# CV - A. Hope Jahren

### **Personal information**

First name, Surname: A. Hope, Jahren

Date of birth: 27.09.1969 Sex: Female

Nationality: United States

Researcher unique ID: orcid.org/0000-0003-3884-1676

URL for website: <a href="www.jahrenlab.com">www.jahrenlab.com</a>



My research focuses on the chemical links between the living and non-living earth, both in modern environments and through time, in both human and human-absent systems. My best-known scholarship invokes stable isotope geochemistry to elucidate climate conditions from plant tissues, producing a fundamental contribution to our understanding of photosynthesis. In addition to directing a state-of-the-art research laboratory, I work to translate science for public *via* the popular press and major literary venues, and have produced two national and international best-selling books.

### **Education**

Year	Faculty/department - University/institution - Country
1996	Ph.D. Department of Soil Science, University of California at Berkeley
1991	Bachelor of Arts cum laude. Department of Geology, University of Minnesota

### Positions - current and previous

Year	Job title – Employer - Country
2016-now	Wilson Professor, Centre for Earth Evolution and Dynamics, Univ. of Oslo, Norway
2008-2016	Full Professor with Tenure, Department of Geology, Univ. of Hawaii, USA
2008	Visiting Scholar – Univ. of Montpellier II – France
1999-2008	Assistant, Associate and Full Professor with Tenure
	Department of Earth and Planetary Sciences, Johns Hopkins Univ., USA
1996-1999	Assistant Professor, Department of Earth Sciences, Georgia Inst. of Technology, USA
1996	Postdoctoral Scholar, Environmental Science, Univ. of CA at Berkeley, USA

### Fellowships / Academy memberships

Year	Description
2019-now	Fellow, Institute on the Environment, University of Minnesota at Minneapolis
2018-now	Elected Member, The Norwegian Academy of Science and Letters
2011-now	Fellow, Aldo Leopold Foundation, Stanford University
2005-now	Fellow, American Geophysical Union (Biogeochemistry Section)
2001-now	Fellow, Geological Society of America
1997	Teaching Fellow, Georgia Institute of Technology

#### **Awards**

Year	Description
2020	James H. Shea Award, National Association of Geoscience Teachers
2018	Medalist, Australian Society for Medical Research
2016	Named to the TIME-100 list of the World's 100 most influential people
2016	WINGS WorldQuest Women of Discovery Leadership Award
2013	Best University Research Award, Department of Energy, Geosciences Division
2010	Fulbright Award in Arctic Science (Norway)
2005	Named one of the Popular Science "Brilliant 10"
2005	James B. Macelwane Medal: American Geophysical Union Young Scientist Award
2003	Fulbright Award in Environmental Science (Denmark)
2001	Donath Medal: Geological Society of America Young Scientist Award
1994	Outstanding Graduate Student Instructor Award, UC Berkeley
1994	Jonathon O. Davis Dissertation Award in Quaternary Geology
1993	Stahl Award for Research in Geoarchaeology
1992	Fulbright Award in Geology (Norway)
1991-1995	Graduate Fellowship, National Science Foundation (USA)

### **Peer-reviewed Publications**

A.H. Jahren Scientific Publications Page		
Career	Since 2017	
88	16	Publications in International Journals, including Nature Ecology & Evolution, Nature Communications, PNAS, EPSL, Geology, Geochimica et Cosmochimica, Annual Reviews of Earth Science, Global Biogeochemical Cycles.
4740	2018	Citations (Google Scholar)
39	25	h-index (Google Scholar)

### **Works for the Popular Press**

### A.H. Jahren Popular Press Author Page

Book: A.H. Jahren. 2020. "The Story Of More" (Vintage).

50,000+ copies sold: National and International Bestseller; adapted for YA (2021)

*Translations:* 9 languages including Arabic, Spanish, Chinese, Korean and Japanese.

Book Editor: **A.H. Jahren**. 2017. "The Best American Science and Nature Writing" (Houghton Mifflin) Book: **A.H. Jahren**. 2016. "Lab Girl" (Knopf).

400,000+ copies sold: National and International Bestseller

Eight consecutive weeks on The New York Times Bestseller List (April 24 to June 12, 2016)

Winner, 2016 National Book Critics Circle Award, Autobiography

Winner, 2017 Excellence in Science Prize, AAAS

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

Translations: 23 languages including Spanish, German, French, Chinese and Russian

# **Administrative and Editorial experience**

Year	Description - Role
2020-2021	Participant and author, Pre-COP26 for CO26 UN Climate Summit Glasgow 2021
2016-now	Director, CLIPT Stable Isotope Laboratory, CEED and IBV, University of Oslo (Norway)
2010-2014	Secretary, American Geophysical Union (Biogeochemistry Section)
2014	Co-Organizer, Biogeochemistry Theme, Goldschmidt Conference Sacramento, CA
2010-2014	Editor, Geological Society of America Bulletin
2006-2009	Associate Editor, Geological Society of America Bulletin
2003-2006	Editorial Board, <i>Geology</i>
2016-2019	Selection Committee, European Geosciences Union Young Investigator Award
2008-2010	Selection Committee, American Geophysical Union Fellows, Medals and Awards
2004-2007	Selection Committee, Geological Society of America Young Investigator Award

# **Grant management experience (USA only)**

Year	Project owner - Project - Role - Funder
2013-2016	University of Hawaii (UH) – The Fractionation of Carbon Isotopes during Photosynthesis – Principal Investigator (\$0,4M) – Department of Energy (BES), USA
2013-2015	UH – Paleoclimate Analysis of a Miocene Arctic Forest – Principal Investigator (\$0,15M) – National Science Foundation (GEO/EAR/SGP), USA
2010-2013	UH – Acquisition of IRMS Instruments for Stable Isotope Analyses of New Geobiological Substrates – Co-Investigator (\$0,7M) – National Science Foundation (OS/MRI-R2), USA
2010-2013	UH – Development of the Carbon Isotope Signature as a Potential Proxy for Paleo- $pCO_2$ – Principal Investigator (\$0,5M) – Department of Energy (BES), USA
2008-2011	UH – Paleoenvironmental Reconstruction of the Eocene Arctic – Principal Investigator (\$0,35M) – National Science Foundation (ARC), USA
2006-2010	UH – Development of New Biomarkers for Surficial Earth Processes – Principal Investigator (\$0,3M) – Department of Energy (BES), USA

# **International Research Expeditions** (last 10 years)

Year	Description – Project
2022	Leader, Mimerdal Formation, Pyramiden, Svalbard
2014	Leader, Komarov Botanical Preserve, Aptekarsky Island, Russia
2011	Leader, Dingle-Dunquin Group (Silurian to Devonian Age), Dingle Peninsula, Ireland

# Major contributions to the early careers of currently-tenured faculty

Name	A.H. Jahren role	Tenured Position
Brian Schubert	Post-doc Advisor	University of Louisiana at Lafayette
Scott Werts	PhD Thesis Advisor	Winthrop University, South Carolina
Anne Jefferson	Undergraduate Thesis Advisor	Kent State University, Ohio

#### Ten Selected Peer-Reviewed Publications

Out of my total 88 peer-reviewed scientific articles, 41 were published in the past 10 years (3 as first author and 23 with a supervised student or postdoc as first author). Listed below are 10 select publications that particularly illustrate the history of my primary topic: isotopic fractionation during photosynthesis. As is evident from author lists below, my most prolific work on this subject was performed in collaboration with B.A. Schubert, for whom I served as post-doc advisor at the University of Hawaii. Dr. Schubert is currently a tenured Associate Professor at the University of Louisiana.

### Publication (links to PDFs for download)

Cui, Y., Schubert, B.A. and **Jahren, A.H.,** 2020. A 23 my record of low atmospheric CO<sub>2</sub>. *Geology*. 48(9), pp. 888-892. DOI: 10.1130/G47681.1

Schubert, B.A. and Jahren, A.H., 2018. Incorporating the effects of photorespiration into terrestrial paleoclimate reconstruction. *Earth-Science Reviews*, *177*, pp. 637-642.

Schubert, B.A. and Jahren, A.H., 2015. Global increase in plant carbon isotope fractionation following the Last Glacial Maximum caused by increase in atmospheric  $pCO_2$ . Geology, 43(5), pp. 435-438.

Schubert, B.A. and **Jahren, A.H.**, 2013. Reconciliation of marine and terrestrial carbon isotope excursions based on changing atmospheric CO<sub>2</sub> levels. *Nature Communications*, *4*(1), pp. 1-6. Schubert, B.A. and **Jahren, A.H.**, 2012. The effect of atmospheric CO<sub>2</sub> concentration on carbon isotope fractionation in C3 land plants. *Geochimica et Cosmochimica Acta*, *96*, pp. 29-43. Schubert, B.A. and **Jahren, A.H.**, 2011. Fertilization trajectory of the root crop Raphanus sativus across atmospheric *p*CO<sub>2</sub> estimates of the next 300 years. *Agriculture, ecosystems & environment*, *140*(1-2), pp.174-181.

Schubert, B.A. and **Jahren, A.H.,** 2011. Quantifying seasonal precipitation using high-resolution carbon isotope analyses in evergreen wood. *Geochimica et Cosmochimica Acta*, 75(22), pp. 7291-7303.

**Jahren, A.H.,** Arens, N.C. and Harbeson, S.A., 2008. Prediction of atmospheric  $\delta^{13}CO_2$  using fossil plant tissues. *Reviews of Geophysics*, 46(1).

**Jahren, A.H.,** 2007. The Arctic forest of the middle Eocene. *Annual Review of Earth and Planetary Sciences*, *35*(1), pp.509-540.

Arens, N.C., **Jahren, A.H.** and Amundson, R., 2000. Can C3 plants faithfully record the carbon isotopic composition of atmospheric carbon dioxide?. *Paleobiology*, *26*(1), pp.137-164.

### Use of Jahren's Popular Science Books as University-wide or Community-wide Read Selections

Both of my popular science works have been selected for several programs, a subset is listed here:

Year	Event
2022	Association of American Medical Colleges Free Read (STORY OF MORE)
2021	Northwestern University One Book (STORY OF MORE)
2021	Charleston University (South Carolina) Campus Read (STORY OF MORE)
2021	Big Read Miami (LAB GIRL)
2021	Florida Museum of Natural History Commuity Read (LAB GIRL)
2020	St. Croix River Valley Associan of Libraries (Wisconsin) Big Read (LAB GIRL)
2020	Monmouth College (Illinois) Big Read (STORY OF MORE)
2018	Longwood Gardens (Philadelphia Botanical Gardens) Community Read (LAB GIRL)
2018	University of California at Santa Barbara (LAB GIRL)