

JULIA B. GAUDINSKI

EDUCATION

Ph.D. Earth System Science, March 2001, University of California, Irvine 1995-2001

B.A. Earth Science, 1990, University of California, Santa Cruz 1986-1990

B.A. Environmental Studies*, 1990, University of California, Santa Cruz 1986-1990

**Honors on bachelor's thesis*

PROFESSIONAL EXPERIENCE

Research Development (RD) Specialist University of California, Santa Cruz, CA Nov 2017 –

I am part of a growing RD team working to catalyze and support the research enterprise at UCSC.

- Work individually with faculty to plan, help write, edit and develop support materials for federal and state grant proposals and interface with the Office of Sponsored Projects as needed
- Meet with faculty to discuss their funding challenges and how RD can ideally provide services and create infrastructure to help them
- Developing programs for new faculty: annual workshop to support applying to early career awards, annual trips to Washington DC to interface with program managers
- Working to establish a culture of internal peer-review for proposals within the environmental sciences faculty

Operations Manager SapientX Inc., Santa Cruz, CA Jan-June 2017

SapientX is a start-up company innovating in Conversational AI.

- Coached founder in speaking techniques and how to present content
- Supported and strategized with founder in business development activities targeting Silicon Valley
- Designed, wrote copy, created art assets, published and maintained the company website
- Designed, created, wrote and published marketing campaigns including social media

President/Founder Mobile Ranger, Santa Cruz, CA 2012- 2016

In 2012, I created Mobile Ranger in order to leverage mobile technology and reshape how people relate to the natural and human history of places. Mobile Ranger's mission was to "connect people to places" by telling compelling stories of place. Our free app with 18 self-guided mobile tours of the central California coast is still downloadable for [Apple](#) and [Android](#) devices. We built audience for the content via blogs and social media at mobileranger.com.

- Designed and managed all aspects of corporate strategy, finances and taxes
- Hired, trained and managed professional, intern and volunteer writers
- Wrote grants to federal, state and local agencies for small business funding (50% success rate)
- Produced, wrote, edited and maintained our website, blogs, social media and mobile-app content
- Planned and executed content and marketing strategies, presentations for client discovery, product sales, and client management
- 11k+ Facebook Likes, 100k annual website visitors, 3,500 mobile app downloads since late 2015

Contracted Research Affiliate *Lawrence Berkeley National Laboratory* 2006-2012
Earth Sciences Unit, Margaret Torn Laboratory

Postdoctoral Researcher *University of California, Berkeley* 2001-2005
Department of Integrative Biology, Todd Dawson Laboratory and joint with Margaret Torn Laboratory,
Lawrence Berkeley National Laboratory

Graduate Research Assistant *University of California, Irvine* 1995-2001
Department of Earth System Science, Susan Trumbore Laboratory

My research expertise is in climate science, particularly how soils within forested ecosystems affect the amount of carbon dioxide in the atmosphere.

- Designed, funded and implemented field and laboratory based research at multiple sites
- Published papers in the peer-reviewed literature (11 publications, cited over 1,400 times)
- Reviewed countless research papers for several peer-reviewed journals
- Presented academic research and implications at conferences and meetings worldwide
- Taught, mentored, hired and managed undergraduates, interns and student workers

Staff Hydrologist *Golder Associates Inc., Redmond, WA* 1991-1994

- Performed project management and oversight of field sampling programs
- Analyzed data using spreadsheets and models and wrote reports for clients

Oceanographer/Chemist *University of Washington, Seattle WA* 1993

- Managed a three person ocean/atmosphere sampling team aboard a NOAA vessel for two trans-Pacific cruises (55°N-70°S)

SELECTED PEER REVIEWED PUBLICATIONS

Gaudinski JB, MS Torn, WJ Riley, TE Dawson, JD Joslin, H Majdi (2010). Measuring and modeling the spectrum of fine-root turnover times in three forests using isotopes, minirhizotrons and the Radix model. *Global Biogeochemical Cycles* 24, Article Number GB3029.

Riley WJ, JB Gaudinski, MS Torn, JD Joslin, PJ Hanson (2009). Fine-root mortality rates in a temperate forest: estimates using radiocarbon data and numerical modeling *New Phytologist* 184(2): 387-398.

Gaudinski JB, MS Torn, WJ Riley, C Swanston, SE Trumbore, JD Joslin, H Majdi, TE Dawson, PJ Hanson (2009). Use of stored carbon reserves in growth of temperate tree roots and leaf buds: analyses using radiocarbon measurements and modeling. *Global Change Biology* 15(4): 992-1014.

Joslin JD, JB Gaudinski, MS Torn, WJ Riley, PJ Hanson (2006). Fine-root turnover patterns and their relationship to root diameter and soil depth in a C-14-labeled hardwood forest. *New Phytologist* 172(3): 523-535.

Gaudinski JB, TE Dawson, S Quideau, EAG Schuur, JS Roden, SE Trumbore, DR Sandquist, SW Oh, RE Washylishen (2005). Comparative analysis of cellulose preparation techniques for use with C-13, C-14, and O-18 isotopic measurements. *Analytical Chemistry* 77(22): 7212-7224.

Johnston CA, P Groffman, DD Breshears, ZG Cardon, W Currie, W Emanuel, J Gaudinski, R Jackson, K Lajtha, K Knadelhoffer, D Nelson Jr., WM Post, G Retallack, L Wielopolski (2004) The frontier below: carbon cycling in soil. *Frontiers in Ecology and the Environment* 2(10): 522-528.

Trumbore SE, JB Gaudinski (2003). The secret lives of roots. *Science* (302): 1344-1345.

Gaudinski JB, SE Trumbore (2003). Soil carbon storage potential at Walker Branch Watershed, Oak Ridge, TN. In: Elwood J (Ed), *North American Temperate Deciduous Forest Responses to Changing Precipitation Regimes* (Springer-Verlag).

Trumbore SE, JB Gaudinski, PJ Hanson, J Southon (2002). Quantifying ecosystem-atmosphere carbon exchange with a ¹⁴C label, USA. *EOS Transactions AGU* 83(24): 265-268.

Gaudinski JB, SE Trumbore, EA Davidson, A Cook, D Richter (2001). The age of fine-root carbon in three forests of the eastern United States measured by radiocarbon. *Oecologia* 129: 420-429.

Gaudinski JB, SE Trumbore, EA Erickson, S Zheng (2000). Soil carbon cycling in a temperate forest: radiocarbon-based estimates of residence times, sequestration rates and partitioning of fluxes, *Biogeochemistry* 51: 33-69.

FUNDED GRANTS

The City of Monterey: Pacific Grove Area of Special Biological Significance Tour (Sole-author \$25k)
California Marine Sanctuary Program: Marine Protected Areas Beach Tour, 2015 (Sole-author \$3k)
PG&E Solar Schools Program Grant for a solar pond at Bonny Doon School, 2008 (*Co-author* \$5k)
Department of Energy: Enriched Background Isotope Study, 2002-2004 (Co-author \$1.2 million: 3 years)
Department of Energy: Carbon Sequestration, 2001-2003 (Primary author \$900k: 3 years, renewed)
Center for Accelerator Mass Spectrometry, Lawrence Livermore National Labs, 1998 (Sole-author \$15k)

INVITED PRESENTATIONS/AWARDS

Scholarship to the American Meteorological Society's 2012 Summer Policy Colloquium funded by the National Science Foundation. I was unable to attend due to sudden illness of my mother.

Invited discussion leader at "Scaling Root Processes: Global Impacts Workshop," Washington DC, March 7-9, 2012. U.S. Department of Energy, Biological and Environmental Research Program.

Invited seminar at Max-Planck-Institute for Biogeochemistry, Jena Germany (2010). Measuring and modeling the spectrum of fine-root turnover times in forests using isotopes, minirhizotrons and the Radix model.

Invited talk at "Workshop on Fine Root Turnover," Swedish Agricultural University, Uppsala Sweden Sept. 8-12, 2003. Improving estimates of fine-root lifetimes and BNPP: Radiocarbon and traditional methods.

Editors Citation for Excellence in Reviewing. 2003, *Global Biogeochemical Cycles*.

COMMUNITY SERVICE

Development Committee Member *Pacific Collegiate School* 2017-present

Board President, Trustee *Bonny Doon Elementary School* 2010-2017

Board Trustee *Santa Cruz County School Boards Association* 2011-2014

Board President, Treasurer *Bonny Doon Community Preschool* 2004-2009

- Joined marketing and communications sub-committee for PCS
- Hired and evaluated institutional leaders
- Planned and evaluated strategic goals based on educational and financial metrics
- Communicated information and procedures to the public and presided over many public meetings

LANGUAGES

English: Native language

Spanish: Good to very good spoken and written Spanish

MEMBERSHIPS

National Organization for Research Development Professionals

American Geophysical Union

American Meteorological Society