

CURRICULUM VITAE

David L. Valentine, Department of Earth Science and Marine Science Institute
University of California, Santa Barbara, CA 93106

Professional Preparation

Revelle College, UC San Diego	Chemistry/Biochemistry	B.S., 1995
U.C. San Diego	Chemistry	M.S., 1996
U.C. Irvine	Earth System Science	M.S., 1998/Ph.D 2000

Appointments

2010-	Professor, Earth Science*, UC Santa Barbara
2008-	President, Valentine Scientific and Consulting Services, Inc
2006-2010	Associate Professor, Earth Science, UC Santa Barbara
2001-2006	Assistant Professor, Earth Science, UC Santa Barbara
2000-2002	NSF Postdoctoral Fellow, Scripps Oceanography, UCSD

*Also appointed as a Professor of Biology in the College of Creative Studies and as Adjunct Professor in the Department of Ecology, Evolution and Marine Biology, UCSB.

Honors and Recognition

National Science Foundation, CAREER award in Chemical Oceanography, 2005-2010
UCSB Chancellor's Award for Excellence in Mentorship of Undergraduate Research*, 2009
*Awarded to only 1 UCSB faculty member annually, presented by the Chancellor at graduation
Kavli Fellow, 2010

Teaching and Advising

Postdoctoral and Graduate Advising (as primary advisor only):

Ph.D: George Wardlaw, Frank Kinnaman, Molly Redmond, Brandon Swan, Monica Heintz, Blair Paul*, Stephanie Mendes*, Stephani Shusta*, **MS:**Brian Campbell, Chris Farwell, Suvi Flagan*, **Postdoctoral:** Dr. Haibing Ding, Dr. Sankar Marichamy, Dr. Susan Mau, Dr. Molly Redmond*, Dr. Frank Kinnaman*, Dr. Sarah Bagby*. *current.

Undergraduate Advising and Mentorship:

2002-11: Faculty Advisor for Earth Systems Geology, Undergraduate Major
2006-present: Faculty advisor for Biology, College of Creative Studies
2002-present: mentoring of >50 Undergraduates in research

Teaching

2001-present, primary classes: Intro to Oceanography for non science majors; Earth Systems Oceans and Atmospheres, Field Studies in Marine Biogeochemistry; Marine Chemistry, Special Topics in Geomicrobiology, Special Topics in Microbial Geochemistry. Prior TA experience at UCSD and UCI, for 10 courses (Introductory Chemistry, Organic Chemistry, Organic Chemistry Lab, Atmospheric Chemistry, The Atmosphere).

Research Activities

Publications and Presentations:

57 Journal Papers and Book Chapters, 1 Monograph, 1 Provisional Patent, 3 news items, 47 Oral Presentations, 94 Poster Presentations Authored, 5 Journal Cover Images

Editing, Reviewing and Service:

Associate Editor, Journal of Geophysical Research-Biogeosciences (2006-2010)
Reviewer for > 150 manuscripts and proposals
Funding Panels (Invites from NASA, NSF and DOE)
AGU Fall Meeting Coordinator –Biogeosciences, 2003-2005

Oceanographic Expeditions: Total (18), as Chief Scientist (8)

2013 (funded)	R/V Atlantis or equivalent	Borderlands, CA (Chief Sci)
9/13-9/29, 2011	R/V Atlantis/Jason/Sentry	Borderlands, CA (Chief Sci)
7/14-8/7, 2011	HOS Sweet Water 4	NOAA Gulf Cruise (Chief Sci)
3/19-4/10, 2011	HOS Sweet Water 2,	NOAA Gulf Cruise (Chief Sci)
12/3-12/20, 2010	HOS Davis 5	NOAA Gulf Cruise (Chief Sci)
9/25-10/5, 2010	NOAA Ship Pisces	Gulf Spill Response (Chief Sci)
9/10-9/21, 2010	NOAA Ship Pisces	Gulf Spill Response
6/10-6/21, 2010	R/V Cape Hatteras	Gulf Spill Response
9/13-9/29, 2009	R/V Atlantis (DSV Alvin)	Borderlands, CA (Chief Sci)
7/2-7/17, 2007	R/V Atlantis (DSV Alvin)	Borderlands, CA (Chief Sci)
6/20-6/30, 2004	R/V New Horizon	Borderlands, CA (Chief Sci)
8/28-9/10, 2003	R/V Alpha Helix	Skan Bay, AK
7/26-7/31, 2002	R/V Atlantis	Cascadia Margin, OR
9/15-10/2, 2001	R/V Alpha Helix	Skan Bay, AK
5/19-6/1, 2001	R/V Knorr	Black Sea, Turkey
8/5-8/10, 2000	R/V Atlantis	Cascadia Margin, OR
8/18-8/25, 1999	R/V Melville	Eel River Basin, CA
10/8-10/11, 1998	R/V Point Lobos/ROV Ventana	Santa Barbara, CA
8/12-8/28, 1997	R/V Alpha Helix	Skan Bay, AK

Science Communication: >100 interviews for network and cable television (e.g., PBS News Hour, NBC Nightly News), newspapers (e.g., LA Times, NY Times, USA Today, Wall Street Journal), magazines (e.g., New Yorker, Scientific American), and radio (e.g., NPR, BBC), as well as several NSF press releases and other stories.

Society Memberships: American Geophysical Union, American Society for Microbiology

Current Federal Grants and Contracts

Active Awards (Does not include supplements, institutional or corporate awards)

- 1) DOE Methane Hydrates Program, Assessing the Efficacy of the Methanotrophic Biofilter in Methane Hydrate Environments, 2008-2012; (lead-PI), 2008-2012.
- 2) NSF Geobiology and Low Temperature Geochemistry, Collaborative Research: Experimental determination of petroleum biodegradation patterns from a genomically-informed analytical vista, (lead-PI), 2009-2012.
- 3) NSF Chemical Oceanography, Collaborative Research: Chemical Changes Accompanying Petroleum Weathering in the Coastal Ocean, (lead-PI), 2009-2012.
- 4) NSF Chemical Oceanography, RAPID: Assessing the impact of chemical dispersants on the microbial biodegradation of oil immediately following a massive spill, (lead-PI), 2010-2012.
- 5) NSF Major Research Instrumentation, MRI RAPID: Acquisition of two cavity ringdown spectrometers to quantify hydrocarbon conversion in deep waters of the Gulf of Mexico, (lead-PI), 2009-2011.
- 6) NSF Major Research Instrumentation, MRI: Acquisition of an Electron Microprobe for UCSB Researchers and Educators, (Co-PI with Brad Hacker, Jim Mattinson, Frank Spera and John Cottle), 2009-2011.
- 7) NSF Dimensions of Biodiversity, Dimensions: The Role of Viruses in Structuring Biodiversity in Methanotrophic Marine Ecosystems, (lead-PI), 2010-2014.
- 8) NSF Chemical Oceanography, Disproving the Hypothesis of Microbial Growth-Phase Dependent Isotope Fractionation: A Theoretical and Experimental Assessment, (Co-PI with John Kessler), 2012-2014.
- 9) NSF Chemical Oceanography, Development and Application of a Radiotracer Rate Method for Ethane and Propane Consumption (lead PI), 2012-2014.