BIOGRAPHICAL SKETCH

DANIEL JAMES REPETA

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Education and Training:
B.S., Chemistry, University of Rhode Island, September, 1977.
Ph.D., Chemical Oceanography, Massachusetts Institute of Technology/WHOI Joint Program, September 1982.
NIH Postdoctoral Research Fellow, Columbia University 1983.
NATO Postdoctoral Fellow, Institute du Chimie, Universite Louis Pasteur, Strasbourg, France, 1984.

Professional Experience:
Assistant Scientist, Department of Chemistry, WHOI, 1985- 1989.
Associate Scientist, Department of Marine Chemistry and Geochemistry, WHOI, 1989-1998.
Senior Scientist, Department of Marine Chemistry and Geochemistry, WHOI, 1998-present.

Select Synergistic Activities: New England Center for Ocean Sciences Excellence (NE-COSEE), curriculum development for middle school science classes (Seeing the Carbon Cycle, NSTA Science Scope Magazine, Jan. 2006 p 14-18 (www.nsta.org)), Woods Hole Partnership in Education Program (www.woodsholediversity.org/pep/), Woods Hole Science and Technology Partnership, Over the past year, I have been working with Ms. Annie Baldwin from Carolina Forrest High School in Myrtle Beach, SC to develop laboratory modules in microbial biogeochemistry for high school level marine science classes.

Collaborators and Co-authorsOutside WHOI Within the Past 48 Months:
Lihini Aluwihare (SIO), E. Virginia Armbrust (Univ. Washington), William Balch (Bigelow Laboratory, ME), Philipp Boning (ICBM, Oldenburg), Michael Beman (UH), Christopher Bowler (ENS, Paris), Hans-Jurgen Brumsack (ICBM, Oldenburg), Debora Bronk (VIMS), Craig Carlson (UCSB), Penny Chisholm (MIT), Matt Church (UH), Daniele De Corte (HCMR, Athens, Greece), Andrew Dickson (SIO), Ellen R.M. Druffel (UCI), Alexandra Gogou (HCMR, Athens, Greece), Maik Grunwald (ICBM, Oldenburg), Dennis Hansell (Univ. Miami), Dierk Hebbeln (CMES, Bremen), John Heidelberg (USC), Gerhard J. Herndl (Univ. Vienna), R. Max Holmes (Woods Hole Research Center), Debora Iglesias-Rodriguez (NOC, Southampton, UK) Ian Joint (Plymouth, UK), V. Jones (Atkins Global, UK), David Karl (UH), Zbigniew Kolber (MBARI), Evangelia Krasakopoulou (HCMR, Athens, Greece), David Kirchman (Univ. Delaware), Frank Lamy (AWI, Bremerhaven), Carina Lange (Univ. Concepçion, Chile), Ricardo Letelier (OSU), Stephen Maberly (CEH, UK), Christophe Mingon, James Moffett (USC), Mahyar Mohtadi (CMES, Bremen), Monica Orellana (Inst. Syst. Biology, Seattle, WA), Christos Pangiotopoulos (Univ. Marseilles), Silvio Pantoja (Univ. Concepçion, Chile), Stella Psarra (HCMR, Heraklion, Greece), Mike Rappé (UH), John Raven (UD, UK), Ulf Riebesell (IFM-GEOMAR, Keil) (Pamela Rossel (Univ. Concepçion, Chile), Reiner Schlitzer (Alfred-Wagner IFP, Bremerhaven), Richard Sémperé (Univ. Marseilles), Walker Smith (VIMS), Georgina Spyres (HCMR, Athens, Greece), Debora Steinberg (VIMS), Grieg Steward (UH), Gabriela Tomasky (BU), Philippe Tortell (UBC, Vancouver), Ivan Valiela (MBL, Woods Hole) Taichi Yokokawa (NIOZ, The Netherlands), J.K. York (Univ. Conn), Richard E. Zeebe (UH), Jon Zehr (UCSC), Vassilis Zervakis (Univ. Aegean, Greece).

Graduate and Postdoctoral Advisors and Advisees: Robert B. Gagosian (Graduate Advisor; President/CEO, Consortium for Ocean Leadership), Pierre Albrecht (Postdoctoral Advisor, Institute du Chimie, Universite Louis Pasteur, Strasbourg), Koji Nakanishi (Postdoctoral Advisor, Columbia U.).

Ph.D. Graduate Students (current affiliation): Lihini Aluwihare (Scripps Institution of Oceanography), Carol Arnosti (UNC, Chapel Hill), Jamie Becker (current Ph.D. student), Chris Follett (current Ph.D. student), Linda King (Abbott Laboratories), Kathleen Munson (current Ph.D. student), Mark McCaffrey (OilTracers LLC), Tracy Quan (Oklahoma State University), Julian Sachs (Univ. Washington).

Postdoctoral Fellows (current affiliation): Gry Mine Berg (Stanford Univ.), Robert Chen (Univ. Massachusetts), Ralf Goericke (Scripps Institute of Oceanography), Alexandra Gogou (HCMR, Athens, Greece),Vera Jones (Atkins Global, UK), Markus Kienast (Dalhousie University, Canada), Travis Meador (Center for Marine Environmental Sciences, University of Bremen, Germany), Mar Nieto-Cid (Univ. Vigo, Spain), Christos Panagiotopoulos (Univ. Marseilles, Marseilles, France), Daniel J. Simpson (Molecular Probes, Madison WI), Brandy Toner (Univ. Minnesota), Sharon Widmer (US EPA), Benjamin Van Mooy (WHOI Department of Marine Chemistry and Geochemistry).

Five relevant publications:

McCarren, J., J.W. Becker, D.J. Repeta, Y. Shi, R. Young, R.R. Malmstrom, S.W. Chisholm, and E.F. DeLong (2010). Microbial metatranscriptomics reveals microbes and metabolic 2 pathways associated with high molecular weight dissolved organic matter turnover in the sea. *PNAS* (in press).

Gogou, A., and D.J. Repeta. Particulate-dissolved transformations as a sink for semi-labile dissolved organic matter. Chemical characterization of high molecular weight dissolved organic matter and surface active organic matter in coastal seawater and in laboratory culture of the diatom *Chaetoceros neogracile. Marine Chemistry* (in press).

Hansell, D.A., C.A. Carlson, D.J. Repeta, and R. Schlitzer (2010). Dissolved organic matter in the ocean: New insights stimulated by a controversy. *Oceanography* **22**: 202-211.

Meador, T.B., A. Gogou, G. Spyres, G.J. Herndl, E. Krasakopoulou, S. Psarra, T. Yokokawa, D. De Corte, V. Zervakis, and D.J. Repeta (2010). Correlations between dissolved organic matter chemical composition, the prokaryotic community, and biogeochemical cycles in the Eastern Mediterranean Sea. *Deep Sea Research* 10.1016/j.dsr2.2010.02.015.

Panagiotopoulos, C., D.J. Repeta, and C.G. Johnson (2007). Characterization of methyl-, 3-deoxy-, and methyldeoxysugars in high molecular weight dissolved organic matter. *Org. Geochem*. **38**, 884-896.

Five other papers

Quan, T. M., and D.J. Repeta (2007). Periodate oxidation of marine high molecular weight dissolved organic matter: evidence for a major contribution from 6-deoxy and methyl sugars. *Mar. Chem*. **105**, 183-193.

Repeta, D.J., and L.I. Aluwihare (2006) High molecular weight dissolved organic carbon cycling as determined by radiocarbon measurements of neutral sugars *Limnol. Oceanogr*. **51**, 1045-1053.

Hwang, J., E.R.M. Druffel, T.I. Eglinton, and D.J. Repeta (2006) Source(s) and cycling of the nonhydrolyzable organic fraction of oceanic particles. *Geochim. Cosmochim. Acta* doi:10,1016/j.gca.2006.07.020.

Aluwihare, L.I., D.J. Repeta, S. Pantoja and C.J. Johnson (2005) two chemically distinct pools of organic nitrogen accumulate in the ocean. *Science* **308**, 1007-1010.

Berg, G.M., D.J. Repeta, and J. LaRoche (2003). The role of the picoeukaryote *Aureococcus anophagefferens* in cycling of marine high molecular weight dissolved organic nitrogen. *Limnol. Oceanogr.* **48**: 1825-1830.