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Educational Background

Ph.D., University of Michigan, Marine Geology and Geochemistry, 2001
M.S., University of Southern California, Earth Sciences, 1997
B.A., Bryn Mawr College, Geology, 1995

Areas of Specialization

My primary interests lie in the cycling of biologically important elements, with a particular focus on the marine nitrogen cycle. I use and develop isotopic tools to access pristine sedimentary N archives for reconstructions related to 1) changing nutrient status of the Southern Ocean; 2) biogeochemical cycling within eastern boundary current upwelling systems (such as the California, the Benguela, and the Peru-Chile).

Recent Presentations

Using microfossil-bound 15N/14N to reconstruct the nutrient status of the glacial Southern Ocean, Gordon Conference on Chemical Oceanography, 2005

Revisiting the nutrient status of the glacial Southern Ocean, College of Oceanic and Atmospheric Sciences, Oregon State University, 2004

Nutrient Utilization During the Last Glacial Maximum, Evidence from a New Diatom-bound N Isotope Method, Rebecca S. Robinson, Brigitte Brunelle, and Daniel M. Sigman, AGU Fall Meeting, 2003

Recent Publications

Robinson, R. S., D. M. Sigman, P. J. DiFiore, M. M. Rohde, T. A. Mashiotta, and D. W. Lea, Diatom-bound 15N/14N: New support for enhanced nutrient consumption in the ice age Subantarctic, Paleoceanography, 2005.

Robinson, R. S., Brunelle, B. G., and Sigman, D. M. Revisiting nutrient utilization during the last glacial maximum: Evidence from a new method for measuring the nitrogen isotopic composition of diatom bound organic matter. Paleoceanography, 2004.

Sigman, D. M., Robinson, R. S., Knapp, A., van Geen, A., McCorkle, D.C., Brandes, J. A., Thunell, R. C., Distinguishing between water column and sedimentary denitrification in the Santa Barbara Basin using the stable isotopes of nitrate. Geochemistry Geophysics Geosystems 4: art. no. 1040, 2003

Robinson, R. S. and Meyers, P.A. Biogeochemical changes within the Benguela Current upwelling system during the Matuyama Diatom Maximum: Nitrogen isotope evidence from Ocean Drilling Program Sites 1082 and 1084. Paleoceanography. v. 17 (4): art. no. 1064, 2002.

Robinson, R. S., Meyers, P. A and Murray, R. W. Geochemical evidence for variation in deposition and delivery of sediment in late Pleistocene light-dark color cycles under the Benguela Current Upwelling System. Marine Geology. v. 180, p. 249-270, 2002.