

A. Russell Flegal
Distinguished Professor
Microbiology & Environmental Toxicology
University of California, Santa Cruz

Cumulative Bio-Bibliography: Last Revised: 05/17/2011

Signature indicates the following information has been reviewed for accuracy, and
bio-bibliography information may be released to the public:

Signature

Date

EMPLOYMENT HISTORY

Distinguished Professor, Microbiology & Environmental Toxicology, UCSC, 2008-present
Fulbright Scholar, Universidad de Concepción, Chile, 2010-2011
Professor, Environmental Toxicology, UCSC, 2000-2008
Visiting Scientist, European Center for Research in Environmental Geochemistry, CNRS, 1998 & 2005
Professor, Earth & Planetary Science, UCSC, 1992-2000
Lecturer, Université Paul Cézanne, France, 1998
Visiting Scientist, Lawrence Livermore National Laboratory, 1985-1997
Research Geochemist, UCSC, 1989-1992
Visiting Associate, Geochemistry, California Institute of Technology, 1980-1992
Visiting Scientist, Swiss Federal Institute of Technology, 1989
Associate Research Geochemist, UCSC, 1985-1989
Visiting Scientist, United States Geological Survey, Denver, 1985
Research Associate, Oceanography, Moss Landing Marine Laboratories, 1980-1985
Lecturer, Chemistry, UCSC, 1978
Officer (2nd Lt. - Capt.), United States Army Corps of Engineers, 1969 - 1972

EDUCATION

Research Fellow, Geochemistry, California Institute of Technology, 1980.
Ph.D., Oceanography, Oregon State University, 1979.
MA, Biology, Moss Landing Marine Laboratories, 1976.
BA, Zoology, University of California, Santa Barbara, 1968.

PROFESSIONAL COMPETENCE AND ACTIVITY

Awards & Honors

Fellow, American Association for the Advancement of Science
Fulbright Scholar, Universidad de Concepción, Chile, 2010-2011
Distinguished Professor, UCSC, 2008
Chancellor's Achievement Award for Diversity, UCSC, 2007
Distinguished Lecturer, Carnegie Mellon University, 2006
Gaspar de Portola Lecturer, Catalanian Universities, Spain, 2005
Faculty "Top Banana" Award, Crown College, UCSC, 2003
Outstanding Faculty Award, Division of Physical & Biological Sciences, UCSC, 2000
Excellence in Teaching Award, UCSC, 1998

Archimedes Society, 1980

Current Research Support

Environmental Risk Factors for Cardiovascular Disease in Mongolia (Silbergeld et al.), National Institutes of Health, 2010-2015, \$1,008,446.

Louis Stokes Alliances for Minority Participation (LSAMP): California Louis Stokes for Minority Participation Phase IV (Flegal), National Science Foundation, 2007-2012, \$250,000.

Pending Research Support

Lead in the Amundsen Sea: An assessment of contemporary and historic inputs to the Southern Ocean (Flegal and Gallon). National Science Foundation, 2011-2014, \$309,671.

Previous Research Support

Lecturing and research in environmental science, Universidad de Concepción, Chile (Flegal), Fulbright-Hays Award, 2010-2011.

Spatial and temporal variations in silver concentrations and lead concentrations and isotopic compositions in the North Pacific Rim and Basin. (Gallon and Flegal), National Science Foundation, 2008-2010, \$320,000.

Submarine groundwater discharges of mercury and methylmercury to Monterey Bay (Flegal), UCSC Institute of Marine Science/Packard Endowment, 2009-2010, \$20,000.

Acquisition of a high resolution inductively coupled mass spectrometer with laser ablation (Delaney et al.), National Science Foundation, 2008-2009, \$566,787.

Groundwater discharge of mercury to California coastal waters (Flegal et al.). California Sea Grant College Program, 2008-2009, \$19,044.

Special studies on methyl mercury and reactive mercury in San Francisco Bay (Flegal and Conaway), San Francisco Estuary Institute, 2007-2008, \$191,000.

Trace element concentrations, speciation and phase distributions in the San Francisco Bay estuary (Flegal and Conaway), San Francisco Estuary Institute, 2007-2008, \$283,375.

Factors controlling mercury methylation in marshlands (Flegal and Conaway), California Environmental Protection Agency, 2005-2008, \$214,500.

Groundwater remediation study at the Fort Ord site. (Flegal et al.), Department of Defense, 2006-2008, \$295,144.

Mercury speciation in Monterey Bay and marine aerosols (Flegal et al.), UCSC Institute of Marine Science/Packard Endowment, 2006-2007, \$20,000.

Mercury methylation/demethylation studies. UCSC Center for Dynamics at the Land/Sea Interface (Flegal), 2006-2007, \$2,0000.

Metal cycling and bioavailability during phytoplankton blooms in South San Francisco Bay (Flegal), University of California Center for Water Resources, 2005-2007, \$59,227.

Seed research for an NSF MRI laser ablation ICP-MS acquisition proposal (Hourigan et al.), UCSC Faculty Research Grant, 2006-2007, \$12,000.

Trace element concentrations, speciation and phase distributions in the San Francisco Bay estuary (Flegal and Conaway), San Francisco Estuary Institute, 2006-2007, \$207,999.

Coastal Toxicology Program Student Training Grant (Flegal), University of California Toxic Substances Research & Teaching Program, 2005-2006, \$40,000.

Upwelling of dimethylmercury in Monterey bay as a potential source of atmospheric monomethylmercury (Flegal et al.). Packard Foundation Endowment for Ocean Science and Technology. 2005-2006, \$20,000.

Collaborative studies on biogeochemical cycles in the Mediterranean (Flegal and Véron). UC-Berkeley Fund. 2005-2006, \$10,000.

Louis Stokes Alliances for Minority Participation (LSAMP): California Louis Stokes for Minority Participation Phase III (Cicerone et al.), National Science Foundation, 2001-2006, \$2,500,000. (UCSC: \$250,000).

Assessing water lead contamination in Torreón, México: A lead isotope ratio study (Soto-Jimenez and Flegal). UC MEXUS-CONACYT, 2004-2005, \$24,910.

Trace element concentrations, speciation and phase distributions in the San Francisco Bay estuary (Flegal), San Francisco Estuary Institute, 2004-2005, \$355,000.

Mercury concentration, speciation, and isotopic composition analyses of contaminated sediments (Flegal). Supplement to National Institutes of Health Superfund Grant to UC Berkeley (Hunt et al.), 2003-2005, \$78,040.

Coastal Toxicology Program Student Training Grant (Flegal and Yildiz), University of California Toxic Substances Research & Teaching Program, 2004-2005, \$40,000.

Trace element concentrations, speciation and phase distributions in the San Francisco Bay estuary (Flegal), San Francisco Estuary Institute, 2003-2004, \$355,000.

Coastal Toxicology Program Student Training Grant (Flegal and Yildiz), University of California Toxic Substances Research & Teaching Program, 2003-2004, \$47,500.

Campus-Laboratory Exchange for Environmental Research (CLEER): Metal contamination in California waters (Green et al.). University of California Office of the President, 2003-2004, \$60,000.

Collaborative special research grant (Habicht-Mauche and Flegal), University of California at Santa Cruz, 2003-2004, \$9,910.

Fort Ord groundwater remediation: Enhanced water quality monitoring, response rates, data management, visualization, and transport of groundwater contamination (Flegal and Mantey). United States Department of Defense, 2002-2004, \$440,520.

Development of an analytical core facility for a Center of Excellence in Trace Metal Toxicology (Flegal et al.), Keck Foundation, 2001-2003, \$1,000,000.

Trace metal TMDL development: Impairment assessment and numeric definition (Bruland and Flegal), California Water Resources Control Board, 2001-2003, \$115,312.

Trace element concentrations and phase distributions in the San Francisco Bay estuary (Flegal), San Francisco Estuary Institute, 2002-2003, \$310,003.

Coastal Toxicology Program Student Training Grant (Flegal and Yildiz), University of California Toxic Substances Research & Teaching Program, 2002-2003, \$47,500.

Analysis of lead concentrations and isotopic compositions (Flegal), Carrick Law Group, 2002-2004, \$29,416.

Lead concentration analyses of consumer products (Flegal), Bushnell, Caplan & Fielding, 2002-2004, \$45,296.

Lead in keys: Proposition 65 litigation (Flegal), California Attorney General's Office, 2001-2003, \$19,659.

Coastal Toxicology Program Student Training Grant (Flegal and Yildiz), University of California Toxic Substances Research & Teaching Program, 2003-2004, \$47,500.

Coastal Toxicology Program Student Training Grant (Flegal and Yildiz), University of California Toxic Substances Research & Teaching Program, 2002-2003, \$47,500.

Postdoctoral Program in Environmental Chemistry (Flegal et al.), Camille and Henry Dreyfus Foundation, 1999-2002, \$96,000.

Trace element concentrations and phase distributions in the San Francisco Bay estuary (Flegal), San Francisco Estuary Institute, 2001-2002, \$310,003.

Coastal Toxicology Program Student Training Grant (Flegal), University of California Toxic Substances Research & Teaching Program, 2001-2002, \$47,500. Estuary Institute, 2001-2002, \$310,500.

Lead dose biomarkers, reproduction, and infant outcomes (Harvard and UCSC), National Institute of Health, 1997-2002, \$331,554 (Smith and Flegal: UCSC component).

Passive mercury vaporization from contaminated soils, water, and tailings at the Gambonine Mine, Marin County, California (Flegal), University of California Toxic Substances Research and Teaching Program, 2000-2001, \$28,621.

Coastal Toxicology Program Student Training Grant (Flegal), University of California Toxic Substances Research & Teaching Program, 2000-2001, \$47,500.

California Alliance for Minority Participation in Science, Engineering and Mathematics (Flegal), National Science Foundation, 2000-2001, \$145,000.

Analysis of the bioavailability of metal contaminants in infant care products (Flegal). Milberg, Weiss, Bershad, Hynes, & Lerach LLP (Kenneth Johnson et al. v. Bristol-Myers Squibb Co, et al), 2000-2001, \$7,365.

Lead leaching studies of water transport devices (Flegal), Phillips & Cohen LLP (representing Los Angeles Metropolitan Water District et al.), 2000-2001, \$22,400.

Trace element concentrations and phase distributions in the San Francisco Bay estuary (Flegal), San Francisco Estuary Institute, 2000-2001, \$270,000.

Analysis of the bioavailability of lead in keys (Flegal). California Attorney General's Office (People v. Ilco Unican), 2000-2001, \$15,956.

Acquisition of an inductively coupled plasma – optical emission spectrometer and a flame atomic absorption spectrometer for the UCSC Institute of Marine Science Marine Analytical Laboratory (Delaney et al.), National Science Foundation 1999-2000, \$102,263.

California Alliance for Minority Participation in Science, Engineering and Mathematics (Flegal), National Science Foundation, 1999-2000, \$107,375.

Coastal Toxicology Program Student Training Grant (Flegal), University of California Toxic Substances Research & Teaching Program, 1999-2000, \$47,500.

Methylmercury analyses of sediments (Flegal), California State Water Resources Control Board, 1999-2000, \$9,212.

Analyses of elemental carcinogens in tobacco products (Flegal), Milberg, Weiss, Bershad, Hynes & Lerach LLP (representing the City and County of San Francisco et al.), 1999-2000, \$18,193.

Armenian Toxic Metal Emissions: Implications for Environmental Security in Transcaucasia (Flegal), NATO, 1999-2000, \$ 25,000.

Succimer reduction of tissue lead and toxicity in monkeys (University of Wisconsin, University of Maryland, University of California), National Institute of Health, 1994-2000, \$4,073,736.

Atmospheric emissions from combustion products (Flegal), Association of Bay Area Governments, 2000, \$14,000.

California Alliance for Minority Participation in Science, Engineering and Mathematics (Flegal), National Science Foundation, 1998-1999, \$129,258.

Analyses of trace element cycles in San Francisco Bay (Flegal), San Francisco Estuary Institute, 1998-1999, \$290,008.

Excellence in Teaching Award, Honoraria (Flegal), University of California Santa Cruz, 1998-1999, \$500.

Coastal Toxicology Program Student Training Grant (Flegal), University of California Toxic Substances Research & Teaching Program, 1998-99, \$47,500.

Analyses of trace element cycles in San Francisco Bay (Flegal), San Francisco Estuary Institute, 1997-1998, \$267,165.

Coastal Toxicology Program Student Training Grant (Flegal), University of California Toxic Substances Research & Teaching Program, 1997-98, \$47,500.

Assessing resource utilization and trade among prehistoric Rio Grande glaze paints using lead isotope analysis (Habricht-Mauche and Flegal), National Science Foundation, 1996-1997, \$53,751.

Mare Island Study (Flegal), University of California Toxic Substances Research & Teaching Program, 1996-97, \$31,000.

Analysis of lead contamination in calcium supplements (Flegal), Natural Resources Defense Council (California class action litigation), 1996-1997, \$52,700.

Trace element analyses of the Coyote Creek watershed (Flegal), Applied Marine Science, 1996-1997, \$15,612.

Bone lead toxicity and remobilization in rats (Smith et al.), National Institute of Health, 1995-1997, \$467,359.

Technical support for isotopic studies of crust and upper mantle evolution (Cameron et al.), National Science Foundation, 1991-1997, \$116,047.

Coastal Toxicology Program Student Training Grant (Flegal), University of California Toxic Substances Research & Teaching Program, 1996-1997, \$47,500.

Technical support for isotopic studies of crust and upper mantle evolution (Cameron et al.), National Science Foundation, 1994-1996, \$80,000.

Trace element cycles in San Francisco Bay (Flegal), California State Water Resources Control Board, 1996, \$395,000.

Coastal Toxicology Program Student Training Grant (Flegal and Jarman), University of California Toxic Substances Research & Teaching Program, 1995-1996, \$40,000.

Chromium in the San Francisco Bay estuary: A study of cycling, speciation, and anthropogenic inputs. Water Resources Center (Flegal), 1994-1996, \$16,000.

Environmental lead, nephropathy and bone activity in man (Osterloh et al.), National Institute of Health, 1992-1996, \$761,433.

Analyses of trace element cycles in San Francisco Bay - 1995 (Flegal), San Francisco Estuary Institute, 1995, \$221,000.

Reconstruction of historical contamination in San Francisco Bay (Luoma et al.), National Oceanographic and Atmospheric Administration, 1994-1995, \$175,159.

Coastal Toxicology Program Student Training Grant (Flegal and Tjeerdema), University of California Toxic Substances Research & Teaching Program, 1994-1995, \$75,000.

Acquisition of an inductively coupled plasma mass spectrometer (Delaney et al.), National Science Foundation, 1994, \$170,341.

Characterization and fate of produced water discharged in shallow coastal waters (Flegal), U.S. Department of the Interior, 1994-1995, \$30,000.

Analyses of trace element cycles in San Francisco Bay - 1994 (Flegal), San Francisco Estuary Institute, 1994, \$239,200.

Student Research Projects on the biogeochemical cycles of trace elements in the San Francisco Bay estuarine system (Flegal), Research Enhancement Program for the San Francisco Bay and the Sacramento-San Joaquin Delta, Interagency Ecological Studies Program, California State Water Resources Control Board, 1993-1994, \$68,000.

Characterization and fate of produced water discharged in shallow coastal waters (Flegal), U.S. Department of the Interior, 1989-1994, \$305,845.

Coastal Toxicology Program (Flegal and Tjeerdema), University of California Toxic Substances Research and Training Program, 1993-1994, \$70,000.

Mercury contamination in California rivers (Gill and Flegal), California State Water Resources Control Board, 1992-1994, \$80,000.

Sediment records of trace metal and radioisotope contamination in San Francisco Bay (United States Geological Survey and University of California), National Oceanographic and Atmospheric Administration, 1992-1994, \$106,000.

Trace element cycles in San Francisco Bay (Flegal), California State Water Resources Control Board, 1993-1994, \$145,000.

Coastal Toxicology Program (Flegal and Tjeerdema), University of California Toxic Substances Research and Training Program, 1992-1993, \$67,000.

Intercalibration of XRF measurements of bone leads concentrations (Flegal), National Institute of Environmental Health Sciences, 1991-1992, \$24,460.

Organic contaminants and toxicity of San Francisco Bay sediments (Flegal and Risebrough), California State Water Resources Control Board, 1991-1992, \$394,000.

Heavy metal contamination in Pacific coastal waters along the United States - Mexico boundary (Flegal and Sañudo-Wilhelmy), UC MEXUS, 1991-1992, \$10,000.

Trace element cycles in San Francisco Bay, Year II (Flegal and Gill), California State Water Resources Control Board, 1991-1992, \$302,000.

Coastal Toxicology Program (Flegal), University of California Toxic Substances Research and Training Program, 1991-1992, \$67,000.

Pore water chemistry of estuarine sediments (Flegal and Risebrough), California State Water Resources Control Board, 1990-1992, \$200,000.

Elemental analyses of sediments in San Francisco Bay (Flegal and Risebrough), California State Water Resources Control Board, 1990-1991, \$100,000.

Determination of sources and fluxes of lead in sediments in the Great Lakes (Flegal), Institute of Geophysics and Planetary Physics, 1990-1991, \$24,804.

^{205}Pb study of the enhancement of lead absorption during outpatient treatment protocols (Rosen and Flegal), Johnson and Johnson, 1990-1991, \$31,021.

Isotopic analyses of lead contamination in Kansas City, Kansas (Flegal), TetraTech, 1990-1991, \$3,400.

Trace element cycles in San Francisco Bay (Flegal), California State Water Resources Control Board, 1989-1990, \$137,000.

Characterization of produced formation water and receiving waters at a coastal discharge site (Flegal), University of California Toxic Substances Research and Training Program, 1989-1990, \$68,000.

Lead in the Antarctic: Supplement (Flegal). National Science Foundation, Division of Polar Programs, 1989-1990, \$20,000.

The biogeochemical cycle of lead in the Southern Hemisphere (Flegal), Institute of Geophysics and Planetary Physics, 1989-1990, \$26,400.

Lead in the northeast Pacific (Flegal), National Science Foundation, Division of Ocean Sciences, 1987-1990, \$199,890.

Lead in the Antarctic (Flegal), National Science Foundation, Division of Polar Programs, 1987-1989, \$103,057.

Development of stable isotope tracer techniques for environmental research (Flegal), Institute of Geophysics and Planetary Physics, 1988-1989, \$24,850.

Heavy metals in coastal waters along the U.S. - Mexican boundary in the northeast Pacific (Flegal), UC MEXUS Development Grant, 1988-1989, \$7,800.

Acquisition of a thermal ionization mass spectrometer (Collerson et al.), National Science Foundation, 1987-1988, \$150,464.

Stable isotope ratios of reactive metals in sea water (Flegal), Institute of Geophysics and Planetary Physics, 1987-1988, \$14,950.

Characterization of produced formation water and receiving waters at a coastal discharge site (Flegal), University of California Toxic Substances Program, 1988, \$25,000.

Metal concentrations in sediments and marine organisms (Flegal), San Francisco Bureau of Water Pollution Control, 1987-1988, \$10,000.

Lateral transport of elements in the ocean (Martin et al.), Office of Naval Research, 1984-1987, \$483,937.

Metal concentrations in sediments and marine organisms (Flegal), San Francisco Bureau of Water Pollution Control, 1986-1987, \$15,000.

A joint Argentine - U.S. marine geology cruise to the Argentine shelf, slope and rise (Ciesielski et al.). National Science Foundation, 1985-1986, \$23,402.

Isotopic ratios of lead in Monterey Bay (Flegal), California State Water Resources Control Board, 1984-1985, \$25,000.

Equipment Grant - Atomic Absorption Spectrometer (Martin et al.), National Science Foundation, 1984, \$49,936.

Trace element fluxes, residence times and rates of change in high productivity (upwelling) regimes (Knauer et al.), National Oceanographic and Atmospheric Administration, 1983, \$75,000.

Lead fluxes in the oceans (Flegal), National Science Foundation, Division of Ocean Sciences, 1983-1987, \$147,233.

Gulf of the Farallons disposal site (Nybakken et al.), United States Army Corps of Engineers, 1983, \$139,093.

Trace elements in the sediments and biota of San Francisco Bay (Flegal), San Francisco Department of Public Works, 1983, \$15,000.

Elemental analyses of stripped bass fish tissues (Flegal), National Marine Fisheries Service, 1981, \$5,000.

Ocean thermal energy conversion (OTEC) - particulate program methods development (Knauer and Flegal), United States Department of Energy, 1981, \$10,000.

Habitat selection in benthic marine invertebrates: relation to community patterns near waste discharges (Nybakken et al.), Environmental Protection Agency, 1981, \$143,000.

Intercalibration of elemental analyses of marine sediments (Martin and Flegal), California State Water Resources Control Board, 1980, \$12,000.

Ocean thermal energy conversion (OTEC) - particulate program (Knauer and Flegal), United States Department of Energy, 1980, \$19,000.

A study of the chemistry of marine sediments and sludge (Martin and Flegal), California State Water Resources Control Board, 1979, \$50,000.

Initial investigation on the interaction of particulate material with OTEC systems (Knauer and Flegal), United States Department of Energy, 1979, \$30,000.

WRITINGS AND CREATIVE ACTIVITIES IN PROGRESS

Books and Monographs

Fifth Global Environment Outlook (GEO-5), United Nations Environment Programme (in review)

Articles

Black, F.J., B.A. Poulin and A.R. Flegal. Factors controlling the abiotic photo-degradation of monomethylmercury in surface waters (in review).

Flegal, A.R., C. Gallon and C.H. Conaway. All the lead in China (in review).

Gallon, C. and A.R. Flegal. Sources, fluxes, and biogeochemical cycling of silver in the oceans (in review).

Gallon, C., C.M. Ranville, C.H. Conaway, W.M. Landing, C.S. Buck and A.R. Flegal. Asian industrial aerosol inputs to the North Pacific as evidenced by lead concentrations and isotopic compositions in seawater and aerosols (in review).

Luengen, A.C., P.T. Raimondi and A.R. Flegal. Fine scale changes in phytoplankton community composition and water chemistry during a spring bloom in San Francisco Bay (in review).

Yáñez, J., M. Guajardo, G. Miranda, C. Soto, H.D. Mansilla, and A.R. Flegal. Retrospective assessment and contemporary distributions of mercury pollution in the Lengua Estuary, Chile (in review).

Zurbrick, C.M., P. Morton, C. Gallon, A. Shiller, W. Landing and A.R. Flegal. Intercalibration of cadmium and lead concentration measurements in the Northwest Pacific Ocean (in review).

PUBLISHED WRITINGS AND CREATIVE ACTIVITIES

Books and Monographs

- Black, F.J., C.H. Conaway and A.R. Flegal. 2011. Mercury in the Marine Environment. In: *Mercury in the Environment: Pattern and Process* (M.S. Bank, ed.), University of California Press (in press).
- World Health Organization. 2010. *Children's Exposure to Mercury*. World Health Organization, Geneva, Switzerland, pp. 140, http://www.who.int/ceh/publications/children_exposure/en/index.html
- Black, F.J., C. Gallon and A.R. Flegal. 2008. Ecological Processes: Sediment Retention and Release. In: *Encyclopedia of Ecology*. (Jorgensen, S.E. and B. Fath, eds.), Elsevier Ltd., pp. 3172-3179.
- Conaway, C.H., F.J. Black, T.M. Grieb, S. Roy and A.R. Flegal. 2008. Mercury in the San Francisco Estuary. *Reviews of Environmental Contamination and Toxicology* 194: 29-54.
- Flegal, A.R. (Guest Editor). 2007. Sources, Transport, Fate, and Toxicity of Pollutants in the San Francisco Bay Estuary, Special Issue, *Environmental Research* 105(1).
- Conaway, C. and A.R. Flegal, 2003. Toxicology. In: *Macmillan Guide to Pollution*. (R.M. Stapleton, P.A. Hemminger and S.L. Senecah, eds.), Macmillan Reference, New York, pp. 250-253.
- Flegal, A.R. and G.M. Scelfo. 2003. Lead: Properties and Determination. In: *Encyclopaedia of Food Science, Food Technology and Nutrition, Second Edition* (B. Caballero, L. Trugo and P. Finglas, eds.), Academic Press, London, pp. 3477-3482.
- Flegal, A.R., J. Last, E.E. McConnell, M. Schenker and H. Witschi. 2001. *Scientific Review of Toxicological and Human Health Issues Related to the Development of a Public Health Goal for Chromium(VI)*. University of California Chromate Toxicity Review Committee Report, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency, pp. 32.
- Flegal, A.R. 1999. Factors influencing C.C. Patterson's role in the evolution of the multidisciplinary field of biogeochemistry. In: *Clean Hands: Clair Patterson's Crusade Against Environmental Lead Contamination* (C.I. Davidson, ed.), Nova Science Publishers, pp. 37-46.
- Flegal, A.R. (Guest Editor). 1998. Clair C. Patterson, Special Issue, *Environmental Research, Volume 78*.
- Flegal, A.R., I. Rivera-Duarte, P.I. Ritson, G.M. Scelfo, G.J. Smith, M.R. Gordon and S.A. Sañudo-Wilhelmy. 1996. Metal contamination in San Francisco Bay waters: Historic perturbations, contemporary concentrations, and future considerations. In: *San Francisco Bay: The Ecosystem* (J.T. Hollibaugh, ed.). American Association for the Advancement of Science, pp. 173-188.
- Flegal, A.R., I. Rivera-Duarte, and S.A. Sañudo-Wilhelmy, 1996. Silver contamination in aquatic environments. *Reviews of Environmental Contamination and Toxicology* 148: 139-162.
- Flegal, A.R. and D.R. Smith. 1995. Measurements of environmental lead contamination and human exposure. *Reviews of Environmental Contamination and Toxicology* 143: 1-45
- Osenberg, C.W., R.J. Schmitt, S.J. Holbrook, K.E. Abu-Saba and A.R. Flegal. 1995. Detection of environmental impacts: Natural variability, effect size, and power analysis. In: *Detecting Ecological Impacts: Concepts and Applications in Coastal Habitats* (R.J. Schmitt and C.W. Osenberg, eds.), Academic Press, Washington, D.C., pp. 83-108.
- Flegal, A.R. 1993. Lead: Properties and Determination. In: *Encyclopaedia of Food Science, Food Technology and Nutrition* (R. Macrae, R.K. Robinson and M.J. Sadler, eds.), Volume 4. Academic Press, London, pp. 2665-2670.
- National Research Council. 1993. *Measuring Lead Exposure in Infants, Children and Other Sensitive Populations*. National Academy Press, Washington, D.C., 337 pp.
- Flegal, A.R., D.R. Smith and R. Elias. 1990. Lead contamination in foods. In: *Food Contamination From Environmental Sources* (J.O. Nriagu and M.S. Simmons, eds.), Advances in Environmental Science and Technology, Volume 23, pp. 85-120.
- Grant, L.D., R.A. Goyer, H. Olem, W.J. Nicholson, R.W. Elias, P.M. Bertsch, J.M. Davis, A.R. Flegal and K.R. Mahaffey. 1990. *Indirect Health Effects Associated With Acidic Deposition*. National Acid Precipitation Assessment Program. SOS/T Report 23.
- Patterson, C.C., C. Boutron and A.R. Flegal. 1984. Present status and future of lead studies in polar snow. In: *Greenland Ice Core Geophysics, Geochemistry and the Environment* (C.C. Langway, Jr., H. Oeschger and W. Dansgaard, eds.), Geophysical Monograph 33: 101-104.
- Martin, J.H., G.A. Knauer and A.R. Flegal. 1980. Cadmium in natural waters. In: *Biogeochemistry of Cadmium* (J.O. Nriagu, ed.), Academic Press, pp. 141-145.

Martin, J.H., G.A. Knauer and A.R. Flegal. 1980. Distribution of zinc in natural waters. In: *Biogeochemistry of Zinc* (J.O. Nriagu, ed.), Academic Press, pp. 193-197.

Articles in Professional Journals

- Ndung'u, K., S. Hibdon, A. Véron and A.R. Flegal. 2011. Lead isotopes reveal sources of lead in balsamic and other vinegars. *Science of the Total Environment* 409: 2754-2760.
- Odigie, K.O. and A.R. Flegal. 2011. Pyrogenic remobilization of historic industrial lead depositions. *Environmental Science and Technology* (in press).
- Soto-Jiménez M.F. and A.R. Flegal. 2011. Childhood lead poisoning from the smelter in Torreón, México. *Environmental Research* 111: 590-596.
- Soto-Jiménez, M.F. and A.R. Flegal. 2011. Metal-contaminated indoor and outdoor house dust from a neighborhood smelter area in Torreón, México. *Procedia Environmental Sciences* 4: 134-137.
- Benoit M.D., R.M. Kudela and A.R. Flegal. 2010. Modeled trace element concentrations and partitioning in the San Francisco Estuary, based on suspended solids concentration. *Environmental Science and Technology* 44: 5956-5963
- Conaway, C.H., F.J. Black, P. Weiss-Penzias, M. Gault-Ringold and A.R. Flegal. 2010. Mercury speciation in Pacific coastal rainwater, Monterey Bay, California. *Atmospheric Environment* 44: 1788-1797.
- Flegal, A.R., C. Gallon, S. Hibdon, Z.E. Kuspa and L.F. Laporte. 2010. Declining – but persistent – atmospheric contamination in central California from the resuspension of historic leaded gasoline emissions as recorded in the lace lichen (*Ramalina menziesii* Taylor) from 1892-2006. *Environmental Science and Technology* 44: 5613-5618.
- Ndung'u, K., S. Friedrich, A.R. Gonzalez, K. and A.R. Flegal. 2010. Chromium oxidation by manganese (hydr)oxides in a California aquifer. *Applied Geochemistry* 25:377-381.
- Ranville, M.A., G.C. Cutter, C.S. Buck, W.M. Landing, L.S. Cutter, J. Resing and A.R. Flegal. 2010. Aeolian contamination from Asian fossil fuel combustion seen in corresponding inputs of selenium and silver to the North Pacific. *Environmental Science and Technology* 44: 1587-1593.
- Wu, J., R. Rember, M. Jin, E.A. Boyle and A.R. Flegal. 2010. Isotopic evidence for the source of lead in the North Pacific abyssal water. *Geochimica et Cosmochimica Acta* 74: 4629-4638.
- Black, F.J., C.H. Conaway and A.R. Flegal. 2009. On the stability of dimethyl mercury in seawater and its conversion to monomethyl mercury. *Environmental Science and Technology* 43: 4056-4062.
- Black, F.J., A. Paytan, K.L. Knee, N.R. DeSieves, P.M. Ganguli, E. Gary and A.R. Flegal. 2009. Submarine groundwater discharge of total mercury and monomethyl mercury to central California coastal waters. *Environmental Science and Technology* 43: 5652-5659.
- David, N., L.J. McKee, C.C. Conaway, F. Black, D.H. Schoellhamer, N.K. Ganju and A.R. Flegal. 2009. Mercury concentrations and loads in a large river system tributary to San Francisco Bay, California, USA. *Environmental Contamination and Toxicology* 28: 2091-2100.
- Conaway, C.H., F. J. Black, M. Gault-Ringold, J. T. Pennington, F. P. Chavez, and A. R. Flegal. 2009. Dimethylmercury in coastal upwelling waters, Monterey Bay, California. *Environmental Science and Technology* 43: 1305-1309.
- Luengen, A.C. and A.R. Flegal. 2009. Depletion of dissolved methylmercury by a spring phytoplankton bloom in San Francisco Bay. *Limnology and Oceanography* 54: 23-40.
- Soto-Jimenez, M.F., F. Paez-Osuna, G. M. Scelfo, S.H. Hibdon, R. Franks, J. Aggarwal and A.R. Flegal. 2009. Persistent lead contamination in the Gulf of California Ecoregion in Mexico: Isotopic evidence of the predominance of historic emissions of leaded gasoline. *Journal of Geochemical Exploration* 101: 209-217.
- Dunlap, C., D. Steding, R. Bouse, J. Unruh, C. Alpers, and A.R. Flegal. 2008. Anthropogenic sources of lead in the Sacramento and San Joaquin drainage basins. *Geochimica et Cosmochimica Acta* 72: 5935-5948.

- Gallon, C., J. Aggarwal and A.R. Flegal. 2008. Evaluation of the capacities of different sample introduction systems for the determination of Pb isotope using a multiple collector – inductively coupled plasma mass spectrometer. *Analytical Chemistry* 80: 8355–8363.
- Flegal, A.R. 2008. Ecotoxicology: A Comprehensive Treatment, Review. *Limnology and Oceanography Bulletin* 17(2): 63-65.
- Soto-Jimenez, M.F., F. Páez-Osuna, G. Scelfo, S. Hibdon, R. Franks, J Aggarawl and A.R. Flegal. 2008. Lead pollution in subtropical ecosystems on the SE Gulf of California Coast: A study of concentrations and isotopic composition. *Marine Environmental Research* 66: 451-458.
- Black, F.J., K.W. Bruland and A.R. Flegal. 2007. Competing ligand exchange-solid phase extraction method for the determination of the complexation of dissolved inorganic mercury (II) in natural waters. *Analytica Chimica Acta* 598: 318-333.
- Buck, K.N., J.R.M. Ross and A.R. Flegal. 2007. A review of total dissolved copper and its chemical speciation in San Francisco Bay, California. *Environmental Research* 105(1): 5-19.
- Conaway, C., J.R.M., Ross, R. Looker, R.P. Mason, and A.R. Flegal. 2007. Decadal mercury trends in San Francisco Estuary sediments. *Environmental Research* 105(1): 53-66.
- Flegal, A.R., C.L. Brown, J.R.M. Ross, G.M. Scelfo, and S.H. Hibdon. 2007. Spatial and temporal variations in silver contamination and toxicity in San Francisco Bay. *Environmental Research* 105(1): 34-52.
- Flegal, A.R., J.A. Davis, M. Connor, and C.H. Conaway. 2007. Sources, transport, fate, and toxicity of pollutants in the San Francisco estuary. *Environmental Research* 105(1): 1-4.
- Huerta-Diaz, M., I. Rivera-Duarte, S.A. Sañudo-Wilhelmy and A.R. Flegal. 2007. Comparative distributions of size fractionated metals in pore waters sampled by in-situ dialysis and whole-core squeezing: Implications for diffusive flux calculations. *Applied Geochemistry* 12(11): 2509-2525.
- Huntley, D.L., D.L. Spielman, J. Habicht-Mauche, and A.R. Flegal. 2007. Local recipes or distant commodities? Lead isotope and chemical composition analyses of glaze paints from the Salinas Pueblos, New Mexico. *Journal of Archaeological Science* 34 (7): 1135-1147.
- Luengen, A.C., P.T. Raimondi and A.R. Flegal. 2007. Contrasting biogeochemistry of six trace metals during the rise and decay of a spring phytoplankton bloom in San Francisco Bay. *Limnology and Oceanography* 52 (3): 1112-1130
- Ndung'u K, Hibdon S, Flegal AR. 2007. Lead in vinegar: Determination and possible sources. *American Laboratory* 39 (4): 30+ Suppl.
- Ndung'u, K., M.A. Ranville, R.P. Franks and A.R. Flegal. 2006. On-line determination of silver in natural waters by inductively-coupled plasma mass spectrometry: Influence of organic matter. *Marine Chemistry* 98: 109-120.
- Rankin, C.W. and A.R. Flegal. 2006. Lead in cocoa and chocolate: Rankin and Flegal respond. *Environmental Health Perspectives* 114 (5): A275-A276.
- Soto-Jimenez, M.F., S. A. Hibdon, C. W. Rankin, A. C. Ruiz-Fernandez, F. Paez-Osuna and A. R. Flegal. 2006. Chronicling a century of lead pollution in Mexico: Stable isotopic composition analyses of dated sediment cores. *Environmental Science & Technology* 40: 764-770.
- Conaway, C.H., R.P. Mason, D.J. Steding and A.R. Flegal. 2005. Estimate of mercury emission from gasoline and diesel fuel consumption, San Francisco Bay area, California. *Atmospheric Environment* 39: 101-105.
- Flegal, A.R., C.H. Conaway, G.M. Scelfo, S. Hibdon and S.A. Sañudo-Wilhelmy. 2005. Factors influencing measurements of decadal variations in metal contamination in San Francisco Bay, California. *Ecotoxicology* 14: 1-16.
- Gonzalez, A.R., K. Ndung'u, and A.R. Flegal. 2005. Natural occurrence of hexavalent chromium in the Aromas Red Sands Aquifer, California. *Environmental Science & Technology* 39: 5505-5511.
- Rankin, C.W., J. O. Nriagu, T. A. Arowolo, K. Adebayo, and A. R. Flegal. 2005. Lead contamination in cocoa and cocoa products: Isotopic evidence of global contamination. *Environmental Health Perspectives* 113: 1344-1348.

- Ranville, M.A. and A.R. Flegal. 2005. Silver in the North Pacific Ocean. *Geochemistry, Geophysics, Geosystems*: 10.1029/2004GC000770.
- Conaway, C. H., E. B. Watson, J.R. Flanders and A.R. Flegal. 2004. Mercury deposition in a tidal marsh of South San Francisco Bay downstream of the historic New Almaden mining district, California *Marine Chemistry* 90: 175-184.
- Kurkjian, R., C. D. Dunlap and A.R. Flegal. 2004. Long-range downstream effects of urban runoff and acid mine drainage in the Debed River, Armenia: insights from lead isotope modeling. *Applied Geochemistry* 19: 1567-1580.
- Ndung'u, K., S. Hibdon and A.R. Flegal. 2004. Determination of lead in vinegar by ICP-MS and GFAAS: Evaluation of different sample preparation procedures. *Talanta* 64: 258-263.
- Luengen A. C., C.S. Friedman, P.T. Raimondi and Flegal A. R. 2004. Evaluation of immune responses as indicators of contamination in San Francisco Bay, Using a novel phagocytosis and phagocytic index method developed for mussels. *Marine Environmental Research* 57: 197-212.
- Ranville, M., D. Rough and A.R. Flegal. 2004. Metal attenuation at the abandoned Spenceville copper mine. *Applied Geochemistry* 19: 803-815.
- Sañudo-Wilhelmy, S.A., A. Tovar-Sanchez, N.S. Fisher and A.R. Flegal. 2004. Examining toxic metals in U.S. estuaries. *Environmental Science and Technology* 38: 34A-40A.
- Tovar-Sanchez, A., S.A. Sañudo-Wilhelmy, and A.R. Flegal. 2004. Temporal and spatial variations in the biogeochemical cycle of cobalt in two estuaries: Hudson River and San Francisco Bay. *Estuaries, Coastal and Shelf Science* 60: 717-728.
- Kurkjian, C.R. and A.R. Flegal. 2003. Isotopic evidence of the persistent dominance of blood lead concentrations by previous gasoline lead emissions in Yerevan, Armenia. *Environmental Research* 93: 308-315.
- Conaway, C., S. Squire, R.P. Mason, and A.R. Flegal. 2003. Mercury speciation in the San Francisco Bay estuary. *Marine Chemistry* 80: 199-225.
- Ndung'u, K., R.P. Franks, K.W. Bruland K.W. and A.R. Flegal. 2003. Organic complexation and total dissolved trace metal analysis in estuarine waters: comparison of solvent-extraction graphite furnace atomic absorption spectrometric and chelating resin flow injection inductively coupled plasma-mass spectrometric analysis. *Analytica Chimica Acta* 481: 127-138.
- Sañudo-Wilhelmy, S.A. and A.R. Flegal. 2003. Potential influence of Saharan dust on the chemical composition of the Southern Ocean. *Geochemistry, Geophysics, Geosystems*: G^3 10.1029/2003GC000507.
- Habicht-Mauche, J.A., S.T. Glenn, M.P. Schmidt, R. Franks, H. Milford, and A.R. Flegal. 2002. Stable lead isotope analysis of Rio Grande glaze paints and ores using ICP-MS: a comparison of acid dissolution and laser ablation techniques. *Archaeometry* 29: 1043-1054.
- Kurkjian, R., C.E. Dunlap, and A.R. Flegal. 2002. Lead isotope tracking of atmospheric response to post-industrial conditions in Yerevan, Armenia. *Atmospheric Environment* 36: 1421-1429.
- Roitz, J.S., K.W. Bruland, and A.R. Flegal. 2002. The biogeochemical cycling of manganese in San Francisco Bay: Temporal and spatial variations. *Estuarine, Coastal and Shelf Science* 54: 227-239.
- Sañudo-Wilhelmy, S.A., K.A. Olsen, M. Yang, G.M. Scelfo, T.D. Foster and A.R. Flegal. 2002. Trace metal distributions off the Antarctic Peninsula in the Weddell Sea. *Marine Chemistry* 77: 157-170.
- Spinelli, G. A., A. Fisher, C.G. Wheat, M.D. Tryon, K.M. Brown, and A.R. Flegal. 2002. Groundwater seepage into northern San Francisco Bay: implications for dissolved metals budgets. *Water Resources Research* 10.1029/2001WR000827
- Squire, S., G.H. Scelfo, J. Revenaugh, and A.R. Flegal. 2002. Decadal trends of silver and lead contamination in San Francisco Bay surface waters. *Environmental Science and Technology* 36: 2379-2386.

- Steding, D.J. and A.R. Flegal. 2002. Mercury concentrations in coastal California precipitation: Evidence of local and trans-Pacific fluxes of mercury to North America. *Journal of Geophysical Research – Atmospheres* 10.1029/2002JD002081
- Thomas, M. A., Conaway, C. H., Steding, D. J., Marvin-DiPasquale, M., Abu-Saba, K. E., and A.R. Flegal. 2002. Mercury Contamination from Historic Mining in Water and Sediment, Guadalupe River and San Francisco Bay, CA. *Geochemistry* 2: 211-217.
- Alleman, L.Y., T.M. Church, P. Ganguli, A.J. Veron, B. Hamelin, and A.R. Flegal. 2001. Role of oceanic circulation on pollutant lead distribution in the South Atlantic. *Deep-Sea Research II* 48: 2855-2876.
- Alleman, L.Y., T.M., A.J. Veron, B. Hamelin, and A.R. Flegal. 2001. Isotopic evidence of contaminant lead in the South Atlantic troposphere and surface waters. *Deep-Sea Research II* 48: 2811-2829.
- Ndung'u, K.M., M.A. Thomas, and A.R. Flegal. 2001. Silver in the Western Equatorial and South West Atlantic. *Deep-Sea Research II* 48: 2933-2946.
- Ndung'u, K., J. Donat, M.A. Thomas, J.A. Consolvo and A.R. Flegal. 2001. Intercalibrated lead concentration measurements in the Atlantic. *Deep-Sea Research II* 48: 2781-2786.
- Habicht-Mauche, J., S.T. Glenn, H. Milford, and A.R. Flegal. 2000. Isotopic tracing of prehistoric Rio Grande glaze-paint production and trade. *Journal of Archaeological Science* Vol. 27: 709-713.
- Abu-Saba, K.E., D.L. Sedlak, and A.R. Flegal. 2000. Indirect reduction of hexavalent chromium by copper in the presence of superoxide. *Marine Chemistry* 69:33-41.
- Dunlap, C.E., R. Bouse, and A.R. Flegal. 2000. Past leaded gasoline emissions as a nonpoint source tracer in riparian systems: A study of river inputs to San Francisco Bay. *Environmental Science and Technology* 34:1211-1215.
- Scelfo, G.M. and A.R. Flegal. 2000. Lead in calcium supplements. *Environmental Health Perspectives* 108: 309-313.
- Steding, D.J., C.E. Dunlap, and A.R. Flegal. 2000. New isotopic evidence for chronic lead contamination in the San Francisco Bay estuary system: Implications for the persistence of past industrial lead emissions in the biosphere. *Proceedings of the National Academy of Science* 97:11181-11186.
- Ganguli, P.M., R.P. Mason, K.E. Abu-Saba, R.S. Anderson, and A.R. Flegal. 2000. Mercury speciation in acid mine drainage from the New Idria Quicksilver Mine, California. *Environmental Science and Technology* 34:4773-4779.
- Alleman, L.Y., A.J. Veron, T.M. Church, A.R. Flegal, and B. Hamelin. 1999. Invasion of the abyssal North Atlantic by modern anthropogenic lead. *Journal of Geophysical Research Letters* 26: 1477-1480.
- Creasey, C.L. and A.R. Flegal. 1999. Elemental analyses of groundwater: Demonstrated advantage of low-flow sampling and trace-metal clean techniques over standard techniques. *Hydrogeology Journal* 7: 161-167.
- Dunlap, C.E., E. Steinnes, and A.R. Flegal. 1999. A synthesis of lead isotopes in two millennia of European air. *Earth and Planetary Science Letters* 167: 81-88.
- Ritson, P.I., R.M. Bouse, A.R. Flegal, and S.N. Luoma. 1999. Stable lead isotopic analyses of historic and contemporary lead contamination of San Francisco Bay estuary. *Marine Chemistry* 64: 71-83.
- Rivera-Duarte, I., A.R. Flegal, S.A. Sanudo-Wilhelmy, and A.J. Veron. 1999. Silver in the far North Atlantic Ocean. *Deep-Sea Research II* 46: 979-990.
- Veron, A.J., T.M. Church, I. Rivera-Duarte, and A.R. Flegal. 1999. Stable lead isotopic ratios trace thermohaline circulation in the subarctic North Atlantic. *Deep-Sea Research II* 46: 919-935.
- Véron, A., P. Flament, M.L. Bertho, L. Alleman, A.R. Flegal, and B. Hamelin. 1999. Isotopic evidence of pollutant lead sources in northwestern France. *Atmospheric Environment* 33: 3377-3388.
- Flegal, A.R. 1998. Clair Patterson's influence on environmental research. *Environmental Research* 78: 65-70.

- Owen, B.D. and A.R. Flegal, 1998. Blood lead concentrations in marine mammals validate estimates of 10^2 – to 10^3 –fold increase in human blood lead concentrations. *Environmental Research* 78: 134-139.
- Veron, A.J., T.M. Church, and A.R. Flegal. 1998. Lead isotopes in the western North Atlantic: Transient tracers of pollutant lead inputs. *Environmental Research* 78: 102-111.
- Abu-Saba, K.E. and A.R. Flegal. 1997. Temporally variable freshwater sources of dissolved chromium to the San Francisco Bay estuary. *Environmental Science and Technology* 31: 3455-3460.
- Kozelka, P.B., S. Sanudo-Wilhelmy, A.R. Flegal, and K.W. Bruland. 1997. Physico-chemical speciation of lead in South San Francisco Bay. *Estuarine, Coastal and Shelf Science* 44: 649-658.
- Rivera-Duarte, I. and A.R. Flegal. 1997. Pore-water silver concentration gradients and benthic fluxes from contaminated sediments of San Francisco Bay, California, U.S.A. *Marine Chemistry* 56: 15-26.
- Rivera-Duarte, I. and A.R. Flegal, 1997. Porewater gradients and diffusive benthic fluxes of Co, Ni, Cu, Zn, and Cd in San Francisco Bay, *Croatia Chemica Acta* 70: 389-417..
- Flegal, A.R. 1996. Clair C. Patterson (1922-1995). *Nature* 379: 487.
- Rivera-Duarte, I. and A.R. Flegal. 1996. Microtechniques for the determination of nanomolar concentrations of trace elements in ≤ 10 ml of sediment porewater. *Analytica Chimica Acta* 328: 13-17.
- Sañudo-Wilhelmy, S.A. and A.R. Flegal. 1996. Trace metal concentrations in the surf zone and in coastal waters off Baja California, Mexico. *Environmental Science and Technology* 30: 1575-1580.
- Sañudo-Wilhelmy, S.A., I. Rivera-Duarte and A.R. Flegal. 1996. Distribution of colloidal trace metals in the San Francisco Bay estuary. *Geochimica et Cosmochimica Acta* 60: 4933-4944.
- Smith, D.R., J.D. Osterloh, and A.R. Flegal. 1996. The use of endogenous stable lead isotopes to determine the release of lead from the skeleton. *Environmental Health Perspectives* 104: 60-66.
- Abu-Saba, K.E. and A.R. Flegal. 1995. Chromium speciation in San Francisco Bay: Superposition of geochemical processes causes complex spatial distribution of inorganic species. *Marine Chemistry* 49:189-200.
- Flegal, A.R., S.A. Sañudo-Wilhelmy and G.M. Scelfo.1995. Silver in the eastern Atlantic Ocean. *Marine Chemistry* 49: 315-320.
- Landing, W.M., G.A. Cutter, J.A. Dalziel, A.R. Flegal, R.T. Powell, D. Schmidt, A. Shiller, P. Stratham, S. Westerlund, and J. Resing. 1995. Analytical intercomparison results from the 1990 Intergovernmental Oceanographic Commission open-ocean baseline survey for trace metals: Atlantic Ocean. *Marine Chemistry* 49: 253-266.
- Smith, D.R. and A.R. Flegal. 1995. Lead in the biosphere: Recent trends. *Ambio* 24: 21-23.
- Wood, T.M., A.M. Baptista, J.S. Kuwabara and A.R. Flegal. 1995. Diagnostic modeling of trace metal partitioning in south San Francisco Bay. *Limnology and Oceanography* 40: 345-358.
- Yeats, P., S. Westlund and A.R. Flegal. 1995. Cadmium, copper and nickel distributions at four stations in the eastern central and south Atlantic. *Marine Chemistry* 49: 283-294.
- Osenberg, C.W., R.J. Schmitt, S.J. Holbrook, K.E. Abu-Saba and A.R. Flegal. 1994. Detection of environmental impacts: natural variability, effect size, and power analysis. *Ecological Applications* 4: 16-30.
- Ritson, P.I., Esser, B.K., Niemeyer, S., and A.R. Flegal. 1994. Lead isotopic determination of historical sources of lead to Lake Erie, North America. *Geochimica et Cosmochimica Acta* 58: 3297-3305.
- Rivera-Duarte, I. and A.R. Flegal. 1994. Benthic lead fluxes in San Francisco Bay, California, USA. *Geochimica et Cosmochimica Acta* 58: 3307-3313.
- Sañudo-Wilhelmy, S. A. and A.R. Flegal. 1994. Temporal variations in lead concentrations and isotopic composition in the Southern California Bight. *Geochimica et Cosmochimica Acta* 58: 3315-3320.

- Smith, D.R., M.E. Markowitz, J. Crick, J.F. Rosen, and A.R. Flegal. 1994. The effects of succimer on the absorption of lead in adults determined by using the stable isotope ^{204}Pb . *Environmental Research* 67: 39-53.
- Veron, A., T.M. Church, C.C. Patterson and A.R. Flegal. 1994. Use of stable lead isotopes to characterize the source of anthropogenic lead in North Atlantic surface waters. *Geochimica et Cosmochimica Acta* 58: 3199-3206.
- Flegal, A.R., D.L. Garrison and S. Niemeyer. 1993. Lead isotopic disequilibria between plankton assemblages and surface waters reflect life cycle strategies of coastal populations within a northeast Pacific upwelling regime. *Limnology and Oceanography* 38: 670-678.
- Flegal, A.R., H. Maring and S. Niemeyer. 1993. Anthropogenic lead in Antarctic sea water. *Nature* 365: 242-244.
- Flegal, A.R. and S.A. Sañudo-Wilhelmy. 1993. Comparable levels of trace metal contamination in two semi-enclosed embayments: San Diego Bay and South San Francisco Bay. *Environmental Science and Technology* 27: 1934-1936.
- Smith, G.J. and A.R. Flegal. 1993. Silver in San Francisco Bay estuarine waters. *Estuaries* 16: 547-558.
- Veron, A., T.M. Church, C.C. Patterson, Y. Erel and A.R. Flegal. 1993. Response of lead cycling in the surface Sargasso Sea to changes in the tropospheric input. *Journal of Geophysical Research* 98: 18,269-18,276.
- Crick, J. and A.R. Flegal. 1992. Contaminant lead in blood-collection tubes for trace-element studies. *Clinical Chemistry* 38: 600-601.
- Flegal, A.R. and D.R. Smith. 1992. Lead levels in preindustrial humans. *The New England Journal of Medicine* 326: 1293-1294.
- Sañudo-Wilhelmy, S. and A.R. Flegal. 1992. Anthropogenic silver in the Southern California Bight: a new tracer of sewage in coastal waters. *Environmental Science and Technology* 26: 2147-2151.
- Smith, D.R. and A.R. Flegal. 1992. Stable isotopic tracers of lead mobilized by DMSA chelation in low lead exposed rats. *Toxicology and Applied Pharmacology* 116: 85-91.
- Smith, D.R., S. Niemeyer and A.R. Flegal. 1992. Lead sources to California sea otters: Industrial inputs circumvent natural lead biodepletion mechanisms. *Environmental Research* 57: 163-174.
- Smith, D.R. and A.R. Flegal. 1992. The public health implications of humans' natural levels of lead. *American Journal of Public Health* 82: 1565-1566.
- Smith, D.R., J. Osterloh, S. Niemeyer and A.R. Flegal. 1992. Stable isotope labeling of lead compartments in rats with ultra-low lead concentrations. *Environmental Research* 57: 190-207.
- Ericson, J.E., D.R. Smith and A.R. Flegal. 1991. Skeletal concentrations of lead, cadmium, silver and zinc in Ancient North American Pecos Indians. *Environmental Health Perspectives* 93: 217-223.
- Flegal, A.R., G.E. Smith, G.A. Gill, S. Sañudo-Wilhelmy and L.C.D. Anderson. 1991. Dissolved trace element cycles in the San Francisco Bay estuary. *Marine Chemistry* 36: 329-363.
- Flegal, A.R., H. Maring and S. Niemeyer. 1991. Lead fluxes in Antarctic surface waters. *Antarctic Journal of the United States*.
- Sañudo-Wilhelmy, S. and A.R. Flegal. 1991. Trace element distributions in coastal waters along the United States - Mexico boundary: Relative contributions of natural processes versus anthropogenic inputs. *Marine Chemistry* 33: 371-392.
- Church, T.M., A. Veron, C.C. Patterson, D. Settle, Y. Erel, H.B. Maring and A.R. Flegal. 1990. Trace elements in the North Atlantic troposphere: Shipboard results of precipitation and aerosols. *Global Biogeochemical Cycles* 4: 431-443.
- Michaels, A. and A.R. Flegal. 1990. Lead in marine planktonic organisms and pelagic food webs. *Limnology and Oceanography* 35: 287-295.
- Smith, D.R., S. Niemeyer, J.A. Estes and A.R. Flegal. 1990. Stable lead isotopes evidence anthropogenic contamination in Alaskan sea otters. *Environmental Science and Technology* 24: 1517-1521.

- Coale, K.S. and A.R. Flegal. 1989. Copper, zinc, cadmium and in surface waters of Lake Erie and Lake Ontario. *Science of the Total Environment* 87/88: 297-304.
- Flegal, A.R. and K.H. Coale. 1989. Discussion: Trends in lead concentrations in major U.S. rivers and their relation to historical changes in gasoline-lead consumption. *Water Resources Bulletin* 25: 1275-1277.
- Flegal, A.R., T.F. Duda and S. Niemeier. 1989. High gradients of lead isotopic composition in north-east Pacific upwelling filaments. *Nature* 339: 458-460.
- Flegal, A.R., J.O. Nriagu, S. Niemeier and K.H. Coale. 1989. Isotopic tracers of lead contamination in the Great Lakes. *Nature* 339: 455-458.
- Flegal, A.R., S. Sañudo-Wilhelmy and S.E. Fitzwater. 1989. Particulate thallium fluxes in the northeast Pacific. *Marine Chemistry* 28: 61-75.
- Smith, D.R. and A.R. Flegal. 1989. Elemental concentrations of hydrothermal vent organisms from the Galapagos Rift. *Marine Biology* 102: 127-133.
- Flegal, A.R. and D.R. Smith. 1988. Lead dispersion gradients in San Francisco Bay. *Proceedings, Seventh International Ocean Disposal Symposium*. Environment Canada, pp. 468-483.
- Flegal, A.R., K.J. Rosman and M.R. Stephenson. 1987. Isotope systematics of contaminant leads in Monterey Bay. *Environmental Science and Technology* 21: 1075-1079.
- Flegal, A.R. and V.J. Stukas. 1987. Accuracy and precision of lead isotopic composition measurements in sea water. *Marine Chemistry* 22: 163-177.
- Weldon, B.R., G.C. Cailliet and A.R. Flegal. 1987. Comparison of radiometric dating with vertebral band age estimates in four California elasmobranchs. In: *Age and Growth of Fishes* (R.C. Summerfelt and G.E. Hall, eds.), pp. 301-315.
- Flegal, A.R. 1986. Lead fluxes in tropical marine waters: a review. *Science of the Total Environment* 58: 1-8.
- Flegal, A.R., K. Itoh, C.C. Patterson and C.S. Wong. 1986. Vertical profile of lead isotopic compositions in the northeast Pacific. *Nature* 321: 689-690.
- Flegal, A.R., D.M. Settle and C.C. Patterson. 1986. Thallium in marine plankton. *Marine Biology* 90: 501-503.
- Smith, D.R., M.D. Stephenson and A.R. Flegal. 1986. Trace metals in mussels transplanted to San Francisco Bay. *Environmental Toxicology and Chemistry*, 5: 129-138.
- Flegal, A.R. 1985. Lead in a pelagic food chain. Hungarian Academy of Sciences, *Symposia Biologica Hungarica* 29: 83-90.
- Flegal, A.R. and C.C. Patterson. 1985. Thallium concentrations in sea water. *Marine Chemistry* 15: 327-331.
- Flegal, A.R., B.K. Schaule and C.C. Patterson. 1984. Stable isotopic ratios of lead in surface waters of the central Pacific. *Marine Chemistry*, 14: 281-287.
- Oakden, J.M., J.S. Oliver and A.R. Flegal. 1984. EDTA chelation and zinc antagonism with cadmium in sediment: Effect on the behavior and mortality of two infaunal amphipods. *Marine Biology* 84: 125-130.
- Oakden, J.M., J.S. Oliver and A.R. Flegal. 1984. Behavioral responses of a phoxocephalid amphipod to organic enrichment and trace metals in sediment. *Marine Ecology - Progress Series* 14: 253-257.
- Flegal, A.R. and C.C. Patterson. 1983. Vertical concentration profiles of lead in the central Pacific at 15°N and 20°S. *Earth and Planetary Science Letters* 64: 19-32.
- Goldberg, E.D., M. Koide, V. Hodge, A.R. Flegal and J.H. Martin. 1983. U.S. Mussel Watch: 1977-1978 results on trace metals and radionuclides. *Estuarine and Coastal Marine Science* 16: 69-93.
- Flegal, A.R., M. Stephenson, J.H. Martin and M. Martin. 1981. Elevated concentrations of mercury in mussels (*Mytilus californianus*) associated with pinniped colonies. *Marine Biology* 65: 45-48.
- Flegal, A.R. 1980. Labeling manganese in geochemical matrices by neutron activation. *Analytica Chimica Acta* 116: 359-364.

- Flegal, A.R. 1980. Geostandard needs in environmental research and monitoring programs. *Geostandards Newsletter* 4: 17-18.
- Flegal, A.R. 1980. The geographic variation of silver in the black turban snail, *Tegula funebris*. *Environment International* 3: 303-305.
- Flegal, A.R. 1979. A biogeochemical study of manganese in the estuarine zone. *Ph.D.Thesis*, Oregon State University.
- Flegal, A.R. 1978. Trace element concentrations in the rough limpet, *Acmaea scabra*, in *California*. *Bulletin of Environmental Contamination and Toxicology* 20: 834-839.
- Flegal, A.R. 1977. Mercury in the seston of the San Francisco Bay estuary. *Bulletin of Environmental Contamination and Toxicology* 17: 273-277.
- Flegal, A.R. and J.H. Martin. 1977. Contamination of biological samples by ingested sediment. *Marine Pollution Bulletin* 8: 90-92.
- Flegal, A.R. 1976. A geographic survey of silver concentrations in the gastropod *Tegula funebris* (A. Adams, 1855). *MS Thesis*, Moss Landing Marine Laboratories.
- Martin, J.H. and A.R. Flegal. 1975. High copper concentrations in squid livers in association with elevated levels of silver, cadmium and zinc. *Marine Biology* 30: 51-55.

Selected Technical Publications (Author or contributor)

- San Francisco Estuary Institute. 2006. *The Regional Monitoring Program: Science in Support of Managing Water Quality in the San Francisco Estuary*. SFEI Contribution 435, Oakland, CA. 45 pp.
- NOAA Panel of Scientific Experts. 2003. *Scientific Review of the Technical Report of the San Francisco International Airport Runway Reconfiguration Project*, US Department of Commerce, Washington, D.C.
- University of California. 2002. *Review of the California Department of Toxic Substances' Mercury Report*, University of California, 7 pp.
- University of California. 2001. *Report of the UC Chromium(VI) Blue Ribbon Panel to the Office of Environmental Health Hazard Assessment*, University of California, 30 pp.
- NOAA. 1999. *Report of the San Francisco Airport Science Panel*, NOAA, US Department of Commerce, Washington, D.C., 21 pp.
- USEPA. 1995. *Method 1631: Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry*. USEPA Office of Water, Washington, D.C., 33 pp.
- USEPA. 1995. *Method 1632: Determination of Inorganic Arsenic in Water by hydride Generation Flame Atomic Absorption*. USEPA Office of Water, Washington, D.C., 30 pp.
- USEPA. 1995. *Method 1636: Determination of Hexavalent Chromium by Ion Chromatography*. EPA 821-R-95-029. U.S. Environmental Protection Agency, Office of Water. Washington, D.C., 31 pp.
- USEPA. 1995. *Method 1637: Determination of Trace Elements in Ambient Waters by Chelation Preconcentration with Graphite Furnace Atomic Absorption*. EPA 821-R-95-030. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., 45 pp.
- USEPA. 1995. *Method 1638: Determination of Trace Elements in Ambient Waters by Inductively Coupled Plasma-Mass Spectrometry*. EPA 821-R-95-031. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., 47 pp.
- USEPA. 1995. *Method 1639: Determination of Trace Elements in Ambient Waters by Stabilized Temperature Graphite Furnace Atomic Absorption*. EPA 821-R-95-032. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., 41 pp.
- USEPA. 1995. *Method 1640: Determination of Trace Elements in Ambient Waters by On-line Chelation Preconcentration and Inductively Coupled Plasma-Mass Spectrometry*. EPA 821-R-95-033. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., 45 pp.

- USEPA. 1995. *Method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels*. EPA 821-R-95-034. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., 36 pp.
- USEPA. 1995. *Guidance on the Documentation and Evaluation of Trace Metals Data Collected for Clean Water Act Compliance Monitoring*. EPA 821-B-95-002. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., 30 pp.
- USEPA. 1995. *Guidance on Establishing Trace Metal Clean Rooms in Existing Facilities*. Draft. EPA 821-B-95-001. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., 18 pp.

Supervised Theses

- Langsner, M. 2009. Ph.D. Discovery of first indications of multidrug resistance in a teleost embryo, using the model organism zebrafish (*Danio rerio*). Ph.D. Thesis, Environmental Toxicology, UCSC.
- Black, F. J. 2008. Method for investigating the complexation of inorganic mercury, and factors controlling the photo-degradation of monomethyl mercury in natural waters. Ph.D. Thesis, Environmental Toxicology, UCSC.
- Luengen, A.C. 2007. Investigating the spring bloom in San Francisco Bay: Links between water chemistry, metal cycling, mercury speciation, and phytoplankton community composition. Ph.D. Thesis, Environmental Toxicology, UCSC.
- Conaway, C.H. 2005. Sources, transport, and fate of mercury in San Francisco Estuary and tributaries. Ph.D. Thesis, Environmental Toxicology, UCSC.
- Flanders, J.R. 2004. The effect of organic and inorganic ligands on the bioavailability, uptake, and methylation of inorganic mercury by *Desulfobus proflonicus* *Ipr3*. MS Thesis, Environmental Toxicology, UCSC.
- Ranville, M.A. 2004. Anthropogenic perturbations of trace metal cycling in California and the North Pacific Ocean. Ph.D. Thesis, Environmental Toxicology, UCSC.
- Rankin, C. 2004. Case studies in sources of lead contamination: Chocolate and the Hudson River Estuary. MS Thesis, Environmental Toxicology, UCSC.
- Gonzalez, A. 2004. Natural occurrence of hexavalent chromium in the Aromas Red Sands Aquifer, California. MS Thesis, Environmental Toxicology, UCSC.
- Kurkjian, R. 2001. Geochemical cycling of industrial lead and human exposure in the Republic of Armenia. Ph.D. Thesis, Earth Sciences, UCSC.
- Ostrowski, J. 2001. Benthic fluxes of copper and nickel from contaminated estuarine sediments near Mare Island Naval Reserve. M.S. Thesis, Earth Sciences, UCSC.
- Luengen, A. 2001. Mussel immune responses as biomonitors of stress in San Francisco Bay. M.S. Thesis, Ocean Sciences, UCSC.
- Steding, D. 2001. Three case studies at the regional and global scales of the cycling and fate of lead and mercury in the environment. Ph.D. Thesis, Earth Sciences, UCSC.
- Abu-Saba, K.E. 1998. Spatial and temporal variability in the aquatic cycling of chromium. Ph.D. Thesis, Chemistry, UCSC.
- Ganguli, P. 1998. Mercury speciation in acid mine drainage: New Idria Quicksilver Mine, California. MS Thesis, Earth Science, UCSC.
- Beck, N.G. 1997. The applicability of stable lead isotopes to trace groundwater contamination. MS Thesis, Earth Science, UCSC.
- Owen, B.D. 1996. Blood lead concentrations in northern elephant seal pups (*Mirounga angustirostris*) evidence natural background levels in humans. MS Marine Science, UCSC.
- Rivera-Duarte, I. 1995. Porewater geochemistry of trace elements in San Francisco Bay sediments. Ph.D. Thesis, Earth Science, UCSC.
- Abu-Saba, K.E. 1994. Chromium in San Francisco Bay: Inorganic speciation, distribution, and geochemical processes. MS Thesis, Chemistry, UCSC.

- Ritson, P.I.M. 1994. Historical and contemporary cycling of contaminant lead in aquatic systems. Ph.D. Thesis, Earth Science, UCSC.
- Sañudo-Wilhelmy, S.A. 1993. Geochemistry of trace metal contamination in the Southern California Bight. Ph.D. Thesis. Earth Science, UCSC.
- Smith, D.R. 1991. Lead isotope systematics in environmental and clinical lead contamination. Ph.D. Thesis. Biology, UCSC.
- Sañudo-Wilhelmy, S.A. 1989. 1) Trace metal distributions and stable lead isotopic composition in surface waters along the United States - Mexican boundary in the northeast Pacific; 2) Trace metal distributions in surface waters along the United States - Mexican boundary: Multivariate statistical analyses. MS Thesis, Marine Science, UCSC.

UNIVERSITY SERVICE

Department

Environmental Toxicology, Chair, 1992-2004, 2008
 Environmental Toxicology Search Committees, 2000-2008
 Environmental Toxicology Search Committee, Chair, 1995-96, 1996-97, 1997-98, 1999-2000, 2002-03
 Earth Science, Search Committee, 1995

Division of Physical and Biological Sciences

Sullivan Award Committee, 2010-present
 Division Professional Staff Review Committee Chair, 2008-2009
 Division Professional Staff Review Committee, 2007-2008
 Chemical Hygiene, Committee, 1996-2008
 DELSI, Advisory Committee, 1998-2004
 Physical and Biological Sciences Division, Associate Dean, 1994-2004
 Institute of Marine Sciences, Advisory Committee, 1992-1994, 2001-2004
 Biomedical Space Committee, 2002-2003
 Environmental Sciences Space Committee, 2002-2003
 Physical Sciences Building Committee, 1992-2002
 Development Campaign Steering Committee, 2000-2001
 Environmental Sciences Committee, 2000-2001
 Natural Sciences Division Space Committee, 1997-1998
 Environmental Engineering Committee, 1993-1994
 Pharmacology Committee, 1992-1994
 Fort Ord Committee, UCSC, 1992-1994

College

Crown College, Executive Committee, 2000-2003

Campus

Crown & Porter Provost Review Committee 2010
 California Alliance for Minority Participation in Science, Engineering and Mathematics, Regional Director, 1997-2010
 Committee on Educational Policy, 2006-2008
 Chemical Safety Advisory Committee, 2002-2008
 UC Honors Consortium, 2008

Academic Advisor Coordinator, Search Committee, 2006-2007
Howard Hughes Symposia on Diversity in the Sciences, Campus Representative, 2006
Chancellor's Inaugural Symposium Committee, 2005
Western Association of Colleges, Committees, 2003 & 2004
Science, Technology, Environment, Policy and Society, Executive Committee, 2002
Institute of the Environment, Committee, 2001-2002
College Provosts, Search Committee, 2000-2001
Director of University Affairs, Search Committee, 2000-2001
Santa Clara Valley Regional Center Academic Planning Task Force, Committee, 2000

Office of the President

California Alliance for Minority Participation in Science, Engineering and Mathematics, Statewide Undergraduate Symposium, Judge, 1999-2010
UC MEXUS, Grants Review Committee, 2006
UC Toxic Substances Research and Teaching Program, Executive Committee, 2000-2004
Water Resources Center, Coordinating Board, 2000-2004
California Office of Environmental Health Hazard Assessment's Mercury Report, UC Review, 2002
University of California Chromium(VI) Blue Ribbon Panel for the Office of Environmental Health Hazard Assessment, 2000-2001
Dialogues on Undergraduate Education: Research as a Cornerstone of Undergraduate Education for Students in the University of California, Delegate, 2000
California Virtual University, University of California, Committee, 1997-1998
Working Group on Teaching and Learning Technologies and the Present and Future of the University, UCSC, 1997-1998
All-University Conference on Teaching and Learning Technologies and the Present and Future of the University, 1997
Managers & Supervisors of Research Professional Employees, University of California, Committee, 1996-1997
University of California Toxic Substances Research and Teaching Program, Annual Symposium, Chair, 1996
California Environmental Technology Center, Science and Technology Advisory Board, 1995-1996.
University of California Toxic Substances Research and Teaching Program, Annual Symposium, Chair, 1993
Toxic Waste Symposium, UCSC, Organizing Committee, 1988
University of California - California Institute of Technology Accelerator Mass Spectrometry Conference, Committee, 1986-87

OUTSIDE PROFESSIONAL ACTIVITIES

Invited Public Lectures or Forum Participation (incomplete)

Challenges, opportunities and expectations for Chilean Fulbright Scholars in the US. *Desayuno Anual en honor a los Fulbrighters que han regresado a Chile durante este año*, Santiago, Chile, December 15, 2010.
Lead biogeochemistry and toxicology. Cabrillo College, April 16, 2010
All of the lead in China. Stanford University, April 2, 2010
Studies of mercury concentration, speciation, and bioavailability in San Francisco Bay.). *4th Annual San Francisco Bay Mercury Coordination Meeting*, Oakland, CA, February 22, 2007.
Isotopic characterization of industrial lead sources in vinegars. *American Chemical Society National Meeting*, San Francisco, CA, September 12, 2006.

Spatial and temporal variations on metals in the San Francisco Bay estuary. *National Monitoring Conference*, San Jose, CA 2006.

Global fluxes of inorganic contaminants: Parallels between California and Spain. *Centre Mediterrani d'Investigacions Marines i Ambientals*, Barcelona, Spain, May, 23, 2005

Mercury fluxes and speciation in San Francisco Bay: from the historic New Almaden mine and California Gold Rush to contemporary sources. *Universitat de Barcelona*, Barcelona, Spain, May 20, 2005

Hexavalent chromium contamination and toxicity in groundwater: Was Erin Brokovich right? *Universitat Autònoma de Barcelona*, Barcelona, Spain, May 15, 2005.

Anthropogenic sources, fate and transport of contaminant silver in the world ocean. *Centre for Advanced Studie*, Spanish Council of Science. Blanes, Spain, May 13, 2005

Atmospheric lead contamination: Temporal and spatial gradients. *United States Environmental Protection Agency, Air Quality Criteria for Lead Workshop*, Chapel Hill, NC, February 2, 2005.

Trace element cycles from the North Pacific to San Francisco Bay to Québec. *Université du Québec INRS-Eau, Terre, Environnement*. Québec, Canada, December 21, 2004

Monitoring trace elements in US estuaries. *National Water Quality Monitoring Council*. San Jose, CA, December 7, 2004.

Biogeochemical cycles of toxic metals: From Armenia to Antarctica with brief stops in San Francisco Bay and the World Ocean. *United States Geological Survey*. Menlo Park, CA, October 21, 2004.

Identifying and tracing sources of lead poisoning using stable lead isotopic composition analyses. *Childhood Lead Poisoning Prevention Program*. Oakland, CA, October 15, 2004.

Quantifying decadal changes in metal contamination in San Francisco Bay. *San Francisco Regional Monitoring Program for Trace Substances*. Berkeley, CA, May 4, 2004.

Resolving spatial and temporal variations in trace elements within the San Francisco Bay estuary. *State of the Estuary Biannual Meeting*, Oakland, CA, February 2004.

Public Forum: *Scientific Review of the Technical Report of the San Francisco International Airport Runway Reconfiguration Project*, San Francisco, CA. June 25, 2003.

Mercury cycling in the San Francisco Bay area: Local and trans-Pacific fluxes. *Electric Power Research Institution Annual Meeting*, Monterey, CA. May 7., 2003.

Public Lecture: Explorations in Marine & Ocean Sciences. University of California, Santa Cruz, November 2002

Panel: Naturally occurring may not be as natural as we think. *Reassessing Prop.65: Has Reform Brought Relief?* San Diego, CA. March 25-26, 2002.

Diurnal to decadal variations of trace element concentrations in San Francisco Bay: The Urban Estuary. *Ocean Sciences Meeting*. Honolulu, HI, February 12, 2002.

Workshop: Developing an Undergraduate Curriculum on Water Resources and Sustainability. Daemen College, Amherst, NY. February 2, 2002.

Biogeochemical cycles of toxic metals in California, *COSMOS Plenary Lecture Series*, Santa Cruz, CA, July 17, 2000

Impacts of climate change on contamination in coastal waters. *The Friends of Long Marine Laboratory Inaugural Lecture Series*. Santa Cruz, CA, April 25, 2000

The perception of risk and environmental toxicology. Seymour Marine Discovery Center, Opening Day Community Reception, Santa Cruz, CA, March 23, 2000

San Francisco Airport Expansion, *NOAA Panel of Independent Experts*, San Francisco, CA, November, 1999

Panel and presentation on mercury speciation analyses of ambient waters. *Mercury Workshop*, Oakland, CA, October 22, 1999

Panel. *Society of American Chicano and Native American Scientists, National Meeting*, Portland, OR, October, 1999

Biogeochemical cycles of contaminants in the San Francisco Bay estuary. *University of California, San Diego*, June, 1999

Establishment of an effective, multicultural research laboratory. Lecture and Panel, *Excellence and Diversity in Undergraduate Education, National Conference*, University of California, Los Angeles, February, 1998.

Mercury: Ubiquitous contaminant in California and beyond (Lecture and Panel Moderator). *Water Quality - From the Source to the Sea, Conference on Environmental Sciences and Policy*, University of California, Davis, CA, 1997.

Silver in the San Francisco Bay estuary. *5th International Conference on Transport, Fate and Effects of Silver in the Environment*. Hamilton, Canada, 1997.

Biogeochemical cycles of metals in San Francisco Bay. San Francisco Estuary Institute, *Regional Monitoring Program for Trace Substances, Annual Meeting*, Oakland, CA, 1997.

Geochemical processes influencing the cycling of contaminant metals in the San Francisco Bay estuary. *San Jose State University, Geology Club*, San Jose, CA, 1997.

Current research and career opportunities in environmental toxicology. *IBM Annual Science and Technology Conference*, San Jose, CA, 1997.

Copper Brake Pad Forum, *Common Ground for the Environment*, Stanford, CA, 1996.

Environmental Toxicology at UCSC. *University of California Toxic Substances Research & Teaching Program, Annual Symposium*, University of California, Santa Cruz, 1996.

Ethical considerations associated with research in environmental toxicology. *Pugwash Chapter, University of California, Santa Cruz*, 1996.

Benthic remobilization: An important source of trace metals in San Francisco Bay. *3rd Biennial State of the Estuary Conference*, San Francisco, CA, 1996.

Lead poisoning: Medical and treatment issues. *3rd Annual New York State Childhood Lead Poisoning Prevention Conference*, State University of New York, Purchase, 1996.

Workshop: Uses of stable lead isotopes. *3rd Annual New York State Childhood Lead Poisoning Prevention Conference*, State University of New York, Purchase, 1996.

Workshop on Sustainable Development for Arizona International Campus (Short Course Instructor and Workshop Facilitator). *University of Arizona, International Campus*, Tucson, AZ, 1996.

Overview of the sampling and analysis process for trace metals determinations. *The Trace Metals Workshop, USEPA Office of Water*, Chicago, IL, 1996.

Overview of the sampling and analysis process for trace metals determinations. *The Trace Metals Workshop, USEPA Office of Water*, Boston, MA, 1996.

The biogeochemical cycles of natural and industrial metals in the San Francisco Bay estuary. *Environmental Engineering, University of California, Berkeley*, 1995.

Overview of the sampling and analysis process for trace metals determinations. *The Trace Metals Workshop, USEPA Office of Water*, Norfolk, VA, 1995.

Overview of the sampling and analysis process for trace metals determinations. *The Trace Metals Workshop, USEPA Office of Water*, San Antonio, TX, 1995.

Overview of the sampling and analysis process for trace metals determinations. *The Trace Metals Workshop, USEPA Office of Water EPA*, Seattle, WA, 1995.

Establishing trace metal clean procedures for elemental analyses of water (Panel). *18th Annual EPA Conference on Analysis of Pollutants in the Environment*, Norfolk, VA, 1995.

Adaptation of trace metal clean techniques for analyses of trace element concentrations in aquatic systems. *18th Annual EPA Conference on Analysis of Pollutants in the Environment*, Norfolk, VA, 1995.

Laboratory determinations of trace metals. *The Trace Metals Workshop, USEPA Office of Water*, Norfolk, VA, 1995.

The global record of lead contamination in the humans: Historical and contemporary problems. *Pacific Lutheran College*, Tacoma, WA, 1995.

A geological perspective on historical and contemporary sources of metal contamination in San Francisco Bay. *Earth Sciences, University of California, Berkeley*, CA, 1995.

Historic, contemporary, and future sources of metal contamination in San Francisco Bay. *American Association for the Advancement of Science, Regional Meeting*, San Francisco, CA, 1994.

Adaptation of ultra-clean techniques for an environmental monitoring program and established site-specific water quality in San Francisco Bay. *17th Annual EPA Conference on Analysis of Pollutants in the Environment*, Norfolk, VA, 1994.

Monterey Bay Water Quality Workshops, Monterey, CA, 1994.

Trace element measurements in water (Panel). *17th Annual EPA Conference on Analysis of Pollutants in the Environment*, Norfolk, VA, 1994.

Trace element contamination in San Francisco Bay. *American Association for the Advancement of Science, Pacific Division Annual Meeting*, San Francisco, CA, 1994.

Accuracy and precision in trace element analyses. *ALEX/West '94, Advanced Laboratory Exposition and Conference*, San Jose, CA, 1994.

Lead contamination in the biosphere: Local, regional, and global concerns. *Moss Landing Marine Laboratories*, Moss Landing, CA, 1994.

Modeling nutrient and heavy metal contamination in South San Francisco Bay. *Bay-Delta Modeling Forum*, Palo Alto, CA, 1994.

Silver in the San Francisco Bay estuary. *2nd International Conference on Transport, Fate and Effects of Silver in the Environment*. Madison, WI, 1994.

Elemental cycles in San Francisco Bay. *San Francisco Regional Water Quality Control Board, Workshop*, Oakland, CA, 1994.

Heavy metal contamination in San Francisco Bay. *American Association for the Advancement of Science*. San Francisco, CA, 1994.

Adaptation of trace metal clean techniques for environmental research in aquatic systems. Society of Environmental Toxicology and Chemistry, Northern California Regional Chapter Fourth Annual Meeting, Oakland, CA, 1994.

Metal contamination in California coastal waters. *Southwest Regional Marine Research Program Conference*, Asilomar, CA, 1993.

Developments in the Environmental Toxicology program at UCSC. *University of California Toxic Substances Teaching and Research Program Annual Symposium*, Santa Cruz, CA, 1993.

The biogeochemical cycle of silver in San Francisco Bay. *First International Conference on Silver in the Environment*. Madison, WI, 1993.

Marine pollution research: Current status and future concerns. Ecotoxicology and Environmental Chemistry - a Global Perspective, 1st *Society of Environmental Toxicology and Chemistry World Congress*, Lisbon, Portugal, 1993.

Lead contamination in the marine biosphere. *Topics in Global Geochemistry, International Symposium*, Pasadena, CA December 1992.

Anthropogenic perturbations of elemental cycles in San Francisco Bay. *Society of Environmental Toxicology and Chemistry*, Oakland, CA, 1992.

The global lead cycle: natural processes and anthropogenic perturbations. *Moss Landing Marine Laboratories*, Moss Landing, CA, 1992.

Elemental contamination in San Francisco Bay. *California Water Pollution Control Association*, Oakland, CA, 1992.

Produced water contamination in the Southern California Bight. Symposium on Toxics in the Marine Environment. *Southern California Academy of Sciences*, Occidental College, 1992.

The theoretical threshold of lead toxicity in humans. *National Conference on Lead Contamination in Adults*. Environmental Protection Agency, Research Triangle Park, NC, 1991.

Variations of trace element concentrations in San Francisco Bay: Geochemical records and analytical artifacts. *11th International Estuarine Research Conference: Geochemistry of Nutrients & Trace Contaminants in Estuaries*, San Francisco, CA, 1991.

Natural and anthropogenic perturbations of trace element cycles in the San Francisco Bay estuary. *11th International Estuarine Research Conference*, San Francisco, CA, 1991.

The challenge of analysis - issues of measurement. *Getting the Lead Out: Priorities for the 1990's - Research and Clinical Management. Environmental and Occupational Health Sciences Institute, Rutgers University, Piscataway, NJ, 1991.*

Natural and anthropogenic perturbations of trace element cycles in the San Francisco Bay estuary. *State of the Estuary, San Francisco Bay Estuary Project, Berkeley, CA, 1991.*

Vertical profiles of Ag, Cd, Co, Cu, Fe, Ni, Pb and Zn concentrations in the South Atlantic. *Intergovernmental Oceanographic Commission, Group of Experts on Standards, Techniques and Intercalibration Symposium. Jekyll Island, GA, 1991.*

Silver in San Francisco Bay: an urban estuary. *Second International Symposium on the Biogeochemistry of Model Estuaries: Estuarine Processes in Global Change. Jekyll Island, GA, 1991.*

Factors controlling trace element cycles in the San Francisco Bay estuary. *United States Geological Survey, Sacramento, CA, 1991.*

Isotopic tracers of lead contamination in the marine biosphere. *Hopkins' Marine Station, Stanford University, Monterey, CA, 1990.*

Natural and anthropogenic sources of lead in the Antarctic. *University of California Toxics Program Symposium on Contamination of the Coastal Marine Environment, Bodega, CA, 1990.*

Particulate lead fluxes in the northeast Pacific. *11th International Symposium on the Chemistry of the Mediterranean, Primosten, Yugoslavia, 1990.*

Multivariate analyses of trace element distributions in the Southern California Bight. *University of Maryland School of Medicine, Baltimore, MD, 1990.*

Isotopic tracers of contaminant lead in the European Alps. *Swiss Federal Institute of Technology, Dubendorf, Switzerland, 1989.*

Isotopic fingerprints of acid rain precursors in the Great Lakes. *Institute of Ecosystem Studies, The New York Botanical Garden, Millbrook, NY, 1989.*

QA/QC of low part per trillion measurements of stable lead isotopic compositions in environmental samples. *Chemical Institute of Canada, National Meeting, Victoria, Canada, 1989.*

Particulate thallium fluxes in the northeast Pacific. *10th International Symposium on the Chemistry of the Mediterranean, Primosten, Yugoslavia, 1988.*

Lead fluxes to Lake Ontario. *International Conference on Trace Metals in Lakes. Hamilton, Canada, 1988.*

A short course on clean-lab techniques. *International Conference on Trace Metals in Lakes. Dorset, Canada, 1988.*

Metal contaminants in the coastal zone. *Symposium on Toxics in the California Coastal Environment. University of California Toxic Substances Research and Education Program, Los Angeles, California, 1988.*

The biogeochemical cycle of lead. Environmental Division, *Lawrence Livermore National Laboratories, Livermore, California, 1988.*

Natural and contaminated elemental cycles in the oceans. *University of the Pacific, Stockton, California, 1988.*

Stable lead isotopes trace contaminant fluxes to the Great Lakes. *Second Annual Research Symposium, University of California Toxic Substances Research and Teaching Program, Los Angeles, California, 1988.*

Trace elements in waters of San Francisco Bay-Delta. *Toxic Contaminants and Their Biological Effects in San Francisco Bay-Delta, Berkeley, California, 1987.*

Lead isotope systematics of a northeast Pacific upwelling filament. *East Pacific Ocean Conference, Tiburon, California, 1987.*

Lead contamination in the ocean. *Monterey Bay Aquarium Symposium, Monterey, California, 1987.*

Other Presentations (with Published Abstracts) at Scientific Meetings (incomplete)

- Ganguli, P.M., N. Dimova, C.H. Conaway, P. W. Swarzenski, N.C. Kehrlein and A.R. Flegal. Mercury Speciation and Transport via Submarine Groundwater Discharge at a Coastal Lagoon in Central California. *28th Biennial Groundwater Conference*. Sacramento CA October 5, 2011
- Ganguli, P.M., C.H. Conaway, P. W. Swarzenski, N.C. Kehrlein and A.R. Flegal. Mercury speciation in coastal California barrier beach lagoons. *10th International Conference on Mercury as a Global Pollutant*. Halifax, Nova Scotia, Canada July 24-29, 2011
- Weiss, P. et al. Speciated mercury and dry deposition observations at AMNET Site CA48 (Elkhorn Slough) compared with TGM measurements on the R/V Atlantis during CALNEX 2010. *10th International Conference on Mercury as a Global Pollutant*. Halifax, Nova Scotia, Canada · July 24-29, 2011
- Odigie, K.O. and A.R. Flegal. Remobilization of industrial lead depositions by wildfire. *American Geophysical Union Fall Meeting*, San Francisco, CA., December 13-17, 2010.
- Paytan, A, F. Black, P. Ganguli, K. Knee, N. Desieyes, E. Gray, C. Conaway, R. Flegal and P. Swarzenski, Submarine groundwater discharge of total mercury and monomethylmercury to coastal waters. *Conference on Radium and Radon Isotopes as Environmental Tracers*, Jerusalem, Israel, March 14–19, 2010.
- Soto-Jiménez, M.F. and A. R. Flegal. Metal-contaminated indoor and outdoor house dust from a neighborhood Smelter area in Torreón, Mexico. *Urban Environmental Pollution Conference*, Boston, Ma. June 19-23, 2010.
- Ganguli, P.M., F.J. Black, P.W. Swarzenski, C.H. Conaway, A. Paytan, L.G. Miller and A.R. Flegal. Mercury speciation and transport in submarine groundwater discharge. *NorCal Society of Environmental Toxicology and Chemistry Conference*. Sacramento CA, September 2009.
- Ganguli P.M., Fisher A.T. and A.R. Flegal. Evaluating the influence of surface water -groundwater interaction on mercury bioavailability in a mine-impacted California coastal stream. *University of California Toxic Substances Research & Teaching Program Research Symposium*, Berkeley, CA, March 2009, *Quality Monitoring Conference*, May 21, 2008.
- Gallon, C., N. Hoang, N. and A.R. Flegal. Spatial variability of lead and silver concentration and lead isotopic composition in the Gulf of Alaska. *University of California Toxic Substances Research and Teaching Program, Annual Symposium*. Santa Cruz, CA. April 2008
- Cutter, G.A., L.S. Cutter, M.A. Ranville and A.R. Flegal. Selenium: Essential, toxic, and increasingly being mobilized to coastal and open ocean waters. *Ocean Sciences Meeting*, Orlando, FL. March 2008.
- Luengen, A.C., P.T. Raimondi and A.R. Flegal. Linkages between algal community composition and water chemistry data on short spatial and temporal scales. *Ocean Sciences Meeting*, Orlando, FL, March 2008.
- Langsner, M., G. Cherr and A.R. Flegal. Characterizing Multixenobiotic Resistance in Developing Zebrafish (*Danio rerio*). *University of California Toxic Substances Research and Teaching Program, Annual Symposium*. Santa Cruz, CA. April 2007
- Conaway, C.H., Ross, J.R.M, Looker, R. and A.R. Flegal. Decadal mercury trends in San Francisco Estuary sediments. *8th Biennial State of the Estuary Conference*, Oakland, CA. 2007.
- Luengen, A.C., C.H. Conaway and A.R. Flegal Linking abiotic and biotic mercury reservoirs: Temporal trends and bloom dilution. *San Francisco Estuary Institute 4th Annual San Francisco Bay Mercury Coordination Meeting*, Oakland, CA, February 22, 2007.
- Soto-Jiménez M.F. and A.R. Flegal. Lead isotope fingerprints of childhood lead poisoning in Torreón, México. *American Geophysical Union Join Assembly*. Acapulco, Mexico May 2007.
- Black, F.J., and A.R. Flegal. Complexation of inorganic mercury and the distribution of complexing ligands along a stream transect. V.M. Goldschmidt Conference, Melbourne, Australia, 2006

- Black, F.J., C. Saltikov and A.R. Flegal. Inorganic mercury (II) speciation and bioavailability, the saga continues. . 8th *International Conference on Mercury as a Global Pollutant*, Madison, WI, August 6-11, 2006.
- Conaway, C.H., F.J. Black, M. Gault-Ringold, J.T. Pennington and A.R. Flegal. Upwelling of dimethylmercury in Monterey Bay as a potential source of monomethylmercury to the atmosphere. 8th *International Conference on Mercury as a Global Pollutant*, Madison, WI, August 6-11, 2006.
- Conaway, C.H., J.R.M. Ross, R. Looker and A.R. Flegal (invited). Decadal mercury trends in San Francisco Estuary sediments (invited). *National Monitoring Conference*, San Jose, CA, September 2006.
- Conaway, C.H., F.J. Black, M. Gault-Ringold, J.T. Pennington and A.R. Flegal. Upwelling of dimethylmercury in Monterey Bay as a potential source of monomethylmercury to the atmosphere. 8th *International Conference on Mercury as a Global Pollutant*, Madison, WI, August 6-11, 2006.
- Luengen, A.C., N.S. Bloom and A.R. Flegal. 2006. Mercury cycling during a spring bloom in San Francisco Bay. 8th *International Conference on Mercury as a Global Pollutant*, Madison, WI, August 6-11, 2006.
- Luengen, A.C. and A.R. Flegal. Depletion of methylmercury during a spring phytoplankton bloom in South San Francisco Bay. *Northern California Chapter of the Society of Toxicology, Spring Meeting*, Half Moon Bay, CA, April 28-29, 2006.
- Luengen, A.C. and A.R. Flegal. Interaction between nutrients, phytoplankton blooms, and mercury concentrations in San Francisco Bay. *American Society of Limnology and Oceanography, Ocean Sciences Meeting*, Honolulu, HI, February 20-25, 2006.
- Langsner, M., G. Cherr and A.R. Flegal. 2006. Characterization of Multixenobiotic Resistance in Developing Zebrafish (*Danio rerio*) *United States Environmental Protection Agency Graduate Fellowship Conference*, Washington, D.C., January, 2006.
- Black, F.J., Saltikov, C., and Flegal, A.R., 2005. Implications for bioavailability: The role of reduced sulfur ligands in the complexation of inorganic mercury in freshwaters. *University of California, Toxic Substances Research & Teaching Program, Annual Symposium*, April 2005.
- Conaway, C.H., R.P. Mason, D.J. Steding and A.R. Flegal (invited). Estimate of mercury emissions from gasoline and diesel fuel consumption, San Francisco Bay area, California *101st Geological Society of America Cordilian Meeting*, San Jose, CA 2005.
- Luengen, A.C. and A.R. Flegal. Contrasting biogeochemistry of six trace metals during a spring phytoplankton bloom in San Francisco Bay. *Northern California Regional Chapter of the Society of Environmental Toxicology and Chemistry*, Berkeley, CA, October 4-6, 2005.
- Conaway, C.H., R.P. Mason, D.J. Steding and A.R. Flegal. Estimate of mercury emissions from gasoline and diesel fuel consumption, San Francisco Bay area, California. *7th Biennial State of the Estuary Conference*, Oakland, CA, September 2005.
- Luengen A. C. and A.C. Flegal. Methyl mercury concentrations during a spring phytoplankton bloom in San Francisco Bay. *Northern California Regional Chapter of the Society of Environmental Toxicology and Chemistry*. Berkeley, California, May 3, 2005.****
- Langsner, M., G. Cherr and A.R. Flegal. Detection of Multixenobiotic Resistance Transporters in Developing Zebrafish (*Danio rerio*). *University of California Toxic Substances Research and Teaching Program, Annual Symposium*, San Diego, CA, April 2005.
- Luengen A. C. and A.R. Flegal. Pronounced variations in nutrients and trace metals during a spring phytoplankton bloom in San Francisco Bay. *American Society of Limnology and Oceanography, Aquatic Sciences Meeting*. Salt Lake City, Utah, February 21, 2005.
- Black, F.J. and Flegal, A.R., 2004. Complexation of inorganic mercury in freshwaters: Spatial variability and ligand sources. *American Geophysical Union Fall Meeting*, San Francisco, CA, December 2004
- Conaway, C.H., E.B. Watson, J.R. Flanders and A.R. Flegal, A.R. Mercury deposition in a San Francisco

- estuary tidal marsh. *7th International Conference on Mercury as a Global Pollutant*, Ljubljana, Slovenia, July 2004
- Flegal, A.R., C.H. Conaway, E.J. Kerin, A.C. Luengen, F.J. Black and M.M. Gilmore. Mercury in San Francisco Bay: Two centuries of contaminant fluxes. *7th International Conference on Mercury as a Global Pollutant*, Ljubljana, Slovenia, July 2004
- Kerin, E.J., Conaway, C.H., and Flegal, A.R. (2004) Distribution and chemical availability of mercury in sediments of the San Francisco Bay Estuary. *7th International Conference on Mercury as a Global Pollutant*, Ljubljana, Slovenia, July 2004.
- Conaway, C.H., R.P. Mason, D.J. Steding and A.R. Flegal. Estimate of mercury emission from gasoline and diesel fuel consumption, San Francisco Bay area, California. *7th Biennial State of the Estuary Conference*, Oakland, CA., September 2004.
- Conaway, C.H. and A.R. Flegal (invited) Investigation of air-water exchange of mercury in San Francisco Estuary. *USGS Water Resources Division Research Seminar Series*, Menlo Park, CA, October, 2004.
- Conaway, C.H. and Flegal, A.R. (invited) Investigation of air-water exchange of mercury in San Francisco Estuary. *American Society of Limnology and Oceanography, Ocean Research Conference*, Honolulu, HI. 2004.
- Black, F. and A.R. Flegal. Complexation of inorganic mercury in freshwaters: Spatial variability and ligand sources. *American Geophysical Union Fall Meeting*, San Francisco, CA, December, 2004.
- Ericson, J.E. and A.R. Flegal. Industrial lead in the global environment. *American Geophysical Union Fall Meeting*, San Francisco, CA, December, 2004.
- Flegal, A.R. Incorporating environmental regulation and litigation in Earth Science curriculum. *American Geophysical Union Fall Meeting*, San Francisco, CA, December, 2004.
- Luengen A. C. and A.R. Flegal. Mercury cycling during a spring bloom. *Northern California Society of Environmental Toxicology and Chemistry 14th Annual Meeting*, Davis, California, May, 2004.
- Luengen, A.C. and A.R. Flegal. Draw-down of metals during a spring phytoplankton bloom in South San Francisco Bay. *American Geophysical Union Fall Meeting*, San Francisco, CA, December, 2004.
- Conaway, C.H., E.J. Kerin and A.R. Flegal. Distribution and chemical availability of mercury in sediments of the San Francisco Bay estuary. *7th International Conference on Mercury as a Global Pollutant*, Ljubljana, Slovenia, June, 2004.
- Conaway, C.H., E. Watson, J.R. Flanders and A.R. Flegal. Mercury deposition in a San Francisco Bay estuary tidal marsh. *7th International Conference on Mercury as a Global Pollutant*, Ljubljana, Slovenia, June, 2004.
- Flanders, J.R., C. Gilmour, C. Miller, R. Mason and A.R. Flegal. The effect of organic and inorganic ligands. *7th International Conference on Mercury as a Global Pollutant*, Ljubljana, Slovenia, June, 2004.
- Flegal, A.R., C.H. Conaway, E.J. Kerin, A.C. Luengen, F.J. Black and M.M. Gilmore. Mercury in San Francisco Bay: Two centuries of contaminant fluxes. *7th International Conference on Mercury as a Global Pollutant*, Ljubljana, Slovenia, June-July, 2004.
- Ndung'u, K., R.P. Franks, K.W. Bruland and A.R. Flegal. Trace metal preconcentrations using chelating resin flow injection: Role of organic complexation. *Inaugural Conference Southern and Eastern Africa Network of Analytical Chemists*, Gaborone, Botswana, July 2003.
- Conaway, C. H., E. Watson, J.R. Flanders, and A.R. Flegal. Mercury deposition in a tidal marsh downstream of the historic New Almaden mining district, CA. *12th International Conference on Heavy Metals in the Environment*, Grenoble, France. May, 2003.
- Conaway, C. H., E. Watson, J.R. Flanders and A.R. Flegal. Mercury deposition in a San Francisco estuary tidal marsh. Invited oral presentation at the *13th annual Northern California Society of Environmental Toxicology and Chemistry meeting*, Berkeley, CA, May 2003. ***
- Kerin, E., Conaway, C. H., and A.R. Flegal. Sequential Extraction of Mercury from Sediments in San Francisco Bay Estuary. *13th Annual Meeting, Northern California Society of Environmental Chemistry and Toxicology*, Berkeley, CA, May 2003.

- Black, F. and A.R. Flegal. Spatial and temporal variability in the complexation of mercury and methyl mercury by reduced sulfur containing ligands in freshwater. *University of California Toxic Substances Research and Teaching Program, 16th Annual Research Symposium*, Oakland, CA, April 2003.
- Conaway, C., E. Watson, J.R. Flanders and A.R. Flegal. Mercury deposition in a tidal marsh downstream of the historic New Almaden mining district, California. *University of California Toxic Substances Research and Teaching Program, 16th Annual Research Symposium*, Oakland, CA, April 2003.
- Flanders, J.R., C. Gilmour and A.R. Flegal. The effects of organic complexation of inorganic mercury on mercury methylation in *Desulfobulbus propionicus* 1p3. *University of California Toxic Substances Research and Teaching Program, 16th Annual Research Symposium*, Oakland, CA, April 2003.
- Gonzalez, A., K. Ndung'u and A.R. Flegal. Spatial gradient in chromium concentration and speciation in the Aromas Red sands Aquifer. *University of California Toxic Substances Research and Teaching Program, 16th Annual Research Symposium*, Oakland, CA, April 2003.
- Luengen, A. and A.R. Flegal. Sampling mercury during a phytoplankton bloom in South San Francisco Bay. *University of California Toxic Substances Research and Teaching Program, 16th Annual Research Symposium*, Oakland, CA, April 2003.
- Ranville, M., K. Ndung'u and A.R. Flegal. Determination of silver concentrations in estuarine and oceanic waters using an online flow injection method and ICP-MS. *University of California Toxic Substances Research and Teaching Program, 16th Annual Research Symposium*, Oakland, CA, April 2003.
- Kerin, E., Conaway, C. H., and A.R. Flegal. Sequential Extraction of Mercury from Sediments in San Francisco Bay Estuary. *American Geophysical Union Fall Meeting*, San Francisco, CA. December 2002.
- Ranville, M. A., Conaway, C. H., and A.R. Flegal (invited). Silver in the North Pacific. *American Geophysical Union Fall Meeting*, San Francisco, CA, December 2002.
- Kerin, E., Conaway, C. H., and A.R. Flegal. Sequential Extraction of Mercury from Sediments in San Francisco Bay Estuary. Poster presentation at the *Northern California Society of Environmental Toxicology and Chemistry*, Berkeley, CA. May 2003.
- Ranville, M. A., Conaway, C. H., and A.R. Flegal (invited). Silver in the North Pacific. *American Geophysical Union Fall Meeting*, San Francisco, CA, December 2002.
- Conaway, C.H., A.R. Flegal, M.A. Thomas, and D.J. Steding. Mercury contamination from historic mining in water and sediment, Guadalupe River and San Francisco Bay. *University of California Toxic Substances Research and Teaching Program, 15th Annual Research Symposium*, Long Beach, CA, April 2002.
- Flanders, J.R., A. R. Flegal, and C. Gilmour. Proposed studies on the effect of inorganic mercury speciation on microbial mercury methylation. *University of California Toxic Substances Research and Teaching Program, 15th Annual Research Symposium*, Long Beach, CA, April 2002.
- Gonzalez, A., A.R. Flegal, and K Ndung'u. Spatial gradients in chromium concentration and speciation in the Aromas Red Sands Aquifer. *University of California Toxic Substances Research and Teaching Program, 15th Annual Research Symposium*, Long Beach, CA, April 2002.
- Ndung'u, K., A. Gonzalez, and A.R. Flegal. Chromium speciation in estuarine and ground waters using supported liquid membranes. *Pittcon 2002*. New Orleans, LA. March 2002.
- Flegal, A.R., G.M. Scelfo, D.J. Steding, C.H. Conaway, S. Squire, and K. Ndung'u (invited). Diurnal to Decadal variations of trace element concentrations in San Francisco Bay: The urban estuary. *Ocean Sciences Meeting*, Honolulu, HI. February 2002.
- Abu-Saba, K.E., A.R. Flegal, P.M. Ganguli, D.C. Whyte, D.E. Mumley, and R. Mason. Talus Lex: Regulatory approaches to reducing mercury concentrations in San Francisco Bay fish. *American Geophysical Union Fall Meeting*, San Francisco, CA. December 2001.

- Conaway, C.H., M. Thomas, D.J. Steding, M.Marvin-DiPasquale, K.E. Abu-Saba, and A.R. Flegal (Invited). Mercury contamination from historic mining in water and sediment, Guadalupe River and San Francisco Bay, California. *American Geophysical Union Fall Meeting*, San Francisco, CA. December 2001.
- Squire, S., Scelfo, G.M., Revenaugh, J. and A. R. Flegal. Time series models of silver and lead in San Francisco Bay. *American Geophysical Union Fall Meeting*, San Francisco, CA, December 2001.
- Conaway, C. H., S. Squire, R.P. Mason, and A.R. Flegal. Mercury in the San Francisco Bay Estuary. Poster presentation at the *2001 6th International Conference on Mercury as a Global Pollutant*, Minamata, Japan. October 2001
- Steding, D.J., C.H. Conaway, R.P. Mason, W.R. Kelly, S.E. Long, and A.R. Flegal (invited). Estimate of potential mercury emissions to the atmosphere from crude oil processing. *6th International Conference on Mercury as a Global Pollutant*, Minamata, Japan. October 15-19, 2001
- Steding, D.J., Q. Williams, and A.R. Flegal. Macedonian money laundering in Mesopotamia (invited). *4th International Symposium on Applied Isotope Geochemistry*, Pacific Grove, CA. June 25-29, 2001.
- Dunlap, C.E., R. Williams, and A.R. Flegal. Copper source discrimination using ⁶⁵ Cu/ ⁶³ Cu isotope ratios in San Francisco Bay sediments. *4th International Symposium on Applied Isotope Geochemistry*, Pacific Grove, CA. June 2001.
- Squire, S., Scelfo, G., Revenaugh, J. and Flegal, A.R. San Francisco Bay: Golden gates and silver estuaries. *Northern California Regional Chapter, Society of Environmental Toxicology and Chemistry*, 11th Annual Meeting, Santa Cruz, CA, June 2001.
- Dunlap, C.E., C.N. Alpers, D. Steding, D.M. Unruh, and A.R. Flegal. The persistence of point source vs. non-point source inputs of anthropogenic lead in a large riparian system: Evidence from lead isotopes in the Sacramento River, California. *International Conference on Heavy Metals in the Environment*, Ann Arbor, MI, August 2000.
- Luengen A. C., Friedman C. S. and A.R. Flegal. Mussel immune systems as biomarkers of contaminant exposure in San Francisco Bay, CA (oral presentation). *11th International Conference on Heavy Metals in the Environment*, Ann Arbor, MI, August, 2000.
- Conaway, C. H., Thomas, M. A., Steding, D. J., Marvin-DiPasquale, M., Abu-Saba, K. E., and A.R. Flegal. Mercury Contamination from Historic Mining in Water and Sediment, Guadalupe River and San Francisco Bay, CA. *Northern California Society of Environmental Toxicology and Chemistry*, Santa Cruz, CA, June 2001
- Conaway, Christopher, Steding, Douglas, and A.R. Flegal. Mercury in South San Francisco Bay and the Guadalupe River, CA. *Annual Meeting UC Toxic Substances Research & Teaching Program*, Lake Tahoe, CA April 2001.
- Kurkjian, R., C. Dunlap and A.R. Flegal. Post-industrial sources of lead in urban air. A case study using lead isotopes in Yerevan, Armenia. *International Conference on Heavy Metals in the Environment*, Ann Arbor, MI, August 2000.
- Steding, D.J., C. Dunlap and A.R. Flegal. New isotopic evidence for chronic lead contamination in the San Francisco Bay and implications for the persistence of past industrial lead emissions in the biosphere. *International Conference on Heavy Metals in the Environment*, Ann Arbor, MI, August 2000.
- Ranville, M., J. Zachos and A.R. Flegal. Covariance of gradients in the carbon and nitrogen isotopic ratios in surface sediments and total dissolved metal concentrations in the San Francisco Bay estuarine system. *International Conference on Heavy Metals in the Environment*, Ann Arbor, MI, August 2000.
- Flegal, A. R. (invited). Silver in the world ocean. *International Conference on Heavy Metals in the Environment*, Ann Arbor, MI, August 2000.
- Thomas, M.A., C. Conaway, M. Marvin-DiPasquale and A.R. Flegal. Mercury contamination in river sediments from historical mining at New Idria and New Almaden, California. *International Conference on Heavy Metals in the Environment*, Ann Arbor, MI, August 2000.

- Luengen A. C., Friedman C. S., and Flegal A. R. (2000). Immune responses of two species of mussels (*Mytilus californianus* and *Mytilus galloprovincialis/trossulus* hybrid) to pollutants in San Francisco Bay, CA (abstract). *92nd Annual National Shellfisheries Association Meeting*, Seattle, WA, March, 2000.
- Boyle, K.A., Fong, P., Ambrose, R., and A.R. Flegal. Evaluating potential impacts of heavy metal deposition from aircraft overflights in coastal wetlands. *University of California Toxic Substances Research and Teaching Program, 13th Annual Research Symposium*, San Diego, CA, 2000.
- Luengen A. C., Friedman C. S., and A.R. Flegal. Measurement and development of a new technique to assess immune system responses of mussels following contaminant exposure in San Francisco Bay, CA (abstract). *University of California Toxic Substances Research & Teaching Program 13th Annual Symposium*, San Diego, CA, April, 2000.
- Ndungu, K., Flegal, A.R., and K.W. Bruland. Trace metal speciation using liquid membranes. *University of California Toxic Substances Research and Teaching Program, 13th Annual Research Symposium*, San Diego, CA, 2000.
- Palenik, B. and A. R. Flegal. Cynaobacterial abundance and diversity in San Francisco Bay. *University of California Toxic Substances Research and Teaching Program, 13th Annual Research Symposium*, San Diego, CA, April, 2000.
- Conaway, C.H. and A. R. Flegal. Investigation of atmospheric mercury from mine tailings and contaminated soils. *University of California Toxic Substances Research and Teaching Program, 13th Annual Research Symposium*, San Diego, CA, April, 2000.
- Fisher, A.T., Flegal, A.R., Brown, K., Wheat, G., Spinelli, G. and M. Tyson. Benthic fluxes of groundwater and solutes to San Francisco Bay. *University of California Toxic Substances Research and Teaching Program, 13th Annual Research Symposium*, San Diego, CA, April, 2000.
- Flegal, A.R., Marvin-DiPasquale, M. and M. Thomas. Microbial production and degradation of methylmercury in sediments of a contaminated mercury mine: New Idria, California. *University of California Toxic Substances Research and Teaching Program, 13th Annual Research Symposium*, San Diego, CA, 2000.
- Ostrowski, J.D. and A.R. Flegal. Diffusive benthic fluxes of copper and nickel in the Mare Island vicinity of San Francisco Bay. *University of California Toxic Substances Research and Teaching Program, 13th Annual Research Symposium*, San Diego, CA, 2000.
- Ranville, M., Zachos, J. and A.R. Flegal. Determining anthropogenic sources of organic carbon and nitrate to San Francisco Bay with isotopic tracers. *University of California Toxic Substances Research and Teaching Program, 13th Annual Research Symposium*, San Diego, CA, 2000.
- Steding, D., Flegal, A.R. and C. Dunlap. New isotopic evidence for chronic lead contamination in San Francisco Bay: implications for the persistence of past industrial lead emissions in the biosphere. *University of California Toxic Substances Research and Teaching Program, 13th Annual Research Symposium*, San Diego, CA, 2000.
- Whalin, L.M., Flegal, A.R. and D. Steding. Atmospheric deposition of trace metals in San Francisco Bay. *University of California Toxic Substances Research and Teaching Program, 13th Annual Research Symposium*, San Diego, CA, 2000.
- Luengen, A., Friedman, C.S. and A.R. Flegal. Measurement and development of a new technique to assess immune system responses of mussels following contaminant exposure in the San Francisco Bay. *University of California Toxic Substances Research and Teaching Program, 13th Annual Research Symposium*, San Diego, CA, 2000.
- Fisher, A.T., Brown, K., Flegal, A.R., Wheat, G., Spinelli, G. and M. Tyson. Benthic Fluxes of groundwater solutes to San Francisco Bay. *University of California Toxic Substances Research and Teaching Program, 12th Annual Research Symposium*, San Diego, CA, 2000.
- Flegal, A.R., Steding, D. and C. Dunlap. Recent variations in lead isotopic ratios in San Francisco Bay to reflect a change in sources) associated with the elimination of leaded gasoline in California.

- University of California Toxic Substances Research and Teaching Program, 12th Annual Research Symposium, San Diego, CA, 2000.*
- Flegal, A.R. Environmental toxicology at UC Santa Cruz: proposed graduate degree program. *University of California Toxic Substances Research and Teaching Program, 12th Annual Research Symposium, San Diego, CA, 2000.*
- Luengen, A. and A.R. Flegal. Effects of copper in bivalve immune systems. *University of California Toxic Substances Research and Teaching Program, 12th Annual Research Symposium, San Diego, CA, 2000.*
- Ndung'u, Kuria, Ana Gonzalez and Russell Flegal. Chromium speciation in estuarine and ground water using supported liquid membranes. *Pittcon 2002, New Orleans, LA. 10- 17 March 2002*
- Palenik, B and A.R. Flegal. Factors influencing Cyanobacteria blooms in South San Francisco Bay. *American Society of Limnology and Oceanography, 2000.*
- Flegal, A.R., D. Steding, and C. Dunlap (invited). Factors influencing the biogeochemical cycle of lead in San Francisco Bay. *Society of Environmental Toxicology and Chemistry National Conference, Philadelphia, PA, August 22-27, 1999*
- Flegal, A.R., D.J. Steding and C.E. Dunlap (invited). Isotopic evidence of historic and chronic inputs of contaminant lead in San Francisco bay. *Ninth Annual V.M. Goldschmidt Conference, Cambridge, MA, August 1999.*
- Flegal, A.R., D. Steding, and C. Dunlap (invited). Contemporary and historic variations in stable lead isotopic compositions in the San Francisco Bay estuary. *Goldschmidt Conference, Cambridge, MA, August, 1999*
- Dunlap, C.E., D. Steding, C. Alpers, and A.R. Flegal. Lead isotopes in the Sacramento River, CA: Tracing point source vs. non-point source heavy metals transport in an extensive riparian system. *American Geophysical Union Fall Meeting, San Francisco, CA, December, 1999.*
- Luengen, A. C. and Flegal A. R. (1999). Effects of copper on bivalve immune systems (abstract). *University of California Toxic Substances Research and Teaching Program 12th Annual Research Symposium, Santa Barbara, CA, April 1999.*
- Ganguli, P.M., K.E. Abu-Saba, R.P. Mason and A.R. Flegal. The source, concentration, and fate of mercury in acid mine drainage from the New Idria Mine: San Benito County, CA. *Geological Society of America Cordilleran Section, Berkeley, CA, June, 1999.*
- Flegal, A.R., C.E. Dunlap, and C.E. Steding (invited). Two centuries of lead contamination in San Francisco bay: Isotopic tracers of historic inputs of industrial lead indicate future inputs into the next millennium. *Society of Environmental Toxicology and Chemistry 20th Annual Meeting, Philadelphia, PA. 1999.*
- Dunlap, C.E. and A.R. Flegal. The removal of anthropogenic lead from the San Joaquin and Sacramento river systems. *American Geophysical Union Fall Meeting, San Francisco, CA, December, 1998.*
- Flegal, A.R. and C.E. Dunlap. A 2,300-year history of lead emissions over Europe. *American Geophysical Union Fall Meeting, San Francisco, CA, December, 1998.*
- Abu-Saba, K.E. and A.R. Flegal. Copper-catalyzed reduction of hexvalent chromium by photoproduced superoxide. *American Geophysical Union Fall Meeting, San Francisco, CA, December, 1997*
- Dunlap, C.E. and A.R. Flegal. Developing osmium isotopes as a hydrological tool in the San Francisco Bay estuary. *American Geophysical Union Fall Meeting, San Francisco, CA, December, 1997.*
- Dunlap, C.E. and A.R. Flegal. ¹⁸⁷Os/¹⁸⁶OS: a new tracer of anthropogenic contamination in San Francisco Bay. *University of California Toxic Substances Research and Teaching Program, 10th Annual Research Symposium, San Diego, CA April 1997.*
- Abu-Saba, K.E. and A.R. Flegal. Sources of dissolved trace metals to San Francisco Bay. *American Geophysical Union Fall Meeting, San Francisco, CA, November 1997.*
- Ganguli, P.M., R.P. Mason and A.R. Flegal. Mercury and arsenic speciation in mine water discharge. *Society of Environmental Toxicology and Chemistry 18th Annual Meeting, San Francisco, CA, November 1997.*

- Abu-Saba, K.E. and A.R. Flegal. Temporally variable freshwater sources of dissolved chromium to the San Francisco Bay estuary. *University of California Toxic Substances Research and Teaching Program, 11th Annual Research Symposium*, San Diego, CA, 1997.
- Abu-Saba, K.E., W. Alksne and A.R. Flegal. Solubility, bioavailability, and environmental toxicology of trivalent chromium compounds in leather manufacturing products. *University of California Toxic Substances Research and Teaching Program, 11th Annual Research Symposium*, San Diego, CA, 1997.
- Abu-Saba, K.E., D.L. Sedlack, and A.R. Flegal. Reductive detoxification of chromium by photo-produced superoxide. *University of California Toxic Substances Research and Teaching Program, 11th Annual Research Symposium*, San Diego, CA, 1997.
- Beck, N.G. and A.R. Flegal. Isotopic tracers of lead and associated petroleum contamination in subsurface aquifers. *University of California Toxic Substances Research and Teaching Program, 11th Annual Research Symposium*, San Diego, CA, 1997.
- Creasey, C.L. and A.R. Flegal. Metal distributions in the colloidal fraction of a groundwater site in the central coast of California. *University of California Toxic Substances Research and Teaching Program, 11th Annual Research Symposium*, San Diego, CA, 1997.
- Creasey, C.L. and A.R. Flegal. The effect of colloids on metal distribution in groundwater on the central coast of California. *Society of Environmental Toxicology and Chemistry, 18th Annual Meeting*, San Francisco, CA, 1997.
- Crick, J.R. and A.R. Flegal. San Francisco Bay sediments: An overview of metal concentrations. *University of California Toxic Substances Research and Teaching Program, 11th Annual Research Symposium*, San Diego, CA, 1997.
- Crick, J.R. and A.R. Flegal. Metal contamination in sediments of the San Francisco Bay estuary. *Society of Environmental Toxicology and Chemistry, 18th Annual Meeting*, San Francisco, CA, 1997.
- Dunlap, C. and A.R. Flegal. ¹⁸⁷Os/¹⁸⁶Os: A new tracer of anthropogenic contamination in San Francisco Bay. *University of California Toxic Substances Research and Teaching Program, 11th Annual Research Symposium*, San Diego, CA, 1997.
- Flegal, A.R. Trace element cycles in San Francisco Bay: Natural and anthropogenic perturbations. *Society of Environmental Toxicology and Chemistry, 18th Annual Meeting*, San Francisco, CA, 1997.
- Habicht-Mauche, J., S.A. Glenn, H. Milford and A.R. Flegal. Accessing resource utilization and trade among prehistoric Rio Grande glaze paints using lead isotope analyses. *Society for American Archaeology, 62nd Annual Meeting*, Nashville, TN, 1997. *
- Ganguli, P.M. and A.R. Flegal. Trace metal geochemistry of acid mine drainage: Abandoned New Idria Quicksilver Mine, San Benito County, California. *University of California Toxic Substances Research and Teaching Program, 11th Annual Research Symposium*, San Diego, CA, 1997.
- Ganguli, P.M., R.P. Mason and A.R. Flegal. Mercury and arsenic speciation in mine water discharge. *Society of Environmental Toxicology and Chemistry, 18th Annual Meeting*, San Francisco, CA, 1997.
- Kurkjian, C.R. and A.R. Flegal. Lead contamination in Armenia. *Society of Environmental Toxicology and Chemistry, 18th Annual Meeting*, San Francisco, CA, 1997.
- Kurkjian, C.R. and A.R. Flegal. Trace metal contamination of air and surface waters in the Republic of Armenia. *University of California Toxic Substances Research and Teaching Program, 11th Annual Research Symposium*, San Diego, CA, 1997.
- Laughlin, N., D.R. Smith, B. Fowler, A.R. Flegal and M. Luck. 1997. The rhesus monkey as an animal to evaluate the efficacy of succimer (Chemet) chelation therapy. *Society of Toxicology, 36th Annual Meeting*, Cincinnati, OH, 1997.
- Mesterheide, N., Rivera-Duarte and A.R. Flegal. Sources of trace metal input to the Sacramento River. *University of California Toxic Substances Research and Teaching Program, 11th Annual Research Symposium*, San Diego, CA, 1997.

- Ramirez, R.E., P.I. Ritson and A.R. Flegal. *Society of Environmental Toxicology and Chemistry, 18th Annual Meeting*, San Francisco, CA, 1997.
- Ramirez, R.E., K.E. Abu-Saba and A.R. Flegal. Serpentes: A natural source of chromium “contamination” in San Francisco Bay. *University of California Toxic Substances Research and Teaching Program, 11th Annual Research Symposium*, San Diego, CA, 1997.
- Rivera-Duarte, I. And A.R. Flegal. Importance of colloids in the transport of trace elements within porewaters. *University of California Toxic Substances Research and Teaching Program, 11th Annual Research Symposium*, San Diego, CA, 1997.
- Rivera-Duarte, I. And A.R. Flegal. Silver in the North Atlantic. *5th International Conference on Transport, Fate and Effects of Silver in the Environment*. Hamilton, Canada, September, 1997.
- Abu-Saba, K.E. and A.R. Flegal. Temporally variable freshwater sources of chromium to the San Francisco Bay estuary. *American Geophysical Union, Fall Meeting*, San Francisco, CA, 1996.
- Beck, N.G., P.M. Ganguli, R.E. Ramirez, D.E. Sampson, and A.R. Flegal. The use of lead isotopes to trace lead associated contaminants in the subsurface. *University of California Toxic Substances Research and Teaching Program, 10th Annual Research Symposium*, Santa Cruz, CA, 1996.
- Creasey, C.L. and A.R. Flegal. Sampling groundwater using trace metal clean techniques and low flow rates. *University of California Toxic Substances Research and Teaching Program, 10th Annual Research Symposium*, Santa Cruz, CA, 1996.
- Creasey, C.L. and A.R. Flegal. Low flow sampling and trace metal clean techniques: Demonstrated applicability for trace analyses of groundwater. *American Geophysical Union Fall Meeting*, San Francisco, CA, 1996.
- Ganguli, P.M., G. Gill and A.R. Flegal. Lead isotopic tracers of acid mine drainage. *University of California Toxic Substances Research and Teaching Program, 10th Annual Research Symposium*, Santa Cruz, CA, 1996.
- Flegal, A.R., B.D. Owen, D.E. Sampson and D.R. Smith. ICP-MS measurements of <0.1 to 1 µg/dL blood lead concentrations in contemporary marine mammals, which approach the natural PbB levels in preindustrial humans. *Society of Toxicology 35th Annual Meeting*, Anaheim, CA, 1996.
- Flegal, A.R. and D.R. Smith. Characterization of contemporary sources of environmental lead contamination in the San Francisco Bay area by their stable isotopic compositions. *Society of Toxicology 35th Annual Meeting*, Anaheim, CA, 1996.
- Luoma, S.N., A. van Geen, C. Fuller, M. Hornberger, W. Pereira, F. Hostettler, K. Kvenvolden, R. Anima, P. Ritson and A.R. Flegal. Historical contamination trends in San Francisco Bay sediments. *American Geophysical Union, Fall Meeting*, San Francisco, CA, 1996.
- Owen, B.D. and A.R. Flegal. An estimate of preindustrial human blood lead levels based on ultralow blood lead concentrations in Northern elephant seals. *University of California Toxic Substances Research and Teaching Program, 10th Annual Research Symposium*, Santa Cruz, CA, 1996.
- Ramirez, R.E., P.I. Ritson and A.R. Flegal. Stable isotope tracing of contaminant lead in produced water. *Geological Society of America, 92nd Annual Meeting*, Portland, OR, 1996.
- Ramirez, R.E., P.I. Ritson, K.E. Abu-Saba and A.R. Flegal. Stable lead isotopes as a tracer of contamination at a produced water outfall. Stable isotope tracing of contaminant lead from a produced water outfall. *University of California Toxic Substances Research and Teaching Program, 10th Annual Research Symposium*, Santa Cruz, CA, 1996.
- Rivera-Duarte, I. and A.R. Flegal. Elemental size fractionation porewaters. *American Geophysical Union, Fall Meeting*, San Francisco, CA, 1996.
- Rivera-Duarte, I. and A.R. Flegal. Benthic sediments: Ultimate sink or infinite source of trace metals. *University of California Toxic Substances Research and Teaching Program, 10th Annual Research Symposium*, Santa Cruz, CA, 1996.
- Rivera-Duarte, I. and A.R. Flegal. Benthic remobilization of Co, Ni, Cu, Zn, and Cd in the San Francisco Bay estuary. *American Geophysical Union, Ocean Sciences Meeting*, San Diego, CA, 1996.

- Sañudo-Wilhelmy, S.A., E.R. Breuer, M. Yang, I. Rivera-Duarte and A.R. Flegal. The role of colloids in the transport of trace metals in the San Francisco Bay estuary. *American Geophysical Union, Ocean Sciences Meeting*, San Diego, CA, 1996.
- Smith, D.R., J.D. Osterloh and A.R. Flegal. 1996. The skeleton is an important source of endogenous lead exposure in humans. *Society of Toxicology, 35th Annual Meeting*, Anaheim, CA, 1996.
- Smith, D.R., J.D. Osterloh, and A.R. Flegal. Bone lead contributions to blood lead levels in humans determined by stable isotopes. *Society of Toxicology 35th Annual Meeting*, Anaheim, CA, 1996.
- Abu-Saba, K.E. and A.R. Flegal. Particulate sources and sinks of dissolved chromium in San Francisco Bay. *American Geophysical Union, Ocean Sciences Meeting*, San Diego, CA, 1995.
- Abu-Saba, K.E. and A.R. Flegal. Wetland influences on the distribution of chromium in San Francisco Bay. *International Wetlands Symposium*, New Orleans, LA, 1995.
- Abu-Saba, K.E. and A.R. Flegal. Biological availability of chromium(III) in tannery sludge. *Society of Environmental Toxicology and Chemistry, Northern California Regional Meeting*, Santa Cruz, CA, 1995.
- Abu-Saba, K.E. and A.R. Flegal. Temporally variable physical processes dominate the geochemical cycling of chromium in San Francisco Bay. *American Geophysical Union, Fall Meeting*, San Francisco, CA, 1995.
- Creasey, C.L. and A.R. Flegal. The impact of colloids on trace metal mobility. *20th Biennial Groundwater Conference*, San Diego, CA, 1995.
- Ganguli, P.M., N.G. Beck, R.E. Ramirez, D.E. Sampson and A.R. Flegal. The use of lead isotopes as a ground water tracer. *20th Biennial Ground Water Conference*, San Diego, CA, 1995.
- Owen, B.D. and A.R. Flegal. Blood lead concentrations in contemporary Northern elephant seals evidence natural background levels in humans. *11th International Conference on the Biology of Marine Mammals*, Orlando, FL, 1995.
- Owen, B.D. and A.R. Flegal. Preindustrial human blood and bone lead concentrations in contemporary Northern elephant seal pups (*Mirounga angustirostris*). *Society of Environmental Toxicology and Chemistry, Northern California Regional Meeting*, Santa Cruz, CA, 1995.
- Rivera-Duarte, I. and A.R. Flegal. Remobilization of Co, Ni, Cu, Zn, and Cd from sediments into porewaters. *American Geophysical Union, Ocean Sciences Meeting*, San Diego, CA, 1995.
- Rivera-Duarte, I. and A.R. Flegal. Effect of macro-organisms on sediment and porewater distributions of nutrients and heavy metals in contaminated sites in San Francisco Bay. *Society of Environmental Toxicology and Chemistry, Northern California Regional Chapter Meeting*, Santa Cruz, CA, 1995.
- Sañudo-Wilhelmy, S.A., I. Rivera-Duarte and A.R. Flegal. The role of colloids in the transport of trace metals in the San Francisco Bay estuary. *3rd International Conference on Transport, fate and Effects of Silver in the Environment*, Washington, D.C., 1995.
- Abu-Saba, K.E., W. Alkne and A.R. Flegal. Industrial-academic partnership investigates chromium toxicity mechanisms and source reduction opportunities. *University of California Toxic Substances Research and Teaching Program, 9th Annual Research Symposium*, San Diego, CA, 1994.
- Abu-Saba, K.E. and A.R. Flegal. Chromium in San Francisco Bay: Inorganic speciation, distribution, and geochemical processes. *American Geophysical Union / American Society of Limnology and Oceanography, Ocean Sciences meeting*, San Diego, CA, 1994.
- Abu-Saba, K.E. and A.R. Flegal. Temporally variable physical processes control the geochemistry of chromium in San Francisco Bay. *American Association for the Advancement of Science, Pacific Division Annual Meeting*, San Francisco, CA, 1994.
- Creasey, C.L. and A.R. Flegal. Sampling colloids to assess their impact on trace metal mobility. *University of California Toxic Substances Research and Teaching Program, 9th Annual Research Symposium*, San Diego, CA, 1994.

- Flegal, A.R., G.M. Scelfo, J.R. Crick, G.E. Smith, K.E. Abu-Saba, I. Rivera-Duarte and P.I. Ritson. Trace element cycles in the San Francisco Bay estuary. *University of California Toxic Substances Research and Teaching Program, 9th Annual Research Symposium*, San Diego, CA, 1994.
- Sañudo-Wilhelmy and A.R. Flegal. Temporal variations in lead concentrations and isotopic composition in the Southern California Bight. *8th International Conference on Geochronology, Cosmochronology and Isotope Geology*, Berkeley, CA, 1994.
- Smith, D., J. Osterloh, S. Niemeyer and A.R. Flegal. Lead isotopic compositions in particulate aerosols and blood of San Francisco area residents: Implications for sources of lead exposure. *8th International Conference on Geochronology, Cosmochronology and Isotope Geology*, Berkeley, CA, 1994.
- Ritson, P.I. and A.R. Flegal. Applications of isotope geochemistry to biological systems. *University of California Toxic Substances Research and Teaching Program, 9th Annual Research Symposium*, San Diego, CA, 1994.
- Ritson, P.I. and A.R. Flegal. Isotope systematics of contaminant lead fluxes in the San Francisco Bay estuary. *8th International Conference on Geochronology, Cosmochronology and Isotope Geology*, Berkeley, CA, 1994.
- Ritson, P.I. and A.R. Flegal. Contaminant lead cycling in the San Francisco Bay estuary: Lead isotopic analyses. *American Association for the Advancement of Science, Pacific Division Annual Meeting*, San Francisco, CA, 1994. **
- Rivera-Duarte, I. and A.R. Flegal. Elemental fluxes in San Francisco Bay. *American Geophysical Union, Fall Meeting*, San Francisco, CA, 1994.
- Rivera-Duarte, I. and A.R. Flegal. Fate of heavy metals at the sediment-water interface. *University of California Toxic Substances Research and Teaching Program, 9th Annual Research Symposium*, San Diego, CA, 1994.
- Rivera-Duarte, I. and A.R. Flegal. Benthic fluxes of trace elements in San Francisco Bay. *American Geophysical Union / American Society of Limnology and Oceanography, Ocean Sciences Meeting*, San Diego, CA, 1994.
- Rivera-Duarte, I. And A.R. Flegal. Dissolved copper concentrations in pore waters of San Francisco Bay sediments. *American Association for the Advancement of Science, Pacific Division Annual Meeting*, San Francisco, CA, 1994.
- Sañudo-Wilhelmy, S.A. and A.R. Flegal. Temporal variations in lead concentrations and isotopic composition in the Southern California Bight. *8th International Conference on Geochronology, Cosmochronology and Isotope Geology*, Berkeley, CA, 1994.
- Smith, D.R., M.E. Markowitz, J. Crick, J.F. Rosen and A.R. Flegal. The effects of succimer on the absorption of lead in adults determined using the stable isotope ²⁰⁴Pb. *University of California Toxic Substances Research and Teaching Program, 9th Annual Research Symposium*, San Diego, CA, 1994
- Smith, D.R., J. Osterloh, S. Niemeyer and A.R. Flegal. Lead isotopic compositions in particulate aerosols and blood of San Francisco area residents: Implications for sources of lead exposure. *8th International Conference on Geochronology, Cosmochronology and Isotope Geology*, Berkeley, CA, 1994.

* Society for American Archaeology, Outstanding Poster Award, Professional Category

** American Association for the Advancement of Science Award for Outstanding Student Presentation

*** Northern California Society of Environmental Toxicology and Chemistry, Award, Best Student Presentation, 2004

**** Northern California Society of Environmental Toxicology and Chemistry, Award, Best Student Presentation, 2005

Membership or Activities in Professional Associations

United Nations Environment Programme, Fifth Global Environment Outlook (GEO-5), Contributing Author, 2010-present

International Council for Science, Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection, 2008-present

Comisión Fulbright en Chile, Ciencias Biológicas y Químicas, Panel, Santiago, Chile, 2010.

Agua, Innovación, Cambio Climático y Desastres Naturales: Impactos y Perspectivas para la Región del Bio Bio. Workshop, Concepción, Chile, 2010.

Scientific Committee on Oceanic Research, GEOTRACES – Pacific Ocean Workshop, Taipei, Taiwan, 2010

World Health Organization, Committee on Childhood Mercury Exposure, 2009-2010

Scientific Committee on Oceanic Research, GEOTRACES – Geochemical Modeling Workshop, Paris, France, 2009

American Association for the Advancement of Science, Expert Panel, 2008

International Conference on the Research Strategy for the Sultanate of Oman, Muscat, Oman, 2008

15th International Conference on Heavy Metals in the Environment, International Organizing Committee, 2007-2008

American Society of Limnology & Oceanography, *Ad hoc* Committee – John Martin Award, 2004-2008

Scientific Committee on Oceanic Research, GEOTRACES – Atlantic Workshop, Oxford, England, 2007

Scientific Committee on Oceanic Research, GEOTRACES – Data-Model Synergy Workshop, Delmenhorst, Germany, 2007

14th International Conference on Heavy Metals in the Environment, International Organizing Committee, 2005-2006

Australian Nuclear Science and Technology Organization, External Reviewer, 2005-2006

13th International Conference on Heavy Metals in the Environment, International Organizing Committee, 2003-2004

12th International Conference on Heavy Metals in the Environment, International Organizing Committee, 2000-2003

11th International Conference on Heavy Metals in the Environment, Scientific Program Committee, 1999-2000

Intergovernmental Oceanographic Commission, Group of Experts on Standards, Techniques and Intercalibration, 1988 –

5th International Symposium on Model Estuaries, International Scientific Committee, 1996-1997

United States Geological Survey, Metal Transport in the Sacramento River, Technical Advisory Committee, 1996 - 1997

San Francisco Bay-Delta Aquatic Habitat Institute, Technical Review Committee, 1990 - 1994

Southern California Educational Initiative, Steering Committee, 1989 - 1994

Second International Ocean Pollution Symposium, Organizing Committee, 1992 - 1993

Topics in Global Geochemistry Symposium, Co-Chair, 1992 - 1993

University of Quebec, External Committee Member, Ph.D. Thesis, 1991-1993

Santa Monica Bay Restoration Project, Technical Advisory Committee, 1991 - 1992

South Bay Waste Load Allocation Program. Technical Review Committee, 1990 - 1992

First International Ocean Pollution Symposium, Organizing Committee, 1990 - 1991

Agriculture Canada, Standard Reference Materials, Certification Laboratory, 1989-1991

Eighth International Ocean Disposal Symposium, Organizing Committee, 1988 - 1989

International Conference on Trace Metals in Lakes, Executive Panel, 1988

International Conference on Trace Metals in Lakes, Short Course Instructor, 1988

Seventh International Ocean Disposal Symposium, Executive Committee, 1986 - 1988

Sixth International Ocean Disposal Symposium, Organizing Committee, 1984 - 1985

Beaufort Sea Monitoring Workshop, Participant, 1983

Consultative or Other Service

People of the State of California v. Iovate Health Sciences Inc. et al., Expert Witness, 2008-present

People of the State of California v. GNC et al., Expert Witness, 2008-present

Shell Oil Products US v. California Department of Health Services et al., Expert Witness, 2006-2008

California Childhood Lead Prevention Program, Consultant (*pro bono**), 2006

Health Canada, Air Effects Division, Exposure of Canadians to Lead from Automotive Racing Fuels: Review and Current Estimates, External Reviewer, 2006

People of the State of California v. Suarez Corporation, (*pro bono**), 2005-2006

People of the State of California v. Boehm-Ritter, Inc. et al., Expert Witness (*pro bono**), 2005-2006

People of the State of California v. Natrol Products, Inc., et al. Expert Witness (*pro bono**), 2003-2005

Environmental Law Foundation v. Cost Plus, Inc. et al., Consultant (*pro bono**), 2004-2006

Environmental Law Foundation v. Borges USA Inc., et al., Consultant (*pro bono**), 2004-2006

Environmental Law Foundation v. Albeco Inc., Consultant (*pro bono**), 2004-2006

American Environmental Safety Institute et al. v. Mars, Incorporated et al., Expert Witness, 2001 - 2004

People of the State of California ex rel. Daniel E. Lungren, Attorney General of the State of California v. Warner-Lambert Co., et al., Expert Witness (*pro bono**), 2000-2002

Kenneth Johnson et al., v. Bristol-Myers Squibb Co. et al. Expert Witness (*pro bono**), 2000-2002

County of Santa Clara et al. v. Atlantic Richfield Co. et al., Expert Witness (*pro bono**) 2000-2001

Milberg, Weiss, Bershard, Hynes & Lerach LLP (representing the City and County of San Francisco et al.), Expert Witness (*pro bono**), 1999-2001

Phillips & Cohen LLP (representing Los Angeles Metropolitan Water District et al.), Expert Witness (*pro bono**), 2000-2001

Natural Resources Defense Council et al v. General Nutrition Corporation et al., Expert Witness (*pro bono**), 1996-1997

Janet C. Mangini et al. v. J.G. Durand & Cie et al., Expert Witness (*pro bono**), 1994-1997

Editorial or Board Service to Publications

International Journal of Oceanography, Editorial Board, 2010-present

Environmental Research, Associate Editor, 2003 – present

Environmental Research: Special Volume, Guest Editor, 2007

Waves, Wetlands, and Watersheds, Reviewer, 2002-2003

Environmental Research: Special Volume, Guest Editor, 1998

Service to Local, State, or Federal Government

California District Attorney Offices, Expert Witness, 2008-present

California Attorney General's Office, Expert Witness, 2006-2008

National Science Foundation, Chemical Oceanography, Panel, 2007

United States Environmental Protection Agency, Clean Air Scientific Committee Lead Review Panel, 2005-2006

United States Environmental Protection Agency, Modeling Human Exposure to Lead Workshop, 2005

National Oceanographic and Atmospheric Administration, Status and Trends Program, External Review Panel, 2005

United States Environmental Protection Agency, Air Quality Criteria for Lead Workshop, 2005

California Childhood Lead Poisoning Prevention Branch, Panel, 2004.

National Research Council, A Review of the Water Security Research and Technical Support Action Plan, External Reviewer, 2003.
National Institute of Environmental Health Sciences, Centers for Oceans and Human Health, Panel, 2003
National Oceanographic and Atmospheric Administration, San Francisco Airport Science Panel II, 2000-2003
California Coastal Commission, Save Our Seas Curriculum Advisory Board, 2001-2003
National Science Foundation, Polar Programs, Panel 2001
California Attorney General's Office, Consultant and Expert Witness (pro bono), 1994, 1999-2000, 2002
San Francisco Estuary Project, Scientific Advisor, 1989 - 2001
National Oceanographic and Atmospheric Administration, San Francisco Airport Science Panel I, 1999
Environmental Protection Agency, STAR Panel, 1997-1998
National Science Foundation, Chemical Oceanography, Panel, 1997-1998
Environmental Protection Agency, Scientific Advisor, 1989 - 1996
Environmental Protection Agency, Consultant, 1994 -1996
National Institute of Environmental Health Science, Site Review Committees, 1991, 1994-1996
National Science Foundation, Watershed, Panel, 1995
National Research Council, Measuring Lead Exposure in Critical Populations, Committee, 1989-1993
Environmental Protection Agency, Conference on Lead Contamination in Adults, Organizing Committee, 1991 - 1992
Agriculture Canada, Standard Reference Materials Certification Laboratory, 1989 - 1991
National Acid Precipitation Assessment Program, Indirect Health Effects, Committee, 1989-1990
San Francisco Bay Toxicity Program, Technical Advisory Committee, 1984 - 1987
San Francisco Bureau of Water Pollution Control, Consultant, 1983-1985
Louisiana Governor's Oil Spill Damage Assessment Conference, California Delegate, 1990

Other

Fulbright-Chile, Fulbright Scholars Selection Committee, 2010
Macquarie University, Australia, External Ph.D. Committee, 2010
Curtin University of Technology, Australia, External Ph.D. Thesis Committee, 2009
Macquarie University, Australia, External Ph.D. Committee, 2007
Université du Québec INRS-Eau, Terre, Environnement, Jury d'évaluation du Thèse de Ph.D., 2004
Curtin University of Technology, Australia, External Ph.D. Thesis Committee, 2002
University of California, San Diego, External Ph.D. Thesis Committee, 2002
State University of New York, Stony Brook, External Ph.D. Thesis Committee, 1999
Université du Québec, Jury d'évaluation du Thèse de Ph.D., 1998
University of Otago, New Zealand, External Ph.D. Thesis Committee, 1997

TEACHING (very incomplete)

Academic Courses

University of California, Santa Cruz
Chemical Oceanography
Marine Biology
Aquatic Toxicology
Groundwater Contamination
Environmental Toxicology
Coastal Policy Challenges of the 21st Century
Senior Thesis Research
Biology

Chemistry
Earth Sciences
Environmental Studies
Marine Science
Independent Studies
Biology
Chemistry
Earth Sciences
Environmental Studies
Marine Science
Sources, Transport, and Fate of Pollutants
Graduate Thesis Research
Biology
Chemistry
Earth Sciences
Marine Science
Topics in Geochemistry
Topics in Environmental Toxicology
Topics in Aquatic Pollution
Topics in Groundwater Contamination

Moss Landing Marine Laboratories
Oceanography
Marine Geochemistry
Marine Chemistry
Marine Science Techniques
Topics in Marine Science
Independent Studies (Marine Science)
Independent Research (Marine Science)

International Conference on Trace Metals in Lakes
A short course on trace metal clean-lab techniques

Soledad Correctional Facility (Hartnell College)
Oceanography

Teaching Awards and Nominations

Nominee: UCSC Alumni Faculty Award, 2008
Nominee: US Professor of the Year, 1998-1999
Excellence in Teaching Award: University of California, Santa Cruz, 1998-1999
Nominee: Excellence in Teaching Award, Northern California Association, Phi Beta Kappa, 1994

Current Graduate Students

Priya Ganguli: Ph.D., Earth & Planetary Sciences
Kingsley Odigie: Ph.D., Environmental Toxicology
Cheryl Zurbrick: Ph.D., Environmental Toxicology

Current Postdoctoral Researchers

Céline Gallon
Peter Weiss

Previous Graduate Students

- Khalil Abu-Saba: MS Marine Science & Ph.D. Chemistry, UCSC
Postgraduate Position: Environmental Scientist, California State Water Resources Control Board
Current Position: Scientist, Brown & Caldwell, and Engineering
- Nicole Beck: MS Earth Science, UCSC
Postgraduate Position: Ph.D. Student, Earth Sciences, UCSC
Current Position: Private Consultant
- Frank Black: Ph.D. Environmental Toxicology, UCSC
Postgraduate Position: Fulbright Scholar, NSF Postgraduate Fellow, Princeton
Current Position: Assistant Professor, Westminster College
- Christopher Conaway: Ph.D. Environmental Toxicology, UCSC
Postgraduate Position: Maxwell Scholar, United States Geological Survey
Current Position: Research Scientist, United States Geological Survey
- J.R. Flanders: MS Environmental Toxicology, UCSC
Postgraduate Position: Geochemist, United States Geological Survey
Current Position: Scientist, URS
- Priya Ganguli: MS Earth Science, UCSC
Postgraduate Position: Environmental Scientist, California State Water Resources Control Board
Current Position: Ph.D. Student, UCSC
- Ana Gonzalez: MS Environmental Toxicology
Postgraduate Position: Geochemist, Geomatrix Consultants
Current Position: Geochemist, Geomatrix Consultants
- Robert Kurkjian: Ph.D. Earth Sciences
Postgraduate Position: Director, Environ. Res. & Manage. Cntr, American University of Armenia
Current Position: Environmental Engineer, Brown & Colwell, Engineering
- Mary Langsner: Ph.D. Environmental Toxicology
Postgraduate & Current Position: LLB Student, University of Nevada, Reno
- Allison Luengen: MS Ocean Science, Ph.D. Environmental Toxicology
Postgraduate Position: Postdoctoral Researcher @ Stony Brook University and UC Davis
Current Position: Assistant Professor, University of San Francisco
- Nicole Meisterheide: German National Graduate Exchange Student
Postgraduate Position: MS Student, Computer Science, UCSC
Current Position: unknown
- Jennifer Ostrowski: MS Student, Earth Science
Postgraduate Position: Technician, Santa Cruz Municipal Water Treatment Facility
Current Position: Science Coordinator, Santa Cruz Schools
- Ben Owen: MS Marine Science, UCSC
Postgraduate Position: Staff Scientist, US Food & Drug Administration
Current Position: Environmental Consultant
- Charles Rankin, MS Environmental Toxicology
Postgraduate Position: mountaineering guide
Current Position: mountaineering guide
- Mara Ranville: Ph.D. Environmental Toxicology
Postgraduate Position: Assistant Professor, Environmental Science, Bard College
Current Position: Acting Director, Environmental Science, Bard College
- Peter Ritson: Ph.D. Earth Sciences, UCSC
Postgraduate Position: Lecturer, Portland Community College

Current Position: Lecturer, Washington State University
Ignacio Rivera-Duarte: Ph.D. Earth Sciences, UCSC
Postgraduate Position: Scientist, Environmental Division, SPAWAR, U.S. Navy, San Diego
Current Position: Scientist, Environmental Division, SPAWAR, U.S. Navy, San Diego
Sergio Sañudo-Wilhelmy: MS Ocean Science, UCSC & Ph.D. Earth Sciences, UCSC
Postgraduate Position: Associate Professor, Stony Brook
Current Position: Professor, USC
Don Smith: Ph.D. Biology, UCSC
Postgraduate Position: Postdoctoral Researcher, University of Maryland, Baltimore
Current Position: Professor, UCSC
Douglas Steding: Ph.D. Earth Science, UCSC
Postgraduate Position: LL.B. Student, University of Washington School of Law
Current position: Environmental Lawyer, Seattle

Previous Postdoctoral Researchers

Linda Anderson: Postgraduate Researcher, Institute of Marine Science, UCSC
Postgraduate Position: Research Scientist, Ocean Sciences, UCSC
Current Position: Research Scientist, Ocean Sciences, UCSC
Charles Dunlap: Postgraduate Researcher, Environmental Toxicology, UCSC
Subsequent Position: Director, Environ. Res. & Manage. Cntr, American University of Armenia
Current Position: Scientist, US Research & Development Foundation
Gary Gill: Postgraduate Researcher, Institute of Marine Science, UCSC
Subsequent Position: Associate Professor, Chemical Oceanography, Texas A&M University
Current Position: Professor, Texas A&M University
Kuria Ndung'u: Dreyfus Postdoctoral Fellow
Postgraduate Position: Assistant Professor, University of Sweden
Current Position: Assistant Professor, University of Sweden
Martin Soto-Jimenez, Fulbright Postdoctoral Scholar
Postgraduate Position: Assistant Professor, Universidad Autonoma de Mexico
Current Position: Assistant Professor, Universidad Autonoma de Mexico
Sharon Squire: Postgraduate Researcher, Environmental Toxicology
Postgraduate Position: Scientist, West Environmental Services and Technology
Current Position: Certified Geologist, West Environmental Services and Technology
Alain Véron: Postgraduate Researcher, Environmental Toxicology
Current Position: Scientist, Laboratoire des Géosciences de l'Environnement, CNRS

Previous Visiting Scientists

Mihran Absylan: American University of Armenia
Laurant Alleman: Laboratoire des Géosciences de l'Environnement, CNRS
Igor Medved, Fulbright Predoctoral Scholar, Moscow, Russia
Mark Taylor, Macquarie University, Australia
Alain Véron: Laboratoire des Géosciences de l'Environnement, CNRS
Maika Vuki: University of Guam

Current Undergraduate Student Lab Members

Kyle Lakatos, Chemistry (CAMP trainee) (
Chris Morrow, Earth & Planetary Science

Previous Undergraduate Senior Thesis Students (Honors)

Amanda Beam, Earth & Planetary Science (Departmental Honors for Senior Thesis)
Holly Brunkal, Earth & Planetary Science
Louise-Samantha Casuran, Earth & Planetary Science
Benjamin Claus, Earth & Planetary Science
Dan Cook, Chemistry & Biochemistry (Departmental Honors for Thesis Research)
Angelina Flores, Biology (National Institutes of Health Postgraduate Fellowship)
Jubilie Flug-Entin, Biology
Stacey Foster, Chemistry & Biochemistry
Melanie Gault-Ringold, Chemistry & Biochemistry (Departmental & College Honors for Senior Thesis, STEPS Award, Dean's Award, Chancellor's Award)
Mari Gilmore, Earth & Planetary Science (Departmental Honors for Senior Thesis)
Ana Gonzalez, Environmental Studies and Earth & Planetary Science (Honors for Outstanding Poster Presentation at UC CAMP Symposium, Departmental Honors for Senior Thesis, Dean's Award, Chancellor's Award, Cota-Robles Fellowship)
Andrea Goodman, Chemistry & Biochemistry (Departmental Honors for Thesis Research) and Earth Science (Departmental Honors for Senior Thesis)
Angela Huston, Chemistry & Biochemistry (Departmental Honors for Thesis Research)
Aaron Johnson-Karas, Earth & Planetary Science
Brian Johnson, Biology (Departmental & College Honors for Senior Thesis)
Scott Katz, Chemistry (Departmental Honors for Senior Thesis)
Elizabeth Kerin, Earth & Planetary Science (Departmental Honors for Senior Thesis)
Dana Kotofsky, Earth & Planetary Science
Maria de los Angeles Mercado, Chemistry & Biochemistry
Jackie McCloud, Earth & Planetary Science
George Montross, Earth & Planetary Science
Fiona Morris, Biology (Departmental & College Honors for Senior Thesis)
Robert Morrow, Chemistry & Biochemistry (Departmental Honors for Senior Thesis)
Brett Poulin, Chemistry & Biochemistry (Departmental Honors for Senior Thesis, Dean's Award, Chancellor's Award)
Rachel Ramirez, Earth & Planetary Science (Outstanding Woman Graduate in Earth Sciences)
Charles Rankin, Chemistry & Biochemistry (Departmental Honors for Senior Thesis, Dean's Award, Thimann Award)
Daniella Rough, Earth & Planetary Science (Departmental Honors for Senior Thesis)
April Sawvel, Chemistry & Biochemistry (Departmental Honors for Senior Thesis, Dean's Award, Chancellor's Award)
Hans Schwing, Chemistry & Biochemistry
John Stanley, Earth & Planetary Science (Outstanding Graduating Senior in Earth Sciences)
Kevin Tharp, Chemistry & Biochemistry (Departmental Honors for Senior Thesis)
Martha Thomas, Biology (Departmental Honors for Senior Thesis, Dean's Award, Chancellor's Award)
Lindsay Whalin, Earth & Planetary Science (Departmental Honors for Senior Thesis, Departmental Graduation Valedictorian)

Previous Undergraduate UC LEADS Trainee

Ngoc Huang

Previous Undergraduate CAMP Trainees

Lacie Bland

Norman Forsberg
Kateshia Brooks
Angelina Flores
Angel Espinosa
Ana Gonzalez
Rachel Ramirez

Previous Undergraduates ACCESS Trainee

Lydia Jennings