CURRICULUM VITAE

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Education:

A.B.	Cornell University, Ithaca, NY	1969	Biological Sciences
Ph.D.	Duke University, Durham, NC	1976	Zoology (Limnology)

P**rofessional Employment:**

2009 and 2005	Acting Dean, Bren School of Environmental Science and Management
2006 -2008	Associate Dean, Bren School of Environmental Science and Management
1987 - present	Professor, University of California, Santa Barbara
1982 - 1987	Associate Professor, University of California, Santa Barbara
1977 - 1982	Assistant Professor, University of California, Santa Barbara
1977	Postdoctoral Fellow, University of Michigan

Awards:

Fellow, American Geophysical Union
Fellow, American Association for the Advancement of Science
Blaustein Visiting Professor, Stanford University
Gleddon Fellow, University of Western Australia
NSF Energy-related Postdoctoral Fellowship

Editorial Service (current):

Editorial Board, Biogeochemistry (2003 – present)
Editorial Board, Hydrobiologia (1985-present)
Editorial Board, Limnology and Oceanography (2012 –present)

Reviewed publications for last 3 years

2010 Silva, T.S.S., M. Costa and J.M. Melack. Assessment of two biomass estimation methods for aquatic vegetation growing on the Amazon floodplain. Aquatic Botany 92: 161-167.

Claessens, L., C. Tague, P. Groffman and J. Melack. Longitudinal and seasonal variation of stream N uptake in an urbanizing watershed: Effect of organic matter, stream size, transient storage and debris dams. Biogeochemistry 98: 45-62

Claessens, L., C. Tague, P. Groffman and J. Melack. Longitudinal assessment of the effect of concentration on stream N uptake rates in an urbanizing watershed. Biogeochemistry 98: 63-74

Silva, T.S.F., M.P.F. Costa and J.M. Melack. Spatio-temporal variability of macrophyte cover and productivity in the eastern Amazon floodplain: a remote sensing approach. Remote Sensing of Environment 114: 1998-2010.

Alsdorf, D. S-C Han, P. Bates and J. Melack. Seasonal water storage on the Amazon floodplain measured from satellites. Remote Sensing of Environment 114: 2448-2456.

Li, X, A.E. Miller, T. Meixner, J.P. Schimel, J.M. Melack, and J.O. Sickman. Testing a representation of the rewetting pulse into a soil biogeochemical model. Geoderma 159: 440-451.

Melack, J.M. and L.L. Hess. Remote sensing of the distribution and extent of wetlands in the Amazon basin. Pages 43-59. In W.J. Junk, M. Piedade, F. Wittmann, J. Schöngart and P. Parolin. Amazonian floodplain forests: Ecophysiology, ecology, biodiversity and sustainable management. Ecological Studies, Springer.

2011 Melack, J.M., A. Finzi, D. Siegel, S. MacIntyre, C. Nelson, A. Aufdenkampe and M. Pace. Improving biogeochemical knowledge through technological innovation. Frontiers in Ecology and the Environment 9: 37-43.

Aufdenkampe, A.K., E Mayorga, P.A. Raymond, J.M. Melack, S.C. Doney, S.R. Alin, R.E. Aalto and K. Yoo. Rivers key to coupling biogeochemical cycles between land, oceans and atmosphere. Frontiers in Ecology and the Environment 9: 53-60.

Belger, L., B. Forsberg and J.M. Melack. Factors influencing carbon dioxide and methane emissions from interfluvial wetlands of the upper Negro River basin, Brazil. Biogeochemistry 105: 171-183, DOI: 10.1007/s10533-010-9536-0

Sadro, S, C.E. Nelson and J.M. Melack. Linking diel patterns in community respiration to bacterioplankton in an oligotrophic high- elevation Sierra Nevada (California, USA) lake. Limnol. Oceanogr. 56: 540–550.

Kemenes, A., B.R. Forsberg and J.M. Melack. CO_2 emissions from a tropical hydroelectric reservoir (Balbina, Brazil). Journal of Geophysical Research – – Biogeosciences 116, G03004, doi:10.1029/2010JG001465.

Collins, S.L., S.R. Carpenter, S.M. Swinton, T.L. Gragson, N.B. Grimm, J.M. Grove, S.L. Harlan, A.K. Knapp, G.P. Kofinas, J.J. Magnuson, W.H. McDowell, J.M. Melack, L.A. Ogden, D. Ornstein, G.P. Robertson, M.D. Smith and A.C. Whitmer. An integrated conceptual framework for social-ecological research. Frontiers in Ecology and the Environment 9: 351–357, doi:10.1890/100068.

Sadro, S., J.M. Melack and S. MacIntyre. Depth-integrated estimates of ecosystem metabolism in a high-elevation lake (Emerald Lake, Sierra Nevada, California). Limnology and Oceanography 56: 1764–1780

Rudorff, C.M., J.M. Melack, S. MacIntyre, C.C.F. Barbosa and E.M.L.M. Novo. Seasonal and spatial variability in CO_2 emissions from a large floodplain lake in the lower Amazon. Journal of Geophysical Research-Biogeosciences 116, G04007, doi:10.1029/2011JG001699

Sadro, S., J.M. Melack and S. MacIntyre. Spatial and temporal variability in ecosystem metabolism: free-water and incubation chamber measurements from benthic and pelagic habitats in a high-elevation lake (Emerald Lake, Sierra Nevada, California). Ecosystems doi: 10.1007/s10021-011-9471-5

Sadro, S., C.R. Nelson and J.M. Melack. The influence of landscape position and catchment characteristics on aquatic biogeochemistry in high-elevation lake chains. Ecosystems doi 10.1007/s10021-011-9515-x

2012 Goodridge, B. and J.M Melack. Land use control of stream nitrate concentrations in mountainous coastal California watersheds. Journal of Geophysical Research-Biogeosciences 117, G02005, doi:10.1029/2011JG001833

Sadro,S. and J.M. Melack. The effect of an extreme rain event on the biogeochemistry and ecosystem metabolism of an oligotrophic high-elevation lake (Emerald Lake, Sierra Nevada, California). Alpine, Arctic and Antarctic Research 44: 222-231

Melack. J.M. Wetlands. Encyclopedia of Remote Sensing, in press

Melack, J.M. and M.T. Coe. Climate change and the floodplain lakes of the Amazon basin In C.R. Goldman, M. Kumagai and R. Robarts (eds.) Global Impact of Climate Change on Inland Water Systems. John Wiley and Sons, in press

Coombs, J.S. and J.M. Melack. The initial impacts of a wildfire on hydrology and suspended sediment and nutrient export in California chaparral watersheds. Hydrological Processes, in press

Verkaik, I, M. Rieradevall, S.D. Cooper, J.M. Melack, T.L. Dudley and N. Prat. Fire as a disturbance in Mediterranean climate streams. Hydrobiologia, in press

Cooper, S.D., P.S. Lake, S. Sabater, J.M. Melack and J.L. Sabo. The effects of land use changes on streams and rivers in Mediterranean climates. Hydrobiologia, in press