Mathew R. Rogers

Ph.D. Candidate
Department of Civil and Environmental Engineering
University of California, Berkeley
Phone: (510) 325-6973 Fax: (510) 655-5138
mrrogers@berkeley.edu
www.matrogers.com

EDUCATION

Ph.D. **University of California, Berkeley**
Environmental Engineering, Spring 2011
Dissertation: *A multi-scale evaluation of natural water treatment systems for the control of pesticides in agroecosystems*
Dissertation Chair: David Sedlak

M.S. University of California, Berkeley
Environmental Engineering**,** December 2002

B.S. University of Missouri-Rolla
Chemical Engineering, May 2001, *Cum Laude*, Minor: English Literature

PUBLICATIONS

Stringfellow, W.T., Graham, J., **Rogers, M.R.,** Borglin, S.E., Brunell, M., Hanlon, J, Spier, C., and K. Nguyen**.** (2009). Water quality changes occurring in agricultural drains of varying riparian function. In M. Moore and R. Kroger (Eds.), *Agricultural Drainage Ditches: Mitigation Wetlands of the 21st Century*. Kerala, India: Research Signpost.

Rogers, M.R. and W.T. Stringfellow. (2009). Partitioning of chlorpyrifos to soil and plants in vegetated agricultural drainage ditches. *Chemosphere* 75, 114.

PRESENTATIONS

Rogers, M.R. (2010). Presentation. "Tools to estimate necessary vegetated ditch BMPs for pesticide mitigation at a watershed scale." ACS National Meeting. March 21-25, San Francisco, CA.

Rogers, M.R. (2009). Poster: "A GIS to estimate requisite vegetated ditch BMPs for pesticides on a watershed scale." SETAC North American Annual Meeting. November 19-23, 2009, New Orleans, LA.

Rogers, M.R. and W.T. Stringfellow. (2008). Presentation: "Partitioning of chlorpyrifos to soil and plants in vegetated agricultural drainage ditches." SETAC North America Annual Meeting. November 16-20, 2008, Tampa, FL.

Rogers, M.R. and W.T. Stringfellow. (2008). Presentation: "Sorption of chlorpyrifos in vegetated agricultural drainage ditches." CALFED Science Conference. October 22-24, 2008, Sacramento, CA.

Rogers, M.R. and W.T. Stringfellow (2006). Presentation: **"**GIS and Meta-analysis techniques for the site suitability analysis of agricultural best management practices."

International Conference on the Future of Agriculture. August 7-9, 2006, Sacramento, CA.

Rogers, M.R. and W.T. Stringfellow (2006). Poster: "Meta-analysis and GIS techniques for site selection of agricultural best management practices." American Ecological Engineering Society Annual Meeting. April 13-14, 2006, Berkeley, CA

RESEARCH EXPERIENCE

California Department of Pesticide Regulation
Graduate Student Researcher, June 2008-May 2010

- *Modeled the use of natural treatment systems to manage chlorpyrifos in watersheds*

Contra Costa Water District
Concord, CA
Graduate Student Intern, June-October 2008

- *Edited a report on salinity management of the Sacramento-San Joaquin Delta for State Water Board hearing*

Lawrence Berkeley National Laboratory
Water Quality Research Laboratory
Graduate Student Researcher, June 2006-June 2008

- *California State Water Resources Control Board funded project on vegetated ditches as pesticide BMPs*
- *Designed and constructed a bench-scale wetland microcosm system*
- *Implemented and refined a SPE GC/MS method for the detection of organophosphate pesticides in surface water*
- *Evaluated the effectiveness of pesticide monitoring plans in Stanislaus County, CA*

University of California, Berkeley
Department of Plant and Microbial Biology
Graduate Student Researcher, October 2002-June 2003

- *Developed a research proposal and experimental design for a study of the relationship between salt marsh plant root exudates and selenium volatilizing rhizosphere bacteria*

U.S. Geological Survey
Columbia Environmental Research Center, Columbia, Missouri
Undergraduate Research Assistant, Summers 1999-2001

- *Investigated early mortality syndrome in Great Lakes salmonid fishes*

TEACHING EXPERIENCE

University of California, Berkeley, Department of Physics
Graduate Student Instructor**,** Physics for Future Presidents (Physics C10) Spring 2009

University of California, Berkeley, Department of Physics
Graduate Student Instructor**,** Physics for Scientists & Engineers (Physics 7A) 7 semesters, 2002-2006
2 sections with the Multicultural Engineering Program (formerly Physics Scholars Program)

University of California, Berkeley, Department of Civil and Environmental Engineering
Graduate Student Instructor**,** Water Chemistry (CE 115), Fall 2005

University of California, Berkeley, Department of Astronomy
Graduate Student Instructor, General Astronomy (Astro 10), Fall 2001

SERVICE

Peer reviewer, *Journal of Environmental Management*, 2010
Agrariana, *Co-Executive Director,* 2008 - present
Chancellor's Advisory Committee on Sustainability
Dean of Students Representative, 2007 - 2009
Engineers for a Sustainable World, UC Berkeley Chapter
Technology Coordinator, 2006-2009
Executive Board, 2006-2007
Project Coordinator/Consultant, residential onsite water and wastewater treatment and reuse projects, 2004-2006
Pesticide Action Network North America
Water Pesticide Information Center Advisory Committee, 2004-2005

FELLOWSHIPS AND AWARDS

UC Toxic Substances Research and Teaching Program
Graduate Student Fellowship, 2004-2006
UC Berkeley GSI Teaching and Resource Center
Outstanding Graduate Student Instructor, Spring Semester 2004
Civil and Environmental Engineering Departmental Graduate Fellowship 2001-2002
Missouri "Bright Flight" and Chancellor's Scholarships, 1996-2000

PROFESSIONAL AFFILIATIONS

Society of Environmental Toxicology and Chemistry, N. California Chapter
American Ecological Engineering Society
American Society of Civil Engineers, San Francisco Section
American Geophysical Union