## Jill Ann Marshall: Curriculum Vitae October 9, 2013

*Department of Geological Sciences*

*University of Oregon*

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### EDUCATION

PhD Candidate **University of Oregon**, Eugene, OR Geosciences

Dissertation topic: *Climatic, abiotic, biotic and lithologic controls on soil production and landscape evolution.* Research advisor: Dr. Joshua J. Roering

M.S. 2009 **San Francisco State University**, San Francisco, CA Geosciences

Thesis title: *Lithologic, topographic and climatic controls on grain size distribution of hillslope sediments*. Research advisor: Dr. Leonard S. Sklar

B. S. 1995 **California State University** Hayward, CA Earth and Environmental Sciences

Areas of Concentration: Hydrology, Environmental Geology

### EMPLOYMENT

Graduate Teaching & Research Fellow, University of Oregon, Eugene, OR 2010 - present

Geomorphologist/Engineering Geologist, California Water Quality Control Board, Oakland CA, 2000- 2009 (variable time)

River Science Coordinator, California Bay Delta Program (CALFED) Science Program, Sacramento, 2000 -2005 (variable time)

Fluvial Geomorphologist, Urban Creeks Council, Berkeley, 1999-2000

Engineering Geologist/Environmental Specialist, California Water Quality Control Board, Oakland CA 1994-1999

### SELECTED HONORS AND AWARDS

Weiser Scholarship, Department of Geosciences, University of Oregon ($2,000), 2009

SFSU graduate-student representative to CSU-wide research competition, 2008

SFSU College of Science and Engineering research competition, Honorable Mention, 2008

Outstanding Student Presentation Award, American Geophysical Union Fall Meeting, 2007

National Fish and Wildlife Foundation, Budweiser Conservation Scholarship ($10,000), 2007

SFSU College of Science and Engineering Research Competition, Honorable Mention, 2007

### MANUSCRIPTS

**Marshall, J.A.** and J.J. Roering, (in review), Sink to source: Morphologic and process implications of diagenetic variations in the 'uniform' Tyee Formation, Oregon Coast Range, *Journal of Geophysical Research - Earth Surface.*

### PEER-REVIEWED PUBLICATIONS

Roering, J.J., B.H. Mackey, **J.A. Marshall**, K. Sweeney, A.M. Booth, N. Deligne, A.M. Handwerger, and C. Cerovski-Darriau, (2013), 'You are HERE': Connecting the dots with airborne lidar for geomorphic fieldwork, *Geomorphology*, 2012 Binghamton Symposium, "The Field Tradition in Geomorphology", doi:10.10106/j.geomorph.2013.04.009

**Marshall, J.A.** and L.S. Sklar (2012) Mining soil databases for landscape-scale patterns in the abundance and size distribution of hillslope rock fragments, *Earth Surface Processes and Landforms,37(3), 287-300.*

Roering, J**., J. Marshall,** Booth, M. Mort, and Q. Jin (2010), Evidence for biotic controls on topography and soil production, *Earth and Planetary Science Letters*

(Awarded the G.K. Gilbert Award for Excellence in Geomorphic Research, American Assoc. of Geographers, 2011)

**Marshall J**. 2003*. Moving from the past into the future: a functional approach for protecting California streams*. *in* P.M. Faber (ed.) California riparian systems: Processes and floodplain management, ecology, and restoration (pp. 158-162). Riparian Habitat and Floodplains Conference Proceedings, Riparian Habitat Joint Venture, Sacramento

### CHAPTERS IN BOOKS

**Marshall, J. A.,** P. DeVries, and N. Milner (2008), *Spawning habitat remediation as part of national and regional scale programs to recover declining salmonid populations*.(pp 275 – 300), *in* Salmon spawning habitat in rivers: physical controls, biological responses and approaches to remediation, edited by P. DeVries and D. Sears, American Fisheries Society, Symposium 65. Bethesda, MD.

### SELECTED CONFERENCE ABSTRACTS AND PROCEEDINGS

**Marshall, J. A**., J.J. Roering, S. Praskievicz; T. C. Hales, D. C. Gavin, P. J. Bartlein, 2012. Temperature Controls On Sediment Production In The Oregon Coast Range - Abiotic Frost-Cracking Processes Vs. Biotic-Dominated Processes Over The Last 40 Ka, *Eos* AGU Fall Mtg, San Francisco, Abstract EP44C-02

Cerovski-Darriau, C., **J.A. Marshall**, J.J. Roering, Shake, rattle and roll - tectonic and lithologic controls on sediment production in the Oregon Coast Range, GeoPRISMS Earthscope Planning Workshop for the Cascadia Primary Site, April 2012.

**Marshall, J. A**., J.J. Roering, R.J. Dorsey, 2011, Geomorphic implications of resistant bedrock in the ‘uniform’ sandstone beds of the Tyee Formation, Oregon Coast Range, *Eos* AGU Fall Mtg, San Francisco, Abstract EP34C-0699.

**Marshall, J. A**, and J.J. Roering, 2010 Erosion rates, stochasticity, and abiotic vs. biotic bedrock to soil production mechanisms in the Oregon Coast Range, *Eos* AGU Fall Mtg, San Francisco, Abstract EP21B-0749.

**Marshall, J. A**., M. Attal, L.S. Sklar, C.S. Riebe, M.D, Hurst, S.M. Mudd, K. Yoo, 2009, The effect of erosion rate on hillslope rock fragment production: implications for supply of bedload material to channels *Eos* AGU Fall Mtg, San Francisco, Abstract EP51B-0594.

Riebe, C.S., **J.A. Marshall,** L.S. Sklar, D.E. Granger, 2008 Characterizing sediment supply to rivers: effects of lithology, climate, weathering and erosion on rock-fragment abundance in granitic, hillslope soils *Eos* AGU Fall Mtg, San Francisco, Abstract H43F-1071.

**Marshall, J.A.** and L.S. Sklar, 2007, Mining soil survey databases to explore lithologic, climatic and topographic controls on hillslope production of bedload-sized rock fragments, *Eos* AGU Fall Mtg, San Francisco, Abstract H41D-0758.

Sklar, L.S., N.J. Finnegan and **J.A. Marshall**, 2007, Climatic, tectonic and lithologic controls on the size distribution of sediments supplied to channels: implications for transient evolution of bedrock river profiles, *Eos* AGU Fall Mtg, San Francisco, Abstract H41D-0757.

**Marshall J.A.,** 2004, Adaptive Management, Interdisciplinary Science and Restoring Large-Scale Riverine Habitats: A California Perspective, *River Management Society* 2004 Symposium, Tahoe City, CA

**Marshall J.A.,** 2003, If you build it, will they come? Lessons learned and a look into the future of restoration design, *American Fisheries Society*, Spawning Habitat Symposium, Quebec City, Canada

### RESEARCH GRANTS

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Critical Zone Research for Graduate Students in Europe ($10,000), 2011

Dawdy Hydrology Research Award, SFSU ($800), 2008

National Center for Airborne Laser Mapping (NSF-funded), Student Seed Grant ($15,000 value), 2006

### SELECTED WORKSHOPS and SPECIALIZED COURSES

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NCED Summer Institute on Earth-System Dynamics, Minneapolis, MN (NCED-funded) 2013

SoilTrEC Workshop Land-Use Practice And Sustainable Use Of Soil, Iceland (NSF-funded) 2013

GeoPRISMS EarthScope Planning Workshop for the Cascadia Primary Site 2012

SoilCritZone Workshop, a joint NSF/EU workshop, Crete, Greece (NSF-funded) 2008

Studying Earth Surface Processes with High-Resolution Topographic Data Workshop, Boulder, CO (NSF/NCALM funded) 2008

UNAVCO Short Course Processing and Analysis of GeoEarthscope and Other Community LiDAR Topography Datasets, Tempe, AZ (UNAVCO-funded) 2008

### PROFESSIONAL SOCIETIES

American Geophysical Union

Geological Society of America