

October 2012

Kelly S. Ramirez
Curriculum Vitae

Postdoctoral Scholar, School of Global Environmental Sustainability
Executive Director, Global Soil Biodiversity Initiative
Colorado State University, Fort Collins, CO 80309

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EDUCATION

Ph.D. Ecology and Evolutionary Biology, University of Colorado, Boulder, 2007-2012
BA Biology, Washington State University, Pullman, 2007

PROFESSIONAL EMPLOYMENT

May 2012- Present: Executive Director, Global Soil Biodiversity Initiative

RESEARCH INTERESTS

Soil microbial ecology, biogeochemical cycles, anthropogenic nitrogen deposition, theoretical modeling, global soil biodiversity, microbial biogeography

PUBLICATIONS

Ramirez, K.S., J.M. Craine, N. Fierer. (2012). Consistent effects of nitrogen amendments on soil microbial communities and processes across biomes. *Global Change Biology*. 18(6):1918-1927.

Fierer, N., C.L. Lauber, **K.S. Ramirez**, J. Zaneveld, M.A. Bradford, R. Knight. (2012). Comparative metagenomic, phylogenetic, and physiological analyses of soil microbial communities across nitrogen gradients. *ISME Journal*. 6(5):1007-1017.

Ramirez, K.S., C.L. Lauber, M. Bradford, R. Knight, N. Fierer. (2010). Consistent effects of nitrogen fertilization on soil bacterial communities in contrasting systems. *Ecology*. 91(12):3463-3470.

Ramirez, K.S., J.M. Craine, N. Fierer. (2010). Nitrogen fertilization inhibits soil microbial respiration regardless of the form of nitrogen applied. *Soil Biology & Biochemistry*. 42:2336-2338.

Ramirez, K.S., C.L. Lauber, N. Fierer. (2010). Microbial consumption and production of volatile organic compounds at the soil-litter interface. *Biogeochemistry*. 99:97-107.

Strickland, M.S., M.A. Callahan, C.A. Davies, C.L. Lauber, **K.S. Ramirez**, D.D. Richter, N. Fierer, M.A. Bradford. (2010). Rates of in situ carbon mineralization in relation to

land-use, microbial community and edaphic characteristics. *Soil Biology & Biochemistry*. 42:260-269.

AWARDS

Fellowship, Global Sustainability Leadership Fellowship, Colorado State University (2012)

Fellowship, Graduate Research Fellow Participant, National Science Foundation (2009-2012)

Travel Grant, American Geophysical Union Conference (2011)

Travel Grant, Soil Ecology Society Parkinson Travel Grant (2011)

Research Grant, EBIO Graduate Student Grant, University of Colorado (2009)

Travel Grant, United Government of Graduate Students, University of Colorado (2008)

Research Grant, Beverly Sears Graduate Student Grant, University of Colorado (2008)

Research Grant, EBIO Graduate Student Grant, University of Colorado (2008)

Fellowship, SLOAN Fellowship (2008)

Fellowship, Alliances for Graduate Education and Professoriate Fellowship, NSF (2007)

PRESENTATIONS

Paper Presentation, **Ramirez, KS** and Fierer, N. "Modeling the effects of increasing anthropogenic nitrogen on soil microbial decomposition", Ecological Society of America. Portland, OR. (2012)

Poster Presentation, America Geophysical Union, San Francisco, CA. (2011)

Poster Presentation, LTER Fungal/Microbial Genomics Working Group Meeting. (2011)

Paper Presentation, Soil Ecology Society. Kelowna, BC, Canada. (2011)

Paper Presentation, Ecological Society of America. Pittsburg, PA. (2010)

Paper Presentation, Ecological Society of America. Albuquerque, NM. (2009)

Paper Presentation, Guild of Rocky Mnt Ecologists and Evolutionary Biologist (GREEBs). Boulder, CO. (2008)

LABORATORY & COMPUTATIONAL SKILLS

- Molecular: DNA extraction, PCR, sequencing, qPCR
- Soil analysis: various wet lab techniques (IRGA, pH, N potential, SIR, others)
- Sequence processing: QIIME, Greengenes, SILVA
- Phylogenetic analysis: Mr.Bayes, RAxML, Muscle
- Programming: R Statistical Package

TEACHING EXPERIENCE

Instructor, Critical Thinking NIH-HHMI Seminar, University of Colorado, (Spring 2010)

Instructor, Statistical Techniques NIH-HHMI Seminar, University of Colorado, (Fall 2008, 2009)

Teaching Assistant, Microbiology Lab, University of Colorado, (Spring 2008).

Teaching Assistant, General Biology Lab, University of Colorado, (Fall 2007).

SYNERGISTIC ACTIVITIES

- Reviewer: Soil Biology and Biochemistry, Oecologia, PLOS, Global Change Biology
- Early Career Ecologists Blog, *Contributor*, (2012-Current)
- American Geophysical Union, *Member* (2011-2012)
- Ecological Society of America, *Member* (2008-current)
- Summer Multicultural Access to Research Training (SMART). *Graduate Advisor* (2008-2011)
- Colorado Diversity Initiative. *Participant*. (2007-2012)
- NIH-HHMI Scholars Program, University of Colorado, *Volunteer* (2008- 2010)
- Evolution Outreach Committee. EBIO Department, University of Colorado, *Coordinator* (2008-2009)

REFERENCES

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