Biosketch Egbert Schwartz

Professional preparation

Michigan State University, East Lansing, MI	Botany B.S., 1988
University of Michigan, Ann Arbor, MI	Cellular and Molecular Biology M.S., 1991
University of California, Davis, CA	Ecology PhD., 1999
University of California, Berkeley, CA	Microbial Ecology post-doc 1999-2001

Appointments

Professor, Dept. of Biology, Northern Arizona University 2013 –present
Associate Professor, Dept. of Biology, Northern Arizona University 2008 – 2013
Assistant Professor, Dept. of Biology, Northern Arizona University 2003- 2008
Assistant Professor, Dept. of Biology, University of Denver 2001 – 2003

Five most closely related publications

1. Bruce A Hungate, Rebecca L Mau, Egbert Schwartz, J Gregory Caporaso, Paul Dijkstra, Natasja van Gestel, Benjamin J Koch, Cindy M Liu, Theresa A McHugh, Jane C Marks, Ember Morrissey, Lance B Price. (2016) Quantitative Microbial Ecology Through Stable Isotope Probing. Applied and Environmental Microbiology (in press); DOI:10.1128/AEM.02280-15
2. Ember M. Morrissey, **Theresa A. McHugh**, **Lara Preteska**, Michaela Hayer, Paul Dijkstra, Bruce A. Hungate, Egbert Schwartz (2015) Dynamics of extracellular DNA decomposition and bacterial community composition in soil. Soil Biology and Biochemistry 86:42-49. DOI:10.1016/j.soilbio.2015.03.020
3. Schwartz, E, DJ Van Horn, HN. Buelow, J G. Okie, M N. Gooseff, J E. Barrett and C D. Takacs-Vesbach (2014) Characterization of growing bacterial populations in McMurdo Dry Valley soils through stable isotope probing with ^{18}O-water. FEMS Microbial Ecology. 89:415-425. DOI: 10.1111/1574-6941.12349
4. Blazewicz S.J., E. Schwartz and M. K. Firestone (2014) Growth and mortality of bacteria and fungi underlie rainfall-induced carbon dioxide pulses from seasonally dried soil. Ecology, **95**:1162-1172. http://dx.doi.org/10.1890/13-1031.1
5. Woods, A., M Watwood, E, Schwartz. (2011) Identification Of a Toluene-degrading Bacterium From a Soil Sample Through $H_2{}^{18}O$ DNA-Stable Isotope Probing. Applied and Environmental Microbiology. 77:5995-5999.

Five other publications

6. Blazewicz, S. and E. Schwartz (2011) Dynamics of ^{18}O incorporation from $H_2{}^{18}O$ into soil microbial DNA. Microbial Ecology, 61:911-916.
7. Schwartz, E. Characterization of growing microorganisms in soil through stable isotope probing with $H_2{}^{18}O$ (2007) Applied and Environmental Microbiology, 73: 2541-2546.
8. Hagerty SB, KJ van Groenigen, SD Allison, BA Hungate, E Schwartz, GW Koch, RK Kolka, P Dijkstra (2014) Accelerated microbial turnover but constant growth efficiency with warming in soil. Nature Climate Change. **4**, 903–906 doi:10.1038/nclimate2361
9. Adair, K., Blazewicz, S.J., Hungate, B.A., Hart, S.C., Dijkstra, P. & E. Schwartz (2013). A positive relationship between the abundance of ammonia

oxidizing archaea and natural abundance $\delta^{15}N$ of ecosystems. Soil Biology & Biochemistry, 65, 313-315.
10. Adair, K. and E. Schwartz. (2008) Evidence that ammonia-oxidizing archaea are more abundant than ammonia-oxidizing bacteria in soils along an elevation gradient in northern Arizona, USA. Microbial Ecology, 56:420-426.

Synergistic activities

- Ex-President of Arizona-Nevada regional American Society of Microbiology chapter.
- Taught the following classes at Northern Arizona University or University of Denver: BIO 369 - Environmental Microbiology, BIO 376 - Industrial Microbiology and Biotechnology, BIO 181 - Introductory Biology, BIO 344 - Cell and Molecular Biology, BIO 350 – Molecular Genetics, BIOL 3120 - General Microbiology, BIOL 4320 - Graduate Student Seminar in Molecular Biology, BIOL 3090 - Microbial Ecology, BIOL 2010 - General Ecology, BIO 599 Microbiology for teachers.
- Reviewed manuscripts for Applied and Environmental Microbiology, Ecosystems, Plant and Soil, Applied Soil Ecology, Ecology, Soil Biology and Biochemistry, International journal of phytoremediation, ISME journal, Environmental Microbiology , Microbial Ecology, Antonie van Leeuwenhoek and PlosOne.
- Served on DOE phytoremediation panel, EPA nonlinear response to climate change panel, NSF microbial interactions and processes panel, NSF Geobiology, and NSF ecosystems panel. Ad-hoc reviewer for NSF Microbial Observatory, Ecology, Ecosystems and Geosciences grant proposals; Ad-hoc reviewer for Department of Energy Program in Ecosystem Research grant proposals; Ad-hoc reviewer for grant proposals submitted to the Kearney foundation.