

Publications Related To Carbon and Nitrogen in Hydrothermal Systems Projects:

Jeff R. Havig, Jason Raymond, J., D'Arcy R. Meyer-Dombard, Natalya Zolotova, and Everett L. Shock. (2011). Merging Isotopes and Community Genomics in a Siliceous Sinter-Depositing Hot Spring. vol. 116, G01005, doi:10.1029/2010JG001415, *JGR Biogeosciences*.

Loiacono S, Meyer-Dombard DR, Havig, J.R., Poret-Peterson, A., Hartnett, H., Shock EL. (2012). Evidence for high-temperature *in situ nifH* transcription in an alkaline hot spring of Lower Geyser Basin, Yellowstone National Park. *Environmental Microbiology*, **14**:1272-1283, doi:10.1111/j.1462-2920.2012.02710.x, 14:1272-1283.

Swingley WD, Meyer-Dombard DR, Shock EL, Alsop EB, Falenski HD, et al. (2012) Coordinating Environmental Genomics and Geochemistry Reveals Metabolic Transitions in a Hot Spring Ecosystem. *PLoS ONE* 7(6): e38108. doi:10.1371/journal.pone.0038108

Schubotz, F., Meyer-Dombard, D.R., Bradley, A.S., Fredricks, H.F., Hinrichs, K.-U., Shock, E.L., Summons, R.E. (2013). Spatial and temporal variability of biomarkers and microbial diversity reveal metabolic and community flexibility in Streamer Biofilm Communities in the Lower Geyser Basin, Yellowstone National Park, *Geobiology*. 11:549-569.

Schubotz, F., Hays, L.E., Meyer-Dombard, D.R., Gillespie, A., Shock, E.L., Summons, R.E. (2015). Stable isotope labeling confirms heterotrophy is a major metabolic pathway in streamer biofilm communities from alkaline hot springs. *Frontiers in Extreme Microbiology*. 6: Article 42. doi: 10.3389/fmicb.2015.00042.

Conference Presentations Related To Carbon and Nitrogen in Hydrothermal Systems Projects:

- 27]** **Meyer-Dombard, D.R.**, Vallalar, B., Cardace, D., Argayosa, A., Argayosa, V., Arcilla, C. (2013). Microorganisms cultured from serpentinizing and hydrothermal fluids in Philippines springs. AOGS 2013, Brisbane. Abstract # IG19-D2-PM2-P-008.
- 26]** Walther, K.M., Oiler, J., **Meyer-Dombard, D.R.** (2012). Small Scale Biodiversity of an Alkaline Hot Spring in Yellowstone National Park. *Eos Trans. AGU*, Fall Meet. Suppl., Abstract B51D-0597, American Geophysical Union, Fall Meeting, 2012.
- 25]** Havig, J.R., Hamilton, T.L, Boyd, E.S., **Meyer-Dombard, D.R.**, Shock, E. (2012). Geochemical and physical drivers of microbial community structure in hot spring ecosystems. *Eos Trans. AGU*, Fall Meet. Suppl., Abstract B51D-0590, American Geophysical Union, Fall Meeting, 2012.
- 24]** **Meyer-Dombard, D.R.**, Loiacono, D.R., Vassiliev, V., Shock, E.L., (2012). Parallel Datasets Reveal Carbon and Nitrogen Cycling in an Alkaline Hot Spring Ecosystem. Midwest Geobiology Symposium, September 22, 2012, Washington University in St. Louis.
- 23]** **Meyer-Dombard, D.R.**, Loiacono, S.T., Shock, E. (2012). Community Response to a Heavy Precipitation Event in High Temperature, Chemosynthetic Biofilms and Sediments. *Eos Trans. AGU*, Fall Meet. Suppl., Abstract B43L-06, American Geophysical Union, Fall Meeting, 2012.
- 22]** Loiacono, S.T., Havig, J.R., Shock, E.L., Meyer-Dombard, D.R. (2012). High-temperature nitrogen cycling: merging genomics, transcriptomics, and geochemistry to evaluate nitrogen-cycling in terrestrial hydrothermal systems. AbSciCon 2012, Atlanta, GA. Abstract # 4053.
- 21]** **Meyer-Dombard, D.R.**, Swingley, W., Raymond, J., Shock, E. (2012). **[invited keynote]**. Coordination of parallel datasets reveals geochemical, energetic, and genomic support for biogeochemical cycling in a hot spring ecosystem. AbSciCon 2012, Atlanta, GA. Abstract # 4051.
- 20]** Loiacono, S.T., **Meyer-Dombard, D.R.** (2011). In situ expression of functional genes reveals nitrogen cycling at high temperatures in terrestrial hydrothermal systems. *Eos Trans. AGU*, Fall Meet. Suppl., Abstract B51G-0492, American Geophysical Union, Fall Meeting, 2011.

- 19] **Havig, J.R.**, Hamilton, T.L., Boyd, E.S., Meyer-Dombard, D.R., Shock, E. (2011). Effects of geochemical changes on microbial community structure in a hot spring ecosystem. *Eos Trans. AGU*, Fall Meet. Suppl., Abstract B31K-01, American Geophysical Union, Fall Meeting, 2011.
- 18] **Hamilton, T.L.**, Havig, J.R., Boyd, E.S., Meyer-Dombard, D.R., Shock, E., Peters, J. (2011) A shift in microbial community composition as a result of a natural temporal change in a hot spring ecosystem. *Eos Trans. AGU*, Fall Meet. Suppl., Abstract B31K-02, American Geophysical Union, Fall Meeting, 2011.
- 17] **Meyer-Dombard, D.R.**, Cardace, D., Loiacano, S., Güleçel, Y., Woycheese, K., Amend, J.P. (2011). Biogeochemical Cycling in Shallow-Sea and Terrestrial Hydrothermal Systems Goldschmidt Geochemical Conference, Prague. <http://goldschmidt2011.org/program/programIndex?letter=M>
- 16] **Meyer-Dombard, D.R.**, Burton, M., Havig, J., Shock, E. (2010). (*invited*). Nitrogen cycling in Hot Spring Sediments and Biofilms. *Eos Trans. AGU*, Fall Meet. Suppl., Abstract B23J-06, American Geophysical Union, Fall Meeting, 2010.
- 15] LaFree, S., Burton, M., **Meyer-Dombard, D.R.** (2010). Nitrogen cycling in Yellowstone National Park thermal features: using gene expression to reveal ecological function. *Eos Trans. AGU*, Fall Meet. Suppl., Abstract B21B-0324, American Geophysical Union, Fall Meeting, 2010.
- 14] **Meyer-Dombard, D.R.**, Burton, M., Vennelakanti, S., Havig, J., Shock, E.L. (2009). Carbon and nitrogen cycling in thermally heated sediments. *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract B23C-0390, American Geophysical Union, Fall Meeting, 2009.
- 6] Raymond, J., **Meyer-Dombard, D.R.**, Shock, E.L. (2008). Phototrophs vs. chemotrophs: surprising diversity at the intersection of hot springs communities. *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract B14A-03, American Geophysical Union, Fall Meeting, 2008.
- 5] **Meyer-Dombard, D.R.**, Raymond, J., Shock, E.L. (2008). Insights into Biofilm Function and Variability from Environmental Genomes and Geochemistry. YNP Research Coordination Network Workshop, Yellowstone National Park, MT.
- 4] **Meyer-Dombard, D.R.**, Dibbell, A., Bradley, A.S., Shock, E.L., Summons, R.E. (2007). Microbial Diversity and SIP Investigations of Streamer Biofilm Communities in Yellowstone National Park. Goldschmidt Geochemical Conference. <http://www.goldschmidt2007.org/index.php>.
- 3] **Meyer-Dombard, D.R.**, Bradley, A.S., Havig, J.R., Raymond, J., Amend, J.P., Shock, E.L., Summons, R.E. (2006). Biogeochemistry of Siliceous Biofilms in Geothermal Ecosystems. Goldschmidt Geochemical Conference. <http://goldschmidt2006.org>.
- 2] **Shock, E.L.**, Meyer-Dombard, D.R., Amend, J.P., Fisher, T., Reysenbach, A.-L. (2003). Geochemical Habitats of Deeply Branched Lineages. NASA Astrobiology Institute General Meeting, February 10-12, 2003. Abstract # 12922. http://nai.arc.nasa.gov/institute/general_meeting_2003/AbstractBook.pdf (page 342)
- 1] Shock, E.L., **Meyer-Dombard, D.R.**, Amend, J.P. (2002). Energetics of Nitrogen Biogeochemistry in Hot Spring Habitats. *Eos Trans. AGU*, 83(47), Fall Meet. Suppl., Abstract F294, American Geophysical Union, Fall Meeting, 2002.