

## Publications Related To These Projects

- Vallalar, B., **Meyer-Dombard D.R.**, Cardace, D., Arcilla, C.A. (2019) Multimetal Resistant, Alkalitolerant Bacteria Isolated from Serpentinizing Fluid-Associated Sediments and Acid Mine Drainage in the Zambales Ophiolite, the Philippines. *Geomicrobiology Journal* 36:792-809.
- **Meyer-Dombard, D.R.**, Casar, C.P., Simon, A., Cardace, D., Schrenk, M.O., Arcilla, C.A., (2018). Biofilm formation and potential for iron cycling in serpentinization-influenced groundwater of the Zambales and Coast Range Ophiolites. *Extremophiles*, 22: 407-431.
- 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.
- **Meyer-Dombard, D.R.**, Woycheese, K.M., Yargıçoğlu, E.N., Cardace, D., Shock, E.L., Güleçal-Pektas, Y., Temel, M. (2015). High pH microbial ecosystems in a newly discovered, ephemeral, serpentinizing fluid seep at Yanartaş (Chimaera), Turkey. *Frontiers in Extreme Microbiology*. 5: Article 723. doi: 10.3389/fmicb.2014.00723.
- **Meyer-Dombard, D.R.**, Amend, J.P., Osburn, M.R. (2013). Microbial diversity and potential for arsenic and iron biogeochemical cycling at an arsenic-rich, shallow-sea hydrothermal vent (Tutum Bay, Papua New Guinea). *Chemical Geology*, 348:37-47. doi.org/10.1016/j.chemgeo.2012.02.024.
- **Meyer-Dombard, D.R.**, Shock, E.L., Amend, J.P. (2012) Effects of Trace Element Concentrations on Culturing Thermophiles. *Extremophiles*, 16:317-331.
- Amend, J.P., **Meyer-Dombard, D.R.**, Sheth, S.N., Zolotova, N., and Amend, A.C. (2003), *Palaeococcus helgesonii*, sp. nov., a facultatively anaerobic, hyperthermophilic Archaeon from a geothermal well on Vulcano Island, Italy. *Archives of Microbiology*, 179: 394-401.

## REFEREED BOOKS AND SERIES

- Amend, J.P., Rogers, K.L., and **Meyer-Dombard, D.R.**, (2004), Microbially mediated sulfur-redox: Energetics in marine hydrothermal vent systems. IN: Sulfur Biogeochemistry-Past and Present. GSA Special Paper 379 (Eds., Amend, J.P, Edwards, K.J., and Lyons, T.W.), p.17-34.

## Conference Presentations Related To These Projects:

### CONFERENCE ABSTRACTS [PRESENTER IN BOLD, MEYER-DOMBARD STUDENTS UNDERLINED]:

#### CONTRIBUTED ORAL PRESENTATIONS:

- 4] Malas, J., Khoury, S., Tanzillo, M., Fischer, G.A., Bogner, J., Meyer-Dombard, D.R. (2020). Impact of changing waste streams on microbial ecology and biogeochemical cycling in landfill ecosystems. Geological Society of America annual meeting, 2020. Abstract#358928.
- 3] **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>.

- 2] Amend, J.P.,** Meyer-Dombard, D.R., Rogers, K., Rusch, A. (2004). Thermophiles and vent geochemistry at Vulcano (Italy) and Ambitle (Papua New Guinea). Goldschmidt Geochemical Conference. <http://www.goldschmidt2004.dk/>.
- 1] Meyer-Dombard, D.R.,** Shock, E.L., Amend, J.P. (2002). Geochemical Culturing Methods Link Hydrothermal Environments with Thermophilic Communities. Second Astrobiology Science Conference. <http://www.astrobiology.com/asc2002/abstract.html?ascid=106>

#### **CONTRIBUTED POSTER PRESENTATIONS:**

- 18] Khoury, S.,** Meyer-Dombard, D.R., Bogner, J., Malas, J, Fischer, G.A. (2021). Microplastics: Abundance and Effect on Microbial Life in Landfills, Wetlands, and Grassland. Midwest Geobiology Symposium, Indianapolis, Indiana.
- 17] Malas, J.,** Khoury, S., Tanzillo, M., Fischer, G.A., Bogner, J., Meyer-Dombard, D.R. (2020) Impact of changing waste streams on microbial ecology and biogeochemical cycling in deep landfill ecosystems. American Geophysical Union, Fall Meeting, 2020.
- 16] Tanzillo, M.,** Meyer-Dombard, D.R., Bogner, J.E. (2020) Influence of Elevated Temperatures on the Microbiome of a Municipal Solid Waste Landfill. American Geophysical Union, Fall Meeting, 2020.
- 15] Tanzillo, M.,** Meyer-Dombard, D.R., Bogner, J. (2020). Influence of elevated temperatures on the microbiome of a municipal solid waste landfill. Geological Society of America annual meeting, 2020. Abstract#358951.
- 14] Khoury, S.,** Malas, J., Tanzillo, M., Fischer, G.A., Bogner, J., Meyer-Dombard, D.R. (2020). Abundance of microplastics in landfills and their effects on microbial processes. Geological Society of America annual meeting, 2020. Abstract#358929.
- 13] Malas, J.,** Khoury, S., Tanzillo, M., Fischer, G.A., Bogner, J., Meyer-Dombard, D.R. (2020) Impact of changing waste streams on microbial ecology and biogeochemical cycling in landfill ecosystems. Geological Society of America annual meeting, 2020. Abstract#358928.
- 12] Malas, J.,** Khoury, S., Tanzillo, M., Fischer, G.A., Patete, I.D., Bogner, J.E., Meyer-Dombard, D.R. (2019). Trash or treasure? Biogeochemical cycling in landfill ecosystems. Abstract B76-546328 (poster presentation). American Geophysical Union, Fall Meeting, 2019.
- 11] Malas, J.,** Khoury, S., Tanzillo, M., Fischer, G.A., Patete, I.D., Bogner, J.E., Meyer-Dombard, D.R. (2019). Trash or treasure? Biogeochemical cycling in landfill ecosystems. 8<sup>th</sup> Annual Midwest Geobiology Symposium, St. Louis, MO.
- 10] Vallalar, B.,** Meyer-Dombard, D.R., Cardace, C., Arcilla, C.A. (2016). Heavy Metal Resistant, Alkalitolerant Bacteria Isolated From Serpentinizing Springs in the Zambales Ophiolite, Philippines. *Eos Trans. AGU*, Fall Meet. Suppl., Abstract B31A-0459, American Geophysical Union, Fall Meeting, 2016.
- 9] Vallalar, B.,** Meyer-Dombard, D., (2015). Isolation of Cellulolytic Bacteria from high pH serpentinizing springs in the Philippines. Astrobiology Science Conference 2015, Abstract #7673.
- 8] Casar, C.P.,** Meyer-Dombard, D.R., Cardace, D., Simon, A. (2015). Characterizing subsurface microbial Fe-reduction in a Martian analog serpentinizing system: Zambales Ophiolite, Philippines. Astrobiology Science Conference 2015, Abstract #7365.
- 7] Casar, C.,** Meyer-Dombard, D.R., Simon, A., Cardace, C., Arcilla, C. (2014) Microbially-influenced Fe-Cycling within high pH serpentinizing springs of the Zambales Ophiolite, Philippines. American Geophysical Union, Fall Meeting, 2014. Abstract # V53A-4819.
- 6] Vallalar, B.,** Meyer-Dombard, D.R. (2014) Culturing Cellulolytic Bacteria from High pH Serpentinizing Springs. 3<sup>rd</sup> Annual Midwest Geobiology Symposium, Chicago.

- 5] Vallalar, B., Meyer-Dombard, D.R., Woycheese, K., Casar, C., Cardace, D., Argayosa, L., Argayosa, V., Arcilla, C. (2013) Microorganisms cultured from highly alkaline serpentinizing springs in the Philippines. 2<sup>nd</sup> Annual Midwest Geobiology Symposium, Indianapolis.
- 4] Woycheese, K.M., Yargicoglu, E.N., Cardace, D., Meyer-Dombard, D.R. (2012). From the Belly of the Beast: Biogeochemistry and geomicrobiology of a fluid seep at Chimaera [Yanartas], Turkey. *Eos Trans. AGU*, Fall Meet. Suppl., Abstract B43G-0510, American Geophysical Union, Fall Meeting, 2012.
- 3] Meyer-Dombard, D.R., Yargicoglu, E.N., Cardace, D., Gulecal, Y., Temel, M. (2012). Biogeochemical Cycling in Fault-Associated and Ophiolite-Hosted Springs. AbSciCon 2012, Atlanta, GA. Abstract # 4494.
- 2] Meyer, D.R., Shock, E.L., Amend, J.P. and Reysenbach, A.-L., (2000). Hydrothermal Ecosystems as Models for Astrobiological Habitats. First Astrobiology Science Conference (AbSciCon). <http://www.astrobiology.com/asc2000/abstract.html?ascid=357>
- 1] Meyer, D.R., Shock, E.L., Amend, J.P. and Reysenbach, A.-L. (2000). Using Geochemistry to Isolate Thermophiles. RIDGE Theoretical Institute.  
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