

Curriculum Vitae

Olivia U. Mason

General Information

Earth, Ocean & Atmospheric Science College of Arts and Sciences
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Florida State University
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Professional Preparation

2008 Ph.D., Oregon State University. Major: Biological Oceanography.
2003 M.S., Portland State University.
1997 B.S., University of Massachusetts, Amherst. Major: Natural Resource Conservation. Cum Laude.

Professional Experience

2018–present Associate Professor, Earth, Ocean & Atmospheric Science, Florida State University.
2012–2018 Assistant Professor, Earth, Ocean & Atmospheric Science, Florida State University.
2009–2012 Postdoctoral Fellow, Lawrence Berkeley National Laboratory.
2008–2009 Postdoctoral Scholar, California Institute of Technology.
2003–2008 Graduate Research Assistant, Oregon State University.
2002–2003 Graduate Research Assistant, Portland State University.
2002–2003 Graduate Teaching Assistant, Portland State University.
2000–2001 Biology, Chemistry, and Physics Teacher, Fontbonne Academy.

Honors, Awards, and Prizes

Honors from Florida's Academic STEM Women and NSF ADVANCE-PAID initiatives, Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (2013).
SPOT Recognition Award, Lawrence Berkeley National Laboratory (2010).
Travel Award, International Symposium for Subsurface Microbiology (2008).
Young Scientist Award, International Symposium for Subsurface Microbiology (2008).
Travel Award, NSF (2003).

Fellowship(s)

FSU Faculty Fellows Program (2022–2023).
This fellowship is with the FSU Office of Research.
Integrative Graduate Education and Research Traineeship (IGERT) Fellowship (2003–2008).
NASA Astrobiology Postdoctoral Fellowship (2008).
Declined fellowship.

Research and Original Creative Work

Publications

Invited Refereed Journal Articles

- Mason, O. U., Han, J., Woyke, T., & Jansson, J. K. (2014). Single-cell genomics reveals features of a *Colwellia* species that was dominant during the Deepwater Horizon oil spill. *Frontiers in Microbiology*, 5, 332. doi:10.3389/fmicb.2014.00332
- Lamendella, R., Strutt, S., Borglin, S. E., Chakraborty, R., Tas, N., Mason, O. U., Hultman, J., Prestat, E., Hazen, T. C., & Jansson, J. K. (2014). Assessment of the Deepwater Horizon oil spill impact on Gulf coast microbial communities. *Frontiers in Microbiology*, 5, 130. doi:10.3389/fmicb.2014.00130
- Scott, N. M., Hess, M., Bouskill, N. J., Mason, O. U., Jansson, J. K., & Gilbert, J. A. (2014). The microbial nitrogen cycling potential in marine sediments is impacted by polyaromatic hydrocarbon pollution. *Frontiers in Microbiology*, 5, 108. doi:10.3389/fmicb.2014.00108

Refereed Journal Articles

- Neri, U., Wolf, Y. I., Roux, S., Camargo, A. P., Lee, B., Kazlauskas, D., Chen, I. M., Ivanova, N., Allen, L. Z., Paez-Espino, D., Bryant, D. A., Bhaya, D., RNA Virus Discovery Consortium, Krupovic, M., Dolja, V. V., Kyrpides, N. C., Koonin, E. V., & Gophna, U. A five-fold expansion of the global RNA virome reveals multiple new clades of RNA bacteriophages. *Cell*.
I am a member of the RNA Virus Discovery Consortium. This paper is accepted.
- Scherer, B., Mast, A., & Mason, O. U. Bacterial communities vary across populations and tissue type in red mangroves (*Rhizophora mangle*, Rhizophoraceae) along an expanding front. *FEMS Microbiology Ecology*.
This paper is accepted.
- Cuellar-Gempeler, Catalina (Mason Postdoc), Casey P. terHorst, Mason, O. U., & Miller, T. Predator dispersal influences predator distribution but not prey diversity in pitcher plant microbial metacommunities. *Ecology*. Manuscript submitted for publication.
This paper is accepted.
- Brayon J. Fremin, Global Phage Small Open Reading Frame (GP-SmORF) Consortium, Ami S. Bhatt, & Nikos C. Kyrpides. Revealing Thousands of Small, Novel Genes in Global Phage Genomes. *Cell Reports*.
I am a member of the Global Phage Small Open Reading Frame (GP-SmORF) Consortium. This paper is accepted.
- Thomas E. Miller, Abigail Pastore, Catalina Cuellar-Gempeler (Mason Postdoc), Erin J. Canter (Mason Master's Student), & Olivia U. Mason (*in press*). Effects of community richness and competitive asymmetry on protozoa evolution in *Sarracenia purpurea* leaves. *American Naturalist*. doi.org/10.1086/721010.
- Vogel, Margaret A (Mason Doctoral Student), Mason, O. U., & Miller, T. E. (2021). Environmental stressors alter the composition of seagrass phyllosphere microbial communities. *Climate Change Ecology*, 2. doi:10.1016/j.ecochg.2021.100042
- Jurelevicius, D., Pereira, R. S., da Mota, F. F., Cury, J. C., de Oliveira, I. C., Rosado, A. S., Mason, O. U., Jansson, J. K., & Seldin, L. (2021). Metagenomic analysis of microbial communities across a transect from low to highly hydrocarbon-contaminated soils in King George Island, Maritime Antarctica. *Geobiology*, 00, 1-14. doi:10.1111/gbi.12472

- Tatariw, C., Mason, O. U., & Mortazavi, B. (2021). Ditching Nutrients: Roadside Drainage Networks are Hotspots for Microbial Nitrogen Removal. *Journal of Geophysical Research: Biogeosciences*, *126*, e2020JG006115. doi:doi.org/10.1029/2020JG006115
- Mason, O. U., Chanton, P., Knobbe, LN (Mason Undergraduate Student), Zaugg, J., & Mortazavi, B. (2021). New insights into the influence of plant and microbial diversity on denitrification rates in a salt marsh. *Wetlands*, *41*. doi:doi.org/10.1007/s13157-021-01423-8
- Vogel, Margaret A. (Mason Doctoral Student), Mason, O. U., & Miller, T. E. (2021). Composition of seagrass phyllosphere microbial communities suggests rapid environmental regulation of community structure. *FEMS Microbiology Ecology*, *97*, fiab013. doi:doi.org/10.1093/femsec/fiab013
- Jurelevicius, D., Cotta, S. R., Montezzi, L. F., Dias, A. C. F., Mason, O. U., Picão, R. C., Jansson, J. K., & Seldin, L. (2020). Enrichment of potential pathogens in marine microbiomes with different degrees of anthropogenic activity. *Environmental Pollution*, *268*, 115757. doi:doi.org/10.1016/j.envpol.2020.115757
- Vogel, Margaret A. (Mason Doctoral Student), Mason, O. U., & Miller, T. E. (2020). Host and environmental determinants of microbial community structure in the marine phyllosphere. *PLoS ONE*, *15*, (7): e0235441. doi:doi.org/10.1371/journal.pone.0235441
- Ledford, T., Mortazavia, B., Tatariw, C., & Mason, O.U. (2020). Elevated nutrient inputs to marshes differentially impact carbon and nitrogen cycling in two Northern Gulf of Mexico saltmarsh plants. *Biogeochemistry*, *149*, 1-16. doi:doi.org/10.1007/s10533-020-00656-9
- Xiong, Y., Mason, O. U., Lowe, Ashlee (Mason Undergraduate Student), Zhang, Z., Zhou, C., Chen, G., Villalonga, M. J., & Tang, Y. (2020). Investigating promising substrates for promoting 1,4-dioxane biodegradation: effects of ethane and tetrahydrofuran on microbial consortia. *Biodegradation*, *31*, 171–182. doi:doi.org/10.1007/s10532-020-09901-2
- Smith, A., Kieft, B., Mueller, R., Fisk, M., Mason, O. U., Popa, R., & Colwell, F. (2019). Carbon fixation and energy metabolisms of a subseafloor olivine biofilm. *ISME J*, *13*, 1737–1749. doi:https://doi.org/10.1038/s41396-019-0385-0
- Gillies, LE (Mason Doctoral Student), Thrash, J., Rabalais, N., & Mason, O. U. (2019). Extent of the annual Gulf of Mexico hypoxic zone influences microbial community structure. *PLoS ONE*, *14*, e0209055. doi:55. https://doi.org/10.1371/journal.pone.0209055
- Xong, Y., Mason, O. U., Lowe, A (Mason Undergraduate Student), Zhou, C., Chen, G., & Youneng, T. (2019). Microbial community analysis provides insights into the effects of tetrahydrofuran on 1,4-dioxane biodegradation. *Applied and Environmental Microbiology*, *85*(11), e00244-19. doi:10.1128/AEM.00244-19
- Thrash, C., Baker, B., Seitz, K., Temperton, B., Campbell, LG (Mason Doctoral Student), Rabalais, N., Henrissat, B., & Mason, O. U. (2018). Metagenomic Assembly and Prokaryotic Metagenome-Assembled Genome Sequences from the Northern Gulf of Mexico "Dead Zone". *Microbiology Resource Announcements*, *7*, e01033-18. doi:10.1128/MRA.01033-18
- Canter, EJ (Mason Master's Student), Cuellar-Gempeler, C (Mason Postdoc), Pastore, A., Miller, T., & Mason, O. (2018). Predator identity more than predator richness structures aquatic microbial assemblages in *Sarracenia purpurea* leaves. *Ecology*, *99*, 652-660. doi:doi.org/10.1002/ecy.2128

- Thompson, L. R., & The Earth Microbiome Project Consortium. (2017). A communal catalogue reveals Earth's multiscale microbial diversity. *Nature*, *551*, 457-463. doi:10.1038/nature24621
- Handley, K., Piceno, Y., Hu, P., Tom, L., Mason, O. U., Andersen, G., Jansson, J., & Gilbert, J. (2017). Metabolic and spatio-taxonomic response of uncultivated seafloor bacteria following the Deepwater Horizon oil spill. *ISMEJ*, 1-15. doi:10.1038/ismej.2017.110
- Thrash, J. C., Seitz, K. W., Baker, B. J., Temperton, B., Gillies, L.E. (Mason Doctoral Student), Rabalais, N. N., Henriessat, B., & Mason, O. U. (2017). Metabolic roles of uncultivated bacterioplankton lineages in the northern Gulf of Mexico "Dead Zone". *mBio*, 1-. doi:10.1128/mBio.01017-17
- Mason, O. U., Canter, E.J. (Mason Master's student), Gillies, L.E. (Mason Doctoral Student), Paisie, T.K. (Mason Undergraduate Student), & Roberts, B. J. (2016). Mississippi River Plume Enriches Microbial Diversity in the Northern Gulf of Mexico. *Frontiers in Microbiology*, *7*, 1048. doi:10.3389/fmicb.2016.01048
- Smith, A. R., Fisk, M. R., Thurber, A. R., Flores, G. E., Mason, O. U., Popa, R., & Colwell, F. S. (2016). Deep Crustal Communities of the Juan de Fuca Ridge Are Governed by Mineralogy. *Geomicrobiology Journal, online*, 1521-0529. doi:10.1080/01490451.2016.1155001
- Stevens, E. W. N., Bailey, J. V., Flood, B. E., Jones, D. S., Gilhooly III, W. P., Joye, S. B., Teske, A., & Mason, O. U. (2015). Barite encrustation of benthic sulfur-oxidizing bacteria at a marine cold seep. *Geobiology*, *13*, 588-603. doi:10.1111/gbi.12154
- Gillies, L.E. (Mason Doctoral Student), Thrash, J. C., deRada, S., Rabalais, N. N., & Mason, O. U. (2015). Archaeal enrichment in the hypoxic zone in the northern Gulf of Mexico. *Environmental Microbiology*, *10*, 3847-56. doi:10.1111/1462-2920.12853
- Mason, O. U., Case, D. H., Naehr, T. H., Lee, R. W., Thomas, R. B., Bailey, J. V., & Orphan, V. J. (2015). Comparison of Archaeal and Bacterial Diversity in Methane Seep Carbonate Nodules and Host Sediments, Eel River Basin and Hydrate Ridge, USA. *Microbial Ecology*, *70*, 766-784. doi:10.1007/s00248-015-0615-6
- Rakowski, C.V. (Mason Master's Student), Magen, C., Bosman, S., Rogers, K. L., Gillies, L.E. (Mason Doctoral Student), Chanton, J. P., & Mason, O. U. (2015). Methane and microbial dynamics in the Gulf of Mexico water column. *Frontiers Marine Science*, *2*, 69. doi:10.3389/fmars.2015.00069
- Trexler, R., Solomon, C., Brislawn, C. J., Wright, J. R., Rosenberger, A., McClure, E. E., Grube, A. M., Peterson, M. P., Keddache, M., Mason, O. U., Hazen, T. C., Grant, C. J., & Lamendella, R. (2014). Assessing impacts of unconventional natural gas extraction on microbial communities in headwater stream ecosystems in Northwestern Pennsylvania. *Frontiers in Microbiology*, *5*, 522. doi:10.3389/fmicb.2014.00522
- Paisie, T.K. (Mason Undergraduate Student), Miller, T. E., & Mason, O. U. (2014). Effects of a Ciliate Protozoa Predator on Microbial Communities in Pitcher Plant (*Sarracenia purpurea*) Leaves. *PLOS ONE*, *9*, e113384. doi:10.1371/journal.pone.0113384
- Mason, O. U., Scott, N. M., Gonzalez, A., Robbins-Pianka, A., Bælum, J., Kimbrel, J., Bouskill, N. J., Prestat, E., Borglin, S., Joyner, D. C., Fortney, J. L., Jurelevicius, D., Stringfellow, W. T., Alvarez-Cohen, L., Hazen, T. C., Knight, R., Gilbert, J. A., & Jansson, J. K. (2014). Metagenomics reveals sediment microbial community response to Deepwater Horizon oil spill. *ISME J*, *8*, 1464-1475. doi:10.1038/ismej.2013.2

- Nicora, C. D., Anderson, B. J., Callister, S. J., Norbeck, A. D., Purvine, S. O., Jansson, J. K., Mason, O. U., David, M. M., Jurelevicius, D., Smith, R. D., & Lipton, M. S. (2013). Amino acid treatment enhances protein recovery from sediment and soils for metaproteomic studies. *Proteomics*, *13*, 2776-85. doi:10.1002/pmic.201300003
- Dubinsky, E. A., Conrad, M. E., Chakraborty, R., Bill, M., Borglin, S. E., Hollibaugh, J. T., Mason, O. U., Piceno, Y. M., Reid, F. C., Stringfellow, W. T., Tom, L. M., Hazen, T. C., & Andersen, G. L. (2013). Succession of Hydrocarbon-Degrading Bacteria in the Aftermath of the Deepwater Horizon Oil Spill in the Gulf of Mexico. *Environmental Science & Technology*, *47*, 10860-10867. doi:10.1021/es401676y
- Baelum, J., Borglin, S., Chakraborty, R., Fortney, J. L., Lamendella, R., Mason, O. U., Auer, M., Zemla, M., Bill, M., Conrad, M. E., Malfatti, S. A., Tringe, S. G., Holman, Hoi-Ying, Hazen, T. C., & Jansson, J. K. (2012). Deep-sea bacteria enriched by oil and dispersant from the Deepwater Horizon spill. *Environmental Microbiology*, *14*(9, SI), 2405-2416. doi:10.1111/j.1462-2920.2012.02780.x
- Mason, O. U., Hazen, T. C., Borglin, S., Chain, P. S. G., Dubinsky, E. A., Fortney, J. L., Han, J., Holman, Hoi-Ying N., Hultman, J., Lamendella, R., Mackelprang, R., Malfatti, S., Tom, L. M., Tringe, S. G., Woyke, T., Zhou, J., Rubin, E. M., & Jansson, J. K. (2012). Metagenome, metatranscriptome and single-cell sequencing reveal microbial response to Deepwater Horizon oil spill. *ISME J*, *6*(9), 1715-1727. doi:10.1038/ismej.2012.59
- Lu, Z., Deng, Y., Van Nostrand, J. D., He, Z., Voordeckers, J., Zhou, A., Lee, Yong-Jin, Mason, O. U., Dubinsky, E. A., Chavarria, K. L., Tom, L. M., Fortney, J. L., Lamendella, R., Jansson, J. K., D'haeseleer, P., Hazen, T. C., & Zhou, J. (2012). Microbial gene functions enriched in the Deepwater Horizon deep-sea oil plume. *ISME J*, *6*(2), 451-460. doi:10.1038/ismej.2011.91
- Blackman, D. K., & IODP Expeditions 304/305 Science Team, including Mason, O. U. (2011). Drilling constraints on lithospheric accretion and evolution at Atlantis Massif, Mid-Atlantic Ridge 30°N. *Journal of Geophysical Research*, *116*(B7), 1-x. doi:10.1029/2010JB007931
- Bertagnolli, A. D., Treusch, A. H., Mason, O. U., Stingl, U., Vergin, K. L., Chan, F., Beszteri, B., & Giovannoni, S. J. (2011). Bacterial diversity in the bottom boundary layer of the inner continental shelf of Oregon, USA. *Aquatic Microbial Ecology*, *64*(1), 15-25. doi:10.3354/ame01504
- Mason, O. U., Nakagawa, T., Rosner, M., Van Nostrand, J. D., Zhou, J., Maruyama, A., Fisk, M. R., & Giovannoni, S. J. (2010). First Investigation of the Microbiology of the Deepest Layer of Ocean Crust. *PLOS ONE*, *5*(11), 1-x. doi:10.1371/journal.pone.0015399
- Hazen, T., Dubinsky, E., DeSantis, T., Andersen, G., Piceno, Y., Singh, N., Jansson, J., Probst, A., Borglin, S., Fortney, J., Stringfellow, W., Bill, M., Conrad, M., Tom, L., Chavarria, K., Alusi, T., Lamendella, R., Joyner, D., Spier, C., Baelum, J., Auer, M., Zemla, M., Chakraborty, R., Sonnenthal, E., D'Haeseleer, P., Holman, H., Osman, S., Lu, Z., Van Nostrand, J., Deng, Y., Zhou, J., & Mason, O. U. (2010). Deep-Sea Oil Plume Enriches Indigenous Oil-Degrading Bacteria. *Science*, *330*(6001), 204-208. doi:10.1126/science.1195979
- Mason, O. U., Di Meo-Savoie, C. A., Van Nostrand, J. D., Zhou, J., Fisk, M. R., & Giovannoni, S. J. (2009). Prokaryotic diversity, distribution, and insights into their role

in biogeochemical cycling in marine basalts. *ISME J*, 3(2), 231-242.
doi:10.1038/ismej.2008.92

Mason, O. U., Stingl, U., Wilhelm, L. J., Moeseneder, M. M., Di Meo-Savoie, C. A., Fisk, M. R., & Giovannoni, S. J. (2007). The phylogeny of endolithic microbes associated with marine basalts. *Environmental Microbiology*, 9(10), 2539-2550. doi:10.1111/j.1462-2920.2007.01372.x

Ildefonse, B., & IODP Expeditions 304/305 Science Team, including Mason, O. U. (2007). Oceanic core complexes and crustal accretion at slow-spreading ridges. *Geology*, 35(7), 623-626. doi:10.1130/G23531A.1

Fisk, M. R., Popa, R., Mason, O. U., Storrer-Lombardi, M. C., & Vicenzi, E. P. (2006). Iron-magnesium silicate bioweathering on Earth (and Mars?). *Astrobiology*, 6(1), 48-68. doi:10.1089/ast.2006.6.48

Amaral Zettler, L. A., Laatsch, A. D., Zettler, E., Nerad, T. A., Cole, J., Diaz, F. C., Diaz, J., Janzen, D. H., Sittenfeld, A. N. A., Mason, O. U., & Reysenbach, Anna-Louise. (2005). A Microbial Observatory of Caterpillars: Isolation and Molecular Characterization of Protists Associated with the Saturniid Moth Caterpillar *Rothschildia lebeau*. *Journal of Eukaryotic Microbiology*, 52(2), 107-115. doi:10.1111/j.1550-7408.2005.05202008.x

Nonrefereed Journal Articles

Mackelprang, R., & Mason, O. U. (2016). News and Views. Marine microbiology: Community clean up. *Nature Microbiology*, 1, 16102. doi:10.1038/nmicrobiol.2016.102

Mason, O. U. (2014). Indigestion. *Natural History*, 10/14, 10-11.

Mason, O. U., & Hazen, T. C. (2011). New insights into microbial responses to oil spills from the Deepwater Horizon incident. *SIM News (Feature Article)*, 61(3), 0. doi:na

Presentations

Invited Presentations at Conferences

Mason, O. U. (presented 2022, March). *How environmental variability and changes are regulating microbial diversity in the nBUS*. Presentation at SCOR-RGNO seminar, Scientific Committee on Oceanic Research (SCOR) and Regional Research Graduate Network in Oceanography (RGNO), Online. (International)

Campbell, L., & Mason, O. U. (presented 2021, May). *Oxygen as a driver of microbial community structure and diversity in the northern Benguela Upwelling System (nBUS) Part I*. Presentation at RGNO Discovery Seminar, Regional Research Graduate Network in Oceanography, Online. (International)

Mason, O. U. (presented 2021, May). *Oxygen as a driver of microbial community structure and diversity in the northern Benguela Upwelling System (nBUS) Part II*. Presentation at RGNO Discovery Seminar, Regional Research Graduate Network in Oceanography, Online. (International)

Mason, O. U. (presented 2019, April). *Advances in Microbial Ecology Since 2010 Used to Resolve the Microbial Response to the DWH Oil Spill*. Presentation at GoMRI Core Area 6 synthesis workshop, GoMRI. (International)

Oral presentation along with serving as a moderator for breakout groups.

- Mason, O. U. (presented 2016, September). *Single cell genomics links function and phylogeny of uncultured microbes that responded to the DWH oil spill*. Presentation at Single-cell Sequencing Expert Panel, Illumina, Boston, MA. (International)
- Mason, O. U. (presented 2016, August). *'Omics' analyses reveal microbial community function in the Deepwater Horizon oil spill deep-sea plume and in surface sediments*. Presentation at ISME, International Society for Microbial Ecology, Montreal, Canada. (International)
- Mason, O. U. (presented 2014, February). *Response of sediment microbial community to Deepwater Horizon oil spill*. Presentation at Ocean Sciences Meeting, ASLO, TOS, and AGU, Honolulu, Hawaii. (International)
- Mason, O. U. (presented 2013, July). *Deep Sea Oil Spills*. Presentation at Gordon Research Conference, Applied and Environmental Microbiology, Gordon Research Conferences, Mt. Holyoke, MA. (International)
- Mason, O. U. (presented 2013, January). *'Omics' Analyses of the Deep-Sea Microbial Community Response to the Deepwater Horizon oil spill*. Presentation at Gulf of Mexico Oil Spill & Ecosystem Science Conference, GoMRI, New Orleans, LA. (International)
- Conrad, M. E., Bill, M., Stringfellow, W. T., Borglin, S. E., Mason, O. U., Dubinsky, E. A., Piceno, Y. M., Fortney, J. L., Tom, L. M., Chavarria, K. L., Lamendella, R., Joyner, D. C., Wetmore, K., Kuehl, J., Mackelprang, R., Wu, C., Lim, J., Reid, F., & Hazen, T. C. (presented 2011, August). *Isotopic Evidence for Microbial Oxidation of Dissolved Methane in the Gulf of Mexico Oil Spill Deep Plume*. Poster presentation at Goldschmidt Conference, Geochemical Society and the European Association of Geochemistry, Prague, Czech Republic. (International)
- Mason, O. U. (presented 2011, July). *'Omics' Analyses of the Deep-Sea Microbial Community Response to the Deepwater Horizon Oil Spill*. Presentation at Society for Industrial Microbiology Annual Meeting (SIMB), Society for Industrial Microbiology, New Orleans, LA. (International)
- Mason, O. U. (presented 2011, May). *Metagenomic analysis of the deep-sea microbial community response to the Deepwater Horizon oil spill*. Presentation at General Meeting American Society for Microbiology, American Society for Microbiology, New Orleans, LA. (International)
- Selected for a Young investigator oral presentation.
- Mason, O. U. (presented 2010, August). *"Omics" analyses of resident microbes in extreme environments such as petroleum reservoirs and deep sea oil plumes*. Presentation at SIMB Annual Meeting, Society for Industrial Microbiology, San Francisco, CA. (International)

Refereed Presentations at Conferences

- Peredo, E., Pérez Castro, S., Mason, O.U., Vineis, J., Bowen, J., Mortazavi, B., Ruff, S. E., Paul, B., Anakha, G., Giblin, A. E., & Cardon, Z. G. (presented 2021, August). *Salt marsh rhizosphere sediments host previously uncultured sulfur cycling bacterial communities in Massachusetts and Alabama*. Presentation at 2021 ESA Annual Meeting, ESA, ESA virtual meeting. (International) Retrieved from <https://cdmcd.co/83bGgL>

- Peredo, E., Pérez Castro, S., Mason, O.U., Vineis, J., Bowen, J., Mortazavi, B., Ruff, S. E., Paul, B., Anakha, G., Giblin, A. E., & Cardon, Z. G. (presented 2021, July). *Genomic diversity of uncultured sulfur cycling bacterial communities isolated from rhizosphere sediments in Massachusetts and Alabama salt marshes*. Presentation at Botany 2021, Botany, <https://botany2021.pathable.co/>. (International)
- Peredo, E., Pérez Castro, S., Mason, O.U., Vineis, J., Bowen, J., Mortazavi, B., Ruff, S. E., Paul, B., Anakha, G., Giblin, A. E., & Cardon, Z. G. (presented 2021, June). *Genomic diversity of uncultured sulfur cycling bacterial communities isolated from rhizosphere sediments in Massachusetts and Alabama salt marshes*. Presentation at ASLO 2021, ASLO, <https://www.aslo.org/2021-virtual-meeting/>. (International)
- Tatariw, C., Mason, O. U., & Mortazavi, B. (presented 2020, December). *Ditching nutrients: Roadside drainage networks are hotspots for coastal nitrogen removal*. Poster presentation at Fall Meeting 2020, American Geophysical Union, Online. (International)
- Steven L Morey, Eric Chassignet, Dmitry S Dukhovskoy, Courtney Kay Harris, Victoria Coles, Michael R Stukel, Robert D Hetland, Kristen M Thyng, Tian-Jian Hsu, Andrew James Manning, Olivia U Mason, Veronica Ruiz Xomchuk, Daijiro Kobashi, Lixin Qu, Leiping Ye, Linlin Cui, Xu Chen, & Jiaze Wang. (presented 2020, February). *A Coupled Modeling System for Simulating Oil-Biological-Sediment Interactions in the Ocean*. Presentation at OSM, AGU. (International)
- Howe, K., Seitz, K., Gillies, L., Baker, B. J., Thrash, J. C., Rabalais, N. N., Rogener, M. K., Joye, S. B., & Mason, O. U. (presented 2020, February). *Active, novel and unexpected methanotrophs play a key role in methane oxidation in the Gulf of Mexico hypoxic zone*. Presentation at OSM, AGU, San Diego. (International)
- Wang, J., Coles, V., Stukel, M. R., & Mason, O. U. (presented 2020, February). *Rapid Adaption of the Microbial Community to Abrupt Environmental Change in the Gulf of Mexico Modeled with the Genome-based EmergeNt Ocean Microbial Ecosystem Model*. Presentation at OSM, AGU, San Diego. (International)
- Coles, V., Wang, J., Mason, O. U., & Stukel, M. R. (presented 2020, February). *Understanding How Emergent Community Trait-based Modeling (Genome-based EmergeNt Ocean Microbial Ecosystem Model) Influences Biogeochemical, Ecological, and Microbial System Responses*. Presentation at OSM, AGU, San Diego. (International)
- Ledford, T., Tatariw, C., Cherry, J., Mason, O.U., & Mortazavi, B. (presented 2019, November). *Nutrient loading impacts nitrogen removal and carbon dynamics in a Juncus and Spartina dominated saltmarsh*. Poster presentation at 2019 CERF Biennial Conference, CERF, Mobile, Alabama. (National)
- Petet, R., Knobbe, L., Mason, O.U., Chanton, P., & Mortazavi, B. (presented 2019, April). *Impacts of microbial community structure on denitrification rates in the rhizosphere of J. roemerianus and S. alterniflora collocated in a Gulf of Mexico saltwater marsh*. Poster presentation at 14th Annual Genomics of Energy & Environment Meeting, DOE Joint Genome Institute, San Francisco, CA. (International)
- Vogel, M., Mason, O.U., & Miller, T. (presented 2018, August). *Abiotic conditions and seagrass host characteristics determine the structure of the microbial communities found on Thalassia testudinum blades*. Presentation at Annual Meeting, Ecological Society of America, New Orleans, LA. (National)

- Campbell, L., Thrash, J., Seitz, K., Baker, B., Rabalais, N., & Mason, O. (presented 2018, August). *Dynamics of Thaumarchaeota abundance and activity in the Gulf of Mexico hypoxic zone*. Poster presentation at International Symposium on Microbial Ecology, International Society for Microbial Ecology, Leipzig, Germany. (International)
- Petet, R., Knobbe, L., Mason, O.U., Chanton, P., & Mortazavi, B. (presented 2018, August). *Microbial community structure and denitrification rates in the rhizosphere of J. roemerianus and S. alterniflora in a Gulf of Mexico mixed marsh*. Poster presentation at International Symposium on Microbial Ecology, International Society for Microbial Ecology, Leipzig, Germany. (International)
- Smith, A., Mueller, R., Fisk, M., Mason, O.U., Popa, R., Kieft, B., & Colwell, F. (presented 2018, August). *Prevalence of the Ancient Wood-Ljungdahl Pathway in a Subseafloor Olivine Community*. Poster presentation at Ocean Worlds, Lunar and Planetary Institute, Houston, TX. (International)
- Howe, K., Seitz, K., Baker, B., Thrash, J., Campbell, L., Rogener, M., Joye, S., & Mason, O. (presented 2018, August). *Revealing previously unrecognized microbes involved in methane oxidation along an oxygen gradient in the northern Gulf of Mexico*. Poster presentation at International Symposium on Microbial Ecology, International Society for Microbial Ecology, Leipzig, Germany. (International)
- Vogel, M., Miller, T., & Mason, O. (presented 2018, August). *Thalassia testudinum blades host unique microbial communities that are shaped by environmental conditions and host characteristics*. Poster presentation at International Symposium on Microbial Ecology, International Society for Microbial Ecology, Leipzig, Germany. (International)
- Campbell, L., Thrash, J., Seitz, K., Baker, B., Rabalais, N., & Mason, O. (presented 2018, April). *Characterizing the overall microbial community structure including two novel Thaumarchaeota in the annual northern Gulf of Mexico hypoxic zone*. Poster presentation at 2018 Southeastern Biogeochemistry Symposium, Southeastern Biogeochemistry Symposium, Tallahassee, FL. (Regional)
- Petet, R., Knobbe, L., Mason, O.U., Chanton, P., & Mortazavi, B. (presented 2018, April). *Impacts of microbial community structure on rates of denitrification in rhizosphere of Juncus roemerianus and Spartina alterniflora in a mixed marsh in the Gulf of Mexico*. Poster presentation at 2018 Southeastern Biogeochemistry Symposium, Southeastern Biogeochemistry Symposium, Tallahassee, FL. (Regional)
- Vogel, M., Mason, O.U., & Miller, T. (presented 2017, September). *Influence of freshwater input on the composition and diversity of microbial communities associated with Thalassia testudinum (turtle grass) blades*. Poster presentation at Florida Sea Grant Coastal Science Symposium, Florida Sea Grant, Gainesville, FL. (State)
- Vogel, M., Mason, O.U., & Miller, T. (presented 2017, August). *Changes in the composition and diversity of seagrass blade associated microbial communities correlates with environmental and host condition*. Presentation at Annual Meeting, Ecological Society of America, Portland, OR. (International)
- Mortazavi, B., Chanton, P., Mason, O.U., & Knobbe, L. (presented 2017, August). *Impact of Juncus roemerianus and Spartina alterniflora on the belowground microbial community structure and rates of denitrification in a mixed marsh in the Northern Gulf of Mexico*. Presentation at Annual Meeting, Ecological Society of America, Portland, OR. (International)

- Miller, T., Pastore, A., Mason, O.U., Canter, E., & Cuellar-Gempeler, C. (presented 2017, August). *Understanding the evolution of competitors in a community context*. Presentation at Annual Meeting, Ecological Society of America, Portland, OR. (International)
- Gillies, L. E., Thrash, J. C., Rabalais, N. N., & Mason, O. U. (presented 2016, August). *Location and continuity of the annual northern Gulf of Mexico hypoxic zone influences microbial diversity*. Poster presentation at ISME, International Society for Microbial Ecology, Montreal, Canada. (International)
- Canter, E. J., Miller, T. E., & Mason, O. U. (presented 2016, August). *Niche theory in microbial ecology: the effects of protozoan predators on microbial communities in purple pitcher plant (*sarracenia purpurea*) leaves*. Poster presentation at ISME, International Society for Microbial Ecology, Montreal, Canada. (International)
- Thrash, J., Baker, B., Seitz, K., Gillies, L., Temperton, B., Rabalais, N. N., & Mason, O. U. (presented 2016, February). *A Metagenomic Assembly-Based Approach to Decoding Taxa in the Dead Zone*. Poster presentation at Ocean Sciences Meeting, AGU, TOS, ASLO, New Orleans, LA. (International)
- Smith, A., Fisk, M., Mueller, R., Colwell, F., Mason, O.U., & Popa, R. (presented 2016, February). *Genomic evidence for the Wood-Ljungdahl pathway for carbon fixation in warm basaltic ocean crust*. Poster presentation at Ocean Sciences Meeting, AGU, TOS, ASLO, New Orleans, LA. (International)
- Gillies, L. E., Thrash, J. C., Rabalais, N. N., & Mason, O. U. (presented 2016, February). *Location and continuity of the annual northern Gulf of Mexico hypoxic zone influences microbial diversity*. Poster presentation at Ocean Sciences Meeting, AGU, TOS, ASLO, New Orleans, LA. (International)
- Thrash, J., Baker, B., Seitz, K., Gillies, L., Temperton, B., Rabalais, N. N., & Mason, O. U. (presented 2015, December). *Metagenomic insights into important microbes from the Dead Zone*. Poster presentation at Fall Meeting, AGU, San Francisco, CA. (International)
- Gillies, L. E., Thrash, J. C., deRada, S., Rabalais, N. N., & Mason, O. U. (presented 2015, May). *Archaeal enrichment in the hypoxic zone in the northern Gulf of Mexico*. Poster presentation at 115th General Meeting of the American Society for Microbiology, American Society for Microbiology, New Orleans, LA. (International)
- Mason, O. U. (presented 2015, February). *Single-cell genomics reveals features of uncultured, indigenous deep-sea Bacteria that dominated the DWH plume and contaminated surface sediments*. Poster presentation at 2015 Oil Spill and Ecosystem Science Conference, GoMRI, Houston, TX. (International)
- Gillies, L. E., Thrash, J. C., Rabalais, N. N., & Mason, O. U. (presented 2014, February). *Microbial community structure in the July 2013 Gulf of Mexico dead zone*. Poster presentation at Ocean Sciences Meeting, ASLO, TOS, and AGU, Honolulu, HI. (International)
- Mason, O. U. (presented 2011, August). *The microbial community of a dispersed, deep-sea oil plume*. Poster presentation at ISME13, International Symposium on Microbial Ecology, Seattle, WA. (International)
- Mason, O. U., Hazen, T. C., Woyke, T., & Jansson, J. K. (presented 2011, July). *'Omics' Analyses of the Deep-Sea Microbial Community Response to the Deepwater Horizon*

- Oil Spill*. Presentation at 2011 SIM (Society for Industrial Microbiology) Annual Meeting, SIM, New Orleans, LA. (International)
- Mason, O. U. (presented 2010, August). *"Omics" analyses of resident microbes in extreme environments such as petroleum reservoirs and deep sea oil plumes*. Presentation at 2010 SIM (Society for Industrial Microbiology) Annual Meeting, Society for Industrial Microbiology. (International)
- Dubinsky, E. A., DeSantis, T. Z., Piceno, Y. M., Mason, O. U., Singh, N. N. S., Probst, A., Joyner, D. C., Chakraborty, R., Hazen, T. C., & Andersen, G. L. (presented 2010, August). *Phylochip assay finds deepwater oil plume enrichment of psychrophilic oil-degrading bacteria*. Poster presentation at ISME13, ISME13 (International Symposium on Microbial Ecology), Seattle, WA. (International)
- Mason, O. U., Probst, A., Dubinsky, E. A., Piceno, Y. M., Tom, L. M., Fortney, J., Lamendella, R., Hazen, T. C., & Jansson, J. K. (presented 2010, August). *The microbial community of a dispersed, deep-sea oil plume*. Poster presentation at the meeting of ISME13 (International Symposium on Microbial Ecology), Seattle, WA. (International)
- Mason, O. U., Di Meo-Savoie, C. A., Nakagawa, T., Van Nostrand, J. D., Rosner, M., Maruyama, A., Zhou, J., Fisk, M. R., & Giovannoni, S. J. (presented 2008, December). *Prokaryotic diversity, distribution, and insights into their role in biogeochemical cycling in marine basalts and gabbros*. Poster presentation at Fall Meeting, American Geophysical Union, San Francisco, CA. (National)
- Mason, O. U., Nakagawa, T., Rosner, M., Van Nostrand, J. D., Zhou, J., Maruyama, A., Fisk, M. R., & Giovannoni, S. J. (presented 2008). *Hydrocarbon-utilizing prokaryotes in a novel deep subsurface ocean crust environment*. Poster presentation at ISSM, ISSM, Shizuoka, Japan. (International)

Nonrefereed Presentations at Conferences

- Mason, O. U. (presented 2011, March). *'Omics' Analyses of the Deep-Sea Microbial Community Response to the Deepwater Horizon Oil Spill*. Poster presentation at User's Meeting, DOE JGI, Walnut Creek, CA. (International)
- Mason, O. U., Hazen, T. C., Borglin, S., Chain, P. S. G., Dubinsky, E. A., Fortney, J. L., Han, J., Holman, H.-Y. N., Hultman, J., Lamendella, R., Mackelprang, R., Malfatti, S., Tom, L. M., Tringe, S. G., Woyke, T., Zhou, J., Rubin, E. M., & Jansson, J. K. (presented 2011). *'Omics' Analyses of the Deep-Sea Microbial Community Response to the Deepwater Horizon Oil Spill*. Poster presentation at User's Meeting, DOE JGI. (International)
- Mason, O. U., Lamendella, R., Dubinsky, E. A., Probst, A., Piceno, Y. M., Tom, L. M., Fortney, J., Hazen, T. C., & Jansson, J. K. (presented 2010). *Microbes make a meal out of oil*. Poster presentation at Open House, Lawrence Berkeley National Lab. (Regional)

Invited Lectures and Readings of Original Work

- Mason, O. U. (2019, June). *2010 Deepwater Horizon oil spill: What we learned about the role of uncultured microbes in oil disposition using multi-'omic' analyses and what comes next*. Delivered at Brisbane Joint Academic Microbiology Seminars, Brisbane, Australia. (Regional)
- Mason, O. U. (2019, June). *2010 Deepwater Horizon oil spill: What we learned about the role of uncultured microbes in oil disposition using multi-'omic' analyses and what comes*

next. Delivered at University of Queensland, Molecular Biosciences Special Seminar. (International)

- Mason, O. U. (2017, April). *Deepwater Horizon oil spill: a microbial perspective*. Delivered at Swarthmore College, Video lecture at Swarthmore, PA. (National)
- Mason, O. U. (2016, November). *Deepwater Horizon oil spill: a microbial perspective*. Delivered at The Ohio State, Video lecture at Columbus, OH. (National)
- Mason, O. U. (2015, November). *Microbial communities in the Gulf of Mexico- from the Mississippi River to the open ocean*. Delivered at University of Georgia, Athens, GA. (National)
- Mason, O. U. (2014, May). *Microbial Response to the Deepwater Horizon Oil Spill*. Delivered at University of Helsinki, Helsinki, Finland. (International)

Mason Lab Cruise Participation

- Mason Lab. (2024). *R/V Roger Revelle, Chief Scientist, for NSF grant: Collaborative Research: Quantifying nitrous oxide sources across an oxygen gradient in the northern Benguela upwelling system*. UNOLS.
Scheduled for early 2023.
- Mason Lab. (2022). *R/V Mirabilis, Walvis Bay, Namibia Benguela Upwelling Oceanographic Monitoring and RGNO Research and Training Cruise*. National Marine Information and Research Centre.
- Mason Lab. (2017). *R/V Mirabilis, Walvis Bay, Namibia Benguela Upwelling Oceanographic Monitoring and RGNO Research and Training Cruise*. National Marine Information and Research Centre.
- Mason Lab. (2015). *R/V Pelican, Cocodrie, LA. Annual Gulf of Mexico Shelfwide Cruise*. Chief Scientists: Nancy N. Rabalais (LUMCON) and Gene Turner (LSU).
- Mason Lab. (2015). *R/V Pelican, Cocodrie, LA. Northern Gulf of Mexico Time-Series Cruise*. Chief Scientist: Nancy N. Rabalais (LUMCON).
- Mason Lab. (2014). *R/V Pelican, Cocodrie, LA. Annual Gulf of Mexico Shelfwide Cruise*. Chief Scientists: Nancy N. Rabalais (LUMCON) and Gene Turner (LSU).
- Mason Lab. (2014). *R/V Pelican, Cocodrie, LA. CARTHE Pelagic Sampling Cruise*. Chief Scientists: Brad E. Rosenheim (USF) and Joanna Kolasinski (USF).
- Mason Lab. (2013). *R/V Pelican, Cocodrie, LA. Annual Gulf of Mexico Shelfwide Cruise*. Chief Scientists: Nancy N. Rabalais (LUMCON) and Gene Turner (LSU).
- Mason Lab. (2013). *R/V Pelican, Cocodrie, LA. ECOGIG GoMRI Consortium*. Chief Scientist: Samantha Joye (UGA).
- Mason Lab. (2013). *R/V Pelican, Cocodrie, LA. Gulf Research Initiative Mooring Recovery Cruise*. Chief Scientists: Jim Singer (SAIC) and Catherine Hancock (FSU).
- Mason Lab. (2012). *R/V Weatherbird II St. Petersburg, FL. Deep-C GoMRI Consortium*. Chief Scientist: Ian MacDonald (FSU).
- Mason Lab. (2012). *R/V Weatherbird II St. Petersburg, FL. Deep-C GoMRI Consortium*. Chief Scientist: Joel Kostka (Georgia Tech).
- Mason. (2010). *R/V Ocean Veritas, Morgan City, LA. BP oil spill sampling*. Chief Scientist: BP representative. 2010.
- Mason. (2005). *R/V Joides Resolution, Ponta Delgado, Azores Islands (Portugal). Expedition 305*. Chief Scientists: Donna Blackman (Scripps) and Benoit Ildefonse (Université Montpellier).

Service

Florida State University

FSU University Service

Committee Member, iChange Committee (2019–present).

University iChange committee working on diversity issues at FSU.

Founding Committee Member, FSU Women in STEM Network (2018–present).

Member, Association of Public and Land-Grant Universities (APLU) STEM Diversity (2018–present).

FSU Department Service

Co-Chair, Co-Chair of the EOAS Aquatic Environmental Science Program (2021–present).

Committee Member, Committee Member, Earth-Life Interactions Search (2021–present).

Committee Member, EOAS High Performance Computing (2012–present).

Committee Member, Winchester Fund (2012–present).

Chair, Phytoplankton Ecologist Position, EOAS (2013–2014).

Committee Member, Chemical Oceanographer Position, EOAS (2012–2013).

The Profession

Editor for Refereed Journals

Editor, *ISMEJ* (2018–present).

Editor, *mSystems* (2015–2020).

Review Editor, *Frontiers in Aquatic Microbiology* (2015–2017).

Guest Reviewer for Refereed Journals

Nature Microbiology (Dec 2017–present).

Marine Genomics (May 2017–present).

mSystems (Dec 2015–present).

Environmental Science and Technology (Jul 2015–present).

Frontiers Marine Science (Jun 2015–present).

Environmental Science and Pollution (Feb 2015–present).

Annual Review of Marine Science (Sep 2012–present).

Applied and Environmental Microbiology (Sep 2012–present).

Environmental Microbiology (Sep 2012–present).

Extremophiles (Sep 2012–present).

ISME Journal (Sep 2012–present).

PLOS ONE (Sep 2012–present).

Reviewer for Textbooks

Man and the Environment (2013).

Judge for an Exhibition

Solar Race Cars. Leon High School, Tallahassee, FL: Energy Whiz (2017).

Reviewer or Panelist for Grant Applications

National Science Foundation (2022).
NSF Ocean Science panel.
National Science Foundation (2020).
National Science Foundation - Panelist (2018).
Genome Canada - Panelist (2016).
Genome Canada (2015).
National Science Foundation (2015).
MA Sea Grant (2015).
National Science Foundation - Panelist (2014).
HHMI funded GCAT-SEEK (2013).
GCAT-SEEK grants.
National Science Foundation (2012).
National Environment Research Council (2011).

Service to Professional Associations

Session Chair, Resolving OMZ processes: single-cells to ecosystems, coasts to open ocean, ASLO, TOS, AGU Ocean Sciences Meeting 2016 (2016).
Organizer, Early Career Workshop, Navigating the first few years from accepting a position to your first pre-tenure merit evaluations, ASLO, TOS, AGU Ocean Sciences Meeting 2016 (2015–2016).
Scientific Program Committee Member, Scientific Program Committee Member for the Microbiology and Molecular Ecology Session, ASLO, TOS, AGU Ocean Sciences Meeting 2016 (2015–2016).
Session Chair, Making a Living on Hydrocarbons: Diversity, Metabolic Potential, and Regulation of Microbial Hydrocarbon Oxidation, Gulf of Mexico Research Initiative (2015).

Service to Other Universities

Ph.D. Thesis Reviewer, *University of Helsinki* (2013).

Consultation

Waste Management Inc. Consultation services (2013).

Broader Impacts

Mason, O. U. (2022). *Named a 2022 Regional Research Graduate Network in Oceanography (RGNO) Instructor. This RGNO is a Special Committee on Oceanic Research (SCOR) capacity and collaboration building project in Southern Africa with University of Namibia's Sam Nujoma Marine Research Center in Henties Bay and Namibia's National Marine Information and Research Center in Swakopmund.*

Mason, O. U., & Miller, T. E. (2021). *Experimental experience in the field and lesson creation for twelve middle and high school science teachers to explore the impact of increasing resources in an ecosystem on the microbial community. Pitcher plants were used as the model system and increasing resources were added to pitchers in the field. Teachers cultured microbes, counted protozoa and monitored oxygen concentrations in the field and implemented the lesson we designed in the classroom.* Florida State University.

- Mason, O. U., & Miller, T. E. (2018). *Elementary to middle school age children from Cornerstone Learning Community were given a guided tour of a pine forest and provided equipment and instruction on viewing the phytotelmic community using microscopes by the PIs and graduate students*. Florida State University.
- Mason, O. U. (2015). *Guest Scientist, FSUS Kindergarten – in classroom talk and hands on oceanography experiment*. Florida State University School.
- Mason, O. U. (2013). *Project GOO*. Deep-C Consortium.
- Mason, O. U. (2013). *Project Scientist "Superstar" participant*. Project Scientist.
- Mason, O. U. (2012–2013). *Advanced Math/Science Research Phage Hunters program*. Berkshire School.