

MELISA A. DIAZ

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EDUCATION

The Ohio State University, Columbus, OH Ph.D. in Earth Sciences <i>Geochemistry of the Shackleton Glacier region, Antarctica and implications for glacial history, salt dynamics, and biogeography</i>	2017 – 2020
The Ohio State University, Columbus, OH M.Sc. in Earth Sciences <i>Spatial and temporal geochemical characterization of aeolian material from the McMurdo Dry Valleys, Antarctica</i>	2016 – 2017
The University of Rochester, Rochester, NY B.S. in Earth and Environmental Sciences Minors: Chemistry and Japanese	2010 – 2014

CURRENT APPOINTMENT

Assistant Professor, University of Colorado Boulder Department of Geography; Institute of Arctic and Alpine Research (INSTAAR) Affiliate faculty for Environmental Engineering	Aug. 2022
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PRIOR APPOINTMENTS

Postdoctoral Scholar, Woods Hole Oceanographic Institution Geology and Geophysics; Applied Ocean Physics & Engineering Advisors: Sarah Das, Catherine Walker, Chris German Research topics: Salt and nutrient cycling in Arctic; Habitat suitability in cryosphere	Sep. 2020 – Aug. 2022
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RESEARCH FUNDING (BOLD DENOTES AMOUNT TO CU)

Active Grants

NSF OPP #2148067 (Total: \$708,248 (\$240,969)) <i>Collaborative Research: Straight to the source- Mineral weathering processes in supraglacial ice and snowbanks, McMurdo Dry Valleys, Antarctica</i> <i>Lead PI: Bergstrom, Co-PIs: Diaz, Heindel, Welch</i>	Aug. 2022
NSF OPP #2224824 (Total: \$92,800 (\$64,699)) <i>Collaborative Research: RAPID: Biogeochemistry of water and sediments from a recently drained Greenland ice-marginal lake</i> <i>Lead PI: Diaz, Co-PIs: Gardner, Das</i>	Jun. 2022
NSF OPP – recommended for full funding (\$7,650,00 total (\$2,045,334)) <i>LTER: MCM6 - The roles of legacy and ecological connectivity in a polar desert ecosystem. Lead PI: Gooseff, Co-PIs: Diaz, Morgan-Kiss, Takacs-Vesbach, Adams, Barrett, Doran, Dugan, Mackey, Salvatore, Zeglin</i>	Jun. 2023

Pending Grants

NASA IDS (\$898,104 (**\$499,282**)) Nov. 2022

Coupling ICESat-2 observations, field data and laboratory analyses to investigate physical and biogeochemical processes at ice-ocean interfaces

Lead PI: Diaz, Co-Is: Walker, Hand, German

NASA PSIE (\$2,040,000 (**\$75,000**))

Consortium for Understanding Brine Evolution of Europa from subsurface studies (CUBEEs) Dec. 2022

Lead PI: Walker, Co-Is: Diaz, Johnson, Urban, Hawkinsx, Zhang, Hammonds, Elachi

Declined Grants

NSF GEO (\$7,500,00 (**\$928,003**)) Mar. 2022

Collaborative Research: Implementation grant: Empowering BIPOC women scholars for social change through soil science.

Lead PI: Fortner, Co-PIs: Diaz, Nezat, Latimer

Other Grants and Awards

Center for Energy Research, Training, and Innovation (CERTAIN) SACNAS Travel (\$5,000) May 2019

Woods Hole Oceanographic Institution Postdoctoral Scholar (\$200,300) Dec. 2019

Geological Society of America Student Research Grant (\$660) Apr. 2019

International Association of Geochemistry Student Grant (\$1,618) Apr. 2019

Friends of Orton Hall Award (\$3,471) 2016-2019 (4)

Purdue SEED Proposal (\$8,175) Dec. 2017

National Science Foundation Graduate Research Fellowship (\$132,000) Mar. 2017

TEACHING EXPERIENCE

University of Colorado Boulder, Boulder, CO

Instructor – The Arctic Climate System (GEOG 4271/5271) Fall 2022

Instructor – Landscapes and Water (GEOG 1011) Spring 2023

Latinx Space for Enrichment and Research, Columbus, OH

Hub Coordinator – Franklin Heights High School Sep. 2018 – May 2020

The Ohio State University, Columbus, OH

Guest Lecturer – Introduction to Oceanography Mar. 2020

Guest Lecturer – Antarctic Study Abroad Program Nov. 2019

The Ohio State University, Columbus, OH

Teaching Assistant – Earth Sciences 1100: Planet Earth Jan. 2016 – Dec. 2016

Boy and Girls Club, Marlborough, MA

Discovery Club Staff – After-school program for K-5th grade Sep. 2014 – Apr. 2015

MENTORSHIP AND ADVISING

Graduate Students

Briana Prado, MS student at CU Boulder – Primary advisor 2022 – ongoing

<i>Denise Mondragon</i> , MS student at CU Boulder – Primary advisor	2022 – ongoing
<i>Katarena Matos</i> , PhD student at CU Boulder – Committee member	2022 – ongoing
Adam Solon, PhD student at CU Boulder – Committee member	2023 – ongoing

Undergraduate Students – Primary advisor

<i>Elisabeth Sellinger</i> , thesis at CU Boulder	2022 – 2023
Jordan McDavid, Woods Hole PEP intern from University of Tampa	Summer 2021
<i>Kat Zic</i> , thesis with research distinction at The Ohio State University	2019 – 2021
<i>Brianna Piergallini</i> , thesis with research distinction at The Ohio State University	2019 – 2020
<i>Caitlin Monagle</i> , thesis with research distinction at The Ohio State University	2018 – 2020
<i>Eli Lucas</i> , thesis at The Ohio State University	2018 – 2020

PEER REVIEWED PUBLICATIONS AND PAPERS

- (18) **Diaz, M.A.**, Fortner, S.K., Lyons, W.B. (In revision). *High resolution concentration-discharge relationships in managed watersheds: a 30+ year analysis*. *Journal of Hydrology: Regional Studies*.
- (17) **Diaz, M.A.**, Gardner, C.B., Elliot, D.H., Adams, B.J., Lyons, W.B. (In review). *Change at 85 Degrees South: Heekin and Thanksgiving Valley Proglacial Lakes from 1960 to 2020*. *Annals of Glaciology*.
- (16) Lemoine, N.P., Adams, B.J., **Diaz, M.A.**, Dragone, N.B., Franco, A.L.C., Fierer, N., Lyons, W.B., Hogg, I.D., Wall, D.H. (In press). *Antarctic microbial community assembly reveals strong dispersal limitation*. *mSystems*.
- (15) Hoffman-Hall, A., Gorris, M.E., Anenberg, S., Bredder, A.E., Dhaliwal, J.K., **Diaz, M.A.**, Fortner, S.K., McAdoo, B.G., Reano, D., Rehr, R.C., Roop, H.A. (2022). A GeoHealth Call to Action: Moving Beyond Identifying Environmental Injustices to Co-Creating Solutions. *GeoHealth*: p.e2022GH000706. <https://doi.org/10.1029/2022GH000706>
- (14) Gardner, C.B., **Diaz, M.A.**, Smith, D.F., Fountain, A.G., Levy, J.S., Lyons, W.B. (2022). *Isotopic signature of massive, buried ice in Eastern Taylor Valley, Antarctica: Implications for its origin*. *Arctic, Antarctic, and Alpine Research* 54 (1), 335-345. <https://doi.org/10.1080/15230430.2022.2102510>
- (13) Dragone, N.B., Henley, J.B., Holland-Moritz, H., **Diaz, M.A.**, Hogg, I., Lyons, W.B., Wall, D.H., Adams, B.J., Fierer, N. (2022). *Elevational constraints on the composition and genomic attributes of microbial communities in Antarctic soils*. *mSystems* 7(1): e01330-21. <https://doi.org/10.1128/msystems.01330-21>
- (12) Franco, A.L.C., Adams, B.J., **Diaz, M.A.**, Lemoine, N.P., Dragone, N.B., Fierer, N., Lyons, W.B., Hogg, I.D., Wall, D.H. (2021). *Response of Antarctic soil fauna to climate-driven changes since the Last Glacial Maximum*. *Global Change Biology* 28: 644-653. <https://doi.org/10.1111/gcb.15940>
- (11) Lyons, W.B., Carey, A.E., Gardner, C.B., Welch, S.A., Smith, D.F., Szykiewicz, A., **Diaz, M.A.**, Croot, P., Henry, T., Flynn, R. (2021). *The Geochemistry of Irish Rivers*. *Journal of Hydrology: Regional Studies* 37: 100881. <https://doi.org/10.1016/j.ejrh.2021.100881>

- (10) **Diaz, M.A.**, Corbett, L.B., Bierman, P.R., Adams, B.J., Hogg, I., Fierer, N., Wall, D.H., Lyons, W.B. (2021) *Relationship between meteoric ^{10}Be and NO_3^- concentrations in soils along Shackleton Glacier, Antarctica*. *Earth Surface Dynamics* 9(5): 1363-1380. <https://doi.org/10.5194/esurf-9-1363-2021>.
- (9) Fortner, S.K., Suffoletta, M.K., Vogt, L.K., Brown, A., **Diaz, M.A.** (2021). *An Iterative Course-Based Soil Lead Research and Partnering Model to Address Systemic Racism and the Enduring Legacy of Redlining*. *Environmental Justice* 00: 00. <http://doi.org/10.1089/env.2021.0013>.
- (8) Dragone, N.B., **Diaz, M.A.**, Hogg, I., Lyons, W.B., Jackson, W.A., Wall, D.H., Adams, B.J., Fierer, N. (2021). *Exploring the boundaries of microbial habitability in soil*. *Journal of Geophysical Research: Biogeosciences* 126(5): e2020JG006052. <https://doi.org/10.1029/2020JG006052>. Preprint: <https://doi.org/10.1101/2020.08.03.234583>.
- (7) **Diaz, M.A.**, Jackson, W.A., Adams, B.J., Wall, D.H., Hogg, I.D., Fierer, N., Welch, S.A., Gardner, C.B., Lyons, W.B. (2021). *Geochemical zones and environmental gradients for soils from the Central Transantarctic Mountains, Antarctica*. *Biogeosciences* 18: 1629-1644. <https://doi.org/10.5194/bg-18-1629-2021>.
- (6) **Diaz, M.A.**, Li, J., Michalski, G., Adams, B.J., Wall, D.H., Hogg, I., Fierer, N., Welch, S.A., Gardner, C.B., Lyons, W.B. (2020). *Stable isotopes of nitrate, sulfate, and carbonate in soils from the Transantarctic Mountains, Antarctica: A record of atmospheric deposition and chemical weathering*. *Frontiers in Earth Science special issue: Novel Isotope Systems and Biogeochemical Cycling During Cryospheric Weathering in Polar Environments* 8(341). <https://doi.org/10.3389/feart.2020.00341>.
- (5) **Diaz, M.A.**, Welch, S.A., Sheets, J., Welch, K.A., Adams, B.J., Khan, A.L., McKnight, D.M., Cary, S.C., Lyons, W.B. (2020). *Geochemistry of Aeolian Material from the McMurdo Dry Valleys, Antarctica: Insights into Dust Sources*. *Earth and Planetary Science Letters* 547: 116460. doi.org/10.1016/j.epsl.2020.116460.
- (4) Lyons, W.B., Foley, K.K., Carey, A.E. **Diaz, M.A.**, Bowen, G.J., Cerling, T. (2020). *The Isotopic Geochemistry of CaCO_3 Encrustations in Taylor Valley, Antarctica: Implications for their Origin*. *Acta Geographica Slovenica* 60(2): 105-119. <https://doi.org/10.3986/AGS.7233>.
- (3) **Diaz, M.A.**, Lyons, W.B., Adams, B.J., Welch, S.A., Khan, A.L., McKnight, D.M., Cary, S.C. (2018). *Major Oxide Chemistry of Mineral Dust, McMurdo Dry Valleys, Antarctica: Revisited*. *Proscience* 5: 25-30. DOI:10.14644/dust.2018.005.
- (2) **Diaz, M.A.**, Adams, B.J., Welch, K.A., Welch, S.A., Opiyo, S., Khan, A.L., McKnight, D.M., Cary, S.C., Lyons, W.B. (2018). *Aeolian Material Transport and its Role in Landscape Connectivity in the McMurdo Dry Valleys, Antarctica*. *Journal of Geophysical Research: Earth Surface*. DOI: 10.1029/2017JF004589.
- (1) **Diaz, M.A.**, Yu, H., Deuerling, K.M., Wörner, G., Gardner, C.B., Harmon, R.S., Goldsmith, S.T., Carey, A.E., Lyons, W.B. (2016). *The Flux of Saharan Dust to Panama and its Influence on Soil Geochemistry*. *Proscience* 3: 38-43. DOI:10.14644/dust.2016.006.

BOOK CHAPTERS AND POSITION STATEMENTS

(1) Fortner, S.K., Scherer, H.H., **Diaz, M.A.**, Brown, K.L., Fadem, C.M., Nezat, C.A., Latimer, J.C., Ebanks, S.C., Landsbergen, K.J. (in press). *The Metal Redlining Network: Uniting Research, Education, and Community*. The Handbook of Broader Impacts, eds. Van Egeren, L. and Renoe, S.

TALKS (*DENOTES INVITED)

- (21) **Diaz, M.A.*** (2022) Boise State University Department of Geosciences
- (21) **Diaz, M.A.*** (2022) Keynote for CU Boulder Hydrological Sciences Symposium
- (20) **Diaz, M.A.**, Bhatia, M., Das, S., Cavaco, M., Charette, M., Williams, P., Osman, M. (2021). Trace metal nutrient distributions and transport in a Greenland ice-marginal lake. AGU Annual Meeting: Biogeochemical Responses of the Cryosphere to Environmental Change.
- (19) **Diaz, M.A.*** (2021). Los Alamos National Lab Frontiers in Geoscience Seminar.
- (18) **Diaz, M.A.*** (2021). UC Berkeley Earth and Planetary Sciences Seminar.
- (17) **Diaz, M.A.*** (2021). Purdue University Department of Earth, Atmospheric, and Planetary Sciences.
- (16) **Diaz, M.A.*** (2021). University of West Virginia Geology and Geography Seminar.
- (15) **Diaz, M.A.*** (2021). *Geochemistry of soils from the Shackleton Glacier region, Antarctica and implications for biogeography*. Colorado State University School of Global Environmental Sustainability Antarctic Lecture Series.
- (14) **Diaz, M.A.*** (2021). Scripps Institute of Oceanography Polar Center “Polar Hour”.
- (13) **Diaz, M.A.***, Gardner, C.B., Elliot, D.H., Adams, B.J., Lyons, W.B. (2020). *Change at 85 Degrees South: Shackleton Glacier Region Proglacial Lakes from 1960 to 2020*. International Glaciological Society Early Career Seminar.
- (12) **Diaz, M.A.**, Gardner, C.B., Elliot, D.H., Adams, B.J., Lyons, W.B. (2020). *Change at 85 Degrees South: Shackleton Glacier Region Proglacial Lakes from 1960 to 2020*. GSA Annual Meeting 2020: Measuring and Modeling the Water Cycle in Cold Regions.
- (11) **Diaz, M.A.**, Bierman, P.R., Corbett, L.B., Adams, B.J., Hogg, I., Fierer, N., Wall, D.H., Lyons, W.B. (2020) *Relative exposure ages inferred from ^{10}Be and NO_3 concentrations along the Shackleton Glacier, East Antarctica*. SCAR COMNAP Open Science Meeting 2020 (canceled due to COVID-19).
- (10) **Diaz, M.A.***, Lyons, W.B. (2019). *Application of inverse distance weighted (IDW) interpolation for Antarctic geochemical studies*. The Ohio State University GIS Day 2019.
- (9) **Diaz, M.A.**, Gardner, C.B., Elliot, D.H., Adams, B.J., Lyons, W.B. (2019). *Change at 85 Degrees South: Heekin Valley Proglacial Lakes from 1960 to 2018*. SACNAS National Diversity in STEM Conference 2019: Multidisciplinary Assessment of Climate Change in Arctic and Antarctic Regions.
- (8) **Diaz, M.A.***, Adams, B.J., Hogg, I., Fierer, N., Wall, D.H., Gardner, C.B., Shaver-Adams, M., Lyons, W.B. (2019). *The hunt for "suitable" habitats along the Shackleton Glacier, Antarctica: a geochemical approach*. University of Texas El Paso Geological Sciences Seminar.
- (7) **Diaz, M.A.**, Adams, B.J., Hogg, I., Fierer, N., Wall, D.H., Gardner, C.B., Shaver-Adams, M., Lyons, W.B. (2019). *Surface Geochemistry of the Shackleton Glacier Region, Antarctica and Implications for Soil Habitability*. Goldschmidt 2019 Conference: Biogeochemical cycling in changing glacial habitats and downstream ecosystems.
- (6) Adams, B.J., Lyons, W.B., Hogg, I., Fierer, N., Wall, D.H., Gardner, C.B., **Diaz, M.A.**, Shaver-Adams, M. (2018). *The role of glacial history on the structure and functioning of ecological communities in the Shackleton Glacier region of the Transantarctic Mountains*. AGU Fall 2018 Meeting: Preliminary Discoveries from the 2015–2018 Shackleton Glacier Deep Field Camp, Antarctica.
- (5) **Diaz, M.A.**, Adams, B.J., Hogg, I., Fierer, N., Wall, D.H., Gardner, C.B., Shaver-Adams, M., Lyons, W.B. (2018). *Distribution of water-soluble salts along the Shackleton Glacier, Antarctica and*

implications for soil habitability. GSA Annual Meeting 2018: Climate Variability, Change, and Water Resources.

- (4) **Diaz, M.A.**, Lyons, W.B., Adams, B.J., Welch, S.A., Khan, A.L., McKnight, D.M., Cary, S.C. (2018). *Geochemistry of Mineral Dust, McMurdo Dry Valleys, Antarctica: Revisited*. DUST 2018 - International Conference on Atmospheric Dust.
- (3) **Diaz, M.A.**, Adams, B.J., Khan, A.L., Welch, K.A., Welch, S.A., McKnight, D.M., Cary, S.C., Lyons, W.B. (2017). *Soluble and bulk geochemical analysis of aeolian material from the McMurdo Dry Valleys, Antarctica*. GSA Annual Meeting 2017: The Aeolian Realm.
- (2) **Diaz, M.A.**, Adams, B.J., Khan, A.L., Welch, K.A., Welch, S.A., McKnight, D.M., Cary, S.C., Lyons, W.B. (2017). *Geochemical Characterization of Wind-Blown Dust from the McMurdo Dry Valleys of Antarctica*. SACNAS National Diversity in STEM Conference 2017: Life Sciences: Ecology/Evolutionary Biology, Other Life Sciences & Earth Science.
- (1) **Diaz, M.A.**, Yu, H., Deuerling, K.M., Wörner, G., Gardner, C.B., Harmon, R.S., Goldsmith, S.T., Carey, A.E., Lyons, W.B. (2016). *The Flux of Saharan Dust to Panama and its Influence on Soil Geochemistry*. DUST 2016 - International Conference on Atmospheric Dust.

POSTERS (DENOTES MENTEE)**

- (10) **Diaz, M.A.**, Hand, K. P., German, C. R. (2022). Coupling of Biogeochemistry and X-ray Tomography in a Sea Ice Core. Astrobiology Science Conference.
- (9) Piergallini, B.**, Goldsmith, S.T., **Diaz, M.A.**, Welch, K.A., Lyons, W.B. (2020). *Concentrations and deposition rates of acid soluble metals in Taylor Valley stream deltas – the sediment dynamics in rapidly changing fluvial systems*. SCAR COMNAP Open Science Meeting 2020. (cancelled due to COVID-19).
- (8) Lyons, W.B., Szykiewicz, A., Welch, S.A., Smith, D.F., **Diaz, M.A.**, Croot, P., Henry, T., Carey, A.E. (2020). *The Geochemistry and Potential Sources of Sulphur in Irish Rivers*. Irish Geological Research Meeting 2020.
- (7) **Diaz, M.A.**, Gardner, C.B., Elliot, D.H., Adams, B.J., Lyons, W.B. (2019). *Change at 85 Degrees South: Heekin Valley Proglacial Lakes from 1960 to 2018*. SCAR ISAES 2019.
- (6) **Diaz, M.A.**, Gardner, C.B., Elliot, D.H., Adams, B.J., Lyons, W.B. (2019). *Climate Change at 85 Degrees South: Heekin Lakes from 1996 to 2018*. Byrd Center 1st Annual Climate Symposium.
- (5) Lyons, W.B., Carey, A.E., Welch, S.A., Gardner, C.B., **Diaz, M.A.**, Fortner, S.K., Gilbert, D.** , Monagle, C.** , Calero, A.E. (2019). *The geochemistry of soils from around the world, an Earth Science perspective*. Soil Science Research Day.
- (4) **Diaz, M.A.**, Welch, S.A., Sheets, J., Welch, K.A., Adams, B.J., Khan, A.L., McKnight, D.M., Cary, S.C., Lyons, W.B. (2018). *Sediment Geochemistry of Aeolian Material from the McMurdo Dry Valleys, Antarctica: Insights into Dust Sources*. Goldschmidt2018 poster session.
- (3) **Diaz, M.A.**, Fortner, S.K., Lyons, W.B. (2016). *Land management impacts on hydrology and concentration vs. discharge relationships in small, central Ohio watersheds*. GSA Annual Meeting 2016 poster session.
- (2) **Diaz, M.A.**, Welch, S.A., Welch, K.A., Khan, A.L., Adams, B., Cary, C., McKnight, D.M., Lyons, W.B. (2016). *Preliminary characterization of wind-blown dust from the McMurdo Dry Valleys of Antarctica*. GSA Annual Meeting 2016 poster session.
- (1) **Diaz, M.A.**, Lyons, W.B. (2016). *The Influence of Agricultural Management Practices and Cover Cropping on Water Quality*. SACNAS National Diversity in STEM Conference 2016 graduate poster session.

FIELD CAMPAIGNS AND MISSIONS

<i>Eyes at the front: a megasite project at Helheim Glacier</i> Helheim Glacier, Greenland Co-led with Sarah Das, Woods Hole Oceanographic Institution	Postponed
<i>Biogeochemistry of water and sediments from a recently drained Greenland ice-marginal lake</i> Lake Tininnilik, Greenland Led by Diaz	July 2022
<i>NASA Dragonfly Mission to Titan</i> Mission Team Observer	Nov. 2020
<i>Fe behavior and bioavailability in sub-aerial runoff into the Ross Sea</i> Taylor Valley and Miers Valley, McMurdo Dry Valleys, Antarctica Co-led with Chris Gardner, The Ohio State University	Dec. 2019 – Jan. 2020
<i>The Role of Glacial History On The Structure And Functioning Of Ecological Communities In The Shackleton Glacier Region Of The Transantarctic Mountains</i> Shackleton Glacier, Transantarctic Mountains, Antarctica Led by Byron Adams, Brigham Young University	Dec. 2017 – Jan. 2018
<i>McMurdo Long-tern Ecological Research Network (MCM-LTER)</i> Taylor Valley, McMurdo Dry Valleys, Antarctica Led by Mike Gooseff, University of Colorado Boulder	Dec. 2016 – Feb. 2017
<i>In-situ cosmogenic production of ¹⁴C in firn and ice</i> Summit Station, Greenland Led by Vasilii Petrenko, University of Rochester	May. 2014 – Jul. 2014

LEADERSHIP AND PROFESSIONAL SERVICE

- AGU Cryosphere Canvassing Committee co-chair (2021-ongoing)
- AGU Biogeosciences Diversity Committee member (2021- ongoing)
- Co-creator and organizer of WHOI Geology and Geophysics Proposal Club (2021)
- Executive Committee graduate student representative for the Byrd Polar and Climate Research Center (2019- 2020)
- Diversity Committee graduate student representative for the School of Earth Sciences (OSU) (2017-2020)
- **President (2018), Vice President (2017), Outreach Coordinator (2019) – Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) OSU Chapter (2016-2020)**

Primary leader: Through both university and community partnerships, acquired funding for two external speakers (Dr. Knatokie Ford and Catalina Martinez), created “FAC Talks” featuring faculty members from diverse departments each month, and funded six students/faculty (through OSU and NSF) to attend the National Diversity in STEM Conference in 2019.

- Planning committee for symposium celebrating the “50th Anniversary of the First All-Women Research Team in Antarctica” (2018-2019)
Speaker for session: “Science for all and all for science”
- Treasurer- School of Earth Sciences Graduate Student Club (2017-2019)
- Session chair/co-chair: SACNAS National Diversity in STEM Conference (2018,2019,2021), AGU Fall Annual Meeting (2021)
- Journal peer-reviewer: JGR Biogeosciences, Nature Communications, Anais da Academia Brasileira de Ciências
- Proposal peer-reviewer: NSF OPP (mail-in)

OUTREACH

- RHRN Global Climate Summit (12/2022)
- WHOI Academic Jobs panelist (11/2022)
- CUAHSI H₃S Cyberseminar Series: Academic Jobs panelist (07/2021)
- Science fair judge for Mashpee Middle High School (01/2021)
- WHOI recruitment booth for SACNAS (10/2020)
- Woods Hole Partnership Education Program (PEP) summer “mini mentor” (06/2020)
Advised two students from University of Texas El Paso
- “Role Model” for OSU Latinx Role Models Day (03/2020 – suspended due to COVID-19)
- Group leader for Optimizing the Intern Experience: A Woods Hole Workshop (06/2019)
- Woods Hole Partnership Education Program (PEP) alumni talk and panel (06/2017, 06/2018)
- NSF GRFP panel for OSU REU summer interns (06/2018, 06/2019)
- Science Olympiad Dynamic Planet grader (04/2019)
- OSU Graduate/Professional Student Recruitment Initiative panel (10/2018)
- Group coordinator for OSU Latinx Role Models Day (04/2018)
- Interpreters for the Medical Profession through Advanced Curriculum and Teaching (IMPACT) role model (03/2018)
- Louis Stokes Alliances for Minority Participation (LSAMP) Graduate panel (02/2017, 04/2017, 08/2017)
- OSU Latinx Early Arrival Program panel (08/2017)

SCIENCE COMMUNICATION

- AGU GeoHealth Position Statement writer (2022-2023)
- Building Broader Impacts workshop leader (12/2022)
- Establishing collaborative partnerships for equity and justice, AGU workshop leader (12/2022)
- Metal Redlining Network Columbus, OH facilitator (06/2019- ongoing)
https://serc.carleton.edu/earthconnections/networks/metal_redlining/index.html
- IN FISH “Being a Scientist” speaker (07/2021)
- WHOI SSF-PEP Lecture Series speaker (06/2021)
- Polar Science Literacy workshop at Rutgers University (05-06/2020)
 - NSF DRL 1906897
- Ohio Camp Oty'Okwa soil organism activity (06/2020)
<https://youtu.be/YO1THQo3hko>
- PBS NOVA Virtual Field Trip (04/2020)
<https://www.youtube.com/watch?v=Qewqxm8xPvo>

- Created monthly “Fun Fridays” interactive science event for K-12 students at Columbus Northside Metropolitan Library (11/2019-08/2020; ongoing)
- Channel 10 local news Antarctic research spotlight (11/2019)
- West Fest booth volunteer (05/2017, 05/2018, 06/2019)
- The Ohio State University College of Arts and Sciences Student Spotlight (01/2018)
<https://artsandsciences.osu.edu/news/earth-sciences-antarctica>
- *Byrd 1933* film panelist (01/2018)
- Environmental Film Series panelist (11/2017)
- Franklinton Friday STEAM Factory “Spooky Talk” (10/2017)
- Byrd Polar and Climate Research Center Student Interview (09/2017)
<https://vimeo.com/228320380>
- COSI After Dark interactive booth volunteer (08/2017)
- Workshop on Science Communication- Polar-ICE Sci-I teacher workshop (06/2017)
- Ohio History Connection polar booth with BPCRC (04/2017)

HONORS AND AWARDS

National SACNAS Chapter Award – Outstanding Prof. Development (President)	Oct. 2019
Women of Color Advancement Grant (\$1,000)	May 2019
Ray Travel Award (\$1,000)	May 2019
Geochemical Society Travel Award (\$1,500)	Aug. 2018
Recruitment and Diversity Services Travel Award (\$1,500)	Mar. 2017
Friends of Orton Hall Award (\$3,471)	2016-2019 (4)
Geological Society of America On to the Future Travel Award (\$650)	July 2016
Dean’s List, University of Rochester	May 2014

MEMBERSHIPS

Geochemical Society
 Geological Society of America (GSA)
 International Association of Geochemistry (IAGC)
 American Geophysical Union (AGU)
 Society for Advancing Chicanos/Hispanics and Native Americans in Science (SACNAS)
 Society of Latinxs/Hispanics in Earth and Space Science (SOLESS)
 Earth Science Women’s Network
 Association of Early-Career Polar Scientists (APECS)
 Polar Impact

LANGUAGES

English- native language
 Spanish- read, speak, and write with moderate proficiency
 Japanese and French- read, speak and write with basic competence