WILLIAM DAVIE LEAVITT, PHD.

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| Education | |
|---|---|
| 2009-2014 | Harvard University (Cambridge, MA, USA) Ph.D., Dept. Earth & Planetary Science, Advisor: David T. Johnston. |
| Dissertation: On the mechanisms of sulfur isotope fractionation during microbial sulfate reduction. | |
| 2007-2009 | Harvard University (Cambridge, MA, USA) M.A., Dept. Organismic & Evolutionary Biology, Advisor: Peter R. Girguis |
| 2008 | Microbial Diversity, Marine Biological Laboratory (Woods Hole, MA, USA) |
| 2002-2006 | Hampshire College (Amherst, MA, USA) B.A. Microbial Ecology & Molecular Biology, Advisor: Jason M. Tor |
| Professional Experience | |
| 2016-present | Assistant Professor, Department of Earth Sciences, Dartmouth College, Hanover, NH |
| 2018-present | Adjunct Assistant Professor, Department of Chemistry, Dartmouth College, Hanover, NH |
| 2016-present | Adjunct Assistant Professor, Department of Biological Sciences, Dartmouth College, Hanover, NH |
| 2014-2016 | Steve Fossett Postdoctoral Fellow, Washington University in St. Louis, St. Louis, MO, Lab of Alexander Bradley. |
| 2011-2015 | Visiting Scientist, Instituto de Tecnologia Química e Biológica, Bacterial Energy Metabolism Group, Lab of Inês C. Pereira. |
| 2014 | Postdoctoral Researcher, Harvard University, Department of Earth & Planetary Sciences, Lab of David Johnston. |
| 2006-2007 | Research Assistant I, Harvard University, Department of Earth & Planetary Sciences, Lab of Ann Pearson. |
| 2006 | Research Assistant I, Montana State University, Department of Microbiology, Lab of Gill Geesey. |
| Grants | |

National Science Foundation EAR Low Temperature Geochemistry and Geobiology (Leavitt lead-PI). Collaborative Proposal: Establishing the hydrogen isotopic window into Archaeal lipid biomarkers; Leavitt: \$274,935 of \$555,115. September 2019 -August 2022.

Simons Foundation (Leavitt, sole PI). Molecular fingerprinting of microbial surface ocean methane. \$540,000. April 2019 to March 2021.

National Science Foundation Major Research Initiation Grant (Leavitt Co-PI). Acquisition of an Isotope Ratio Mass Spectrometer (IRMS) to enable interdisciplinary research at Dartmouth and beyond. \$483,126. June 2018 - May 2021.

Department of Energy Joint Genome Institute Community Sequencing Project (Leavitt P.I). Identification of genes involved in Archaeal lipid cyclization. RNAseq award. January 2019 - present.

American Chemical Society Petroleum Research Fund Doctoral New Investigator. (Leavitt, sole P.I.). The inner lives of Archaea: the hydrogen isotopic composition of Archaeal lipids may represent a proxy of past metabolic state. \$110,000. July 2017 - June 2019, (no cost extension from thru June 2020).

- Sloan Foundation, Deep Carbon Observatory. *The Deep Carbon Cycle through geological time: An interdisciplinary synthesis of the carbon cycle in the Earth's lithosphere-biosphere system.* (Lead: S. Zahirovic & D. Muller; **Co.I Leavitt** & 22-others), \$100,000 to University of Sydney. January 2018 to September 2019.
- Dartmouth College Office of Provost RPF SEED funding. (Leavitt, Sole P.I). From microbial enzymes to global climate: toward isotopically fingerprinting methane produced in Earths' surface waters. (\$49,000). Active period: June 2017 to May 2018 (no cost extension from thru May 2019).

Prior to 2016:

- 2014 to 2017: NASA-Exobiology (**Leavitt, Science I.**; Lead P.I.: A. Bradley, Washington Univ. St. Louis). Coevolution of sulfate reducer biosignatures and the redox state of the early Earth. \$388,253. Duration: 01 July 2014 to 30 June 2017.
- 2015 European Molecular Biology Organization International Sulfur Metabolism meeting travel award, Helsingør, Denmark.
- 2013 Geochemical Society student travel grant, 23rd Goldschmidt. Florence Italy
- 2012 Microbial Sciences Initiative, Harvard University, Travel grant, Lisbon, Portugal.
- 2012 NASA Travel Grant (Leavitt to visit the Pereira Lab at the ITQB)
- 2011 NSF-EAR Graduate Research Travel Grant
- 2008 to 2011 NSF Graduate Research Fellowship
- 2005 NSF-REU Yellowstone Microbial Observatory, Montana State University.
- 2004 NSF-REU Dept. of Biology, University of South Carolina.

Awards

2019-2021 Simons Early Career Investigator in Marine Microbial Ecology and Evolution 2017-2019 American Chemical Society Petroleum Research Fund New Investigator 2014-2016 Steven Fossett Postdoctoral Fellowship, Washington University in St. Louis 2008-2011 NSF-BIO & EAR Graduate Research Fellowship

Manuscripts: *Equal contribution; Leavitt lab #graduate or *undergrad student author, ^Leavitt as senior and communicating; @Leavitt as first & communicating.

In revision or review:

Bertran, E, A Waldeck, BA Wing, I Halevy, **WD Leavitt**, AS Bradley, DT Johnston. [in revision, *ISME Journal*]. A mechanistic understanding of oxygen isotope effects during microbial sulfate reduction.

Taenzer#, L, P Carini, J Gaube⋆, Bourque, A Masterson, **WD Leavitt^**. Microbial Methane from Methylphosphonate Isotopically Records Source. [in review, *GRL*].

Peer Reviewed Publications:

[18] Zhou#, A, Y Weber, B. Chiu, FJ Elling, A. Cobban⋆, A Pearson, **WD Leavitt^**. *Environmental Microbiology*. Energy flux controls tetraether lipid cyclization in *Sulfolobus acidocaldarius*. [*In press*]

[17] **Leavitt**@, **WD**, S Venceslau, J Waldbauer, D Smith, IAC Pereira, and AS Bradley. 2019. Proteomic and isotopic response of *Desulfovibrio vulgaris* to DsrC perturbation. *Frontiers in Microbiology*. doi: 10.3389/fmicb.2019.00658.

- [16] Bertran, E., **W.D. Leavitt**, A.Pellerin, GM Zane, JD Wall, I Halevy, B. Wing, D.T. Johnston. 2018. Deconstructing the dissimilatory sulfate reduction pathway: Isotope fractionation of a mutant unable of growth on sulfate. *Frontiers in Microbiology.* doi: https://doi.org/10.3389/fmicb.2018.03110
- [15] **Leavitt**, **W.D.**, S. Jean-Loup Murphy, L. R. Lynd, A.S. Bradley. 2017. Hydrogen isotope composition of Thermoanaerobacterium saccharolyticum lipids: comparing wild type to a nfn- transhydrogenase mutant. *Organic Geochemistry*. doi: http://dx.doi.org/10.1016/j.orggeochem.2017.06.020
- [14] **Leavitt**, **WD**, S Venceslau, DT Johnston, IAC Pereira and AS Bradley. 2016. Fractionation of sulfur and hydrogen isotopes in *Desulfovibrio vulgaris* with perturbed DsrC expression. *FEMS Microbiology Letters*. 363:20. doi: https://doi.org/10.1093/femsle/fnw226

From here up, completed or entirely generated while at Dartmouth.

- [13] **Leavitt**, **WD**, Flynn, TM, Suess, MK and Bradley, AS. 2016. Transhydrogenase and Growth Substrate Influence Lipid Hydrogen Isotope Ratios in *Desulfovibrio alaskensis* G20. *Frontiers in Microbiology*. 7:918. doi: 10.3389/fmicb.2016.00918
- [12] **Leavitt, WD**@*, AS Bradley*, AA Santos, IAC Pereira and DT Johnston. 2015. Sulfur isotope fractionation by dissimilatory sulfite reductase. *Frontiers in Microbiology*. doi: 10.3389/fmicb.2015.01392
- [11] Santos*, A.A., S. Venceslau* F. Grein, **WD Leavitt**, C. Dahl, D.T. Johnston and I.A.C Pereira. 2015. A protein trisulfide couples dissimilatory sulfate reduction to energy conservation. *Science*. 350: 1541-45.
- [10] Fike, DA, AS Bradley and **WD Leavitt**. Ch. 20: Geomicrobiology of Sulfur. Ed: H.L. Erlich, D.K. Newman and A. Kappler. 2016. <u>Geomicrobiology</u>, 6th edition. CRC Press.
- [9] Bradley, AS*, **W.D. Leavitt***, M.L. Schmidt, A.H. Knoll, P.R. Girguis and D.T. Johnston. 2016. Patterns of sulfur isotope fractionation during Microbial Sulfate Reduction. *Geobiology* 10.1111/gbi.12149.
- [8] **Leavitt**, **WD**, R.C. Cummins, M.L. Schmidt, M.S. Sim, S. Ono, A.S. Bradley and D.T. Johnston. 2014. Multiple sulfur isotope signatures of sulfite and thiosulfate reduction by the model dissimilatory sulfate-reducer, *Desulfovibrio alaskensis* str. G20. *Frontiers in Microbiology* 5: 1- 16.
- [7] Reardon, C.L., T.S. Magnuson, E.S. Boyd, **W.D. Leavitt**, D.W. Reed and G.G. Geesey. 2014. Hydrogenase Activity of Mineral-Associated and Suspended Populations of *Desulfovibrio desulfuricans* Essex 6. *Microbial Ecology*. 67: 318-326.
- [6] **Leavitt**, **W.D.**, I. Halevy, A.S. Bradley and D.T. Johnston. 2013. The influence of sulfate reduction rates on the Phanerozoic sulfur isotope record. *Proceedings of the National Academy of Science, USA*. 110: 11244-11249.
- [5] Bradley, A.B., **W.D. Leavitt** and D.T. Johnston. 2011. Revisiting the dissimilatory sulfate reduction pathway. *Geobiology*. 9: 446–457.

[4] Pearson, A., **W.D. Leavitt**, J.P. Saenz, R.E. Summons, M.C.-M. Tam and H. Close. 2009. Diversity of hopanoids and squalene-hopene cyclases across a tropical land-sea gradient. *Environmental Microbiology*. 11: 1208-1223

- [3] Boyd, E.S., **W.D. Leavitt** and G.G. Geesey. 2009. CO₂ Uptake by a Thermoacidophilic Microbial Community Attached to Precipitated Sulfur in a Geothermal Spring. *Applied and Environmental Microbiology*. 75: 4289-4296.
- [2] Pearson, A., K.S. Kraunz, A.L. Sessions, A.E. Dekas, **W.D. Leavitt** and K.J. Edwards. 2008. Quantifying Microbial Utilization of Petroleum Hydrocarbons in Salt Marsh Sediments by using the ¹³C Content of Bacterial rRNA. *Applied and Environmental Microbiology*. 74: 1157-1166.
- [1] Boyd, E.S., R.A. Jackson, G. Encarnacion, J.A. Zahn, T. Beard, **W.D. Leavitt**, Yundan Pi, C.L. Zhang, A. Pearson and G.G. Geesey. 2007. Isolation, Characterization, and Ecology of Sulfur-Respiring Crenarchaea Inhabiting Acid-Sulfate-Chloride-Containing Geothermal Springs in Yellowstone National Park. *Applied & Environmental Microbiology*. 73: 6669-6677.

Manuscripts in preparation

Manuscripts for projects where the data collection and analyses are complete, submission within 1 to 3 months.

- a. Taenzer#, L, D Rumble III, J Labidi, X Feng, E Young, **WD Leavitt^**. Combinatorial isotope effects in microbialgenic methane.
- b. Cobban, A.⋆, Zhou#, Y Weber, FJ Elling, A Pearson, **WD Leavitt^**. Cyclization of Sulfolobus acidocaldarius GDGTs changes in response to temperature and pH.
- c. **^Leavitt, WD**, J Waldbauer, MS Sim, S Venceslau, F Boidi, I.A.C Pereira, and AS Bradley. Proteomic and isotopic fingerprints of fast versus slow growth in the model sulfate reducer *Desulfovibrio vulgaris*.
- d. Chiu, B., A Zhou#, C Chang, E Eggleston, Y Weber, FJ Elling, R. Whitaker, A Pearson, **Leavitt^**, **WD**. The role of geranylgeranyl reductase in the cyclization of archaeal GDGTs in *Sulfolobus islandicus*.

Active Projects

Projects where experiments & data collection are underway.

- i Zhou#, A, A. Cobban&, M Amenabar, Y Weber, FJ Elling, A Pearson, **WD Leavitt**. Isoprenoid lipid cyclization records metabolic mode in a common Yellowstone thermoacidophilic archaeon.
- ii. Weber, Y, S Kopf, Zhou#, FJ Elling, A Pearson, **WD Leavitt**. Hydrogen isotopic composition of Archaeal GDGTs in response to free energy availability.
- iii. Luxem, K., L Taenzer#, **WD Leavitt**, X Zhang. C and H isotopic composition of nitrogenase generated methane.
- vi. Soucey, S., A. Hicking, B Chiu, **WD Leavitt**. Gene transfer agents in sulfate reducers.

Teaching

2016-pesent at Dartmouth

2018-present (annually) EARS_272: Topics in Geobiology (graduate seminar, co-taught) 2017-present (annually) EARS_07: Life on Mars? (Freshman Seminar)

2018-present (annually) EARS 34: Global Biogeochemical Cycles

2016, 2018 (annually): Visitor on Fall Field Program (Stretch): Yellowstone National Park

- 2018 EARS 88: The Earth System (co-taught)
- 2018 EARS_202: Critical Analysis in Earth Sciences (co-taught)
- 2017 EARS_72: Advanced Geobiology *Pre-2016*
- 2012 Life as a Planetary Phenomenon, Harvard University
- 2012 Structural Geology Field Trip, Canadian Rockies, Harvard University
- 2010 Low-T. Geochemistry I: Biogeochemical cycles, Harvard University
- 2009 Aqueous and Environmental Chemistry, Harvard University
- 2009, 2008 Geomicrobiology Field Course, Hampshire College

Invited Talks

- 2019 Woods Hole Oceanographic Institution, Falmouth, MA
- 2019 University of Arizona, Tucson, AZ
- 2019 2nd International Geobiology Conference, Banff, Canada
- 2019 McGill University, Dept. Earth & Planetary Sciences, Montreal, Canada
- 2018 Montana State University, Bozeman, MT
- 2018 American Chemical Society Spring Meeting, San Francisco, CA
- 2017 COGC₃, Massachusetts Institute of Technology, Cambridge, MA
- 2017 University of Connecticut, Storrs, CT
- 2017 American Chemical Society Spring Meeting, San Francisco, CA
- 2016 Williams College, Geology Department, Williams, MA
- 2016 Dartmouth College, Biology Department, Hanover, MA
- 2016 Woods Hole Oceanographic Institution, Falmouth, MA
- 2016 Bigelow Marine Science Labs, Boothbay, ME
- 2016 Princeton University, Dept. of Geosciences, Princeton, NJ
- 2015 25th V.M. Goldschmidt Conference, Prague, Czech Republic
- 2015 Cambridge University, Isotope Coffee, Cambridge, UK
- 2015 Dartmouth College, Earth Science Dept., Hanover, NH
- 2014 American Geophysical Union Annual Meeting, San Francisco, CA
- 2014 Southern Illinois U., Geology Dept., Carbondale, IL
- 2014 Agouron Institute, Sulfur Cycle Symposium, Rancho Palos Verdes, CA
- 2014 Cornell University, Microbiology Dept. Seminar, Ithaca, NY
- 2014 Woods Hole Oceanographic Institution, Marine Chem. & Geochem., Falmouth, MA
- 2014 Hampshire College, School of Natural Sciences, Amherst, MA
- 2013 Instituto de Tecnologia Química e Biológica, Oeiras, Portugal
- 2013 Origins of Life Initiative Chalk Talk series, Harvard University, Cambridge, MA
- 2013 Microbial Sciences Initiative Chalk Talk series, Harvard University, Cambridge, MA
- 2012 Washington University in St. Louis, Dept. Earth & Planetary Sciences, MO
- 2012 Max Planck Institute for Marine Microbiol., Biogeochem. Dept., Bremen, Germany

Contributed Conference Talks (Leavitt first author only):

- 2019 Deep Carbon Observatory, Deep Energy Meeting, La Clusaz, France
- 2017 Deep Carbon Observatory, Early Career Workshop, Catania, Italy
- 2017 10th Northeast Geobiology Conference, Storrs, CT
- 2015 4rd Midwest Geobiology Conference, Bloomington, IN
- 2014 24th V.M. Goldschmidt Conference, Sacramento, CA
- 2013 23rd V.M. Goldschmidt Conference, Florence, Italy
- 2012 22nd V.M. Goldschmidt Conference, Montreal, Canada
- 2012 EMBO Workshop on Microbial Sulfur Metabolism, Noordwijkerhout, Netherlands
- 2012 Northeast Geobiology Conference, McGill University, Montreal, Canada

Contributed Conference Posters (Leavitt first author only):

- 2017 American Geophysical Union Annual Meeting, New Orelans, LA
- 2017 Archaea Gordon Research Conference, Waterville Valley, NH
- 2016 American Geophysical Union Annual Meeting, San Francisco, CA
- 2016 C1-Metabolism Gordon Research Conference, Waterville Valley, NH
- 2016 Geobiology Gordon Research Conference, Galveston, TX
- 2015 American Geophysical Union Annual Meeting, San Francisco, CA
- 2015 EMBO Workshop on Microbial Sulfur Metabolism, Helsingør, Denmark
- 2014 Plant & Microbial Biosciences Workshop, Tyson Research Center, St. Louis, MO
- 2014 3rd Midwest Geobiology Conference, Chicago, IL
- 2014 Northeast Geobiology Conference, Yale University, New Haven, CT
- 2013 2nd Midwest Geobiology Conference, IUPUI in Indianapolis, IN
- 2012 1st Midwest Geobiology Conference, Washington University, St. Louis, MO
- 2008 9th International Conference on Gas in Marine Sediments, Bremen, Germany
- 2008 American Society for Microbiology General Meeting, Boston, MA
- 2007 American Geophysical Union General Meeting, San Francisco, CA
- 2006 American Society for Microbiology General Meeting, Orlando, FL

Leavitt Group Member Conference Proceedings, §undergraduate or #graduate student (2016-present only)

- 2019. 29th V.M. Goldschmidt Conference, Barcelona, Spain. *Abstract.* #Taenzer, L, **WD Leavitt**, J Labidi, E Young. The origin of 12CH2D2 depletions in microbialgenic methane gases.
- 2019. Luxem#, K, L Taenzer#, **WD Leavitt**, X Zhang. *Large hydrogen isotope fractionation distinguishes nitrogenase-derived methane from other sources*. Gordon Research Conference in Applied and Environmental Microbiology.
- 2019. Talk. #Taenzer, L, D. Rumble III, E.D. Young, J Labidi, P Carini, B #Bourguez, S Lincoln, X Feng, J §Gaube, **WD Leavitt.** Bulk and clumped isotope signature of aerobic methane reveals production pathway. Northeast Regional Geobiology Conference XIII, Amherst, College.
- 2019. Poster. #Zhou, A, B Chiu, A §Cobban, Y Weber, F Elling, A Pearson, **WD Leavitt.** Continuous and batch culture constraints with Sulfolobus acidocaldarius on the TEX86 paleo temperature proxy. Northeast Regional Geobiology Conference XIII, Amherst, College.
- 2019. Poster. & Cobban, A, A #Zhou, B Chiu, Y Weber, F Elling, A Pearson, **WD Leavitt.** Quantifying the Effect of Environmental Drivers on Lipid Composition Shifts in *S. acidocaldarius*. Northeast Regional Geobiology Conference XIII, Amherst, College.
- 2019. Poster. Chiu, B., A #Zhou, C Zhang, Y Weber, R Whitaker, A Pearson, WD Leavitt. The role of geranylgeranyl reductasein *Sulfolobus islandicus* GDGT lipid cyclization. Northeast Regional Geobiology Conference XIII, Amherst, College.
- 2018, 28th V.M. Goldschmidt Conference, Boston, MA, USA. *Talk*. Taenzer#, L, J §Gaube, D Rumble III, ED Young, **WD Leavitt**. Clumped and bulk isotopic fingerprints of methane produced by C~P lyase.
- 2018, 28th V.M. Goldschmidt Conference, Boston, MA, USA. *Talk*. Bertran#, E, **WD Leavitt**, A Pellerin#, GM Zane, JD Wall, I Halevy, B Wing, DT Johnston. Deconstructing the dissimilatory sulfate reduction pathway: Isotope fractionation of a mutant unable of growth on sulfate.

2018, 28th V.M. Goldschmidt Conference, Boston, MA, USA. *Poster*. Zhou#, A, M Amenabar, Y Weber, FJ Elling, A Pearson, **WD Leavitt**. Archaeal GDGT profiles as recorders of free energy availability. (poster)

2018, January. Geobiology Gordon Research Conference, Galveston, TX. *Talk*. Bertran#, E, A Waldeck#, BA Wing, I Halevy, **WD Leavitt**, AS Bradley, DT Johnston. 2017. Oxygen isotope trends during microbial sulfate reduction.

2017, Wetterham Symposium, Dartmouth College. *Poster*. §Gaube, J, A, §Cobban, W.D. Leavitt. Growth of marine bacteria *Pseudomonas stutzeri* Hl00D01 on P₅₊ and P₃₊ compounds.

2017, 27th V.M. Goldschmidt Conference, Paris, France. *Poster.* Venceslau, SS, Santos, AA, **Leavitt, WD**, Johnston, D, Bradley, AS & Pereira, IAC. Dissimilatory Sulfate Reduction is a Four-Step Pathway.

2017, 27th V.M. Goldschmidt Conference, Paris, France. *Talk*. The Role of Reversibility and S Intermediates in the S Metabolism. Farquhar J, **Leavitt WD**, Guo W, D Eldridge, & D Bojanova.

2016, 26th V.M. Goldschmidt Conference, Yokohama, Japan. *Talk.* Relating Geochemical Signatures to the Metabolic State of Cells. Bradley, A, **Leavitt, WD** & Waldbauer, J.

Field Work

Synergistic Activities

Conference Session Chair, Co-Chair:

- 2020: American Chemical Society, Philadelphia, PA.
 Microbially-Driven Geochemical Reactions: Kinetics and Communities
- 2018: 28th V.M. Goldschmidt Conference, Boston, MA.
 Traditional and Non-Traditional Stable Isotopes in Geobiology & Biogeochemistry
- 2017: American Geophysical Union, New Orleans. 3rd annual (Bio-isotopic) message in a (rock record) bottle.
- 2017: 27th V.M. Goldschmidt Conference, Paris, France. *Microbial metabolic and isotopic processes.*
- 2016: American Geophysical Union, San Francisco, CA 2nd annual (Bio-isotopic) message in a (rock record) bottle.
- 2015: American Geophysical Union, San Francisco, CA 1_{st} annual (Bio-isotopic) message in a (rock record) bottle.

Grant review:

NASA-Exobiology (panel 2019); NSF-EAR Low Temperature Geochemistry & Geobiology Postdoc Fellowship (2019 panel; ad-hoc regularly); NSERC (ad-hoc); NSF-OCE Biological Oceanography (ad-hoc); NSF-OCE Chemical Oceanography (ad-hoc); NSF-EAR Low Temperature Geochemistry and Geobiology (2016 panel; ad-hoc routinely); NSF-OCE Marine Geology & Geophysics (ad-hoc); NASA Planetary Sciences Graduate student fellowship (panel, 2016).

Journal reviewer. Science Advances; The ISME Journal; Nature Microbiology; Geochimica et Cosmochimica Acta; Applied & Environmental Microbiology; Environmental Microbiology; Earth & Planetary Science Letters; Geobiology; Chemical Geology; Frontiers in Microbiology; Marine Environmental Research; Associate Editor Frontiers in Earth Science.

PhD Students & Committees:

2018-fwd: James Busch (Dartmouth), Earth Science, Primary Advisor: J.Strauss 2017-fwd: Anne Farrell (Dartmouth), Biology, Primary Advisor: O.Zhaxybayeva

Masters Students & Committees:

2017- 2019: Alice Zhou (Dartmouth), Earth Science, Primary Advisor: Leavitt 2017- 2019: Lina Taenzer (Dartmouth), Earth Science, Primary Advisor: Leavitt 2017-2018: Virginia Wala (Dartmouth), Earth Science, Primary Advisor: J.Strauss

Undergraduate Students:

Dartmouth Senior Honors Thesis Advisee:

Alec Cobban (Dartmouth '19), Biology, Primary Advisor: Leavitt Janel Gaube (Dartmouth '18), Chemistry, Primary Advisor: Leavitt Emma Rieb (Dartmouth '18), Earth Sciences, Primary Advisor: Leavitt

Dartmouth Presidential Fellows:

Carter Boyd (Dartmouth '21).

Women in Science Project (WISP) students:

Melanie Prakash (Dartmouth '21).

Lab trainees:

Theo Green (Dartmouth '21); Rachael Rubin (Dartmouth '20); Cameron Buxton (Dartmouth '19);

Other

2015-2016: Flavia Boidi, visiting PhD student & Fulbright Fellow visiting Washington University in St. Louis, from Universidad Nacional de Cordona, Argentina.

2014-2015: Claire Wallace, undergraduate research, Washington University in St. Louis.

2011-2012: Marian Schmidt, post-baccalaureate scholar, Harvard University

2009-2011: Renata Cummins, undergraduate thesis, Harvard University.

Outreach

2017 to present: Faculty Advisor, Dartmouth ManyMentors: www.manymentors.org

Career Development & Short-courses:s

2017 Sloan Foundation Deep Carbon Observatory Workshop, Catania, Italy.

2016 NSF and National Association of Geoscience Teachers Early Career Geoscience Faculty workshop

2011 Microscopy Workshop, Harvard Microbial Sciences Initiative (MSI)

Professional Affiliations:

Geochemical Society (GS)

American Geophysical Union (AGU)

American Chemical Society (ACS)

Geological Society of America (GSA)

American Society for Microbiology (ASM)

Sigma Xi