

CURRICULUM VITAE

Sarah Youngs

Research Assistant I
Applied Ocean Physics and Engineering Department
Blake 203, MS #7
Woods Hole Oceanographic Institution
Woods Hole, MA 02543

Telephone: (614) 949 - 1798

E-mail: syoungs@whoi.edu

EDUCATION:

2019 B.S. Chemistry, Minor in Environmental Studies, Denison University, GPA: 3.80, *magna cum laude*
2015 Dublin Jerome High School; Dublin, OH

PROFESSIONAL EXPERIENCE:

Sept. 2020-present Research Assistant I, Woods Hole Oceanographic Institution, AOPE Dept.
Jan. 2020- May 2020 AmeriCorps STEM Field Educator, Teton Science Schools
June 2019-Dec. 2019 Marketing & Communications Assistant, Latrobe-Chestnut Hill Realty and Associates
June 2019-Dec. 2019 Substitute Teacher & Kindergarten Teachers Aide, Mary Evans Child Development Center
Jan. 2017-May 2019 Undergraduate Research Assistant, Denison University, Chemistry & Biochemistry Dept.
Sept. 2016-May 2019 Head Tutor – Chemistry and Biology, Denison University, Academic Programs Dept.

TRAINING, CERTIFICATIONS, LICENSES:

2020 Wilderness First Responder Training and Certificate

AWARDS:

2019 Phi Beta Kappa Honor Society
2019 Mortar Board
2017-2019 Top 50 Scholar Athlete, Denison University
2018 Ted Barclay Top Five Award, Denison University

RESEARCH INTERESTS:

My overall research interest is to better understand how human activity is impacting ocean chemistry. Specifically, I operate and experiment with novel sensors to detect and quantify oceanic microplastics and dissolved gasses to discover their impacts on both human health and our oceans. I also broadly study plastic debris in the form of both micro and macroplastics, seeking to evaluate plastic type, weathering, breakdown, and metal accumulation in various locations around the world.

PROFESSIONAL ACTIVITIES:

WHOI:

2020-present WHOI Sustainability Task Force Committee
2020-present WHOI Committee on Diversity and Inclusion (CDI), volunteer

Outside WHOI:

2017-2019 Committee on Intercollegiate Athletics, Vice President

EDUCATIONAL OUTREACH:

2022 Meet a Scientist, Munger Mountain Elementary School, Jackson, WY
2022 Classroom Teaching, New Heights Charter School, Brockton, MA; WHOI Broader Impacts Group
2022 Classroom Teaching, Falmouth Public Schools; Woods Hole Sea Grant
2020-present MassSTEM Hub Volunteer
2021 Falmouth Academy Science Fair Judge
2021 WHOI CDI Outreach Program, Meet a Scientist & Classroom Teaching
2020-2021 Unlearning Racism in the Geosciences (URGE)

COMMUNITY SERVICE

2020 Meals on Wheels; Columbus, OH
2019-2020 Habitat for Humanity; Columbus, OH & Jackson, WY
2019 Star House; Columbus, OH

2018-2019 A Call to College; Newark, OH
 2016-2018 Big Brothers Big Sisters; Newark, OH

SUPERVISION/MENTORING AT WHOI:

2022 Declan Lane, High School Student, Falmouth Academy, mentor & delegate work assignments
 2020-2021 Ellie Mattison, Guest Undergraduate Student, mentor & delegate work assignments

CRUISE & FIELD WORK PARTICIPATION:

November 2021 R/V Roger Revelle with AUV Sentry and ROV Jason; Guaymas Basin, Gulf of California, Deployment of an in-situ methane sensor and an in situ dissolved inorganic carbon (DIC) sensor for the chemical analysis of hydrothermal vent fluids, (San Diego, CA to San Diego, CA)
 October 2021 Local field work; Microplastic sensor testing; Grews Pond
 May 2021 Local field work: CO₂ sensor testing; Little Sippewissett Marsh

PRODUCTS:

2022 **Youngs, S.**, Michel, A., de Vos, A., James, B., Dibenedetto, M., Reddy, C., Chemical Analysis of Nurdles from the M/V X-Press Pearl Fire: A Study of Rapid Degradation, Weathering, and Metal Accumulation, 2022 Ocean Sciences Meeting, Honolulu, HI. (Abstract).
 2022 Uyeda, K., **Youngs, S.**, Anderson, C., Grzenda, D., Morrison, A., White, H., Michel, A., Examining the Relationship Between Weathering and the Accumulation of Metals on Macroplastic Debris Collected From Coastal Environments, 2022 Ocean Sciences Meeting, Honolulu, HI. (Abstract).
 2021 de Vos, A.; Aluwihare, L.; **Youngs, S.**; DiBenedetto, M. H.; Ward, C. P.; Michel, A. P.; Colson, B. C.; Mazzotta, M. G.; Walsh, A. N.; Nelson, R. K.; Reddy, C. M.; James, B. D. The M/V X-Press Pearl Nurdle Spill: Contamination of Burnt Plastic and Unburnt Nurdles along Sri Lanka's Beaches. *ACS Environmental Au*.
 2019 Maldonado, S., Reczek, J., **Youngs, S.**, Macinnes, M., Sinniah, K., Cousineau, B. Discovery of Unusually Stable Reduced Viologen via Synergistic Folding and Encapsulation. *J. Electrochem. Soc.* 2019, 166(15).

PRESENTED TALKS:

2 April 2019 Presenter: Reczek, J., and **Youngs, S.** Synthesis of Organic Aromatic Dimers for Supramolecular Radical Chemistry. 2019. Poster session presented at the American Chemical Society 2019 National Meeting. Orlando, Florida.