

Incentive Fund Project Report
Hannah Gold
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Project Title: Sustainable Practices in the Liotta Lab

Project Team Members: Hannah Gold

Amount Awarded: \$5000

Total Amount Spent: \$5000

Brief Description of Project for the OSI website & communications:

This project aimed to address significant water and solvent consumption associated with manual dishwashing in the chemistry lab. Hand-washing uses five times more water than a dishwasher cleaning the same items. Additionally, most chemistry labs use a solvent (acetone or ethanol) rinse after washing with water. On average, each chemist in our lab uses around fifty pieces of glassware per week, amounting to 212L of water and 500mL solvent per chemist per week. A dishwasher has the potential to decrease that water usage by 94%, diverting hundreds of gallons of water and solvent waste. Funds received from this incentive grant went toward purchasing and installing a glassware washer for our laboratory.

Objectives:

1. Reduce water consumption in glassware cleaning processes.
2. Decrease reliance on solvents like acetone for post-wash rinse purposes.
3. Align Liotta lab practices with broader sustainability objectives.

Results & Lessons Learned:

While we have only just installed the dishwasher, the process of attaining the instrument was a learning experience. We learned the importance of allocating a space amenable to plumbing and electricity modifications which can provide a playbook for future labs if they wish to make this change. The project also brought increased awareness into the lab about the broader environmental impact of our solvent and water usage.