

Chemistry 17-18 MSFT SUMMARY REPORT:

- #17.01 Chemistry Laboratory Instrumentation Refresh

Provide a summary report of your submission and how MSFT funding has helped improve resources and experiences for students at CI? If your submission has a sustainability element, how has this contributed to CI's sustainability efforts? Feel free to add photos.

The funding was critical to help improve student learning in our laboratory classes by providing funding for new and replacement instrumentation for our teaching labs. The new instrumentation includes a Microplate Reader, which we use primarily in Biochemistry laboratory. We had 136 students taking biochemistry laboratories last year. We also purchased a replacement Gas Chromatography instrument for a unit we retired. The previous unit was purchased in 2003. This is a workhorse instrument for organic chemistry, which had 327 students last year. We were able to purchase an optical light scattering instrument, which we will use to develop new experiments in physical chemistry laboratory. This was a very timely purchase as we recently hired a tenure-track physical chemist. We had 46 students take physical chemistry lab last year. We purchased a UV/Vis spectrophotometer for our bio and physical chemistry laboratory, and we were able to use funding to repair our older UV/Vis spectrophotometer in our organic chemistry laboratory. We were able to purchase potentiostats, primarily for our analytical chemistry laboratory, which had 80 students last year. Finally, we were able to refresh 3 outdated computers that were attached to instrumentation with the funding.

Provide a summary of the status of your budget. Were you within budget? Was the entire allocation spent by end of FY? Overspent? An extension requested due to scope/materials change?

We were allocated \$156,000 and we overspent by \$40.22. We modified our request to add the repair of the older UV/Vis unit, which broke down after our application was submitted. We also modified it to add the computers attached to instrumentation when they were not approved to be part of the general refresh program.

Final Comments?

The department is extremely grateful for this funding. Without it, we would not be able to purchase these types of instruments. It is really impactful for our students and has a tremendous positive impact on them.

Additional Statements: