TO: Jenni Nance and Timothy Keirnan
FROM: Rowan Kerns
DATE: 17 April, 2026
SUBJECT: Internship Reflection

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For the duration of the 2026 spring semester, I worked with the Materials Characterization Fabrication Core Facility (MCFF) to help write Standard Operating Procedures (SOPs) for six different instruments and processes in their laboratory. I worked in conjunction with Murphy Mallow, a research technician for MCFF. Murphy served as the subject matter expert for MCFF, and helped with editing some of the technical accuracy of the SOPs. Throughout the course of the semester. Professor Kiernan assisted in copyediting the SOPs to ensure clarity, cohesion, and consistent style.

For five of the six SOPs, Murphy provided me with a very rough list of bullet points outlining which operation options I was to include in each SOP. I pulled information from Murphy's bullet points and the manufacturer's manual to write the content for 5 of the SOPs. For the Cold Mount with Epoxy Resin SOP, I wrote all of the content from a training session with Murphy.

I have gained a lot of knowledge and valuable experience that will carry over to further projects. To ensure that the technical content of the SOPs were accurate to the operations of each instrument, I participated in informal training on all of the instruments I wrote about. This was particularly valuable to me because of my personal interest in electron microscopy. I made sure to take notes so I wouldn't forget any steps of the operation method. I also learned how to write while following, and adjusting a laboratory/company specific style guide.

As I graduate next semester, I think about how these skills I've learned could translate into skills for a future career. Keeping track of all of the work I did on the Google Sheets Internship Tracker has taught me how to discipline myself, communicate professionally, and manage my time effectively.

Appendix: All Standard Operating Procedures

- PX300 Grinder Polisher SOP Final
- PX400/500 Grinder Polisher SOP Final
- MSX255M Sectioning Saw - MCFF Final
- MX500 Mounting Press MCFF DRAFT
- MX500 Mounting Press FOR STAFF MCFF DRAFT
- Cold Press SOP-MCFF