

RESEARCH FACILITIES DEVELOPMENT AND MANAGEMENT

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New Hire Research Lab Development:

- Faculty Search Process: 2015-1016
- Faculty Start Date: August, 2016 Research: Material Substrate Development and Growth
- Laboratory Location Identification: Sept 2016 – Feb 2017
- Initial Laboratory Design: March – June 2017
- Detailed Laboratory Design and Refinement: July – September, 2017

Physical Renovation Started: October 2017

Promised Finish Date: June 2018

Cost: \$990,000 (including contingency)



New Hire Research Lab Development:

- June 2018 “We’re almost done but need two more months to finish”
- August 2018 “We need one more month and went **\$70,000** over budget. It will not happen again”
- Oct – Dec 2018 “Finishing the punch list and only the gas cabinet is left”
- January 2019 “The gas cabinet as installed is not correct. They are redesigning it”
- Feb – June 2019 Gas cabinet redesign, **\$90,000** more
- Summer 2019 Weekly 1-2 hour meetings with entire project team including all contractors **\$150,000** more.
- Fall 2019 “Almost done but your PI has made changes. **\$120,000** more.
- Dec 2019 “It will be done by Feb 1 and we need more money. Do you want commissioning tests?”
- Feb 2020 Project Manager Replaced – they are finishing it soon for **\$30,000** more as final payment.



Lessons Learned:

- Faculty Search Process:

Facility/Renovation Needs, Locations, and Costs MUST be considered in Detail

- Laboratory Design and Cost Estimating:

Take the time to Do it Right the First Time

- Facility Construction or Renovation:

Create a Culture of On Time and On Budget project completion

- Manage expectations throughout the project:

Changes will happen, but handle them appropriately

