Tactic 3: Proactive Lab Renovation Interventions

Lab Setup Impacts Faculty Productivity and Career Advancement

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The research life of an investigator is about 30 years. Our goal is to have their lab ready when they show up. If they must wait a year for their lab to be ready, we're reducing their research lifetime by 3%. Meanwhile their tenure clock is ticking.

Jim Cowell Associate Vice President, Facilities California Institute of Technology 66

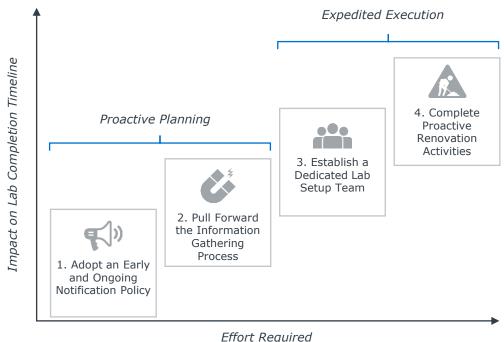
The Chemistry department recently made a high-profile hire who needed a customized lab. We spent a ton of time and money on renovations, but the project took more than a year to complete. Just as we were finishing up, we found out the researcher got fed up with the wait and took a position at another school.

Director, Facilities Planning
Design and Construction
Public R1 Institution

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Four Levers for Planning Lab Renovations for New Faculty Hires

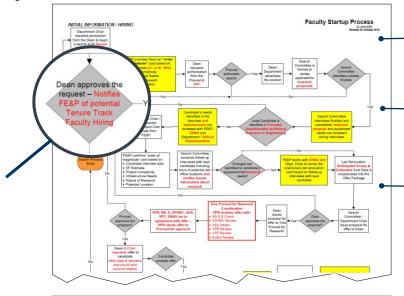


End of

Process

Decision

Rice University's Startup Process for New Faculty Hires



Quality

Check

Clearly denotes roles and responsibilities for all campus partners involved

FE&P1 is notified as soon as a new faculty hire is approved and before search is initiated

Search committee updates FE&P throughout the recruitment process (e.g., once lead candidate is identified, once offer is developed)

Other potential policy adjustments:

- Facilities and Research have representative(s) serve on search committees as ex officio members
- Facilities and Research participate in developing unit and institutional hiring plans

Flowchart Kev

Process

Step

¹⁾ Facilities Engineering & Planning.

2. Pull Forward the Information Gathering Process

Strategies for Collecting Intel about Lab Needs from Faculty Recruits



Checklist

Faculty recruits fill out a checklist indicating lab needs and preferences (e.g., fume hoods, chemical storage, clean room).

Resource: University of North Texas's Checklists (<u>Short</u> and <u>Long</u>)



Walkthrough

Facilities shows recruits lab space (virtual or inperson) to get instant feedback on desired layout and features.



Interview

Facilities or Research has conversation (virtual or in person) with top recruits about their lab needs before offer is made.

Resource: EAB's Capital Project Planning Toolkit Conversation Guide



Photos

Institution requests that recruits share photos of their current lab setup and equipment with Facilities and Research.



Case in Brief: University of North Texas

- Human Resources process improvement team worked with Toyota Production System Support Center to improve faculty onboarding, including lab setup
- Facilities uses checklists, interviews, and photo reviews to gather intel
- Facilities checks paperwork before units advertise positions and reads offer letters before they are issued, which allows them to check accuracy and minimize subsequent conflict over costs

3. Establish a Dedicated Lab Setup Team





Michigan State's Faculty Readiness Project (FRP)

Team Structure and Dynamics



5 Infrastructure Planning & Facilities (IPF) staff, including 1 supervisor, 1 mechanical engineer, 2 project managers, and 1 operations coordinator



1 Facilities Planning & Space Management (FPSM) staff member



FRP projects are "side of desk" and in addition to other responsibilities



IPF supervisor protects project manager time for FRP projects



IPF/PDC staff prioritize FRP projects over others due to time sensitivity

Key Components



Endorsed by the Vice Presidents for IPF, Research, and Finance



Branded lab setup services as "Faculty Readiness Project"



Actively promoted to academic units through a roadshow presentation



Established **consistent responsibilities** based on team member expertise



Scheduled **weekly meetings** to discuss projects and update campus partners

FRP Renovation Projects, 2014-2018



4. Complete Proactive Renovation Activities



Avenues for Expediting Renovation Timelines (Regardless of Occupants)



Sole Source Contractor

Institutions partner with one contractor for a set time period so they can minimize back-and-forth negotiations for each project.



Advanced Purchasing or Stockpiling

Institutions proactively purchase or stockpile frequently used lab materials to avoid order delays.



Occupant-Neutral Improvements

Institutions make foundational and cosmetic upgrades (e.g., plumbing, paint) prior to offer acceptance so they can focus subsequent improvements on occupant-specific needs.



Michigan State University's Faculty Readiness Project (FRP) Approach

FRP team worked with a contract administrator in Purchasing department to develop a request for quote and select a sole source contractor for a 3-year contract.

FRP has stockpiled casework from vacated or repurposed labs and has them refinished by an external partner. FRP also has a close relationship with a local casework supplier to speed up procurement.

After learning about five intended faculty hires in Plant Sciences, FRP pulled forward cosmetic upgrades to increase the space appeal for recruits and reduce the extent of subsequent renovations.