

Meet the Lock Shop

by Teesa Chmielewski

Limited FEDition *writer and Lock Shop Supervisor Teesa Chmielewski writes about her work in the Lock & Key Shop:*

The Caltech Lock & Key Shop's team of locksmiths is dedicated to safeguarding the university. Our work often flies under the radar when everything runs smoothly. But we serve an essential campus function with a certain mystique, a function that is integral to the overall safety of the whole campus and to Facilities operations.

A lot has evolved in my 40+ years working in the lock shop. For instance, when I first joined Caltech as a key clerk, we didn't have a key window. Two Sargent master keys (North and South) together opened nearly every door on campus. We still had a few skeleton keys! And we used to track all key assignments on paper with yellow request forms and index cards. We're finally now in the 21st century, efficiently providing an essential service to Caltech Facilities and the whole Caltech community with online key requests, a database for tracking keys, and highly secure Medeco key systems campus-wide.

A typical day in the lock shop starts with checking out daily keys to Facilities staffers for their work assignments. We check in and out anywhere from 20 to 40 keys through-out each day, checking them all back in at the end of the day. We also manage permanent key assignments to students, faculty, and staff for their office and living spaces. On busy days we can assign as many as 30 permanent keys.

We currently have 68,816 keys, 10,554 doors, 2,500 keyholders, and 86 Medeco key systems — the campus standard — in our database. This year alone we have issued 1,244 keys! The process is significantly easier and more robust now that all campus keys are controlled by our new database system.

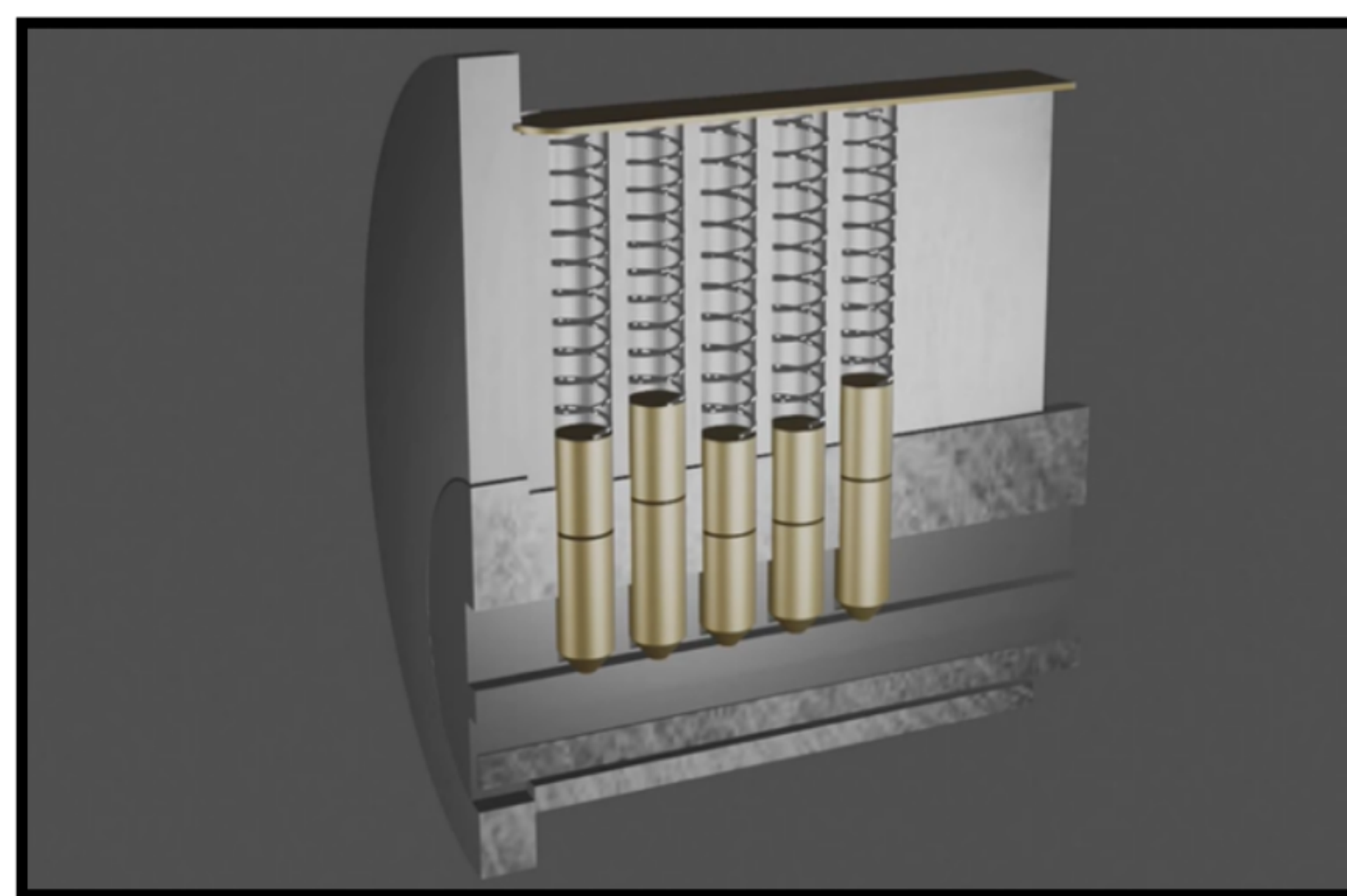
In addition to keys, we are responsible for maintaining all doors on campus. This includes:

- secure keycard access doors and electrical locks;
- door sweeps and weatherstripping;
- all hardware, including locks, hinges, self-closing mechanisms, and knobs;
- ADA/handicap-accessible door operators;
- filing cabinets and desk drawers (we sometimes pick locks when lab keys have been lost!); and
- rekeying and updating combination locks.

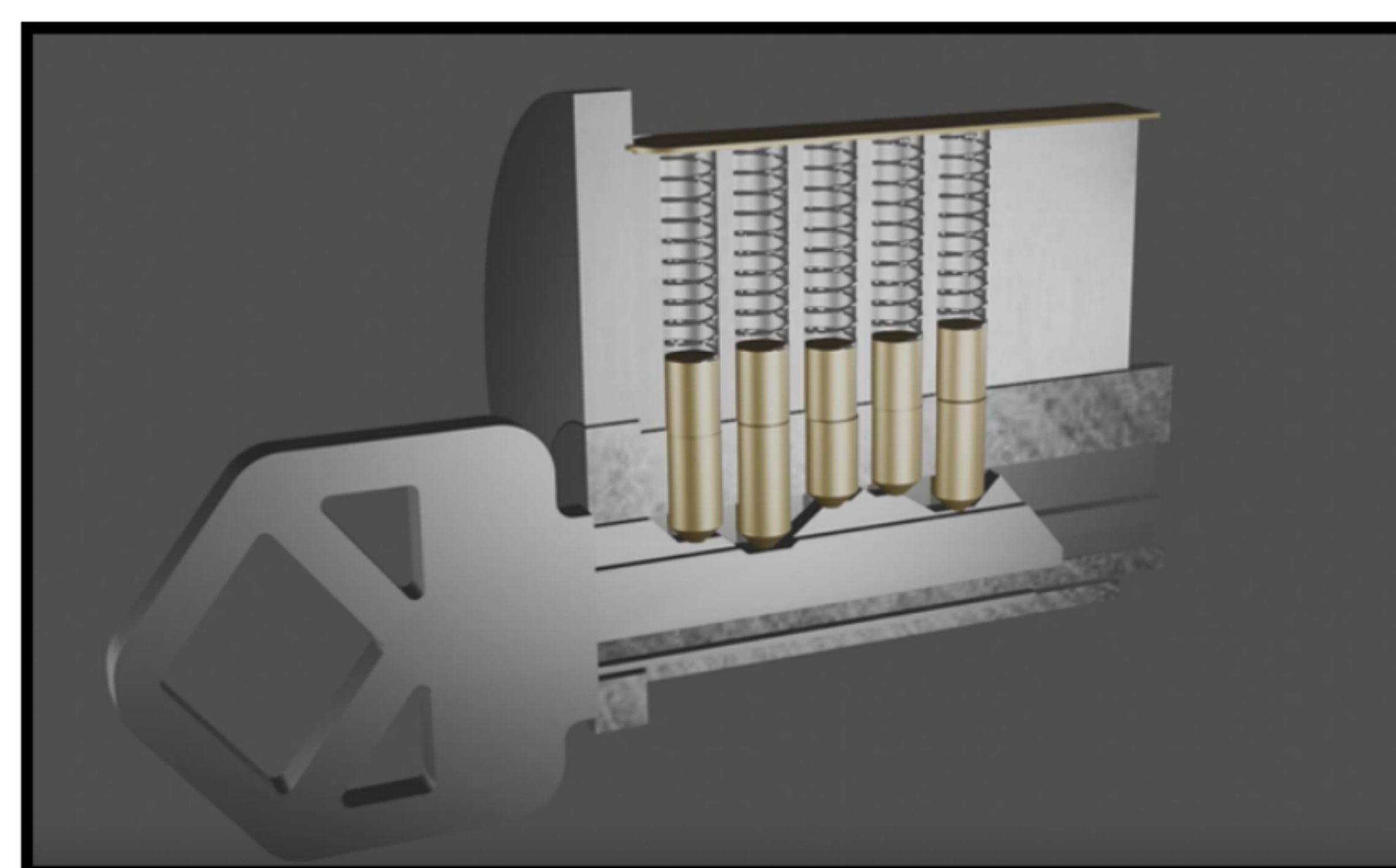
We also ensure that all doors on campus will self-close and lock in the event of a lockdown situation.

How do locks work?

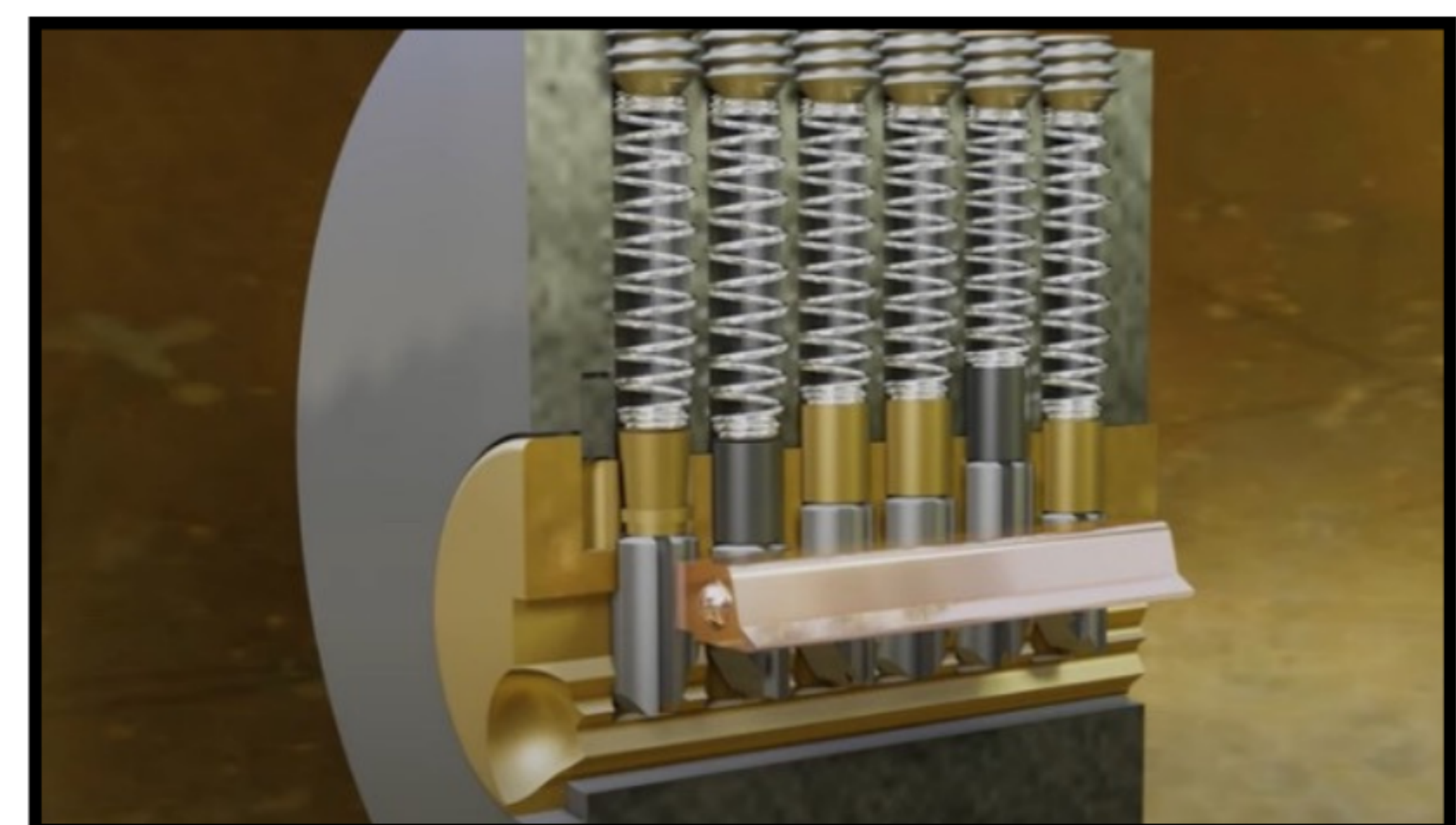
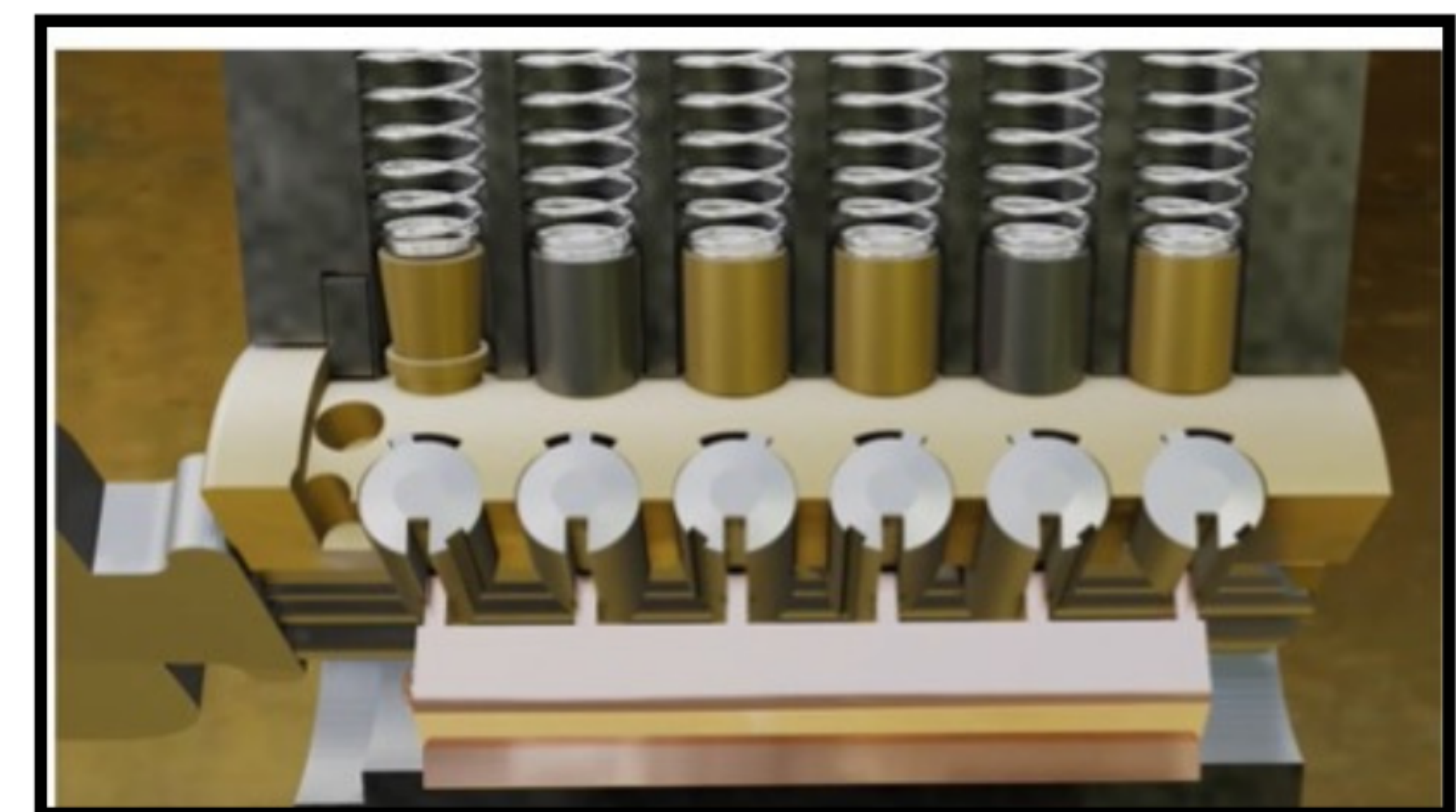
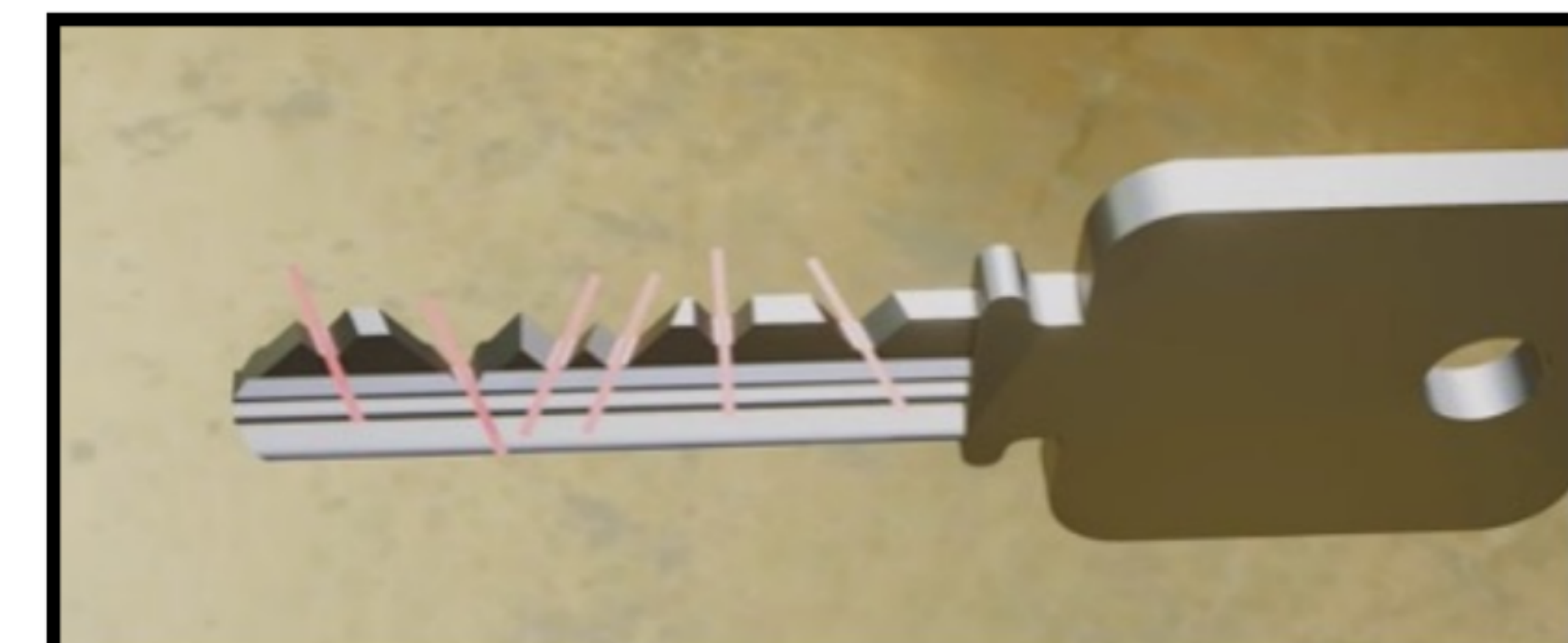
Locks are essentially mechanical puzzles. Shown here is a standard residential cylinder. When a key is inserted, the bumps and ridges in the key push up the pins in the lock. When the pins line up, they create what is called a "shear line," which allows the key to turn.



Standard residential lock



At Caltech, we use secure, pick resistant Medeco cylinders. Medeco keys and locks have angles added to their bumps and ridges. The angles must not only create a shear line but also engage a special side bar before a key will turn in a Medeco lock.



Serving the Caltech community continues to be tremendously fulfilling. And I am grateful to the lock shop crew for their tireless hard work, attention to detail, and commitment to maintaining a secure environment where students, faculty and staff live, learn and work. Next time you pass the key window, be sure to say Hello and Thank You to our important and unsung team of lock shop heroes: Shelby Sheffer, Alex Ferrari, Alex Hofer, and Yours Truly!

Editor's note: Teesa is retiring in April 2024 and will miss us all tremendously. We feel fortunate to have her on the FED Council as her Caltech career comes to a close.



Facilities Engagement & Development Council

AiM Update News

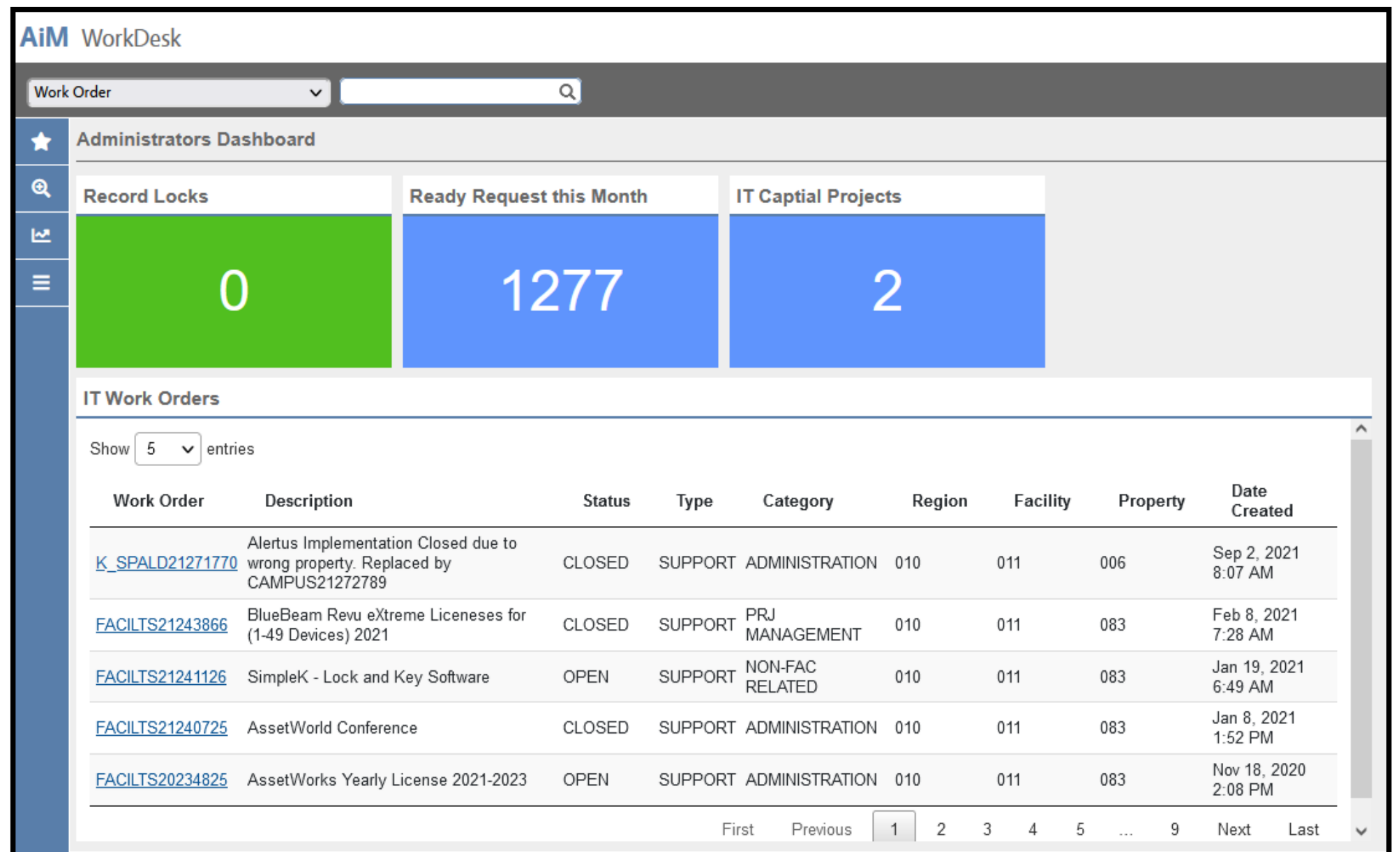
by Alex Flores

Steve Jobs, the late CEO of Apple, once said, “Innovation is the ability to see change as an opportunity — not a threat.” In recent years, Caltech Facilities has gone through many changes, both organizationally and in the software tools we use, including adopting AiM, facilities management software for higher education made by AssetWorks. Innovation like this has catapulted our department forward, allowing us to increase fiscal controls and improve financial accountability within the different Facilities departments.

Because we are upgrading from AiM v11.1 to v13.3 this month, we sat down with Facilities Information Manager Suzy Dollar for an in-depth look at what changes to expect with the two parts of AiM: “Ready Request” (for service requests) and CPPM (Capital Planning and Project Management, for robust fiscal management of capital projects). Suzy expects v13.3 to meet Facilities’ needs for the next 5 years with few if any obstacles.


Suzy indicated that the primary change is the ability to significantly customize your dashboard (see figure).

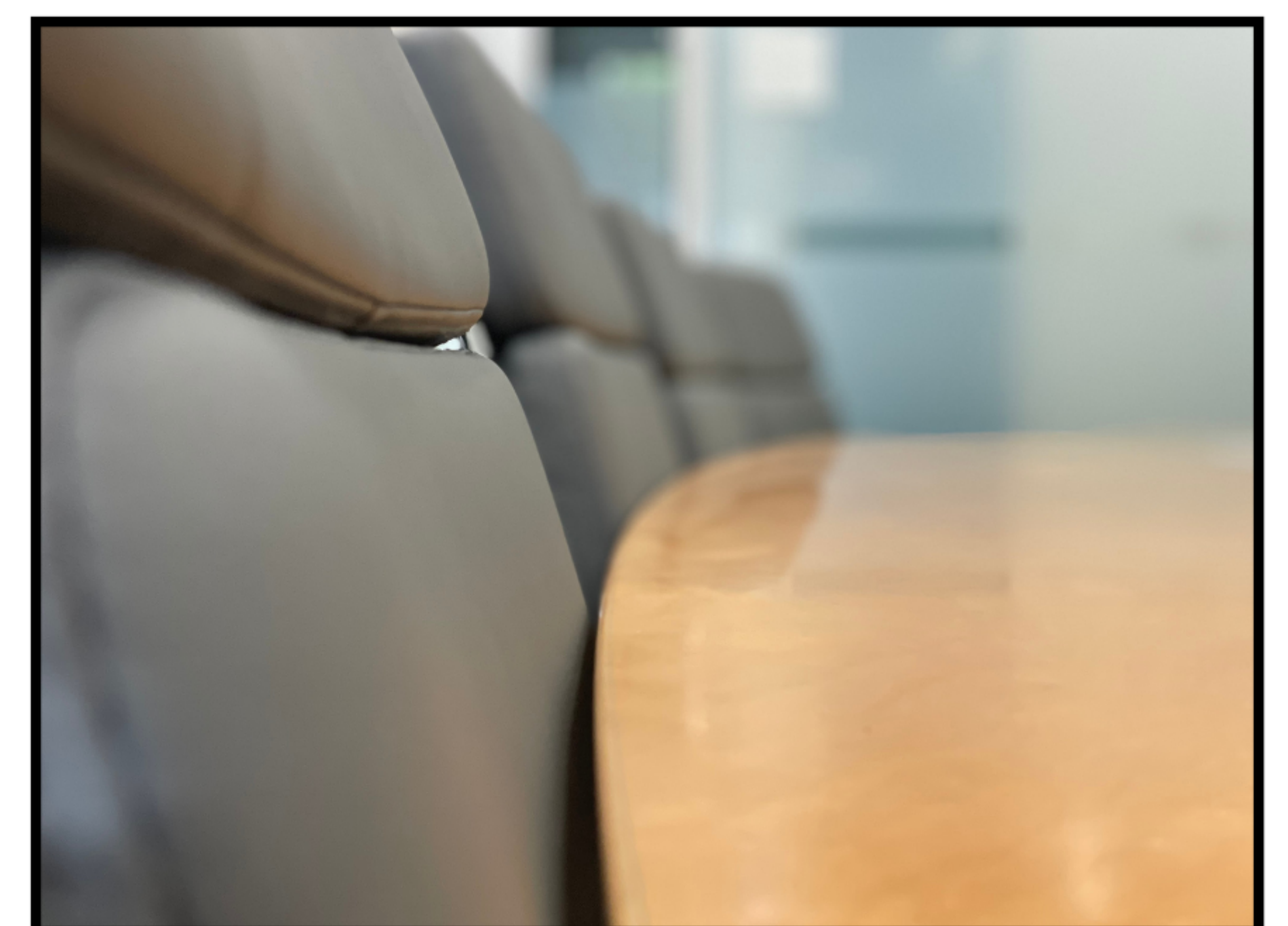
The other changes will mainly affect capital project reporting and project closures. This update will bring us one step closer to our long-term goal of smoothly integrating “Ready Request” and CPPM, seamlessly interfacing service request work orders with project planning and financial approvals.



Customized (V13.3) dashboard

Suzy also indicated that in the very near future our new GIS (Global Information System) will communicate closely with CPPM, giving a PM or supervisor clear insight into construction projects, including visual representation of what materials are being purchased for a particular part of a building. Imagine seeing in 3D the actual square footage and materials of a Crellin wet lab being constructed.

The future is right around the corner, and Caltech is at the cusp of revolutionizing work order tracking, project management, and financial accountability. 



Where am I?
Can you identify these images from around campus?



Fall is Open Enrollment Season!

