

De-Cluttering Lab Spaces with LabSavers: A Lab Clean-Up Pilot in Three CU Boulder Lab Buildings

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University of Colorado
Boulder



LabSavers
Clean Labs. Save Space.

www.i2sl.org/labsavers

Learning Objectives

1. Learn about a lab clean-up pilot offered to labs in 3 departments at CU Boulder.
2. Understand the benefits and challenges experienced as well as improvements to be made for future lab clean-up events.
3. Hear metrics, collaboration, and also how this project is connected to multiple projects and goals of CU Boulder Green Labs.
4. Learn about resources available through LabSavers.



New Resource: Lab Space Assessment and Reallocation Processes at 3 University Campuses



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	University of Colorado Anschutz Medical School	University of Colorado Boulder College of Engineering and Applied Sciences (CEAS)	University of California San Diego (UCSD) Scripps Institute of Oceanography (SIO)
What is the school's or institution's policy on assigning lab space?	See CU Anschutz <i>Research Space Guidelines</i>	MOUs are signed by new and existing principal investigators (PIs) and renewed ever two years. No space commitments or promises are given in new faculty offer letters; instead, their MOU documents space allocation prior to their onsite visit, which ensures space offered to new faculty has been approved by the department and dean's office.	<i>Scripps Institute of Oceanography Space Allocation Policy</i>
Which campus leader gave the charge to conduct lab space assessment and reallocation?	Dean of the Medical School in 2021	Dean of the College of Engineering and Applied Sciences	Authority delegated to the Vice Chancellor of Marine Sciences (VCMS) by the Chancellor of UCSD in ~2023. The Scripps

Inspired by CU Anschutz, UC Davis, and Caltech

UC Davis Partnership with Freezer “Amnesty” at Vet School



2011



University of Colorado
Anschutz Medical Campus

2023

CU Anschutz Wins Award for Lab Space Optimization:

44,000 sq.ft. of Underutilized Lab Space
Reclaimed as Part of Lab Clean-up Project



SPRING 2025

LAB SPRING CLEAN COMPETITION

Why conduct this lab clean-up pilot at CU Boulder?

- Lab space optimization by de-cluttering
- CU Boulder Climate Action Plan
- Re-use of useful surplus items and chemicals
- Figuring out improved processes for future clean-up events and to benefit system-change at CU Boulder.

Efficient and optimized use of lab space. . .



. . .one of the most important climate actions to take when working in labs.

Why? Lab spaces are large energy users due to ventilation needs. Maximizing lab space productivity is a win for science and energy efficiency.

What did the pilot offer to labs?

- 3 weeks (~4 days/week) where labs could drop off unneeded items and chemicals
- Event for 3 large, older lab buildings (Ramaley, Porter and Gold)
- Serving 3 lab departments (EBIO, MCDB, and IPHY)
- 2 drop-off locations were staffed by Green Labs student assistants and FTEs
- Frequently visited by EH&S to help with needs.

NOTE: This opportunity was for labs with members and did not address spaces without occupants that also had items to purge.

Do you have unwanted lab equipment and supplies? Participate in the



Lab Clean-Up Pilot Event!

For Gold, Porter, & Ramaley
From May 19 – June 5, 2025



Drop-Off Locations:

- Porter B413
- Ramaley N189

Drop-Off Times:

- 10am-3pm
- Week 1: 5/19-5/22
- Week 2: 5/27-5/29
- Week 3: 6/2-6/5

This pilot is a collaborative effort of:

- Green Labs • EH&S
- Property Services
- FM Sustainability
- EBIO, IPHY, MCBD property managers
- Ramaley and MCBD building managers
- CCO Property Accounting

Instructions for Drop-Off:

<https://shorturl.at/9Hlo8>



Drop-Off Submission Form:



Items for disposal/surplus can only be dropped off at the times and dates above. Please follow all rules in the instructions and use the drop-off submission form.



Questions? Email: greenlabs@colorado.edu
or visit the drop-off sites during the scheduled hours above.



It takes a village!

- Green Labs (FTEs & Students)
- FM Sustainability
- EH&S
- Property Services/Surplus
- Property Accounting
- Property Managers
- Building Managers
- Dept chairs & researchers

Prep meetings

- Identify locations (including those suitable for chemical collection)
- Instructions with rules to follow
- Setting dates that would work for all
- Create forms and flyers
- Outreach

EH&S Green Tag & Google Form required for each item dropped off by labs

 Environmental Health & Safety
UNIVERSITY OF COLORADO BOULDER

Green Tag

(303) 492-6025

Equipment Description: _____

(Include all ID numbers)

Principal Investigator: _____
(Printed Name)

Current Location: _____
(Building/Room Number)

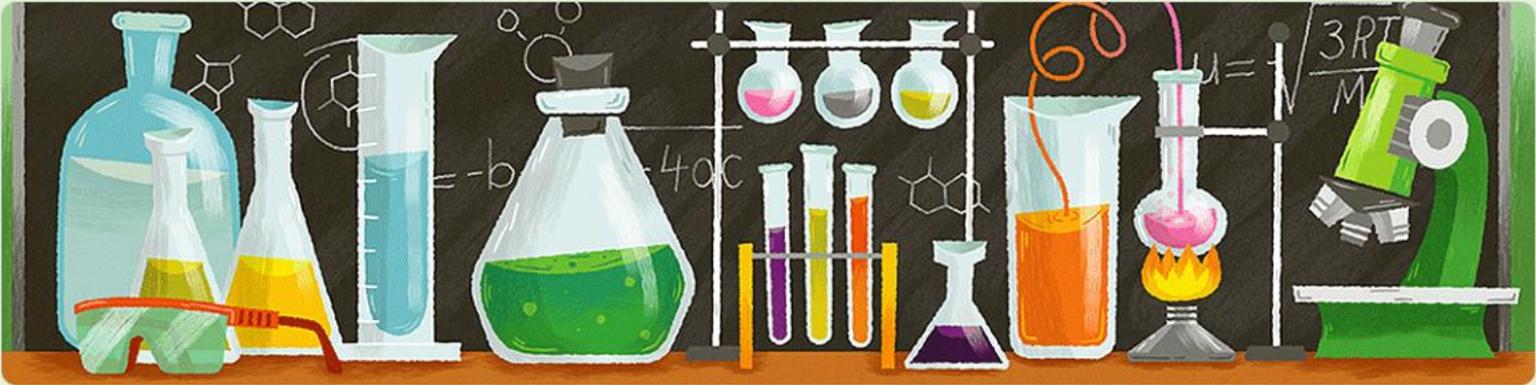
I certify that this item has been properly decontaminated of chemical, biological and radiological hazards and is ready for relocation.

Printed Name: _____ Date: _____

Signature: _____

Email/Phone Number: _____

Notes/Special Instructions: _____



Section 1 of 8

Lab Clean-Up Pilot: Item Drop-Off Submission Form

✕ ⋮

Pictures from two drop-off sites



**Pile of EH&S
Green Tags**



Lots of coffee makers! ☺









I scream, you scream, we all scream for ice cream!

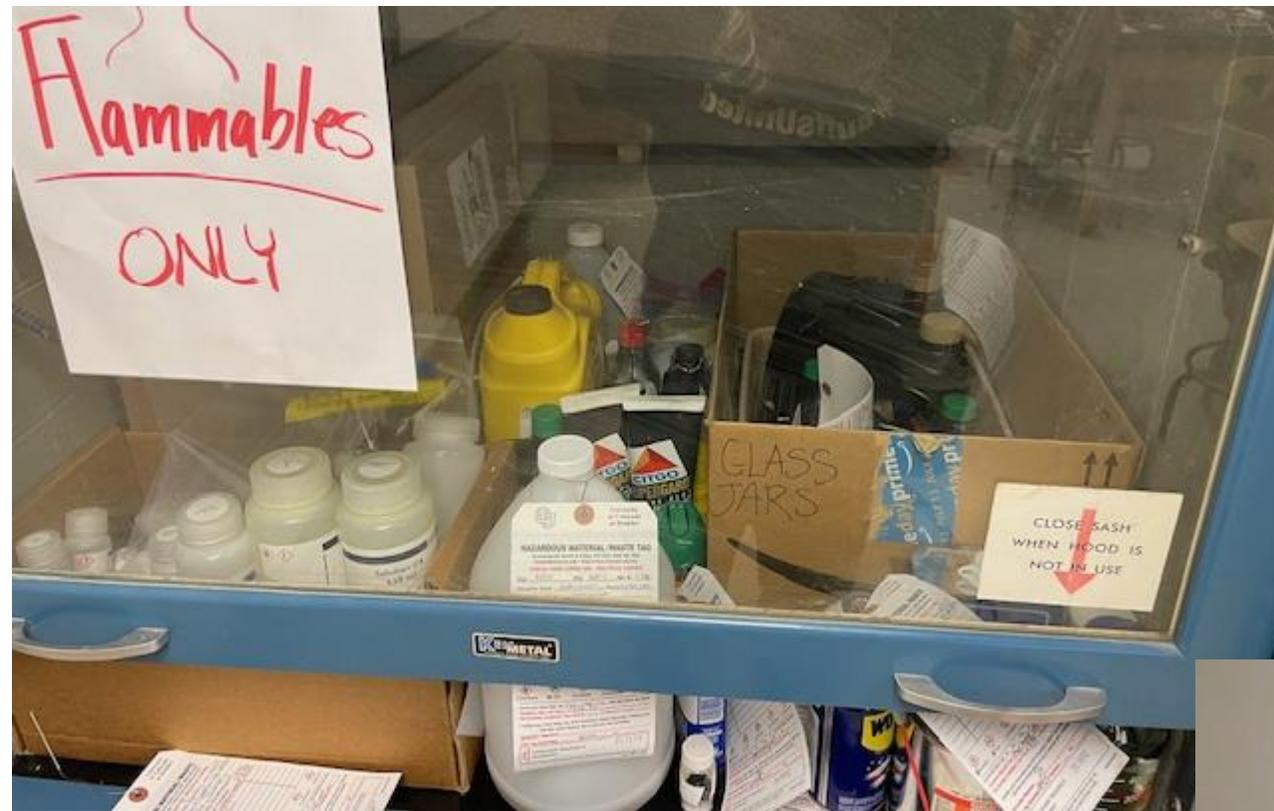


Some of the items picked up directly from labs



Chemicals







Geiger Counters

Moved to hallway with last items – pilot took longer than expected



How many items were dropped off in 3 weeks?

~800 items dropped off

- equipment, supplies, chairs, computers, etc.
- So far, our sales revenue is ahead of our disposal costs by ~\$2780

1005 chemicals dropped off

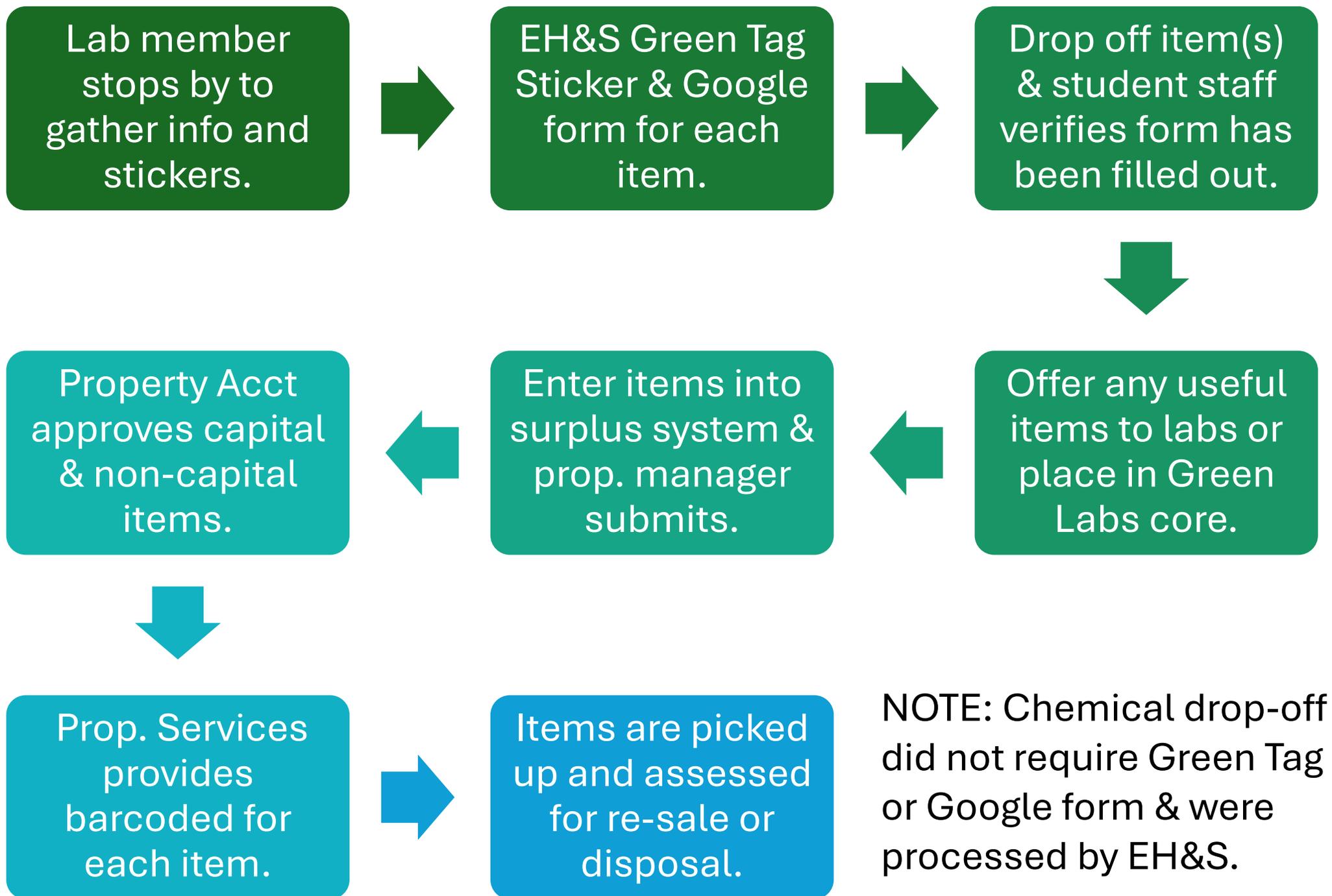
- solids, non-hazardous liquids, flammables, liquid acids, liquid bases

Some repurposing of useful items, but could have done so much more

Lab members were allowed to “shop” for items and chemicals that they wanted.

- EH&S transferred requested chemicals from one lab inventory to another.
- Perhaps ~30 equipment items redistributed to labs (& also some supplies).

Lab Clean-up Process followed by Green Labs



NOTE: Chemical drop-off did not require Green Tag or Google form & were processed by EH&S.

Picking items up...



Property Tag



10161-48095-008

LABORATORY EQUIPMENT
ZEISS AXIOPHOT MICROSCOPE

Sticker with barcode:
required for pick-up.



**...to be processed at
Distribution Center.**



Challenges

Example CU Tag:



- One lab department had not done their CU Tagged (capital) inventory and thus was out of compliance...the dept could not submit items for surplus/disposal until that was resolved. **Having an up-to-date CU Tag inventory will be a pre-requisite for future lab clean-up events.**
- The process for surplus/disposal of items had recently changed and thus there was a learning curve for not only Green Labs but also others involved.
 - We learned late about bulk uploads and that Property Accounting wanted CU Tagged submitted separately from untagged items. **Our new SOP will avoid these challenges in the future and our new Google forms are designed to allow bulk uploads by cutting and pasting from the form.**
- Apple monitors are sometimes computers and thus required serial number submission. These required re-submission. **We will be more experienced next time.**
- Most lab members were more than willing to follow the rules, but there were a few who refused to fill out the form for each item. **We have simplified our form for future events.**
- The process to dispose has many steps and as a result can take a long time from submission to pick-up. Processing all the items took us months. **This lab clean-up pilot has made us experts and we are able to be much more streamlined for processing surplus in the future.**

Resources & items to note for next event

- One building instead of three
- 2 weeks for drop-off
- Ask for funding for temporary employee
- Increase efforts for re-use (equipment & chemicals)
- New simpler surveys for three categories:
 - CU Tagged items
 - Untagged items
 - Chemicals
- SOP created for more streamlined process
- New poster and flyer

Take part in the CU Boulder Green Labs'

Lab Clean-Up Event



This event is for (name buildings/departments here)

Drop-Off Sites:

- Room #1
- Room #2
- Chemicals

Drop-Off Times:

- 10 am – 3 pm
- W1: Dates
- W2: Dates

Items for surplus/disposal can ONLY be dropped off during the days/times above
Please follow ALL instructions/guidelines

Drop Off Instructions/ Guidelines



We accept most lab supplies and equipment, CU Boulder tagged or untagged, and some types of chemicals. Fill out an EH&S Green Tag and the appropriate form below for each item!!


Untagged Item Drop-Off Form


Tagged Item Drop-Off Form


Chemical Drop-Off Form

Questions? Email greenlabs@colorado.edu OR visit the drop-off sites during scheduled hours.

This project is a collaborative effort between:

- Green Labs
- Environmental Health & Safety
- Property Services
- Facilities Management
- Sustainability
- Building Property Managers
- Building Managers
- Campus Controller's Office, Property Accounting

Why are universities ending up with cluttered labs?

Complex process to dispose, and institutions often have insufficient support for surplus efforts.

Funding (grants)- enables purchase of duplicate, unshared items instead of promoting cores.

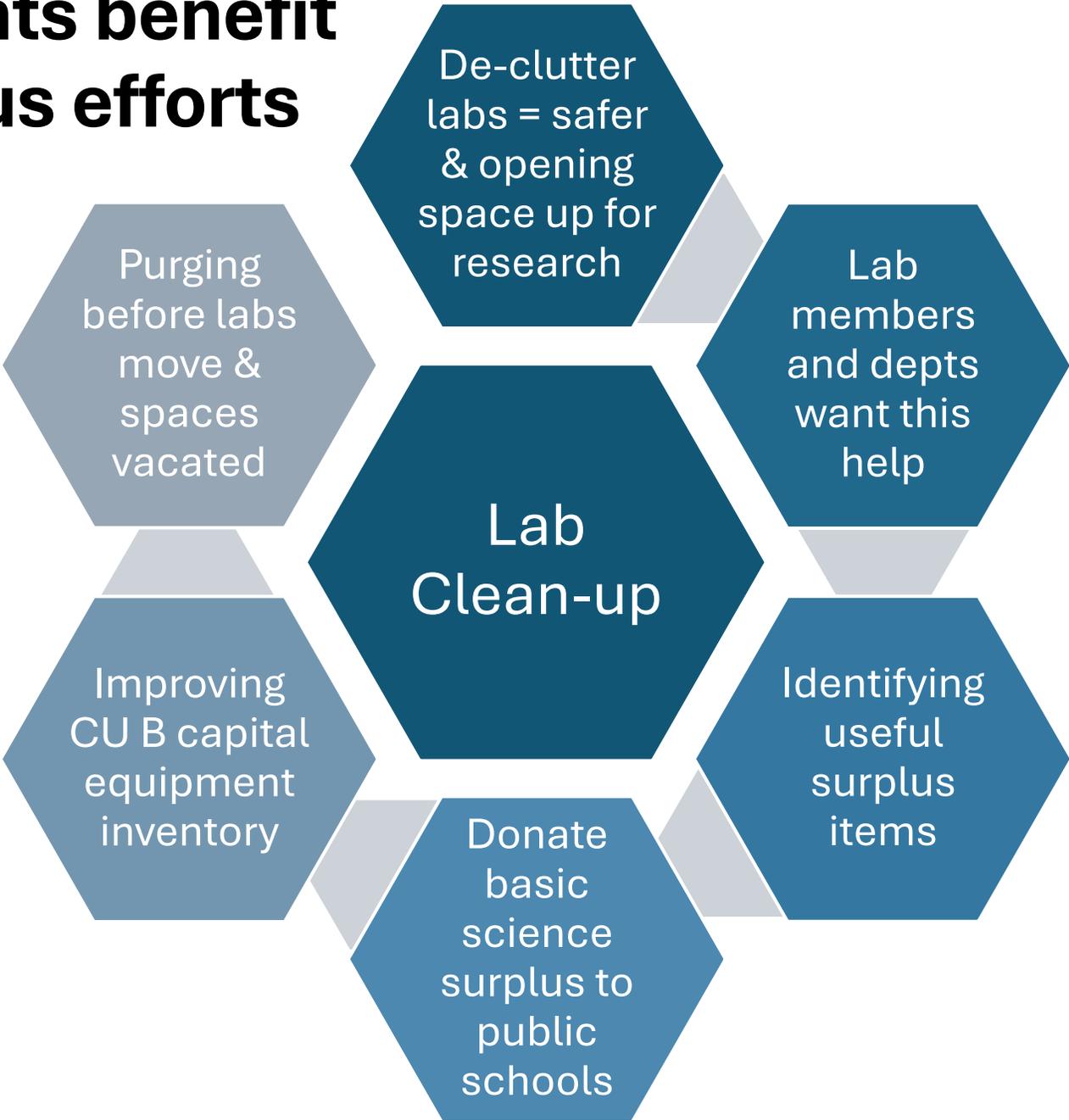
As research changes directions, so do needs of lab groups, resulting lab space becoming storage space.

Offer letters/start ups usually continue to promote culture of my lab, my equipment.

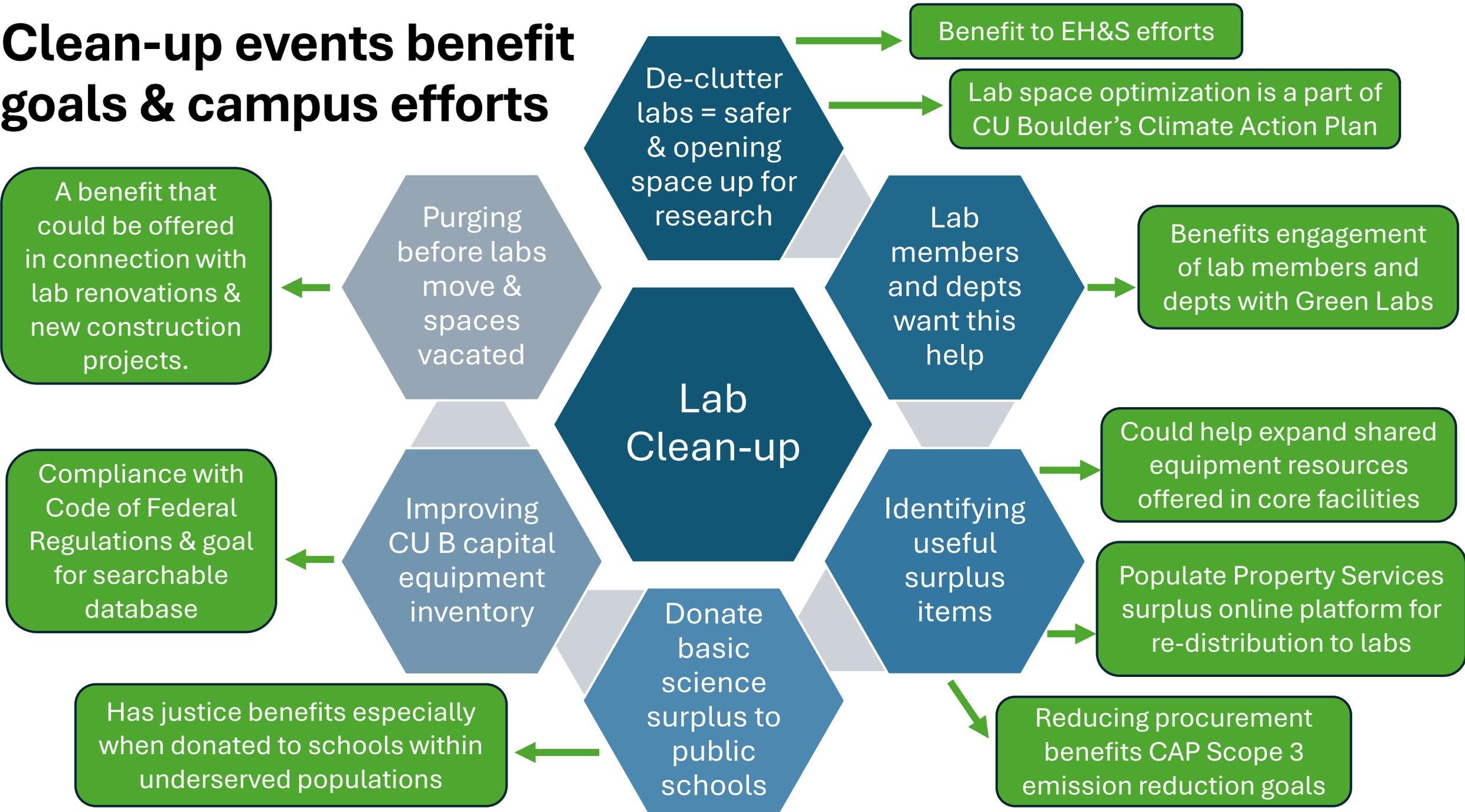
US overhead funding process does not encourage lab space optimization.

Institutions usually lack processes for regular assessment of research activity & reallocation of space.

Clean-up events benefit goals & campus efforts



Clean-up events benefit goals & campus efforts



Questions?

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Green Labs Program

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Compliance benefits can be leveraged to request funding for equipment sharing & surplus re-use efforts

Code of Federal Regulations (CFRs) requiring sharing and avoiding duplication:

- [2 CFR 200.318 d](#): **Avoidance of unnecessary or duplicative items.** “The recipient's or subrecipient's procedures must avoid the acquisition of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a more economical purchase. When appropriate, an analysis should be made between leasing and purchasing property or equipment to determine the most economical approach.”
- [2 CFR 200.318 f](#): **Use of excess and surplus Federal property.** "The recipient or subrecipient is encouraged to use excess and surplus Federal property instead of purchasing new equipment and property when it is feasible and reduces project costs."
- [2 CFR 200.313 c2](#): “During the time that equipment is used on the project or program for which it was acquired, the recipient or subrecipient must also make the equipment available for use on other programs or projects supported by the Federal Government, provided that such use will not interfere with the purpose for which it was originally acquired. First preference for other use of the equipment must be given to other programs or projects supported by the Federal agency that financed the equipment. Second preference must be given to programs or projects under Federal awards from other Federal agencies. Use for non-federally-funded projects is also permissible, provided such use will not interfere with the purpose for which it was originally acquired. The recipient or subrecipient should consider charging user fees as appropriate.”