# UW-Madison Green Labs Team & Program







## About the Team & the Certification Program

~ 10 staff members



- ~ 15 student interns
- ~ 10 intern teams





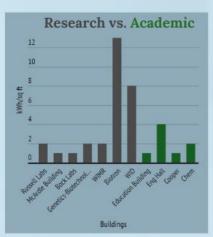


Suzie Kazar

- Green Labs team (and lab certification program) began in 2018/2019
- Grassroots certification program
- Team members consult with campus labs to complete a certification checklist
- Also perform research related to labs & sustainability

# ELECTRICITY USE In Labs Across Campus





## **PCR Machine** 2.7% Autoclave 17.5% **Fume Hood** Cold Centrifuge 1.2% 44.7% Gas Lasers **Ultra-Low Freezer** 6.2%

## Academic vs. Research **Buildings**

On average, research buildings use approximately 2.5 kilowatt hours per square foot more than academic buildings.

## Lab Equipment

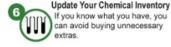
Research labs require many energy intensive machines, leader to higher energy use than academic buildings (source: USCS Sustainability).

## Top 10 Tips to Green Your Lab



### Shut the Sash

One fume hood can use as much energy as three homes



## If you know what you have, you

can avoid buying unnecessary



## Maintain Your Freezers

Free up space and reduce energy use by cleaning out reezers and discarding old



### Be Mercury-Free

Whenever possible, use mercury-free equipment to prevent runoff into the water



Recycle nitrile gloves, pipette travs, and old electronics and



## Purchase Efficiently

Whenever possible, buy Energy Star certified equipment.



### Separate Your Waste

Obtain the proper bins for your lab so you can divert material from the landfill



### Reduce Electricity Use

Turn off lights when leaving the room and unplug equipment when not in use. Powerstrips make it



## Reduce Paper Use

Reuse packaging materials and remove your lab from unnecessary mailing lists



## Run When Full

Only run dishwashers or autoclaves when they're full.

If you're interested in learning about how you can implement more sustainable practices in your teaching or research lab, please reach out to the Green Labs Team at greenlabs@g-groups.wisc.edu. We look forward to working with you!

# Our Certification Program

Water and Energy Conservation

Education and Collaboration

Proper Waste Disposal

Sustainable Purchasing

## **Certification Program Process**

- 1. Initial meeting & walkthrough of the lab
- Access to checklist
  - a. Labs work on checklist with designated lead
  - b. Must complete 7/9 action item groups for certification
- 3. Check-ins with Green Labs team whenever questions or issues arise
- 4. Final walk-through of lab with Green Labs team
- 5. Certification (framed certificate & website shout-out)



# **Certification Program Impacts**

- 6 labs have completed certification
  - ~100 employees
- 6 labs are completing certification
  - another ~100 employees
- Big pause during virtual instruction
- Recent swell of interest among campus labs
- No other impact metrics are currently being measured
  - labor-intensive (not insurmountable) to get granular data on lab energy/water/waste etc.
  - could be integrated into the certification process
- So.....My Green Lab?





# Thanks!



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