

GREENLABS GUIDELINES

The Office of Sustainability GreenLabs Program is designed to educate and empower campus labs to work toward laboratory sustainability. Through management training and collaboration, labs will work toward sustainable purchasing practices and sharing resources, energy and water conservation, and waste reduction efforts. These guidelines have been designed to reduce the carbon footprint of these areas of campus.



AREAS OF FOCUS

Management/training

Introduce, review and remind staff of correct green lab practices at meetings

Freezer Clean Out Events

- Inform the lab in advance and encourage participation from all members.
- Create a schedule and have researchers sign up for time slots when they can remove materials from the freezer.
- All samples that are going to remain in the freezer should be labeled and entered into a database.
- Make sure the lab manager is present at the event in case anyone has questions.
- Remove excess ice using a rubber mallet (metal tools may damage freezer coils).
- Once the cleanout is complete, try to consolidate space and unplug any freezers that are no longer needed. If this is not an option, fill excess space with water bottles (filled with water) so that the freezer maintains temperature until more samples fill in.
- Contact EHS & EM personnel to ensure that all unwanted samples are disposed of properly



Purchasing

- Order products from companies that conserve materials or use recycled content for packaging
- Share resources with neighboring labs
- Purchase efficient equipment- Energy Star rated
- Consolidate orders to reduce packaging
- Regularly update chemical inventory and audit chemical supply to prevent over-purchasing

Chemical Storage/Use

- Reduce hazardous chemical use when possible
- Use chemicals/reagents on a first in - first out basis

Energy Conservation

- Retire old equipment and purchase energy efficient- Energy Star
- Keep windows closed
- Fine tune HVAC systems
- Fume Hoods
 - Shut the sash when not in use
 - Never use for storage of chemicals
 - Be sure occupancy switch is turned off when not in use
- Remove space heaters
- Best management practices for freezers include:
 - Storing samples at high density
 - Keeping inventory
 - Cleaning out unused samples
 - Defrosting
- Temperature is also important. The difference between -70°C and -80°C makes no difference for most samples, but the extra energy required to maintain -80°C adds up
- Turn off equipment and lights when not in use
- Use full loads in autoclaves and incubators
- Do not use hot plates or freezers next to HVAC auto temperature sensor system



Water Conservation

- Water timers
- Water misers
- Report leaks immediately
- Do not use aspirators
- Use tap water when possible



Waste Reduction and Recycling

- Recycle
 - recycle plastic, glass, paper, metal and cartons with single stream collection
 - flatten and recycle cardboard in blue dumpsters
 - plastic film recycling collection
 - Nitrile Gloves
 - VWR and Kimberly-Clark both provide nitrile glove recycling services.
 - VWR's glove recycling program is free and allows for the recycling of any nitrile gloves, while Kimberly-Clark's program is not free and accepts only Kimberly-Clark products.
 - Block Styrofoam recycling
- Practice green chemistry to reduce the volume of hazardous chemicals used
- Hazardous/Biohazard
 - Be sure to comply with campus standard on all bio and hazardous waste disposal

