BEST PRACTICES

Sustainability

Rationale: U-M is committed to sustainability and research cores are uniquely positioned to be leaders of sustainability practices in science. This document provides a number of resources and tips to help your core contribute to U-M's sustainability goals.

Acronyms, Abbreviations, Definitions, Units

- OCS - Office of Campus Sustainability serves as the focal point for sustainable campus operations
- EHS - Environmental Health & Safety Office promotes health, safety and environmental compliance within the U-M campus community
- Procurement Services - supports all procurement needs for all U-M campuses
- SOP - Standard operating procedure

Guidance

Sustainable Lab Certification Program

This program, led by OCS, will help you assess your current practices, identify targeted actions to improve your level of sustainability, and ultimately earn a rating (from Bronze to Platinum) and public recognition for your efforts!

- Define your workspace
- Complete the self-assessment of your workspace - Lab Assessment
- Once submitted, an OCS staff member will work with you to assess next steps to achieving your sustainability rating

Sustainable Purchasing

Refers to the purchasing of products and services that have. a reduced effect on human health and the environment when compared to competing products and services.

- Prioritize ordering goods and services from the University-Wide contracts established by U-M Procurement Services
- Prioritize products and services that have obtained environmentally sustainable certifications. The ACT Database is a helpful tool that shows the life-cycle impact of products.
- Substitute sustainable products where appropriate including recyclable, compostable, and reusable materials
- Refrain from the procurement and use of single-use plastic

BEST PRACTICES

Guidance Continued

Lab Reuse Program

The Lab Reuse Program (formerly known as ChEM Reuse) supports U-M labs and U-M's waste reduction goal by enabling surplus chemicals, lab equipment and materials to be used in other campus labs rather than being sent out for disposal. The program is operated by OCS in partnership with EHS. Any U-M Ann Arbor lab can donate usable items or request items - for free!

- Request items from the Door-to-Door Program, including chemicals, here
- Visit the Lab Swap Shop at the North University Building every Thursday, 1-3pm
- Donate items - email sustainable-labs@umich.edu with a description
- Host or participate in Lab Reuse Events

Green Lab Practices

Your core can make an impact on reducing U-M's carbon footprint

- Replace single-use plastic with glass whenever possible
- Schedule an annual freezer clean-out to remove unneeded and expired reagents and defrost the unit
- Share freezer space when possible
- Unplug un-used or infrequently used equipment
- Regularly monitor faucets and put in work orders for any leaks
- Practice "just in time" purchasing of reagents and materials
- Substitute high hazard chemicals - USC, Millipore Sigma, PennEHRS
- Consider building layout efficiencies to minimize energy expenditure

Create Standard Operating Procedures

A set of step-by-step instructions to help employees carry out routine operations

- Following SOPs not only helps with reproducibility, but it also decreases waste opportunities by ensuring all staff know the appropriate procedure to follow for each experiment
- Consider using digital systems to manage your SOPs to eliminate paper waste, Protocols.io is a great option for this

Resources

Please see Addressing the Environmental Impact of Science Through a More Rigorous, Reproducible, and Sustainable Conduct of Research (doi: 10.7171/ 3fc1f5fe.d085ce95) for more information on the important role Research Core Facilities play in RR&T and Sustainability!