

250214 Meeting Minutes

Attendees: Maddy Adolf, Linda Mondaca, Alyssa Player, Vijaya Kumar, Ben Ben, Annie Lam, Yiting Wang, Genevieve Gandara, Jaasiel Alvarez, Henry P, Cate Holmes, Dennis Ko, Christopher Kalaw, Tasha Cammidge, James Linton

This month, [RSVP here](#) to order food from [My Vegan!](#) [In your RSVP](#), please type in the meal you would like and all the details for the order. **The deadline for submitting your food order is Thursday 9am.** I will also bring a kettle so we can boil hot water and I will bring some yummy hot chocolate packets and tea bags for folks to enjoy! If you prefer, BYOT. **Please remember to bring your laptops.** For bonus sustainability: folks can bring their own cups and/or utensils and/or plates as an alternative to our usual compostable ones!

Will update [Restaurant Guide](#) and our [Coffee, Breakfast, and Dessert Guide](#)

- My Vegan had plastic straws and bags, but the rest of the packaging was recyclable or paper

Introductions ...

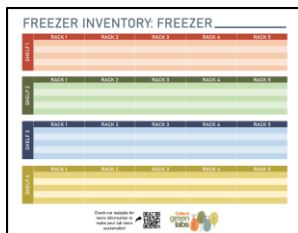
[Million Advocates for Sustainable Science](#) Petition

- International Institute for Sustainable Laboratories (I2SL) along with My Green Lab are petitioning to change funding granting agency policy to promote sustainable research
- By signing the letter you can help transform how science funding organizations set expectations for efficiency, resiliency, and sustainability in the way scientific research is conducted
- Reached 1100+ signatures!

Green Labs Monthly Tip: Freezer defrosts!

If needed, you can book an extra freezer by emailing bbereceiving@caltech.edu!

1. We recommend making sure your alternate freezer is at your required temperature before attempting a clean-out.
2. Take a picture of your freezer so you remember where everything went before the transfer.
3. Move freezer racks into the new freezer using a cart, keeping the order the same as in the original freezer if possible.
4. Put any loose items (in doors, on shelves etc.) in bins and transfer those to the alternate freezer.
5. Turn off your now-empty lab freezer and set out trays or bins to collect the melting ice (we like to use the autoclave bins!). Cloths can be used to direct the drips as well. Post a sign near or on the freezer to warn lab members of potential slipping hazards.
6. Once all the ice is melted, wipe out the freezer with a dry cloth thoroughly and then turn on the freezer.
7. Once the freezer is at the correct temperature, put all items back in, following your picture as a guide.
8. Inventory your freezer to make it easier to find things, meaning your lab spend fewer minutes with the door open (and reducing the number of defrosts you have to do every year!)
 - a. Green Labs has [digitally fillable inventory sheets](#) or [blank printable inventory sheets](#) if your lab needs (both for an entire freezer on page one or just for a shelf full of racks on page two).
9. Also check out the [Freezer Rebate Program](#) and the [International Freezer Challenge](#)!



Updates

- **25 Certified labs!! WHOOOOO**
 - o Please get CERTIFIED TODAY! To get certified, finish the easy, 30-minute [Green Labs Certification](#) and submit it to sustainability@caltech.edu.
 - o Certified Labs-exclusive event planned for April!

Updates – Pilot Programs

- FUNDING IS AVAILABLE – SEE PILOT PROGRAMS WEBSITE
- Lomi Composter Pilot (8 on campus): 475 kg of dirt (2375 kg (or 5236 lbs!) food waste)
 - Donation of \$345 worth of supplies!!
 - 8 total on campus
- Pipette Tip Box Recycling: 2,530 pounds (5490 gallons or 20,781+ liters) of plastic waste diverted
- -70°C/-80°C Comparison Pilot: 5 labs involved, collaborating with NIH and UVA
- PolyCarbin: Initial order replaced 31 pounds of crude oil and reduced 122 pounds of CO2E via sustainable procurement
- AP: sent off another box of coloured plastic, 34 lbs of plastic recycled, 12,793 water conserved, 70 lbs carbon emissions reduced
- Styrofoam recycling pilot
 - DIVERTED 11 DUMPTSTERS total!!
 - [Sign the petition!](#)
 - [Technical bulletin from I2SL](#)
 - [LCA of Styrofoam](#)
 - [How to do LCAs](#)
- Fume hood sensor project
 - Around \$1,300 savings per fume hood on average!! GG writing up now for our 21 fume hoods

Updates – Social Media

- [Follow us on social media](#)
 - o Do you have time to [film a short video](#) or [write a blog post](#) I2SL is asking for videos or blogs, and there is a \$500 stipend available!
 - o Letters to the editor California Tech (<https://tech.caltech.edu/about/>)
 - o JA presented her slides (see Drive for details) and made a case for social media at Caltech
 - o [TC will create a folder in the Drive for this](#) so we can collaborate and make sure we are covering interesting topics

- Jaasiel : could do a post about the Styrofoam – share your photos!!
- TC: will update pic to show how many followers we have on the slides

Updates – Past Events

- This past month:
 - January 8 and Feb 5 – Styrofoam recycling days
 - Composting Challenge September-December
 - December 16th Lunch and Learn with Grenova and Lab Managers group!
 - Clean Up Event January – April 2025
 - 2025 [Freezer Challenge](#)– next year make a higher priority!
 - January 1 – July 1
 - Labs compete to improve freezer efficiency, sample accessibility, reduced risks, cost-savings, and energy-savings for their lab’s cold storage!
 - Fun, free program
 - Scored on different categories (like defrosting freezers or inventorying)
 - Awards given at I2SL for the winners!
 - Will provide internal prizes, AND a popsicle party in the summer!
 - FTE Green Labs position announced!

Updates – Future Events

- Coming up:
 - Marketplace Launch
 - Certification Challenge Sweet Treat Event!
 - GL “newsletter” email with updates April?
 - Hosting SURF summer students – Dennis Ko update?

Grenova Pipette Tip Washer Updates

- Background:
 - Grenova manufactures several different models of automated tip washers.
 - This instrument can wash and dry pipette tips using several methods:
 - soaking, pressure washing, vertical agitation, sonication, 1-4 cleaning solutions based on contamination type, and UV light curtain
 - Model at right: 4 racks/cycle, 16-24 tip racks/hour, 30W x 29D x 18H (in.)
 - These tip washers can be integrated into automated systems for tip washing tasks within robotic liquid handlers.
 - Genova has partnered with the NIH and other labs to validate that their tip washer eliminates contamination and has demonstrated reproducible results with washed tips when working with siRNA and peptide libraries, SARS-CoV-2 testing, and toxicology.
- Propose to lease the tip washer for 6 months - 1 year with funding from various labs/stakeholders
- Install and validate, possibly connect to robotic arm
 - Student researchers can help
 - Validate up to 10x wash and reuse (can be up to 50x!)
- Decide how to barcode to serve many labs’ various needs
- Determine best way to handle deliveries/drop-offs
- Smaller pilot for 1-3 months with just a few labs, then expand to campus and start recharge program

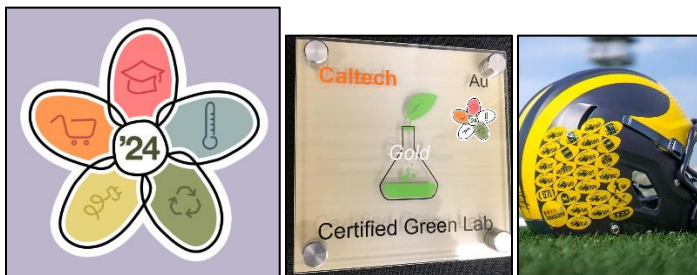
- Anyone interested in helping to validate/use this tip washer? Please email me at greenlabsinfo@caltech.edu

Caltech Green Labs Marketplace

- Available for beta testing now! VK and SK are working on a few final touches
- Vijaya's daughter is volunteering to help set this up; she has set up a website/app where folks can submit photos of their supplies and use the website to divest those materials!
 - Vijaya has offered to run it to start off and has gotten permission from IMSS
 - Pre-Pilot? Now until March?
 - Open it up to lab managers afterwards (during cleanup event)
 - Donate anything left to LEAP?
 - Trouble contacting them
 - Every 6 months clear the items? Labs re-add items? Or we reach out
 - Collecting more data so we can determine how much \$ we have prevented in excess spending via a google form that folks use to enter
 - Photos need to be manually added!
 - **BETA-TESTERS!! Please add your surplus supplies and let us know if you have any feedback!**
- From VK slides:
 - Reduce waste by re-homing...*if no longer needed and in good usable condition*
 - Chemicals, reagents
 - Equipment
 - Lab ware
 - ...
 - Help save cost vs buying new
 - Help reduce sustainability cost of manufacture, packaging, transporting, disposing
 - My daughter built it
 - Link on Caltech Green Labs website
 - Collect item details using Google forms
 - Data goes into a spreadsheet...name, picture, description, contact info, category etc
 - Choose a template to display spreadsheet data in webpage
 - Neat and organized
 - browse, filter, keyword search
 - Up to 1000 items, no log-in required
 - Run pilot during lab clean-up event
 - March 2025
 - Open it up to all labs/ divisions
 - Collect data on monetary value of items posted
 - Decide on future plans
 - Run during lab clean-up months or year-round?
 - Item stays with donor and goes directly to new home
 - Work with LEAPS
 - Please try posting...link is on Caltech Green Labs website
 - Feb 2025
 - Test internally...modifications, suggestions?
 - Image files issue
 - vijayasr@caltech.edu

Green Labs Certification Updates

- Proceed with stickers, or do we want to go with the banner / football helmet sticker version?
 - Folks voted to stick with sticker
 - Want one sticker that is larger than mockups, that is changed out every year on RH
 - Then smaller stickers indicating if folks achieved all 5 goals every year on the LH side
- What else will help labs already Certified succeed?
 - What do YOU folks want to see next year?
 - DK: More CCE labs Certified
 - TC: also want to get back onto CCE newsletter – we were not able to participate the last time as they insist we are only a BBE group 😞
 - DK: will talk to the DOO about this!
 - DK: might also ask if CCE can provide funding for the group, too
 - DK: modify website so we can see stats of which divisions are certified
 - TC: will do
- Green Offices Certification?
- Green Events Certification?



- Will discuss the below table next time, went through quickly this time

Goals for Green Labs Resources for Certified Labs

completed, incomplete, partially complete

Module	Goal	Resources offered by GL	Did we accomplish this goal? How?
Green Purchasing	Increase adoption of sustainable consumables and lab appliances, including low waste/low packaging alternatives	-Recommended products and vendors,	3x fact sheets, resources on Clean Up Event webpage
		-information on energy star certified appliances,	
		-information on Tech Mart Green designation.	
Cold Storage Management	Increase adoption of cold storage inventories to reduce unnecessary footprint, increase compliance with practices that	- -70C ULT campaign,	- -70 ULT campaign ongoing, results next year
		-Freezer Challenge resources,	- Do more for the freezer challenge in 2025, use resources online

	promote energy efficiency and cold storage lifetime	-Lab Cleanup Event including cold storage inventory resources,	- Lab Clean Up Event includes lots of cold storage resources
		-cold storage maintenance fact sheet	- 2x fact sheets
Electricity Conservation	Increase awareness of energy usage in lab spaces and adoption of practices to reduce unnecessary consumption	shut the sash campaign information,	-STS campaign results information forthcoming
		-power off guidance stickers,	-stickers are a WIP – printer is not working right now ☹
		-power meters for estimating usage and costs at the point of consumption	-power meters and worksheet could be a good pilot program in 2025!
Recycling and Waste Management	Increase adoption of vendor take back programs for materials that can be reused or recycled. Increased accounting for waste when planning lab meals for organizing lab supplies.	Tip box recycling program,	-pipette tip box recycling only reaches those who use 2 vendors, but other vendors not willing to work with us, think of other solutions?
		-styrofoam recycling program,	-Styrofoam program ongoing, data collection in process
		-signage for waste streams,	-signage for waste streams – work with Chris Kalaw and use our own
		-LEAP Donation Collection Event,	-LEAP is impossible to get in touch with, but found Bob Bell who can do repairs?
		-petition for recycling transparency and improvements at Caltech,	-Petition for recycling transparency-work with Chris Kalaw
		-Green Labs Dining Guide	-Green Labs food guides on website, is this sufficient?
Education of Lab Members	Increase awareness of sustainability issues in lab spaces and support for green practices	-group meeting announcement slides,	-some slides available from fact sheets
		-restaurant guide for group events,	-restaurant guides available
		-1:1 meeting for development of action plan,	-cannot do 1:1 meetings as yet, but if FTE then yes
		-various fact sheets,	-fact sheets are finished, more could be made
		-slides and signage	-slides and signage working with fact sheets

What should requirements be for

- What should requirements be for:
 - TC: Want these to be harder to achieve so that labs engage all year, and might not be able to get all the points
 - JL: send a survey at end to ensure they get all the points they deserve

- MA: GSA advantage – might be a good resource for sustainable purchasing tools
- MA: also want to make sure every category is flexible, in case folks don't have an ULT or something, they can still get points, so have additional categories or tasks for labs that don't have for eg -70s or something
- JA: digital stickers at end for their website
- All group members contributed to the ideas below:
- Education
 - Create and present on 1 (2?) topics during lab meeting and give GL the slides for other labs
 - Preparing slides on sustainable initiative, share with GL
 - Other: niche specific things that outside of the norm, give them an opportunity to shine in non-typical ways (social media or such)
 - For example: AAALAS meeting in long beach, speaker presenting on sustainable initiatives and show us that they have done that
 - SURF: point educate their students about sustainability or community members (high school students etc)
 - Tours for lab members, give a blurb/plug for sustainability
 - Meeting agendas can do one tip!
 - Onboarding!
- Purchasing
 - Put together a writeup or slides etc. on a product and why it is sustainable, why you are switching etc
 - Slides or comparison that is shared, add to product lists!
 - Switch to a biodegradable option
 - Switch to sustainable vendors (for example switching from amazon)
 - Consolidate buying on a day or something, instead of every day
- Energy
 - Fume hood behaviour – participate in the STS program
 - Energy audit
 - JA: Prep for power loss (surge protectors that turn off at night smart power strips)
 - JA: Check quality of electrical cables (no extension cords) but old cords
 - Computer monitors are turned off,
- Recycling
 - Waste or protocol audit
 - Participate in recycling program for plastics
 - Participating in cleanup, prove that they donated or recycled those materials
 - Designating recycling areas or getting bins
 - Recycling printer ink cartridges, send back to vendor or other non-traditional items
 - Ship back Styrofoam shippers or using those companies, NEB
 - Batteries, e-Waste participation
 - Styrofoam pickups participation
 - Participate in the TIP WASHING initiative!
- Cold storage
 - Above and beyond freezer defrost, perhaps divesting significant amounts or participate in the freezer challenge?
 - Could think of this as a bonus point, if you have no freezers or fridges, what else are you doing to be sustainable instead, and put that in the survey

- Thermostat, TC incubation settings
 - [Freezer Rebate Program](#) – replace an old unit, get the point
 - Divesting significant numbers of samples
 - Freezer defrost???
 - Inventory or organizing freezer
 - Change -70 from -80
- TC: will print stickers for April and draft an email to the GLC group to initiate the program from April – December

-

Waste Audits Initiative – Protocols and Waste

- Notes from last time below
- Spreadsheet audit tool
 - Did anyone try this out?
- Need anything else?
- Updates to our Spring Clean Events Page?
- TC: will post on website and would love feedback and will adjust as needed in 2025

-

Plans for 2025

- Want to hear from YOU about next year!
-
- GL Certification Update ~April?
- Lab Equipment Metering
- Water Usage / Autoclave Share Program
- Shut the Sash Campaign Expansion
- Recycling
- Fact Sheets
- Procurement
- Flip Book!! ✓

-

Flip Book Presentation – Jaasiel Alvarez

- See slides on Drive
- Coordination – volunteers for sections discussed below
 - Energy Efficiency
 - Cold Storage
 - Waste Management
 - Fume Hoods
 - ...
 - Customizable area
- [Doc link here](#)
- Finish by May to print one for April?
-
- DK: envision putting them?
 - JA: magnets on fridge, or wall
- TC: could also add a section for fume hoods, qr code for GL, safety recommendations etc

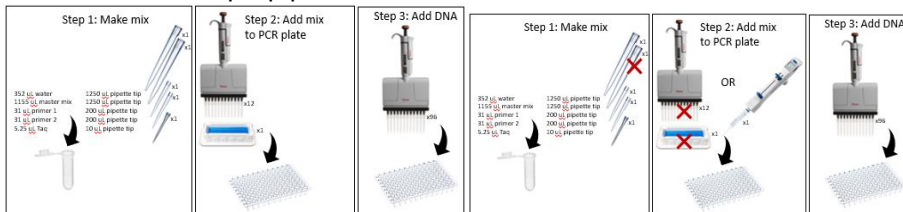
- AP: qr code for videos or visual aids on separate page, cool video of how fume hood works etc
- TC will make it a doc for folks to work on for April – print off mockup then?
 - CK: wants to help get it finished by April, TC to coordinate with him also
 - JA: put up by January and we can discuss and then claim topics then
- AP: digital version that lives on the website
- JL: identify saety officers in each lab, direct and remind people, more likelty to be utilized
- JA: didn't want this to be too text-heavy, put pictures in instead, fill up the space left that way instead
- JA: add in #s for plastics that are recyclable here, collaborate with CK

Reminders

- Graduate students please fill out the Sustainability Survey
- Chris has an update on the Styrofoam pilot!
- Happy Holidays!
 - Printed extras of these posters if folks want to take to post in their buildings?
- Next meeting March 7?

Waste Audits: Protocol Audits (from last time)

- TC modified a PCR prep protocol like so:



Item	Old	Old x 20 x 52	Plastic waste (g)/year	Cost	New	New x 20 x 52	Plastic waste (g) / year	Cost
2 ml tube	1	1040	1175.2	41.6	1	1040	1175.2	41.6
PCR plate	1	1040	20696	2194.4	1	1040	20696	2194.4
1250 uL pipettes	2	2080	1489.28	62.4	1	1040	744.64	31.2
200 uL pipettes	14	14560	3800.16	436.8	2	2080	542.88	62.4
10 uL pipettes	97	100,880	13164.84	3024	97	100,880	13164.84	3024
Repeater pipette	0	0	0	1383.2	1	1040	2840.24	1383.2
Reservoir	1	1040	9002.24	592.8	0	0	0	
Totals			49,327.68	\$6352			39,163.80	\$6736.8
DIFFERENCE							-10,163.88 g	+384.80
Emissions (~6 kg CO2 emissions per 1 kg plastic):			295,966.08 g CO2				234,982.8 g CO2	
DIFFERENCE							-60,984 g CO2	(=removing 1 car from the road for 5 days!)

- shows cost increase (slight!) but LOTS of carbon emission and plastic savings!
- [6 kg CO2 emissions per 1 kg plastic](#)
- [\(Removing 1 car from the road reference\)](#)

Another lab sent us this:

Optimization of 2 steps in AAV production protocol to minimize plastic usage

- Adeno-associated viruses are produced in HEK293T cells
- Endo protocol is 7 days, with 2 steps where cell media needs to be changed
- Media change generates a lot of biohazard plastic waste, due to need to avoid contamination (contamination of media stock, and cross-contamination of other AAV prep)

Original protocol	Greener protocol
1. Remove old media from dishes	1. Collect both media into 200mL or 500mL centrifuge bottles from each well and freeze them until later during centrifugation step
2. Replace with pre-warmed fresh stock media	2. Remove old media from dishes
3. In every subsequent media change, change 50% of media in each well	3. Replace with pre-warmed fresh stock media
	4. Do not do media change at all for the second and third days. Do not do media change for the rest of the experiment
	4. Use a second tube for media during cell harvest step

For ten 15-cm dishes (standard size AAV preparation) this would use **heavily 25 mL serological pipettes** (one for each plate, one for each media change step)

For ten 15-cm dishes (standard size AAV preparation) this would use **heavy 25 mL serological pipettes** (one for each media change step)

Lab does an estimated 400 such preps per year (based on number of 15cm plates purchased, accounting for cell expansion phase)

Original protocol	Greener protocol
• 8000 25mL serological pipettes per year	• 800 25mL serological pipettes per year
• 13g waste, so ~ 100 kg biohazard plastic waste	• 10 kg biohazard plastic waste
• 800 25mL serological pipettes is \$125, so \$1000 per year	• \$100 per year
	• Reducing plastic emissions by 440 kg per year (100 kg per prep + removing 1 car from the road for 1 month)

- Updated protocols can be shared immediately, e.g. on protocols.io
- This is just addressing 2 steps of lengthy protocol

- Showing both cost savings and CO2 emissions and plastic waste and hazardous waste savings!
- **TC created a tool for doing a waste audit, would like help working out kinks, will post on Drive? Go over next month?**
 - o AP: use “space” not room on the sheet
- **TC created how-to guide, could make part of the Clean Up event, ask for help editing! Will post on Drive, go over next month?**

END OF MEETING

From last time(s):

Green Event Initiative

- Maybe launch this in 2025
- Some good program examples include [UCLA](#) and [Yale](#)



- Carbon counter
 - o GG will try to build
 - Has chips with different colours, and labels for each city/street to determine distance, each slot is a different method of commute (walk, bike, car, etc).
 - o **GG would like help if anyone is interested!**

Waste Audits Initiative

- What are [waste audits](#)?
 - o Recording what is in waste bins, recycle bins, solvent waste containers
 - o Record what is wasted after a protocol or kit
 - Would love to have a lab offer up a protocol and see if we can modify it
 - Volunteers?
 - KM: able to bring bead cleanup protocol for next time – uses a lot of tips!!
 - o For example: my lab does PCRs and we aspirate water THEN master mix, so we can reuse the same tip (which halves our tip usage for the master mix prep!)
 - o We also reuse conical tubes for reagents, and repeater pipette tips for aliquoting reagents
 - o CC: capturing air pollution? Emissions, water, air, soil, lab waste from experiments
 - o KM: power meter initiative; green chemistry related to solvent substitution, and reduce pollution
- Why conduct waste audits?
 - o Understand volume of waste and determine priorities, or target specific protocols etc, determine what we can change
 - o Can be useful to show your lab if they are properly recycling, and determine why things are not being recycled and adopt signage, different sized bins, etc. to help make it easy and simple to recycle properly
 - If recycling bins are too contaminated with non-recyclables, custodial just tosses the whole bin!
 - [MIT study](#)
 - o Change how we purchase
 - Can contact our suppliers and ask for alternatives with less waste, or that are more recyclable eco-friendly
 - o Reduce packaging and shipping
 - Consolidate orders/suppliers within the lab or between labs
 - Purchase in bulk
 - Right-size purchases
 - Reuse packaging like coolers
 - o Collaborate with other labs or universities to see if they have alternatives that create less waste, share our best practice tips

- Research and find alternatives (for example, replacing single-use plastics with glassware)
 - Recycling waste
 - Including solvent waste recycling or plastic recycling!
 - [Kimberly Clark](#), [Terracycle](#), and [Medline](#) all offer **glove recycling programs**.
 - [Corning](#) offers flexible **package recycling programs**.
 - VK: encourage labs to stop wasting so much
 - MM: SAVE MONEY
 - KM: can we have the new Materials and Recycling Coordinator come give a talk?
 - TC: will ask! Great idea! Maybe for Feb or something?
- How to conduct a waste audit?
 - KM: 2 ideas from above: protocol adjustments and waste streams, labs are more likely to do waste stream ones, so we focus on that for now
 -
 - Step 1: Inform custodial and lab of the effort
 - [Waste audit template form](#)
 - [Example checklist](#)
 - KM: how much time? Talk to custodian and lab, record for 1 day or 1 week, context of lab cleanup at that time could calculate cost of things they are throwing away esp expired reagents that are over-ordered (page 1)
 - Step 2: Keep waste for a day/week/protocol
 - VK: Broad categories, 3 bins or 5 bins, gloves, plastics paper (page 2) during event (within reason, for biohazard bins can estimate) so all waste from those categories goes into those specific bins and weigh it afterwards
 - OR divide out the waste from each category (recycling, trash, hazardous waste/solvent waste, etc.) and track
 - Step 3: DOCUMENT (photos?)
 - DK: do folks use inventory systems? If you have overbought, don't find it you buy more, so focus on right-sizing protocols or purchasing
 - KM: no pattern of expiry dates for reagents, no "smell test" if something is expired if it will work, asking manufacturer for evidence of expiry
 - MM: OLAR sends back food that has short expiry date and get new, ask for at least 3 month date or something like that, incorporate into purchasing procedure?
 - Step 4: Tell lab of the results
 - What to do with data?
 - Recommend reuse where possible
 - Refuse (consolidating orders, talking with vendors about wastage)
 - Recycle (use tipone etc that have recycling programs on campus OR products that are able to be recycled)
 - KM: provide for spring cleanup, opportunity to advertise for programs we already have and GL guide etc., if complete it they can come to the lab cleanup party, give us data too on brands of gloves and tips etc. aspects of recycling policy, filing things incorrectly, data about behaviour compliance , bring to EHS that they don't know how to recycle
 - Work with members to offer recommendations

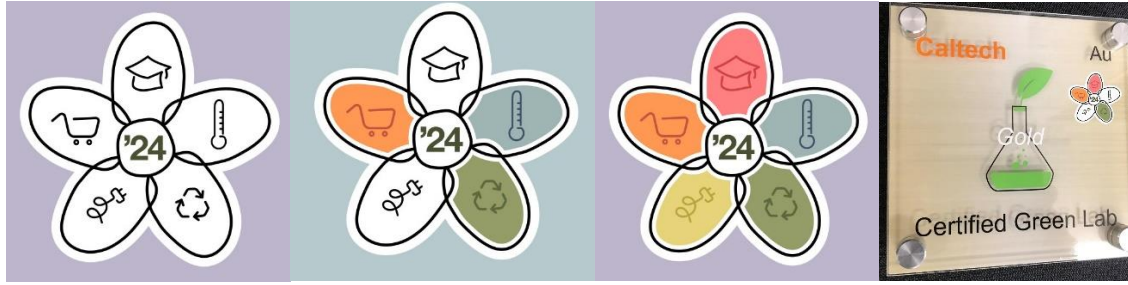
- VK: Where do you think you can reduce volume of waste for your lab? Make a summary page on the site, post ideas, lessons learned and what do you think other labs could benefit from (ethanol prep)
- MM: “Tips for tips” “More tips for Less Tips!” (VK)
- Can also update our recycling signage
- Suggest lab meeting updates / QC / Check-ins
-
- Some other resources:
 - [University of Bristol Plastics Guidance](#)
 - Article – [Reducing Plastics in an Microbiology Lab](#)
 - Article – [UCLA Lab Waste Survey](#)
- Can we create a protocol / resources to help labs conduct one? Do we want to?
 - Yes?! TC will work on making a document for next time
 - TC and KM will bring protocols that we can examine and see if there are ways to optimize
 - KM: tie into the cleanup event?
 - KM: will let us use the data they send (if they send us pictures) on what brands folks purchase etc.

Fact Sheets Updates

- Rough drafts will be posted to the [Drive](#) for:
 - Energy Vampire *
 - Lynchpin fact sheet?
 - Energy Star
 - KM: like the upright version of the graph, it is easier to read
 - Fume Hood
 - Recycling
 - Cold Storage
 - Purchasing
 - TechMart Green Designation
- Spent rest of time working on engagement resources
- KM: make sure we say that it is from the Survey, adding to website
- KM: bring the posters to the LT event and have people vote!!

GROUP WORKED ON ENGAGEMENT PROGRAM AS DIRECTED BY KATE MALECEK

- STICKERS!!
 - MS presented ideas to the group, pictures below



- From last meeting:
 - o TS: very cute
 - o TC: can even use sticker paper we already have to print them
 - o MS: will have the one with the white background be the main sticker, then add coloured patch stickers as requirements are met for each category (5 from previous meetings, including education, cold storage, recycling, energy efficiency, purchasing)
 - o MS: modelled after the original GL logo designs
 - o TC: is this motivational? – group nodded YES
 - o CH: what happens when you get all 5? Could make the middle sparkly or gold or something
 - TC: or holographic!
 - o MS: yes, the middle could definitely be used, it is boring now
- From this meeting:
 - o BB: website mods for each leaf (have each leaf and a definition on the website)
 - o AP: have a leaf for every event, add it to the poster or something
 - o DK: helmet stickers from football players helmets
 - o KM: also in the future can give “stickers” for each lab website, put on our website too etc.
 - o KM: perhaps once launched, we have a deadline for changes, announce winner of “Most Changes” or “Best Lab” or something at certification party
 - o