

Green Lab Committee Notes (Draft by TC)

Green Lab and Green Campus Committee Guide

- Emailed Chen about interest 220422
- First meeting set out for ~May 19

Green Lab Committee Representative Initiative

- Start small with Chen, move out to BBE, maybe other campus departments?
- Set up program like the DEI – reach out to Pamela Bjorkman, Michael Dickinson, Max Christman
- Position is a VOLUNTARY green lab representative in each participating research group
- Collect real **DATA**, maybe make newsletters, perhaps have undergraduate participation
- Responsibilities
 - Attend quarterly meetings? Monthly meetings?
 - Act as a receptive venue for ideas, feedback, recommendations, and initiatives from everyone
 - Could spend first few minutes talking about various larger group projects (like transportation initiatives, water use, biodiversity projects, etc)
 - Set one small goal for each participant at the end of each meeting (ie investigate glove usage per lab)
 - Spend 5 mins or more in each lab meeting or after quarterly meetings updating the lab and talking about initiatives
 - Roles
 - Participate in producing sustainability newsletters (1x per year?) as a group or individual lab regarding changes you would like to or have implemented
 - Collect and present data to group and campus
 - Could also present during quarterly meetings
 - Divide into groups responsible for energy, water, biodiversity, education, carbon footprint/emissions, transportation, etc
 - Participate in pursuing large, medium, and small action items in labs and on campus
 - Include other departments like engineering or art or architecture, maybe make it a contest-like thing to find better or creative solutions
 - Participate in Green Labs program on campus
 - Encourage environmentally-friendly behaviours and drive campus sustainability initiatives

Action Items

- **Campus action items (not BBE specific) - could include groups like engineering or art or Pasadena community**
 - Draft Sustainability Policy
 - Lab waste and recycling transparency
 - Sustainability website overhaul
 - Development of how-to guide, location of recycling services, what to recycle and how etc
 - For example:
<https://www.tcd.ie/provost/sustainability/greencampuscommittee/>
- Various recycling programs
 - For example: Addition of recycling/composting in student housing

- Adding recycling bins to animal facilities spaces (where appropriate given biohazard concerns) to recycle (for example: petri dishes)
 - Biodiversity campaigns
 - Beehive installation/pollinator plan
 - Events (Green Week, Earth Day etc), involve campus or Pasadena community
 - Composting in every building
 - Can have events with community promoting home composting
 - Sustainable food and dining choices on campus
 - Using locally grown food in dining halls
 - Encouraging community gardens or increasing footprint of community gardens
 - The rules are unclear, and may be inaccessible to some people who would otherwise use the plots
 - Increase \$.25 discount on bringing your own reusable cups etc
 - <https://dining.caltech.edu/sustainability-initiatives>
 - Overhaul utensil usage on campus
 - Survey students on biodegradable vs real washable utensils
 - Look into costs and water usage, how costly it is to dispose of single-use utensils
 - Fossil fuel divestment campaign
 - Transportation
 - Biking initiatives in conjunction with Pasadena, making better bike lanes in Pasadena
 - Making the yearly transportation questionnaire include questions on **how** you'd like to travel or changes needed for your travel to be more sustainable
 - Secure bicycle parking/storage
 - Discount on AMTRAK
 - Sustainable purchasing
 - Commitment for Caltech store to purchase from sustainable, equitable, and humane clothing producers, and to prioritise eco-friendly products (reusable mugs, bamboo clothing, etc)
 - Green labs could even have our own swag?
 - Could ask Caltech community to devise a logo specific for our group
 - Investigating paper towels vs air dryers in the washrooms
 - Could be a newsletter study, investigate recycling/waste transparency, look into biodegradable paper, how much water goes into making paper towels etc
 - Making a "re-use" mailing list specific to labs/participating in the "buy nothing" initiative
 - Incorporating sustainability initiatives into operational standards and practices, writing into grants etc
 - Encouraging reluctant PIs to participate and share equipment etc
- **Large action items (BBE Specific)**
 - Glove recycling
 - May instead turn to purchasing biodegradable gloves, BBE could petition Genesee or something to make purchasing these gloves cheaper BBE- or campus-wide
 - Water recycling from zebrafish facility
 - Lab waste and recycling transparency

- Water-saving practices
- -80 to -70 chill-up initiative

- **Medium action items (BBE specific)**
 - Equipment repository/list – could be part of the “re-use” mailing list
 - Chemical repository/list – could be part of the “re-use” mailing list
 - Making a Chen- or BBE-specific recycling page(s)
 - Purchasing initiatives
 - Within labs and on campus to minimise single-use plastics (like k cups, plates, etc) for group activities/parties
 - Purchasing initiatives to reduce Styrofoam, encourage purchasing biodegradable products like gloves etc
 - Purchasing in bulk or making fewer orders to reduce shipping emissions and costs
 - Purchasing groups with sustainable packaging (for example: NEB no longer uses Styrofoam, but instead uses cardboard packers)

- **Small action items (BBE specific)**
 - Lab specific initiatives
 - For eg IVF in Prober lab to reduce animal load in facilities
 - For eg drop track method for bacterial transformations
 - Timers for equipment like water baths
 - Initiatives to TURN OFF equipment not in use
 - Water aerators to reduce water usage

Events

- Green week
- Litter pickups near campus or on beaches
- Home composting evenings (in collaboration with local community groups?)
- BioBlitz (campuses compete to record the greatest number of species on campus in a 24-hr period)
- Bird walks, plant walks, etc, engage with community and specialists, could have talks given a few times a year from experts (botanists, ecologists) etc
 - Provides practical field-work experience
- Tree-planting events or other sustainable forestry projects
- Can participate with device monitoring and case studies for energy usage with Elemental Machines - green labs get vouchers if people want to continue with the services after the study
- Can participate in the freezer challenge from mygreenlabs

Initiatives Groups

- Energy consumption and climate change
- waste management
- water and wastewater
- sustainable transport
- resource consumption
- biodiversity
- sustainable procurement
- sustainability education, research, and entrepreneurship
- communication and student engagement
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