

Meeting Minutes 220718

- Attendees: James Linton, Elisha Mackey, Max Christman, Michelle Ravel, Tasha Cammidge, Sarah Torres, Karen Lencioni
- Quick round of introductions for attendees
- Updates on proposal submission:
 - o Feedback generally positive, ST and TC meeting with David Warren next week, so we will update next month
 - o DW sent follow-up questions on the proposal, which ST and TC responded to (general things, some qualification of wording)
 - o DW also reached out to MC with questions about the group
 - DW wants to justify the group and is wanting qualification on commitment, seeing if another group would be better suited to support the GL group, MC commented that DW seems to want to hand off mandating a commitment, but MC responded that this role would be similar to the safety coordinator role for labs only they would focus on sustainability
 - There has been a recent change on diversity in the institution and we are trying to emulate those changes for sustainability, we want to echo those goals especially those relating to equity (which applies to sustainability)
 - These arguments are not presented to higherups in Caltech enough, so it is challenging
 - JML commented that if we frame our goals to suit those audiences, especially energy savings and cost savings as the overriding goal, as in decreasing energy use but having no impact on science
 - MC responded that the barrier is that there will be no change to PI overheads, no direct incentive for each lab as the overhead would be the same even if the energy costs go down, so it is hard to convince people to change – to frame it this way we have to change how labs are billed (direct pricing or something like that) and this is basically an idea that has been floated before the higher-ups before and is a non-starter
 - EM suggested that we could try out establishing a rebate or something for those labs that are participating? More thought needed here?
 - MC commented that there are barriers, but the more enthusiasm/energy we make, the more support we will get
- New topic: establishing a green labs guide
 - o TC showed the Trinity College green labs guide and commented on their wording, could be useful if we base our guide on theirs focusing on Caltech/local facts,
 - o EM: Next section could be a Caltech-oriented facts sheet (how much waste we produce, how much water, climate change/CO2 emissions etc)
 - EM: start smaller than Trinity and grow as year goes on, just with waste and water/energy usage for now, group agrees this is a good start,
 - Group agreed with EM to start smaller than Trinity's, we will focus first on GL facts, then have a page on water/energy usage, then have a page on waste
 - Energy usage page:
 - EM: should be energy/water usage, since they are hard to parse out (for example, autoclaves)

- Their labs in the second floor are coordinating autoclave usage and only running with full loads, especially for bacterial waste
- JML commented on energy savings and initiatives such as “shut the sash” are easy to implement in labs, that temperature control (such as -80s) contribute to 70% of energy use in his lab (data to come later)
- JML: also look into changing the -80s to -70s as there is no impact on samples since the numbers are based on the crystallization of water (one step is 4 deg, where reactions won’t happen any longer but can degrade, next step is -20 where most samples won’t degrade but RNA etc will, and next step is -60 where RNA won’t degrade). So -80 is overkill
 - JML: The idea behind holding at -80 is that you gain an extra buffer if the power goes out, but this only actually gives you 35 more minutes (per study JML found)
 - JML: The -80s that we have in Chen are very efficient so that may be longer
 - MC: Also Chen has a fuel cell that operates independently and a secondary backup generator that will keep things running
 - MC: posted a study from the sustainability website on this topic, so the data exists it is just about getting the word out, perhaps we could convince OUR PI’s to adopt these changes
 - EM: we would have to get Jesse on board, change the settings on the alarms etc so it needs some coordination but could be possible
 - TC commented it is about changing PI’s minds so the data is helpful, JML will send out the information re the -80s
- For waste page
 - Reduce usage of plastics, encourage glass use instead of single-use plastics
 - Should include some green chemistry here for benefits of reducing hazardous waste costs
 - Including gloves, petri dishes (TC mentioned she wants to look into glass dishes and sterilizing them instead, if they will work for the fish facilities since her lab uses 500+ petri dishes a week, BUT wants to know if this is actually better for the environment)
 - EM suggested OLAR could help with this since they have sterilizers, TC will look into it
 - Section could also have a transparency section, where waste goes from Caltech, increasing information and knowledge of process (EM mentioned that a lot of people have the misconception that Caltech doesn’t recycle, so we have to work to change that)
 - Need DATA for if changes are actually eco-friendly
 - JML: Have a coherent workflow of how waste is handled
 - ST: Could post the workflow near the recycling bins, little plaque with information or something
 - EM: does Caltech have resources for waste/energy audits?
 - MC: NO

- Changed to discussion of action plan / mission statement
 - o JML: Need a coherent message moving forward for group
 - o For DW to give us support, we need to start small and then grow, he seems to want to let others shoulder the responsibility so we need to rein in expectations
 - o Need to stay focused on green labs and changes in BBE for now, hopefully eventually we can help sister groups in other departments take off, maybe meet once or twice a year to share information, make this clear to DW that we don't want to be responsible for the entire campus sustainability program, just a small piece of a (hopefully) larger program, reiterate this is why we need BBE support
 - o KL: joined and we gave her a brief update on the meeting,
 - o KL: mentioned that the wording is important for the mission statement, must make sure we are communicating to both the users and the "powers that be", wording in the Trinity guide is good since it discusses cost savings etc, which is what DW will care about
 - o ST: We need DW and division support to develop a website, fund events, get swag etc
 - For eg Earth Day event
 - o JML: once we are more established we should reach out to the Resnick institute to collaborate, esp since they are gaining such attention we should run on their coattails
 - o JML: mission statement should focus on increasing efficiency, decreasing costs, and having no impact on the science (TC: or this could work toward improving the science, for example green chemistry)
 - o We have to word the document to the audience especially to the higher-ups
 - Important too not to ask to much of DW initially, we want to build momentum first and not be too forceful, need to be careful how we prioritize and say things to him to not lose his support (JML suggested DW may hope this movement fizzles, but the group thinks it will not)
 - Make sure it is not just the higher-ups virtue signalling, we want to DO stuff
 - o Flip the narrative to not be so overwhelming, make it palatable to the audience
- Conclusion:
 - o TC: will post some information in the drive including the Trinity guides and action plan, put into a folder called "Action Plan"
 - o TC will write a draft and everyone can edit, will add to folder above
 - TC will include wording similar to the proposal and the Trinity guide, include some goals/targets (which people can change) for waste/water/energy etc, emphasizing no impact to science while increasing efficiency
 - o Group decided action plan our first priority, then we can work on GL guide (this can be one of our goals in the action plan) for early 2023, will discuss and agree on the action plan next meeting
 - o JML commented it will be good to get outside of our echo chamber and settle on a set of goals, since this will let us focus better
- Next meeting Oct 14 11-12pm Chen 240A
 - o Kate Malecek was unable to attend this month, but we will try to do her presentation on pipette tips next meeting

