Green Lab Discussion – 6/20/22

Stephanie Hess, Paul Foote, Susan Martinis, Melanie Loots, Jennifer Fraterrigo, Morgan White, Madhu Khanna, Jan Novakofsi, Meredith Moore

Paul Foote presented a PowerPoint outlining the content

- **Green Lab Program Development**
- Vancouver did Lunch and Learn events once/month to engage researchers and lab managers.
- The continuous challenge is to ensure lab sustainability and safety protocols together become the "norm" on campus.
- Resources have to be accessible at all times.
- Some schools have Green Lab Certification opportunities – bronze, silver, gold self-regulated certification
- $2,000-4,000 funded University of British Columbia's pilot projects (Paul's previous institutions). These opportunities were advertised at Lunch and Learn events.
    - There were waste concerns with disposing of plastic vials instead of reusing.
- **Green Lab Program Focus Topics**
- Every lab could have a Lab Ventilation Management Plan in place.
    - This could include recommendations such as: replace fume hoods with more efficient equipment when available.
- Susan Martinis commented that the types of people in academic research labs vary widely and so does their knowledge with equipment
    - We need to incorporate a design that more convenient so people do not need to remember to implement the sustainable practices, but rather do it naturally.
- Jan Novakofski said that we do not have building specific plans in place and perhaps this is the first step before looking at the bigger picture of a Green Lab program.
- Space Utilization
    - This is a very important component of sustainable lab practices; it emphasizes the importance of using equipment in the most efficient manner and ensure all space has a function (e.g., recommendations for shared freezers, chemical storage, etc.)
- Recycling Programs
    - Opportunities to recycle plastic, glass, and Styrofoam
    - Glove recycling could also lower the cost of our gloves.
    - Individual case-by-case programming with labs to identify hazardous materials compared with what is safe to recycle.
    - Per Jan, we already have extensive recycling programs within our labs.
- Program sizes
    - UC Boulder employs interns to facilitate and spearhead the program.

- Madhu suggested that there be a committee that reviews and starts developing the recommendations outlined in a Green Lab program.

- Susan Martinis would likely charge this committee.
    - Essential to keep in mind both safety and sustainability while also directly involving those who actually interact with and use the labs.
- Jan Novakofski commented that there is both the small-scale scope (what Paul presented during the meeting) and the large-scale approach (the campus wants to decrease energy usage)
    - Are we discussing implementing this program at the building-level or lab-level and there are still questions about where this program would live.
    - Circumstances vary. For example, in some buildings, reducing HVAC may be most important while for others, it may be more significant to identify building envelopes.
    - Could we identify priority actions for the top energy users? At that point we could implement Paul's recommendations once the priorities have been identified for the top energy users.
- Susan Martinis suggested that we could pilot this program at several types of labs (chemistry vs. biology) - perhaps Roger Adams Lab.
- Morgan White suggested that we could start with Freezer Challenger participants since they are already engaged in sustainability practices.
- Jan Novakofski commented that a building-level assessment is needed.
    - Where we have struggled in the past is not understanding the spaces and who uses them (e.g., which spaces are used primarily by undergrads compared to faculty researchers).
- As a charge of the committee, could the committee work with F&S and identify a few buildings as top energy users as a priority to start and then we could expand the program from there.
    - The charge could be for a 6-month committee.
- The people operating the labs and working in the building should be part of the conversation.
- Stephanie Hess previously reached out to directors of sustainability offices within the Big 10. All directors said something similar that they tried and failed a Green Lab program.
    - We would like to know why specifically did they all fail and is there any hope to make them successful in the future? Let's be careful not to reinvent the wheel.
    - We need to also understand what has been done prior to charging out committee?
- The process and program often starts with researchers to build momentum and show that there is campuswide demand.
- Paul Foote commented that collaboration is key and involving a wide group of stakeholders.
    - University of Georgia put together a working plan to implement such a program.
- We have seen success with the Freezer Challenge and hopefully this demonstrates that there is demand for lab sustainability holistically.
    - Paul's passion is very helpful in this effort!
- Freezer Challenge is more labor intensive and very safe (discarding lab samples).
- Susan had to leave early and will be sure to follow up.
- It would be good to know the programs that have been successful.
    - This list should be sent to Susan for review.
    - Melanie, Jan, Stephanie could focus on how to develop this charge for the committee.
- Morgan is going to look for related effort by Underwriter Labs. They built a software that could potentially aid these efforts and they tested it out on our campus.

    - Paul Redman and Brian Bundren were two participants that came to mind as part of this effort.
- Could we implement a Green Lab program through the Underwriter Lab program and recommendations?
- **Next step – identify what the charge should be for a committee and who should lead this committee?**
- Paul will get approval to share University of Georgia plan and other successful programs so we can share with Jan and Melanie in particular.
- This group hopes to reconnect later this summer