Office of the Vice Chancellor for Research & Innovation



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March 22, 2023

Green Research Committee

- Stephanie Hess, Director, Division of Research Safety, OVCRI (co-chair)
- *Jeremy Neighbors, Director, Safety & Compliance, F&S (co-chair)*
- Shari Effert-Fanta, Assistant Director for Facilities and Safety, Prairie Research Institute
- G. Paul Foote, Energy Efficiency & Conservation Specialist, F&S
- Jennifer Fraterrigo, Associate Director for Campus Sustainability, iSEE; and Associate Professor, Department of Natural Resources & Environmental Sciences, College of ACES
- Daphne Hulse, Zero Waste Coordinator, F&S
- Maisie Kingren, Safety Engineer, Materials Research Lab, Grainger College of Engineering
- Tim Mies, Director of Energy Farm Operations, Department of Crop Sciences, College of ACES
- Lisa Moore, Associate Director of Biosecurity and Safety, College of Veterinary Medicine
- Chad Stevens, Director of Facilities and Safety, School of Chemical Sciences, College of LAS
- Morgan White, Associate Director for Sustainability, F&S
- Sabrina Summers, Graduate Student, Agricultural & Biological Engineering, College of ACES
- Mitchell Bryant, Graduate Student, Bioengineering, Grainger College of Engineering

RE: Charge to facilitate iCAP goals via strategic plans in campus research spaces and activities

Dear Colleagues:

The University of Illinois Urbana-Champaign has signed the <u>Climate Leadership Commitments</u>, with intent to work with our community and stake-holders to achieve carbon neutrality, reduce waste, and increase our resilience to climate change. The <u>Illinois Climate Action Plan (iCAP)</u> is the strategic plan to achieve these goals and highlights opportunities and challenges in four key areas: Energy, Transportation, Land & Water, Zero Waste.

As one of the key pillars of Illinois, research not only produces critical and innovative solutions for climate resilience, but also provides opportunities to make strategic changes in our operations and policies to help achieve campus iCAP goals through the adoption of best practices. Goals that are especially relevant to research include reduction in annual energy consumption for each campus unit by at least 20% by 2035, as well as adherence to a "zero waste" policy defined in part as the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials.

We are writing to invite you to participate on a campus Green Research Committee that will recommend *Green Labs* and *Green Research Activities*, which is anticipated to contribute significantly to the achievement of Illinois' iCAP goals. We have asked DRS Director Stephanie Hess and F&S Safety & Compliance Director Jeremy Neighbors to co-chair this committee. We ask that you work together to review the iCAP to address the following:

- 1) Identify specific goals and aspirations, where adoption of alterations at research sites and their activities has potential to safely and practically contribute to climate resiliency. This includes consideration of on-site wet and dry research labs, off-site UIUC research labs, agricultural land, and field sites. This should include a review of best practices from peers and other organizations such as I2SL and My Green Lab.
- 2) Develop a program whereby individual research groups and Departments may qualify for "Green Lab" and/or "Green Research" Certification by adopting best practices that maintain the safety of the research group and community. Importantly, regardless of discipline, all research communities should have the opportunity to attain "Green" status and contribute to the campus iCAP goals. We recognize that these modifications in research group and campus culture may require significant behavioral changes and financial investments. Proposed modifications and best practices should not conflict with federal or state regulations, be unduly burdensome, or impede meeting sponsored research contracts. In this context, please develop:
 - a) Guidance for reducing energy consumption by standard laboratory and office equipment. Guidelines should describe best practices for power-down to ensure the safety of the research environment and maintenance of the equipment.
 - b) Best practices for safe reduction of laboratory and field waste by reducing consumption of disposable materials and increasing recycling.
 - c) A framework for a training program to educate research groups who wish to attain "Green" status.
- 3) Outline a framework to recommend building-specific plans for safe energy conservation in our research spaces that include interdisciplinary research institutes, academic colleges, and field sites. This includes reviewing operations and procedures for off-boarding and hibernation of research space and equipment; along with developing a prioritized list for remodeling or renovating research buildings and laboratories that contain aging or particularly inefficient laboratory spaces. This list will inform the overall campus sustainability efforts. Because funding for renovations is limited, information driven prioritization will focus on the most advantageous projects while maximizing safety and climate resiliency of the campus community.

We ask that a preliminary presentation of your initial recommendations be shared in a meeting by May 1, 2023 to secure feedback and address emerging questions, a preliminary report and recommendations be prepared by **October 1, 2023** with expectation to finalize the report by November 15, 2023.

Thank you for your participation on this important committee. We look forward to working with you and receiving your guidance and recommendations.

Sincerely,

Susan A. Martinis

Vice Chancellor for Research and Innovation Associate Vice Chancellor and Director, Institute for Stephen G. Sligar Professor of Molecular and Executive Director of Cellular Biology, Professor of Biochemistry Facilities and Services

Madhu Khanna

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Sustainability, Energy and Environment

cc: P. Jones, M. Khanna, M. Loots