

## **Memo Concerning the Recent Animal Resource Recycling Program “Green” Initiative**

To: Amy Kadrie, Sustainability Coordinator at the University of Rochester

Jeff Wyatt, Executive Director of Animal Resource at the University of Rochester

**Executive Summary:** The University of Rochester strives to be a leader in promoting environmentally-friendly practices. A recent "Go Green" initiative was enacted to divert waste from gowns and gloves used in the vivarium to recycling programs rather than landfills. While this initiative is commendable, the switch to single-use gowns has had the unintended consequence of increasing the University's environmental impact and needs to be reevaluated. Not only do single-use gowns consume more nonrenewable energy and water to produce, use of disposable gowns has also increased the use of single-use paper bags to transport cages, thereby generating even more waste. The University of Rochester should honor its commitment to environmentally-friendly practices by discontinuing single-use gowns and paper bags and returning to multi-use gowns and coverings.

**Background:** The University of Rochester has a long-standing commitment to sustainability. Recently, the Animal Resource department has collaborated with the Kimberly Clark RightCycle Program to switch the gowns and gloves used in the vivarium as part of a "Green" initiative. While the switch to recyclable gloves is applauded, the switch from reusable gowns to disposable ones is cause for concern. The main concerns are:

- Single-use gowns generate far more waste and consume more resources than multi-use gowns.
- The disposable gowns are too transparent to cover cages during transport, resulting in use of paper bags to cover cages, and so generates even more waste.
- Even though the waste is recycled, there is still a significant increase in the energy and resources needed to produce and transport single-use gowns compared to reusable gowns.

**Policy Options/Alternatives:** While factors such as performance and cost contribute to purchasing decisions, environmental impact is an equally important consideration- especially for institutions striving to be leaders in eco-friendly initiatives like the University of Rochester. Reusable gowns outperform disposable in terms of:

- **Cost:** At around \$4 per gown, and 60 washes over its lifetime (\$0.07 per use), the cost of reusable gowns far outstrips disposable gowns (\$0.50 per use). Even with laundry costs, reusable gowns are more than 50% cheaper over the lifetime of the gown than disposable gowns.
- **Performance:** The current disposable gowns are an ineffective barrier against liquids, and so fail to protect the wearer from animal waste.
- **Environmental impact:** A recent review found "In the cradle-to-end-of-life evaluation of reusable and disposable isolation gowns, selecting the reusable gown system resulted in a roughly 30% reduction in nonrenewable energy consumption, global warming potential, and blue water consumption, and a 93%-99% reduction in solid waste generation at the healthcare facility compared to the disposable gown system."<sup>1</sup> The opaque reusable gowns also doubled as a cover for cage transport, eliminating the paper bag waste that increased after the switch to disposable gowns.

**Recommendations:** I recommend the University of Rochester discontinue use of single-use gowns and return to their more environmentally-friendly multi-use gowns in the vivarium. I further recommend the University of Rochester discontinue use of paper bags (which are often single-use and increase waste) for transporting cages and return to reusable coverings. Implementing even one of these recommendations will reduce the University of Rochester's impact on the environment, and implementing both will help the University of Rochester continue its clear commitment to being a leader in Green initiatives.

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<sup>1</sup> Vozzola, E.; Overcash, M.; Griffing, E. (2018). Environmental considerations in the selection of isolation gowns: A life cycle assessment of reusable and disposable alternative *American Journal. of Infection Control*. (46)p.881-886.  
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