

# LACU Mouse Box Change Efficiency

Kick-off Date: 08/14/18—Completion Date: 08/30/19

LACU - Mouse Box Change Efficiency

DEFINE MEASURE ANALYZE IMPROVE CONTROL

## Project Charter

Charter Element	Description
<b>Background &amp; Purpose</b>	The UTHSC Laboratory Animal Care Unit (LACU) is a Compassionate Team providing Expertise and Resources to ensure Optimal Animal Care, Leading to Enhanced Human and Animal Health.
<b>Mission Statement</b>	Plant the Seed! Increase: Quality – Efficiency – Support - Growth
<b>Scope</b>	<b>In scope:</b> Evaluate mouse box complete change out efficiency of CRB and TSRB with 1-person vs. a 2-person team (Learning experience) <b>Out of scope:</b> Evaluate other species box complete change out efficiency
<b>Business Case Summary</b>	To evaluate our current cage changing process to improve efficiency in our process, increase the total number of boxes changed out each day, but not compromise the animal's health and welfare who are entrusted in LACU's care.

LACU - Mouse Box Change Efficiency

DEFINE MEASURE ANALYZE IMPROVE CONTROL

## Voice of the Customer Summary

Results of surveying the following customers (total of 128 responses):

<b>Principal Investigator</b> <b>Postdoctoral Fellow</b> <b>Research Technician</b> <b>Graduate Student</b> Total 25% reporting	<ul style="list-style-type: none"> <li>Were satisfied with animal care ("Kudos to LACU for an excellent job. Please keep up the good work.")</li> <li>Typically only had issues on cage change day</li> <li>Most issues mentioned didn't pertain to animal care or technicians</li> </ul>
<b>Husbandry Technician</b> <b>Cage Wash Technician</b> 100% reporting	<ul style="list-style-type: none"> <li>Feelings mixed about two-person system.</li> </ul>
<b>Bottlenecks</b>	<ul style="list-style-type: none"> <li>Unexpected equipment break down</li> <li>Animal biosafety cabinets not always available</li> <li>Not enough boxes</li> <li>Supplies not stocked</li> </ul>

LACU - Mouse Box Change Efficiency

DEFINE MEASURE ANALYZE IMPROVE CONTROL

## Business Process Map

**1 person - 35 steps - 8 decisions**

LACU - Mouse Box Change Efficiency

DEFINE MEASURE ANALYZE IMPROVE CONTROL

## What We Discovered

Number of Boxes Changed Per Day

2-Person	127
1-Person	97

Benchmark: 254 boxes changed for the 2-person team.

**2-PERSON TEAM NOT AS EFFICIENT**

LACU - Mouse Box Change Efficiency

DEFINE MEASURE ANALYZE IMPROVE CONTROL

## Lessons Learned

- Evaluations of time studies compared to actual scheduling.
- Evaluate individual reporting of sick/dead/overcrowded boxes to see where retraining is needed.
- Continual follow up survey for researchers and staff to ensure our equivalency of LACU customer satisfaction is being maintained.
- Supervisors provide more detailed schedules to techs.

## Process Owner

- LACU Operations Management Team

LACU - Mouse Box Change Efficiency

DEFINE MEASURE ANALYZE IMPROVE CONTROL

## Applying Lean Methodology in Other Areas – The Lean Mindset

- Changing how rodents are fed by the use of a smaller measured feed scoop as well as not throwing out excess diet.  
**Projected savings ~\$71,000 per year.**
- Alternate schedules to allow for better scheduling between investigators and LACU staff.
- Evaluating the frequency of bedding changes and switching vendors.  
**Projected savings ~\$54,000 per year.**

## Project Team

