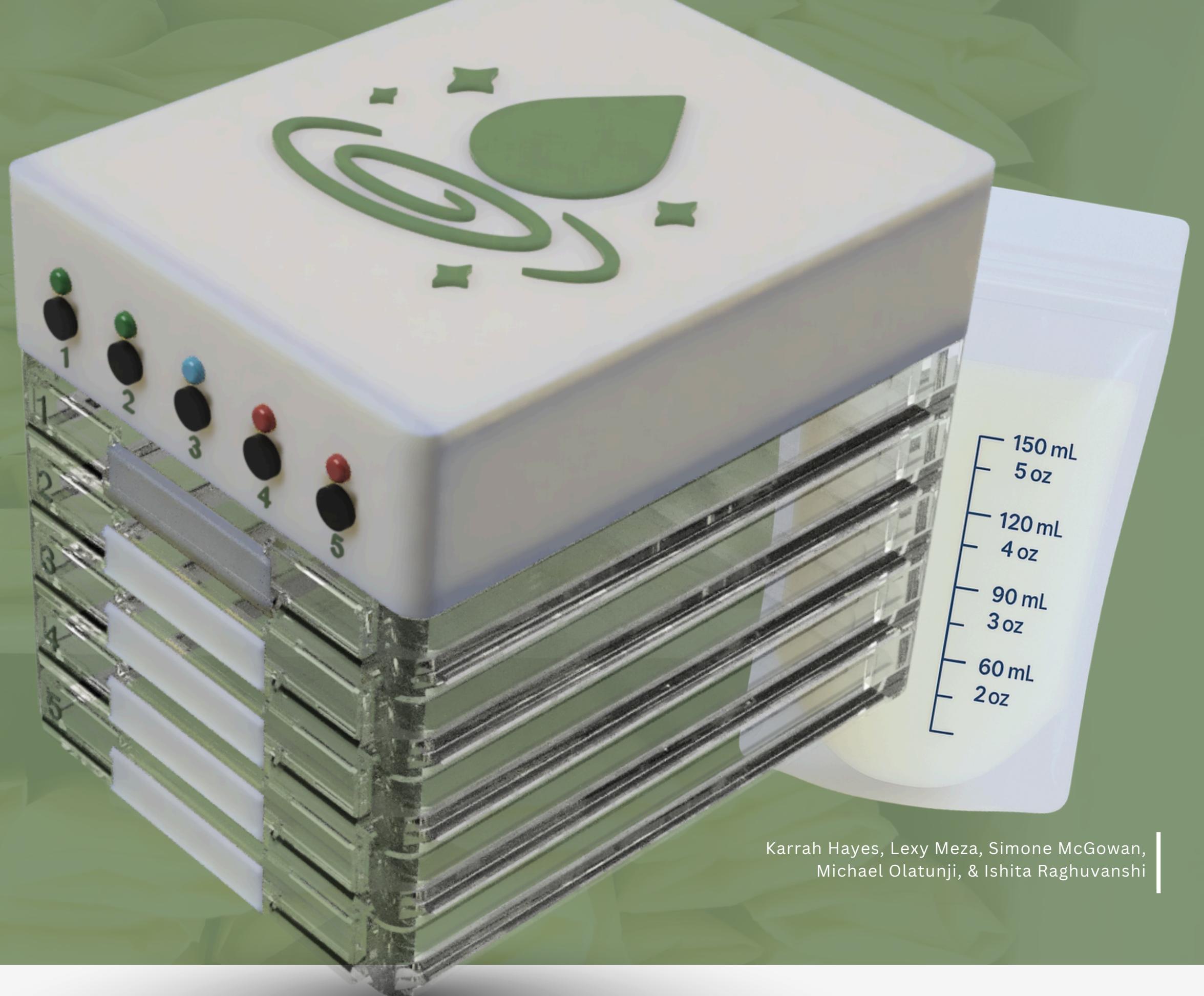




Team MilkyWay

# STELLAR STACKER

Long-Term Cold Storage  
Organizer for Breastmilk



Karra Hayes, Lexy Meza, Simone McGowan,  
Michael Olatunji, & Ishita Raghuvanshi



# PROBLEM

Lack of  
standardized  
breastmilk storage  
practices

Limited freezer  
space

Burdensome  
Manual tracking

Warped freezing  
shape

**Disorganization = Wasted milk**

Parents using expressed breastmilk  
need a simple system that **scales**,  
**preserves timestamps**, and enforces  
**first-in first-out use**

# STELLAR STACKER



Maximizes freezer space with stable, stackable trays that fit all freezer types



Scales with you - magnetic, modular units that snap together as your stash grows



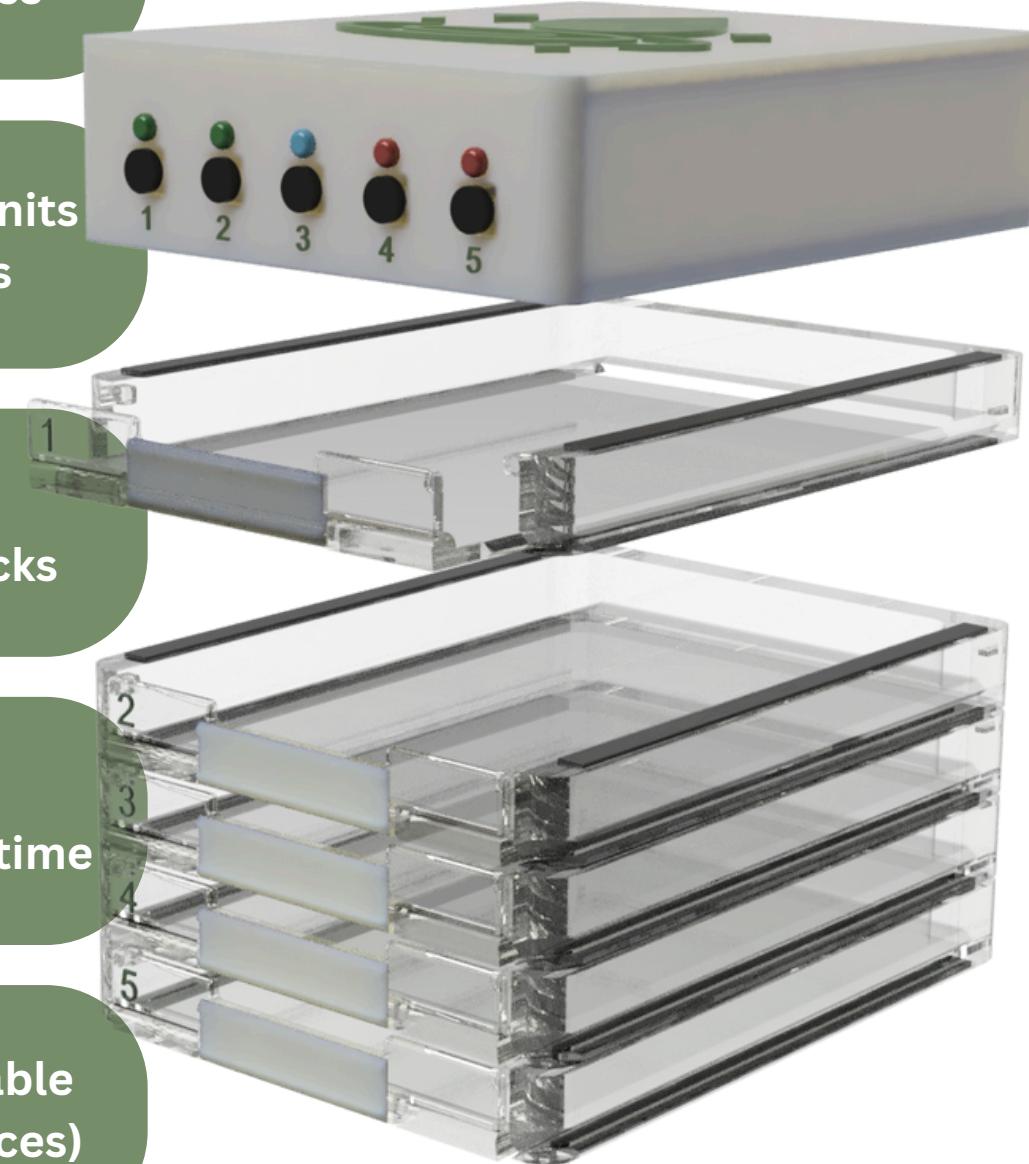
Saves daily time + mental load without needing to check dates or reorganize stacks



Prevents wasted milk with “oldest first” visibility via LED that changes color over time



Turns messy milk piles into a clean, countable system (no more toppling bags or lost ounces)



# SOLUTION

# THE TRAY

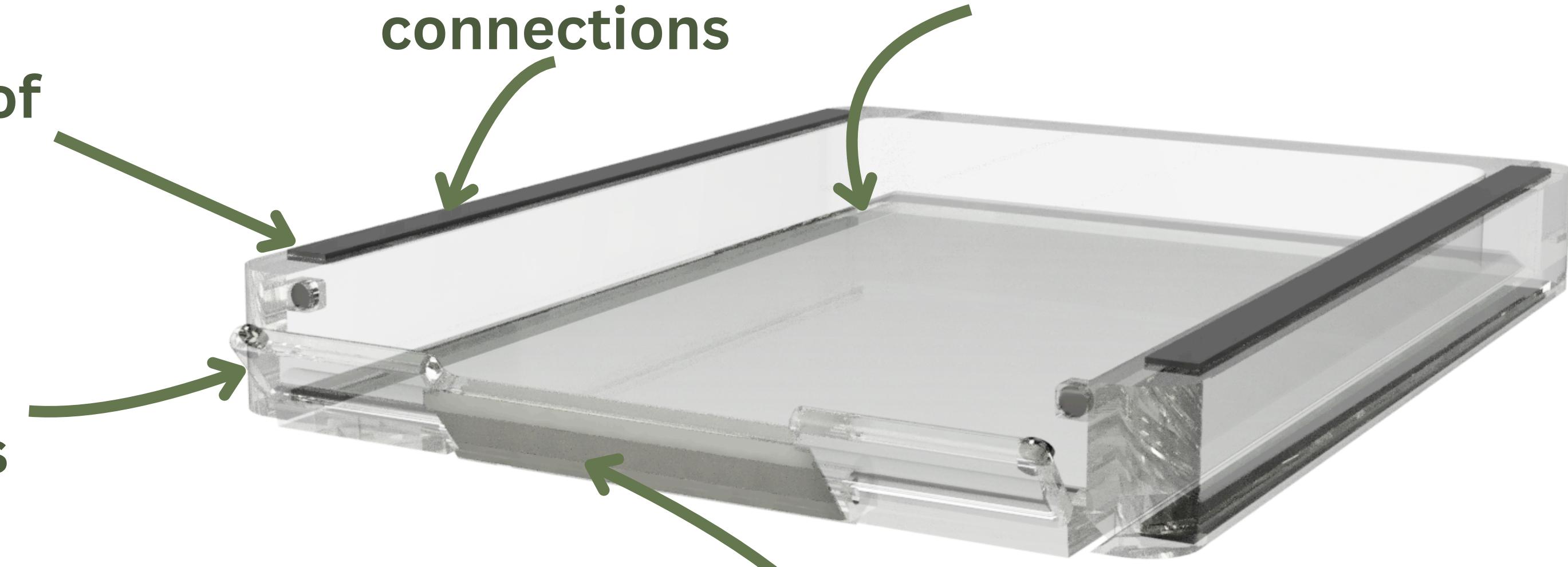
Holds 3 bags of  
milk (18 oz)

Can hold  
weight ~8 lbs

Magnetic  
connections

Sliding bottom for  
ease of retrieval

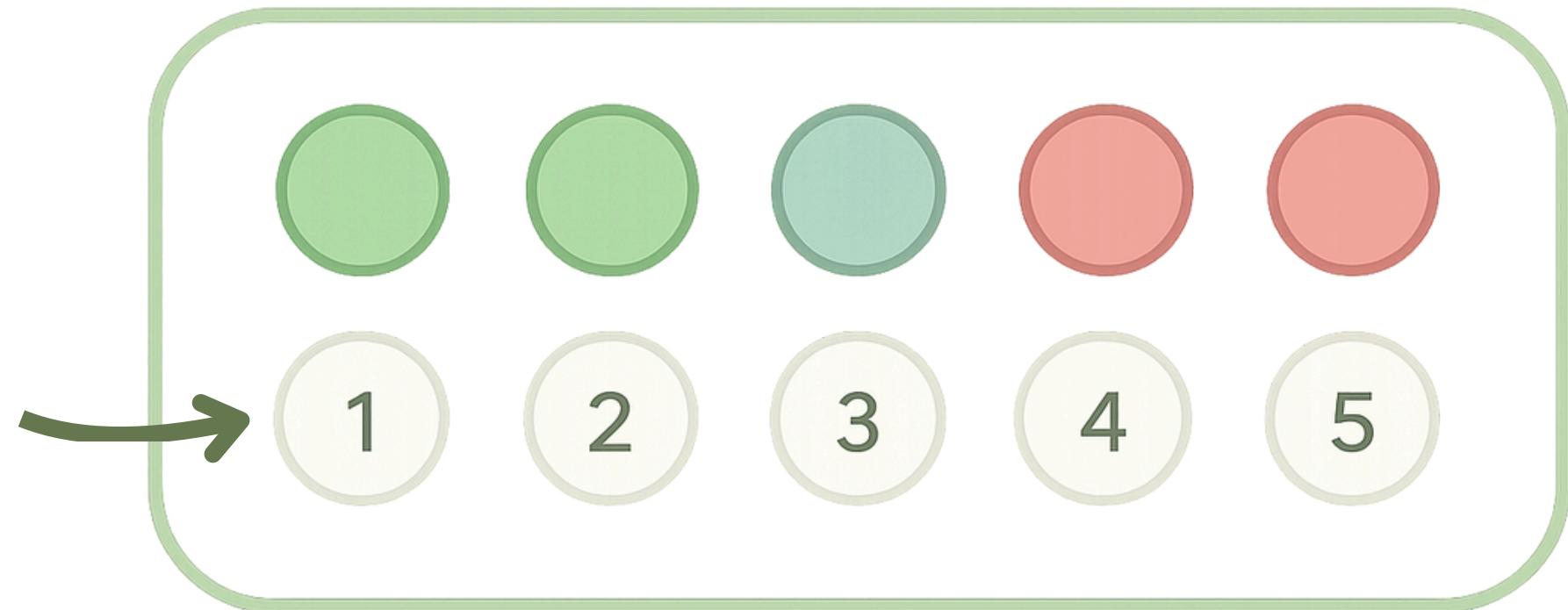
Label holder for  
manual dating



# SOLUTION

# THE TRACKING SYSTEM

Corresponding  
tray numbers

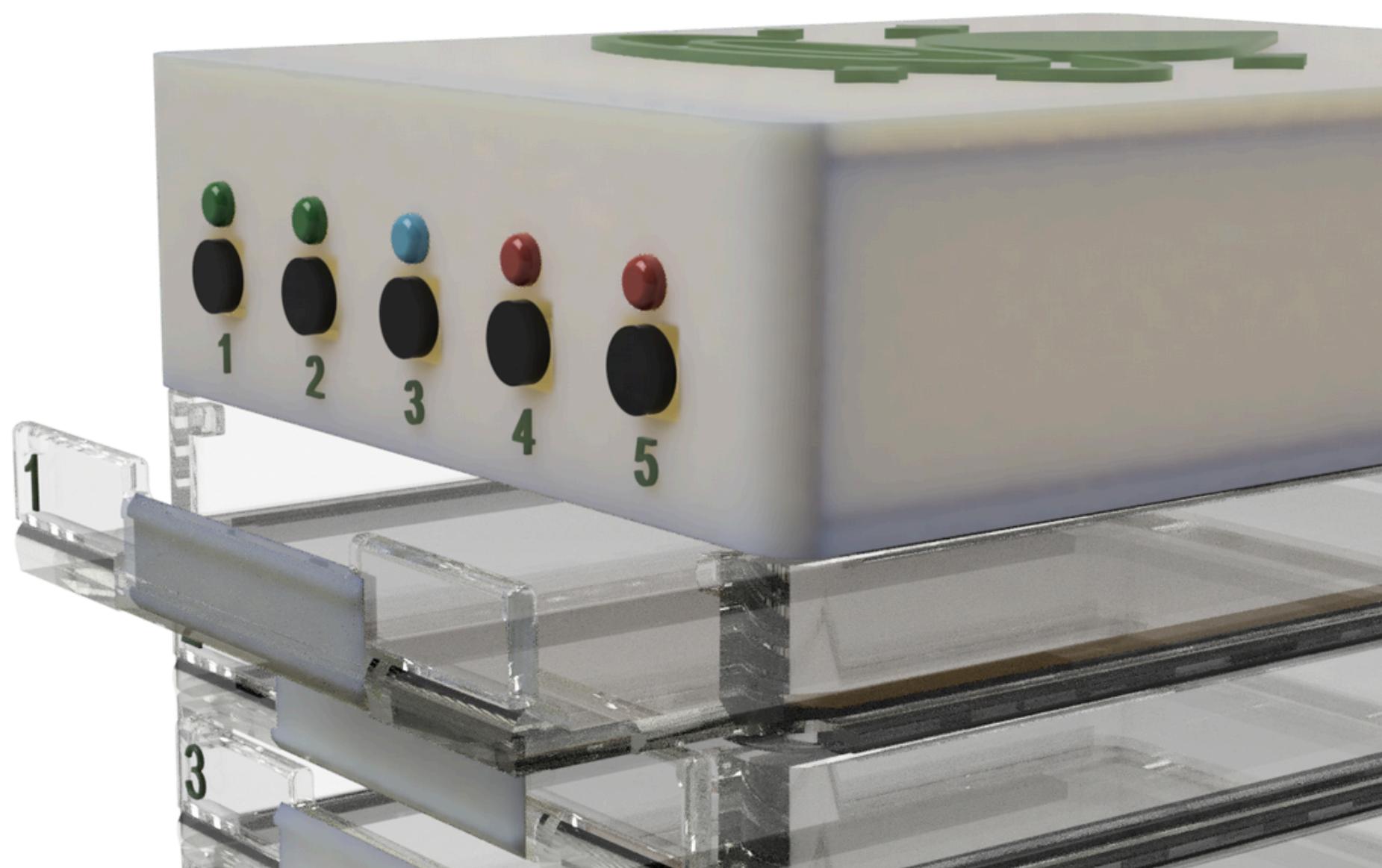


Green LED  
Milk 0-2  
months

Blue LED  
Milk 2-4  
months

Red LED  
Milk 4-6  
months

Flashing Red LED  
Milk 6+  
months



# SOLUTION

# PROTOTYPE



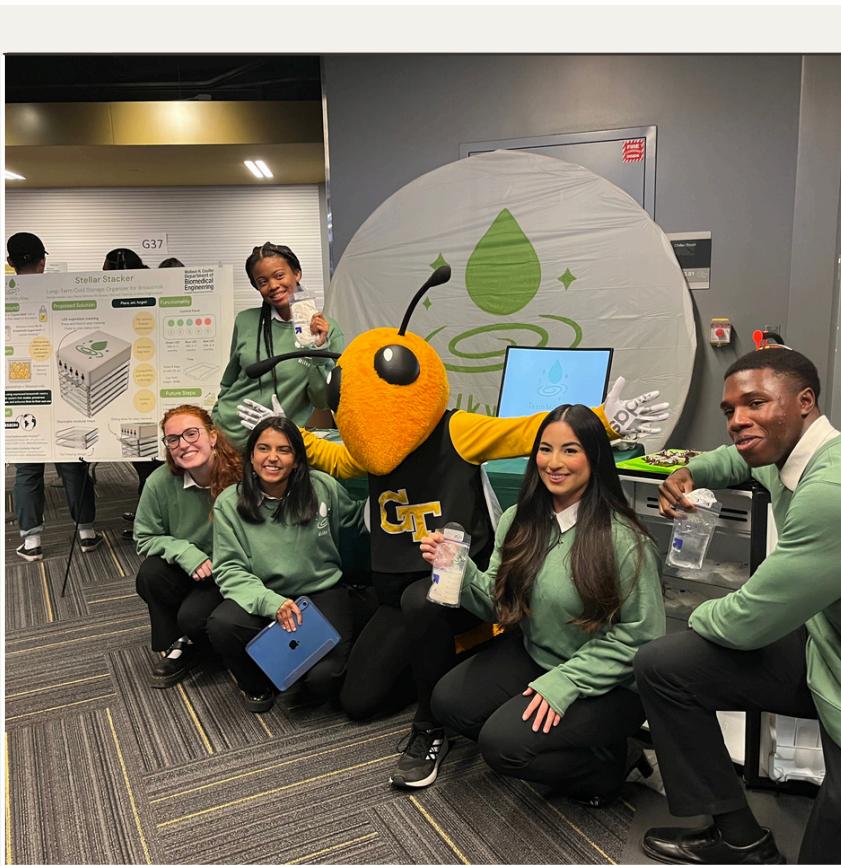
System in pull out freezer



Slide out tray bottom



# MILKY WAY IS GRATEFUL FOR YOUR SUPPORT



## THANK YOU

To our sponsor, Caleb Rudnicki for your active engagement and helping connect us with users

To our Our Emory Clinical Collaborator, Nia Guine-Herndon, MN, RN for your enthusiasm and connecting us with CHOA

To our interviewees! We appreciate your input and willingness to help us determine the unmet needs

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