

# Zero to One

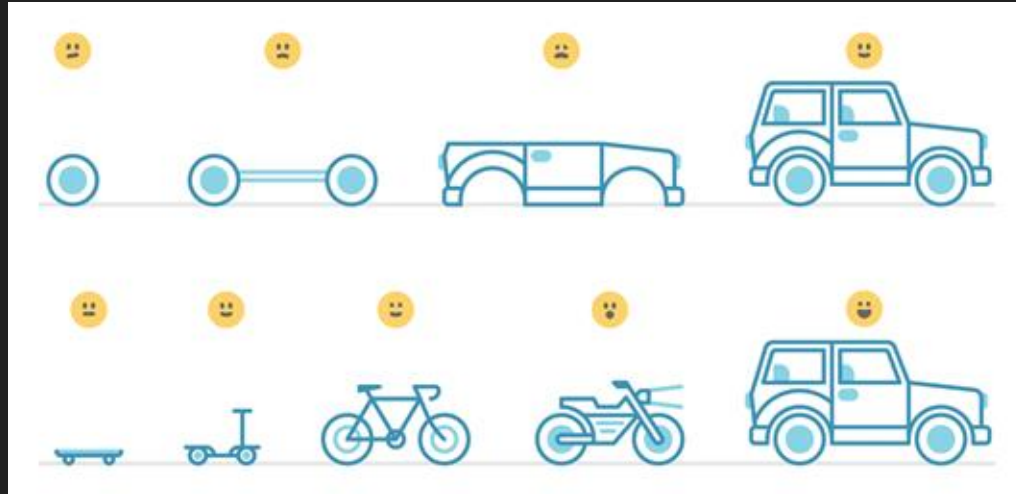
the startup advantage

Viraj Mane, PhD

Cofounder, Chief Scientific Officer, Lactiga

# Startups: what's the mindset?

The incumbent

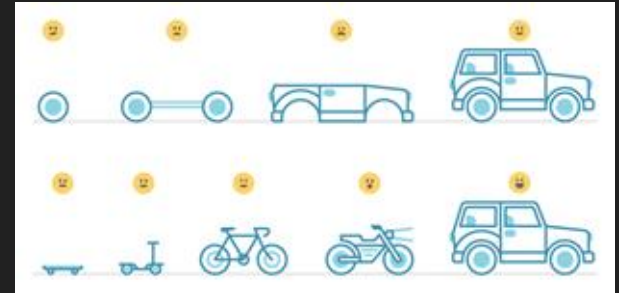


The startup

# Startups: what's the mindset?

## What do they do differently?

- Learn at speed
- Customer discovery at speed
- Build the MVP at speed
- Make decisions amidst uncertainty at speed
- Do things that don't scale



## And why?

- Because speed/agility is an advantage
  - Even when resource-constrained

# The Role of Inspiration

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David Vetter, 1971-1984

# The Role of Inspiration, Part 2



This happened after completing my PhD and two postdoctoral fellowships

# Why Startups Play a Different Game (and Often Win)

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“What problem is important enough to justify starting a company?”

- Startups begin with an *insight*, not a product
- Incumbents avoid uncertain, narrow, or unproven opportunities
  - Founders often act before there is external validation



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# Why Startups Play a Different Game (and Often Win)

Putting your own spin on the problem statement:

- What made the opportunity non-obvious
- The personal founder context (why *you* saw it)
  - a. Life sciences background + DoD + fatherhood

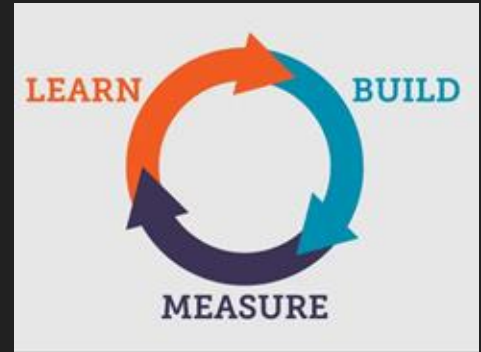


How Startups Learn Faster Than Incumbents

# How Startups Learn Faster Than Incumbents

“At the beginning, what did you *believe* was true – but didn’t yet know?”

- Key early assumptions (scientific, customer, regulatory, market)
- What would have killed the idea if proven false
- The first thing you chose to test and why

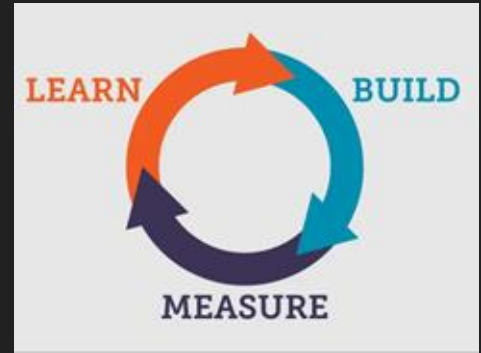


The Lean Startup Loop

# How Startups Learn Faster Than Incumbents

## For startups:

- Most early work is assumption testing and risk assessment
- Learning velocity matters more than building a large feature set



The Lean Startup Loop

No Guessing:

How Founders Figure Out What Actually  
Matters

# How Founders Figure Out What Actually Matters

## ASK THE CUSTOMER

- Initial hypothesis about the “customer”
- How conversations changed your understanding of the problem
- Signals that surprised you or contradicted expectations

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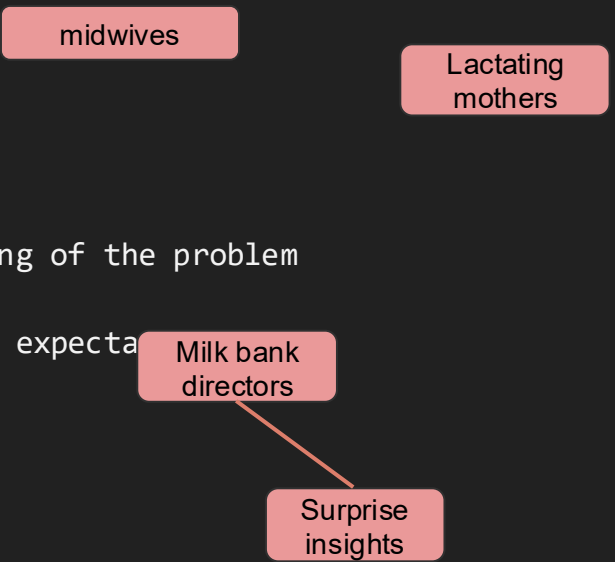
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midwives

Lactating  
mothers

Milk bank  
directors

Surprise  
insights



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midwives

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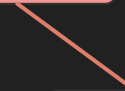
Lactating  
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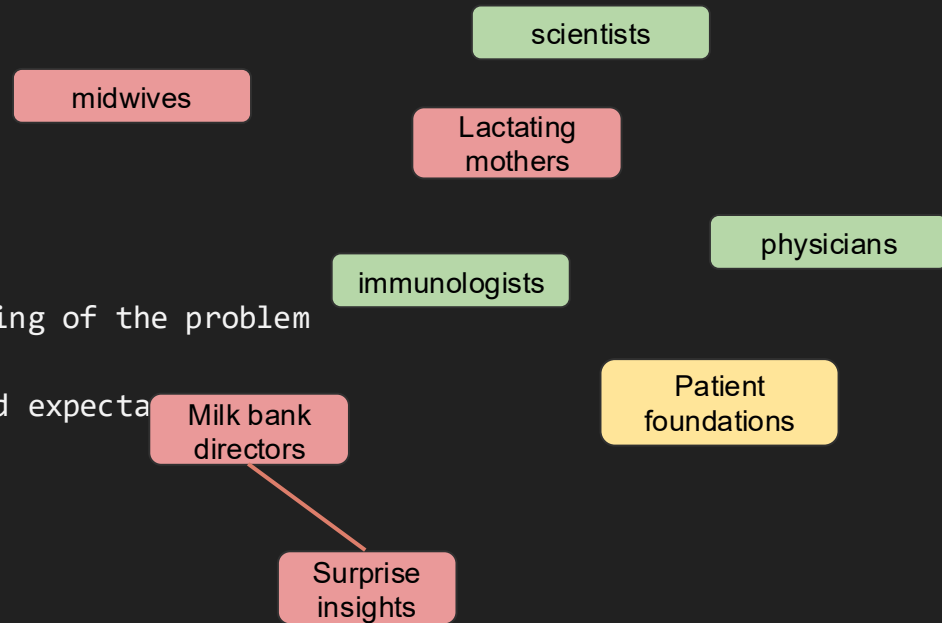
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# How Founders Figure Out What Actually Matters

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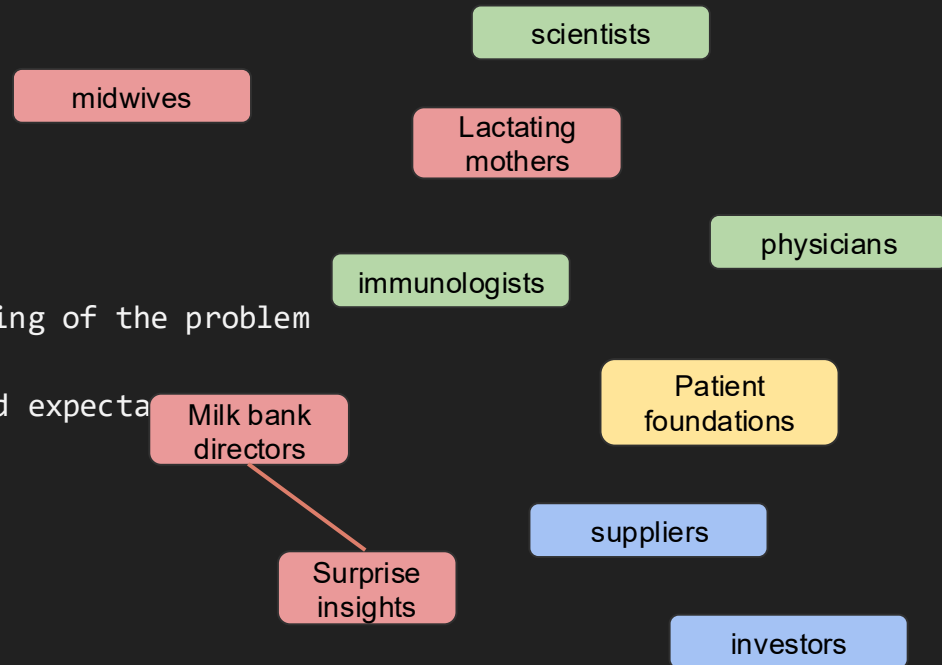
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# How Founders Figure Out What Actually Matters

## ASK THE CUSTOMER

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# How Founders Figure Out What Actually Matters

## The Objective: Learn from customers

- Customer discovery applies even in science-heavy domains
- Listening beats pitching
- Discovery reduces risk before capital is committed

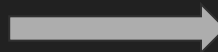
suppliers

investors

Why Early Startups Break the “Rules” on Purpose

# Why Early Startups Break the “Rules” on Purpose

Do Things That Don't Scale: This is the Early-Stage Advantage



Setting up the MVP

# Why Early Startups Break the “Rules” on Purpose

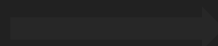
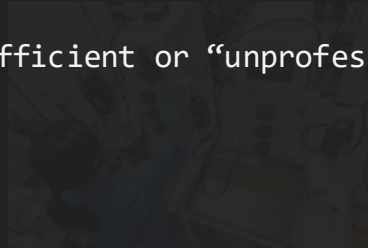
Do Things That Don't Scale: This is the Early-Stage Advantage

What could you personally do that would never scale – but still matters?

These could be activities that look inefficient or “unprofessional” from the outside

BUT, early inefficiency creates insight

First you learn, then you scale



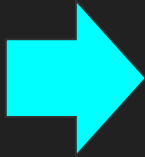
Setting up the MVP

The Minimal Viable Product (MVP):  
Find (some) Truth Without Building the Whole Thing

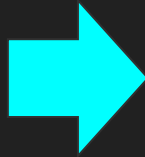
# The MVP: Find (some) Truth Without Building the Whole Thing



Small volume  
milk  
collection



Self-funded  
studies

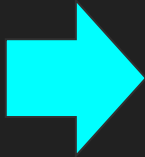


First patent

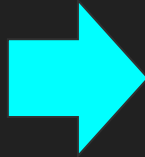
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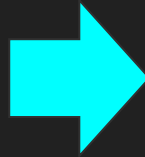
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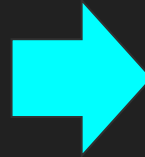
Self-funded  
studies



First patent



First NIH  
award

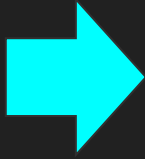


First  
venture  
capital

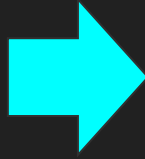
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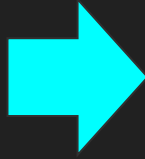
First  
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ODD and RPD  
designations  
from FDA

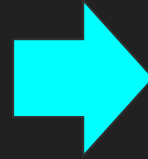
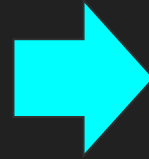
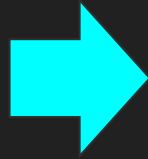
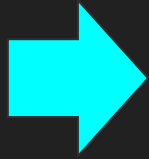
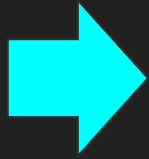


First  
publication



2 more NIH  
awards

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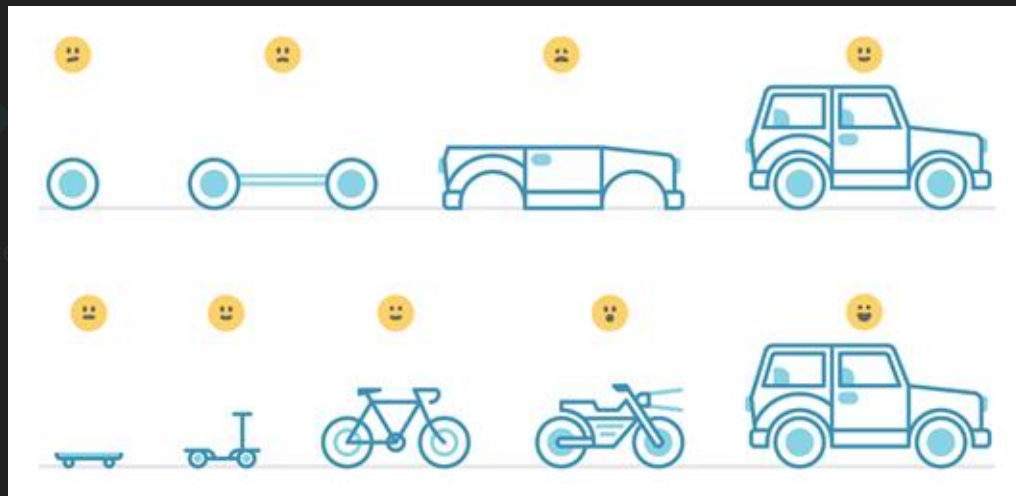
2 more NIH  
awards

**7 issued patents**

**16 research awards**

**2 publications**

# The MVP: Find (some) Truth Without Building the Whole Thing



Small volume  
milk  
collection

Self-fund  
studies

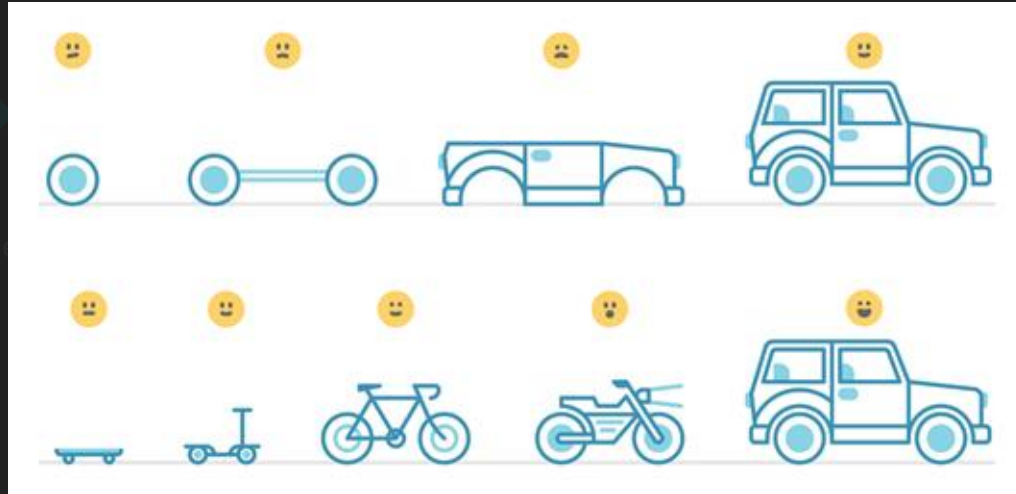
First  
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16 research awards

- What did you learn?
- What didn't you learn?
- Did you address risk?

2 publications

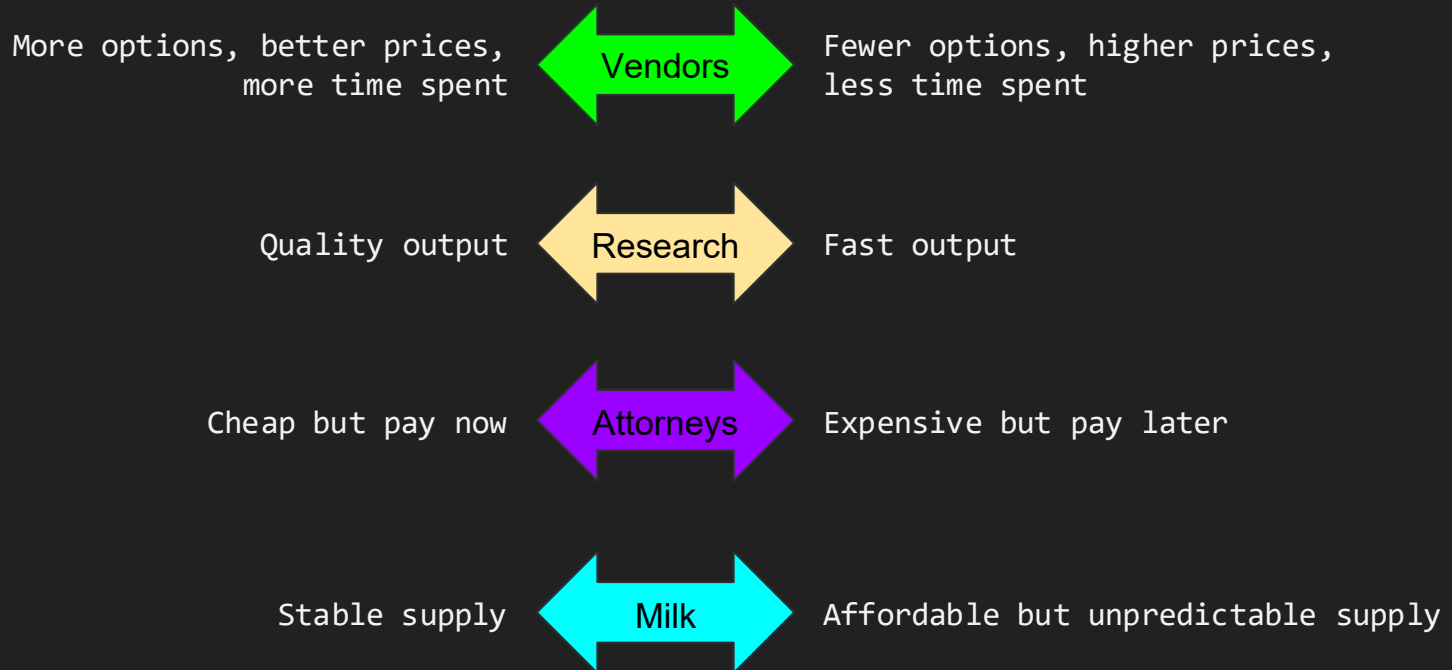
# Uncertainty:

Making High-Stakes Decisions Without All the Answers

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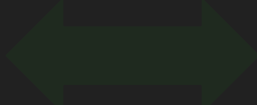


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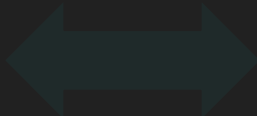
More options, more uncertainty



Fewer options, less uncertainty

- Startups cannot wait for certainty
- Some decisions are reversible → and should be treated as such
- Judgment improves through action
  - Being decisive might be more important than being right
  - Establishes a track record of leadership

Stable supply



Cheap supply

What This Means for You, Even If You Don't  
Start a Company

# What This Means for You, Even If You Don't Start a Company (Yet)

## HYDRATION



Disruptive branding

## UTILITY / TRANSPORTATION



Disruptive flexibility  
and engineering

## HOSPITALITY



Disruptive experience

# What This Means for You, Even If You Don't Start a Company (Yet)

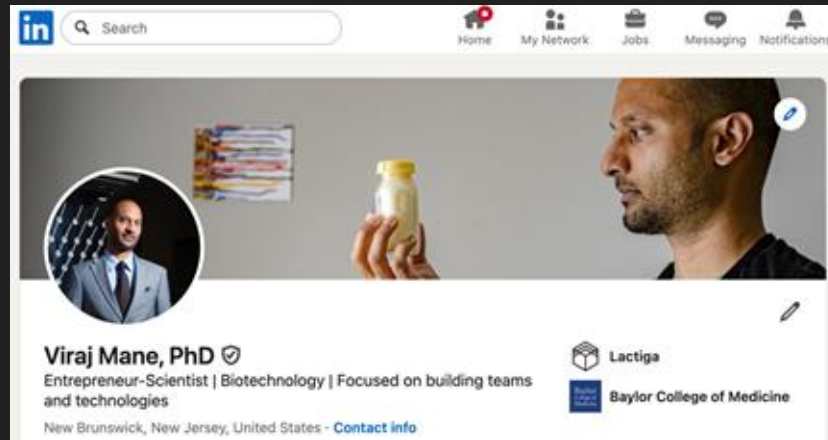
HYDRATION

## What can you do differently?


- Learn at speed
- Customer discovery at speed
- Build the MVP at speed
- Make decisions amidst uncertainty at speed
- Do things that don't scale, if you can learn from it

HOSPITALITY

# thank you!





The image shows a screenshot of a LinkedIn profile for Viraj Mane, PhD. The profile header features a circular profile picture of a man in a suit and a larger banner image of the same man holding a small yellow vial. The navigation bar at the top includes icons for Home, My Network, Jobs, Messaging, and Notifications. The profile name is "Viraj Mane, PhD" with a verified badge. Below the name is the headline "Entrepreneur-Scientist | Biotechnology | Focused on building teams and technologies" and the location "New Brunswick, New Jersey, United States - [Contact info](#)". Two company logos are displayed: Lactiga and Baylor College of Medicine.

Viraj Mane, PhD 

Entrepreneur-Scientist | Biotechnology | Focused on building teams and technologies

New Brunswick, New Jersey, United States - [Contact info](#)

 Lactiga

 Baylor College of Medicine

please stay in touch