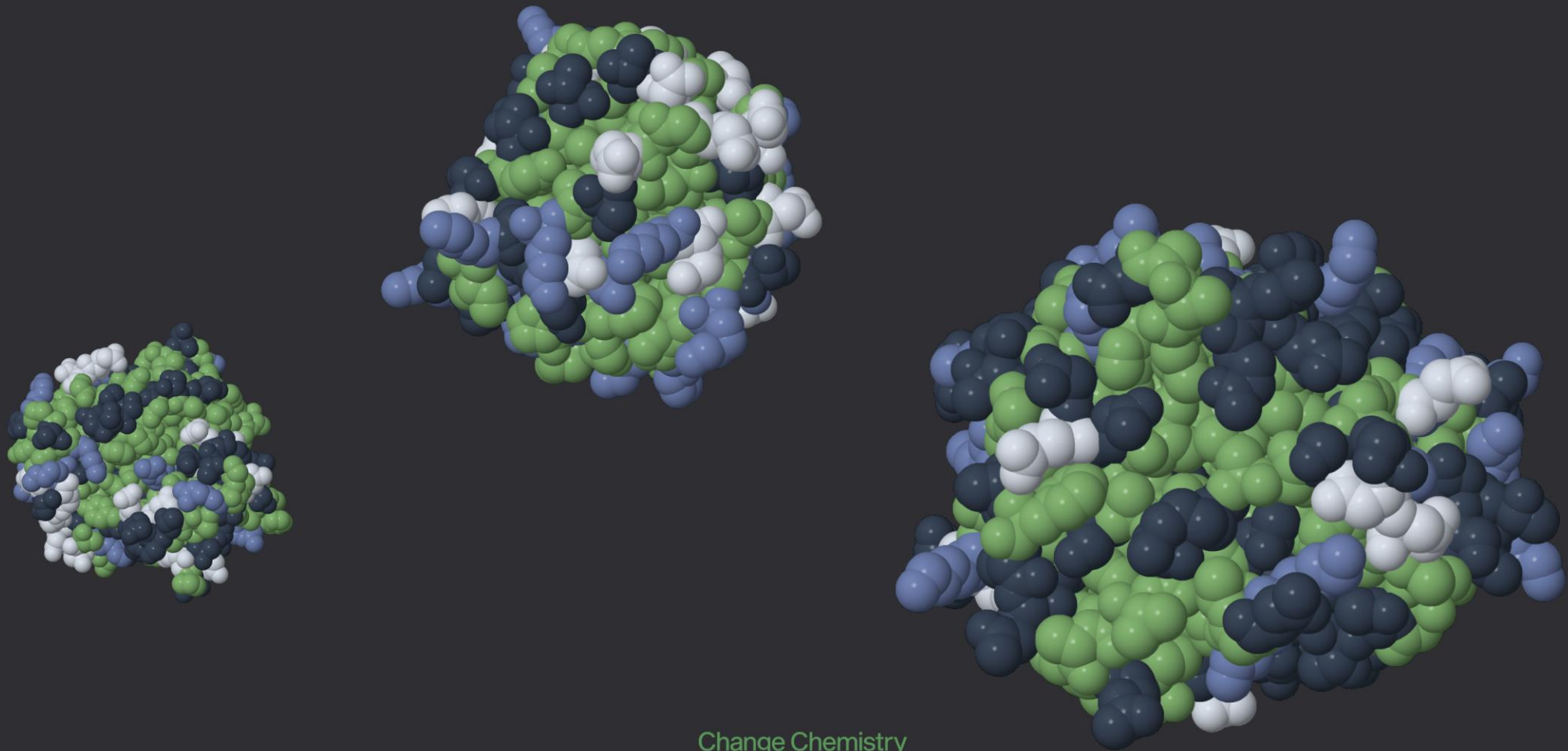


Cascade Biocatalysts

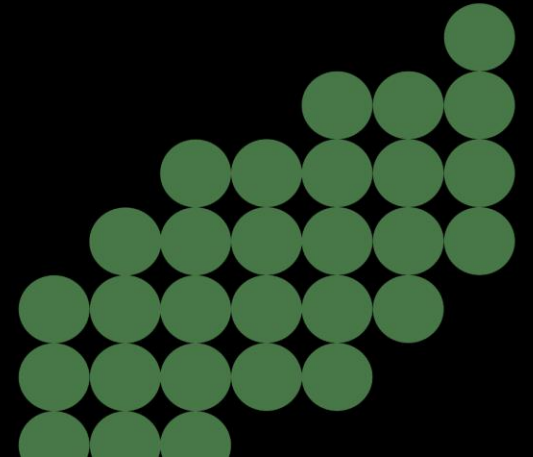
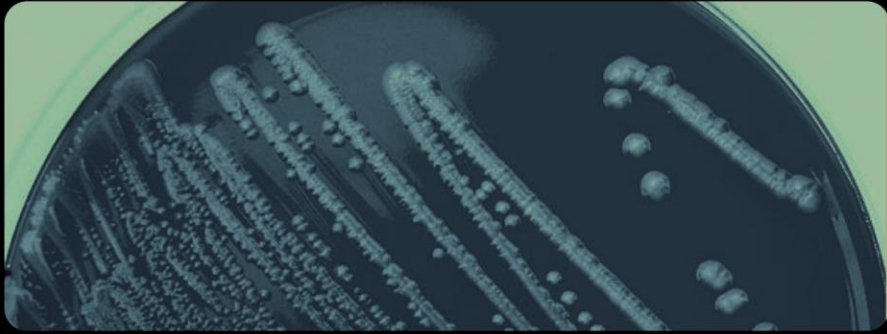


www.cascadebiocatalysts.com

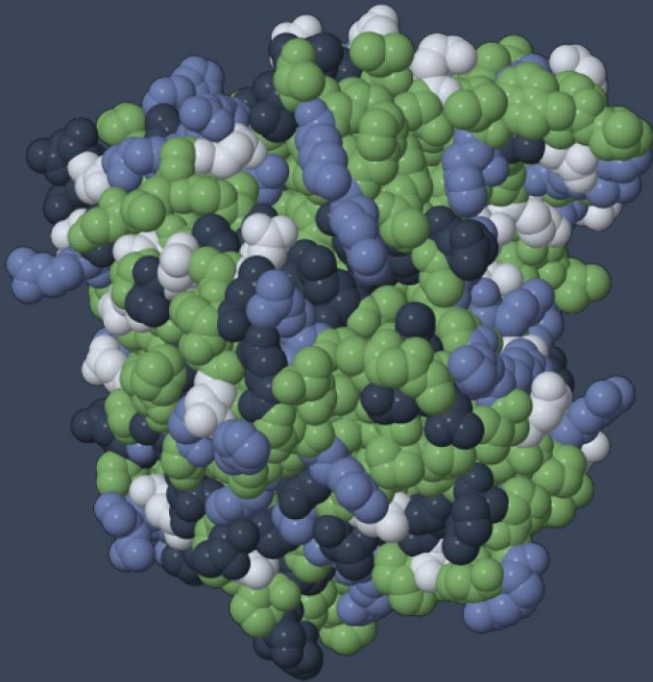
Catalyzing greener chemistry with
longer lasting enzymes



Nature uses enzymes to manufacture our world



Enzymes are powerful but not yet cost effective



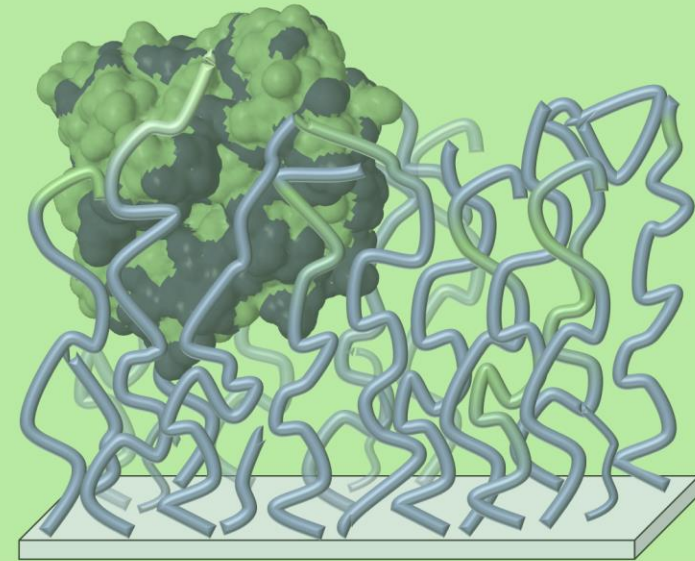
- Most stable in cells
- Breakdown in industrial conditions
- Expensive to replace



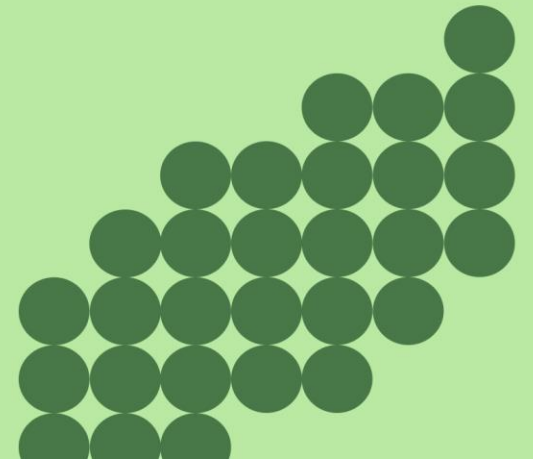
Our Solution

An innovative coating to create **body armor** for the enzyme

Standard industrial filler

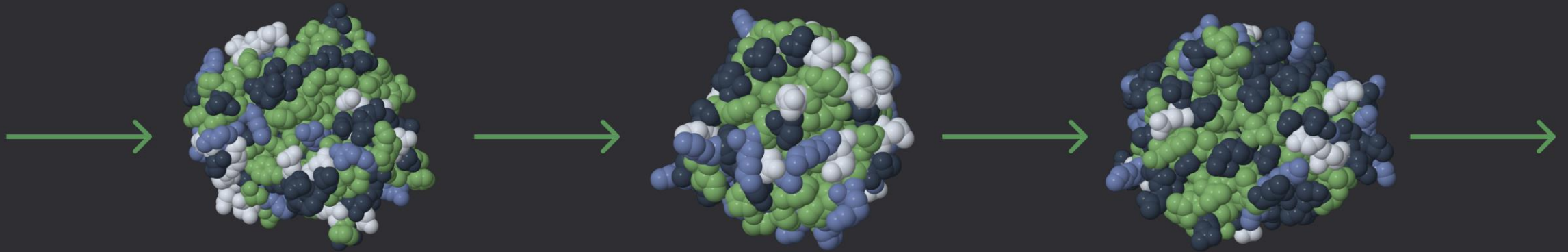
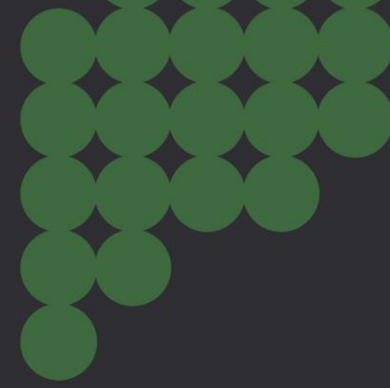


Our patent-pending innovation



Our Vision

Assembly lines of enzymes



Predictable and scalable modular machinery

Built in fuel sources (cofactor regeneration)

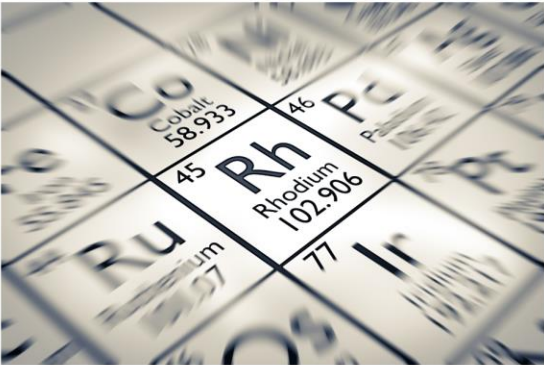
Unlocking routes to existing and novel molecules



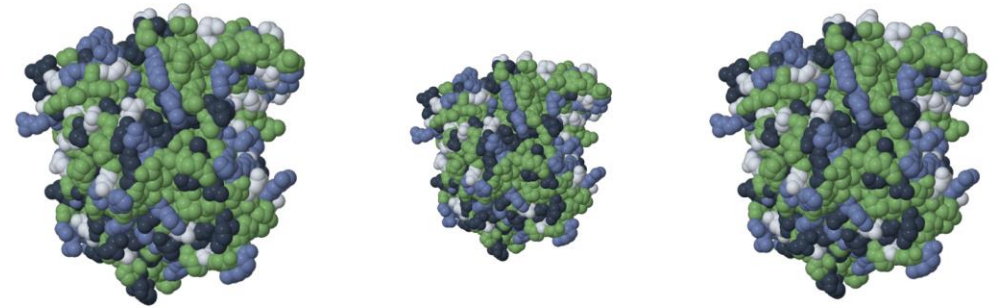
Enzymes are better catalysts (diabetes drug example)

Old way with a metal catalyst (pre-2010)

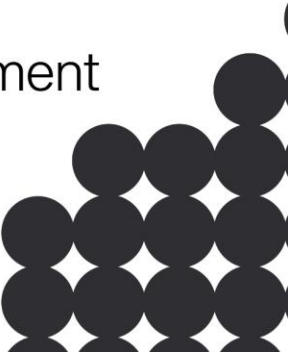
New way with transaminases



- Rare earth metal rhodium
- Spot price ~\$400 K per kg
- Dangerous process with specialized equipment
- Mined far away and by a few vendors



- Higher productivity
- Less than \$1 K per kg
- Safe conditions with generic equipment
- Can be grown anywhere



Enzymes are being adopted across industries

Food



High fructose corn syrup



Specialty fats

TATE & LYLE

Sweeteners (e.g., stevia)



Chemicals



Acrylamide



Hydrogen Peroxide

Debut →

Cosmetics and Colors

Waste management



CARBIOS

Plastic recycling



UPM

Wood waste
processing

Pharmaceuticals



MERCK

Januvia

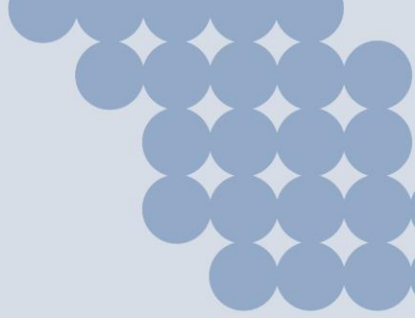


Paxlovid



DSM

Antibiotics



Our Product and Customer Journey



Prioritizing scaling our solution as fast as possible Customer journey

Body Armor for Enzymes



Lipases for high value molecules



Lab bench samples: 10-100 grams

Pilot scale: 10-100 kgs



Industrial quantities: Tons

Our business model is focused on catalyst sales



Our Team

Scientific and business advisors



Alex Rosay
CEO



James Wertz, Ph.D.
CSO

+ 3 other scientific team members
based in Denver, CO



John Warner



David Nunn



Tim Hitchman



Dipnath Baidyaroy

Thank you!

Please contact alex@cascadebiocatalysts.com
to learn more about the Enzymatic Future

