Cornucopia Bio — AI-Native Automation Core

Natural Language, Experiment-Ready Code, Robot Execution

The Problem

Biologists and chemists run structured workflows — ELISA, qPCR, sample prep, multiomics, amide formation, yet almost none of these SOPs can be easily executed directly on a robot.

1. Every vendor speaks a different programming language
2. SOPs exist in natural language, not machine language
3. Robotics experts are rare and expensive
4. Most labs want automation but can't adopt it

As a result, 95% of scientists still pipette manually.

The Opportunity

Across biotech and chemistry, workflows boil down to repeatable building blocks:

- Biologists repeat the same ELISA / qPCR patterns
- Chemists rely on 20–50 canonical reaction types across an entire career

If scientists can simply describe the protocol and run it on any robot, automation becomes universal.

Cornucopia: The Automation Core

Cornucopia transforms natural-language protocols into executable robot code.

What We Do

NLP → validated, production-ready robot code
Vendor-agnostic automation core
Domain-aware code gen for biology and chemistry
Error handling, tip tracking, volume validation

Current Support

ELISA on Opentrons Flex
qPCR on Opentrons Flex
Multiomics prep modules

What We're Looking For

Early biotech & chemistry partners
Access to new robotics platforms
SOP contributors (assays + reactions)
Strategic partnerships

Expanding Now

Tecan (Fluent/EVO)
Hamilton (STAR/Vantage)
We can integrate any new machine with hardware access

Why It Matters

Biotech

- 10–100× faster protocol development
- Reproducible assays
- Lower variability

Chemistry

- Automated reaction setup
- Standardized templates
- Faster iteration in med chem

Vendors

- Modern AI-native interface layer
- Differentiation in a crowded market
- Increased customer adoption

Vision

A world where scientists describe experiments in plain language and execute them on any robot, anywhere.