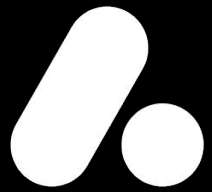


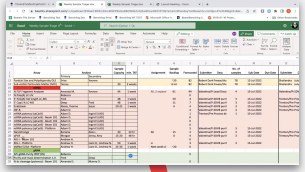
ARTIFICIAL

The Digital Platform for the Modern Lab

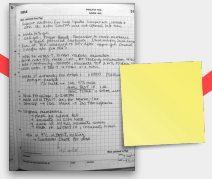
THE LAB TODAY

Scientist wants to run an experiment

LIMS



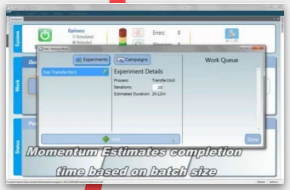
Sample & Inventory Management



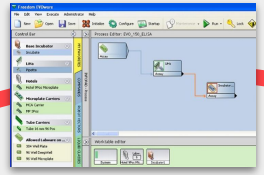
Paper SOPs

Manual Data Entry & Setup

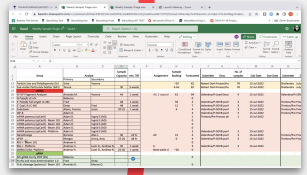
Device Schedulers



Liquid Handler Workflows



Robots



Compliance Monitoring

Visualization & Reports

RESULT

INCOMPLETE, UNTRACEABLE DATA

BUILDING THE LAB STACK TODAY IS MANUAL, MESSY, AND UNSCALABLE

Biodesign tools & ELNs

ELN | Collaboration Tools | DoE

"glue code"

LIMS

Sample & Inventory Management | Request & Order Management | Informatics Workflows | QMS

Data analysis & infrastructure

ML/AI Pipeline | Analytics | Visualization & Reports | Data Lakes | Data Monitoring

*Highly manual, **one-off** and **unscalable** code written by a human, increasing chances for **errors** across multiple steps in every process*

Informatics

Automation

LES & schedulers

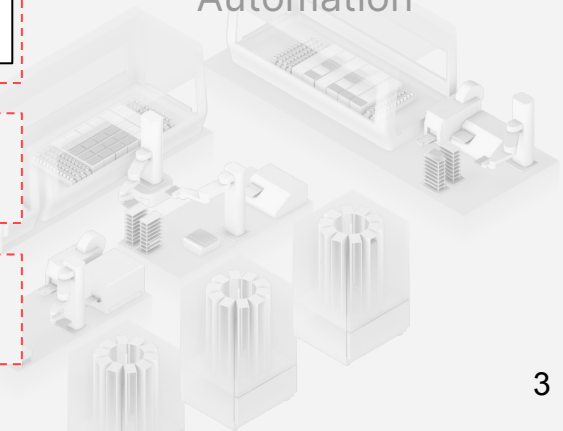
LES | Digital SOPs | Device Schedulers | Compliance Monitoring | HMI Remote Monitoring

Drivers & interfaces

Device Connectivity | Liquid Handler Workflows

Devices

Instruments | Robots | Liquid Handlers

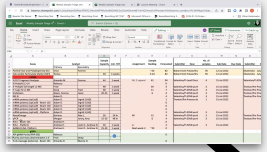


THE AVERAGE BIOTECH LAB LOSES OVER **$750K EVERY YEAR** TO PREVENTABLE INEFFICIENCIES

	$ lost per year	Time lost per year
⟶ Manual data entry, tracking, and cleanup	$237k	2160 hours
⟶ Lack of automation engineer tools to scale experiments	$450k	3120 hours
⟶ New lab tech turnover & training	$27k	480 hours
⟶ Redoing experiments due to human error	$62k	200 hours
Time & money lost every year	**$776K**	**5960 hours**

Artificial is the **only company providing a vertically integrated orchestration platform** that can operate across both digital and physical worlds.

Data / LIMS / ELN



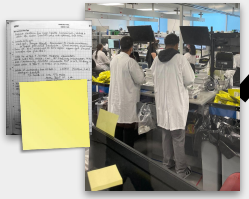
AI

`Scientist wants to run an experiment`

CLOUD
PLATFORM

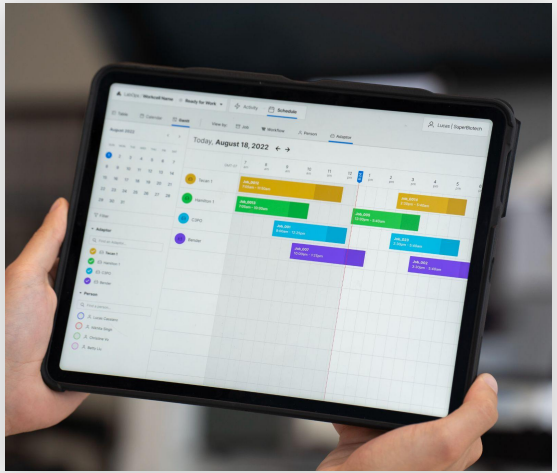
RESULT

People



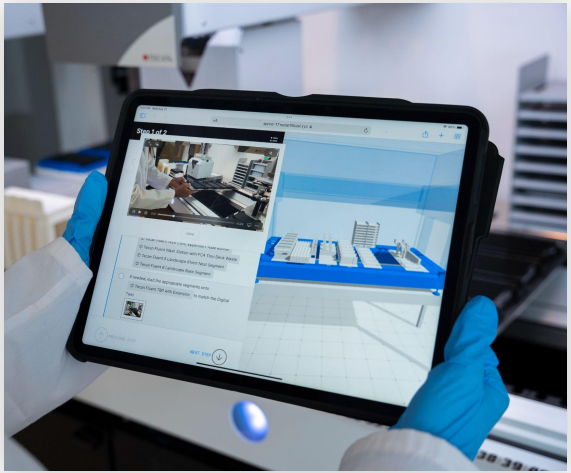
Lab Instruments

FROM REQUEST → RESULT IN ONE SINGLE PLATFORM



1. →

Scientist creates & schedules a new experimental request



2. →

Artificial guides operators and scientists through manual steps

3. →

Artificial runs and consolidates results in the cloud

THE LAB STACK WITH ARTIFICIAL

Biodesign tools & ELNs

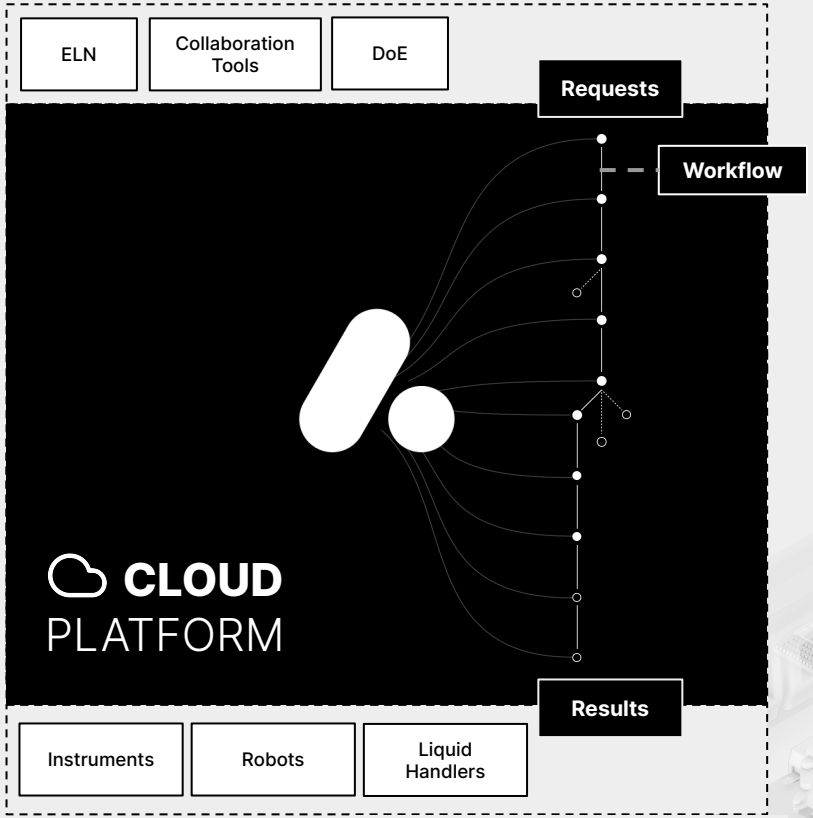
LIMS

Data analysis & infrastructure

LES & schedulers

Drivers & interfaces

Devices



*Artificial is the **only company providing a vertically integrated orchestration platform** that can operate across both digital and physical worlds.*

The Artificial Platform

Artificial LabOps

Run & orchestrate your lab

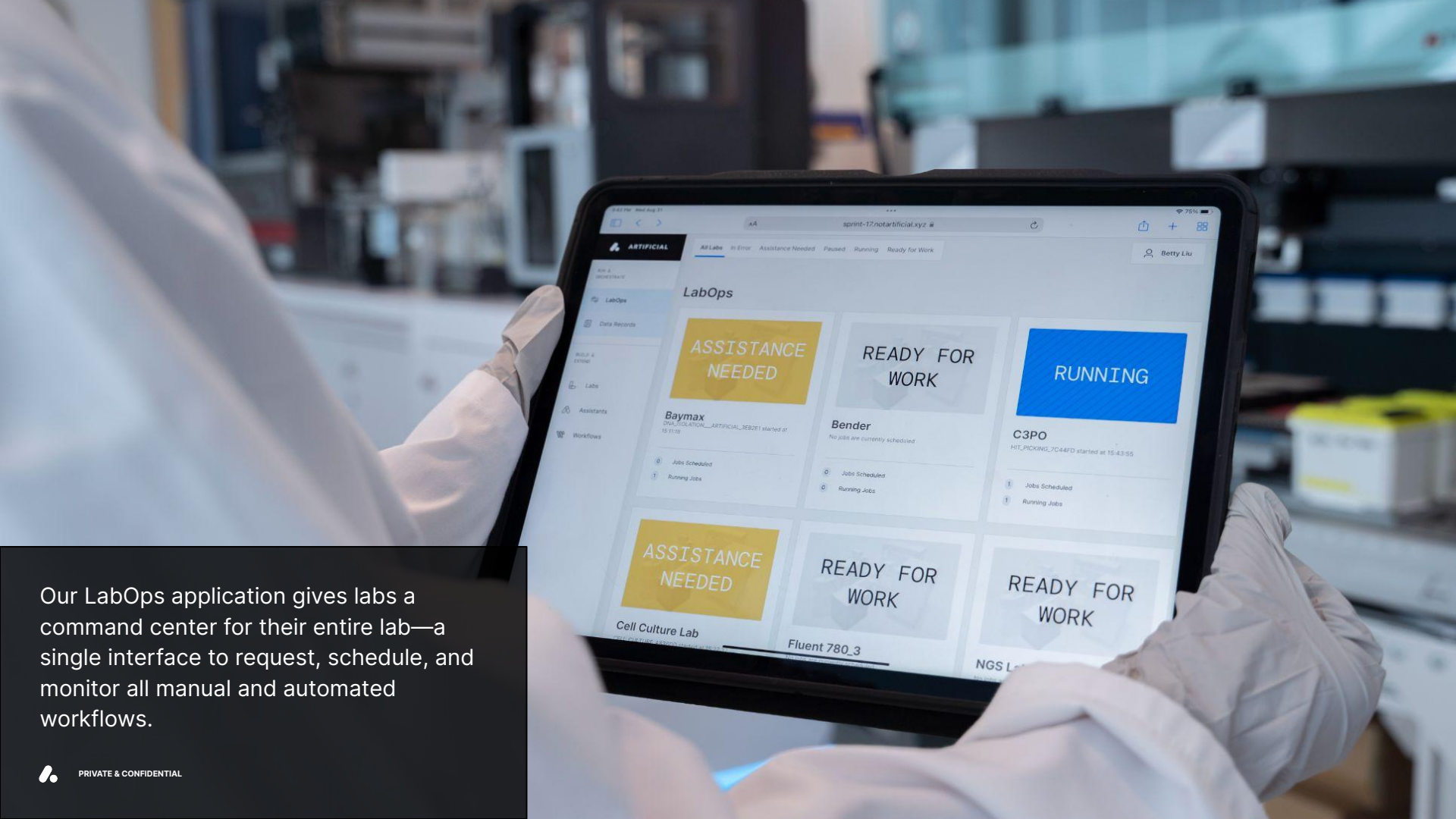
A command center for your entire lab—a single interface to request, schedule, and monitor your manual and automated workflows.

ARTIFICIAL
For Builders

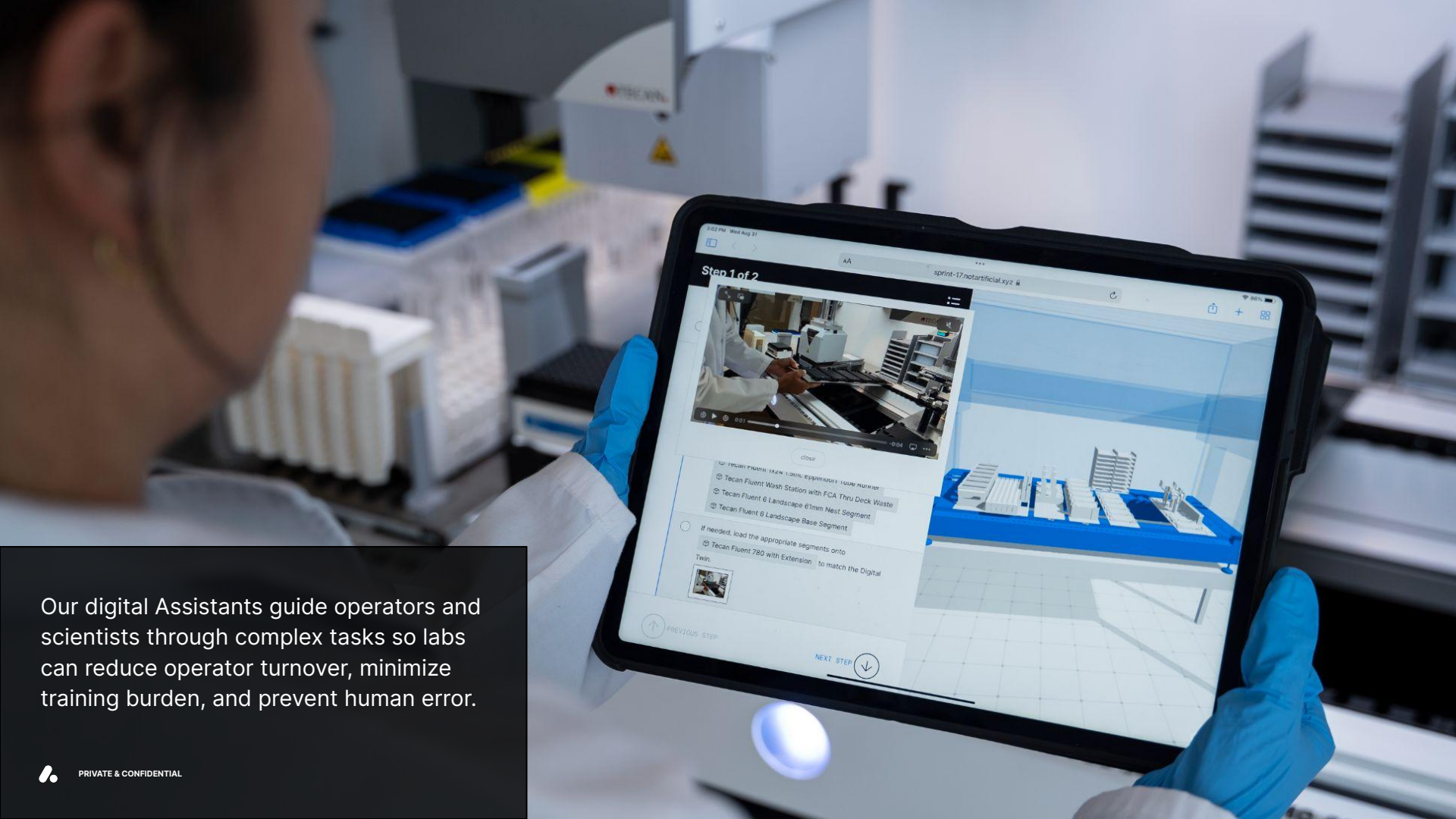
Artificial Digital Lab Toolbox

Digitize your lab, SOPs and workflows

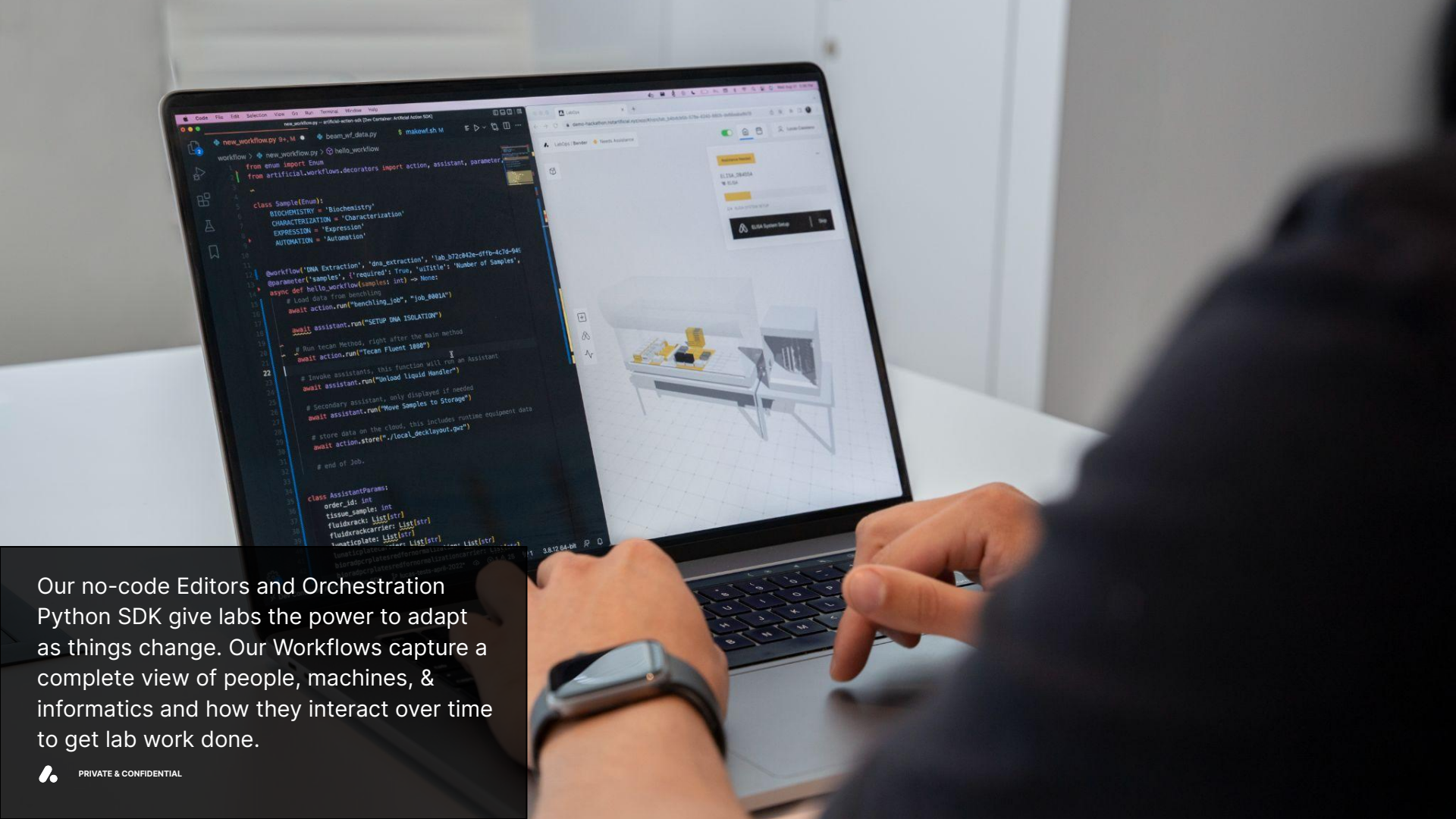
No-code, low-code tools for automation engineers and scientists to customize the Artificial platform for their specific lab context.



Our LabOps application gives labs a command center for their entire lab—a single interface to request, schedule, and monitor all manual and automated workflows.



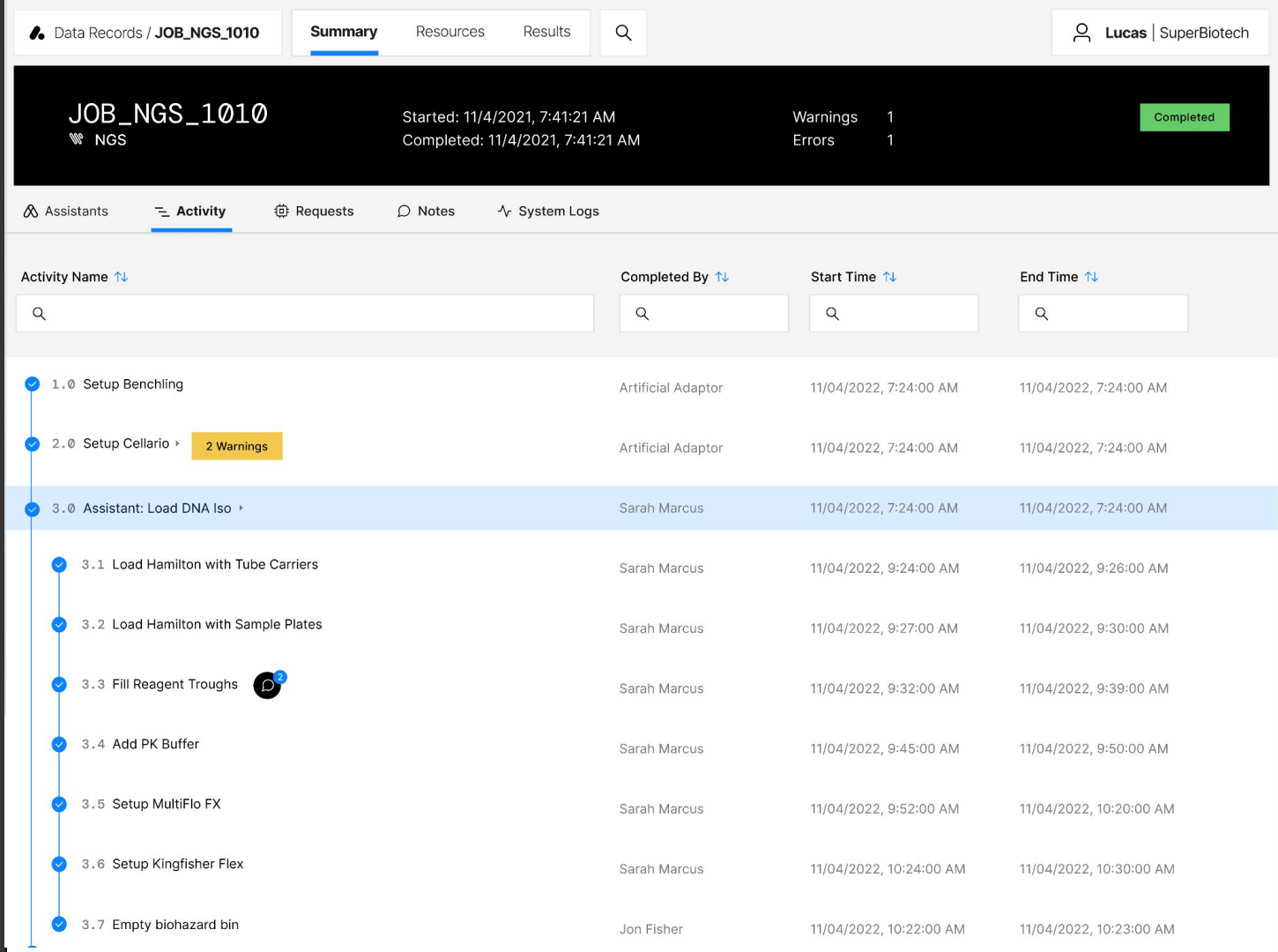
Our digital Assistants guide operators and scientists through complex tasks so labs can reduce operator turnover, minimize training burden, and prevent human error.



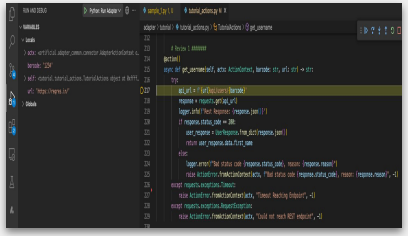
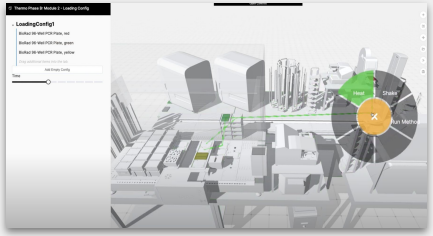
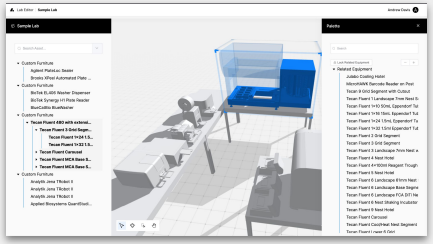
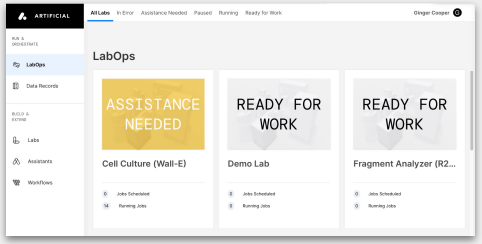
Our no-code Editors and Orchestration Python SDK give labs the power to adapt as things change. Our Workflows capture a complete view of people, machines, & informatics and how they interact over time to get lab work done.

Complete, Contextualized Data Records

All experimental runs in Artificial produce a complete, contextualized data record in the cloud with 360° metadata context ready for AI, compliance and analytics.

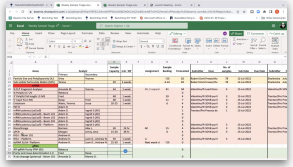


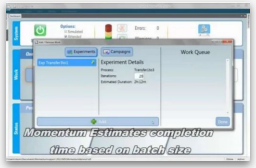
ENGAGEMENT ACROSS THE ARTIFICIAL PLATFORM

SOFTWARE ENGINEER	LAB AUTOMATION ENGINEER/SPECIALIST	SCIENTIST	LAB MANAGER/LAB TECH SCIENTISTS AUTOMATION ENGINEERS
			
Python SDK Leverage the Artificial platform to develop, test, and deploy actions to interface with instruments or other software Expand on Artificial's library of Adapters with custom devices or functionalities	**Workflows SDK** Compose workflows from existing Assistants, and premade Actions Drag and drop Assistants for manual actions, automated actions and configurations	**Assistants** Define new Labs (digital twins) and Assistants (digital SOPs) for execution Leverage existing functionality for easy drag and drop lab set up and human native text for Assistant creation	**LabOps** Single platform and command center to schedule, monitor and execute work Create requests, launch jobs and follow Assistants for visual step-by-step guides to execute end to start workflows

THE "CLOSED LOOP LAB" TODAY

Pharma Xs current lab is run completely manually. Most critically, data lives in disaggregated spreadsheets and there is no visibility into what experiments have been run in the past. This significantly slows down their R&D and their ability to get to production.





DESIGN

Scientists determine which experiment to try next.

"How do you decide what to run?" → "We have a monthly meeting and talk about it for 2 hours."

BUILD

Heterogenous, non-integrated equipment in a lab is run manually by lab techs and lab manager. No tracking of manual steps.

TEST

Equipment is disconnected. Data is gathered in an ad-hoc manner and ends up in silos, file systems or thumb drives in non-standard formats and in spreadsheets at best.

LEARN

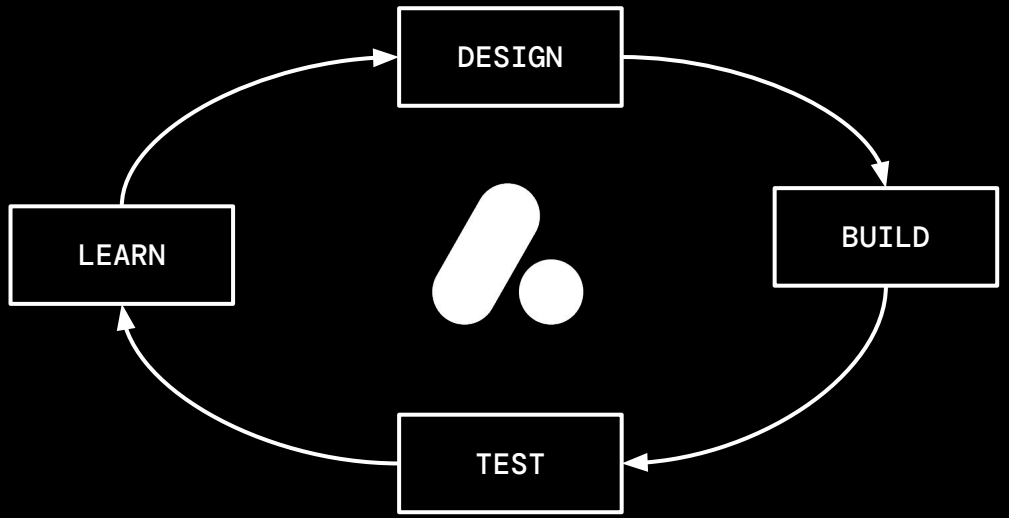
Scientists manually query data living in disaggregated spreadsheets.

"How do you query your data?" → "I walk down the hall and ask three people"

THE CLOSED LOOP LAB WITH ARTIFICIAL

Artificial acts as a central command center for Pharma Xs Lab, enabling faster time from R&D to Production.

Request & Job Module: Pharma X's AI algorithm determines next set of experiments to try combined with Scientist input (in Artificial).



Data Records: Results can be queried and viewed by Scientists in Artificial and are directly fed back into Pharma X's AI algorithm to determine next experiment.

Local Scheduler, Orchestration Engine: Artificial determines what steps need to be run and executes them on an automated system.

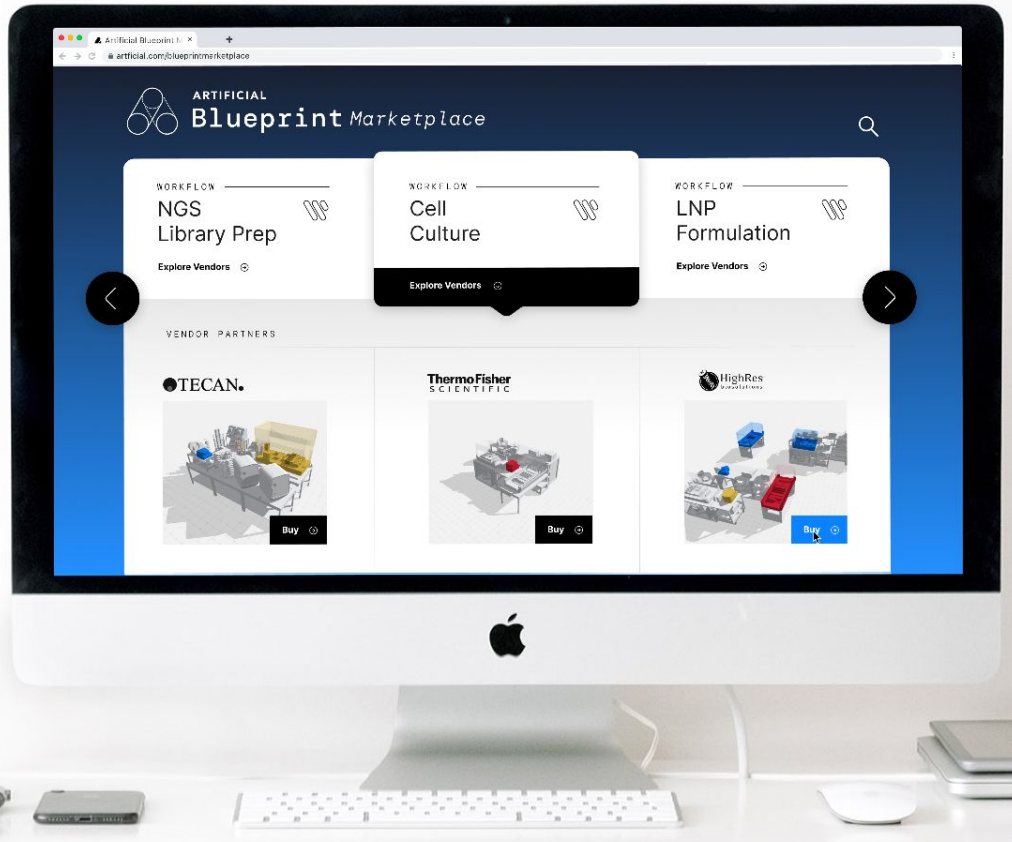
Local Scheduler, Orchestration Engine: Once experiments are ready, Artificial schedules instruments to analyze samples and generate data.

ARTIFICIAL BLUEPRINT MARKETPLACE

"The Github of Scientific Workflows"

We are building a marketplace of **common workflows supported by vendor partners** so labs can easily search, simulate, and buy end2end solutions.

Our common workflows provide **repeatability, reliability, and portability** across locations and vendors.



OUR TEAM

We know what it takes to **connect bits to atoms**, while keeping **humans-in-the-loop**.

DAVID FULLER, CO-FOUNDER & CEO

CTO of the KUKA Group

Managing Director KUKA Roboter ~$1.6B rev.

VP of SW R&D at National Instruments

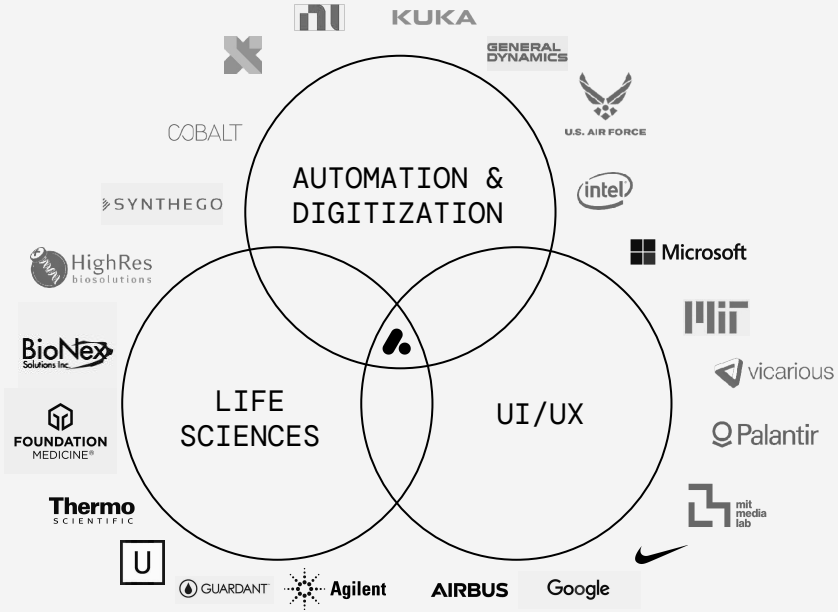
NIKHITA SINGH, CO-FOUNDER & CPO

Human-Robot Interaction Researcher at the MIT Media Lab

Commercial BD & Product at Palantir

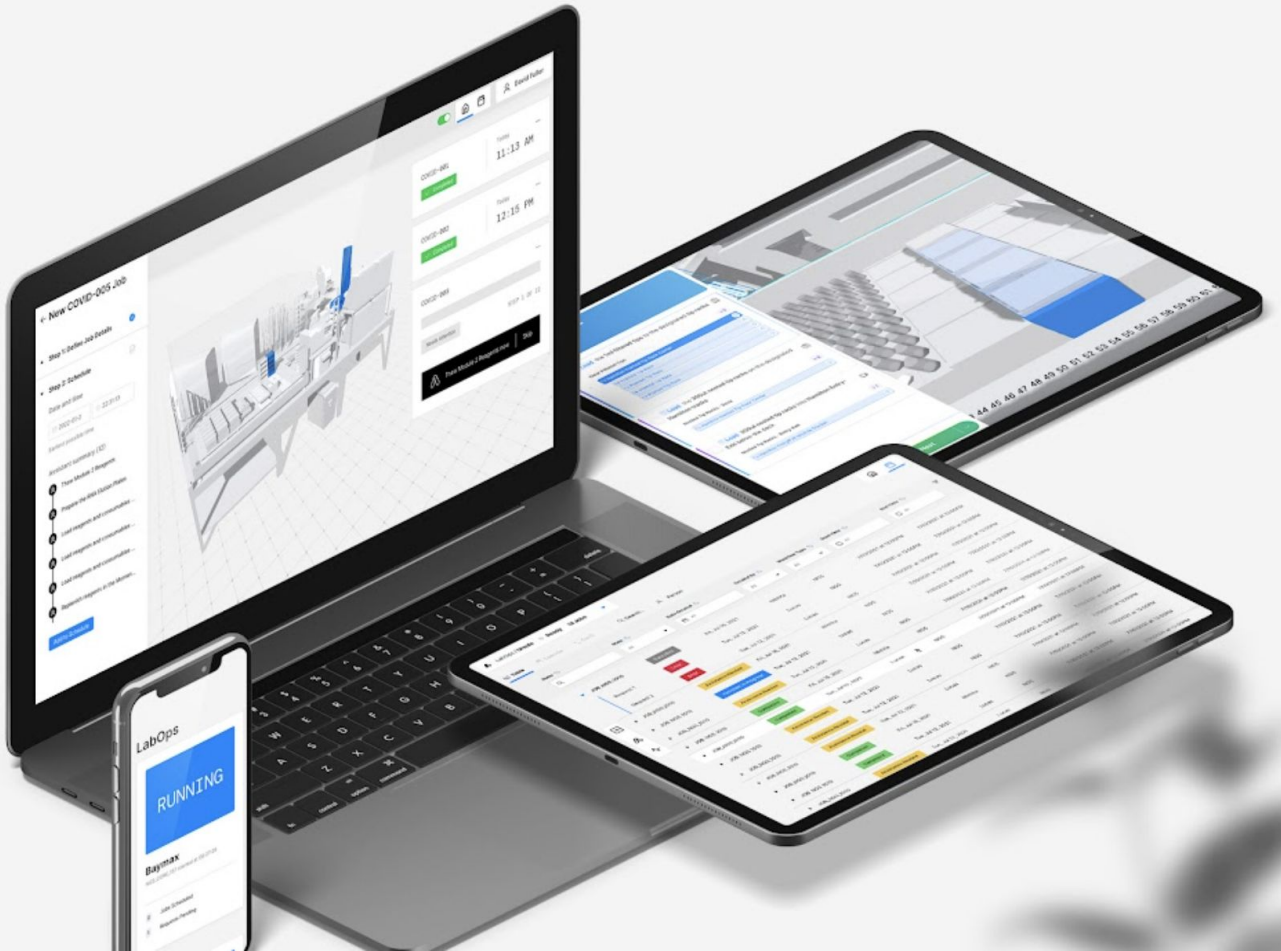
Researcher at UC Berkeley AutoLAB & immunology labs

34 team members with breadth and depth in automation, life science and UX.



THE DIGITAL PLATFORM FOR THE MODERN LAB

Artificial is the partner to bring your lab of the future into today.



www.artificial.com