NestEgg Labs

Redefining Cell Research

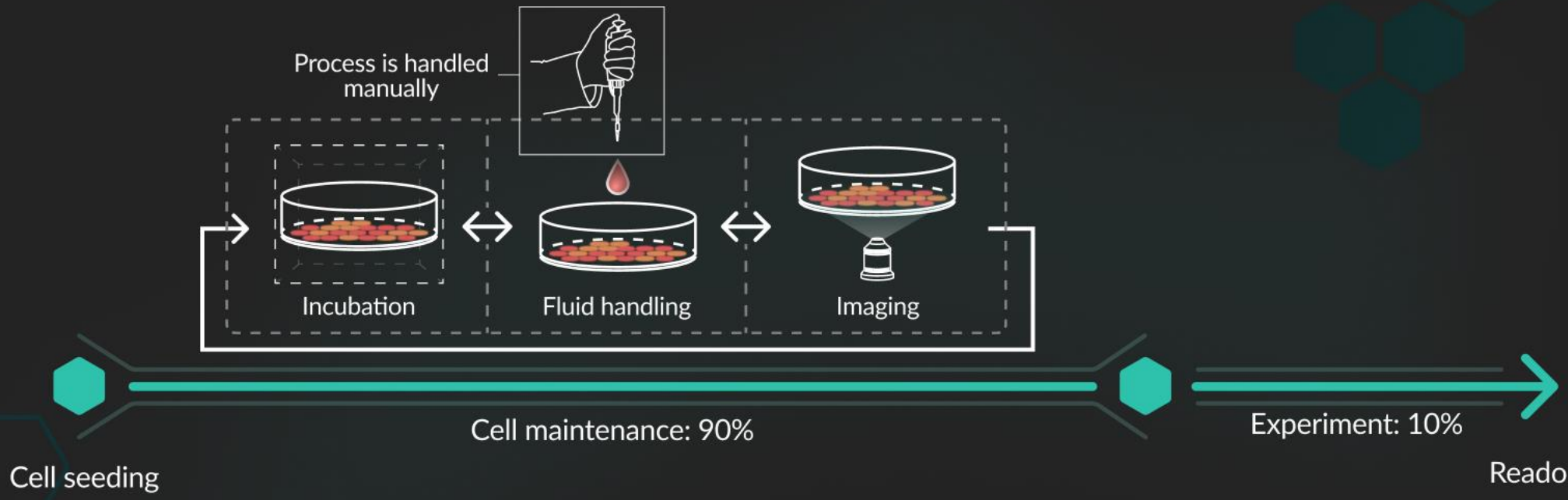
nestegglabs.com


Cell research powers a $1.5 trillion industry, saving millions of lives and creating billions in economic value each year

Yet, in 2024, cell research is still largely done manually

Outdated, manual processes require removing cells from optimal incubator conditions for in-person handling

Cell maintenance consumes 90% of workflow time

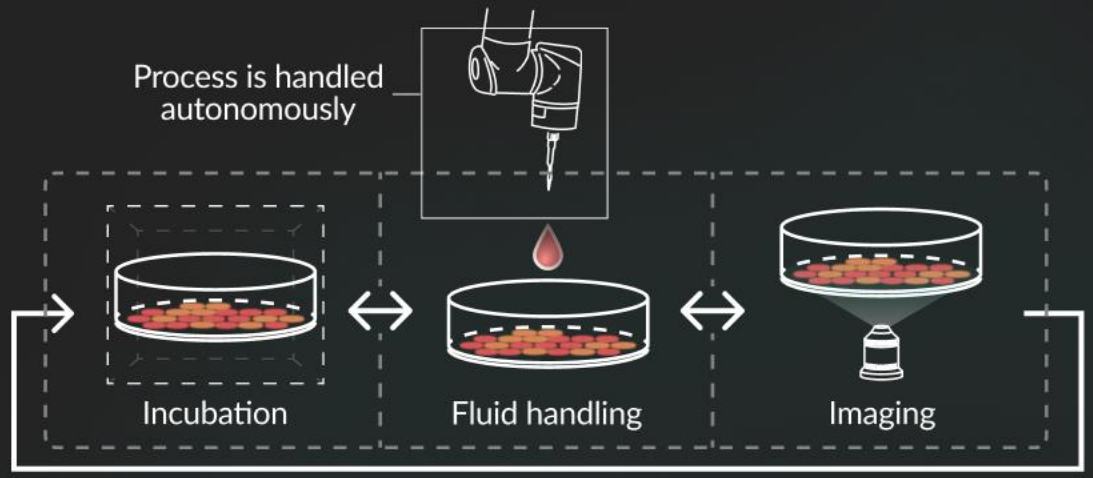


€200B
Lost annually to repeated experiments and variability

30%
Experiments compromised by contamination or misidentification

85%
Research failures due to inefficiencies and lack of automation

Lots of Automation for Readout, gaps persists in cell maintenance



SARTORIUS Leica

ZEISS Cherry Biotech

Experiment: 10%

Cell maintenance: 90%

Cell seeding

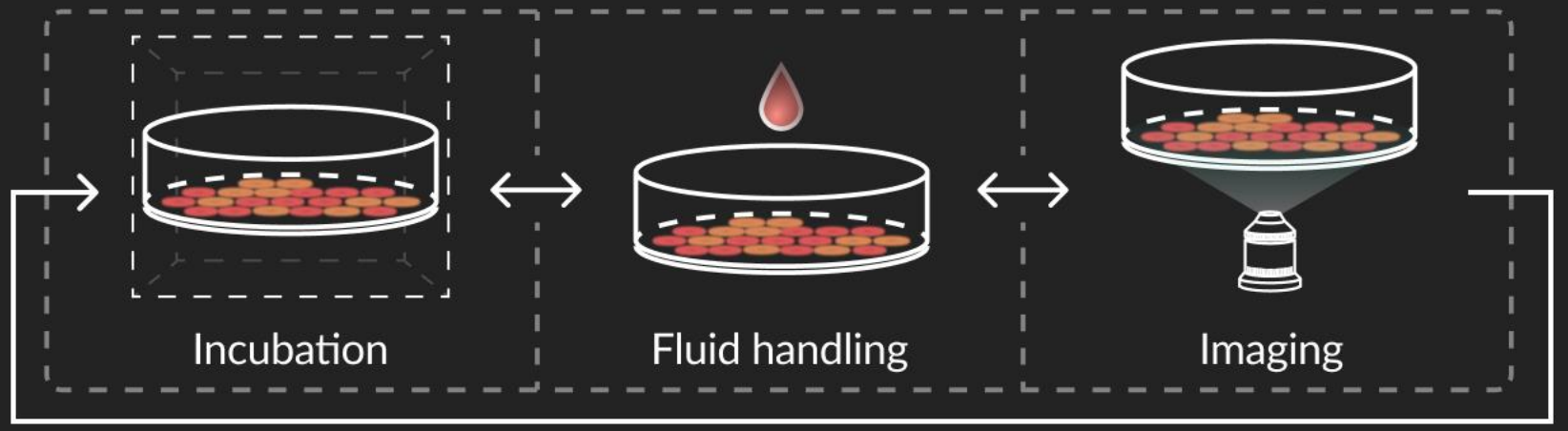
Readout

BECKMAN COULTER TECAN GINKGO BIOWORKS

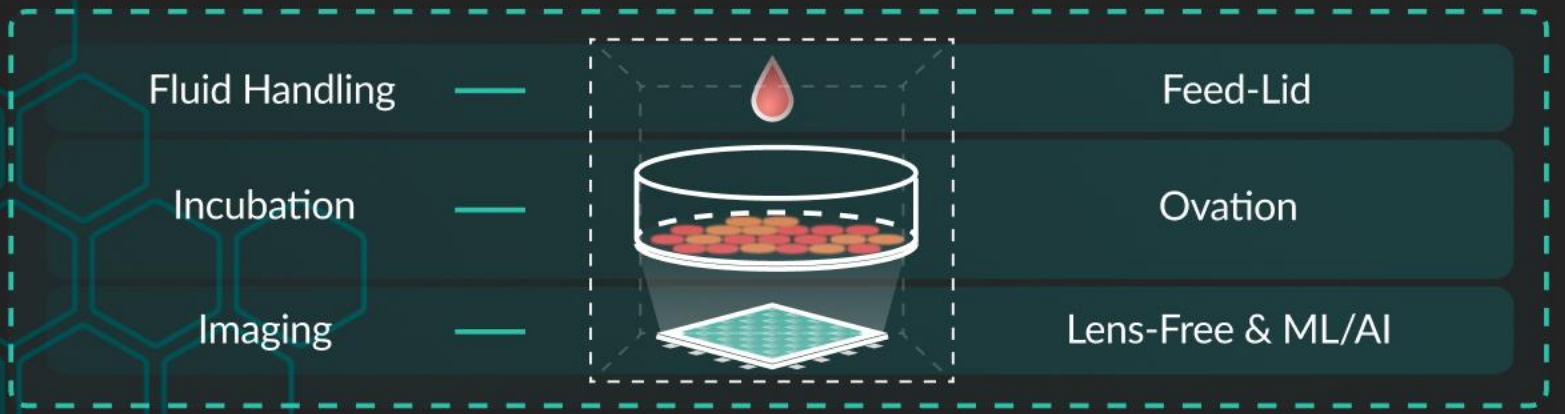
Robotic plate shuttling disrupts workflows, risks cell health through environmental shifts, and remains inaccessible due to high costs and oversized systems

NestEgg Labs End-to-End workflow

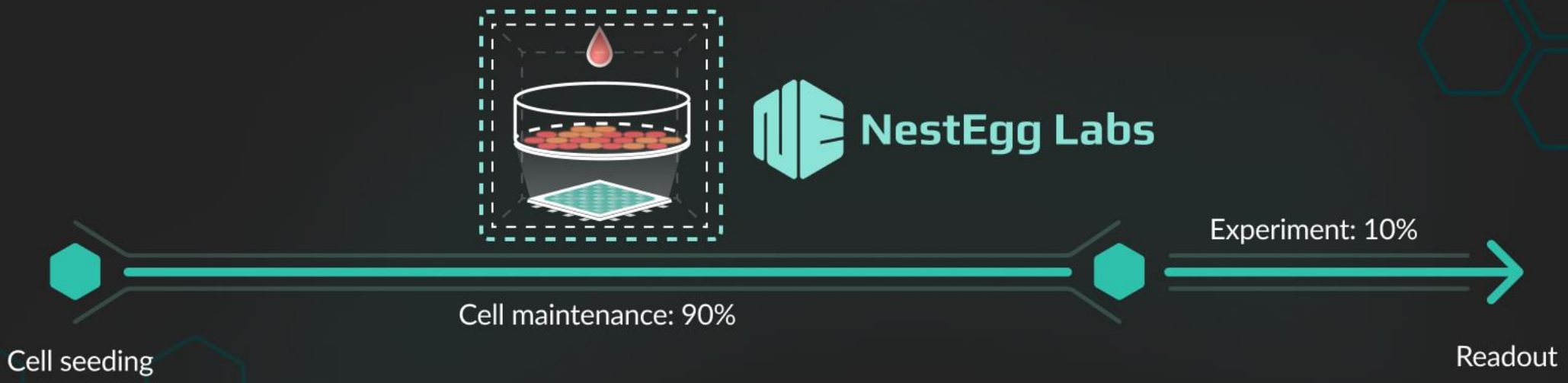
Existing Method



Our Solution



Three critical steps integrated for seamless, uninterrupted workflows



Compact, scalable units maintain stable, cell-friendly conditions to protect health, maximize lab space, and cut single-use plastic waste by over **90%**

€350 each

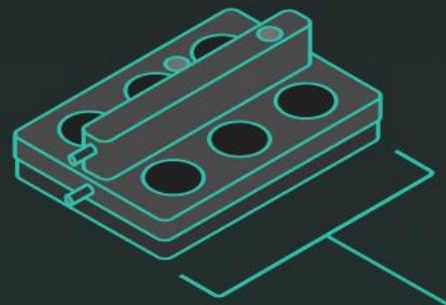
FEED-LID
CONSUMABLE

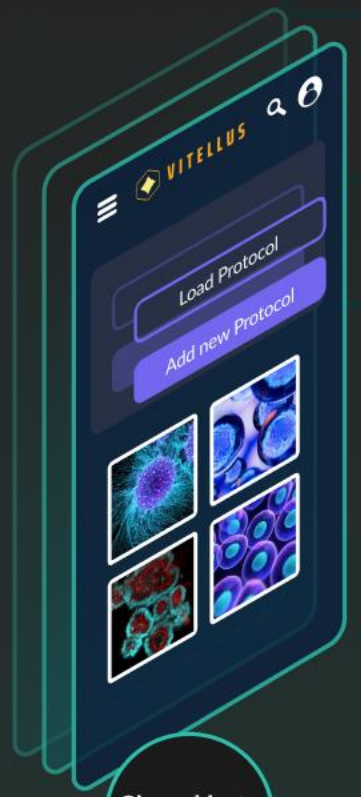
€179K

OVATION
HARDWARE

€9.99 monthly

VITELLUS
SOFTWARE





Patent pending

TRL-7 Validated

Closed beta Q1 2025

Our platform combines Feed-Lid, a sterile reusable lid 3D printed from bio-compatible material. Vitellus a powerful app for smart devices, that serves as the core interface between our hardware and any operating system, and the Ovation system which automates fluid handling and lens-free microscopy remotely. This platform uses the familiar razor/blade model and the software uses a freemium SaaS with paid and enterprise tiers.

Shifting from reactive to predictive science

Reusable consumable prevents contamination and waste by 90%

Feed⇄Lid

Save time for researchers with remote cell culture and reduce error

VATION

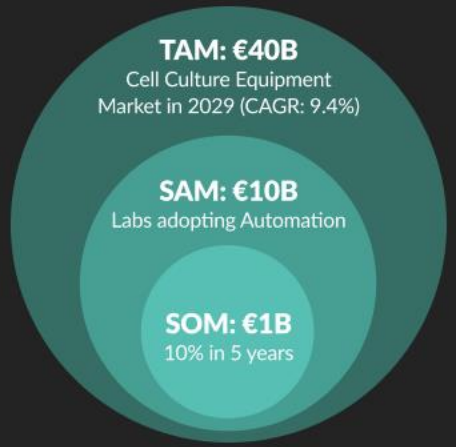
Train models on “big cell data” for predictive insights

Incentivize data sharing to transform the industry

Funding Need	€500K	€2M	€8M	€70M
Revenue Forecast	€1.5M (2027)	€10M (2028)	€60M (2030)	€300M+ (2035)
Value Creation*	€300M	€2B	€6B	€10B+

*Projected value for all customers, based on expanding adoption and market impact across research and pharmaceutical industries. Assumptions are grounded in industry trends and anticipated customer reach at each step.

Building Credibility to Capture a €40B Market



Phase 1

- University labs
- Science Foundations
- Sustainability in research
- Delicate samples

Drive consumable sales, generate preliminary data, build initial use cases

nederlandse brandwonden stichting

MERLN Institute

Leids Universitair Medisch Centrum

Hy2Care

10+ More

Phase 2

- University Departments
- Biotech/Pharma Firms
- CROs

Leverage published research and proven use cases to establish credibility and expand market reach

2025 Q2 Q4 2026 Q3 2027

Design and Development

- 96-well plate prototype
- Plan Larger plate formats
- Vitellus App Development

Pre-manufacturing & Product Finalisation

- Feed-lid Injection molding
- Liquid exchange prototype
- Machine learning coding

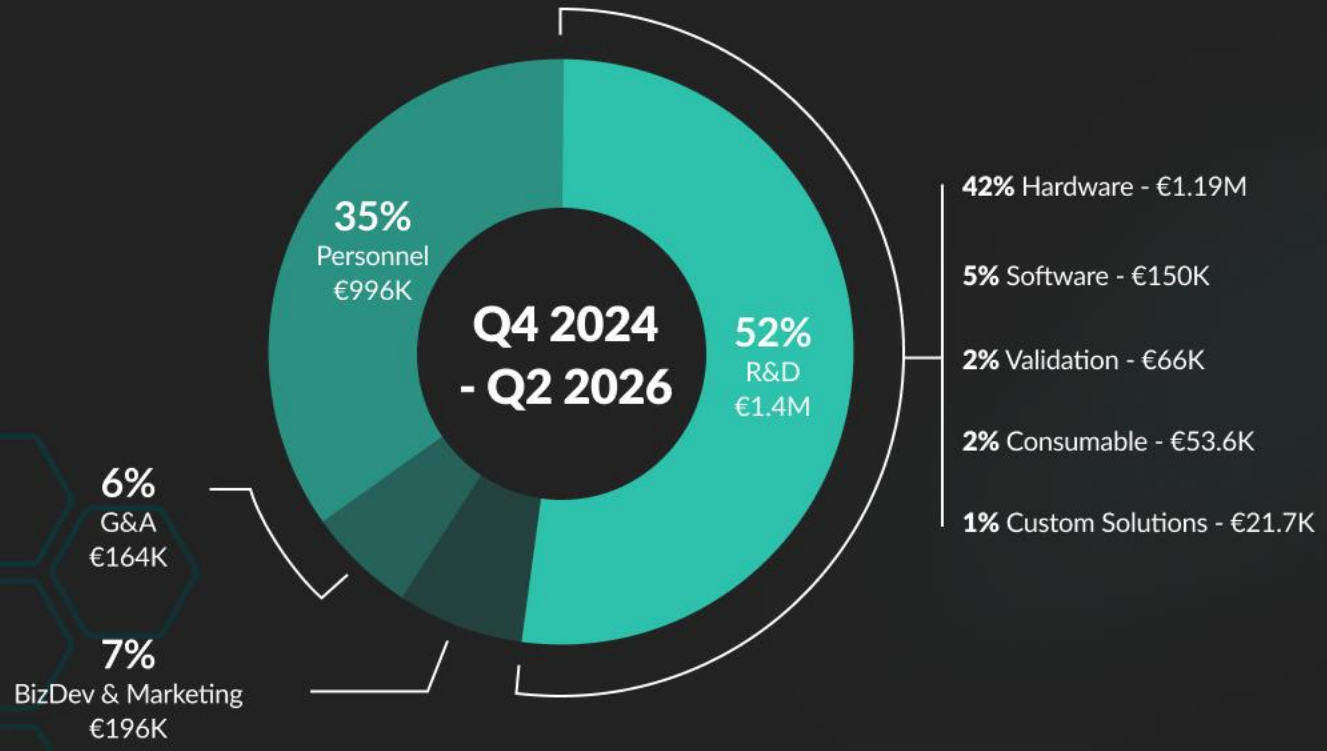
Implementation & Market Preparation

- Algorithm implementation
- Liquid exchange Validation
- Ramp up sales of consumable

Full Market Launch & Growth Evaluation

- Launch Ovation in EU
- Preparations for US launch
- Initiate Phase 2

Poised for Success with the Right Plan and Partners



42% Hardware - €1.19M

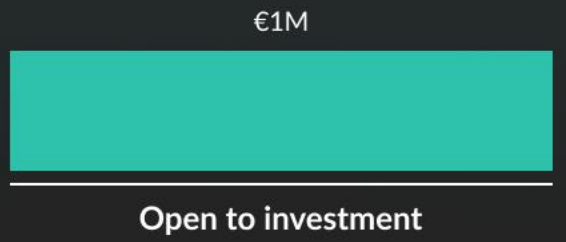
5% Software - €150K

2% Validation - €66K

2% Consumable - €53.6K

1% Custom Solutions - €21.7K

Ask – €1.6 million



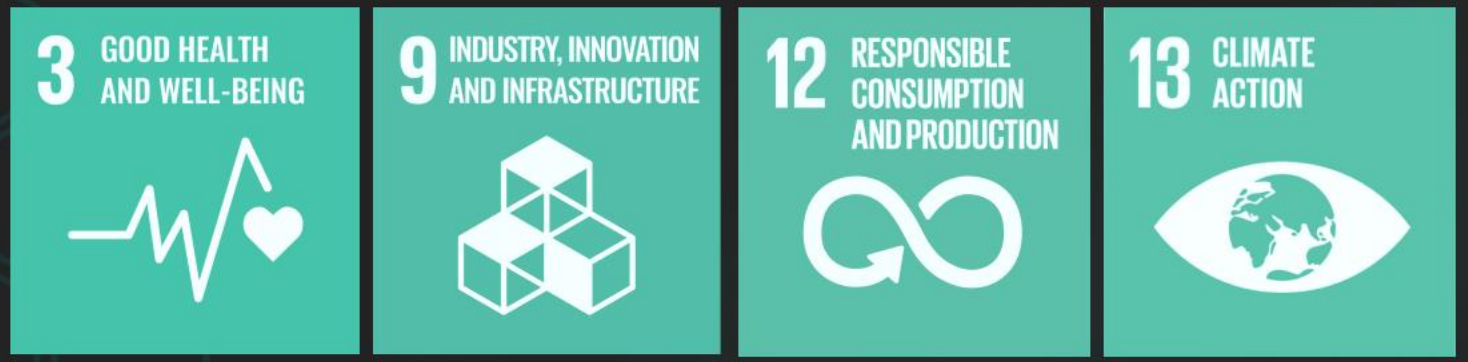
OP-Zuid
Europees Economisch Stimuleringsprogramma

DEMCON

Maastricht University

MERLN Institute

Driving Sustainable Impact in Cell Science



Market

€40B market with a cell-centric, data-rich approach

Scalability

From consumables to CRO services

Traction

Grants, deals, & strong customer interest

Business

On track for profitability by 2027

Sustainability

90% less single-use plastic waste

Built by Researchers for Researchers

Tanner Carden

CEO, Founder

Award winning entrepreneur with 10 years experience in lab automation, fundraising, public speaking, teambuilding, project management, and 3D printing.

Dr. Francesco Pappalardo

Expert, Investor

Subject matter expert with a PhD in Regenerative Medicine, Lean-6-Sigma, 3D cell culture, brand, and communication

Hans Keijdener

Tech Lead

Award-winning expert in cell research, biomedical engineering, 3D printing, and microscopy.

Heena Uijtenboogaard

Growth Manager

A “cold-calling machine”, botanist, chemist, and expert in selling & marketing to research labs.

Gavon Carden
Operational excellence

Joseph Brian Berry
Advisor, Angel

Maarten-Jan Campman
Mentor, Angel

Let’s redefine cell research together!

NestEgg Labs

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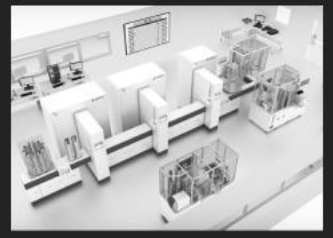
Market Entry Risks and Mitigation Strategies

	Challenges	Mitigation
Market Adoption and Credibility	Convincing academic and research institutions to adopt a new, integrated system may be challenging, especially if they're accustomed to existing manual workflows or large, traditional robotic suites.	• Prioritize impactful case studies with respected labs to showcase benefits and publish results for credibility • Collaborate with KOLs and institutions to drive endorsements and accelerate adoption • Offer discounts or added services to early customers to build traction and foster word-of-mouth
Funding and Cash Flow	Developing and scaling cutting-edge technology requires significant upfront investment in R&D, marketing, and manufacturing	• Align fundraising with milestones (e.g., product validation, sales) to optimize investor interest and ensure cash flow • Focus on both one-time sales and recurring revenue from consumables and software • Maintain strict oversight of spending and adapt budgets to match revenue trends
Competition and Technological Differentiation	Competing against established players with significant resources (e.g., large lab equipment providers) and potential new entrants in the lab automation space.	• Emphasize NestEgg's integrated, modular approach, especially the seamless workflows and scalability • Keep innovating with machine learning, real-time monitoring, and enhanced modularity • Provide exceptional support, training, and user-friendly products to establish NestEgg as the preferred choice
Regulatory Hurdles and Market Entry Barriers	Expanding to European and North American markets may require navigating complex regulatory approvals, especially if moving beyond academic institutions into clinical settings.	• Work with consultants to anticipate compliance needs • Begin with academic and research labs, then expand into clinical applications as compliance progresses • Design products with regulatory standards in mind to streamline approval processes
Technical Challenges in Scaling Data Infrastructure	Managing, storing, and analyzing large volumes of data from continuous cell monitoring could be technically challenging as adoption scales.	• Use reliable cloud services to handle increasing data demands efficiently • Implement optimized storage and processing protocols to avoid bottlenecks • Employ data compression and advanced analytics to reduce storage needs and enhance insights
Intellectual Property Risks	Protecting proprietary technology in a competitive, innovation-driven field.	• File patents in key markets and work with IP experts to ensure enforceability • Track competitor IP activity to detect potential infringements or gaps • Protect non-patentable innovations as trade secrets to maintain a competitive edge

Tailored for Researchers, Not Just Robots



Parameter	NestEgg Labs Solution	Traditional Robotic Suite	Competing Automated Systems
Workflow Integration	Full Integration	Disjointed steps; cells moved manually or by conveyor between stations	Mostly Readout/Prep; partial integration (either/or)
Scalability and Modularity	Scale-Out Capability	Fixed, Large Units	Limited Modularity
Data Continuity	Continuous Capture	Discontinuous	Limited Data Integration
Machine Learning Readiness	Yes	Yes	No
Cell Health and Environmental Stability	Stable, Low-Stress	Prone to Fluctuations	Moderate Stability (if capable of incubation)
Operational Cost Efficiency	High	Low	Moderate
Sustainability	90% Plastic Reduction	High Plastic Use	Moderate Plastic Use
Ease of Use	High	Complex, Specialist required	Moderate
Versatility and Cell Type Flexibility	Adaptable to various lab needs, compatible with standard vessels	Optimized for cell banking, limited to a few cell types per department	Limited to readout, often requires proprietary vessels
Cost and ROI	Affordable, Quick ROI	Expensive, Long ROI	Expensive, Moderate ROI

Sustainability

Metric	Without Feedlid (Current)	With Feedlid (Sustainable Solution)
Number of Researchers in a typical lab	8	8
Annual Plate Handling Events (10 per week)	3,840	3,840
Multiwell Plate Usage	576 plates (25.92 kg of waste)	576 plates (25.92 kg of waste)
Disposable Pipette Tips & Serological Pipettes Waste	96 kg (1,920 tips and ser. pipettes)	2.9 kg (58 reusable Feedlids)
Other Plastic Waste (e.g., gloves, medium bottles, other disposables)	358.08 kg	358.08 kg
Total Plastic Waste	480 kg	386.9 kg
Plastic Waste Reduction	-	Workflow Integration

97% reduction in disposable plastic usage → 20% reduction in total plastic waste across the entire workflow

Addressing a multi-billion euro gap in scientific research

First customer strategy

- Focus on initial engagement with European university labs and research institutions dedicated to sustainability and delicate sample handling (3D cell culture, regen medicine, clinical cell samples). Build credibility through real-world data and use cases, showcasing our consumable's benefits for early adopters.
- Leverage published research, endorsements, and case studies from key scientific leaders to drive awareness and adoption across academic settings.

Growth Strategy:

- Expand from early adopters to broader university departments, biotech firms, and contract research organizations in Europe, using initial success as a foundation for credibility.
- Replicate the proven model in the US market, backed by strong academic validation. Educate researchers and lab managers on the benefits of seamless automation for reproducibility, efficiency, and sustainability.
- Offer flexible access options, including modular product purchases that adapt to diverse lab needs and budget constraints.
- As adoption grows, leverage cell data to generate insights and unlock new revenue as a data broker, driving predictive analytics and scientific advancement

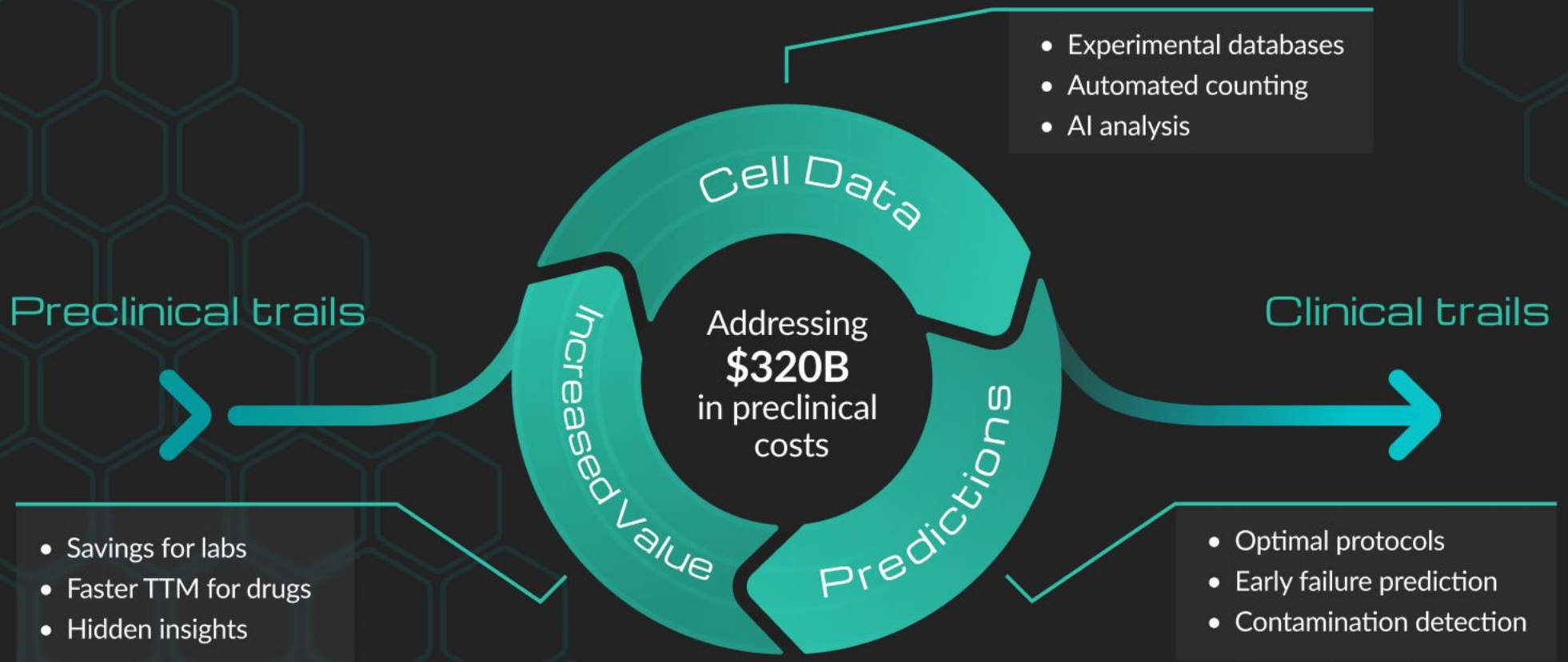
Competitive Advantages:

- Our platform will be the only compact system on the market able to keep the sample under the microscopy
- Innovative, integrated technology that combines fluid handling, incubation, and imaging in one compact system
- Experienced leadership team with deep industry expertise, totaling 20+ years across biomedical research and lab automation
- Endorsements from leading researchers and institutions, reinforcing our reputation for reliability and impact in scientific research

IP

- Patent Filing: We are filing for a patent this year for our proprietary consumable.
- Trade Secret: We possess unique IP related to 3D-printed fluidics, which will be maintained as a trade secret.
- Exclusive Ownership: The OPZuid development grant will generate IP for the automated platform, exclusively owned by NestEgg under a binding agreement.

Unlocking Predictive Power Through AI-driven Cell Data Collection



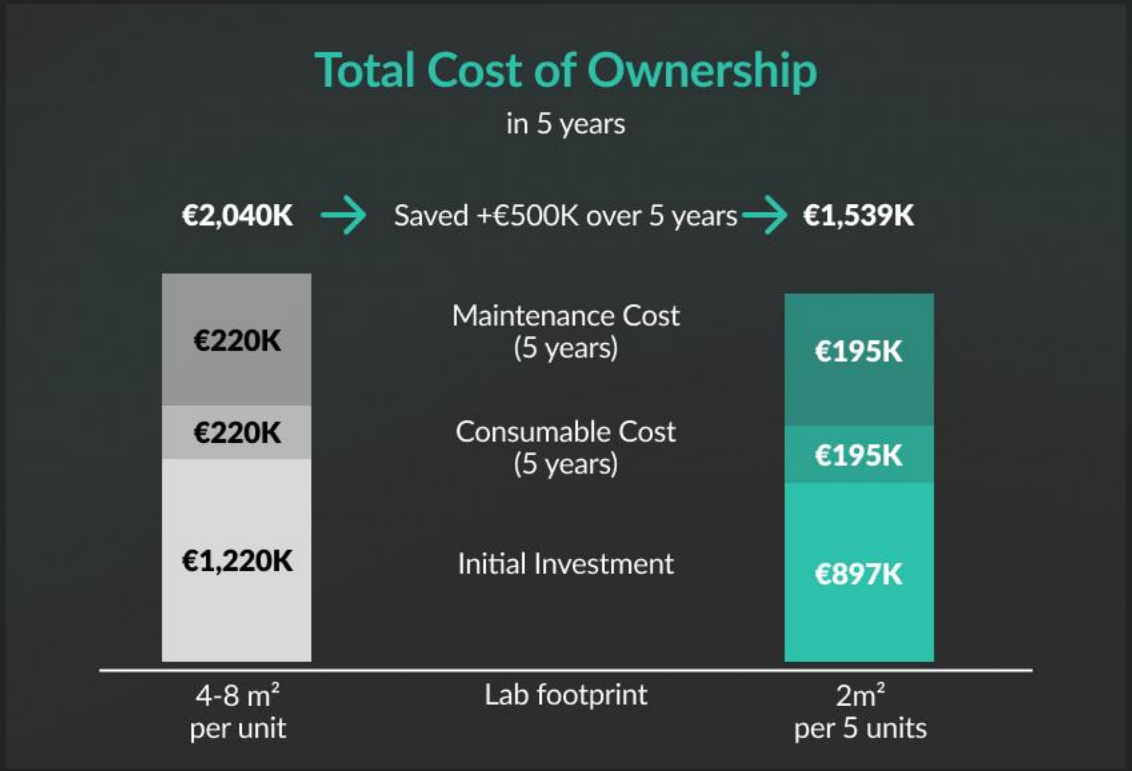
Lab savings

Large-Scale Automation

Occupying a dedicated area of the lab

OVATION

5 Ovation units placed inside existing standard lab incubators



Key Partners

- MERLN Institute
- Roche
- ThermoFisher
- Medtronic
- UKCPI
- NBSO
- University Maastricht
- Appsforce
- Demcon
- iPrasense
- B00

Customer Relationships

- Around-the-clock support and aftercare
- Regular feedback loops with customers
- Collaborations with biomedical leaders for continuous improvement

Key Activities

- R&D for proprietary technology
- Partner and customer relationship management
- Marketing and direct sales operations
- Comprehensive support and service provision
- Data collection and brokering to pharma and biotech companies

Key Resources

- Proprietary technology and consumables
- Expert engineering and development team
- Strategic partnerships and networks
- In-depth industry knowledge and customer support

Channels

- Direct sales team
- Online platforms
- Partner and distributor networks

Value Proposition

- Advanced cell culture tech with efficient, consistent results
- Open-source and proprietary software solutions
- 24/7 customer support and ongoing product development
- Unique access to high-quality, anonymized cell culture data for research insights

Customer Segments

- Academic research institutions
- Biotech companies
- Contract research organizations (CROs)
- Pharmaceutical companies
- Quality control departments in biomanufacturing

Cost Structure

- Cost of goods sold (manufacturing, materials, shipping)
- Research and development costs
- Marketing and advertising costs
- Customer support and aftercare costs
- Salaries and benefits for employees and contractors
- Overhead costs (rent, utilities, etc.)

Revenue Streams

- Sales of proprietary hardware, software, and consumables
- Subscription-based revenue from paid tiers of software offerings
- Revenue from custom work and validation services
- Data licensing and sales to pharmaceutical and biotech companies