



 NOVATICLAB

NovaticLab Case study:
A Success Story with

E. Gulbija Laboratorija



In-house competences

Unified under one roof
with a goal to:

Empower Labs Of Tomorrow.

Engineering Excellence:

Expertise from life science automation to aerospace, with 10+ patented robotics and 3D printing innovations.

Solid Industry Links:

Strong connections with industry leading manufacturers.

Advisory Insight & Agility:

Partnerships with top labs and seasoned professionals ensure rapid, aligned solution deployment in modern labs.



E.Gulbja Laboratory Overview

- Founded in 1993
- Biggest Diagnostic Lab In Latvia
- ISO accredited lab
- 24/7 operation
- 8560 daily patients
- 10.9 million analyses in 2022
- 71 collection points
- 350 employees

Offers **1000** different types of medical analyses.



Staffing Issues

Soaring Demand

Quality with Speed

Infection & Safety Risks

Challenges

Resource Constraints

Data Management

Operational Hurdles

Service Continuity



Solution

Flexible
Task Targeted
Automation



NOVALab - Sample Kit Distribution and Collection Kiosks

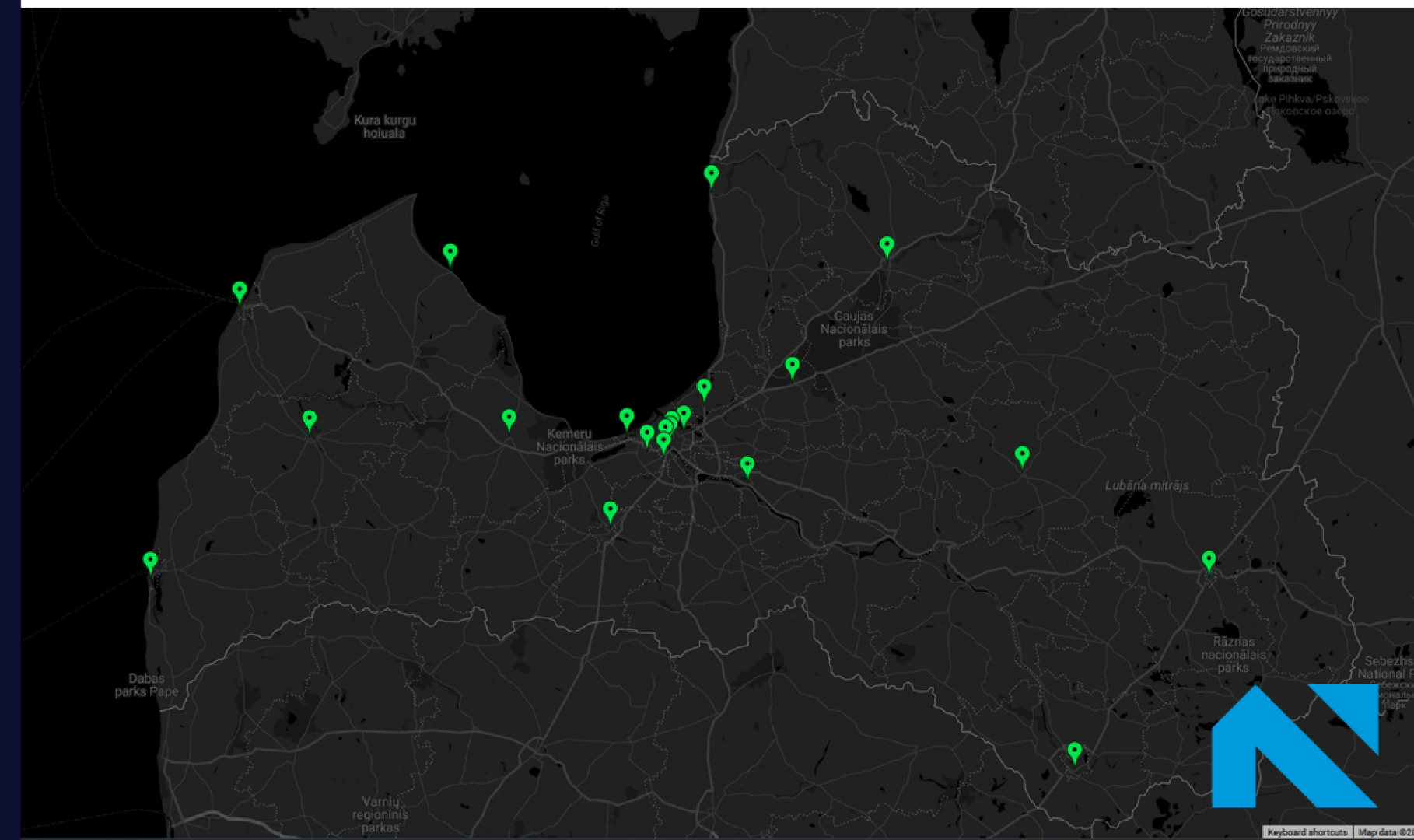
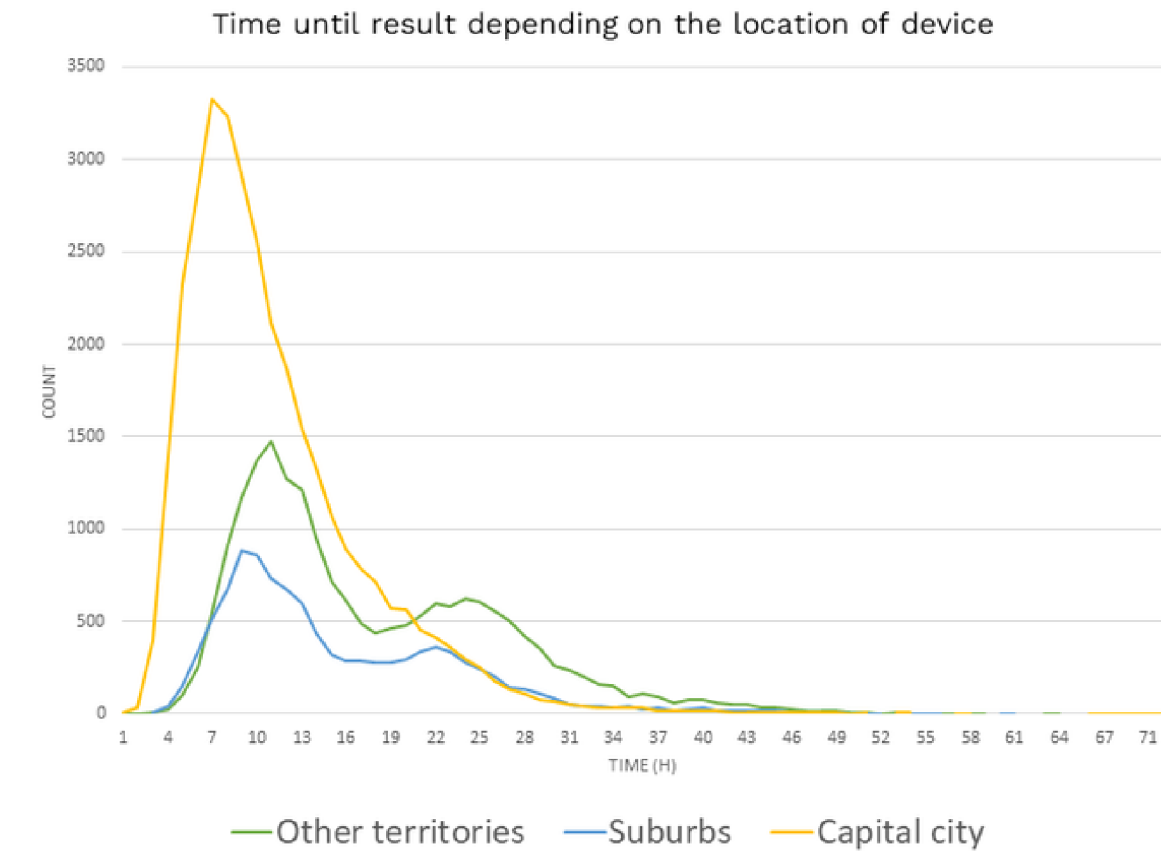
- First Deployment in Dec. 2020
- Accessible 24/7
- 21 locations all over the nation
- Fits most self-sampling kits
- Microclimate Control
- Remote Monitoring

One Step Closer to
Accessible Healthcare



NOVALab Results and Impact

- Over **300,000** kits distributed
- Enhanced patient satisfaction and engagement
- Alternative self-sample deposit methods available
- Crucial support for decentralized regional hospitals
- Addressed issues of access and long lines
- **90%** same-day return rate for dispensed kits
- Met increased demand for self-testing and regular checkups
- Expedited Time-to-Results for PCR tests:
 - **11.1** hrs in capital city
 - **15.5** hrs in suburbs
 - **17.6** hrs in rest of country



NOVAFlex Archiver – Automating Daily Sample Archiving

- Archives up to 1800 samples/hour
- Tubes/vials/swabs (up to 70mm OD)
- Built-in error-detection system
- Seamless integration with LIS/HIS
- Fully Collaborative System
- User-friendly

Focus On
What Truly Matters



NOVAFlex Archiver Impact

- **2M+** Sample Tubes Archived Since Deployment
- Locate Samples **20x faster** -
 - 30 seconds vs 10 minutes (manually).
- Up to **20** labour hours saved per day
 - More time available for meaningful tasks.
- **100+** Extra Tests Daily
 - Enables additional tests within 24 hours on existing samples.
- Inuitive User Interface
 - Easy adoption across all lab departments.



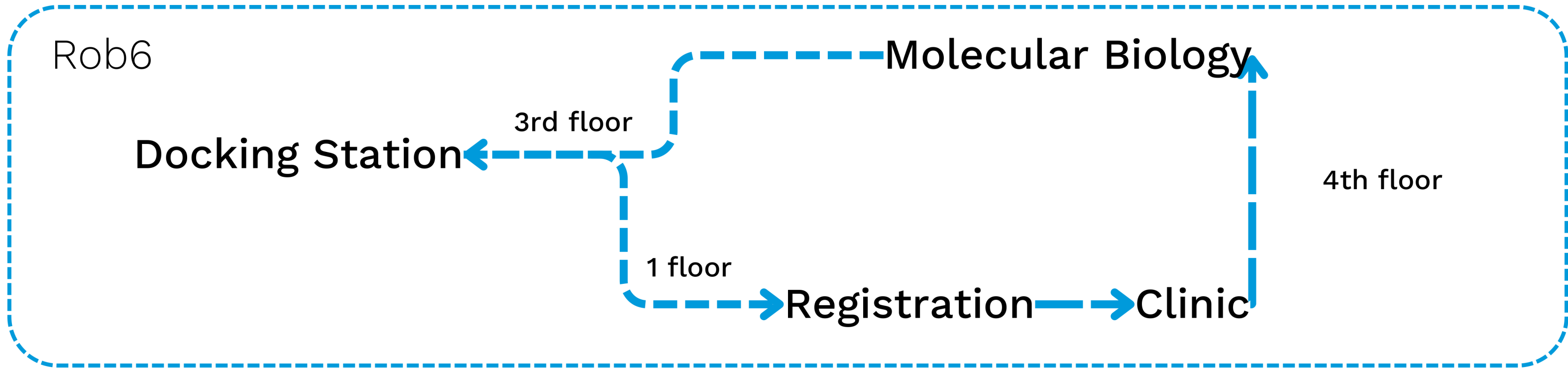
NOVAMove Porter – Autonomous Transport Robot

- Interconnects Lab Departments
- Transports Samples & Materials
 - Autonomous Navigation
 - Opens Doors & Takes Elevators
 - Automatic Charging
 - Fully Collaborative
 - User-Friendly

Focus On
What Truly Matters



NOVAMove Porter Daily Routes



NOVAMove Porter Impact

- Handling **50+%** of All Daily Samples (**6200+**)
 - Managing 58+ daily missions.
- Saving Over **15** Labor Hours Daily:
 - Three robots optimizing staff time and productivity collaboratively.
- Traveling Over **3** Miles & **32** Floors Daily:
 - Ensuring sample transport with reduced staff stress and errors.
- Eliminating Operational Bottlenecks:
 - Automation provides real-time data, allowing for continuous improvement.
- **Focus On What Truly Matters:**
 - Enabling staff to focus on specialized tasks, enhancing job satisfaction and patient care.



Total Cost Savings

Salary savings:

- 2x NOVAFlex Archivers - up to **750** labour hours per month - 11250EUR montly savings.
- 3x NOVAMove Porters - up to **450** labour hours per month - 6750EUR montly savings.
- 21x NOVALab save up to **480** labour hours per month per location totaling over 151'000EUR monthly savings.

Total Salary Cost savings of more than **169'000EUR** per month, **2'028'000EUR** per year.



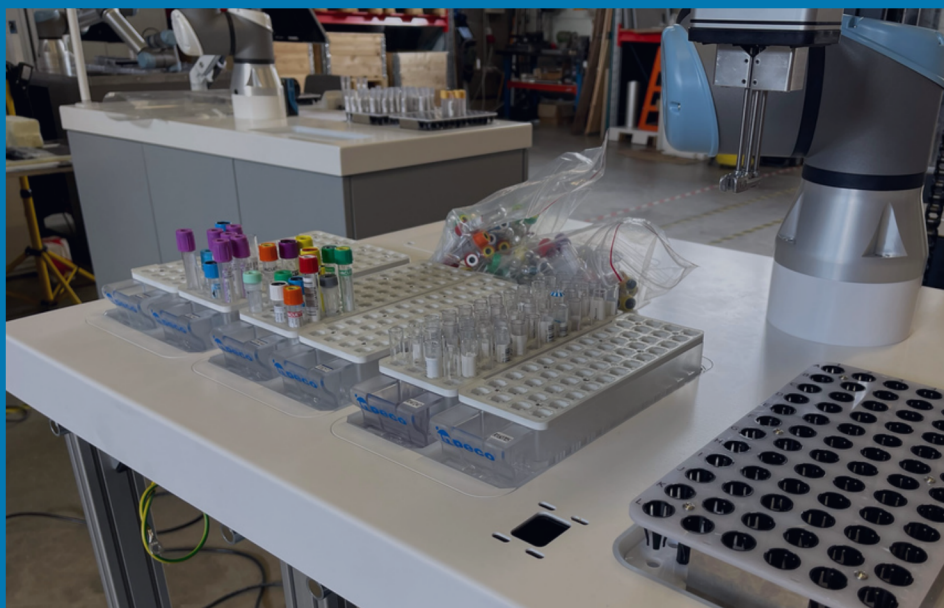
Lessons Learned

- Collaboration and communication are the key to mutual success.
- Build, test, improve and deploy fast.
- Shared Agile and flexible architecture over custom built.
- People are ready for automation.
- User Centric UI/UX.
- Micro Speed, Macro Patience.
- Focus

Focus On
What Truly Matters



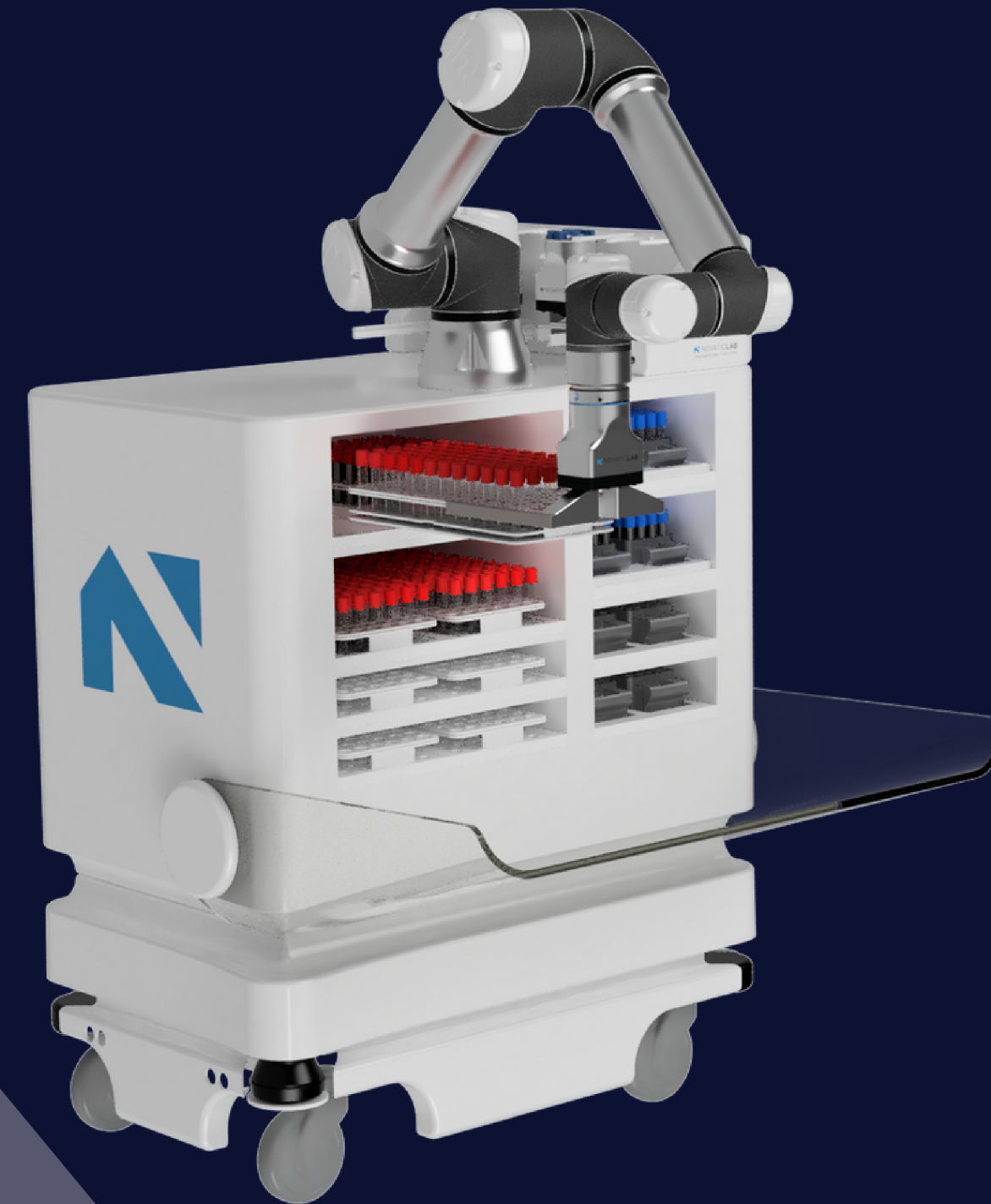
The power of **flexible solutions**



Future Plans

NOVAMove Flex

NOVAX Assesioning



NHS Alignment

NOVALab, NOVAFlex and NOVAMove all align with the following NHS Ambitions and Goals:

- Cost Savings and Health-economic benefits
- Net Zero Ambition
- Core20PLUS5
- Early Cancer/HPV/disease screening

and others.



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"Automation and the use of robots seems difficult at first, but it should be understood that automation speeds up processes, saves employees' time and ensures error-free results.

*Therefore, the main challenge of the industry at the moment is to **automate everything that can be automated.**"*

Mikus Gavars

Molecular Biologist at E.Gulbja Laboratory



 **NOVATICLAB**
Empowering labs of tomorrow

