



## About AITHYRA

AITHYRA is a new, dynamic institute in Vienna, Austria, dedicated to advancing a biomedical revolution by connecting cutting-edge Artificial Intelligence with transformative Life Science research. Supported through generous funding from the Boehringer Ingelheim Foundation and hosted by the Austrian Academy of Sciences, AITHYRA is building a world-class environment where AI specialists, experimental scientists, and engineers collaborate to push the boundaries of biomedical innovation. In February 2025, AITHYRA moved into its first laboratory and office space in the Marxbox at the Vienna BioCenter. In cooperation with the Vienna Business Agency, a new, jointly developed research building will be built by 2029.

**AITHYRA, the place where magic happens!**

AITHYRA's mission is to transform the way life sciences are conducted using AI to drive the biological revolution in the next decade, with the ultimate goal of improving human health.

# Lab Automation Scientist - AI Driven Lab Robotics (f/m/d)

Reporting to Wali Malik, Head of AI Driven Lab Robotics at AITHYRA, you will combine your scientific expertise with deep knowledge of laboratory automation to create scalable, reproducible, and high-throughput next generation experimental workflows.

## Your role

AITHYRA is seeking a highly motivated and skilled Lab Automation Scientist to join our founding lab robotics team. You will play a pivotal role in designing, implementing, and operating an AI-driven autonomous laboratory from the ground up.

Key areas of responsibility:

- **Prototype and Build the Autonomous Lab:** Partner and execute on the design and establishment of AITHYRA's first AI-driven, fully automated laboratory, defining automation infrastructure, standards, and best practices from the ground up.
- **Translate Science into Automation:** Partner with scientists and researchers in areas such as small molecules, proteomics, NGS, and cell & gene therapy to design and develop scalable laboratory methods for both manual and automated workflows.
  - Plan, design, and execute manual and automated high-throughput assay development experiments in relevant domains (e.g., cell culture, proteomics, small molecule screening).
  - Optimize manual protocols for automation, ensuring robust and reproducible performance on standalone instruments and integrated platforms.
- **Develop & Integrate Automation Workflows:** Program liquid handling systems (e.g., Hamilton, Tecan), implement workflow scheduling software (e.g., Cellario, Green Button Go), and integrate third-party lab devices such as plate readers, flow cytometers, sealers/peelers, dispensers, and imaging systems.
- **Optimize High-Throughput & Data-Driven Operations:** Design and refine workflows for high-throughput screening and large-scale data generation, collaborating with AI/ML and scientific computing teams to enable closed-loop experimentation.
- **Ensure Reproducibility & Documentation:** Maintain rigorous workflow documentation, manage version control (e.g., Git), and develop automation scripts (preferably in Python) for robust, reproducible experimental execution.

## Your Profile

- Bachelors/MSc/PhD in Biology, Biotechnology, Bioengineering, or a related discipline, or equivalent industry experience.
- Familiarity with high-throughput screening methodologies and process optimization, combined with a foundation in basic wet-lab skill sets such as molecular biology techniques, cell culture, or protein assays.
- Proven automation experience, including:
  - Programming and method development for liquid handling systems (Hamilton VENUS/VANTAGE, Tecan EVO/Fluent, or similar).

- Automated sample preparation workflows, including assay miniaturization, automation-friendly assay design, and workflow scaling from manual protocols.
- Development and execution of high-throughput assay platforms, including plate-based screening, multiplexed assays, and precision liquid dispensing for large experimental sets.
- Integration and operation of robotic systems and workflow scheduling (e.g., Cellario, Green Button Go).
- Coordination and data handling across diverse lab instruments (plate readers, flow cytometers, sealers/peelers, dispensers, incubators, imaging systems).
- Proficiency in scripting/programming for automation and data handling (preferably Python) and proficiency with code management (e.g., Git).
- Ability to work across disciplines and communicate with scientists, engineers, and computational teams.
- Self-motivated, adaptable, and excited about building world-class capabilities from scratch.

### **Preferred**

- Experience with AI-driven experimentation or closed-loop laboratory systems.
- Knowledge of laboratory information management systems (LIMS) and workflow/data integration.
- Experience in scaling processes from research to production environments.
- Experience applying statistical Design of Experiments (DoE) to optimize automated workflows and improve reproducibility.

### **We offer**

- Shape the Future: Be part of building a cutting-edge research institute from the ground up.
- High Impact: Contribute directly to groundbreaking research at the intersection of AI and Biomedicine.
- Collaborative Environment: Work alongside world-class scientists and engineers in a dynamic, interdisciplinary setting.
- Innovative Technology: Help define and implement the foundational computational infrastructure.
- Unique Opportunity: Experience the excitement and challenge of a brand-new research venture.
  - Relocation allowance provided.

- Diverse social, cultural, and sports activities organized by the Institute.
- Excellent benefits, including insurance coverage and health services (company doctor, psychologist, etc.).
- Minimum gross annual salary of EUR 72.000, negotiable based on expertise and skills.
- Workweek: 40 hours. Core hours: Monday to Thursday (09:00-15:00), Friday (09:00-13:00).
- Up to one home office day per week.

## Application details

Please apply online with a **CV** detailing your strengths and qualifications relevant to the position and a **cover letter**.

The deadline for submitting applications is **30 September 2025**.

**We look forward to your application!**

## Living and working in Vienna

Vienna is a truly international city that blends a rich cultural heritage with a modern, vibrant atmosphere. Renowned for its world-class music, art, and culinary scenes, it also offers exceptional public infrastructure, top-quality healthcare, and a safe environment, and is consistently ranked as one of the most livable in the world. As a global scientific hub, Vienna hosts numerous research institutions and fosters a collaborative, multicultural community that welcomes scientists from around the world.

<https://www.eiu.com/n/campaigns/global-liveability-index-2024/>

AITHYRA is an inclusive employer. We value diversity and strongly encourage applications from all qualified individuals, regardless of background, race, gender, or personal identity.

**Learn more about the institute:** <https://www.oeaw.ac.at/aithyra>

Also add us at [LinkedIn](#) or [BlueSky](#)!

Apply now

**AITHYRA**