

Postdoctoral Positions available in 4 Starting Principal Investigator Groups at AITHYRA, Vienna

The Starting Principal Investigators at AITHYRA, the Research Institute for Biomedical Artificial Intelligence of the Austrian Academy of Sciences in Vienna invite outstanding candidates to apply for several postdoctoral research positions in the field of AI/ML and Life Sciences.

The mission of AITHYRA is to fundamentally transform biomedical science by embedding artificial intelligence as a co-pilot throughout the entire scientific process-from hypothesis generation and experimental design to biological interpretation and therapeutic innovation. Through a coherent integration of AI/ML across biological scales, the goal is to improve our understanding of the root cause of diseases, their diagnosis and the conceptualization of novel therapeutic strategies while inspiring new innovations in AI/ML. https://www.oeaw.ac.at/aithyra/research

Shape the Future: Be part of building a cutting-edge research institute from the ground up!

Postdoctoral Positions (f/m/d)

Designing New High-Throughput Methods to Probe Enzyme Function with Ariane Mora

Uncovering How Viruses Interact with the Immune System with Jason Nomburg

Generative Artificial Intelligence with Alex Tong

Multimodal ML for Protein and Tissue Dynamics with Xinyi Zhang

Your Tasks

You have a keen interest in interdisciplinary research and solving real-world scientific and biomedical problems? We are looking for scientists with a do-er mindset to think outside the box, to learn fast, collaborate effectively, iterate quickly, and work at the interface of both experimental and computational design.

Your Profile

Qualifications for Computer Scientists, AI/ML:

- **PhD** (or near completion) in computer science, machine learning, statistics/biostatistics, computational biology, data science, physics, or a related field.
- Experience with modern deep learning frameworks (e.g., PyTorch, JAX, TensorFlow, R, Bash).
- **Strong publication record** in top-tier venues (e.g., NeurIPS, ICML, ICLR, Nature Methods, Nature Biotech).
- Background in at least one of the following: generative modeling (e.g., flow-based models, diffusion models), statistical physics, computational biology, or ML theory.
- Experience with cloud computing, computational structural biology and/or phylogenetics, and Nextflow is a plus.

Qualifications for Life Scientists:

- **PhD** (or near completion) in chemistry, organic chemistry, biochemistry, virology, microbiology, biology, synthetic biology, computational biology, or a related field.
- Strong publication record including first-author publication(s)
- Excellent molecular biology skills, and prior experience in molecular virology and highthroughput assays is a plus.
- Experimental experience, and experience in project management.

We offer

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

We provide:

- A dynamic and collaborative research environment across AI and the life sciences.
- Extensive collaborative opportunities with other Principal Investigators at AITHYRA, bridging expertise in machine learning, computational biology, structural systems virology, and chemical

biology.

- Access to high-performance compute infrastructure and expert collaborators.
- Access to state-of-the-art experimental laboratories and Al-driven robotics infrastructure.
- Opportunities to build computational and/or experimental skills.
- Freedom to develop independent research questions within the themes of the labs.
- Close mentorship, training opportunities and career development support.
- Diverse social, cultural, and sports activities organized by the Institute.
- Excellent benefits, including insurance coverage and health services.
- Minimum gross annual salary of € 70.000 per year.
- Funding for 2-5 years with support to apply for fellowships, grants.
- Relocation allowance, and fully-paid business apartment for the first 3 months.
- 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

Apply online with:

- A cover letter detailing your research background, fit for the position, and what is the most exciting thing you have discovered or built.
- Indicate your interest in the groups of Ariane Mora, Jason Nomburg, Alex Tong or Xinyi Zhang. Interest in more than one group is possible.
- CV highlighting relevant strengths and qualifications, including publication list.
- · Contact details for two references.

Applications will be reviewed on a rolling basis until 20 November 2025.

AITHYRA Starting PIs will review the applications together, and offer flexible starting dates.

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/

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

Also add us at LinkedIn or BlueSky!

Apply now

