

Data Science Technology Platform Leader at NIMSB

The NOVA Institute for Medical Systems Biology (NIMSB) is being established as a leading center for Medical Systems Biology in Lisbon, Portugal, advancing biomedical research and precision medicine. NIMSB is a strategic partnership between NOVA University Lisbon and the Max Delbrück Center for Molecular Medicine (MDC) in Berlin. NIMSB is located in Champalimaud Foundation campus in the historic riverside area of Belém, in Lisbon, and is closely connected to leading research institutes and hospitals in the wider Lisbon area, offering a highly collaborative and vibrant scientific environment.

NIMSB's mission is to accelerate cutting-edge research and innovation in systems medicine. Its research and innovation programme focuses on single-cell and spatial multi-omics analyses of human samples, machine learning-based computational approaches, and the development and application of human-derived microphysiological models, including organoids and organ-on-a-chip systems, to enable earlier disease detection, novel diagnostics, and advanced therapeutic solutions.

Supported by the European Commission's Teaming for Excellence action, NIMSB is implementing an ambitious development plan that includes recruitment of exceptional scientific leaders for the establishment of advanced technology platforms designed to empower researchers and enable groundbreaking discoveries.

After the recruitment of our first cohorts of Group Leaders, NIMSB is now seeking a visionary **Data Science Platform Leader** to pioneer a cutting-edge research infrastructure focused on service provision and research and development of computational methods for large-scale integration and analysis of multidimensional data. The successful candidate will play a central role in establishing the platform, with dedicated funding to acquire state-of-the-art equipment, evaluate and implement emerging technologies, and build robust and scalable workflows. The Platform Leader will work closely with Principal Investigators and other Technology Platform Leaders from NIMSB, Champalimaud Foundation, and other partners from NOVA University to design, implement and deliver seamless end-to-end workflows and advanced analytical methods, while benefitting from extensive networking opportunities in Portugal and abroad, including with the MDC. The position also offers the opportunity to develop an independent research line aligned with NIMSB's strategic priorities. This role is ideally suited for ambitious, technology-driven scientists who wish to transform breakthrough technologies into impactful biological and biomedical discoveries.

Responsibilities

- Establish, lead and oversee operations of the NIMSB Data Science Technology Platform.
- Collaborate with NIMSB leadership to develop and implement a strategic plan for the platform's operational and scientific goals; ensuring alignment with the NIMSB scientific mission.
- Implement and develop innovative and effective computational methods that are of relevance to the institute and to the research community, in collaboration with researchers and other NIMSB Technology Platforms.
- Remain knowledgeable of advances in omics research and technology, especially in the development and use of machine learning tools for integration and analysis of multidimensional (omics) datasets.

- Implement, maintain and provide a diverse portfolio of tools and pipelines for analysis of omics data, ensuring interoperability, efficiency, and usability.
- Provide expert guidance and training for NIMSB researchers on experimental design and data analysis.
- Recruit, manage and mentor a team, ensuring quality, performance and professional growth.
- Be active in securing extra-mural funding for the platform and dedicated research projects.
- Manage and optimize the platform's budget, including planning, forecasting, and regular financial oversight, ensuring sustainable and effective resource allocation.
- Assist on contract negotiations and assist with equipment procurement.
- Ensure compliance with data protection standards and implement FAIR procedures for data management and usage.
- Implement frameworks for regular evaluation of performance, quality, efficiency, and scalability of the platform.
- Build and maintain strong relationships with stakeholders, including researchers, other technology platforms, scientific and medical institutions and funders.
- Organize workshops and training sessions to ensure transfer of expertise and seamless development of research activities.
- Promote the platform through publications, presentations and participation in scientific conferences.

Qualifications

- PhD in computer sciences or bioinformatics, or quantitative fields with application to biology or genomics.
- Extensive knowledge and demonstrated experience with different omics modalities (e.g. single-cell and spatial technologies, proteomics, and metabolomics) and analysis methods.
- Desirable 5+ years of experience (post-PhD) in data science related fields, preferably with experience in development and use of machine learning frameworks.
- Strong programming skills, with extensive experience in scientific software development, relational databases, and workflow management systems.
- Familiarity with high-performance computing.
- Experience in (meta-)data management and integration, data infrastructure and database management systems.
- Preferably with proven leadership, supervision and management skills.
- Demonstrated ability to build and foster scientific collaborations and partnerships.
- Experience in engaging with scientific and administrative teams.
- Experience in securing third-party funding for research and infrastructure development and managing budgets.
- Strong project management and organizational skills.
- Exceptional organization and communication skills.

- Excellent English skills, both verbal and written, are essential; proficiency in Portuguese is beneficial, but not mandatory.

Skills

We seek candidates who blend scientific and technical expertise with strong interpersonal skills. Attention to details, being resourceful and proactive in problem-solving and adapting to a dynamic environment are essential. Candidates must also be able to work in diverse multicultural and multiethnic teams, fostering an inclusive, collaborative and high-performance work environment.

Benefits

We offer an open and international working environment in an attractive and growing scientific and technological campus. Working contract, with health insurance, is initially limited for 3 years, with the possibility of extension upon evaluation. Remuneration is compatible with experience and qualifications.

Start date as soon as possible.

Application submission

Applications should be submitted to NIMSB.applications@unl.pt with the identification **TPLdatascience-NIMSB-2026**-“applicant’s First and Last Name” by the end of **20 April 2026**, consisting of:

- a. Cover letter (maximum 1 page) describing past and current positions and motivation;
- b. Vision and management strategy for the platform and proposal for research and technology development (maximum 3 pages);
- c. Detailed *Curriculum vitae* including relevant certificates and list of scientific publications (co- authorships included);
- d. Contact details of 2 references, including e-mail addresses.

Suggested referees must send their reference letter directly to the email NIMSB.applications@unl.pt within the application period, referencing the name of the candidate. Letters should focus on the candidate’s expertise and achievements, as well as interpersonal skills. Referees should recognize and avoid unconscious biases or other forms of implicit discrimination. Letters not received by the application deadline may result in the exclusion of the candidate from the selection process.

Please submit your application in a single pdf file (maximum size 8 MB).

NIMSB is committed to diversity and actively supports equal opportunities for all employees regardless of their origin, religion, ideology, disability, age or sexual identity. Applications from women, minoritized or marginalized groups are particularly welcomed.

Evaluation and Selection Process

The selection committee is composed of members of NIMSB Board of Directors and leading researchers and technology platform leaders from the Max Delbrück Center for Molecular Medicine, Berlin, Germany, and from other local partner institutes. The selection includes a two-step evaluation process:

1. Phase 1: evaluation of the *Curriculum vitae* and research proposal/vision towards shortlisting of candidates;
2. Phase 2: evaluation of shortlisted candidates through a scientific symposium, where they present their vision and management strategy for the platform and research proposal, followed by a panel interview. Phase 2 is expected to take place between late June and early July 2026 and candidates are encouraged to keep this period available.

For further information, please visit the NIMSB website (<https://nimsb.unl.pt/>). Enquiries about procedures for application, the positions and perspectives should be addressed to Dr. António Jacinto (NIMSB.applications@unl.pt).