

Systems Biology Scientist

Location: Berlin, Germany

Type: Permanent (Full-time)

Start Date: As soon as possible / by arrangement

ABOUT DAINA

DAiNA is a precision-oncology company focused on enabling personalized cancer treatment for individual patients. We combine comprehensive molecular tumor data including genomics, transcriptomics (bulk, single cell and spatial), proteomics and epigenetics, with AI-driven analysis. Our platform connects multi-omic profiling with functional ex-vivo tumor models and personalized liquid-biopsy monitoring, creating a continuous workflow from biopsy and treatment selection through to therapy monitoring and adaptation. We also operate GMP manufacturing to produce individualized N=1 therapeutics. In short, we help physicians make more informed, personalized treatment decisions based on high-dimensional molecular tumor data.

For more information, visit: www.daina.com

THE ROLE

As Systems Biology Scientist, you will help translate DAiNA's high-dimensional molecular and functional data into mechanistic understanding of each patient's tumor biology. You will work at the interface of multi-omics analysis, cancer biology, resistance modelling, ex-vivo functional testing and longitudinal liquid-biopsy monitoring.

Your role will be to build and apply models that connect molecular tumor profiles with functional drug-response data and in-vivo disease dynamics. This includes identifying potential resistance mechanisms, tumor-evolution trajectories and biologically plausible therapy vulnerabilities that can inform personalized treatment strategies.

Working closely with bioinformatics, AI/ML, wet-lab, clinical and external academic partners, you will contribute to DAiNA's digital-twin and precision-oncology platform by turning complex biological data into actionable, testable and clinically relevant hypotheses.

WHAT YOU'LL DO:

- Integrate genomics, transcriptomics, single-cell/spatial data, proteomics, epigenetics, functional ex-vivo data and liquid-biopsy signals into coherent biological models.
- Contribute to DAiNA's digital-twin development by linking molecular profiles, functional assay results and longitudinal clinical or ctDNA data.
- Model potential resistance trajectories, drug-tolerant persister states and escape mechanisms to support personalized therapy adaptation.
- Translate multi-omics and functional data into biologically meaningful hypotheses for therapy selection, combination strategies and follow-up monitoring.
- Evaluate and integrate relevant pathway databases, network models, biological priors, literature evidence and cancer knowledge resources.
- Collaborate with academic advisors, clinical experts and external partners where additional disease-specific or modelling expertise is needed.

WHAT YOU BRING:

- PhD in systems biology, computational biology, cancer biology, bioinformatics, physics, applied mathematics, biomedical engineering or a related quantitative discipline.
- Strong background in mechanistic, network-based, dynamical-system or predictive modelling of biological systems.
- Solid understanding of cancer biology, tumor evolution, therapy resistance and/or tumor microenvironment biology.
- Experience working with multi-omics data, ideally including genomics, transcriptomics, proteomics, epigenetics, single-cell or spatial data.
- Strong programming skills in Python and/or R, with the ability to build reproducible analyses and usable modelling workflows.
- Strong scientific judgement and ability to distinguish robust biological signals from noise, artifacts or overinterpretation.
- Ability to communicate complex biological and modelling concepts clearly to computational, wet-lab, clinical and management stakeholders.

NICE TO HAVE:

- Experience in oncology, precision medicine, translational cancer research or patient-specific therapy modelling.
- Experience integrating *ex-vivo* functional testing data with molecular and longitudinal clinical data.
- Familiarity with liquid biopsy, ctDNA monitoring, minimal residual disease, clonal evolution or therapy-resistance tracking.

WHY DAINA?

- Employer contributions toward private health insurance or supplementary health coverage, as well as pension or retirement savings.
- Hybrid model with ~60% of working time **expected** on-site and the rest **remotely**, depending on team and business needs.
- Performance-based bonus opportunity, depending on company and individual performance.
- A personal development budget for conferences, courses, certifications, and training.
- The opportunity to work directly on real patient cases and help shape a first-in-class precision-oncology platform
- A proactive, collaborative team with fast decision-making and strong ownership of your domain.

HOW TO APPLY

Send your CV and a short note on why this role fits you to recruiting@daina.com, quoting “Systems Biology Scientist” in the subject line. We review applications on a rolling basis and aim to reply quickly.

DAiNA is an equal-opportunity employer. We welcome applicants of every background and assess every candidate on merit, regardless of age, gender, ethnicity, religion, disability, sexual orientation or origin. If you need any adjustment to the process, let us know in your application.