# Job Title

**Senior Scientist**

# Job Summary

Kinomica is a precision medicine company that is developing next-generation diagnostic tests to help clinicians prescribe the right drug, for the right patient, at the right time. We acquire large, high-quality phosphoproteomics datasets from clinical samples using our state of the art KScan® platform; through which, we were the first to demonstrate that phosphoprotein signatures can be predictive of drug response in a clinical setting (see our profile in Nature: https://www.nature.com/articles/d43747-022-00013-9).

We are seeking a Senior Scientist to support the development of clinical assays for biomarkers arising from Kinomica's phosphoproteomics biomarker discovery platform. The candidate will be involved in a variety of projects that aim to expand Kinomica's portfolio of proteomic and phosphoproteomic assays, and to develop these into new clinical products. The ideal candidate for this role will have a PhD (or equivalent experience) in a relevant field with expertise in developing targeted mass spectrometry-based assays on triple quadrupole instruments.

This role will be based full time at Alderley Park, Macclesfield, and will have responsibilities to both the LC-MS/MS team and a newly formed product development team aiming to take biomarkers identified in Kinomica's R&D work and develop a regulated, mass spectrometry-based targeted assay deployable to clinical labs. The role will report to the Mass Spectrometry Technical Lead as well as interact closely with the Head of Product. Kinomica's current LC-MS/MS capabilities include a Thermo Orbitrap Exploris 240 mass spectrometer, coupled to a Vanquish Neo UHPLC, a Thermo Altis Plus triple quadrupole mass spectrometer coupled to a Vanquish Neo UHPLC and a ZenoTOF 7600 coupled to a Waters ACQUITY M-Class UPLC. The number and range of LC-MS/MS systems required is likely to increase as methods diversify and sample numbers increase.

# Responsibilities and Duties

### Development of clinically applicable targeted assays

- Develop targeted LC-MS methods on a triple quadrupole mass spectrometer to accurately and robustly quantify phosphopeptide biomarkers arising from Kinomica's R&D work.
- Devise strategies for normalisation and quality control to ensure tests are accurate, reproducible and reliable and to ensure we adhere to the relevant quality standards.
- Work with the product development team and quality manager to ensure appropriate systems, monitoring and documentation is in place during development of a test which can ultimately be relied upon to aid patient treatment decision making.
- Author and/or contribute to regulatory submissions, technical protocols and reports.

### General LC-MS/MS operation and maintenance

- Work with the Mass Spectrometry Technical Lead to ensure that LC-MS/MS systems are regularly maintained and calibrated, that all buffers are properly prepared and regularly replaced, and to ensure that the proper Quality Control samples are run, and robust checks are in place.
- Outputs of all maintenance, calibrations, QC work are to be documented for reporting purposes.
- To make process improvements and project efficiencies wherever possible and to contribute freely to the team environment in a manner conducive to the success of company goals.
- To work as part of Kinomica's lab-based team, being mutually supportive and covering duties as necessary during colleagues' absences and at times of additional pressure, as directed.

**The above list of responsibilities is not exhaustive, and the jobholder may be required to undertake other duties commensurate with the level of the role, as reasonably requested by their manager.**

## Qualifications, Experience and Skills

### Essential

- PhD (or equivalent experience) in a relevant or STEM based subject.
- ≥2 years of hands-on experience running/operating high-end LC-MS/MS systems (including hands-on experience calibrating the MS systems, basic maintenance of LC-MS/MS, renewing buffers, running QCs, interpreting data, and reporting QC outputs).
- Specific experience running triple quadrupole mass spectrometers and developing targeted methods.
- Expertise developing clinical assays utilising LC-MS/MS proteomic technologies.
- Experienced interrogating LC-MS/MS raw data using vendor software (e.g., Thermo's Xcalibur/Freestyle/Chromeleon, or SciexOS).
- Ability to work to timelines.
- Excellent communication skills and teamwork skills.
- Excellent organisational skills and time management skills.
- Ability to contribute to the team success.
- A high degree of personal motivation and a willingness to learn new skills, take on challenges and undertake relevant training.

### Non-essential, but added advantage

- Experience with quality management systems and documentation.
- Experience in developing and validating mass spec instrumentation and methods.
- Experience working to ISO 15189, CLIA or working in a similar regulated environment.
- Knowledge of medical device design control processes
- Experienced in preparing samples using proteomic workflows for LC-MS/MS analysis.
- Knowledge and understanding of fundamental principles of biochemical and molecular biological systems.
- Expertise in the utilisation of LC-MS/MS proteomic technologies for the identification and validation of clinical biomarkers.