Position Description

The MALDI-imaging laboratory at Fondazione IRCCS Istituto Nazionale Tumori-Milano is seeking a research fellow. The researcher will be involved in research developing and applying mass spectrometry technologies to clinical and cancer research. The research fellow will be expected to manage research projects involving clinical studies and collaborations. The researcher is expected to design and perform experiments using mass spectrometry and mass spectrometry imaging techniques. This position involves day to day research activities, including data collection, data evaluation, documentation, organization, and scientific writing. The researcher is also expected to supervise other research staff including fellows and graduate research assistants.

Our research

The MALDI-imaging Group uses mass spectrometry to perform molecular mapping of the abundance and spatial information of biomolecules directly in tissue without labeling. It allows characterization of a broad spectrum of analytes, including proteins, peptides, glycans, lipids, drugs and metabolites and is suitable for both discovery and targeted analysis. An advantage of MALDI imaging is that it maintains tissue integrity, which allows for correlation with histological features. It has proven to be a valuable tool for probing tumor heterogeneity and has been increasingly applied to interrogate molecular events associated with cancer. We are placed in a collaborative working environment, and place particular emphasis on training and mentoring to help our colleagues achieve their goals in different research projects.

Job

Tasks will include to design and perform experiments using mass spectrometry and mass spectrometry imaging techniques. This involves day to day research activities, including data collection, data evaluation, documentation, organization, and scientific writing. The research fellow is also expected to present research results (including writing scientific manuscripts).

Job Duties

Plan, direct and conduct advanced research experiments using mass spectrometry.

Evaluate and analyze mass spectrometry data.

Perform statistical analysis.

Establish new research protocols and procedures.

Summarize research findings and publish results in research journals.

Assist with grant proposal writing and progress reports.

Assist with laboratory operations.

Assist the principal investigator in maintaining and conducting research activities in the laboratory. Work in research projects involving the use of mass spectrometry and mass spectrometry imaging in biomedical and cancer research.

Perform experiments using mass spectrometry instrumentation, as well as data and statistical analysis.

Lead clinical studies and participate in research involving human subjects.

Interact directly with clinicians, surgeons, and pathologists to fulfill the aims of the research projects.

Preferred Qualifications

MS and PhD degrees in Chemistry, Basic Science, Health Science, or a related field.

Experience in mass spectrometry applied to clinical research.

Experience with mass spectrometry and/or mass spectrometry imaging is desirable.

Additional Information

This is a one-year term position from the date of hire, with the possibility of extension, contingent upon work performance and continued funding to support the position.

The salary range is between 30.000-36.000 € per annum, depending on skills and experience.