A bioinformatician position in Mass Spectrometry Technological Unit – IEO, Milan.

The Unit provide MS-based proteomics analysis for Department of Experimental Oncology (DEO, https://www.research.ieo.it, https://www.ieo.it) scientists, including protein identification, protein expression profile either in label-Free or label-based methods (SILAC, TMT), interaction proteomics (AP-MS, proximity labelling) and PTMs characterisation. The unit is equipped with state-of-art of Orbitrap-Hybrid mass spectrometers. The instruments are operating in bottom-up workflows (DDA, DIA) and are coupled to a variety of nano-flow chromatography systems (nLC-1200, Neo Vanquish and Evosep-one). The unit also makes use of an 1680 HPLC (Agilent) for offline peptide fractionation (RP-HpH, SCX). Recently, we implemented Quantitative Proteomics Made Simple (QProMS), an R-based algorithm, search engine-independent data analysis and visualisation tool (https://bioserver.ieo.it/shiny/app/qproms).

We are looking for a motivated, enthusiastic candidate with strong interest in computational science to work on dedicated bioinformatics platform aimed to quantitative proteomics data processing.

Key responsibilities are:

- Interact closely with DEO scientists to understand their data analysis needs and provide answers to technical questions through custom analyses, 1-on-1 communication, presentations, and written documents.
- Maintain and continue to develop in-house proteomics algorithms and software tools.
- Explore and deploy external algorithms, software, and tools as needed to complement in-house software.
- Develop data analysis strategies, write algorithms, and help with the analysis of proteomics data.

Requirements

- Masters degree or Ph.D. in statistics, biostatistics, computer science, bioinformatics, or computational biology.
- Experience working with proteomics data and proteomics software (e.g. MaxQuant, Perseus, PD, Skyline, DEP etc).
- Expertise in statistical data analysis. Good coding skills in one or more programming languages (preferably R and/or python).
- A proactive approach to collaborations and a demonstrated ability to work in a team environment.

Contract and salary conditions will be discussed based on candidate profile.

Potential applicants are encouraged to contact Dr. Alessandro Cuomo (Head of the Unit) sending a CV with at least one referee to alessandro.cuomo@ieo.it