MetaboHUB JOB ANNOUNCEMENT

Job Title: Development, implementation and use of NMR and atmospheric pressure ionization mass spectrometry databases for metabolomics

Position Reference: BDX-IR-1-WP1a

Grade: Research engineer

Starting from: 1st October 2013
Applicants need to have work permit for work in France

Duration: 24-months contract, full-time position

Place of work: Working place will be located in the INRA Bordeaux Center (F-33140 Villenave d'Ornon, France) within Bordeaux Metabolome Facility (www.http://www.cgfb.u-bordeaux2.fr/en/metabolome), working under ISO9001:2008 framework, and UMR1332 Fruit Biology and Pathology. (http://www6.bordeaux-aquitaine.inra.fr/bfp)

MetaboHUB background:

The French MetaboHUB project aims at creating a national infrastructure of metabolomics that will place France among the European leaders for advanced research services in metabolomics and fluxomics. This infrastructure will provide tools and services to academic research teams and industrial partners in the fields of nutrition and health, agriculture, environment and biotechnologies.

MetaboHUB will address major life science trends and challenges listed in the National Strategy for Research and Innovation priorities. MetaboHUB outputs will provide full service.
For more information see the web site: www.metabohub.fr

Main purpose of the job/ Specific tasks of the position:

In the framework of the work package entitled "Multisite implementation of analytical chemistry for metabolite detection, quantification and identification", the job objective is to actively participate in

the implementation of spectral databases for metabolite identification and metabolome annotation. This work will be carried out in collaboration with engineers of Bordeaux Metabolome Facility and of the other sites of MetaboHUB.

For NMR spectra, experimental design of 1D and 2D NMR acquisition conditions will be developed according mainly to plant matrices and metabolite specificities in interaction with MetaboHUB NMR group.

For MS spectra, since, API-mass spectra provide limited structural information, requiring the complementary use of MS/MS experiments, both API-MS and API-MS/MS spectral libraries will be developed.

Key responsibilities:

Ranked by importance:

- Experimental design of 1D and 2D NMR or LC-MS acquisition conditions according to matrix specificity.
- Acquisition, annotation and curation of NMR, LC-MS and API-MS/MS spectral data.
- Interaction with bioinformaticians for the development of centralized and standardized spectral repositories.
- Use of these repositories for the characterization of new putative metabolites from plant biological samples in several metabolomics projects of Bordeaux Metabolome Facility or MetaboHUB.
- Development of other R&D projects according to Bordeaux Metabolome Facility prioritization.

Qualifications and minimum working experiences:

- Skills in French language are not a prerequisite. English mandatory
- Academic: PhD in analytical chemistry or biochemistry
- Mandatory skills: Knowledge of basic analytical chemistry. Knowledge and practice of either LC-MS or NMR
- Team-oriented. Self-organized
- Appreciated skills: Knowledge of solution chemistry. Familiar with chemical drawing and NMR prediction softwares.
- Interest in plant science or metabolism.

Salary range:

Minimum starting net salary: 1875 Euros/month.

People to contact for further information:

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Person to contact for information concerning the application process:

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Please send your application including:

The application should contain the following attachments:

- An application letter stating your motivation, qualification, main scientific experiences, and a brief outline of your current and future scientific interests (max. one page)
- A full CV (max. two pages), including a clear presentation of your past and current employment positions specifying start and end dates, employer and location preferentially in a tabular form
- Copies of relevant diplomas or university certificates
- Short statement from a former supervisor/tutor
- Contact information for at least two relevant references

Deadline for application: August 2, 2013