

## Call for applications - Post-doctoral contract offer

### *Context*

Cannabis use is increasing, especially among adolescents, and among them 20% are considered at risk of problematic use. The motivations for cannabis use range from recreational to therapeutic use, causing a blurred distinction between these two purposes. In addition to the short-term and long-term adverse effects of cannabis, the lack of control of these products exposes consumers to health risks due to substances either in excessive concentrations or simply unwanted (contaminants or voluntary adulteration). Cannabis users represent a very heterogeneous population, with subgroups with different patterns of use. This population is insufficiently characterized.

The Cannabinoscope project, supported by IRESP (Institute for Public Health Research), brings together a consortium of 3 partners: UMR 8076 BioCIS (CNRS / Université Paris-Saclay), UMR 1252 SESSTIM (INSERM / IRD / Aix-Marseille University) and RESPADD (Paris). Its objective is to establish a platform for monitoring products in the field, aimed at consumers, which will make it possible to 1) obtain actual data on the quality of products in circulation (either legal or illegal), 2) disseminate a questionnaire on the modalities of use, 3) carry out semi-structured interviews intended to characterize this population in its diversity as well as their motivations and behaviors, and (4) propose an appropriate and effective cannabis-related harm reduction strategy.

### *Description of the missions in the framework of the post-doctoral fellowship*

The proposed post-doctoral position pertains on the analytical chemistry developments related to the Cannabinoscope project. The objectives are: 1) To develop an analytical protocol to quantify cannabinoids, detect synthetic cannabinoids and other contaminants and 2) To establish a field chemical analysis module for rapid drug control yielding a high degree of information. An original analytical approach, involving the creation of a database of experimental and theoretical spectra (UV, fluorescence), will be developed to measure naturally occurring cannabinoids and detect synthetic products by UPLC-DAD-FLD-MS. A mobile analysis unit will be established and must be usable upon training by risk prevention NGOs. The samples collected will also be analyzed in the laboratory or by contractors to produce an exhaustive profiling of other constituents and contaminants.

### *Profile sought*

#### 1. Required skills

Familiarity with hyphenated techniques (UPLC-DAD-MS, GC-MS), molecular modeling of spectra (Gaussian), technical skills related to instrumental set-up and maintenance.

#### 2. Appreciated skills

Computer programming. Development and validation of quantitative analysis methods. Knowledge of cannabinoids chemistry/pharmacology. Knowledge in the field of addictology and harm reduction. Experience in the scientific conduct of projects, involving a significant contribution to strategic orientations according to the progress of the project.

### *Conditions and contacts*

*Localization:* UMR8076 BioCIS, Université Paris-Saclay, Bâtiment Henri Moissan, 17 avenue des Sciences, 91400 Orsay. Université Paris-Saclay (ca 50,000 students) is ranked 16<sup>th</sup> in the world and 1<sup>st</sup> in France according to the ARWU 2022 ranking. UMR 8076 is based in the

Henri Moissan building, a research and teaching center bringing together the Biology, Pharmacy and Chemistry poles.

<https://www.universite-paris-saclay.fr>

<https://www.pharmacie.universite-paris-saclay.fr>

*Period and remuneration:* The contract must start on May 15<sup>th</sup>, 2023. Applications are being considered until April 15<sup>th</sup>, 2023. The duration is one year renewable.

*Salary:* Up to 4000 € gross depending on experience.

*Contacts :*

[alexandre.maciuk@universite-paris-saclay.fr](mailto:alexandre.maciuk@universite-paris-saclay.fr)

[pierre.champy@universite-paris-saclay.fr](mailto:pierre.champy@universite-paris-saclay.fr)