



RESEARCHER IN MICROFLUIDIC M/F
PARIS
TEMPORARY CONTRACT 36 MONTHS MINIMUM

BIOASTER is the only Technological Research Institute in the field of health in France, which focuses on infectious diseases and microbiology. BIOASTER brings together the skills of industry and public research to respond to health issues.

To reinforce the team, located near the center of Paris, within the Institut Pasteur, we are looking for a motivated, creative, and detail-oriented researcher with a strong background in microfluidics, experience in cell biology and ideally in nanotechnology.

MISSION :

This contract is defined on the mission (s) aiming to "demonstrate the ability to perform integrated cellular and humoral functional tests through microfluidics systems" here called 'MISSION', within the scope of research projects aimed at:

- Implement a novel microfluidic platform for sample preparation through inertial microfluidics for cell sorting and enrichment and application in diagnostic field in a collaborative project on sepsis.
- Development of integrated functional cellular and humoral tests: as part of the construction and execution of a collaborative project, for example on Lyme disease
- Integration of a technology patented by BIOASTER in microsystems (including microfluidics and on-board sensor) for the detection of analytes in the context of the construction and execution of an international project.

Job responsibilities will include:

- Validation of a new microfluidic system for particle separation (design, fabrication and testing,)
- Design and development of novel microfluidic platforms in the context of collaborative project with industrial partners
- Development of microfluidic platforms that meets industrial robustness.
- Performance of experiments in clinical settings.
- Writing of protocols, identification of technology limitations and troubleshooting.
- Presentation of results to colleagues, project partners and conference attendees.
- Publication of research results through internal reports, patents and scientific journals.

LOCATION and DURATION:

The position is available immediately.



Given the actions and the objectives to be achieved, the duration of the contract should be spread over a period of between 3 and 4 years in BIOASTER Paris at the Pasteur Institute campus.

PROFILE

Degree and technical skills

- PhD in mechanical engineering or PhD in biology with strong experience in microfluidics engineering and fluid mechanics.
- Knowledge and practice of computer-aided design (CAD) of microfluidic circuits.
- Strong expertise in microfabrication and lab-scale development of microfluidic chips (i.e. photolithography, soft lithography or micromilling) applied to biology, concretized by publications in recognized scientific journals or patents.
- A good background in cell biology is desirable.
- Experience of numerical fluid flow modelling, with a specific focus on fluid dynamics or a closely related area, would be a plus.
- Excellent communication skills, proactive and ample experience in delivering high quality project results, i.e. a record of peer-reviewed journal papers in a relevant area.
- Basic French speaking, fluent English at work

Personal skills

- Open-mindedness, curiosity, taste for innovation.
- Listening and adaptive skills.
- Teamwork skills, excellent communication and interpersonal skills.
- Excellent organizational skills.