



## Postdoctoral position in microfluidics / biotechnology

**Subject:** Microfluidic-based strategies for the rapid diagnostics of emerging infectious diseases

**Domains:** Microfluidics / Immuno & bio-sensing / Diagnostics / Biotechnology / Optical Imaging

**Job description:**

Emerging infectious diseases (COVID-19 pandemic, antibiotic resistance in bacteria or neglected tropical diseases) are a big threat to global healthcare and new detection and diagnostic tools are needed to prevent the spread of pathogens, while ensuring the earliest and best treatment to patients. The [Immunoanalysis Studies and Research Laboratory \(LERI\)](#) at CEA is focused on the development of monoclonal antibodies and immunoassays (ELISA, Lateral Flow Assays) to meet this demand, working in close interaction with clinicians for the validation of tests prior to commercialization (ex: [CARBA5](#)). We are now implementing several strategies to expand the range of applications of these developments and improve the efficiency of current technologies. The recruited post-doc will work within the interdisciplinary microfluidics team, with the aim of developing new diagnostic tests, in order to provide multiplexed detection systems that are simple, fast, sensitive, low-cost and widely available. He/She will have access to the microfabrication, imaging and biosafety laboratory (L2, L3) facilities, as well as to the protein and antibodies production platform.

**Job responsibilities:** The selected candidate will:

- Be in charge of the design, development and validation of microfluidic-based procedures for efficient sample analysis and biomarker detection.
- Implement and train users to new microfabrication and rapid prototyping technologies.
- Take an active role in the presentation and publication of research results.
- Be involved in the training of students and communicating with academic and industrial partners.

**Candidate profile:** We are looking for outstanding candidates with the following skills:

- A PhD in microfluidics, biotechnology or related fields (physics, engineering, chemistry)
- Excellent knowledge in microfluidics with experience in microfabrication/imaging/instrumentation
- Previous experience in immunoanalysis, cell biology or microbiology will be appreciated
- Fluent English, both spoken and written, is mandatory
- Real motivation and ability to work in collaboration across disciplines and autonomously
- Strong interpersonal, organizational and communication skills are a must.

**Starting date:** Autumn 2021 (Position funded for up to 3 years)

**Location:** CEA-Saclay, 91191 Gif sur Yvette – France, within the Paris-Saclay University. (20 km from Paris via public transportation, private bus shuttle service - Paris and Ile de France Region)

**How to apply:** Applicants should send their CV, a cover letter motivating their research interests, a list of current publications and at least two recommendation letters with contact information to Karla PEREZ-TORRALLA ([karla.pereztoralla@cea.fr](mailto:karla.pereztoralla@cea.fr)) & Sandrine LEBLOIS ([sandrine.leblois@cea.fr](mailto:sandrine.leblois@cea.fr)).

[Selected publications](#)