WORKING ENVIRONMENT AND CONTEXT

Notre établissement fait partie de l'Université PSL. Située au cœur de Paris, celle-ci fait dialoguer tous les domaines du savoir, de l'innovation et de la création. Classée parmi les 50 premières universités mondiales, elle forme au plus près de la recherche des chercheurs, artistes, ingénieurs, entrepreneurs ou dirigeants conscients de leur responsabilité sociale, individuelle et collective.

HOSTING STRUCTURE

The Curie Institute Research Center

France’s leading cancer research and treatment centre, Institut Curie unites a renowned research centre and a specialist hospital, fostering close collaboration between scientists, clinicians and healthcare professionals. It offers an environment of excellence where expertise comes together around shared values: care, humanity, openness, collaboration, efficiency, innovation, solidarity and commitment.

MISSIONS

MAIN TASKS

Laboratory

The **RACER (Rare Cancers Exploration and Research)** team, led by **Dr. Sarah Watson** within the **Chemical Biology of Cancer Unit** (INSERM U1339/CNRS UMR3666, **Institut Curie**, Paris), conducts translational research on rare cancers, with a particular focus on **sarcomas**. The team combines multi-scale molecular profiling, preclinical models, and direct access to patient cohorts from Institut Curie.

This position is part of the **ATTILAS** project (*Addressing and Targeting Tumor and Immunological Vulnerabilities in Dedifferentiated Liposarcomas*), funded by the French National Research Agency (ANR, JCJC program, 36 months) and coordinated by Dr. Watson. The project aims to identify actionable tumor and immune vulnerabilities in **dedifferentiated liposarcoma (DDLPS)** through the integration of multi-omics analyses and functional validation.

The successful candidate will contribute to the bioinformatic analyses of a unique dataset including **bulk RNA-seq, single-cell RNA-seq (scRNA-seq), whole-genome sequencing (WGS), and whole-exome sequencing (WES)** data. The position involves close interaction with researchers within the team and with the Bioinformatics Hub at Institut Curie.

Missions

Transcriptomic Analysis

- Analyze bulk RNA-seq datasets, including quality control, normalization, differential expression, and functional enrichment analyses.

- Perform cell-type deconvolution of bulk transcriptomic data.

- Process and integrate scRNA-seq and snRNA-seq datasets, including cell-type annotation, CNV inference, trajectory analysis, and cell-cell communication analyses.

- Integrate transcriptomic findings with functional data generated within the project.

Biostatistics and Biomarker

- Correlate molecular profiles with clinical outcomes using appropriate statistical approaches.

- Optimize and validate prognostic signatures.

- Identify signatures associated with therapeutic response or resistance from single-cell data and apply these signatures to bulk transcriptomic datasets.

Data Management and Scientific Dissemination

- Develop, maintain, and document reproducible bioinformatics pipelines.

- Ensure data management, traceability, and deposition.

- Collaborate closely with biologists, engineers, and clinicians to translate biological questions into actionable analyses.

- Present results at team meetings and contribute to publications, reports, and grant deliverables.

Contraints and risks

- Opportunities for occasional travel to national and international scientific conferences.

APPLICANT PROFILE

KNOWKEDGE AND QUALIFICATIONS EXPECTED

Training and experience required

- **Education and qualifications:** Master’s degree (MSc) or Engineering degree in **Bioinformatics, Biostatistics, Data Science**, or a related field; alternatively, a **PhD** in one of these disciplines or involving substantial transcriptomic data analysis.

- **Professional experience:** At least **2 years** in the analysis of high-throughput sequencing data, **single-cell RNA sequencing (scRNA-seq)** experience.

- **Required expertise:** Strong knowledge of **bulk and single-cell RNA-seq analysis**, from raw data processing to biological interpretation; integration methods and batch-effect correction; survival statistics; and functional enrichment analyses. A background in **cancer biology** is expected, while prior experience in sarcoma research is not required.

- **Desirable skills:** Experience in **cellular deconvolution**, **cell-cell communication inference**, **spatial omics data analysis**, and **copy-number alteration (CNA) analysis**.

Skills required

- **Computational skills:** Proficiency in **R** and **Python**, as well as **Bash** and Unix/Linux environments; routine use of **Git** for version control; experience working on high-performance computing clusters (**SLURM**); familiarity with workflow management systems such as **Nextflow** and reproducible computational environments including **Conda, Docker, and Singularity**.

- **Language skills:** Excellent written and spoken **scientific English**

- **Personal qualities:** Strong commitment to methodological rigor and reproducible research practices; ability to work independently while maintaining a critical perspective on the robustness of analyses; excellent communication skills to interact effectively with biologists and clinicians and present complex analytical results in an accessible manner; and a strong collaborative mindset.

Contract information

Type of contract*: Fixed-term contract*

Starting date: as soon as possible

Duration: 18 months, renewable

Working time: *full time 39 hours per week*

Annual Gross Salary: from 32480€ to 39459€ according to the current grids

Benefits: Collective catering, reimbursement of transportation fees up to 75%, supplementary health insurance

Location of the position: Paris

Contact

Please send your CV, letter of motivation and 2 references

Publication date: 16/10/2026

Deadline for application: Once filled

Faithful to the legacy of its founder, the Institut Curie is deeply committed to promoting equal opportunities, diversity, and inclusion. Convinced that diversity of backgrounds and experiences contributes to collective performance, we strive to provide everyone with a respectful and equitable working environment and encourage all candidates to apply for our job opportunities. All our opportunities are open to people with disabilities
https://euraxess.ec.europa.eu/sites/default/files/brochures/eur_21620_en-fr.pdf

DIPLÔME ET EXPÉRIENCE PROFESSIONNELLE

Bac+5, Bac+6 et plus

NON DISCRIMINATION, OUVERTURE ET TRANSPARENCE

Notre établissement, comme l'ensemble de l'Université PSL, s'engage à soutenir et promouvoir l'égalité, la diversité et l'inclusion au sein de ses communautés. Nous encourageons les candidatures issues de profils variés, que nous veillerons à sélectionner via un processus de recrutement ouvert et transparent.

CONTACT

bs3p277xax5k@emploi.beetween.com

OTHER INFORMATION

Type de contrat / de poste : **CDD**
Durée du contrat : **18 mois**

Reference
bs3p277xax

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