

Permanent BioImage Analyst Position

The French biomedical research organism INSERM opens a permanent BioImage Analyst (F/M) position in the Cellular and Chemical Biology Laboratory (<https://institut-curie.org/unit/umr3666-u1143>) for microscopy-based data analysis, including software and statistical model development. The BioImage Analyst will be assigned to the SAIRPICO team (<https://team.inria.fr/serpico>).

The official application site will open by the middle of June 2023, and will close by the middle of July 2023. For more information, please contact us directly at ludger.johannes@curie.fr and charles.kervrann@inria.fr.

Location

INSERM U1143, Cellular and Chemical Biology, Institut Curie Research Center, 26 Rue d'Ulm, 75005 Paris, and Centre Inria de l'Université de Rennes, Campus Universitaire de Beaulieu, 35042 Rennes Cedex, France.

Job description

In close collaboration with members of the Cellular and Chemical Biology Laboratory, you will participate in scientific programs that require the design of image acquisition strategies in advanced microscopy, the development of image analysis workflows and of customized scripts/macros/plugins. With the support of Inria colleagues, you will also be responsible for advising and training colleagues in computational techniques. Hands-on experience in optics instrumentation and/or biological experimentation would be a definite plus.

Moreover, you will also collaborate with researchers and bioimage analysts from other units of the *Institut Curie* Research Center and members of the France-BioImaging infrastructure (<https://france-bioimaging.org/>), in the “BioImage Informatics - Image Processing & Data Management” node and within Euro-BioImaging-ERIC (<https://www.eurobioimaging.eu/>).

Your main activities will be:

- Development and deployment of algorithms, advanced methods for image processing and analysis.
- Design of image analysis pipelines/workflows, implementation of automated data analysis protocols, and optimization onto various platforms and operating systems (Windows, Linux, MacOS).
- Collaboration with imaging specialists and biologists in projects for smart (deep learning-assisted) image acquisition and reconstruction in super-resolution, light sheet, and possibly electron microscopies.
- Train user, write documentation and tutorials, maintain relevant software repositories and documentations, teach courses for image and data analysis, and perform knowledge and technology transfer.

Requirements

- PhD in signal and image processing, statistics or applied mathematics with validated training or documented experience in microscopy image processing
- Minimum of 3 years of experience after PhD in bioimage processing, statistical and deep learning (convolutional neural networks), data visualization, image processing platforms (Fiji/ImageJ, Icy, napari), software development (e.g., Java, C/C++, Python, Matlab), and FAIR image database management systems (e.g., Omero).
- Practical experience with recent microscopy techniques (e.g., super-resolution, light sheet, fluorescence polarization, cryo-EM, cryo-ET).
- Excellent English language and team player skills are needed to operate with a high degree of autonomy in an international environment.

Benefits

We offer:

- An internationally highly competitive scientific environment with excellent infrastructure
- Favorable salary conditions based on experience, and all benefits of public employment, **including health, retirement and family services.**
- Funding for regular training courses.
- The location of the U1143 / SAIRPICO team in Paris and Rennes, a beautiful town in Brittany (1,5 hours by train from Paris).