# France-Biomaging is looking for a software engineer

## renewable one-year contract

#### Goal

Participate in the "DATA" project of the France-BioImaging infrastructure, which is dedicated to biological imaging (see <a href="https://france-bioimaging.org/">https://france-bioimaging.org/</a>). The goal of the work will be to create annotated image databases suitable for machine learning and to set up R&D competitions to solve bottlenecks in bioimage analysis.

#### **Main activities**

- -Participate in the identification of key questions in bioimage analysis.
- -Deploy and configure image database management systems (OMERO by default) and develop tools to facilitate manual image annotation.
- -Mobilize the community of image producers to contribute to this database.
- -Organize R&D competitions that use these databases and that mobilize the international community: communicate (newsletter, website, Twitter, etc.), define the course of the competitions, develop their IT tools, organize the event, identify and evaluate the participant results.
- -Monitor similar initiatives in the national and international community, particularly in Europe.

### **Expected skills**

- -Experience in programming.
- -Experience in machine learning and evaluation of its methods.
- -Experience with competitions is a plus.
- -Experience in image analysis and some of its basic software tools (e.g. Image J/FiJi, Icy, Ilastik, ImJoy ...) is a plus.
- -Knowledge of at least one image data management software (eg OMERO) or client server architectures.

## **Diplomas**

Master in computer science, applied mathematics, physics, bioinformatics or related field; dual biology/computational science skills preferable but not obligatory.

### **Context**

France-BioImaging is a distributed research infrastructure that works at the crossroads of molecular and cellular biology, biophysics, engineering, mathematics and computer science. This unique infrastructure brings together major imaging facilities and research teams performing R&D in the bioimaging field. The infrastructure aims at developing new image analysis tools based on deep learning. For this, the engineer will work with a team of ~10 people that will implement the France-BioImaging "DATA" project. The engineer will be located in Paris and will be under the direct supervision of Drs. C. Zimmer (Pasteur) and T. Walter (Ecole des Mines).

**Application deadline: 15th JUNE 2022**