

**Engineer IN CRYO-ELECTRON TOMOGRAPHY AND IMAGE PROCESSING**

The **‘unité de technologie et de service’ ultra-structural bio-imaging (uTechs-UBI)**, part of the center for innovation and technological research (**CITECH)**, at **Pasteur institute in Paris**, provides technical and scientific support in electron microscopy to the Pasteur community. The platform is equipped with state-of-the-art transmission and scanning EMs, including a cryo-EM with direct detector and a focused ion-beam SEM. It is run by 10 staff members, specialized in different EM techniques, including single particle EM. A specific aim is to develop workflows for cryo-correlated light- and 3D electron microscopy for protein complexes *in situ* and *in vitro*. To strengthen our team we are looking for an engineer with a background in cryo-electron tomography and image processing.

**The job responsibilities will include both development as well as service:**

**Development**:

Developing imaging resources: improve and develop workflows for cryo-correlated light- and cryo-electron tomography (CLEM). This includes sample preparation, automated imaging and image processing. Contribute to development of macros for automation and high-through-put in CLEM and single particle EM based on cryo-ET.

**Service:**

Supervision of the computer workstations, contribute to the upgrading of the facility’s computer systems, software packages and web server management. Management of big data-sets.

Running and updating computational data analysis packages; three-dimensional reconstruction of cell volumes and segmentation with a particular emphasis on 3D correlated light- and electron microscopy (CLEM), as well as the analysis of single particle cryo-EM data.

Providing support for expert, and training new, users in different software packages. This responsibility involves one-on-one training sessions and the organization of workshops.

**Qualifications and Experience**

The ideal candidate should have a PhD in biology or physics, possessing strong interpersonal and communication skills. Outstanding computer skills (including Linux/Unix environment) and a strong background in cryo-electron tomography are a prerequisite; image processing in EM, in particular related to CLEM and single particle EM, is an advantage.

The successful candidate will tightly interact with the Utechs photonic bio-imaging, the bio-imaging unit, the newly created bio-imaging hub and the protein platform of institut Pasteur. Training in other EM centers will be offered to allow for an optimal career development in image processing in EM. The successful candidate should be able to work independently, be very organized, reliable, enjoy working in an international team and enjoy helping users with different backgrounds (facility spirit). Fluency in English (in writing and spoken) and background in spoken French is required.

To apply send a **merged** PDF of CV, motivation letter summarizing professional background and names of three potential referees. After a successful probation period the position can become permanent.

Deadline for application: 28th of February 2018

**Send you application by email to cidalia.da-agra@pasteur.fr**

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