

Expression of Interest - Electron Microscopy Expert

The Instituto de Medicina Molecular João Lobo Antunes (iMM) is seeking an expert in electron microscopy to join the **Comparative Pathology Unit (CPU)**, a core facility that provides comparative, experimental and diagnostic pathology support to iMM scientists using animal models of human disease, and scientists/physicians investigating human disease. Scientific areas at iMM include oncobiology, aging and stem cell research, immunology, infectious diseases, cellular and molecular biology and neurosciences, among others.

The candidate selected for this role will have the opportunity to engage in a diverse array of research collaborations in many topical areas that may result in co-authoring in publications. However, this is not a post for an independent researcher. The technical expert will report to the commissary of the CPU facility.

The technical expert will be responsible for the following activities:

- Discussion with researchers to decide on experimental approach to tackle their scientific questions
- Preparing and fixing biological specimens using conventional fixation methods and high-pressure freezing techniques
- Grid preparation (thin film coating, carbon coating)
- Thin and ultra-thin sectioning of samples
- Preparation of stains and post-staining grids
- Manipulation of electron microscopes and collection of images
- Perform routine laboratory tasks such as basic equipment maintenance, ordering supplies, and other work required for the operation of the facility
- Maintain records of experiments, and deliver reports to researchers in written and oral English formats
- Follow all safety procedures to maintain a safe workplace
- Train graduate students, post-doctoral fellows, and technicians in electron microscopy techniques and instrument operation.

Profile of Candidate

- Minimum of a PhD (or the equivalent), preferably with a focus on Biology
- Experience with electron microscopy procedures and techniques such as sample fixation, sample embedding, sectioning, and post-staining
- Excellent written and verbal communication skills in English



- Excellent organizational and problem-solving skills
- Interest to learn how to operate, maintain and troubleshoot electron microscopes and other related equipment.
- Ability to perform tasks requiring a high degree of manual dexterity and patience
- Able to establish and maintain effective working relationships with supervisors, co-workers and users of the facility
- Demonstrated independent work as well as small-team work
- General skills in light microscopy (e.g. transmission light microscopy, fluorescent microscopy) is desirable
- Experience in correlative light and electron microscopy (CLEM), cryo-sectioning of samples, immune-gold labelling and 3D imaging techniques such as electron tomography will be considered a very strong asset

Working Conditions: Allocated workspace in the CPU Office and access to Institutional facilities and services. The team has experienced histology technicians and the chosen candidate will work closely with the electron microscopy facility team at our collaborative facility at the Instituto Gulbenkian de Ciência (IGC). The chosen candidate will have access to a Leica UC7/FC7 Ultramicrotome and other necessary sample preparation equipment. The electron microscopes and some of the more specialized equipment, like the high-pressure freezer, is located at the IGC. The chosen candidate will work and coordinate the iMM EM projects with the IGC facility. Experiments may also involve cooperation and/or traveling to the International Iberian Nanotechnology Laboratory (INL), Braga.

Please submit your detailed CV and Motivation Letter in PDF format through iMM website by clicking in the "**Apply**" button below the position ad. For more information about iMM check at https://imm.medicina.ulisboa.pt/#

Call closes at noon, January 10th 2022.

Lisbon, 25th of November 2021