

Training Opportunity for Portuguese Graduates

Title	Duty Station
Automate registration of 3D data (Schwab Team_2)	EMBL Heidelberg/Germany
Domain of activity and project Automate registration of 3D data acquired by different imaging modalities. The Schwab team specialises in Correlative Light and Electron Microscopy (CLEM), whereby we use data acquired by light microscopy (widefield or confocal) to locate a region of interest (ROI) within an opaque Electron Microscopy (EM) sample. This requires several stages of registration of data in 3D, light microscopy to MicroCT and MicroCT to EM. All forms of our data are a series of 2D images that are combined to give a 3D picture of a biological sample. This project would focus to automate the process of registering a 2D image into the 3D data with all possible orientations.	
Required education IT, computer vision, image analysis.	
Knowledge, skills and any special requirements The graduate would need to be able to understand problems in three dimensions and be able to apply solutions. Programming skills would be essential and the instincts to take initiative to explore new softwares/solutions would be a great advantage for the graduate and the project alike.	
Training opportunity for the Graduates The Schwab Team has a diversity of skills to share within the field of Electron Microscopy (EM) and Cell Biology. The team focuses on developing techniques to assist Correlative Light and Electron Microscopy (CLEM) and can provide extensive support on the topic. The graduate would be involved in the everyday activities of this development whilst following their own complex project.	
Further information (website) https://www.embl.de/research/units/cbb/schwab/index.html	