



colabs



COORDINATOR	Dr. Edgar Gomes
PHD/PÓS-DOC/...	Dr. Anna Pezzarossa
INSTITUTE/LAB	Instituto de Medicina Molecular (IMM)
PROJECT TITLE	High resolution 3D modelling and characterization of cells.
PROJECT DESCRIPTION	<p>The candidate will use state of the art software for image analysis to build a 3D model of the intricate structure of the cell organelles under different experimental conditions from 3D FIB-SEM slices.</p> <p>After image segmentation using software for semi-automated image classification, 3D rendering software (e.g. Blender) will be used to visualize the complete three-dimensional structure. Particular emphasis will be placed on details rendering. Further, existing measurement tools will be used to obtain quantitative information from the data.</p>
WORK FIELD/CONCEPTS	Image Analysis, 3D modelling and rendering
NUMBER OF VACANCIES	1
STUDENT PROFILE	Organized, autonomous, attentive to details
REQUIRED SKILLS	Basic knowledge of programming
OBJECTIVES	Create a realistic 3D model, and an animation from the data. Obtain quantitative information from the dataset.
NECESSARY EQUIPMENT	None. We will provide a high-end workstation.
DURATION	Start: March 26nd Finish: June 30th
RECOMMENDED SCHEDULE	1 or 2 afternoon or morning a week (3.5h, h 14-17.30, or h 9.30-12.30), excluding Tuesdays afternoons.