

## **Use of sample supports with landmarks to facilitate re-localisation**

Re-localisation of a fluorescently labelled structure of interest in the electron microscope is a key point of correlative light and electron microscopy methods. In this talk I will present different kind of supports with markers that we use in our lab in order to perform correlative light and electron microscopy, both at room temperature and in cryo-conditions. Markers on sample supports are usually used as prominent landmarks to align low magnification fluorescent-light and electron microscopy images of the object of interest with an intermediate spatial precision (~500 nm to a few  $\mu\text{m}$ ). For a more accurate image registration recently published methods introduce the use of fluorescent nanobeads (50-200 nm in size) that can be detected in both imaging modes and used as landmarks to obtain a higher localisation accuracy (~ 50 nm). In my presentation I will discuss the implementation of these methods and its connection to the SerialEM ( Boulder lab) open-source software for image registration and acquisition in 2 and 3D.