Correlative Microscopy in Life and Materials Science

MIM.4.P057 High Resolution SEM, 3D-Applications and Correlative Light/Electron Microscopy

R. Neujahr¹

¹Carl Zeiss Microscopy, Microscopy Labs, Muenchen, Germany

ralph.neujahr@zeiss.com

Light and electron microscopy are two powerful, yet mainly independently used imaging Recently, more and more researchers want to combine the strengths of these tools to gain new insights into the functionality and the associated ultra-structure of biological specimen.

A prerequisite is the precise retrieval of one and the same regions of interest within the sample. Due to the different image contents this can be a very time-consuming to nearly impossible task. With the introduction of "Shuttle & Find" Carl Zeiss made a straight-forward workflow available that allows to easily transferring a sample together with the corresponding coordinates between wide-field light and scanning electron microscopes (SEM). Repositioning to the regions of interest became a matter of only a few mouse clicks. Combined with high resolution SEM and 3D imaging this tool provides extreme flexibility detecting fluorescent signals and corresponding ultrastructural organization.

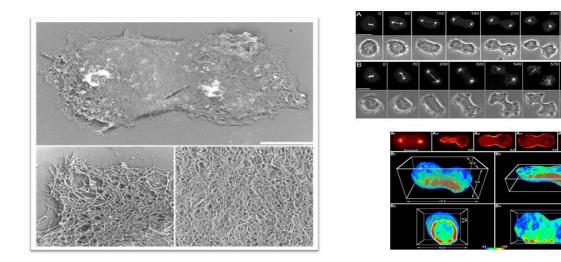


Figure 1.

