

Correlative Structured Illumination and Electron Microscopy

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We implemented both invasive and noninvasive labeling approaches for correlative super resolution fluorescent light microscopy and electron microscopy. Structured Illumination microscopy (SIM) which provides a resolution gain of a factor of two, was used to locate specific cellular structures of interest, like centrosomes and multiple vesicular bodies. Cells and labeled proteins were re-located in ultra-thin sections under electron microscopy. Correlative SIM and EM techniques provide valuable complementary and unique information in cell biology.