

Extremely Dynamic Behaviors of Vesicles and Zones in an Around the Golgi as Visualized by High-speed Super-resolution Live Imaging SCLIM

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We have been developing super-resolution confocal live imaging microscopy (SCLIM) to visualize real-time events of membrane traffic in a living cell. For the understanding of functional differentiation of distinct vesicles and zones in and around an organelle, it is critical to achieve very high spatiotemporal resolution in live imaging. The next generation SCLIM, SCLIM2, provides us an ideal tool to do that. We can now analyze 4D behaviors of tiny organelle zones and even individual vesicles. I will show examples in yeast, plant and animal cells.