Abstract: The retina is organized in a series of parallel processing systems that isolate different properties of a visual scene, such as illuminance, contrast, and color. While mapping retinal circuits, we discovered a new cell class, the Campana cell, that violates the foundational rules of visual processing within the retina. However, understanding the Campana cell's synaptic properties is complicated by the high density and small size of synaptic structures. To resolve this, we used super-resolution STED imaging and 3D processing to identify the pre and post-synaptic structures of Campana cells.

https://www.biorxiv.org/content/10.1101/2020.05.16.100008v1