Table S1. Representative studies using super-resolution microscopy to study TJ organization and dynamics.

Bold text indicates the cell type, and underlining indicates dynamic events.

Super-resolution technique	Proteins imaged	Notes	Citation
Spectral Position Determination Microscopy (SPDM)	Claudin-3-YFP, claudin-5-YFP	Reconstituted TJ strands in **HEK 293 cells**; reported resolution ~50 nm.	Kaufmann et al., 2012
Structured Illumination Microscopy (SIM)	Actin probe and myosin probe in cells where ZO-1 or afadin were knocked down	Examined junction remodeling and actin connections to the junction especially at tricellular junctions under elevated contractility in **MDCK II cells**.	Choi et al., 2016
STochastic Optical Reconstruction Microscopy (STORM)	fixed and stained for claudin-18 and ZO-1	Investigated TJ protein interactions in **alveolar epithelial cells**.	Koval et al., 2016
Structured Illumination Microscopy (SIM)	tagged (GFP, SNAP tag, Halo tag) claudins, ZO-1, and occludin; actin probe	Reconstituted TJ strands in **fibroblast cells**; used SNAP- and Halo-tagged proteins for pulse-chase analysis to determine where newly synthesized TJ proteins dynamically incorporated into strands.	Van Itallie et al., 2017; Van Itallie et al., 2019
Structured Illumination Microscopy (SIM)	Myc-ZO-1-HA	Expressed ZO-1 epitope tagged on either end in **EpH4 epithelial cells** and showed that ZO-1 exhibits tension-dependent conformational changes.	Spadero et al., 2017
STochastic Optical Reconstruction Microscopy (STORM)	Fixed and stained for claudin-1, claudin-5 or ZO-1	Investigated TJ incorporation and morphology in **murine brain microvascular endothelial cells** when connexin 43 was perturbed (Johnson et al.), or when Claudin-1 was elevated or targeted with a specific peptide (Sladojevic et al.).	Johnson et al., 2018; Sladojevic et al., 2019

Bold text indicates the cell type, underlined text indicates dynamic events.

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