



Walter Lab

The Walter lab studies how cells maintain the quality of their proteins and organelles during homeostasis and stress. The lab investigates the machinery governing protein synthesis, folding, and targeting, as well as the mechanisms by which organelles enforce quality control over their proteomes, communicate with one another, and regulate their abundance. Because the decline of these quality control systems is a hallmark of aging, a central goal is to understand how rewiring of these processes drives, or protects against, age-related disease progression. Combining structural, biochemical, and genetic approaches, the lab pursues fundamental discoveries in cell biology with direct relevance to the biology of aging.