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**Cover picture:** A solitary rod cell isolated from the adult rabbit retina using enzymatic digestion and mechanical dissociation techniques. The photoreceptor remains intact after isolation and synaptically active. Nomarski optics highlight the longitudinally arrayed mitochondria in the inner segment ( $\times 4,000$ ). Light micrograph kindly provided by Drs. Ellen Townes-Anderson, Raymond Dacheux, and Elio Raviola.

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