The mechanisms of axon and dendrite morphogenesis during neuronal maturation are not fully understood. Many previous studies have focused on neurites forming de novo from dissociated cells, but in this issue, Morgan and colleagues suggest a different mechanism may occur in vivo. They show that axons and dendrites of retinal bipolar cells form directly from neuroepithelial-like processes of immature bipolar cell precursors. The cover image shows a cross section through a mature mouse retina with immunolabeled photoreceptors (purple), amacrine and ganglion cells (red) and bipolar cells (green).

(Morgan and colleagues suggest a different mechanism may occur in vivo. They show that axons and dendrites of retinal bipolar cells form directly from neuroepithelial-like processes of immature bipolar cell precursors.)
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