ABSTRACT

Growing axons are exposed to a variety of guidance cues along their pathways. As many guidance molecules have been identified and their individual effects on axon behavior extensively studied, the general molecular principles of axon guidance are emerging. With a focus on the mouse as a model system, I will review the general concepts on how neuronal growth cones integrate multiple guidance cues that they encounter at the same choice points, how attraction and repulsion are mediated, and how long-ranging axon projections are built with a limited number of guidance cues.