

CHAPTER 6

Commentary: Saccadic eye movements: overview of neural circuitry

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Abstract: Recent neuroanatomical, neurophysiological, clinical, and brain imaging studies have generated a wealth of data describing the neural control of saccadic eye movements and visual fixation. These studies have identified many of the cortical and subcortical structures involved in controlling the behavior. Critical nodes in the network include regions of the parietal and frontal cortices, basal ganglia, thalamus, superior colliculus, cerebellum, and brainstem reticular formation. Specific functions are likely not localized to only one brain area, but rather, they may be distributed across multiple areas. This commentary is used to review briefly the neural circuitry controlling saccadic eye movements and visual fixation.