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Superior Colliculus

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Cross-References

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Definition

There are two superior colliculi located on the dorsal aspect of the brain stem and sit below the thalamus. They are involved with the initiation and control of shifts in gaze as well as eye-head coordination. An input to the colliculi originates in the cerebral cortex, the inferior colliculus, the retina, the basal ganglia, and the spinal cord. Fibers from the superior colliculi project to the paramedian pontine reticular formation and the spinal cord.

References and Readings

- Oster, S. F., & Sretavan, D. W. (2003). Connecting the eye to the brain: The molecular basis of ganglion cell axon guidance. *British Journal of Ophthalmology*, 87(5), 639–645.
- Sten, B. E. (2005). The development of a dialogue between cortex and midbrain to integrate multisensory information. *Experimental Brain Research*, 166, 305–315.