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Sommario/riassunto	Since years, patterning and function of some brain parts such as the cortex in the forebrain and the optical tectum or cerebellum in the midbrain/hindbrain region are under strong investigation. Interestingly the diencephalon located in the caudal forebrain has been ignored for decades. Consequently, the existing knowledge from the development of this region to function in the mature brain is very fragmented. The central part of the diencephalon is the thalamus. This central relay station plays a crucial role in distributing incoming sensory information to appropriate regions of the cortex. The thalamus develops in the posterior part of the embryonic forebrain, where early cell fate decisions are controlled by local signaling centers. In this Research Topic we discuss recent achievements elucidating thalamic neurogenesis - from neural progenitor cells to highly specialized neurons with cortical target cells in great distance. In parallel, we highlight developmental aspects leading from the early thalamic anlage to the late the organization of the complex relay station of the brain.