**Key Points about the Limbic System**

The [limbic system](https://www.boundless.com/psychology/definition/limbic-system/), located just beneath the [cerebrum](https://www.boundless.com/psychology/definition/cerebrum/) on both sides of the [thalamus](https://www.boundless.com/psychology/definition/thalamus/), is not only responsible for our emotional lives but also many higher mental functions, such as learning and formation of [memories](https://www.boundless.com/psychology/definition/memory/).

The primary [structures](https://www.boundless.com/psychology/definition/structure/) within the limbic system includes the [amygdala](https://www.boundless.com/psychology/definition/amygdala/),  [hippocampus](https://www.boundless.com/psychology/definition/hippocampus/), thalamus, [hypothalamus](https://www.boundless.com/psychology/definition/hypothalamus/), basal ganglia, and cingulate gyrus.

The amygdala is the [emotion](https://www.boundless.com/psychology/definition/emotion/) center of the brain, while the hippocampus plays an essential role in the formation of new memories about past experiences.

The thalamus and hypothalamus are associated with changes in emotional reactivity.

The cingulate gyrus coordinates smell and sights with pleasant memories, induces an emotional reaction to pain, and helps regulate aggressive behavior.

The basal ganglia is a group of nuclei lying deep in the [subcortical](https://www.boundless.com/psychology/definition/subcortical/) white matter of the [frontal lobes](https://www.boundless.com/psychology/definition/frontal-lobe/); its functions include organizing motor behavior and coordinating rule-based, habit learning.

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