Insular Lobe

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Synonyms

[Insula](#); [Insular cortex](#); [Island of Reil](#)

Definition

Often considered to be the fifth lobe of the brain, the insular lobe is situated deep within the lateral (Sylvian) fissure where it is concealed by the opercula of the frontal, parietal, and temporal lobes. While the functions of the insular lobe are not fully understood, it receives nociceptive and visceral sensory input and has been implicated in a variety of processes, ranging from homeostatic regulation, autonomic control, interoceptive awareness, and taste perception to affective-motivational pain processing, salience, and subjective emotional experience. Functional

neuroimaging studies have also linked the insular lobe to conscious desires, cravings, and addiction as well as a variety of neuropsychiatric disorders, including schizophrenia, mood, panic, post-traumatic stress, and obsessive compulsive disorders.

Cross-References

- ▶ [Autonomic Nervous System](#)
- ▶ [Functional Imaging](#)
- ▶ [Sylvian Fissure](#)

References and Readings

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