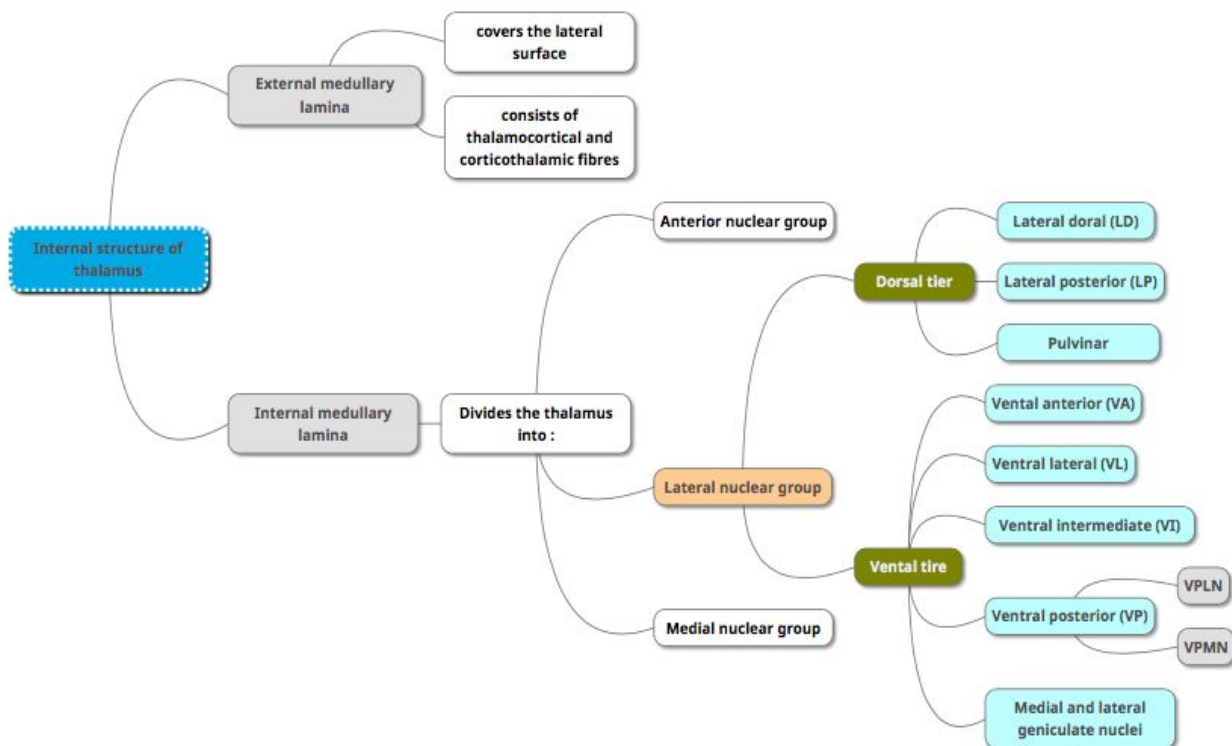
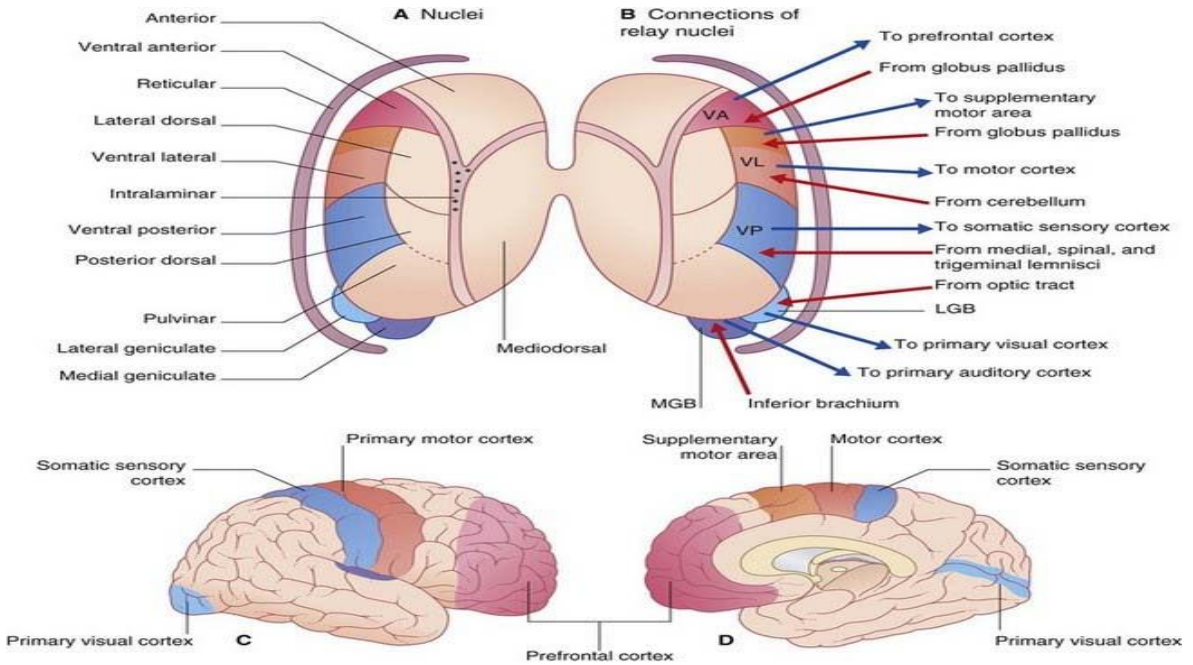


# Surfaces of thalamus

surface	Connections
Lateral surface	<ul style="list-style-type: none"> <li>• <b>Posterior limb</b> of internal capsule.</li> </ul>
Medial surface	<ol style="list-style-type: none"> <li>1. <b>Third ventricle.</b></li> <li>2. Interthalamic connexus / adhesion (<b>Massa intermedia</b>).</li> </ol>
Superior surface	<ol style="list-style-type: none"> <li>1. <b>Lateral ventricle.</b></li> <li>2. <b>Fornix.</b> "C-shaped bundle of nerve fibers in the brain that acts as the major output tract of the hippocampus"</li> </ol>
Inferior surface	<ul style="list-style-type: none"> <li>• Anterior : <b>HYP</b>othalamus</li> <li>• Posterior : <b>SUB</b>thalamus.</li> </ul>
The two <u>ends</u> of thalamus	
Anterior end	<ul style="list-style-type: none"> <li>• Forms a projection ( <b>Anterior tubercle</b> ) which lies <b>just below</b> the <b>interventricular foramen</b> "foramina of Monro that connect the paired lateral ventricles with the third ventricle"</li> </ul>
<b>P</b> osterior end	<ul style="list-style-type: none"> <li>• <b>P</b>ulvinar , which lies <b>above</b> :</li> <ol style="list-style-type: none"> <li>1. Superior colliculus.</li> <li>2. Lateral &amp; medial geniculate bodies.</li> </ol> </ul>



Projections of thalamic nuclei		
Nucleus	Afferent (Input)	Efferent (Output)
Anterior nucleus	Mammillary body	Cingulate gyrus
Medial nucleus	Hypothalamus	Frontal & prefrontal cortex
<b>Lateral nucleus (VENTRAL tire) :</b>		
Ventral anterior nucleus (VA)	Globus pallidus	Premotor cortex
Ventral lateral nucleus (VL)	Dentate nucleus	Primary motor cortex
Ventral posterior lateral nucleus (VPLN)	Medial & spinal leminsci	Sensory cortex
Ventral posterior medial nucleus (VPMN)	Trigeminal lemniscus	Sensory cortex
Lateral geniculate body	Optic tract	Visual Ccortex
Medial geniculate body	Lateral lemniscus	Auditory cortex



Done by : Khawla Alammari