VA Mid-Atlantic Health Care Network

MIRECC
Mental Illness Research, Education and Clinical Center

Post Deployment Mental Health
VISN 6

Windows to the Brain:
Axial Atlas 1

Lobes
Major Regions
Arterial Territories
Major Tracts

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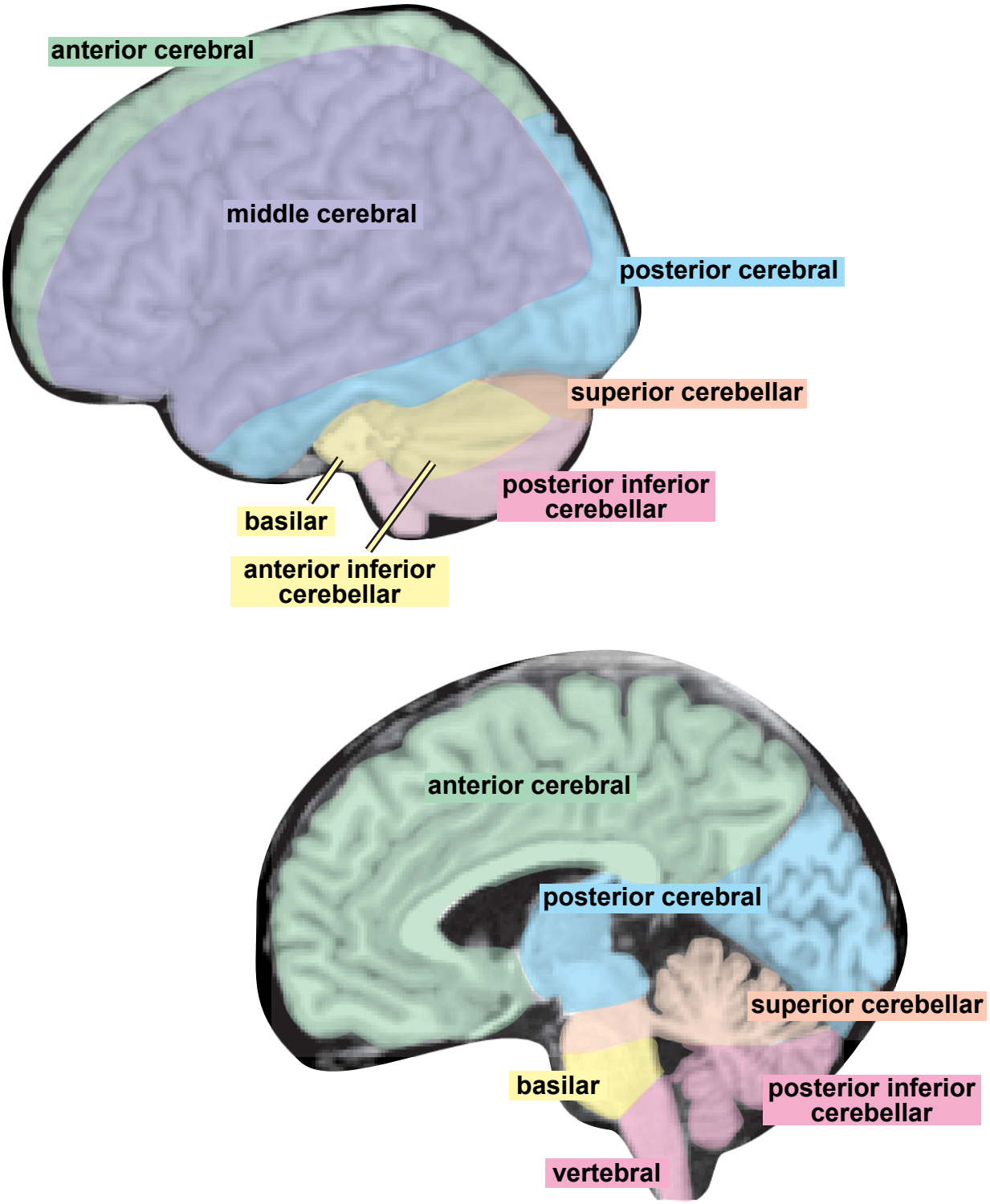
Right side of each section: Arterial territories are color-coded to match the figures below.*

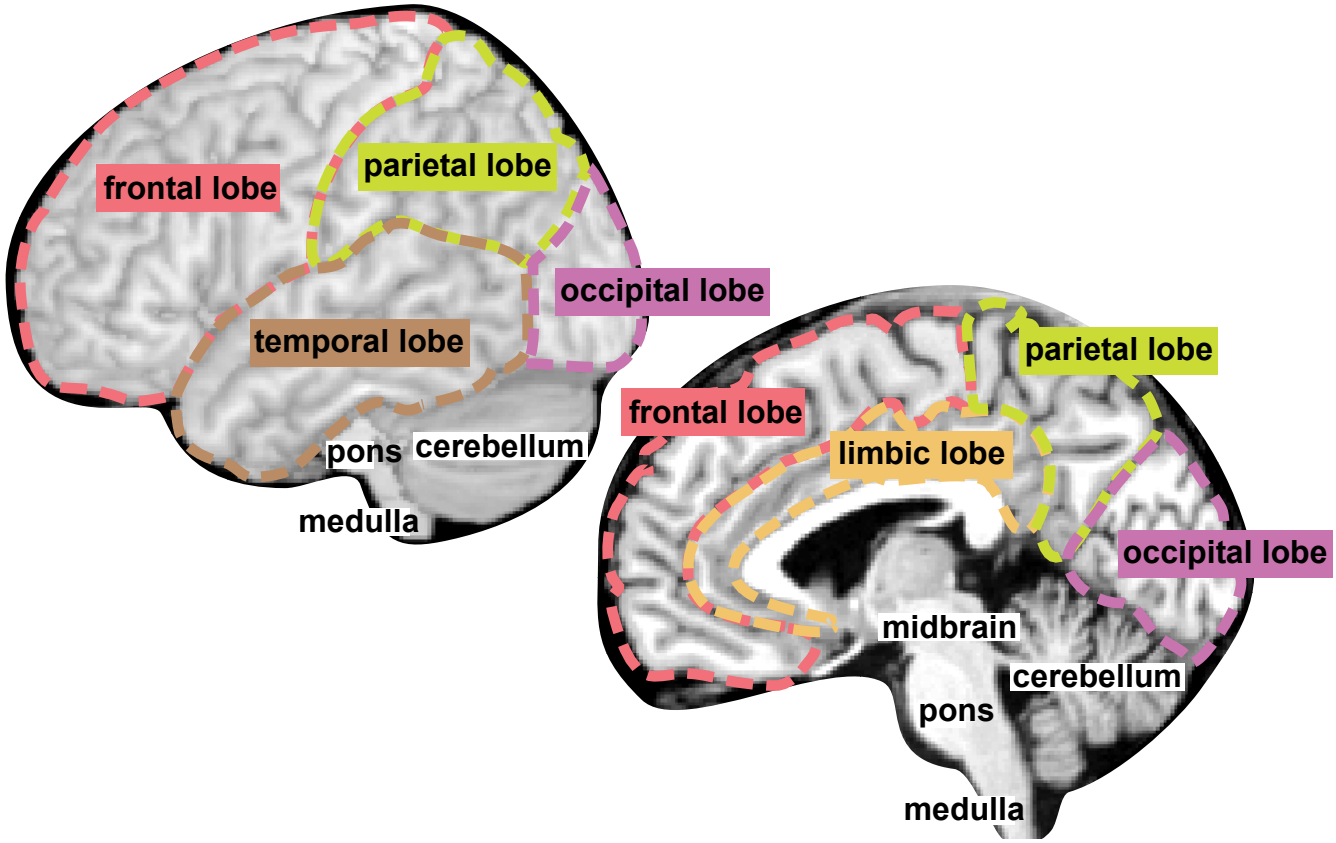
Arterial Territories



*Hurley RA, Fisher R, Taber KH. Clinical and functional imaging in neuropsychiatry. In: Yudofsky SC, Hales RE (eds). The American Psychiatric Press Textbook of Neuropsychiatry 5th Edition. American Psychiatric Press 2007: 245-300.

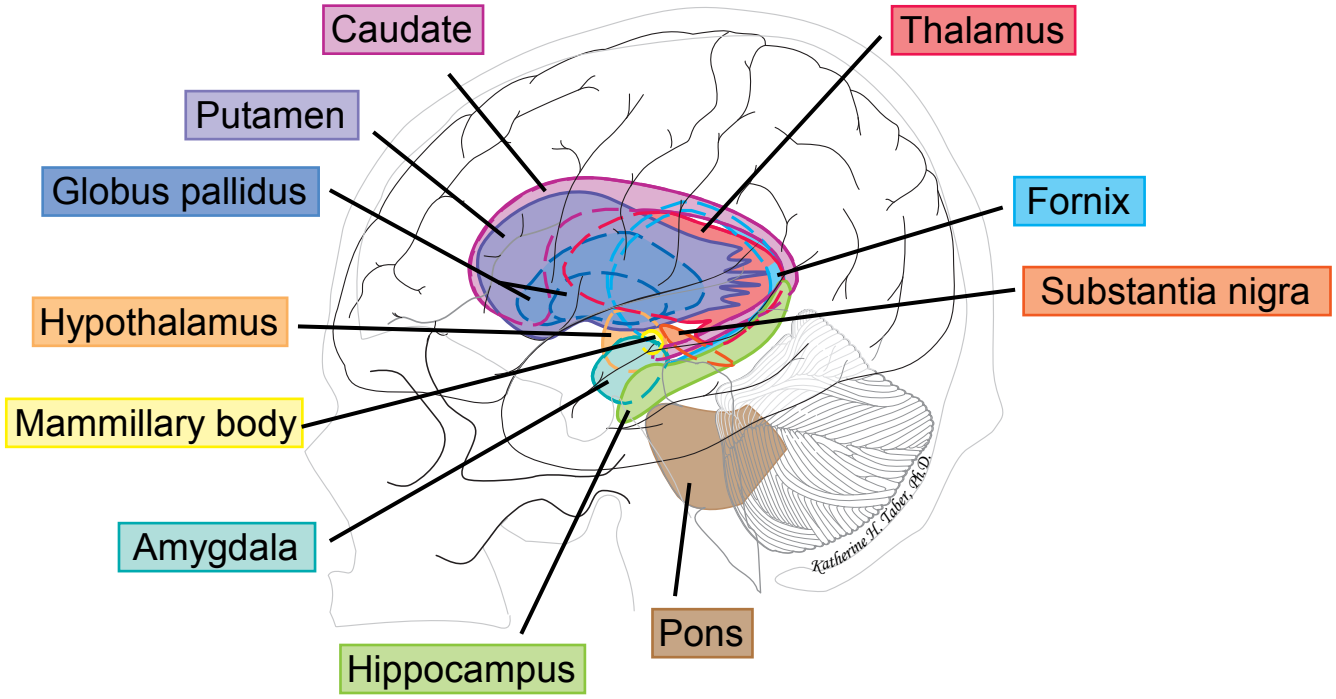
Left side of each section: Cerebral lobes, major regions, and major subcortical structures are labeled and color-coded to match the figures below.

Cerebral Lobes & Major Regions



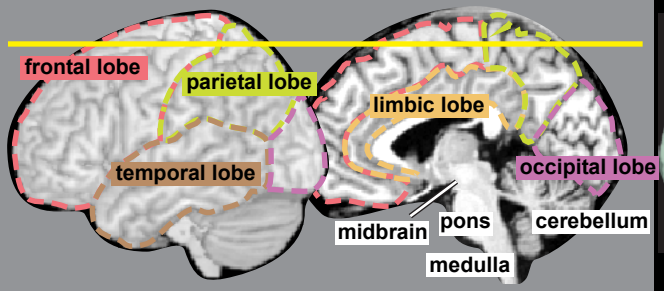
Major Subcortical Structures

This cartoon of a lateral view of the brain and skull shows the approximate positions and configurations of the major subcortical structures. The colors assigned in this figure are used in the sectional atlas to facilitate structure identification.*

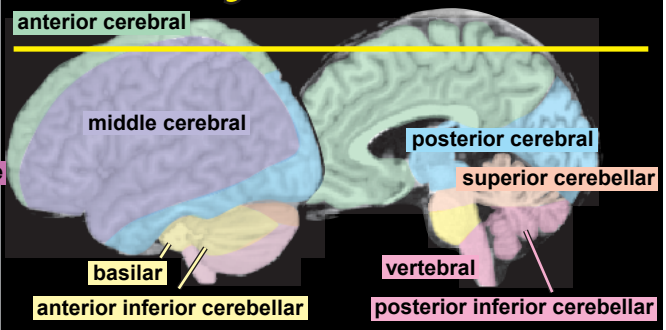


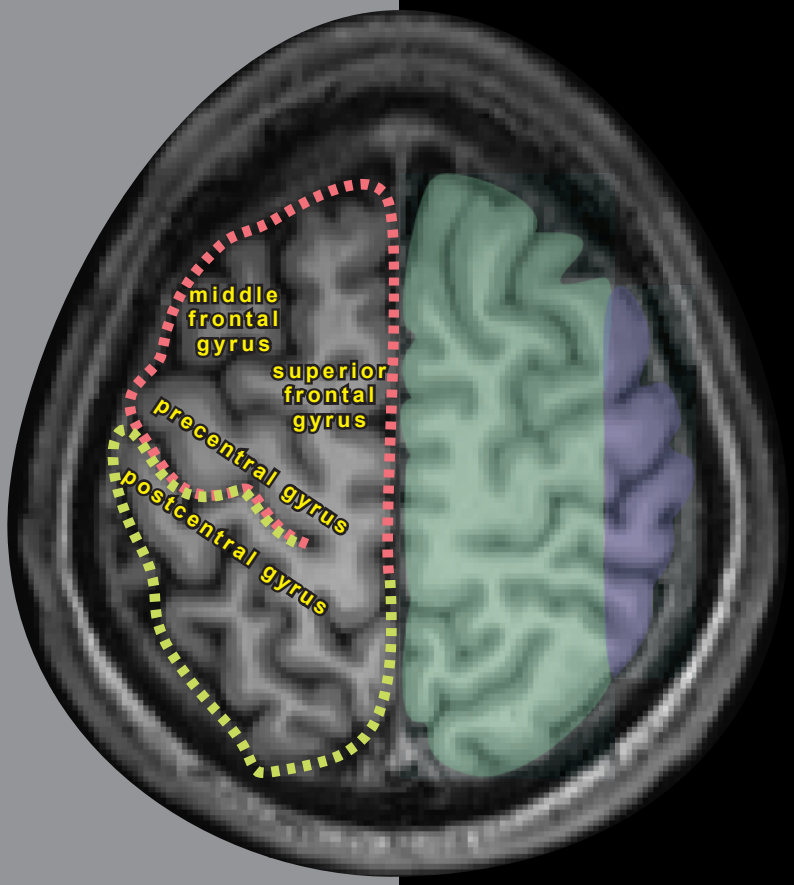
*Naumescu I, Hurley RA, Hayman LA, Taber KH. Int J Neuroradiol 1999; 5(1): 51-59.

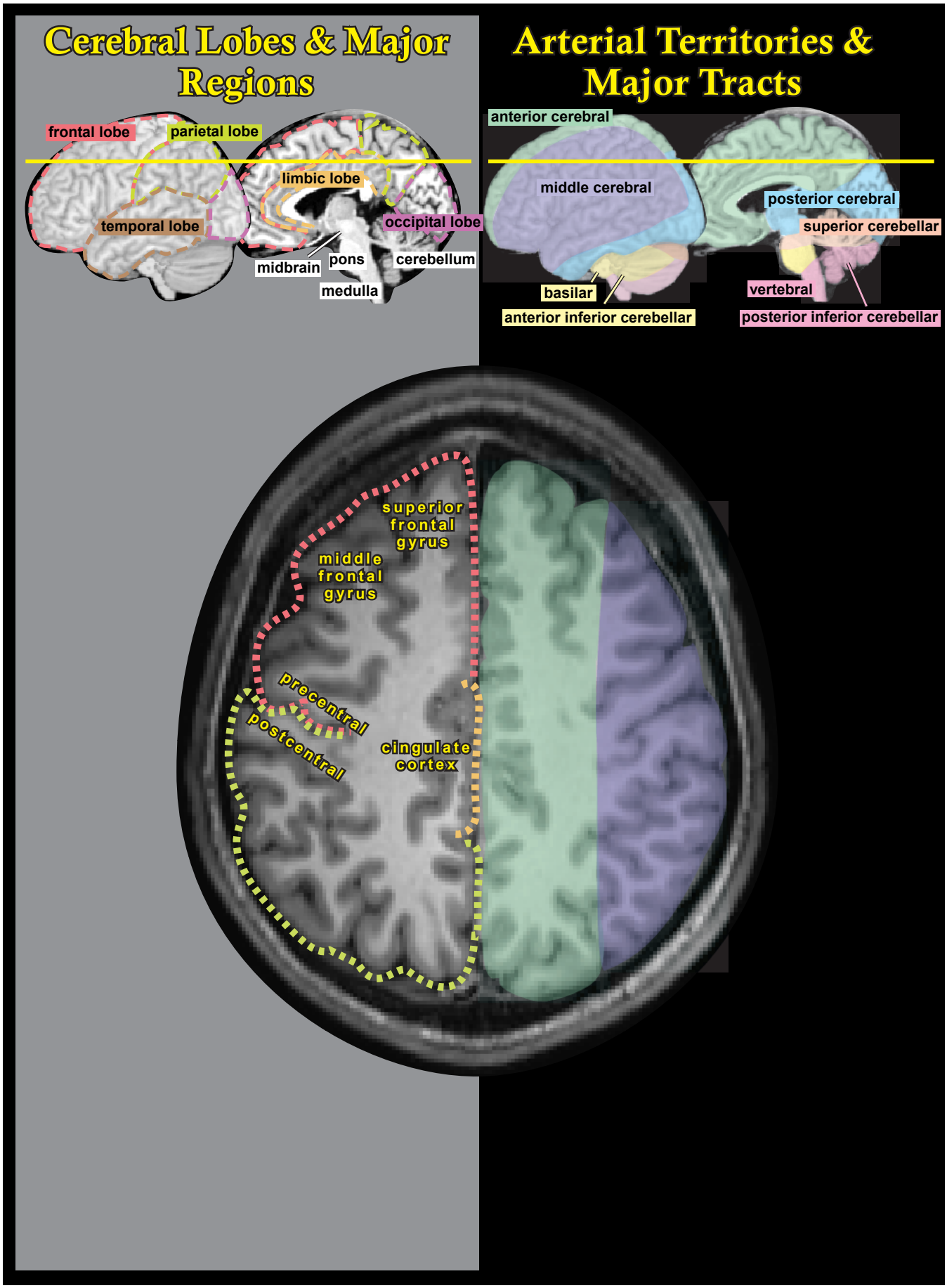
Cerebral Lobes & Major Regions

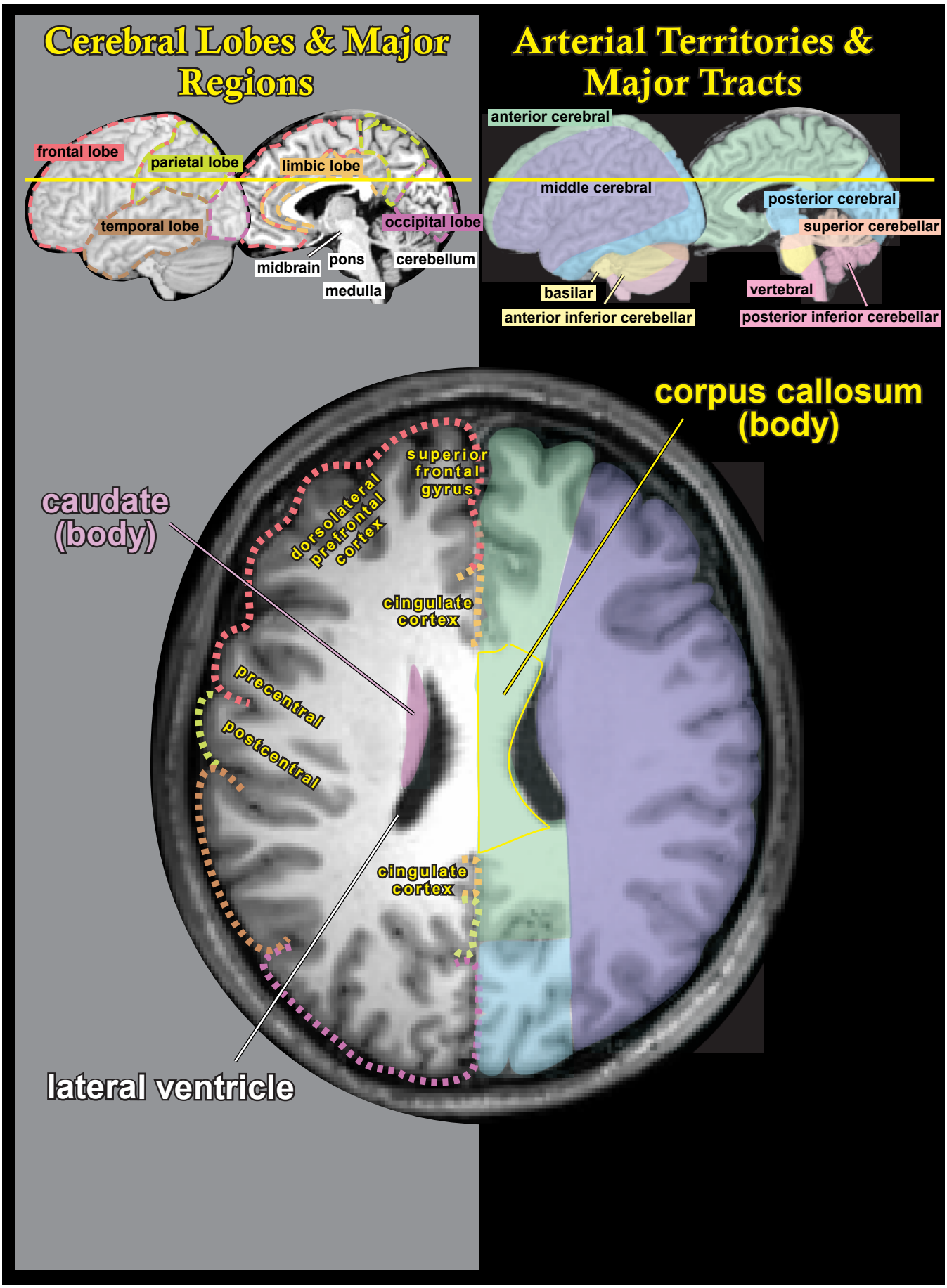


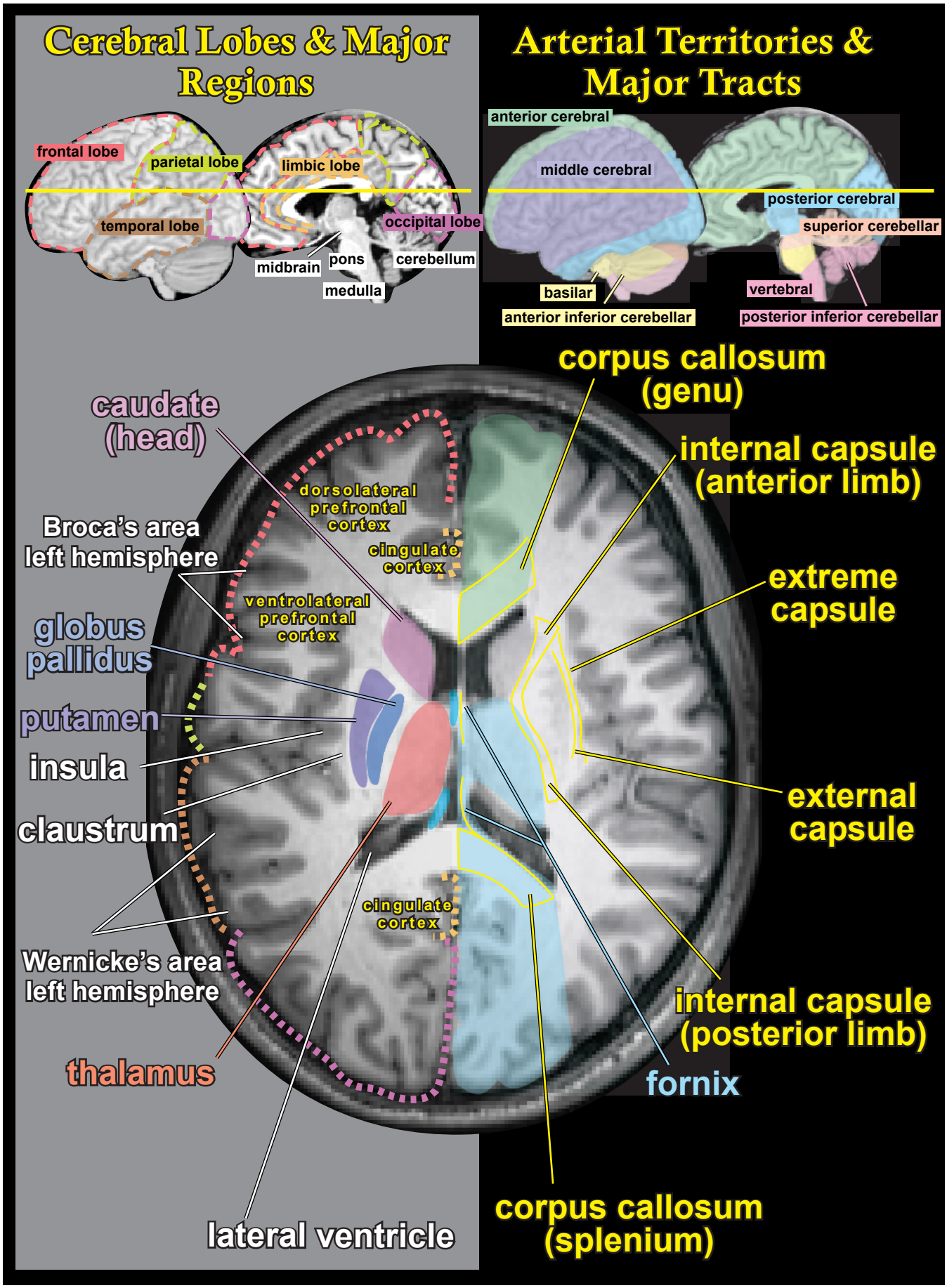
Arterial Territories & Major Tracts

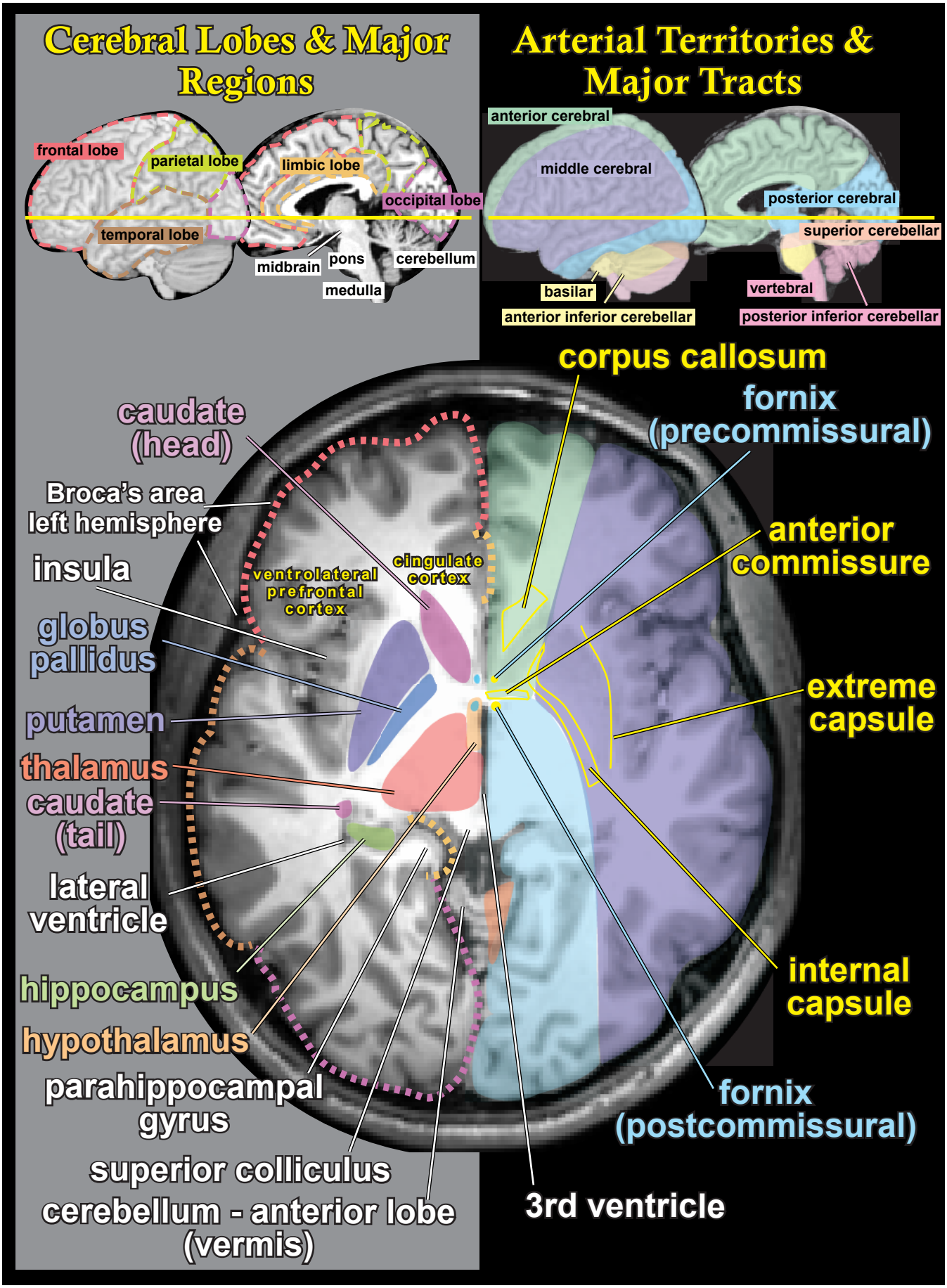


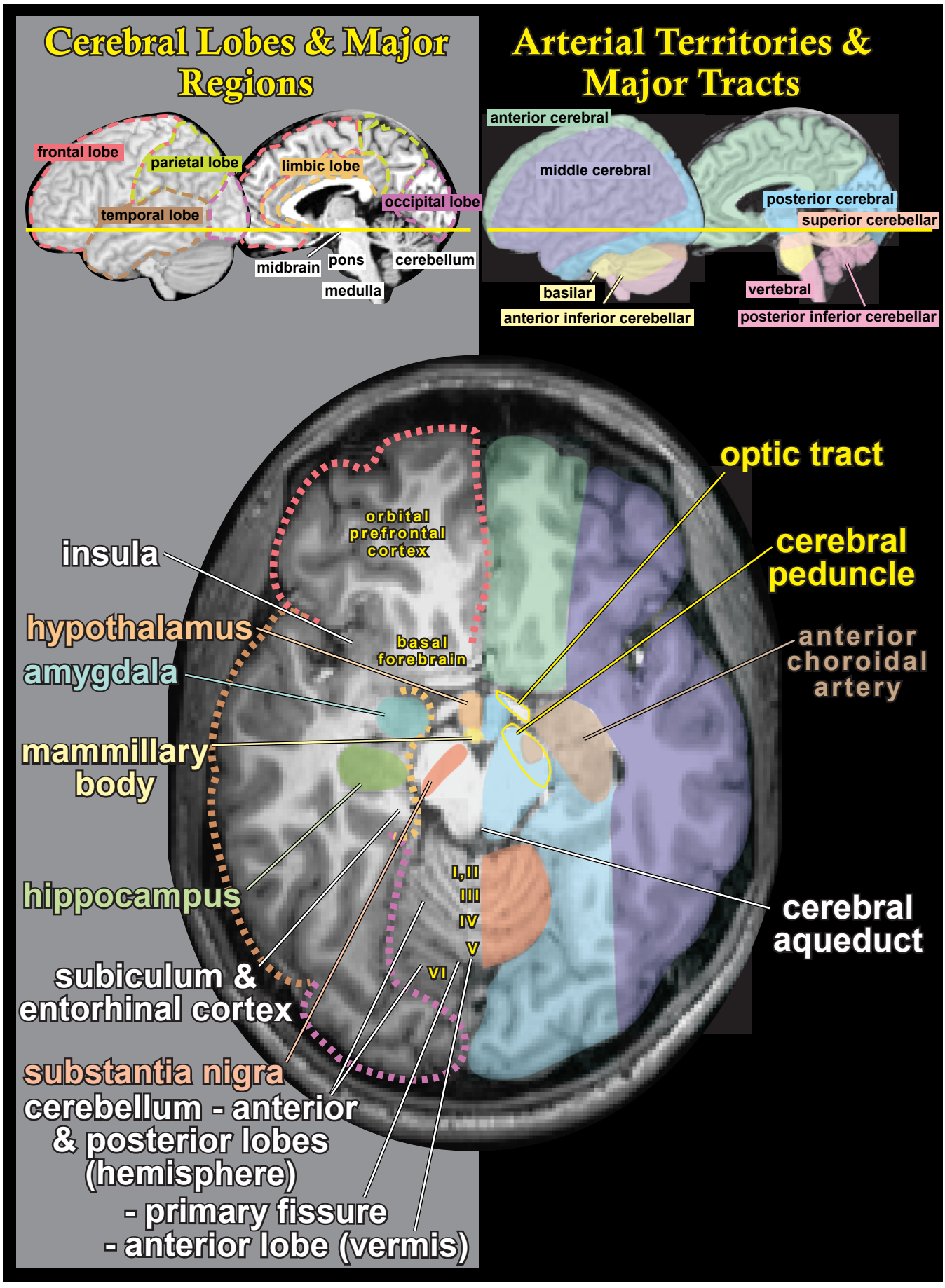


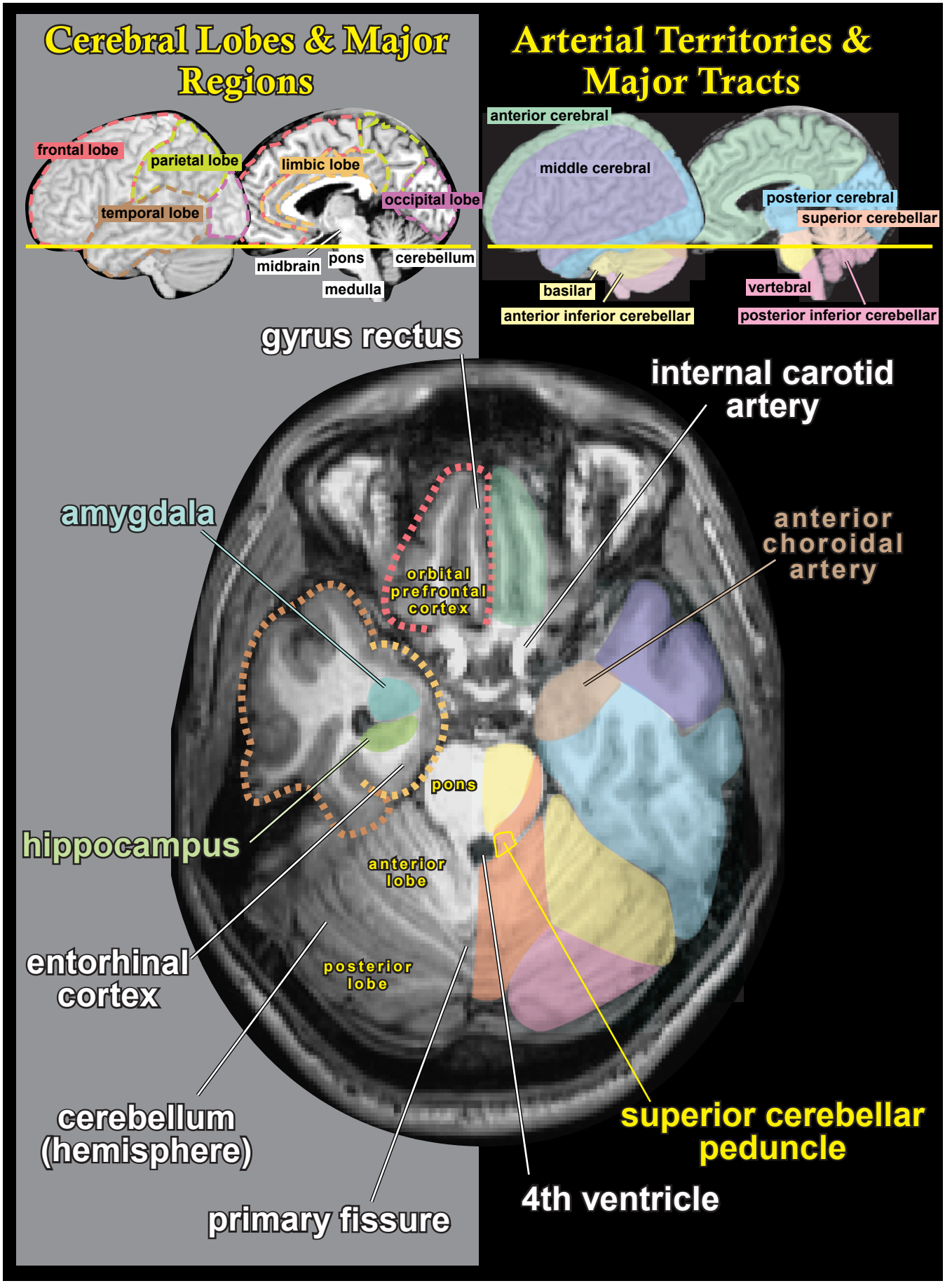

Cerebral Lobes & Major Regions
frontal lobe
parietal lobe
limbic lobe
temporal lobe
occipital lobe
midbrain
pons
cerebellum
medulla
Arterial Territories & Major Tracts
anterior cerebral
middle cerebral
posterior cerebral
superior cerebellar
basilar
vertebral
anterior inferior cerebellar
posterior inferior cerebellar
superior frontal gyrus
middle frontal gyrus
precentral
postcentral
cingulate cortex


Cerebral Lobes & Major Regions
frontal lobe
parietal lobe
limbic lobe
temporal lobe
occipital lobe
midbrain
pons
cerebellum
medulla
Arterial Territories & Major Tracts
anterior cerebral
middle cerebral
posterior cerebral
superior cerebellar
basilar
vertebral
anterior inferior cerebellar
posterior inferior cerebellar
corpus callosum (body)
caudate (body)
superior frontal gyrus
dorsolateral prefrontal cortex
cingulate cortex
precentral
postcentral
cingulate cortex
lateral ventricle


Cerebral Lobes & Major Regions
frontal lobe
parietal lobe
limbic lobe
temporal lobe
occipital lobe
midbrain
pons
cerebellum
medulla
Arterial Territories & Major Tracts
anterior cerebral
middle cerebral
posterior cerebral
superior cerebellar
basilar
vertebral
anterior inferior cerebellar
posterior inferior cerebellar
corpus callosum (genu)
caudate (head)
internal capsule (anterior limb)
dorsolateral prefrontal cortex
Broca's area left hemisphere
cingulate cortex
extreme capsule
ventrolateral prefrontal cortex
globus pallidus
putamen
insula
external capsule
claustrum
cingulate cortex
Wernicke's area left hemisphere
internal capsule (posterior limb)
thalamus
fornix
lateral ventricle
corpus callosum (splenium)


Cerebral Lobes & Major Regions
frontal lobe
parietal lobe
limbic lobe
occipital lobe
temporal lobe
midbrain
pons
cerebellum
medulla
Arterial Territories & Major Tracts
anterior cerebral
middle cerebral
posterior cerebral
superior cerebellar
basilar
vertebral
anterior inferior cerebellar
posterior inferior cerebellar
corpus callosum
fornix (precommissural)
caudate (head)
Broca's area left hemisphere
insula
anterior commissure
ventrolateral prefrontal cortex
cingulate cortex
globus pallidus
extreme capsule
putamen
thalamus
caudate (tail)
lateral ventricle
internal capsule
hippocampus
hypothalamus
parahippocampal gyrus
fornix (postcommissural)
superior colliculus
cerebellum - anterior lobe (vermis)
3rd ventricle


Cerebral Lobes & Major Regions
frontal lobe
parietal lobe
limbic lobe
occipital lobe
temporal lobe
midbrain
pons
cerebellum
medulla
Arterial Territories & Major Tracts
anterior cerebral
middle cerebral
posterior cerebral
superior cerebellar
basilar
anterior inferior cerebellar
vertebral
posterior inferior cerebellar
optic tract
orbital prefrontal cortex
insula
cerebral peduncle
hypothalamus
basal forebrain
anterior choroidal artery
amygdala
mammillary body
I,II
III
IV
V
VI
hippocampus
cerebral aqueduct
subiculum & entorhinal cortex
substantia nigra
cerebellum - anterior & posterior lobes (hemisphere)
- primary fissure
- anterior lobe (vermis)


Cerebral Lobes & Major Regions
frontal lobe
parietal lobe
limbic lobe
occipital lobe
temporal lobe
midbrain
pons
cerebellum
medulla
Arterial Territories & Major Tracts
anterior cerebral
middle cerebral
posterior cerebral
superior cerebellar
basilar
vertebral
anterior inferior cerebellar
posterior inferior cerebellar
gyrus rectus
internal carotid artery
amygdala
anterior choroidal artery
orbital prefrontal cortex
pons
hippocampus
anterior lobe
entorhinal cortex
posterior lobe
cerebellum (hemisphere)
superior cerebellar peduncle
4th ventricle
primary fissure