



Departamento
de Anatomía y Medicina Legal

FACULTAD DE MEDICINA
UNIVERSIDAD DE CHILE

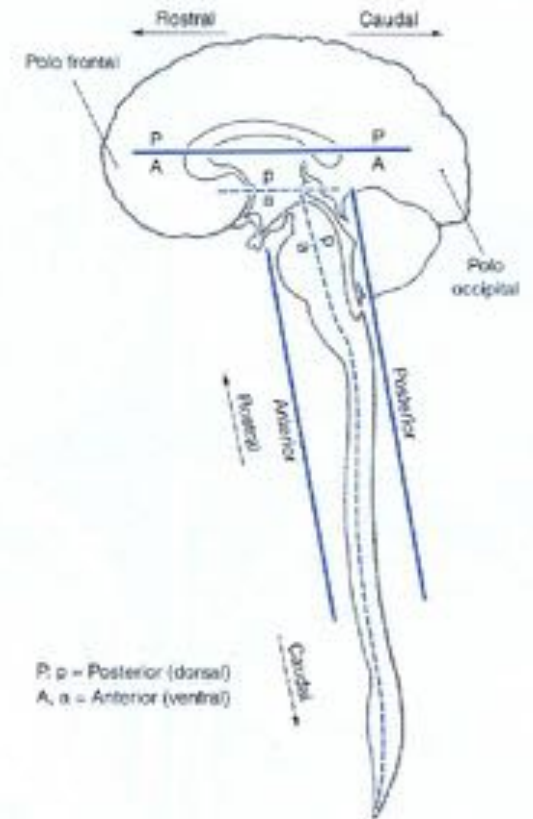
Anatomía Externa del Sistema Nervioso Central

Ximena Rojas, PhD

Sistema Nervioso Central

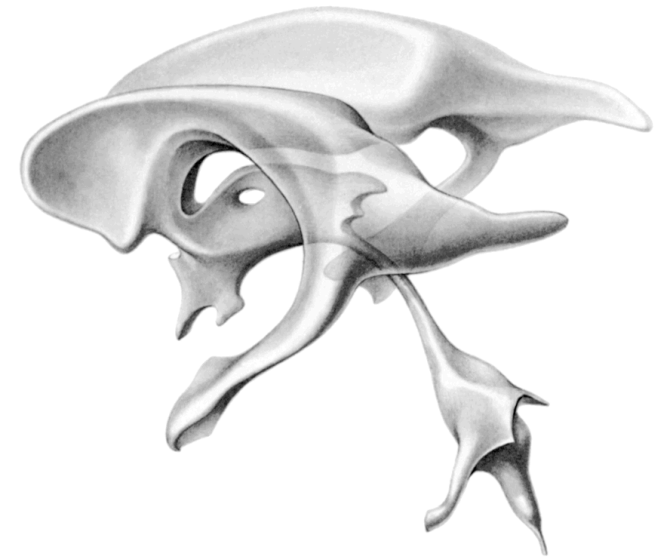
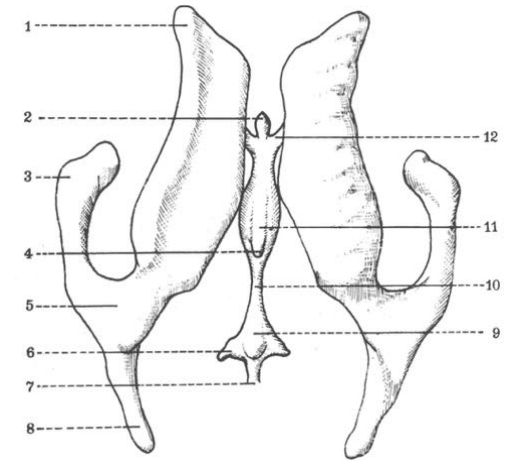
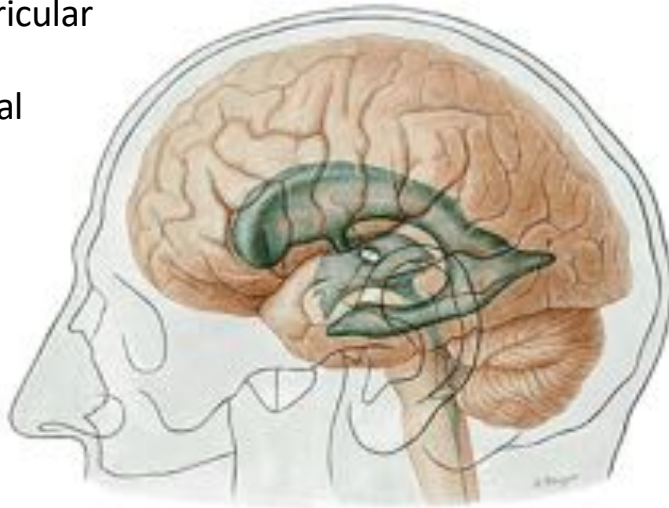


- ▶ **Cerebro**
 - ▶ **Hemisferios**
 - ▶ Corteza cerebral
 - ▶ Núcleos de la base
 - ▶ **Diencéfalo**
 - ▶ Tálamo
 - ▶ Hipotálamo
 - ▶ Epitálamo
- ▶ **Cerebelo**
- ▶ **Tronco encefálico**
 - ▶ Mesencéfalo
 - ▶ Puente
 - ▶ Bulbo
- ▶ **Médula espinal**



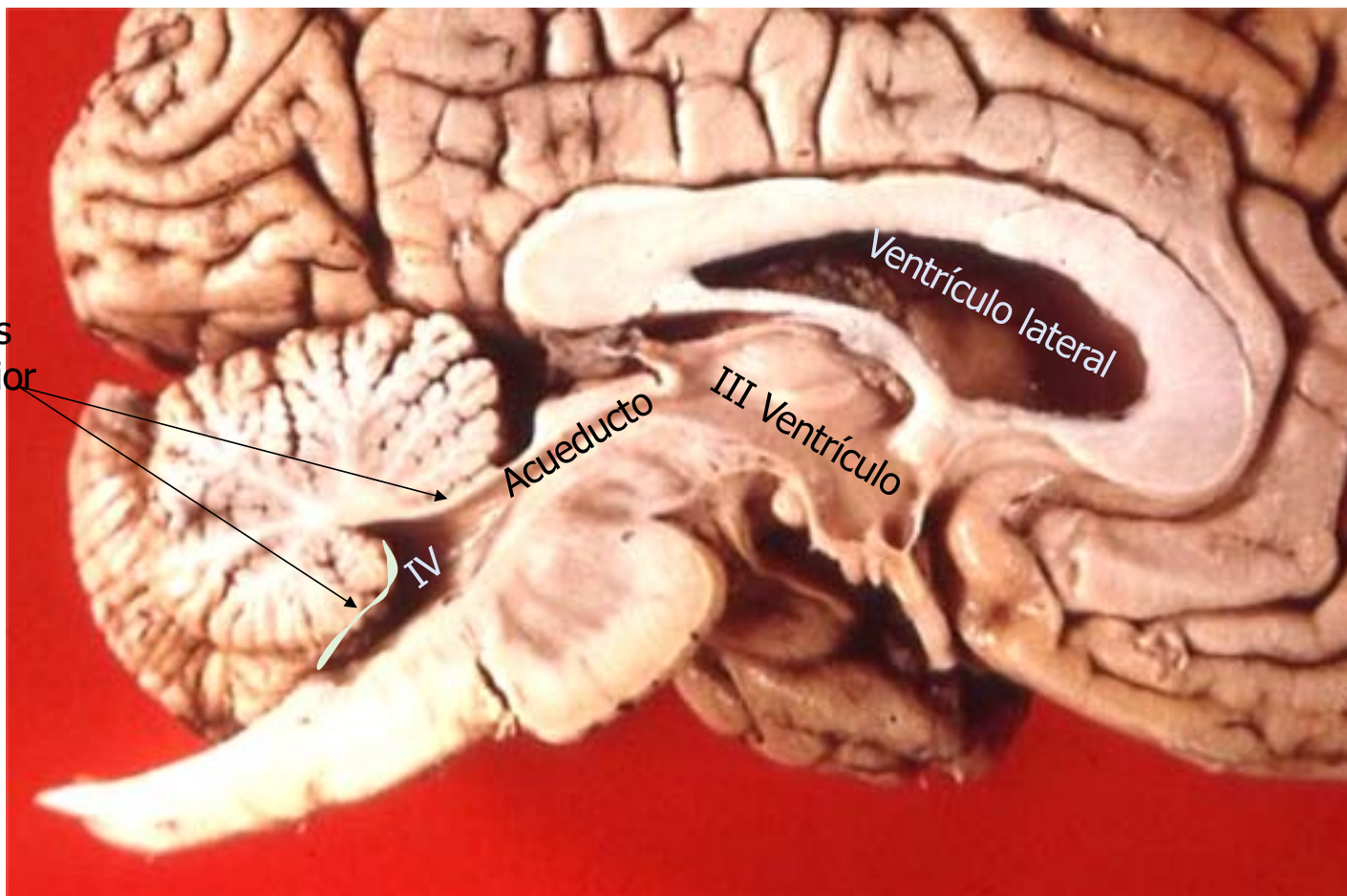
Cavidades Ventriculares

- Ventriculos laterales
- Agujero interventricular
- III ventrículo
- Acueducto cerebral
- IV ventrículo
- Canal central

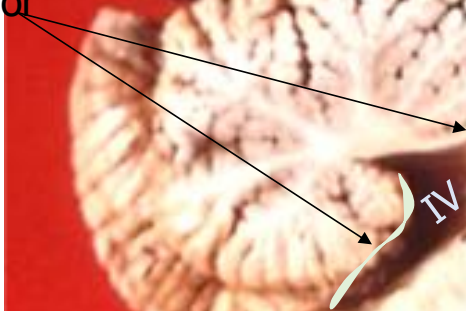




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Velos medulares superior e inferior





Velos
medulares
superior e
inferior

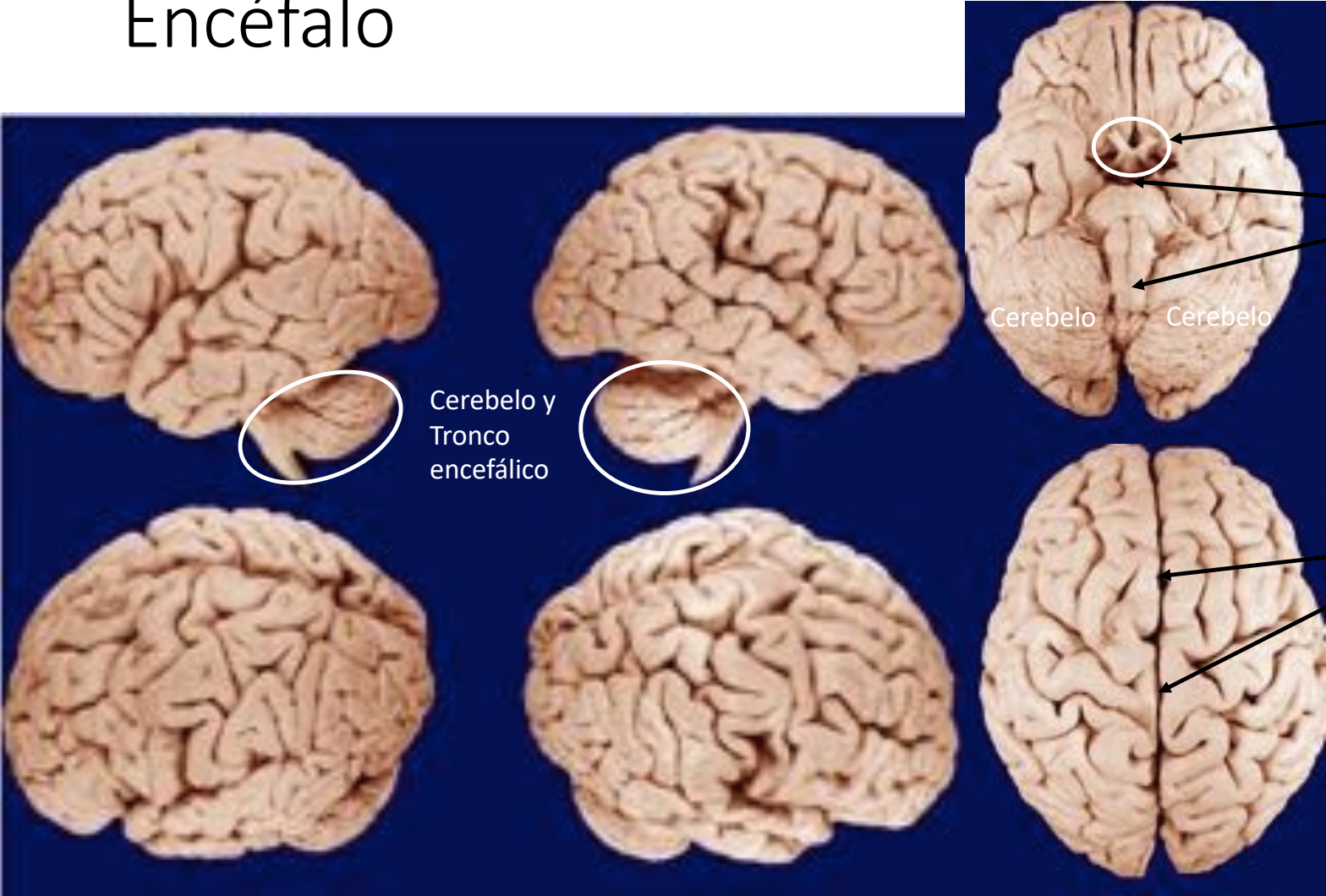
Septo pelúcido

Agujero interventricular



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Encéfalo



Cerebelo y Tronco encefálico

Cerebelo

Cerebelo

Diencefalo

Tronco encefálico

Fisura longitudinal

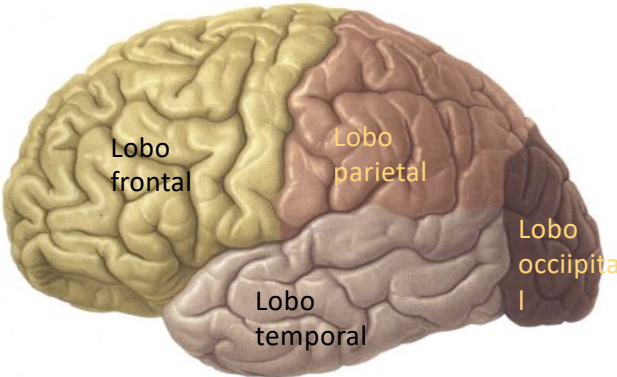
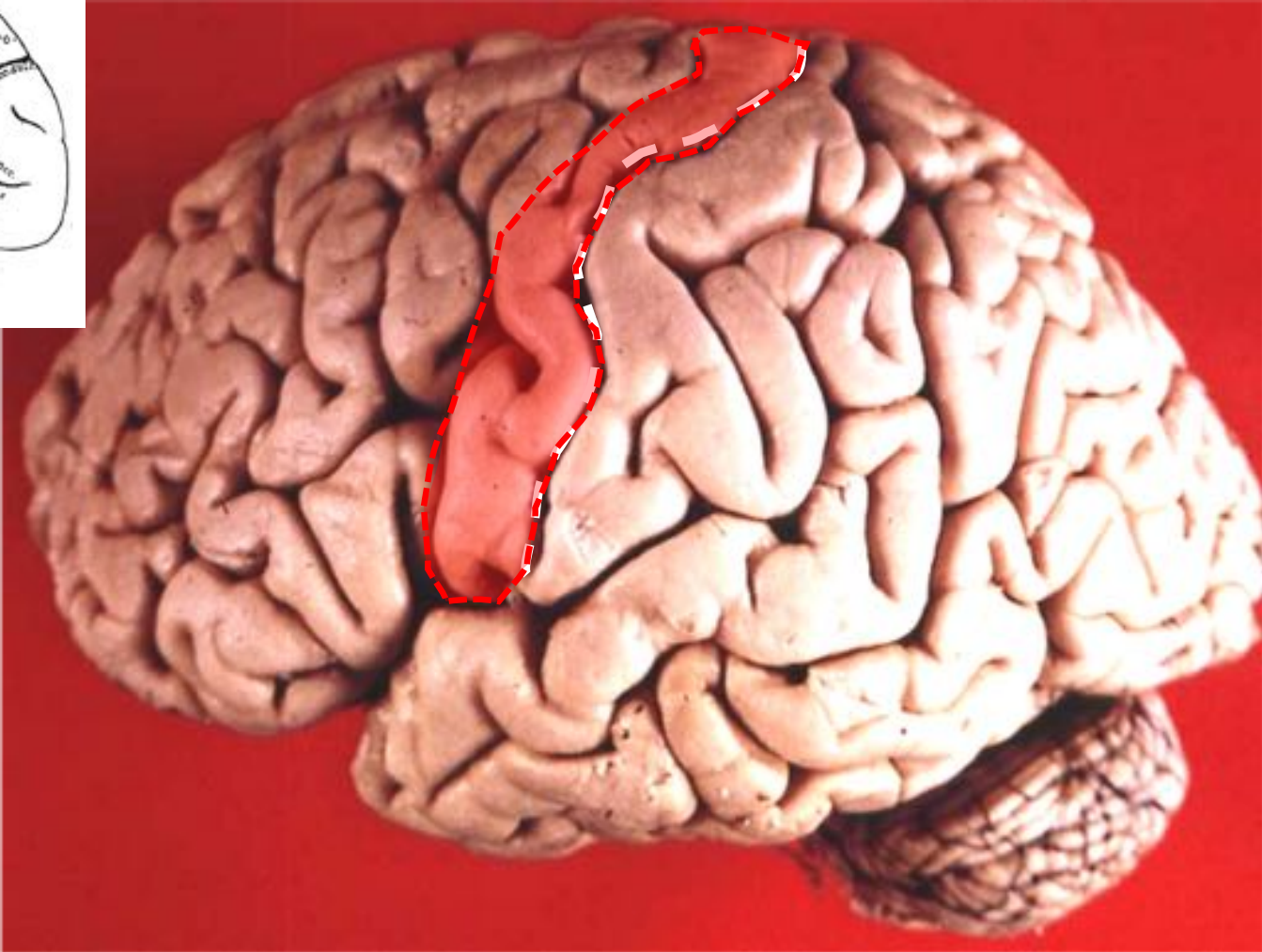
Hemisferios



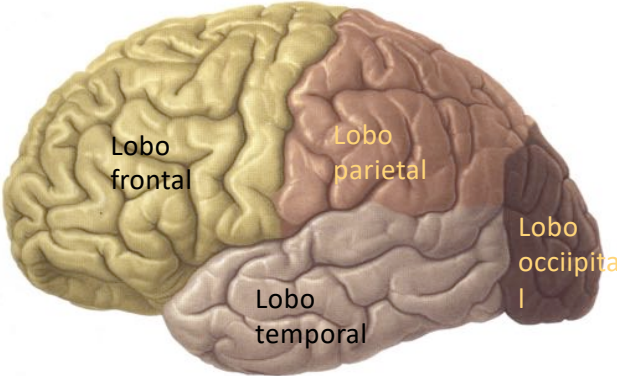
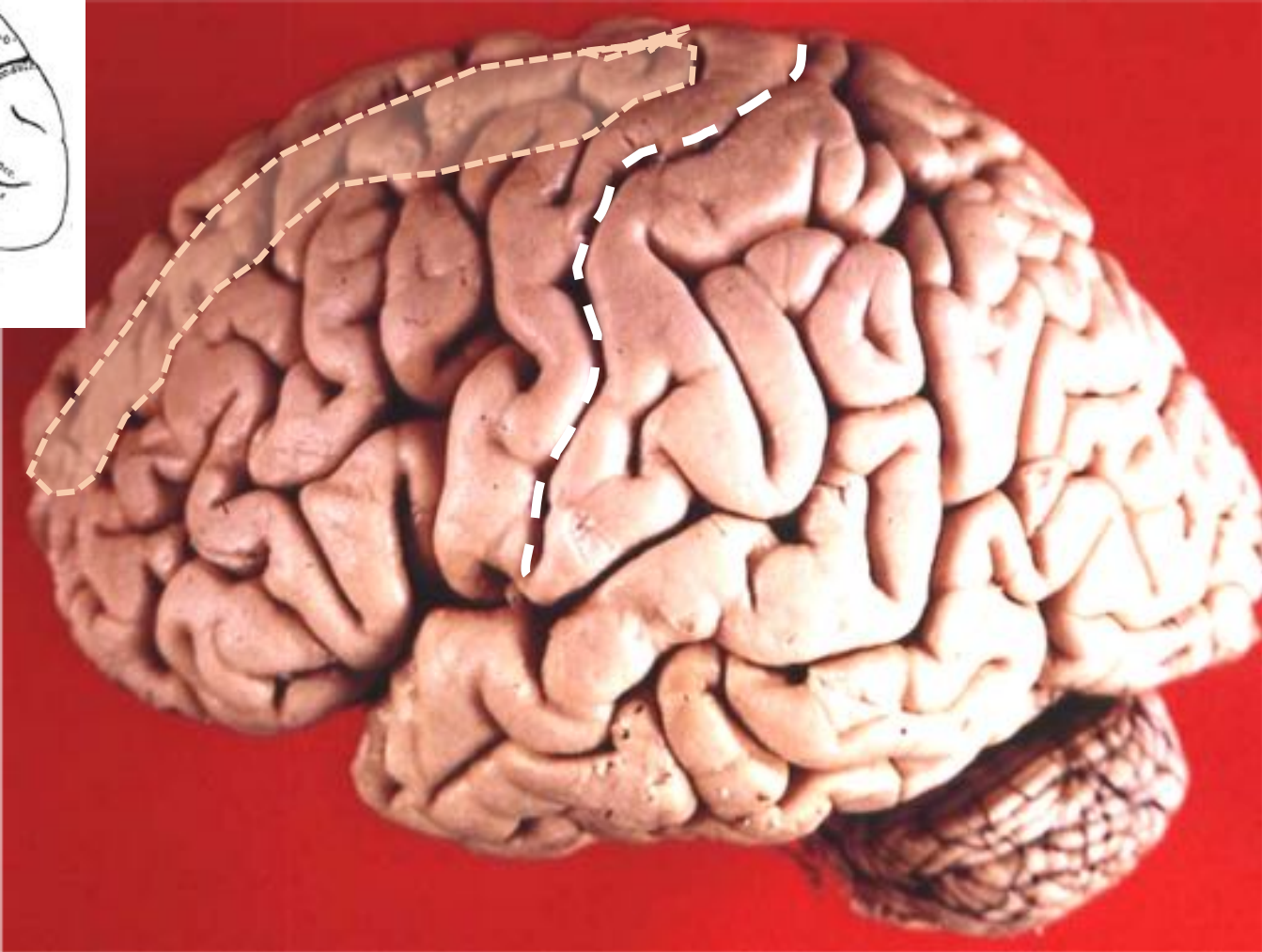
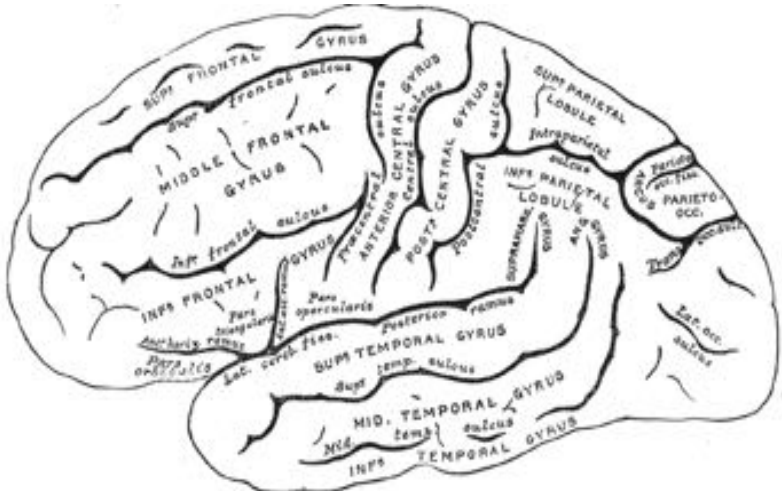
- El plegamiento produce:
 - Giros
 - Surcos
- Los surcos delimitan:
 - Lobos
 - Frontal
 - Parietal
 - Temporal
 - Occipital
 - De la ínsula



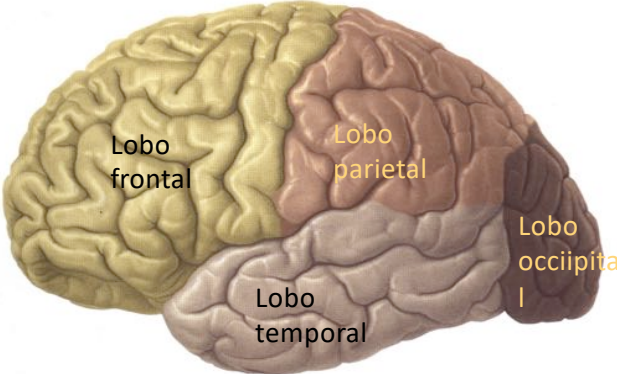
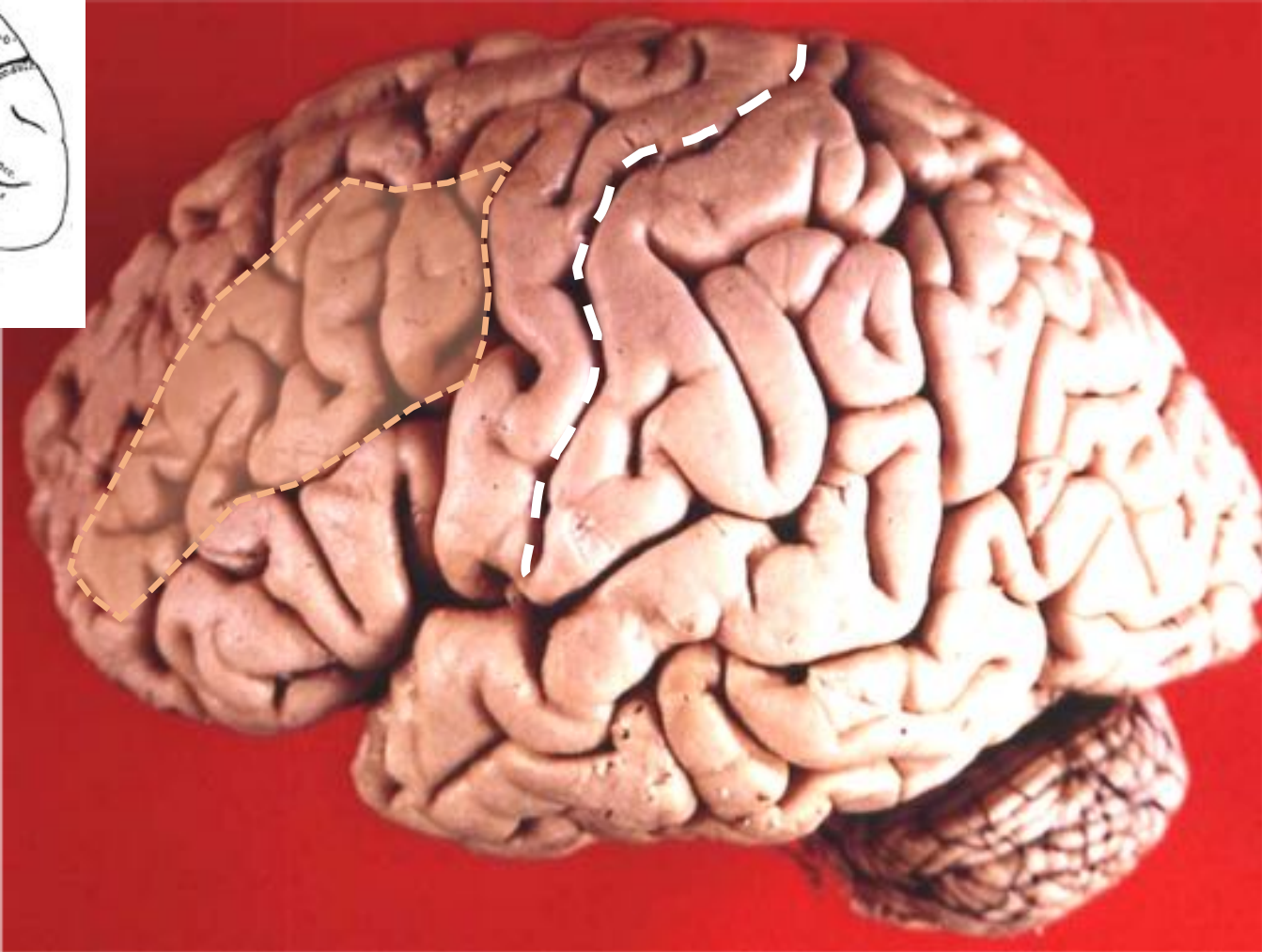
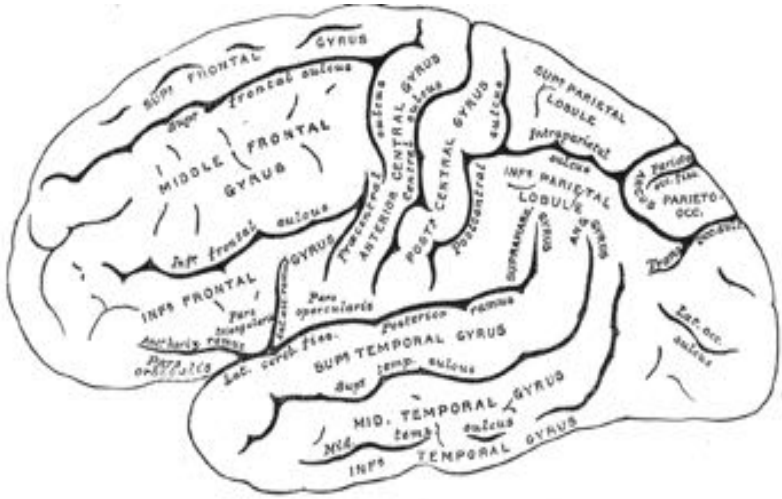
Cara Lateral



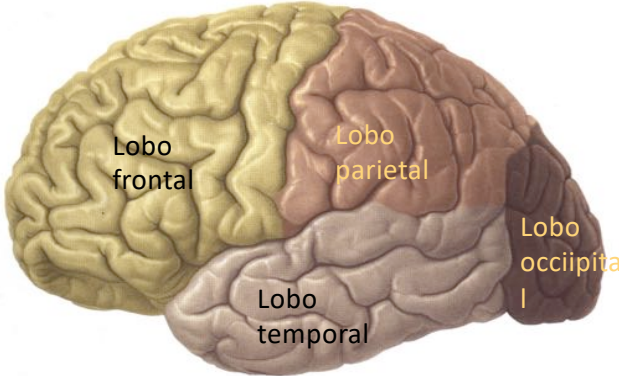
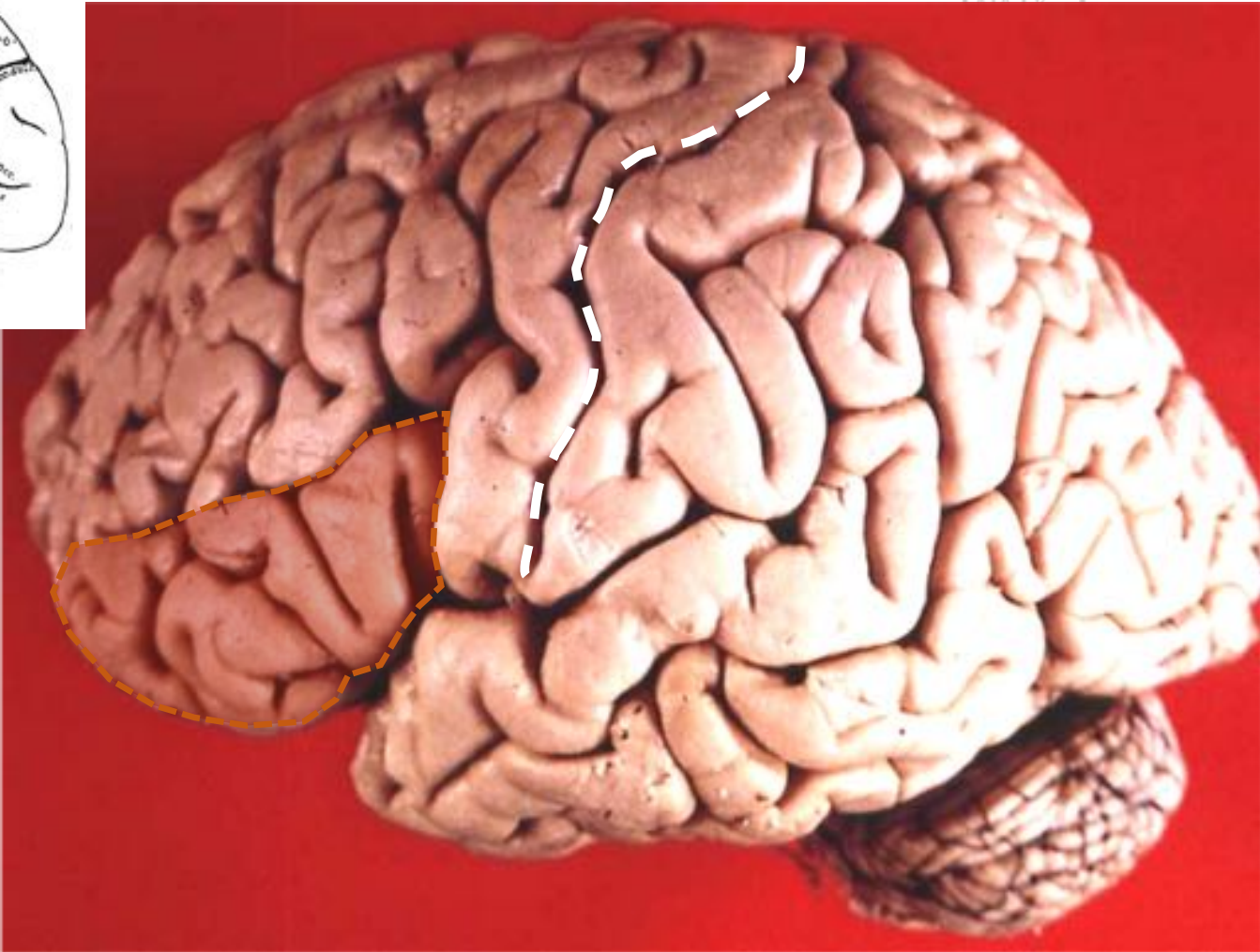
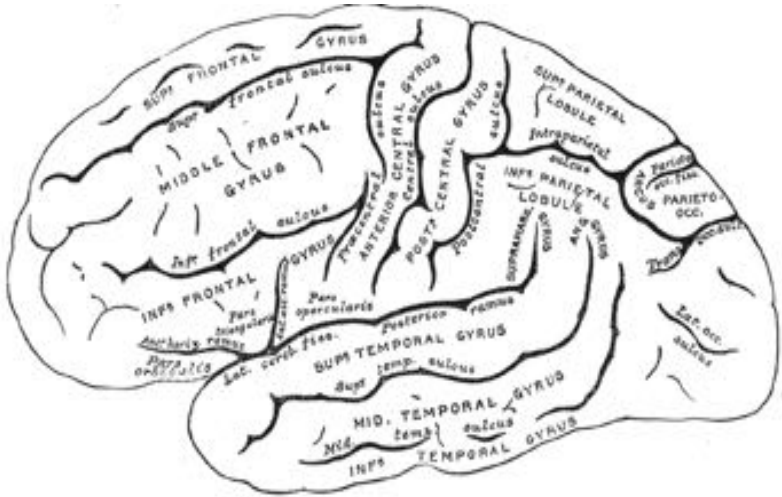
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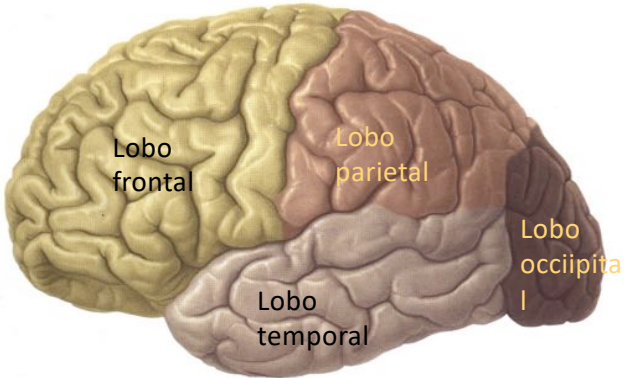
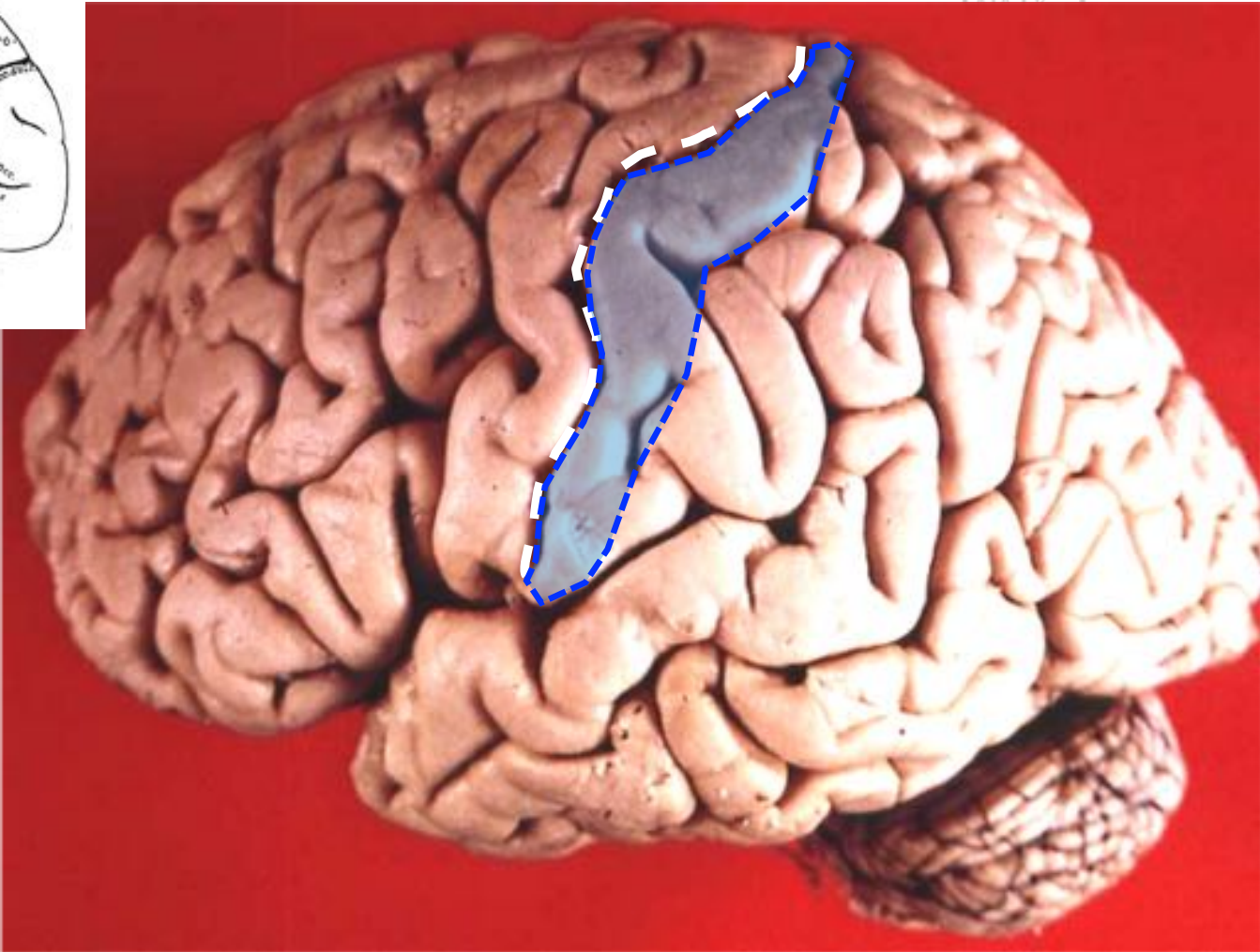
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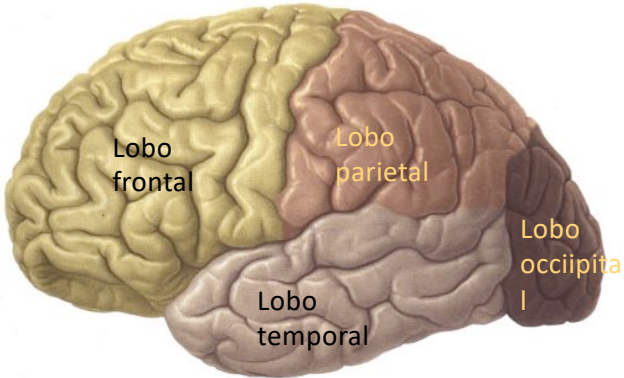
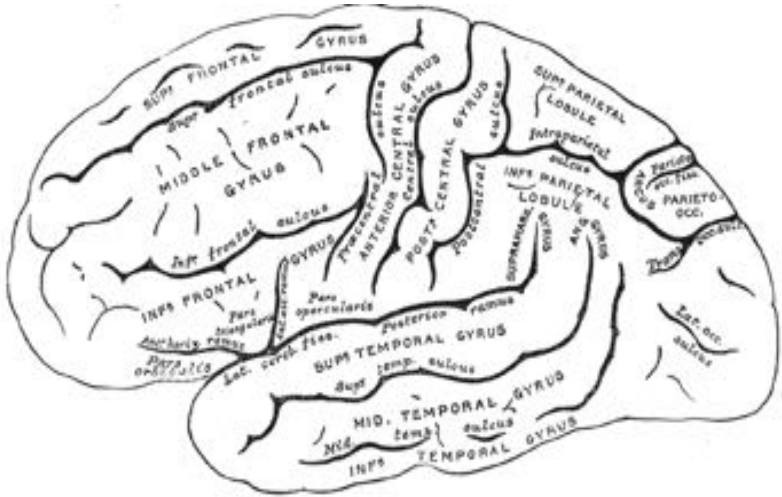
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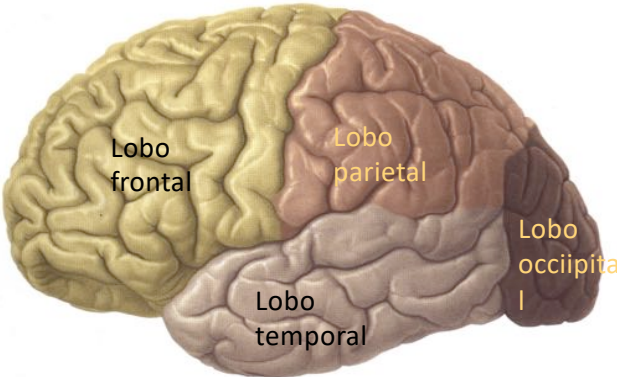
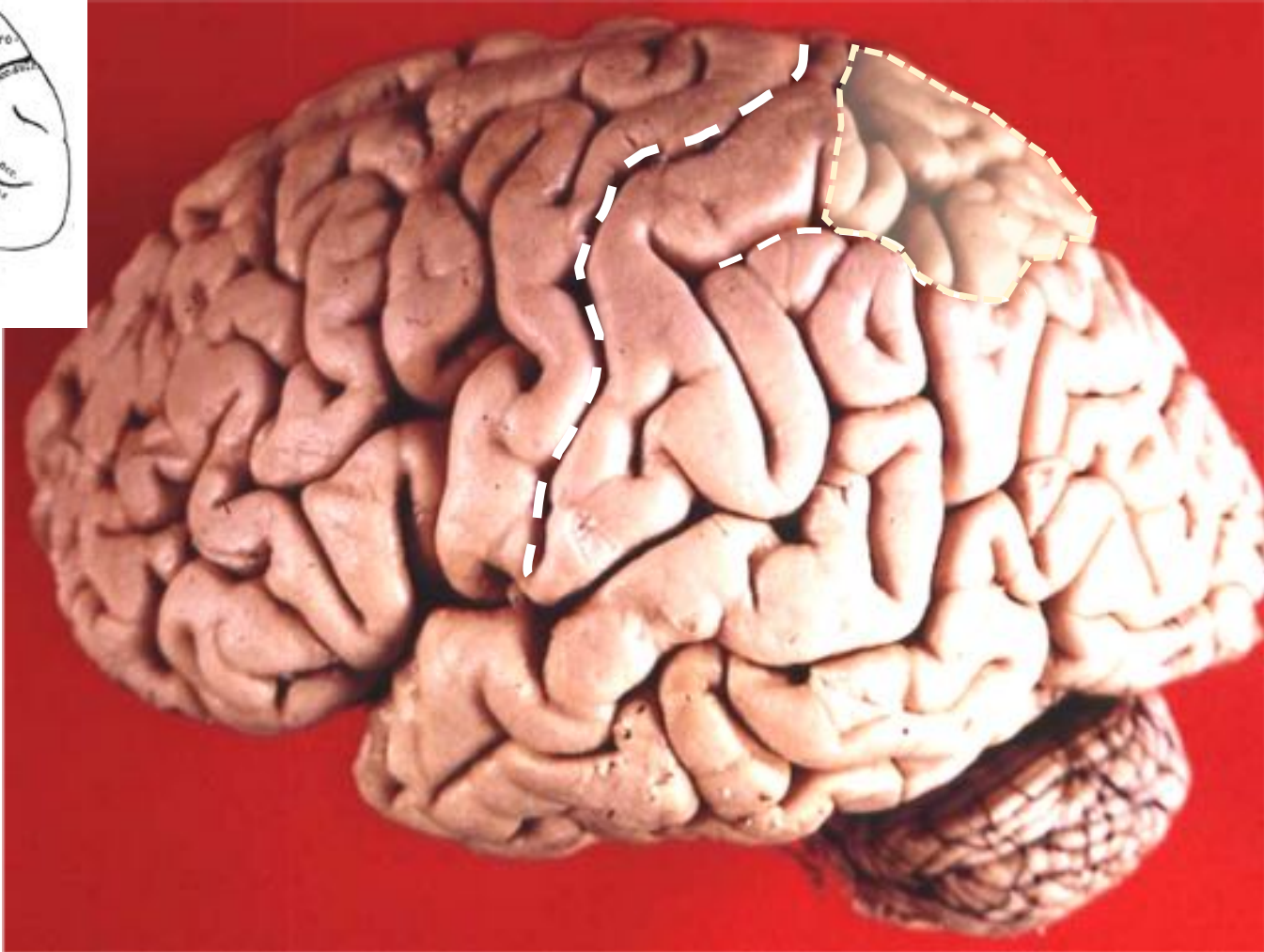
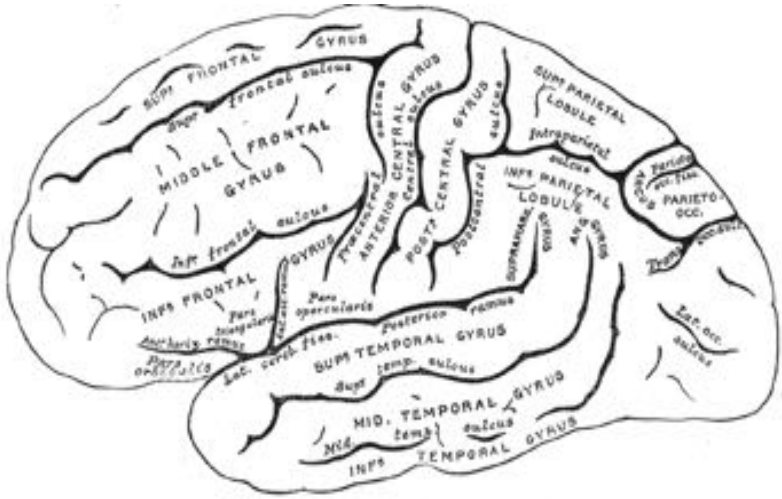
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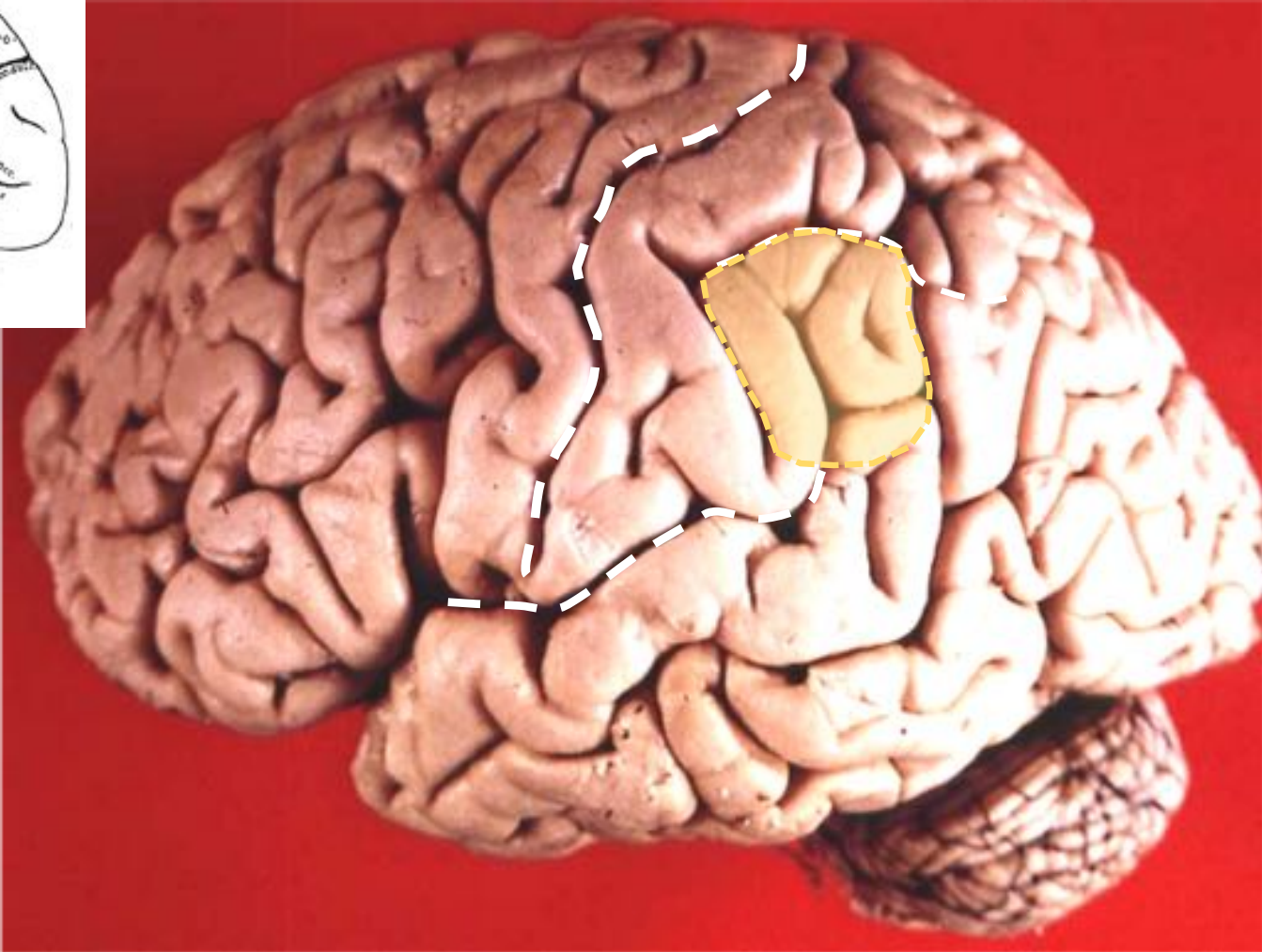
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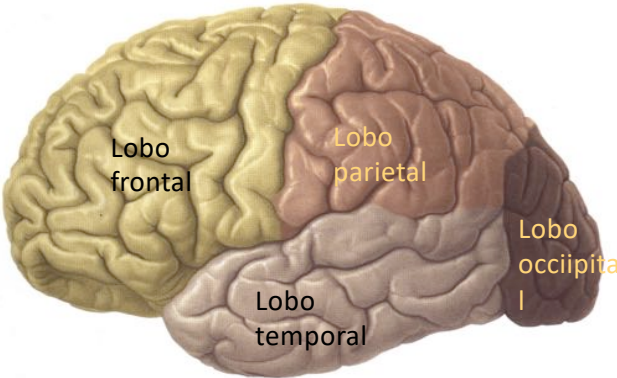
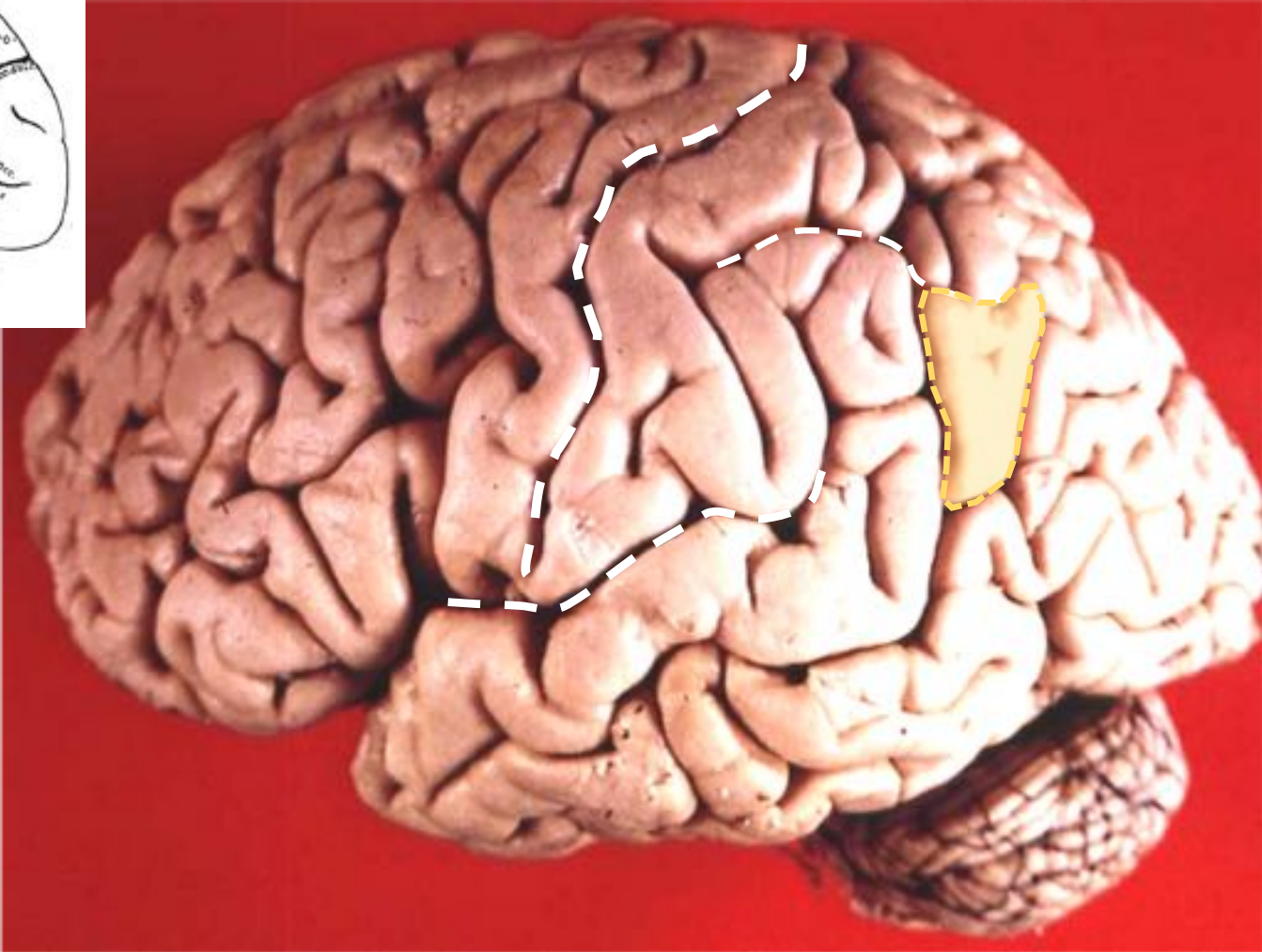
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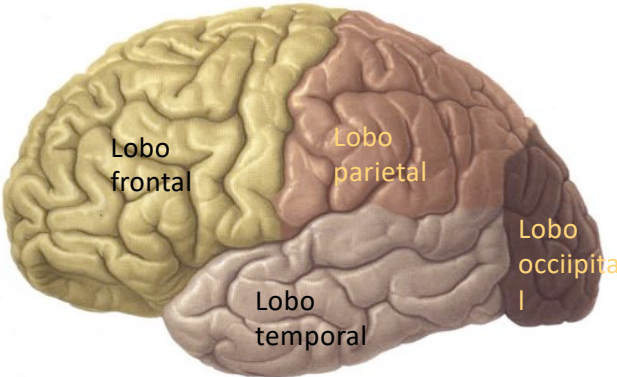
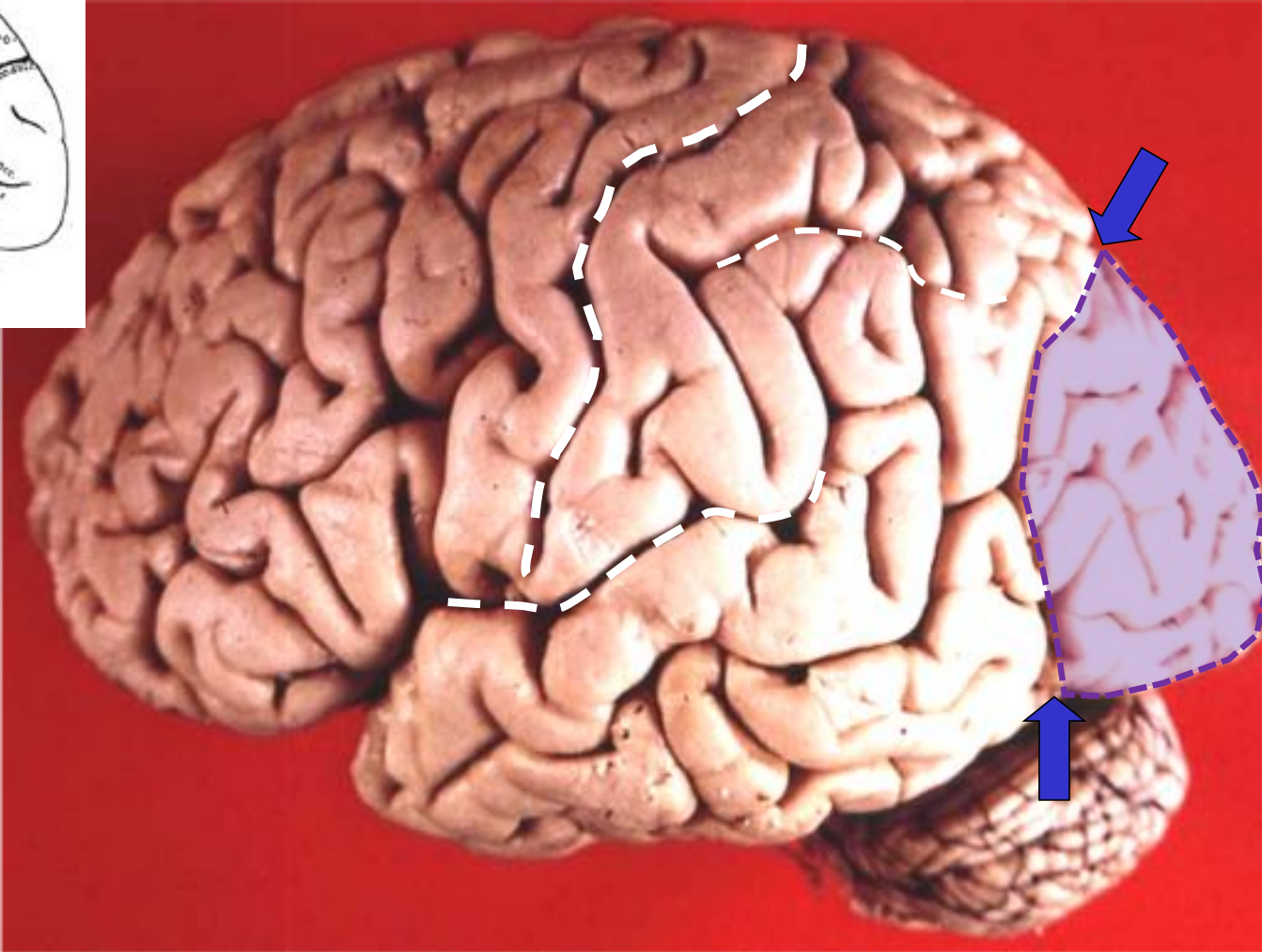
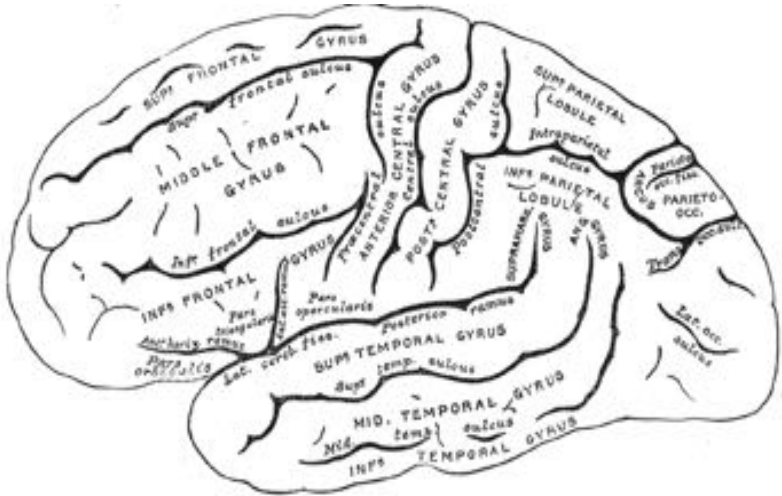
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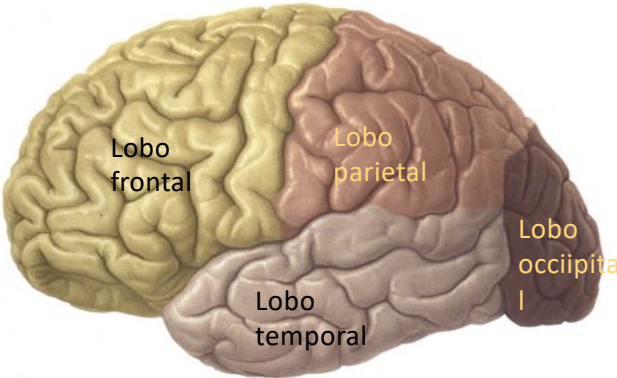
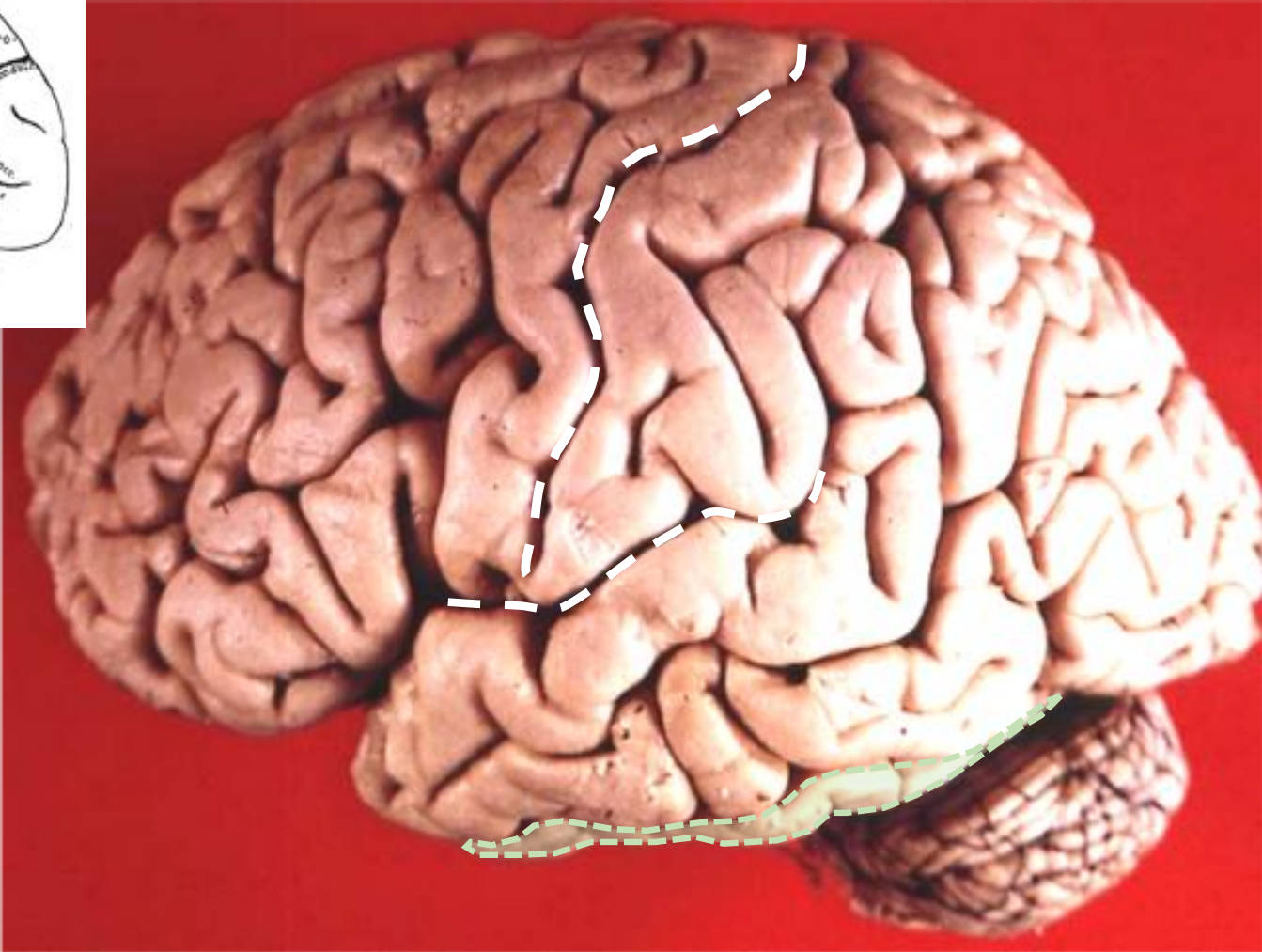
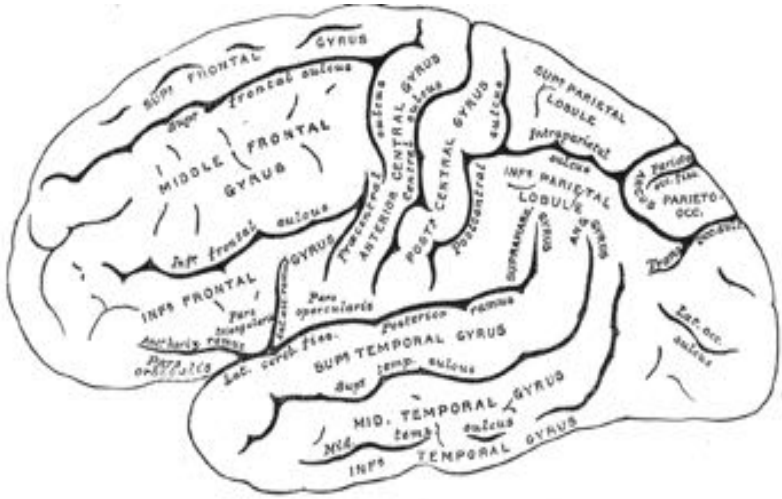
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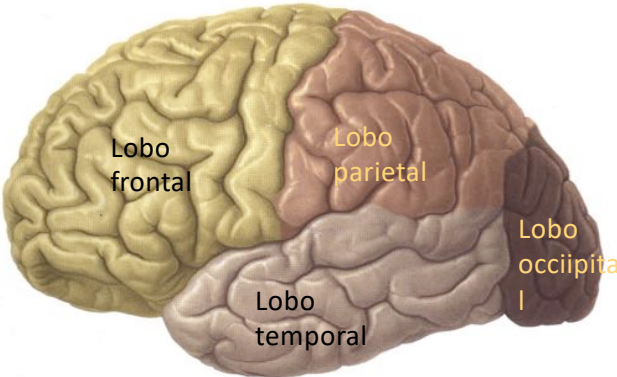
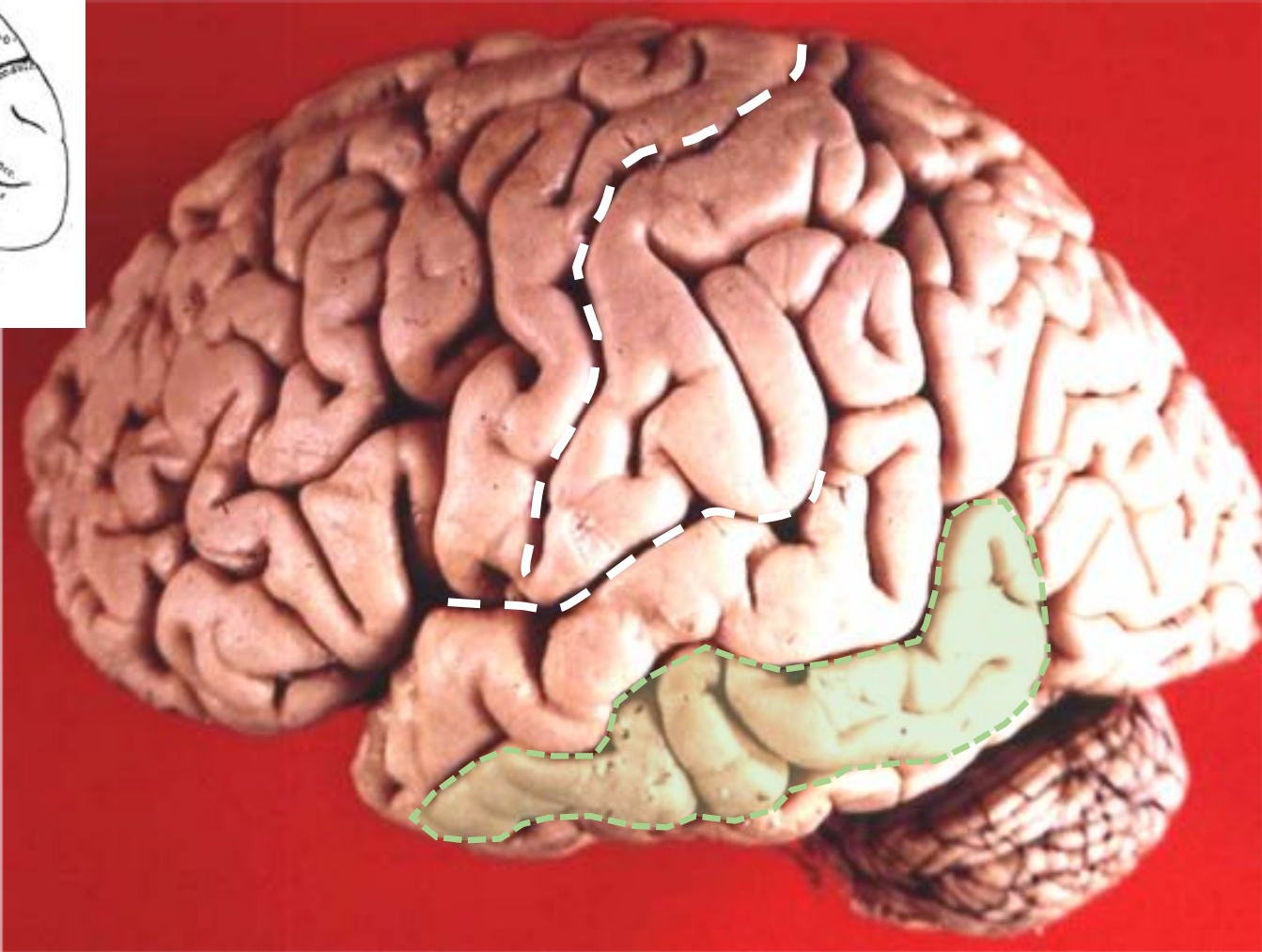
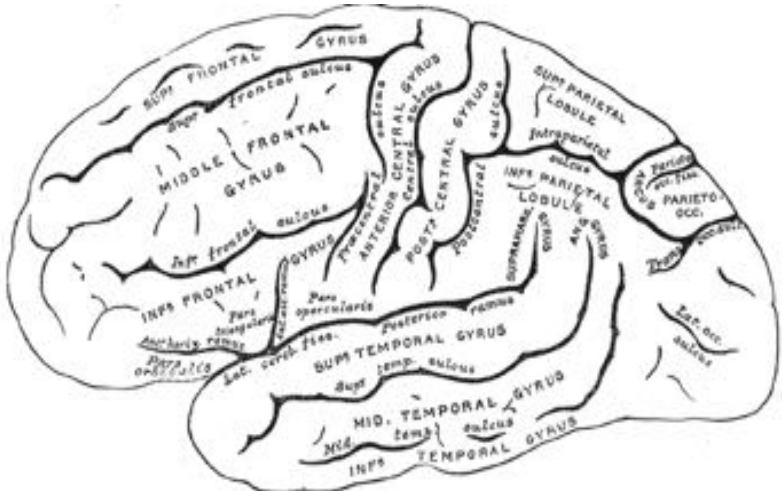
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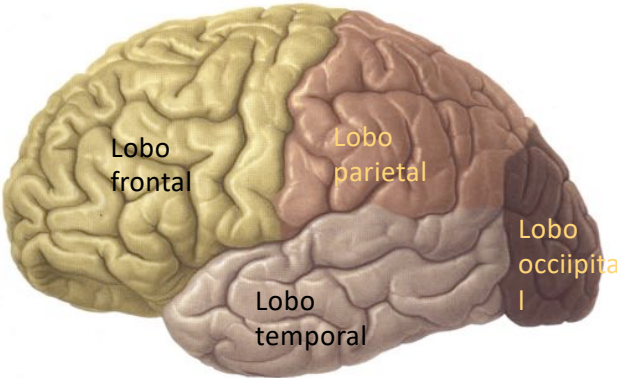
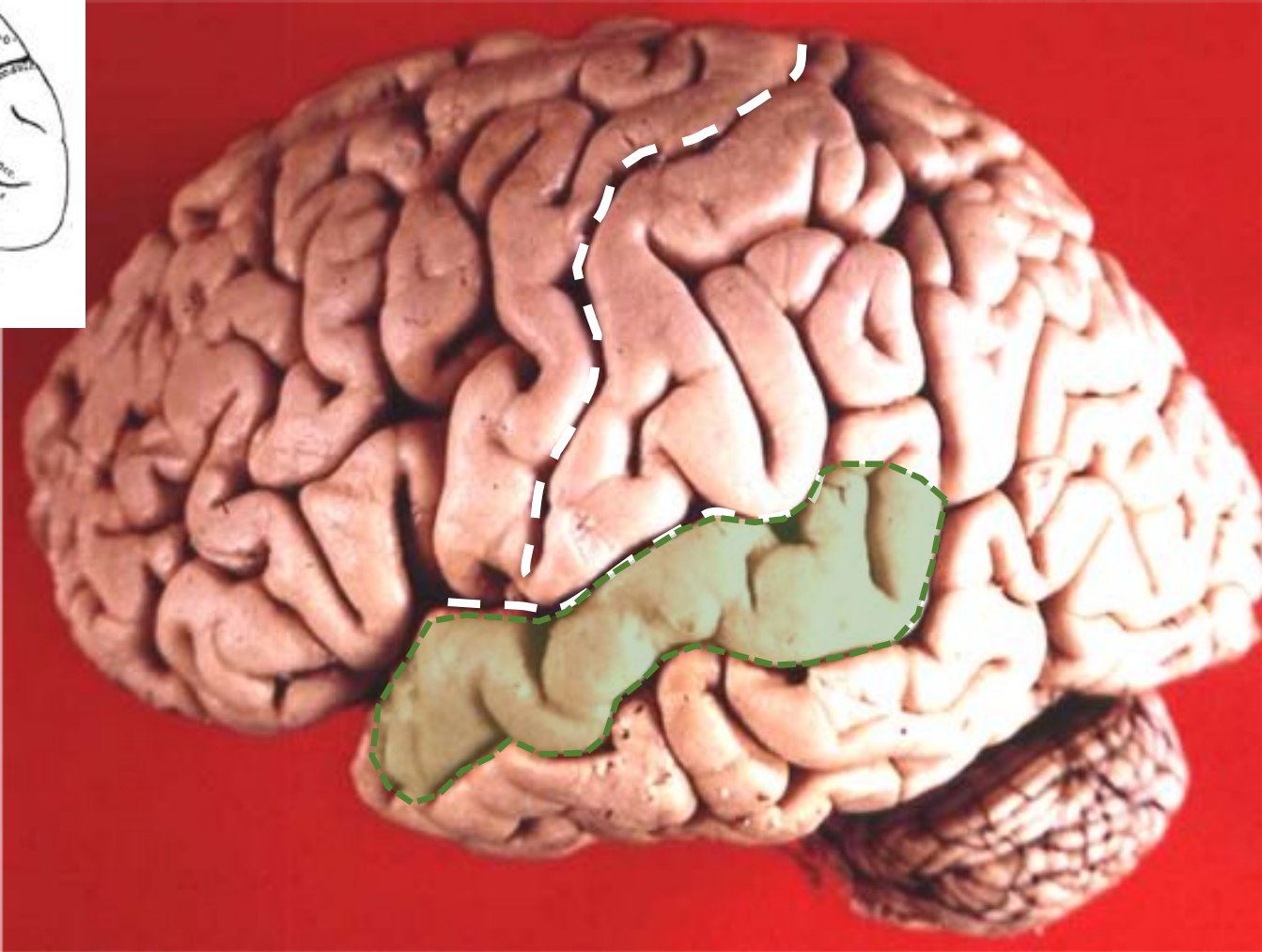
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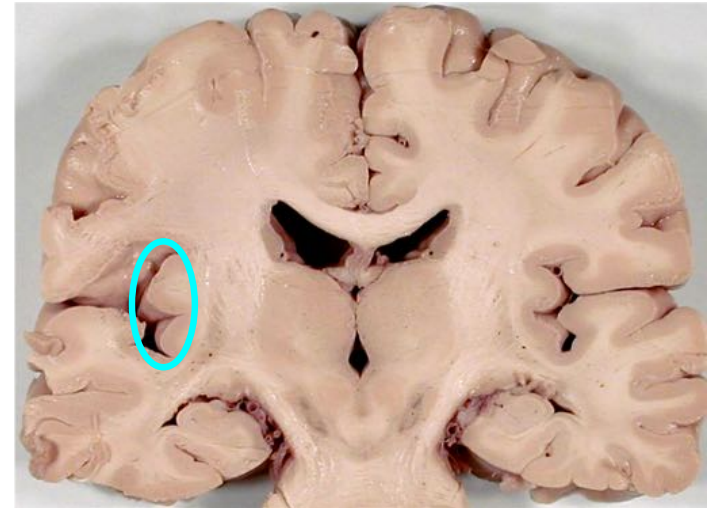
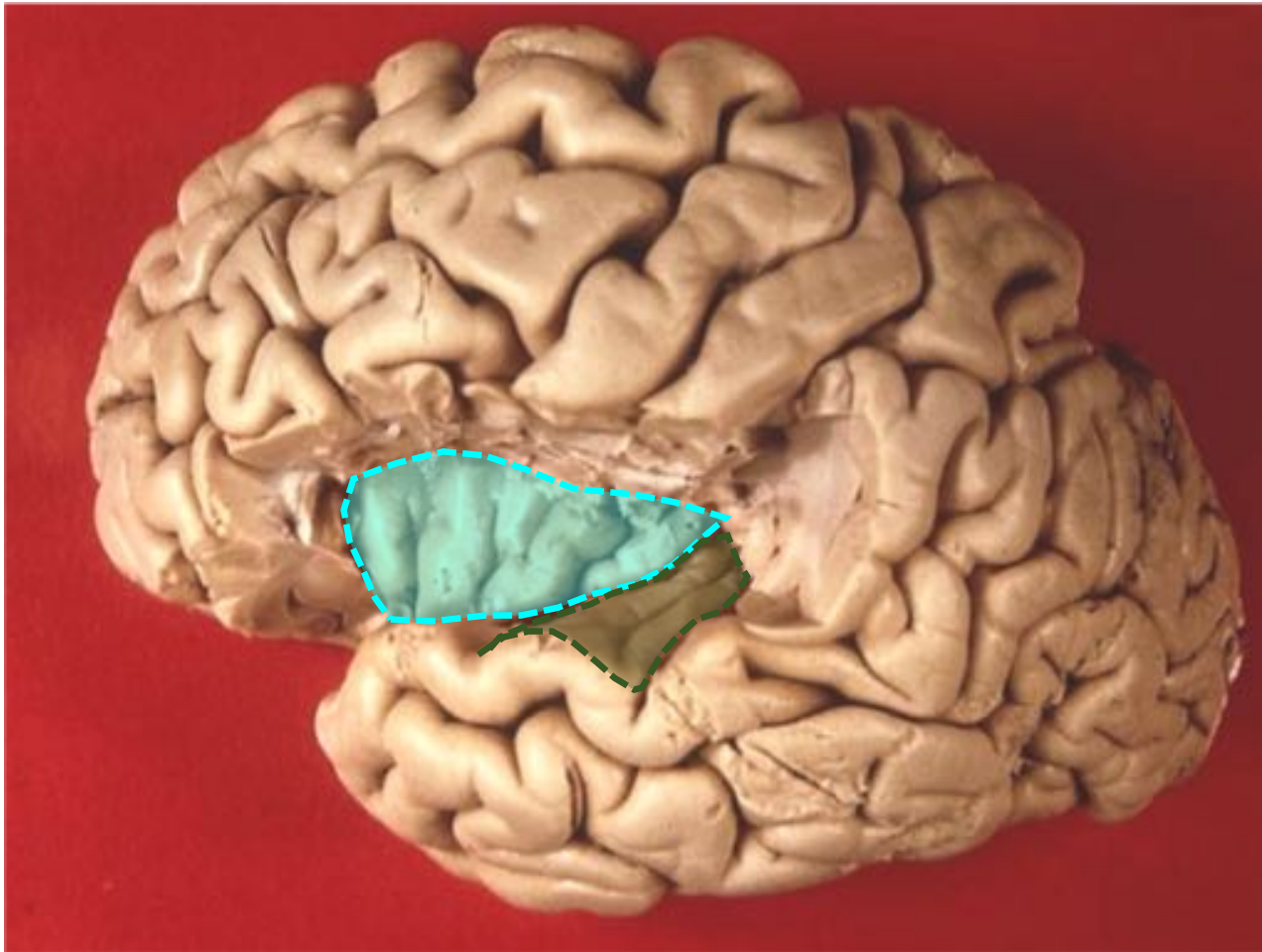


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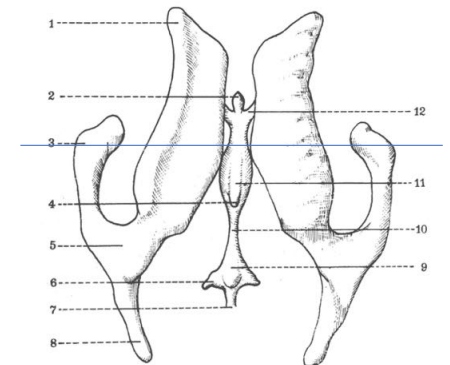
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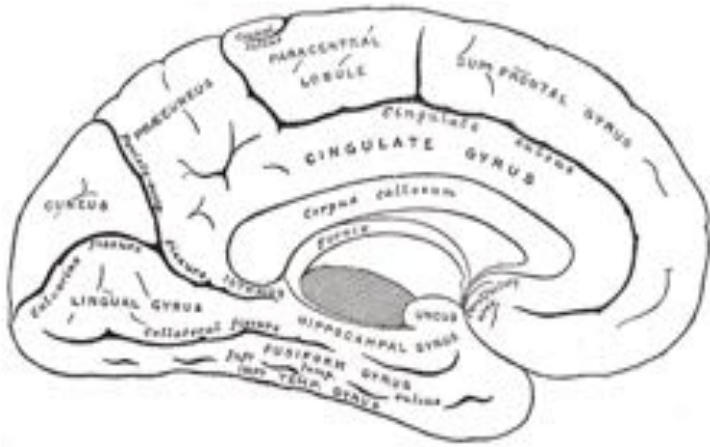


Lobo y giros de la ínsula

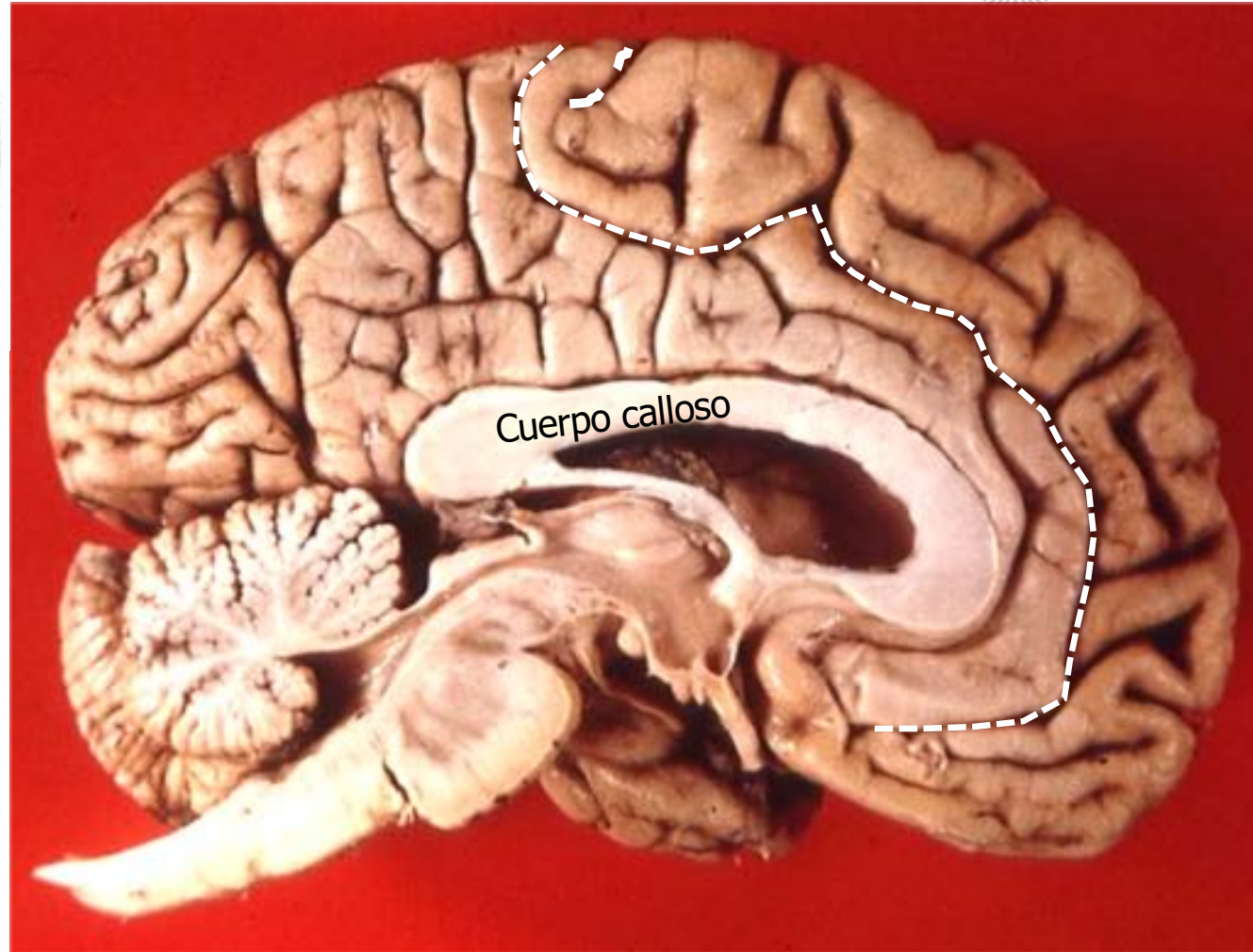
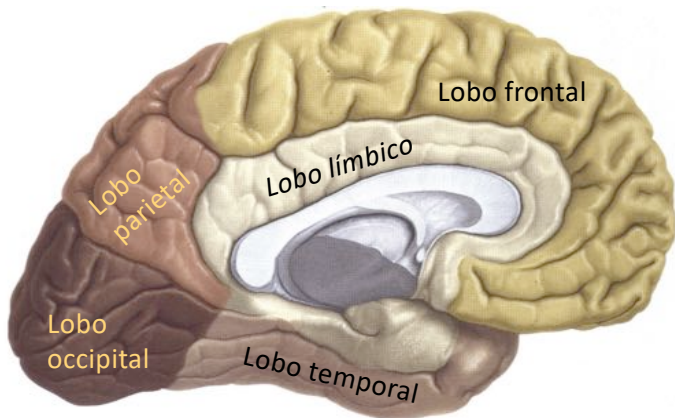
Giros temporales transversos



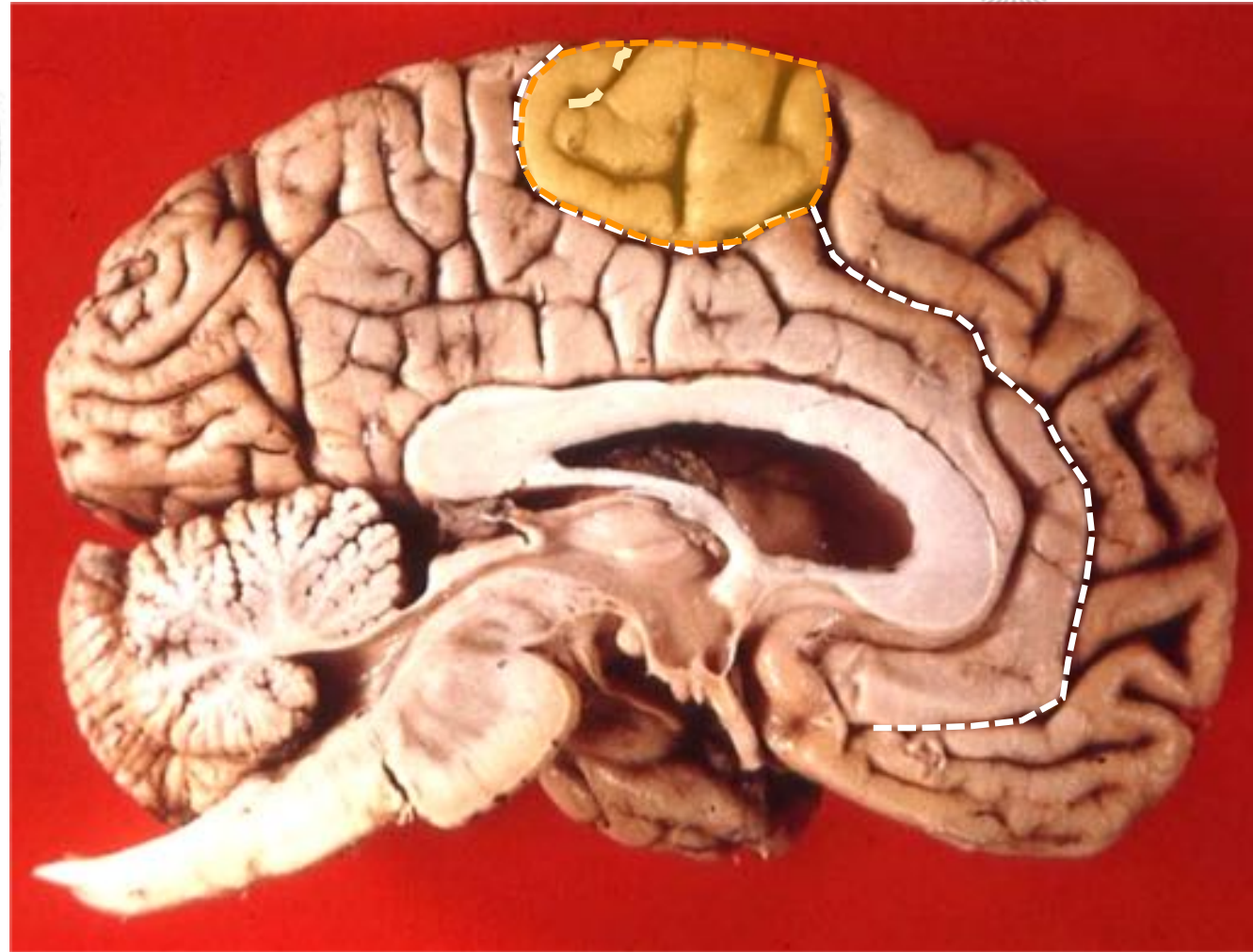
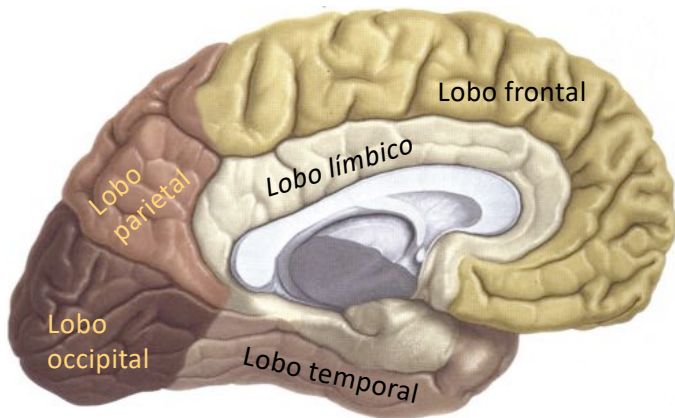
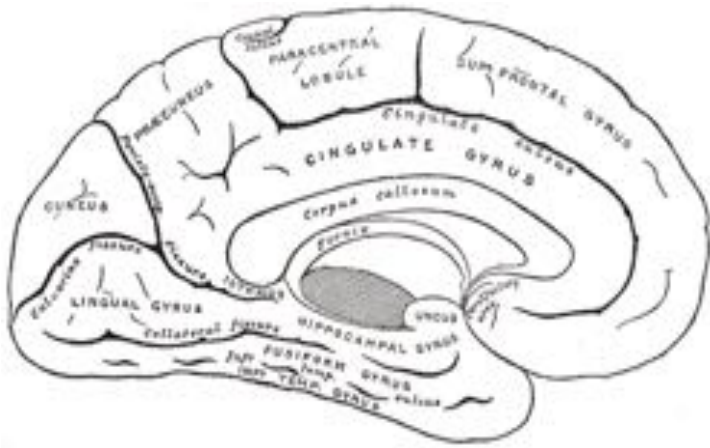
Cara Medial



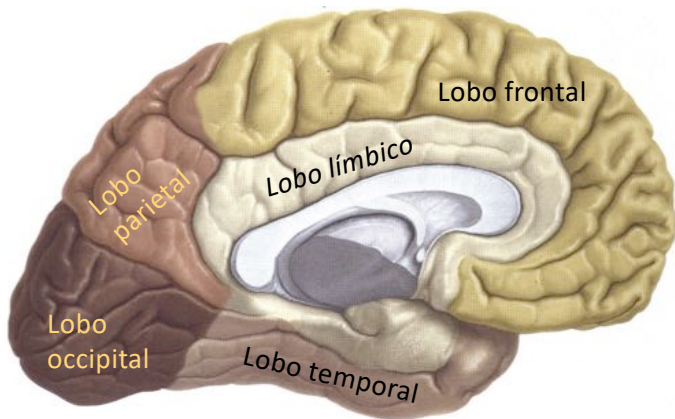
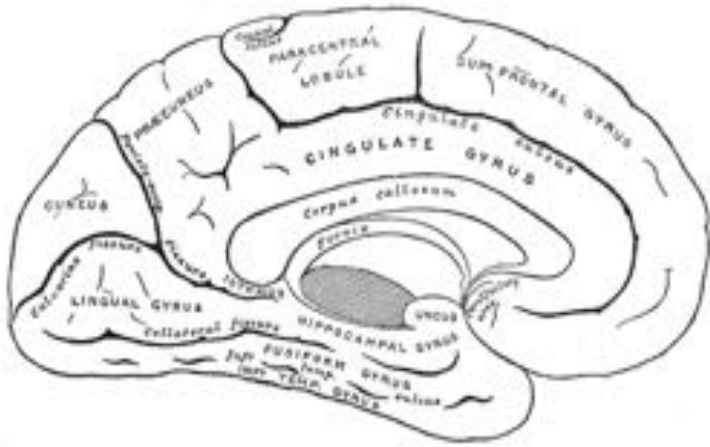
surco del cíngulo



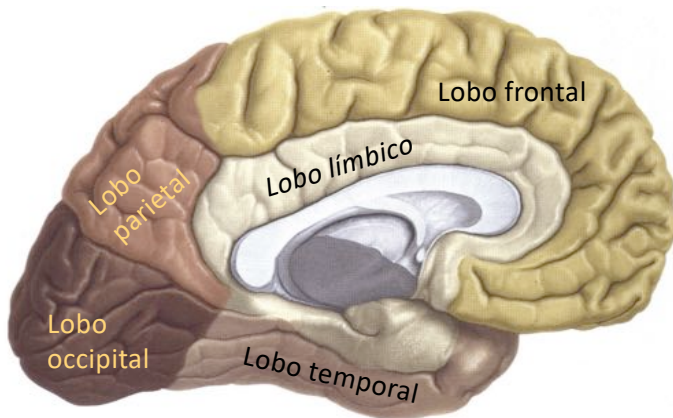
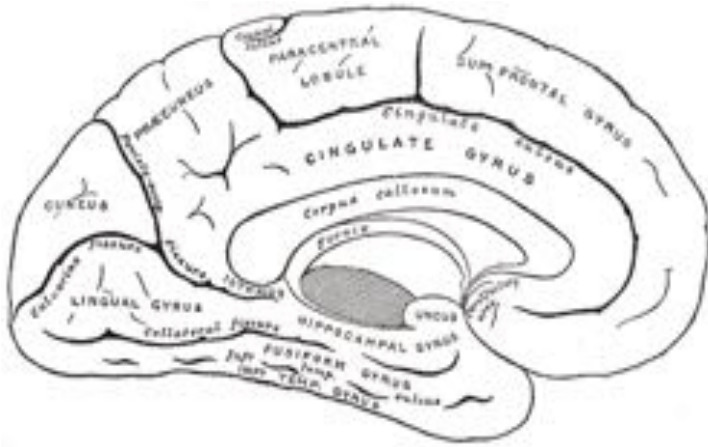
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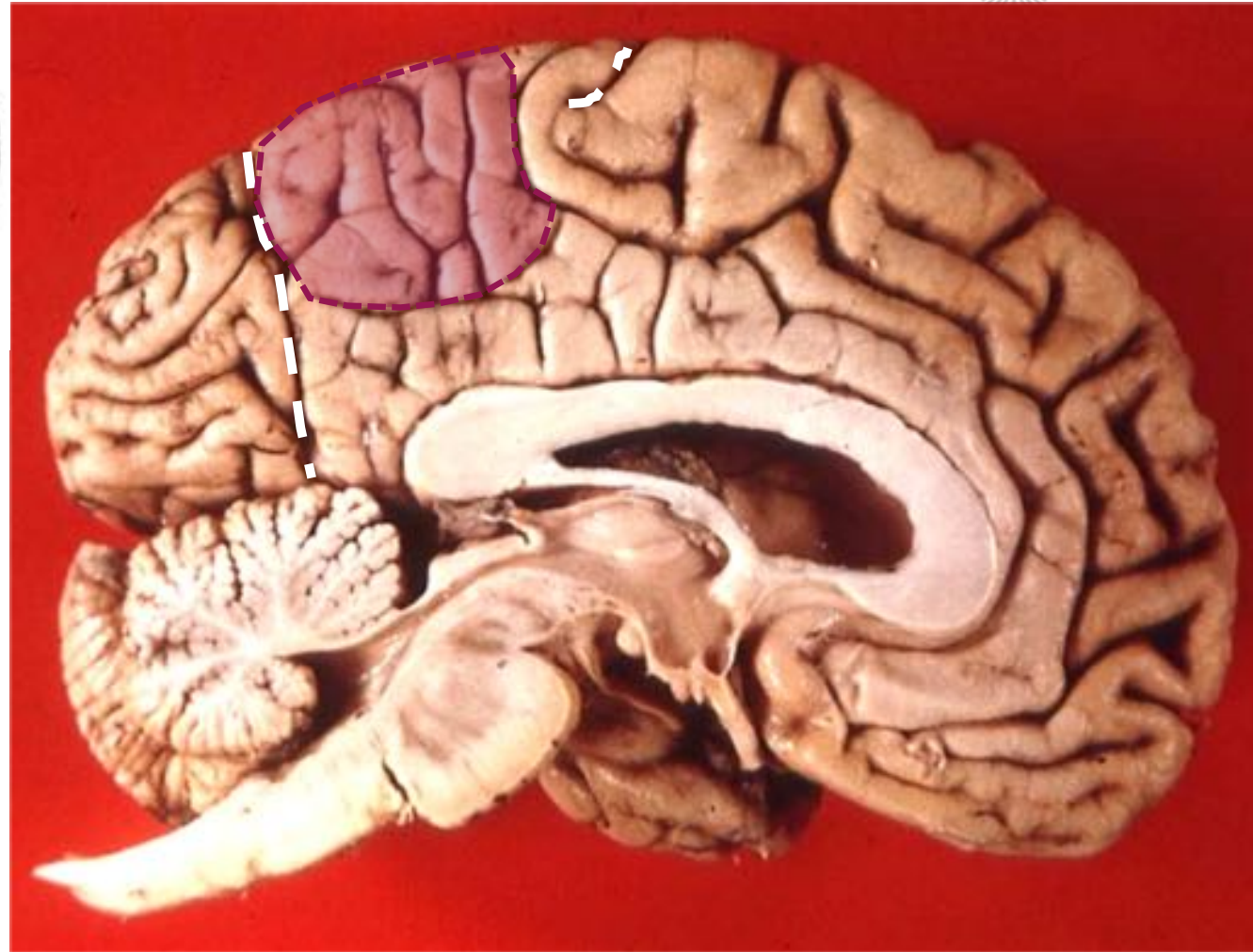
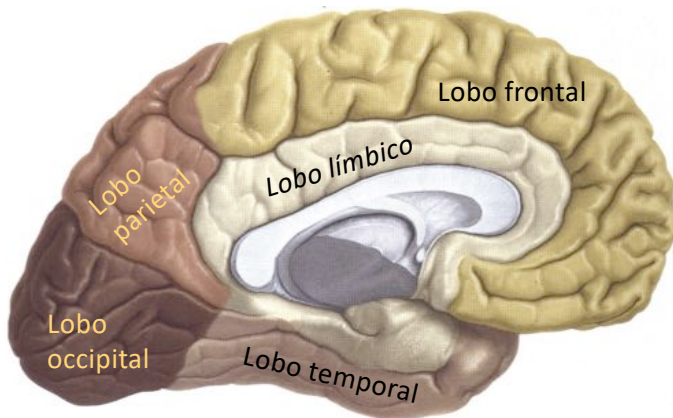
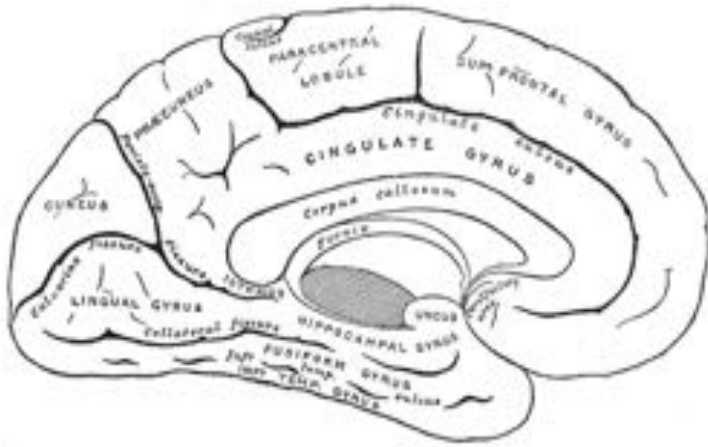
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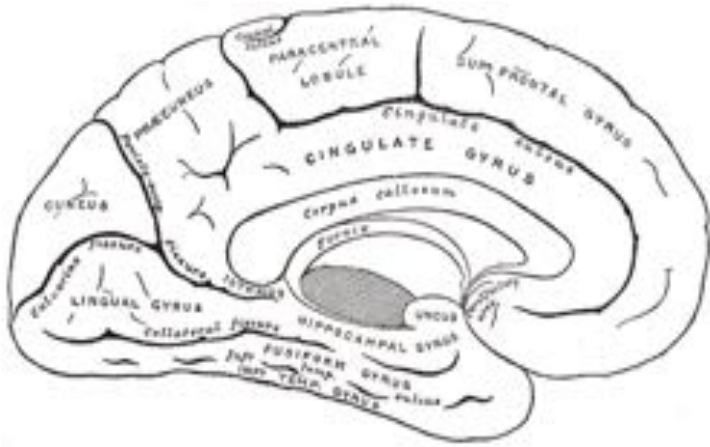
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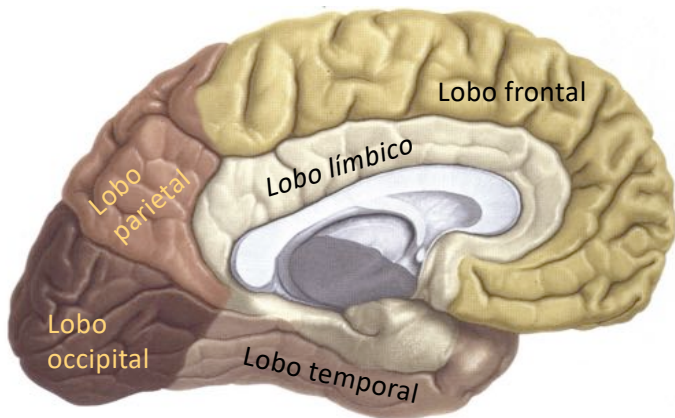
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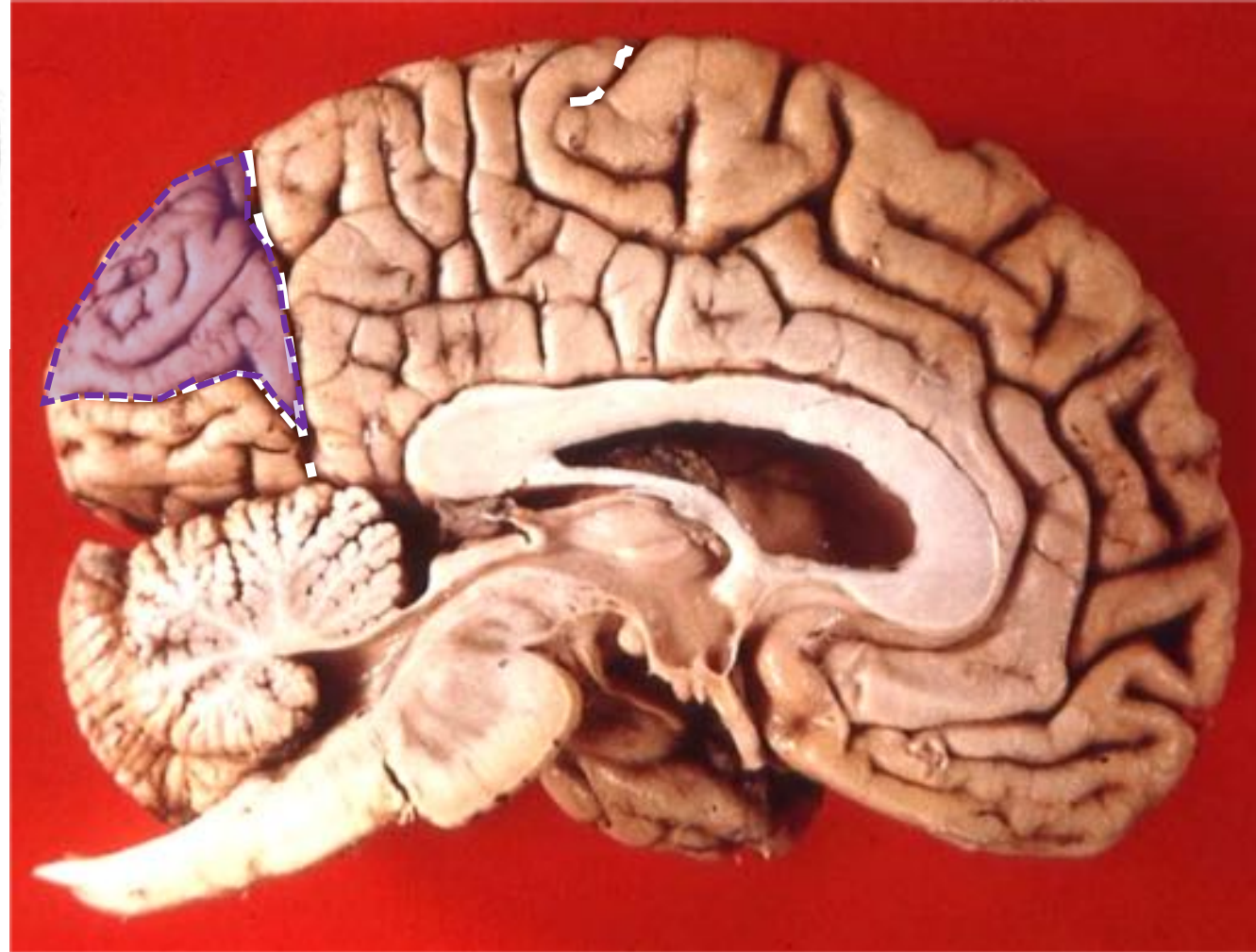
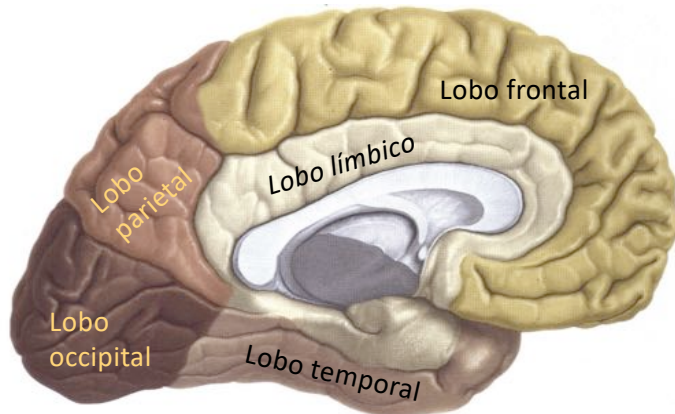
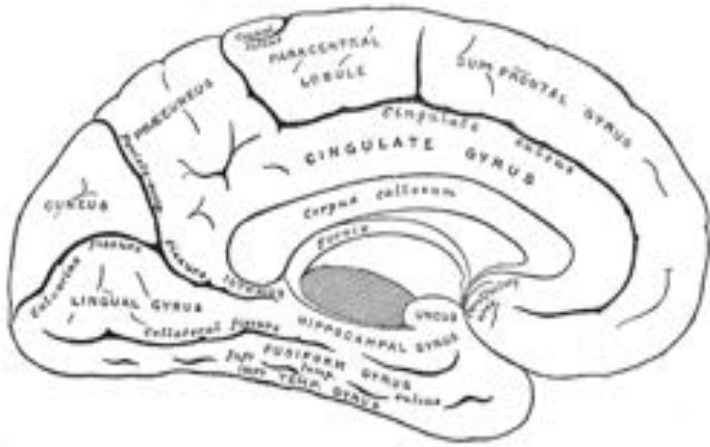
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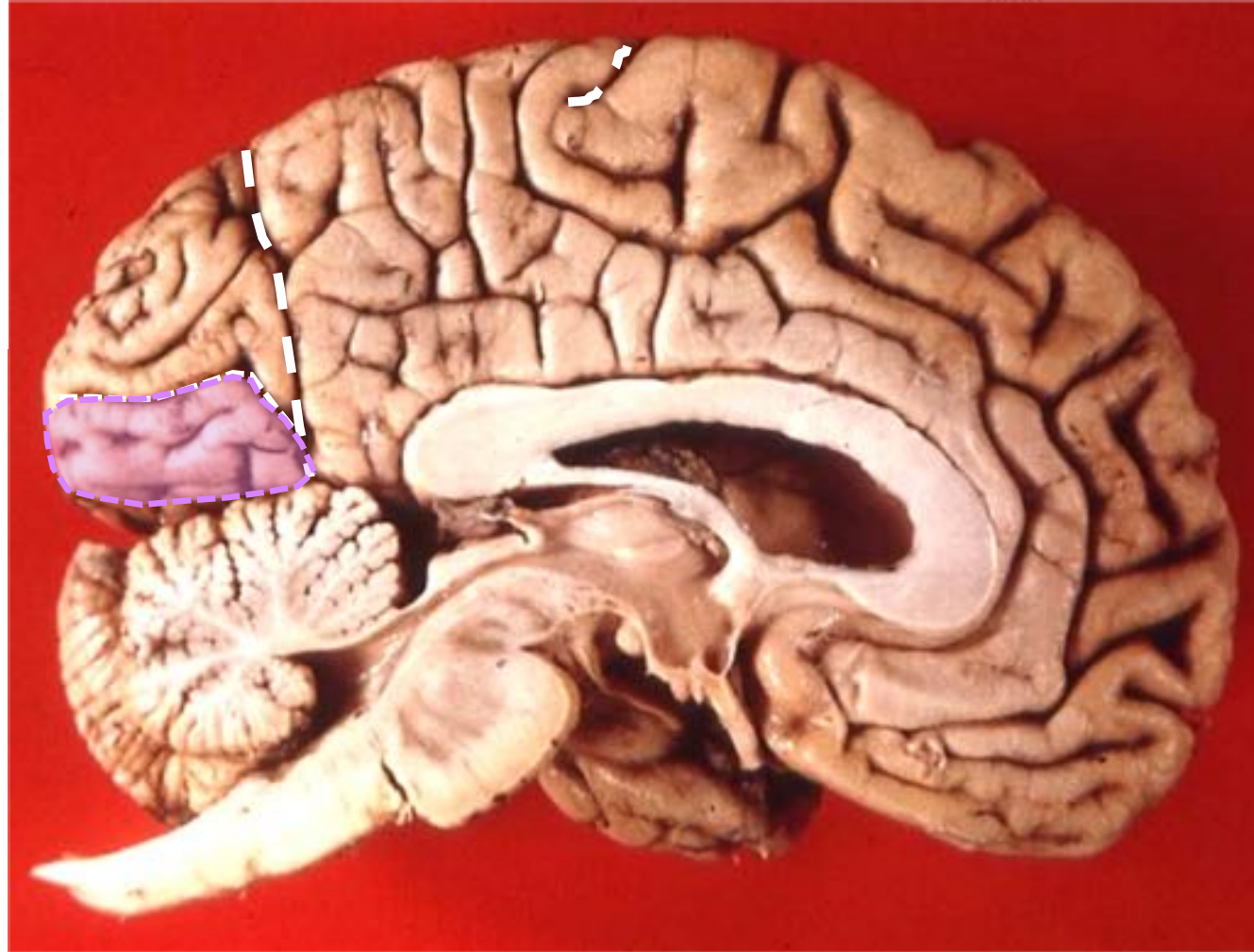
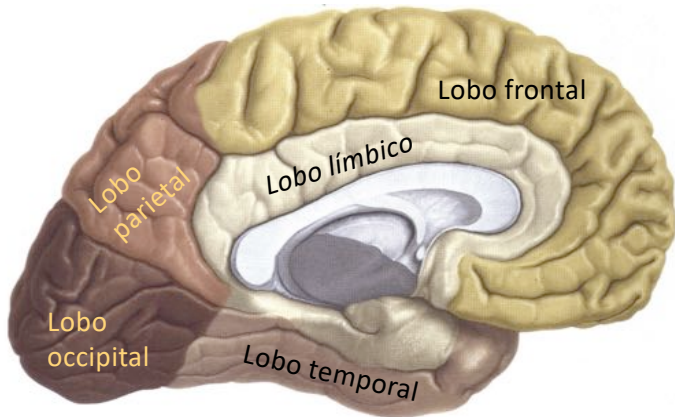
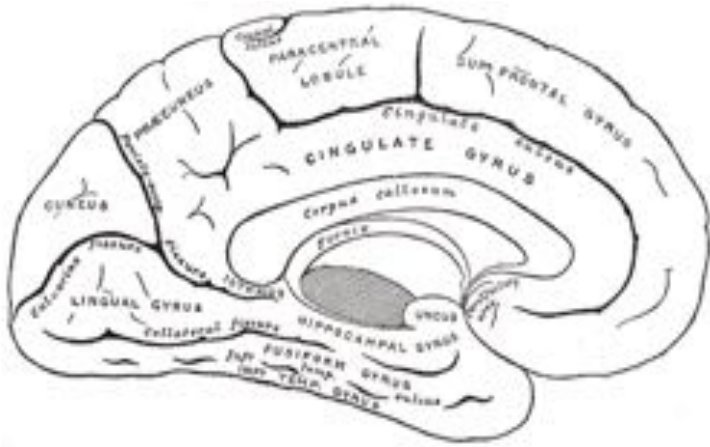
surco calcarino



Cara Medial



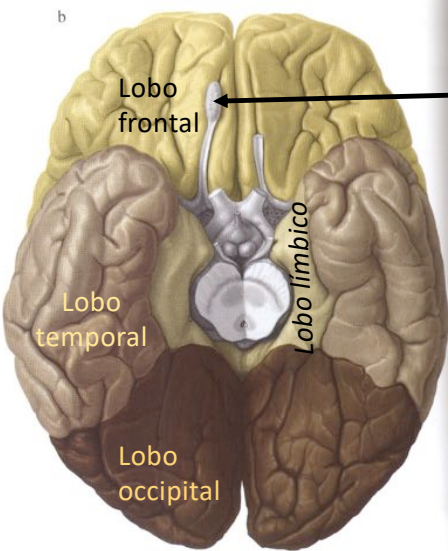
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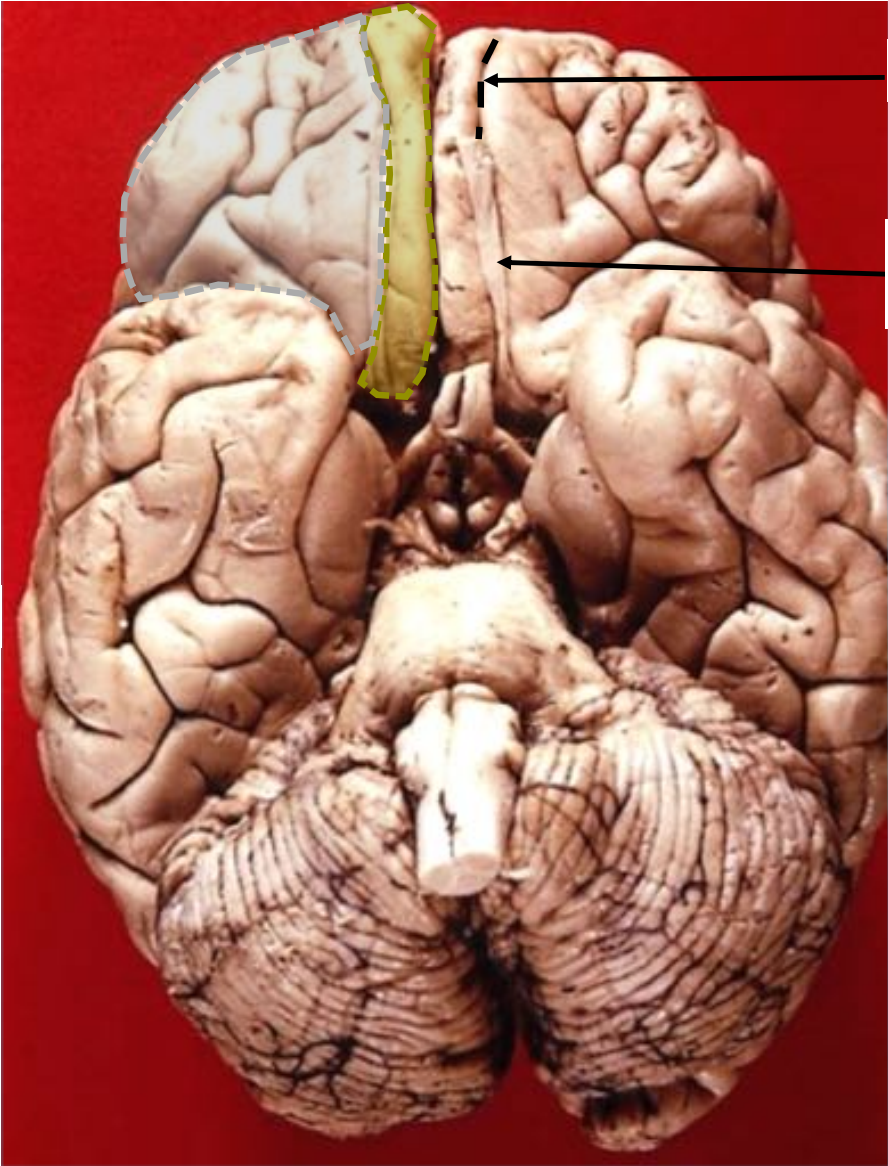
Cara Inferior

Giro recto

Giros orbitarios



Bulbo olfatorio



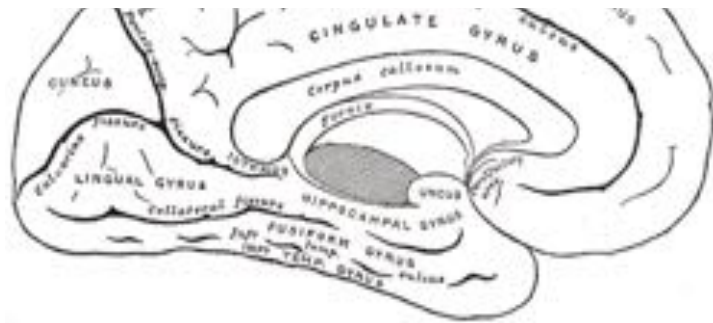
Surco olfatorio

Tracto olfatorio



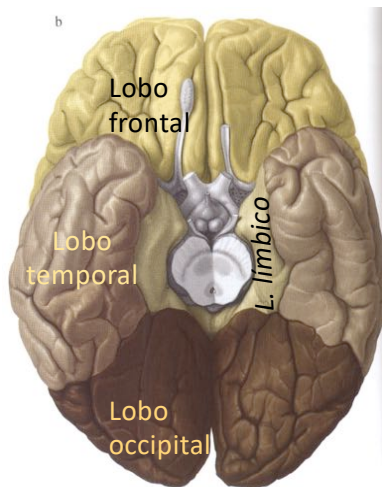
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Cara Inferior



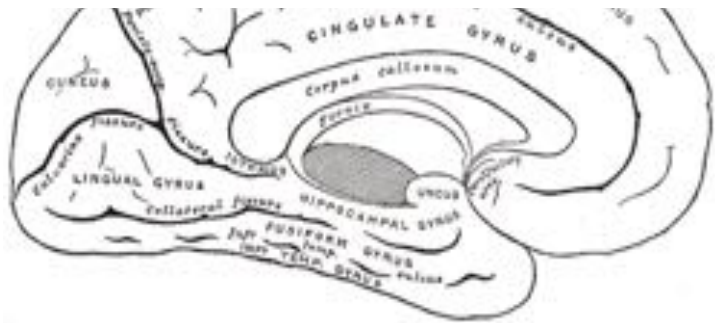
Uncus

Giro parahipocampal

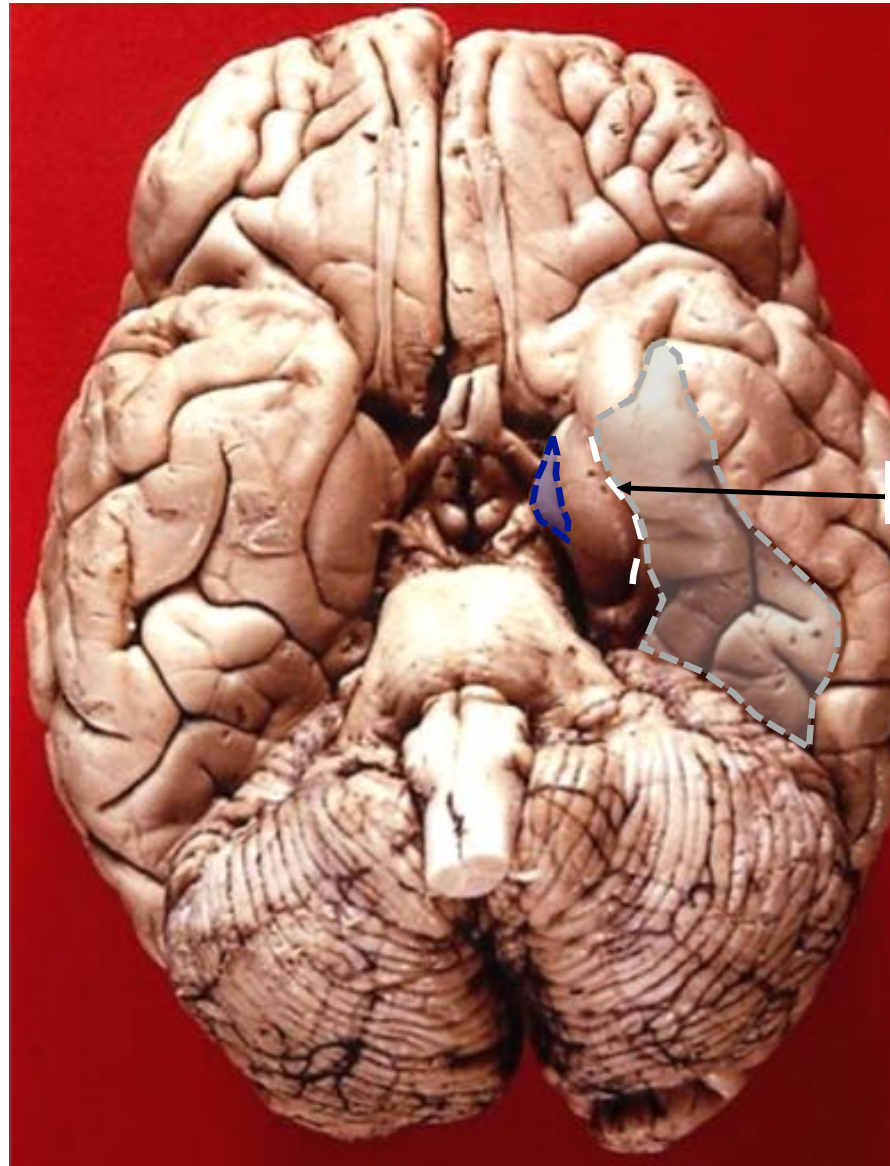
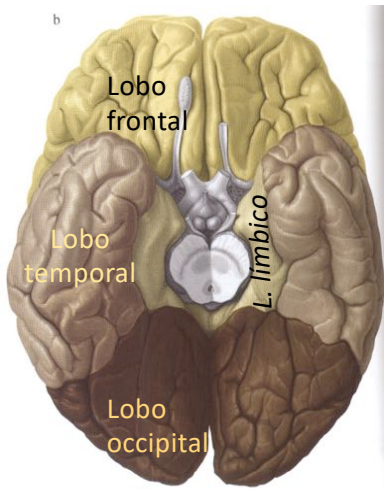


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Cara Inferior

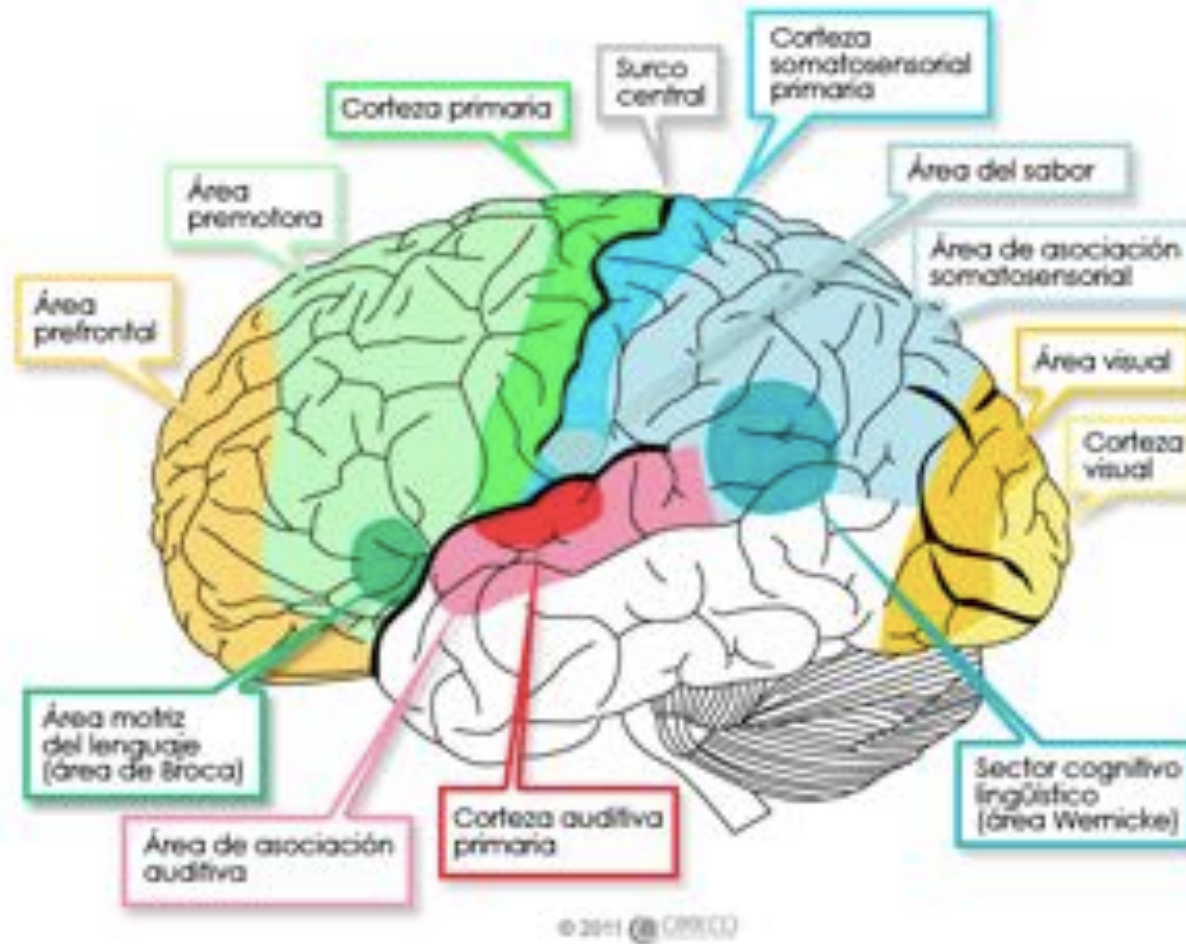


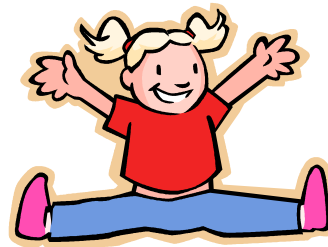
Giros occipitotemporales



Surco colateral

AREAS FUNCIONALES DE LA CORTEZA CEREBRAL





- Vea ahora el Video 2...



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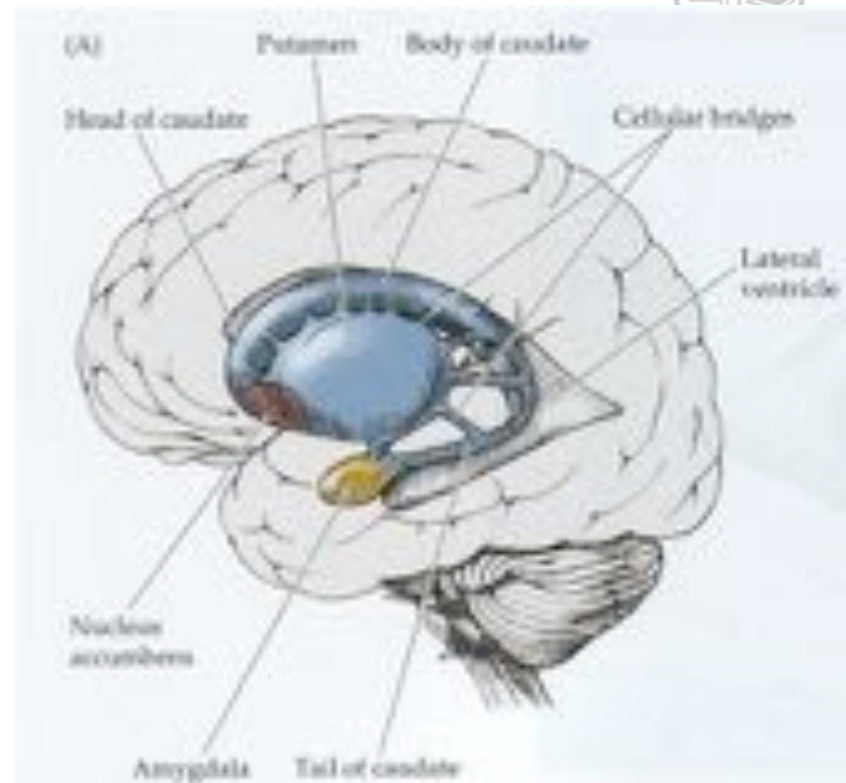
Anatomía Externa del Sistema Nervioso Central Parte 2

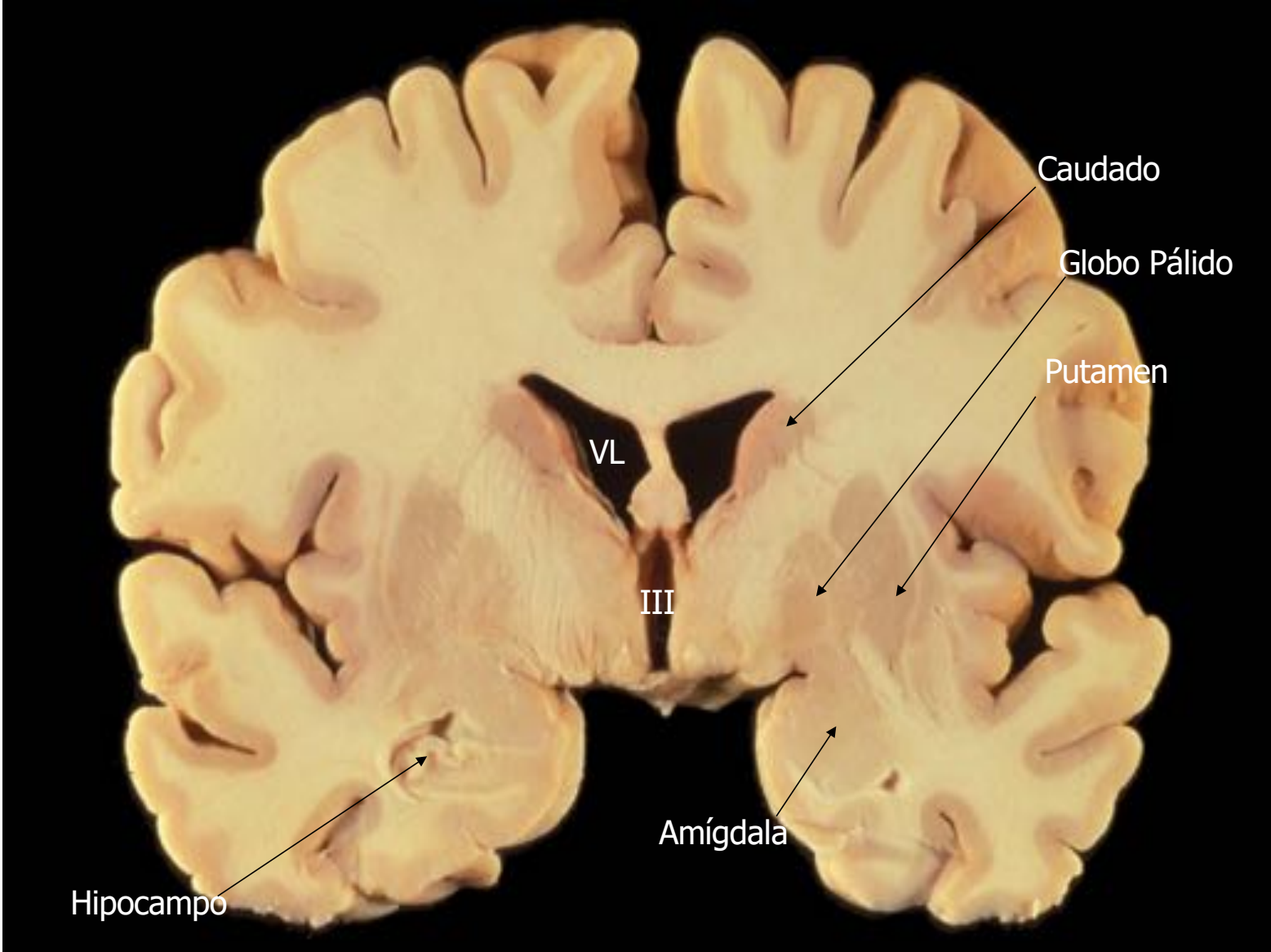
Ximena Rojas, PhD

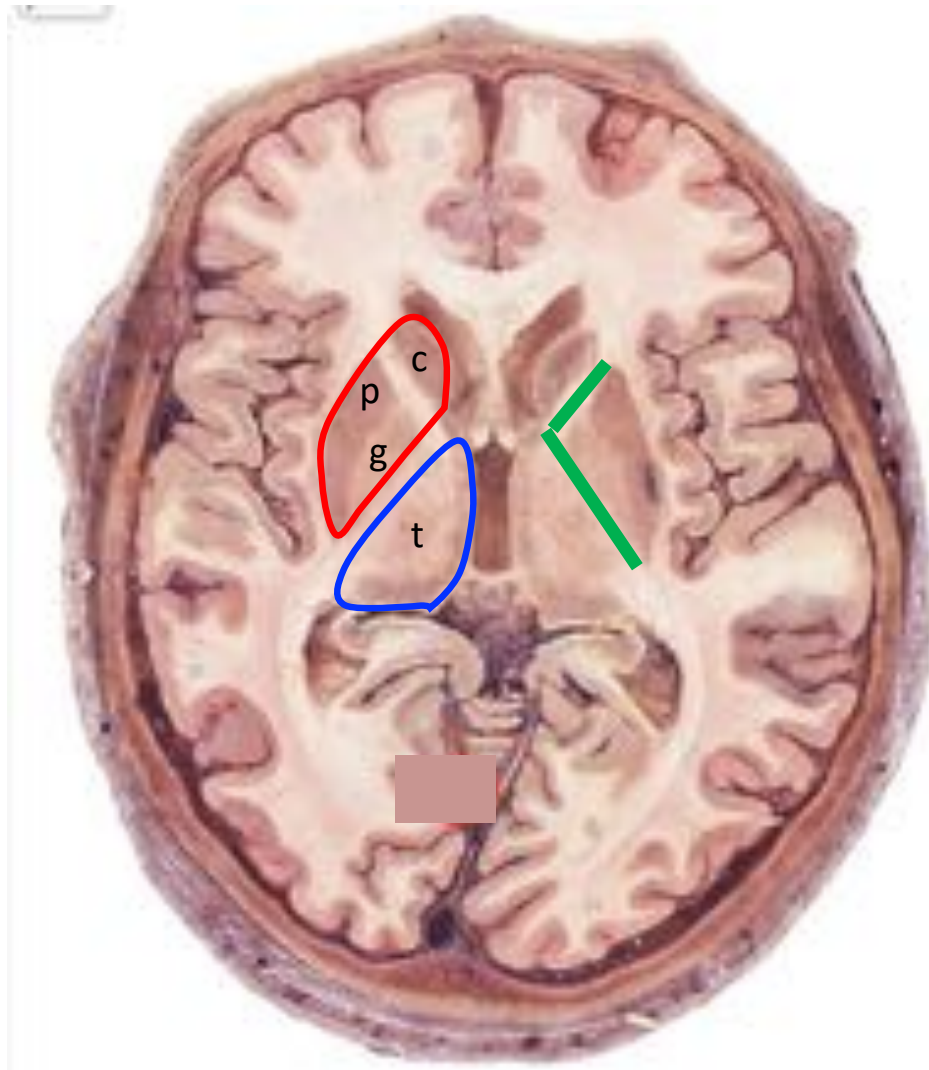
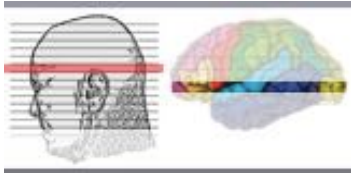
Núcleos de los hemisferios






- N. de la Base
 - Caudado
 - Putamen
 - Globo pálido
- Amígdala







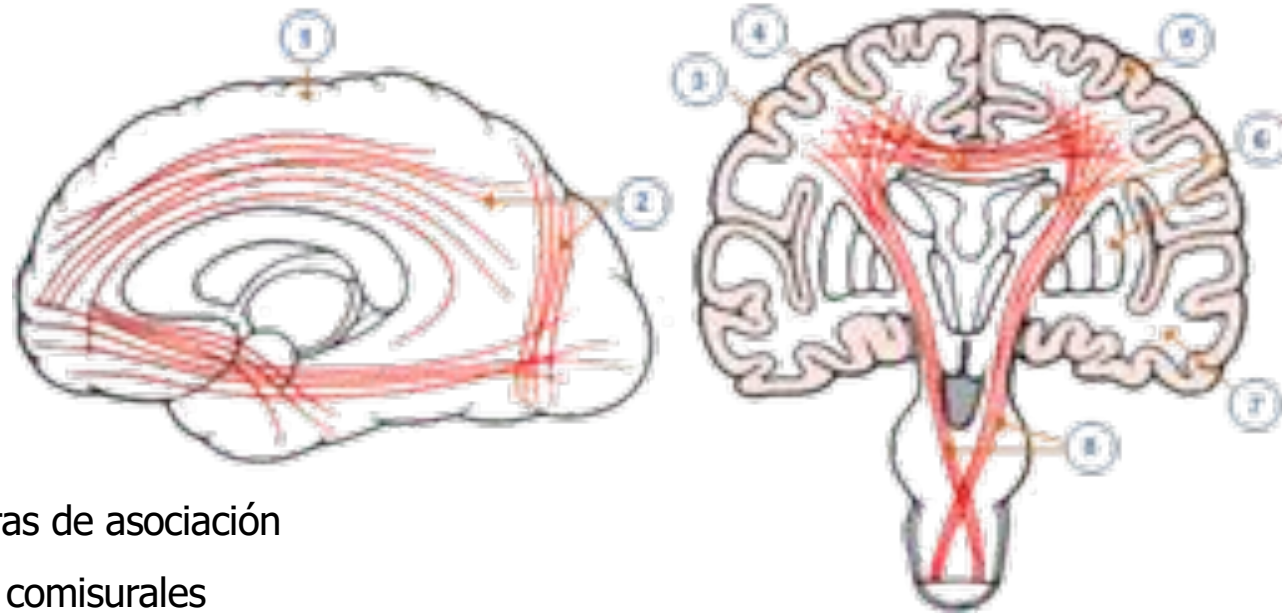
-  Núcleos de la base
-  Diencefalo
-  Cápsula interna (fibras de proyección)

Disposición de la Sustancia Blanca

Tipos de Fibras



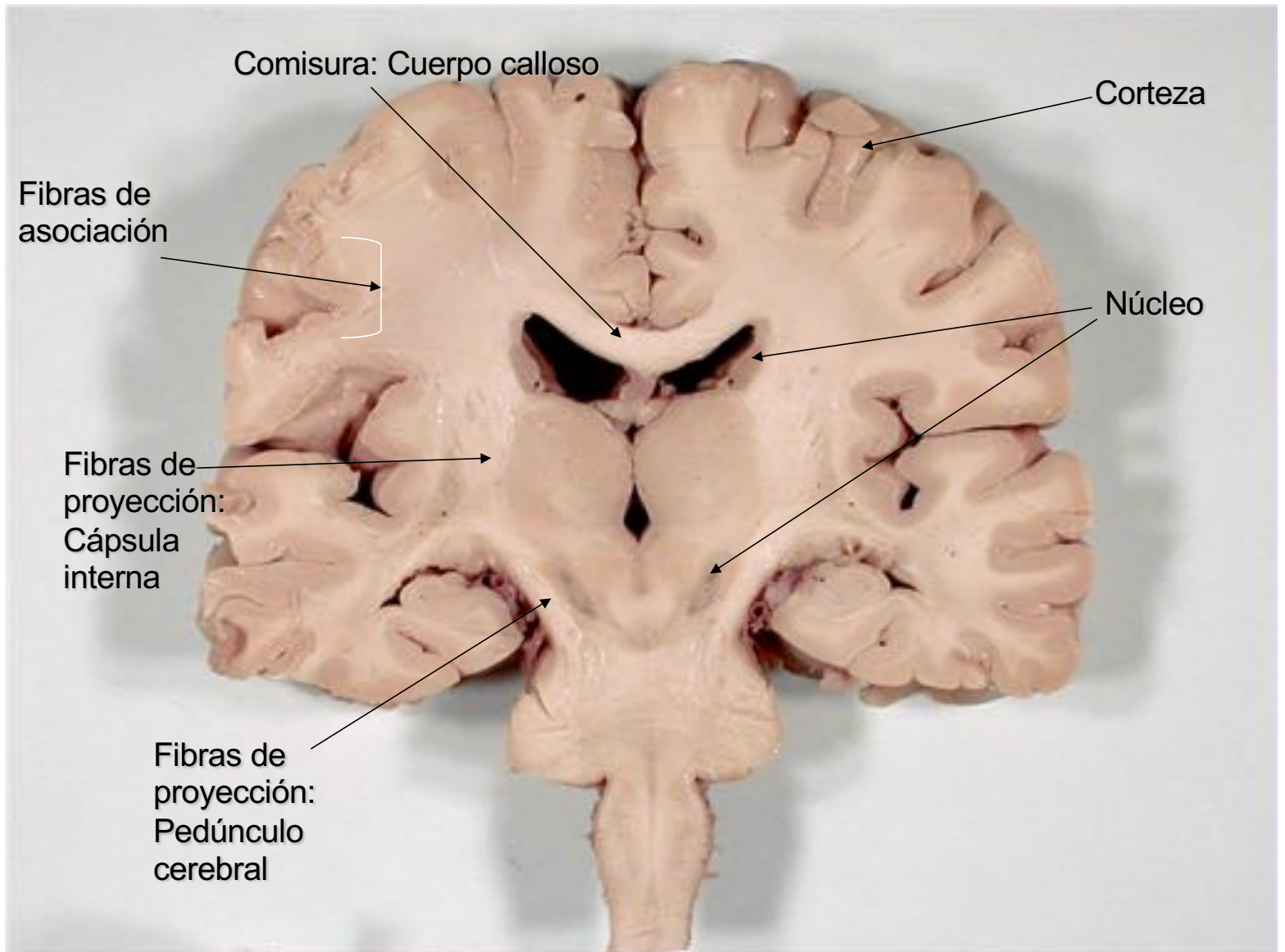
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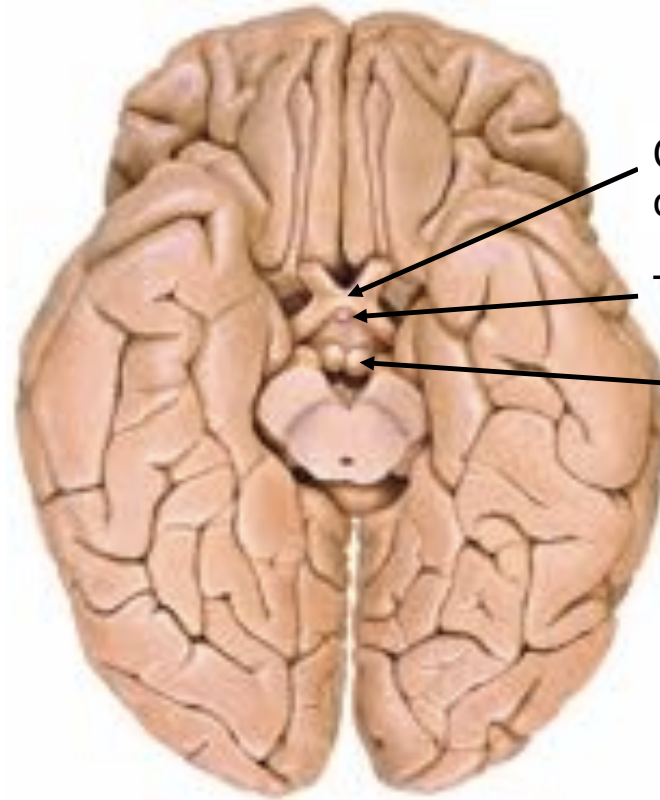
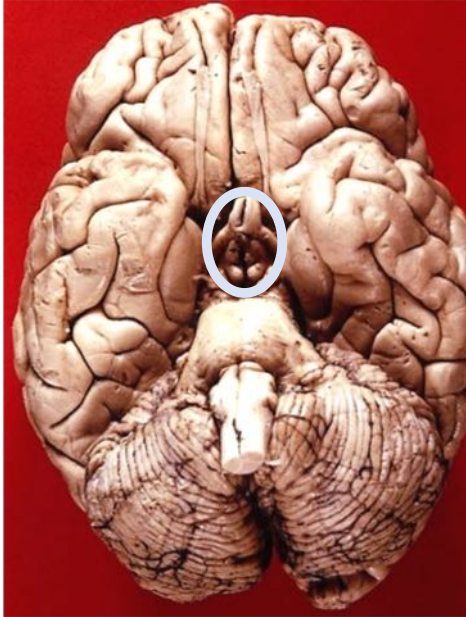
1, 2: Fibras de asociación

4: Fibras comisurales

8: Fibras de proyección



Diencéfalo



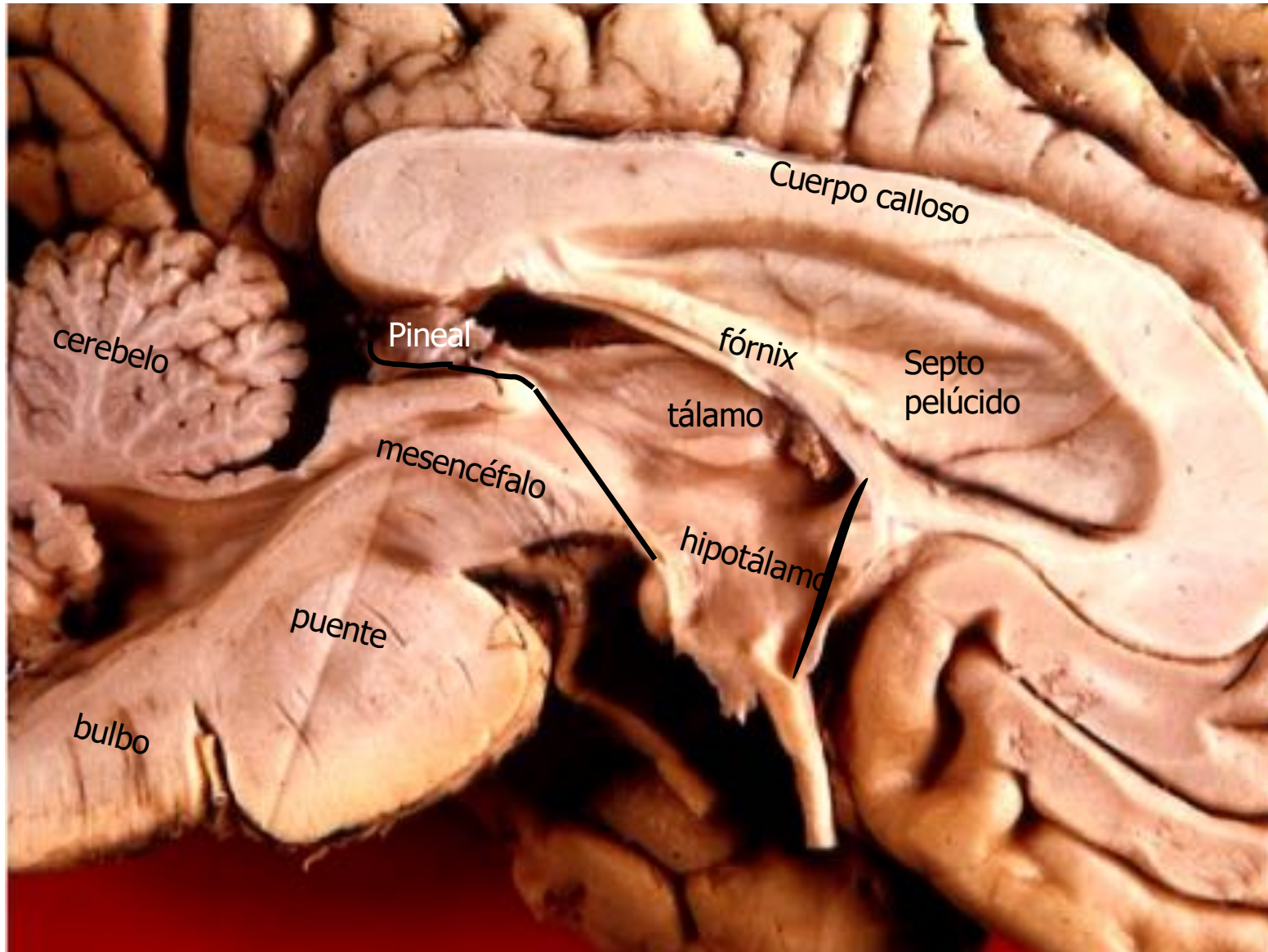
Quiasma óptico y nervio
óptico (NC II)

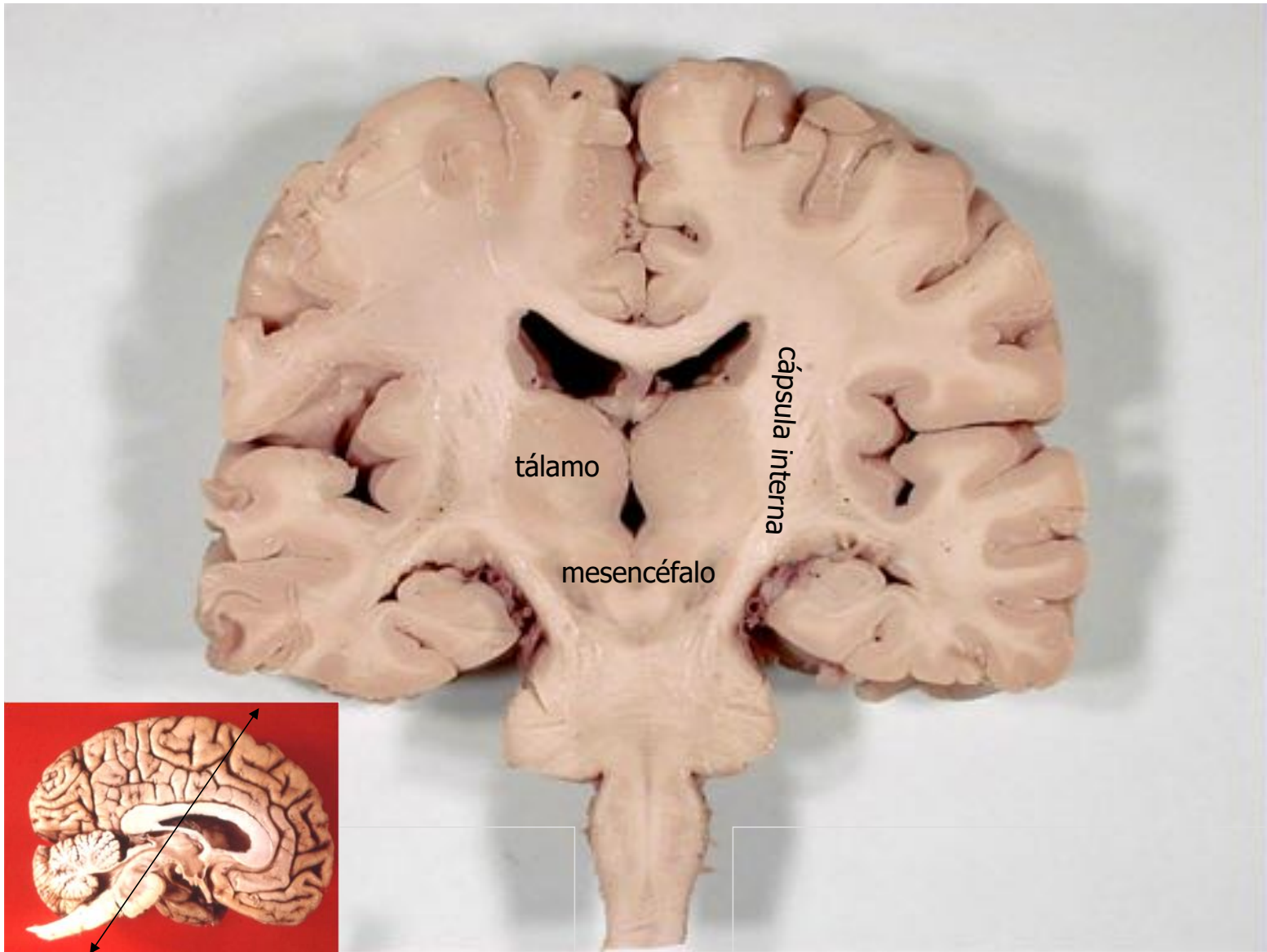
Tallo hipofisiario

Cuerpo mamaril

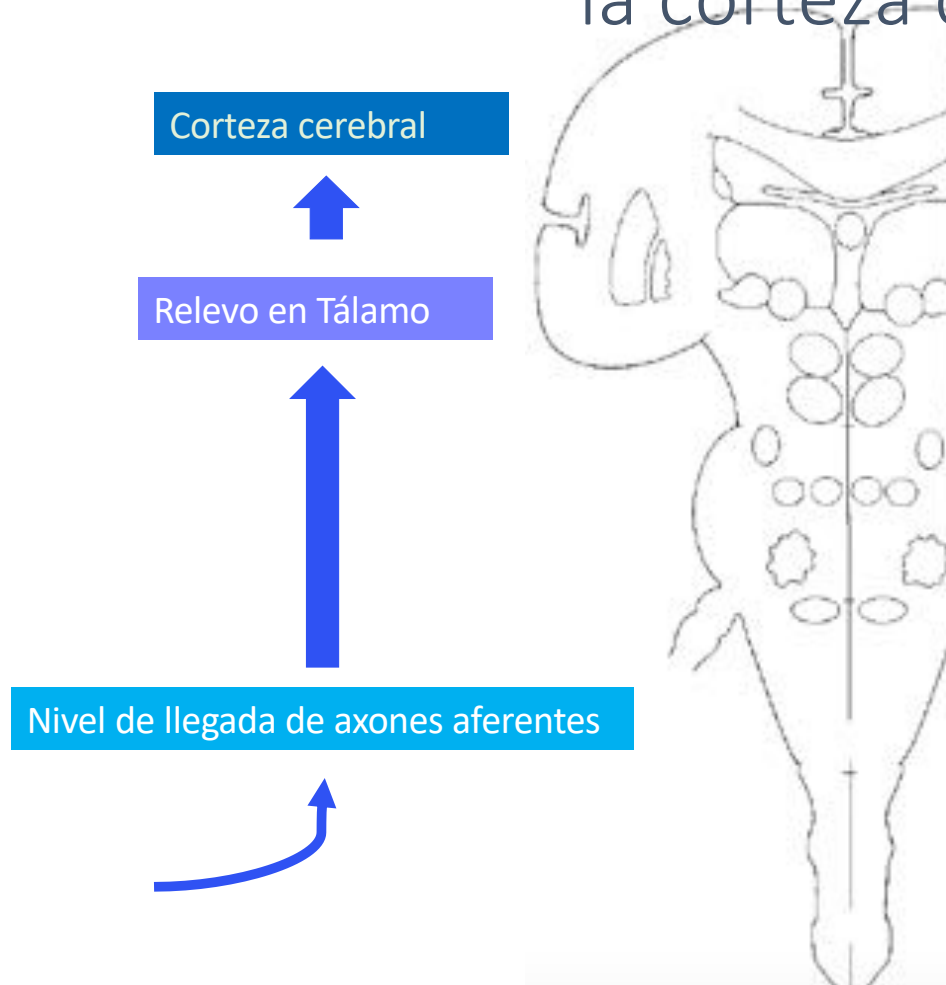
Límites

- Anterior:
 - lámina terminal y el agujero interventricular.
- Posterior:
 - comisura posterior.
- Lateral:
 - brazo posterior de la cápsula interna (no se ve en la figura).
- Superior:
 - fórnix y parte del cuerpo calloso.
- Entre tálamo e hipotálamo
 - Surco hipotalámico





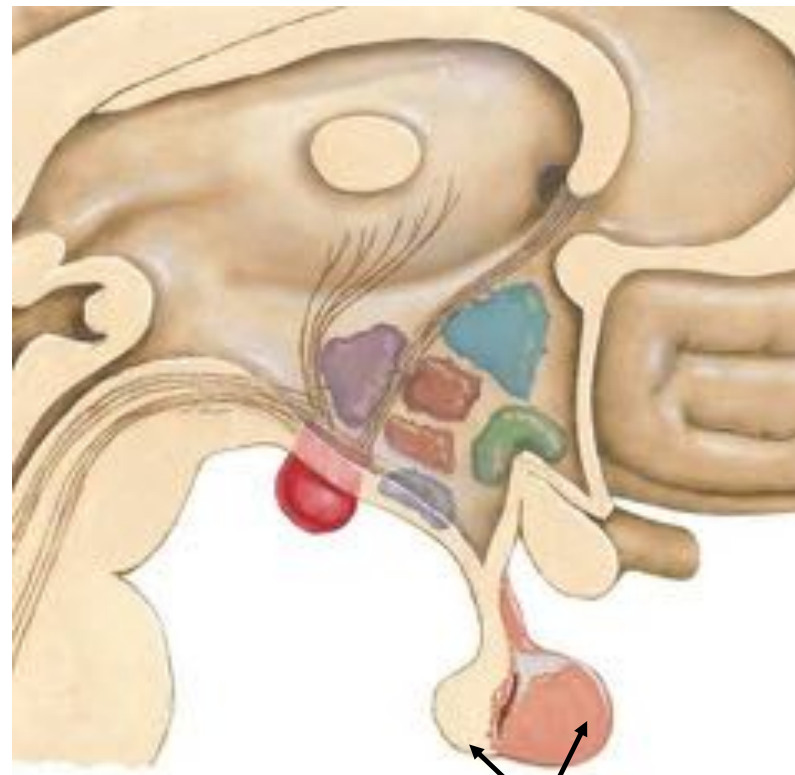
El Tálamo es un importante centro de relevo hacia la corteza cerebral



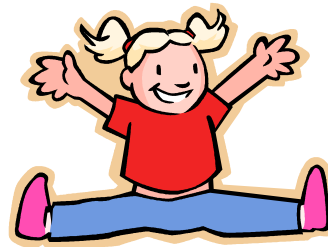
El Hipotálamo es un importante centro endocrino y de control del SNA



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Hipófisis



- Vea ahora el Video 3...

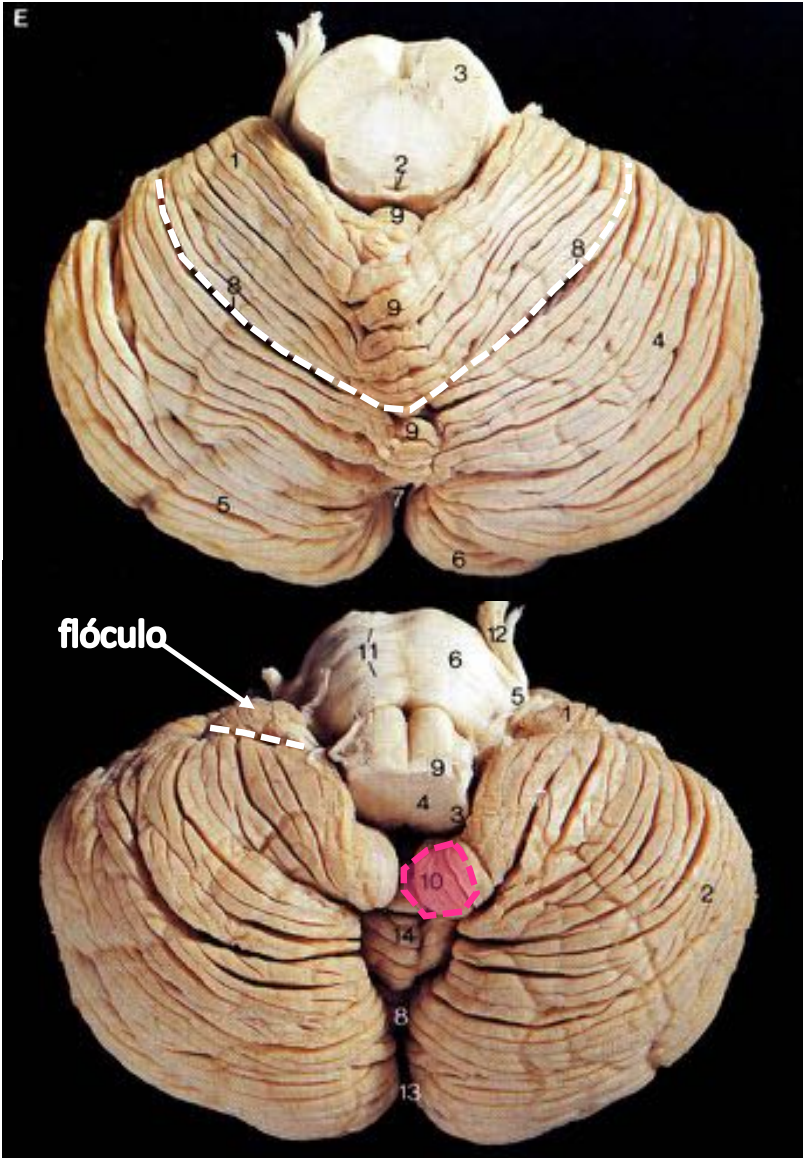


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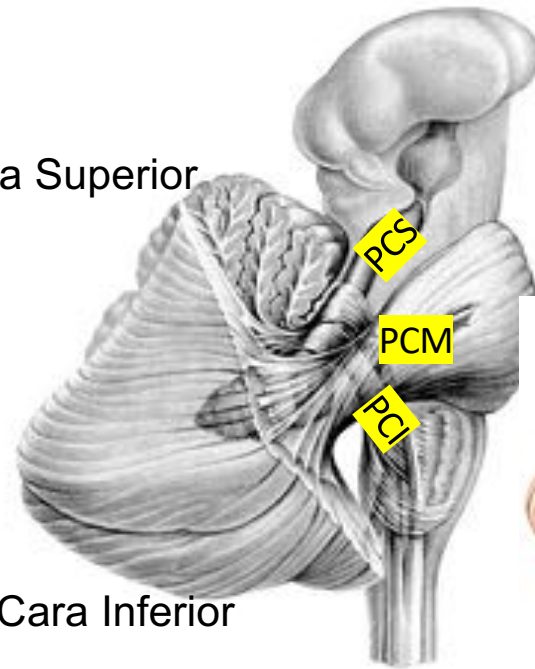
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Anatomía Externa del Sistema Nervioso Central Parte 3

Ximena Rojas, PhD



Cara Superior



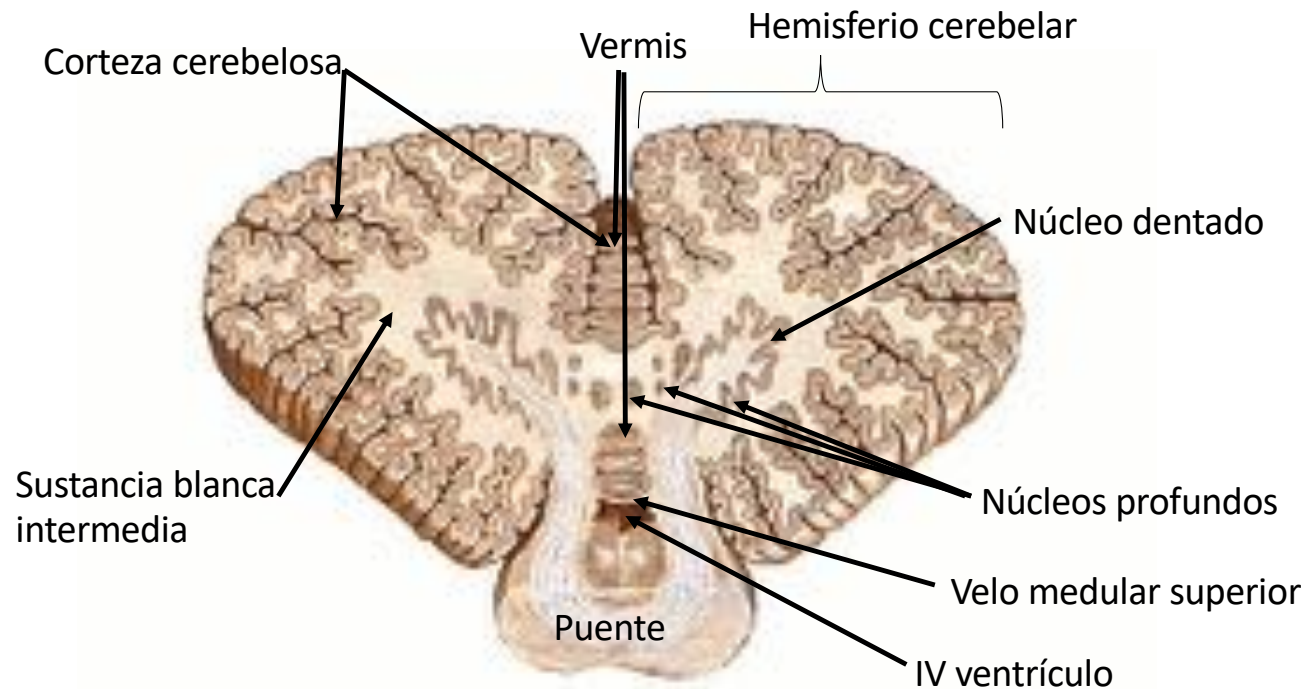
Cara Inferior

tonsila

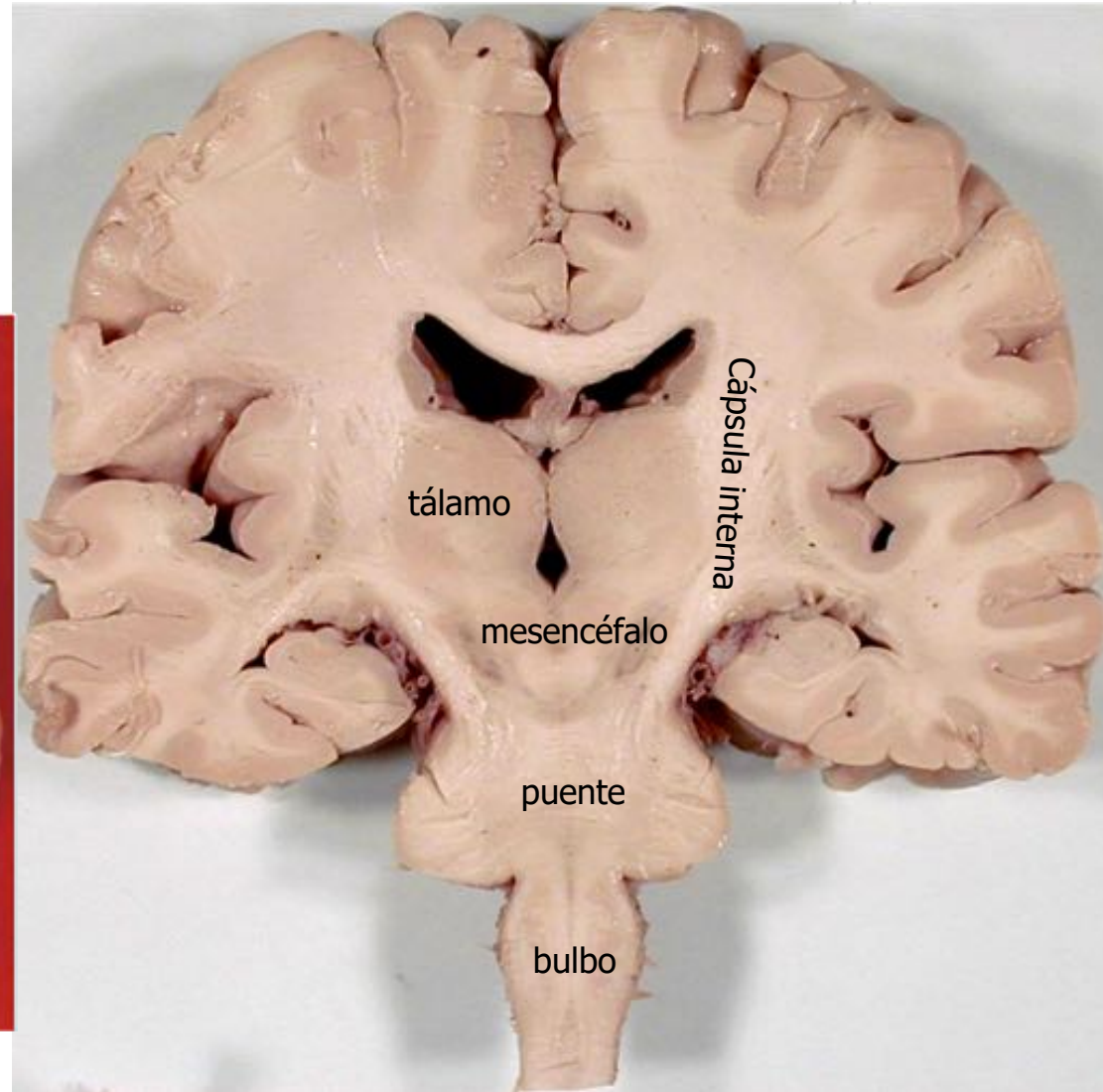
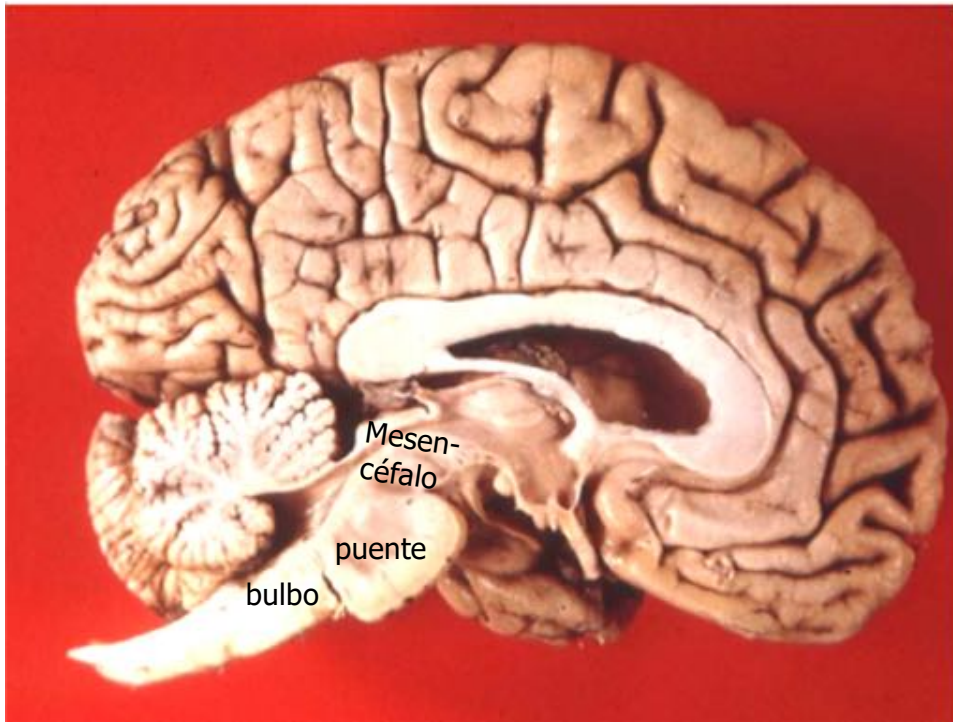
Cara Anterior



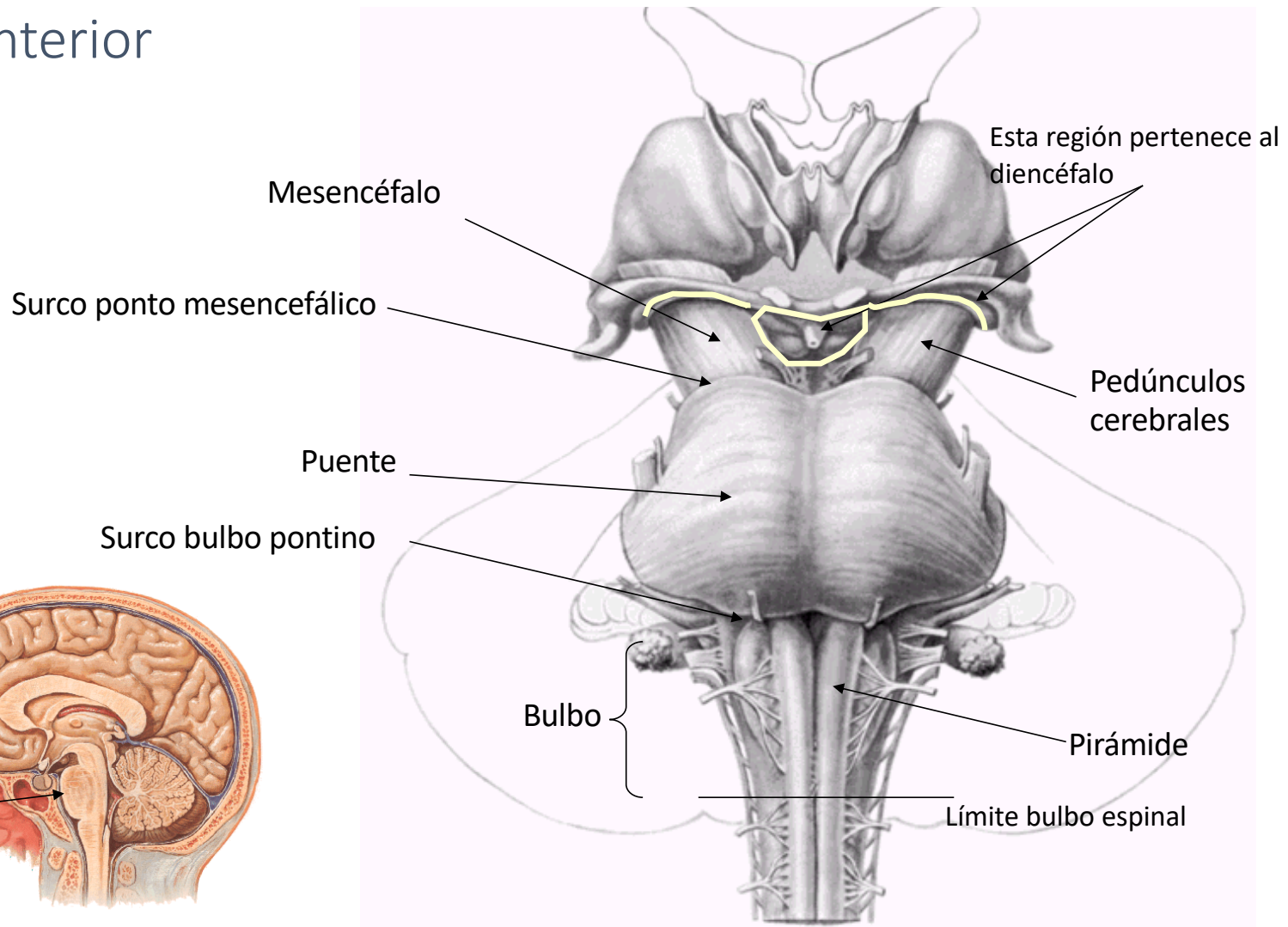
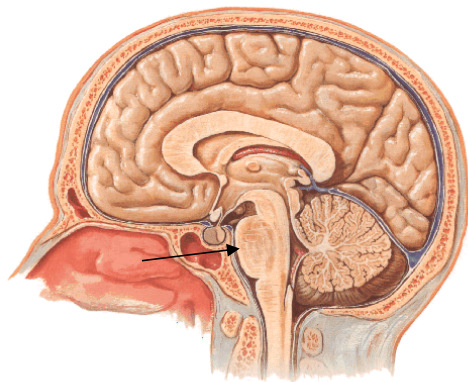
- Separado del IV ventrículo por los velos medulares de éste.
- No posee cavidad ventricular.
- Posee corteza y núcleos profundos.



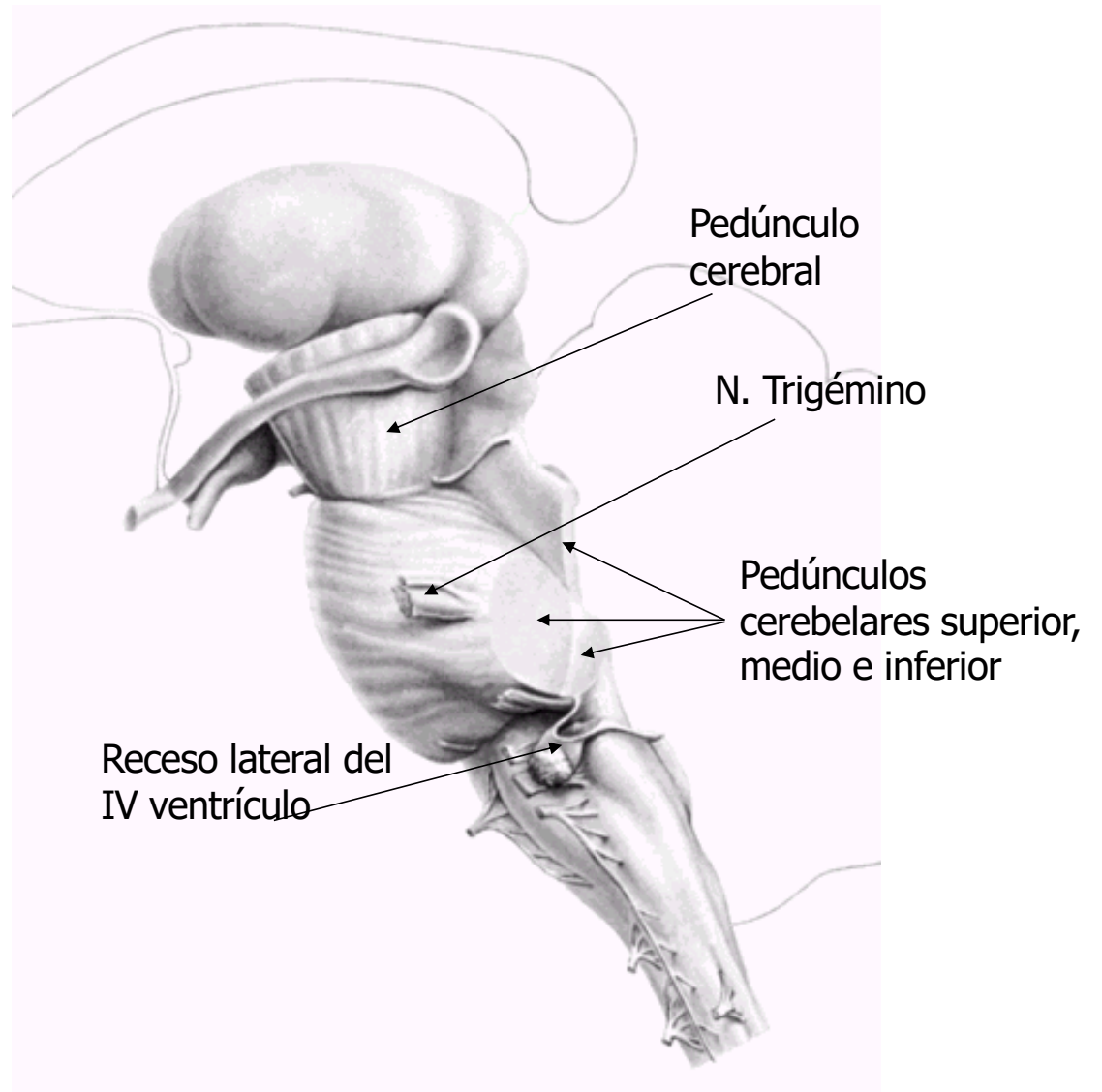
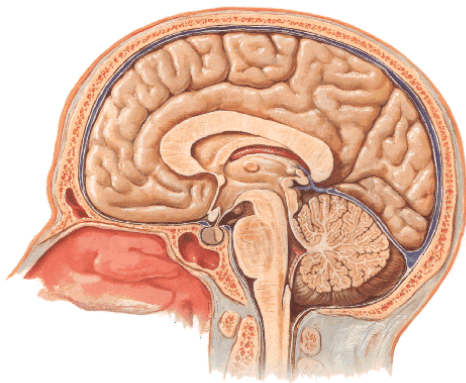
Tronco encefálico



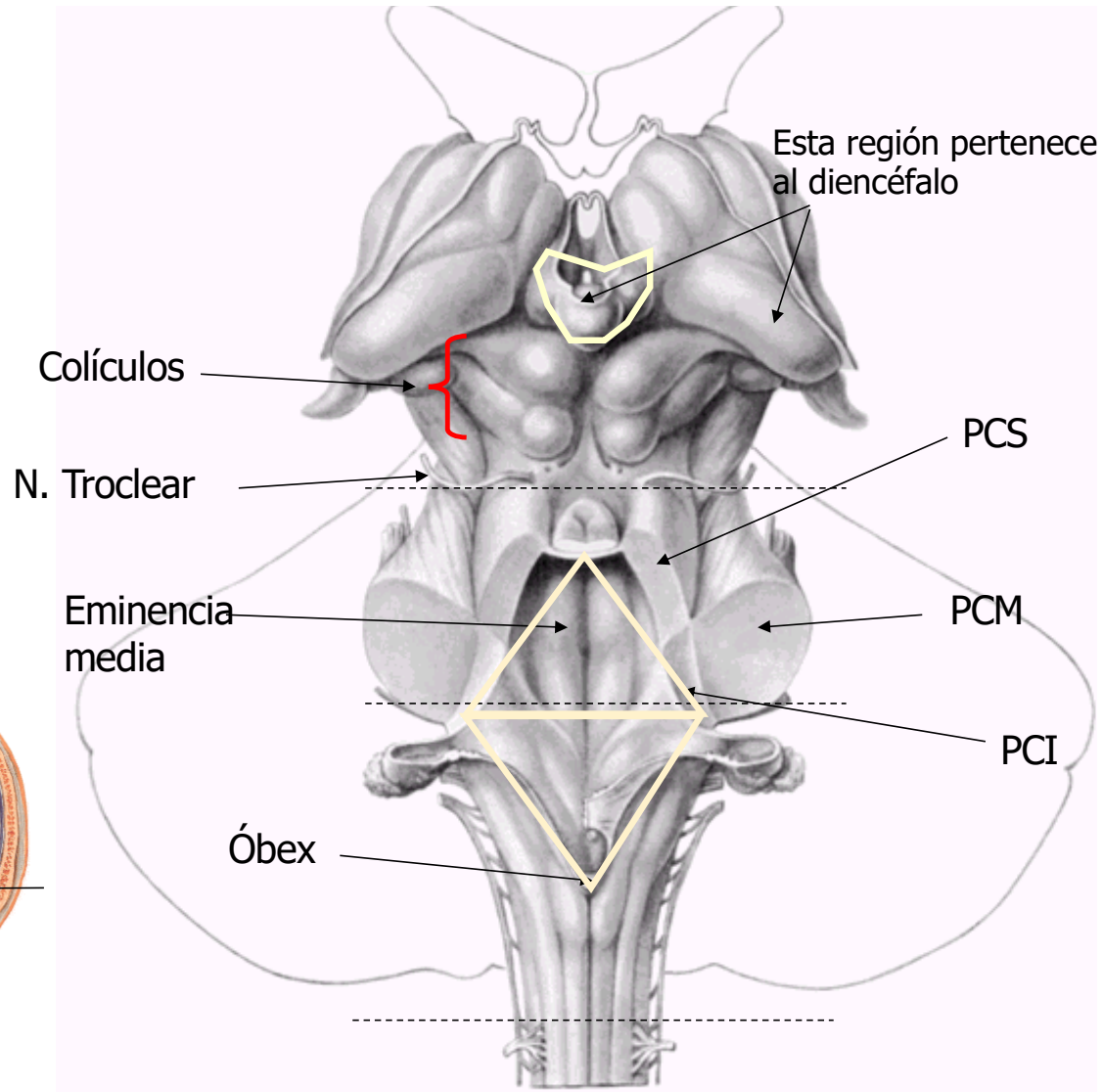
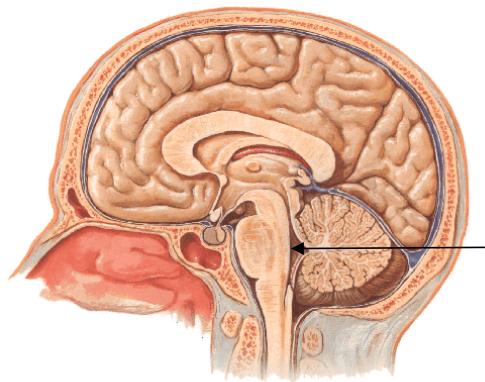
Cara anterior



Cara lateral



Cara posterior

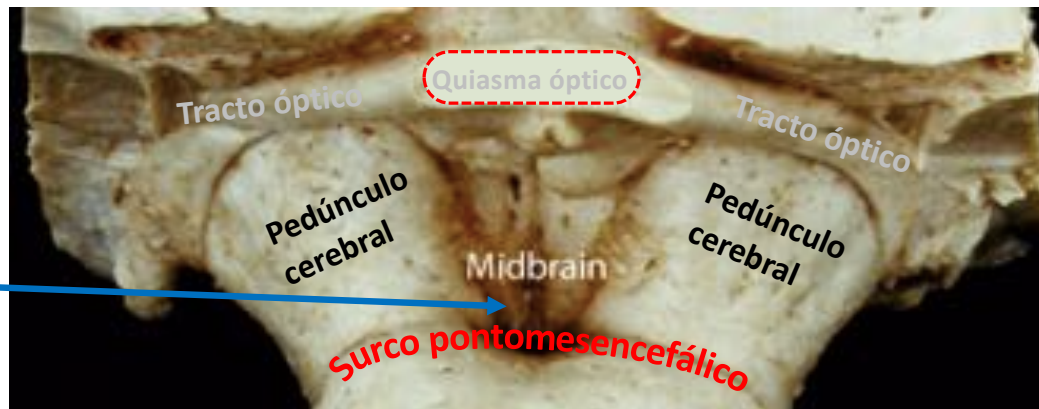


PCS: Ped. Cerebelar superior
PCM: Ped. Cerebelar medio
PCI: Ped. Cerebelar inferior

Mesencéfalo

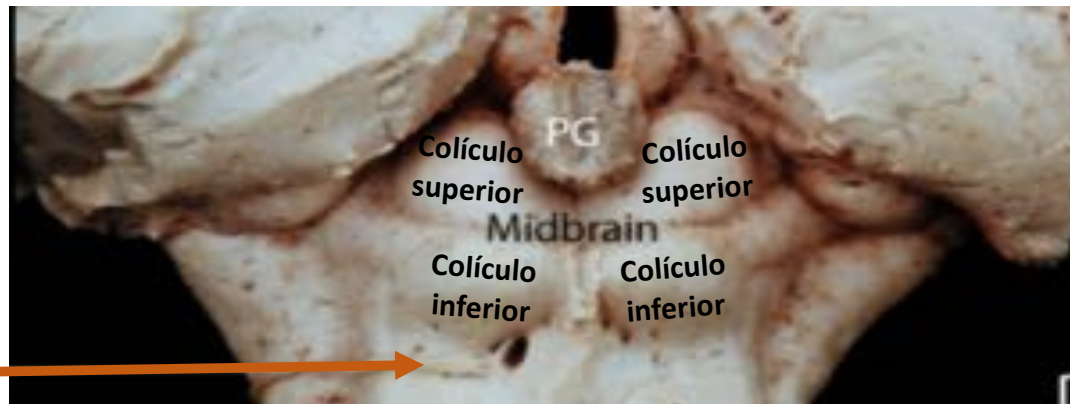


vista anterior



Fosa interpeduncular

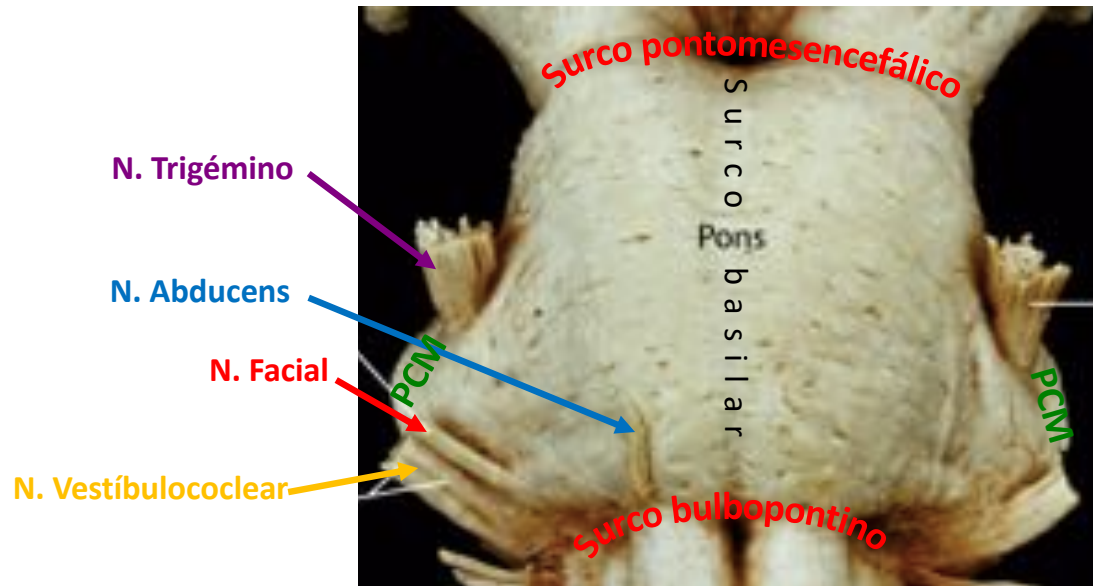
N. Oculomotor



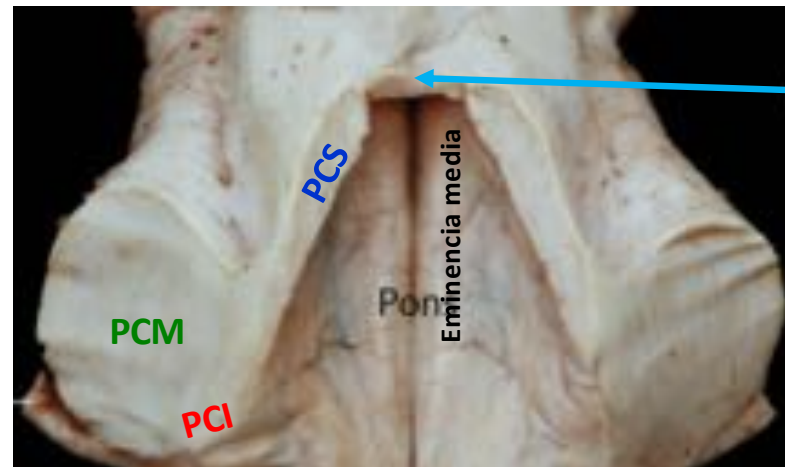
N. Troclear

vista posterior

Puente



vista anterior



Velo medular superior (cortado)

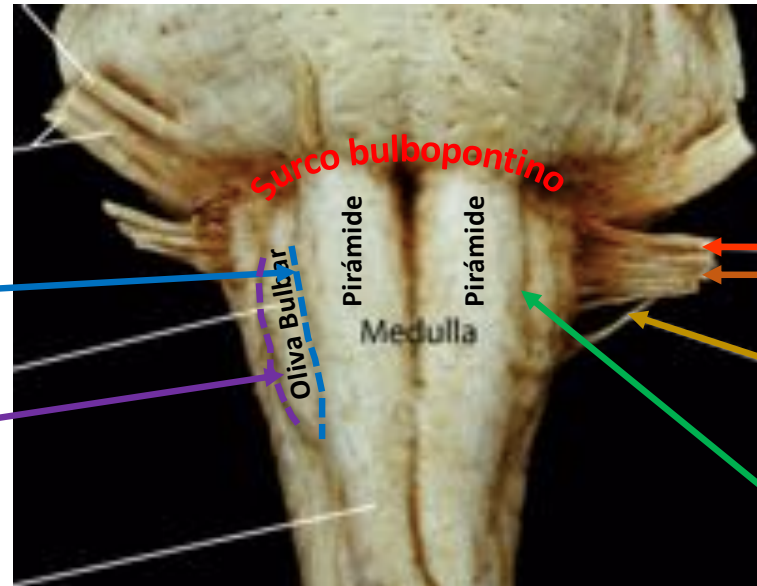
vista posterior

PCS: Pedúnculo cerebelar superior
PCM: Pedúnculo cerebelar medio
PCI: Pedúnculo cerebelar inferior

Bulbo



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Surco preolivario

Surco retroolivario

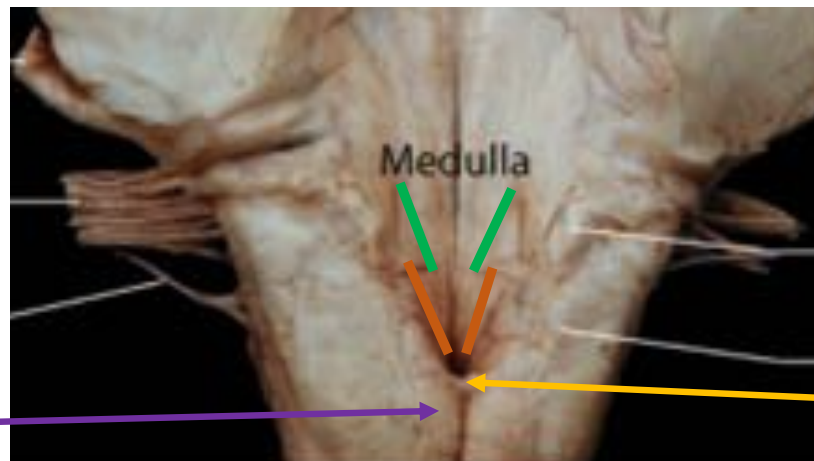
N. Glosofaríngeo

N. Vago

N. Accesorio

N. Hipogloso

vista anterior



Trígono del Hipogloso

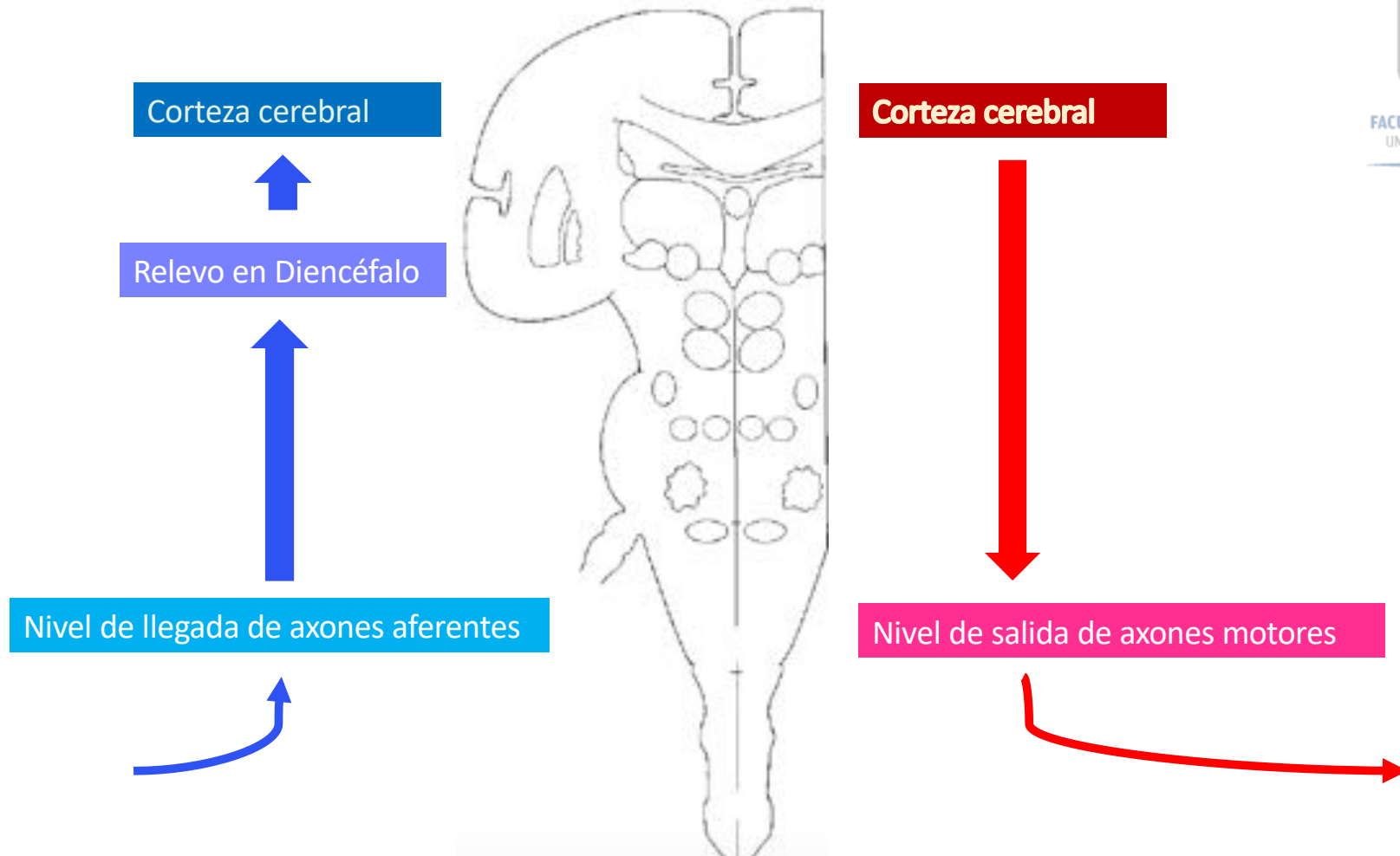
Trígono del Vago

vista posterior

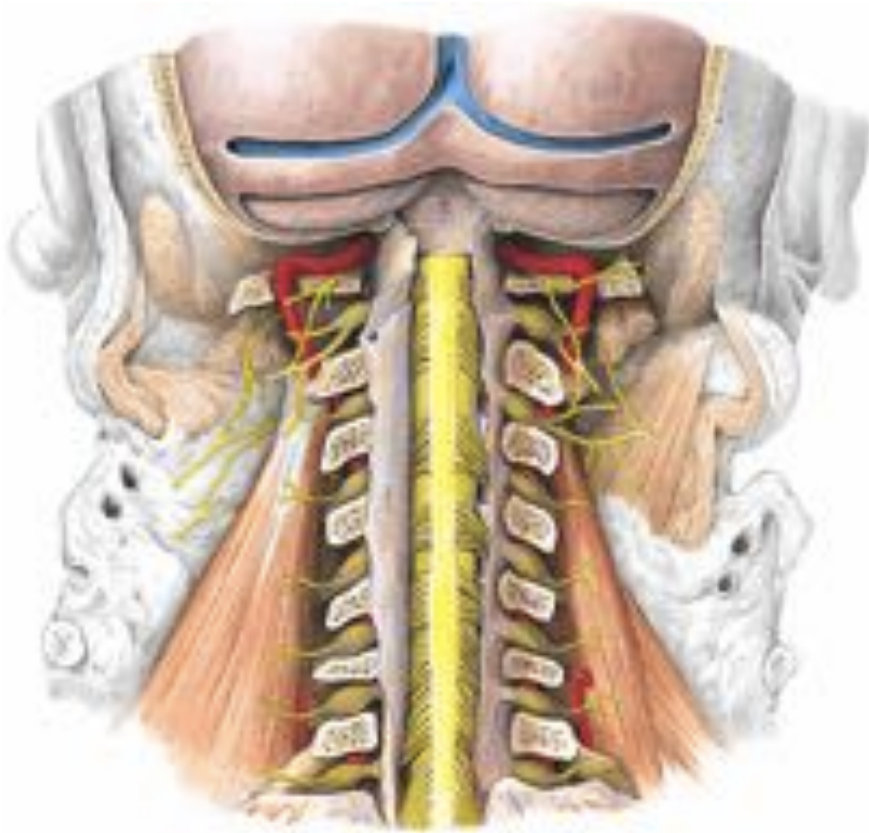
Tubérculo grácil

Óbex

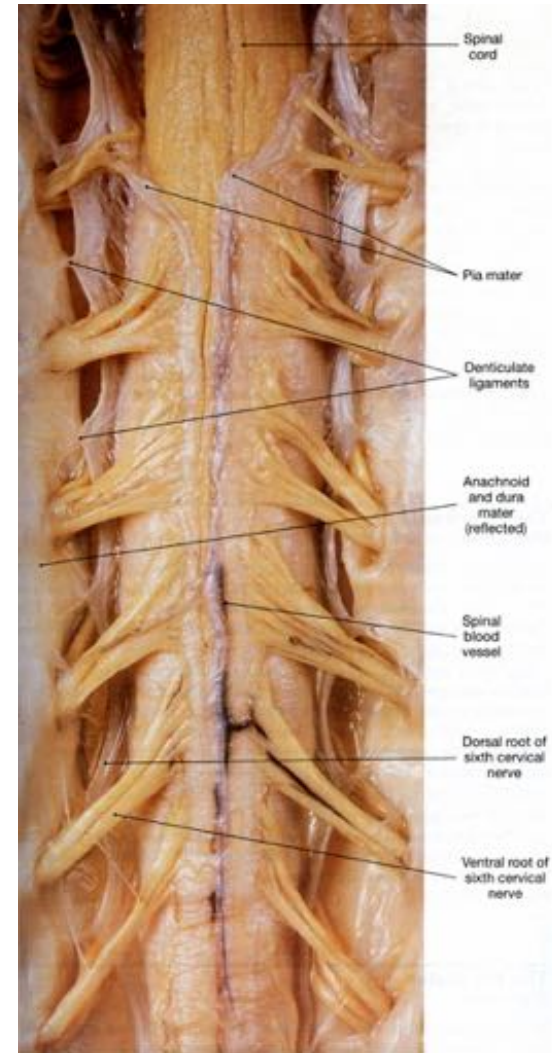
El Tronco Encefálico es vía de paso de tractos ascendentes y descendentes



Médula Espinal



vista posterior



vista anterior

Médula espinal

Duramadre

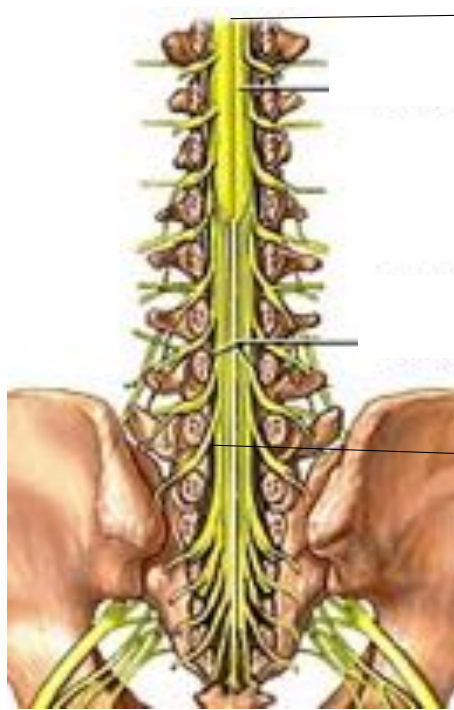
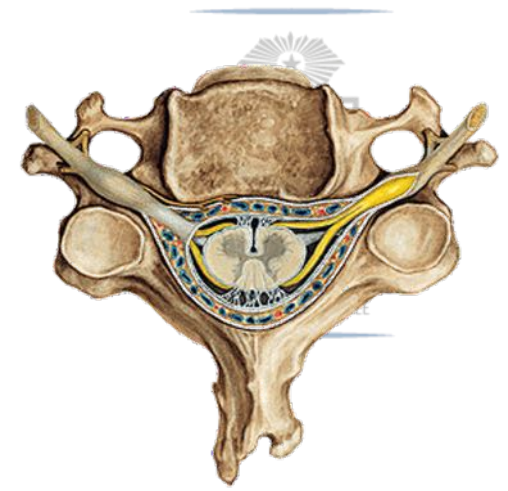
Nervio y ganglio
espinal

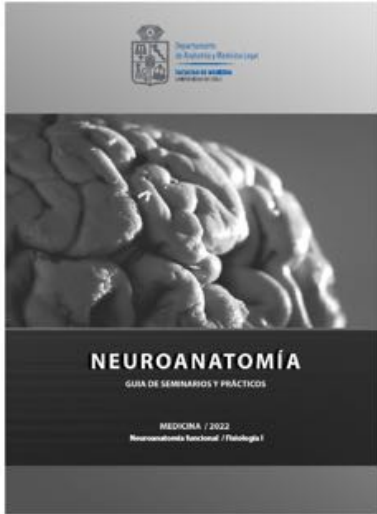
Raíz espinal

Cono medular

Filum terminale

Cola de caballo o
cauda equina





HAVE
COFFEE
AND
STUDY
HARD



- Apunte de Anatomía Macro de SNC, U Cursos
- Bibliografía: Haines, DH (2014). *Principios de Neurociencia* . *Capítulo 1*, pp 2-12; *Capítulos 6 y 7*, pp 82-108. Disponible en <http://bibliografias.uchile.cl/2132>