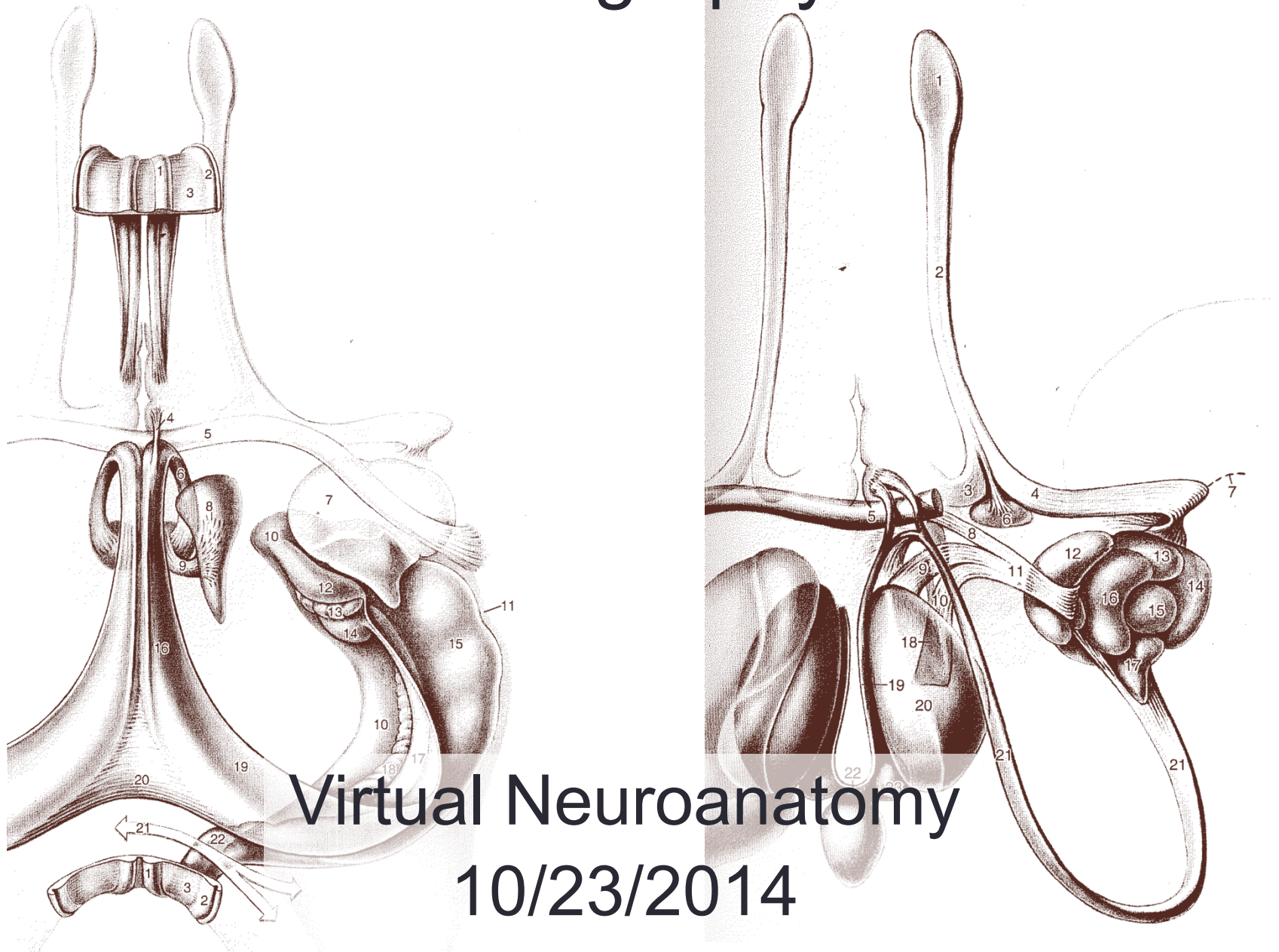


Fornix & Stria Terminalis: Tractography



Fornix: Afferents/Efferents

Hippocampus:
 10 – Subiculum
 12,14,15 – Ammon's
 Horn/Cornu Ammonis

Precommissural

Column

Body

Crus

Fimbria

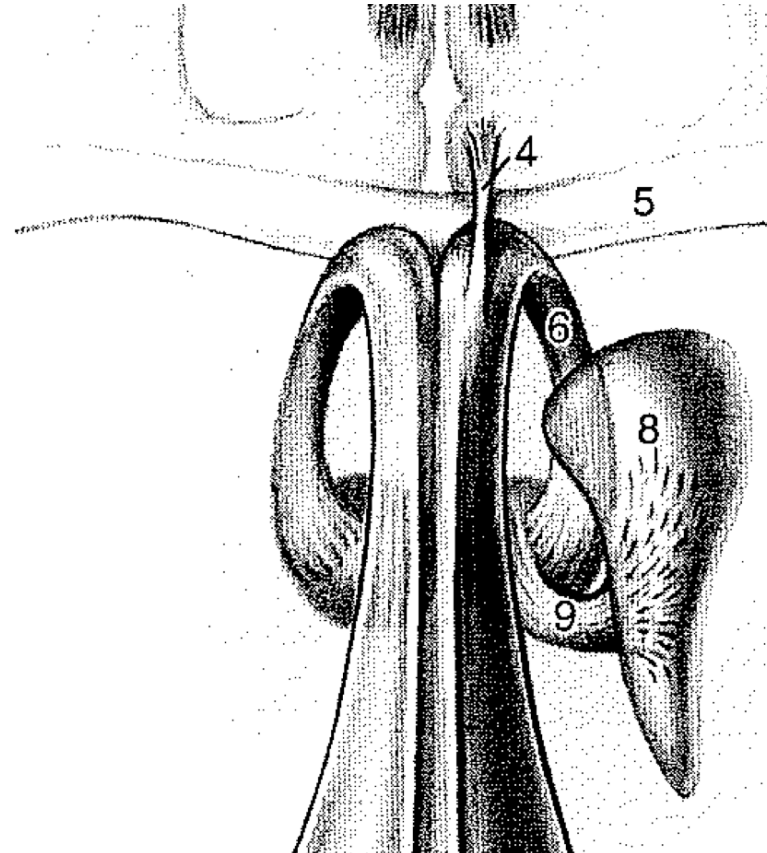
Nieuwenhuys 2007



Bruni and Montemurro 2009

Fornix: Afferents/Topography

1. Precommissural fornix – septal area, basal and medial forebrain, hypothalamic areas
2. Postcommissural fornix – mammillary bodies; anterior and midline thalamus; bed nucleus of the stria terminalis



Nieuwenhuys 2007

Fornix: Tractography

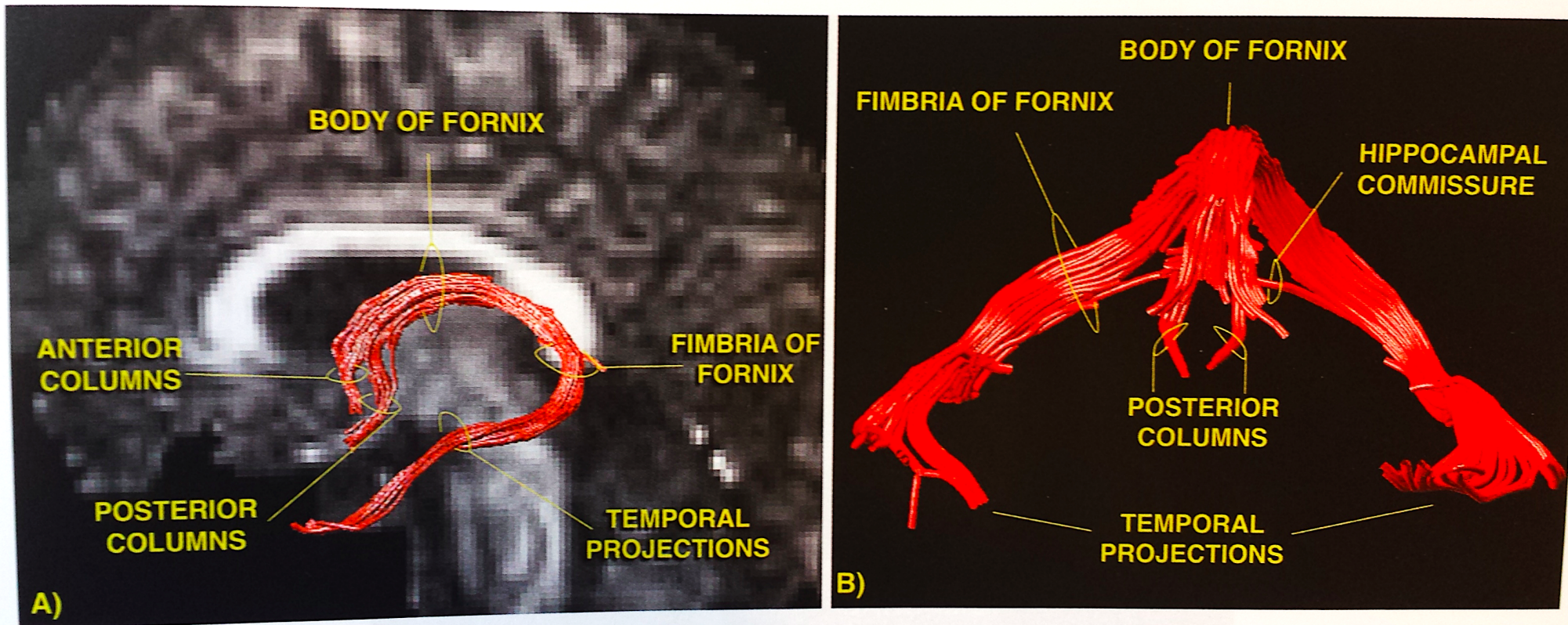


Figure 11.2 A) Lateral and B) anterior views of a tractographic reconstruction of the fornix. Note that the fibres of the hippocampal commissure run together with the temporal fibres of the fornix (Catani et al., 2002).

Stria Terminalis: Afferents/Efferents

Amygdala (12-17):

12 – Cortical

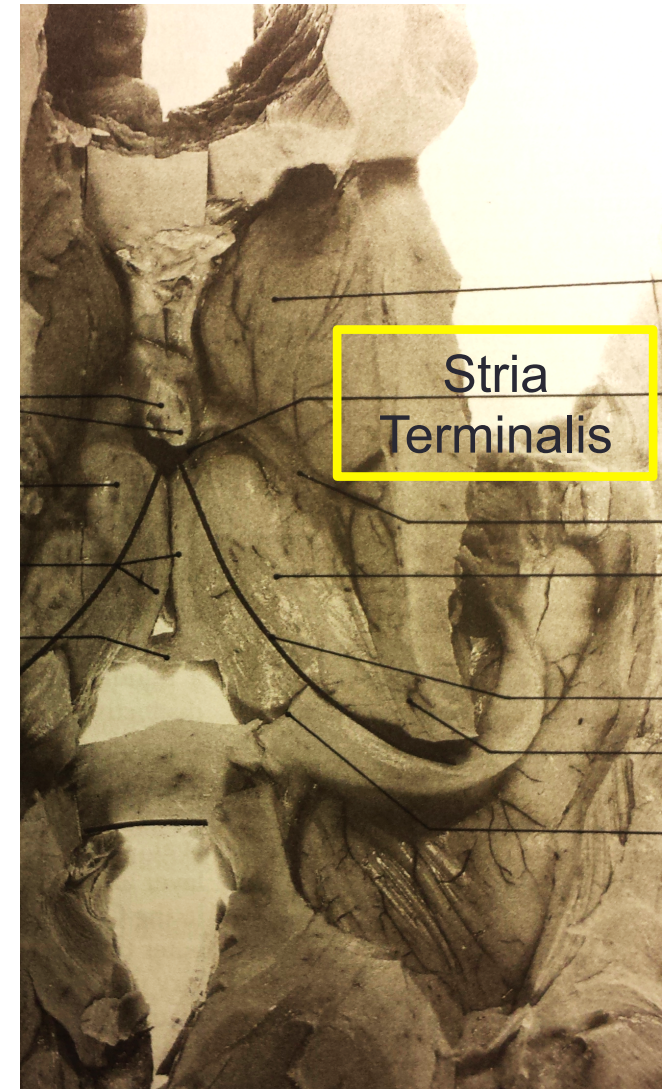
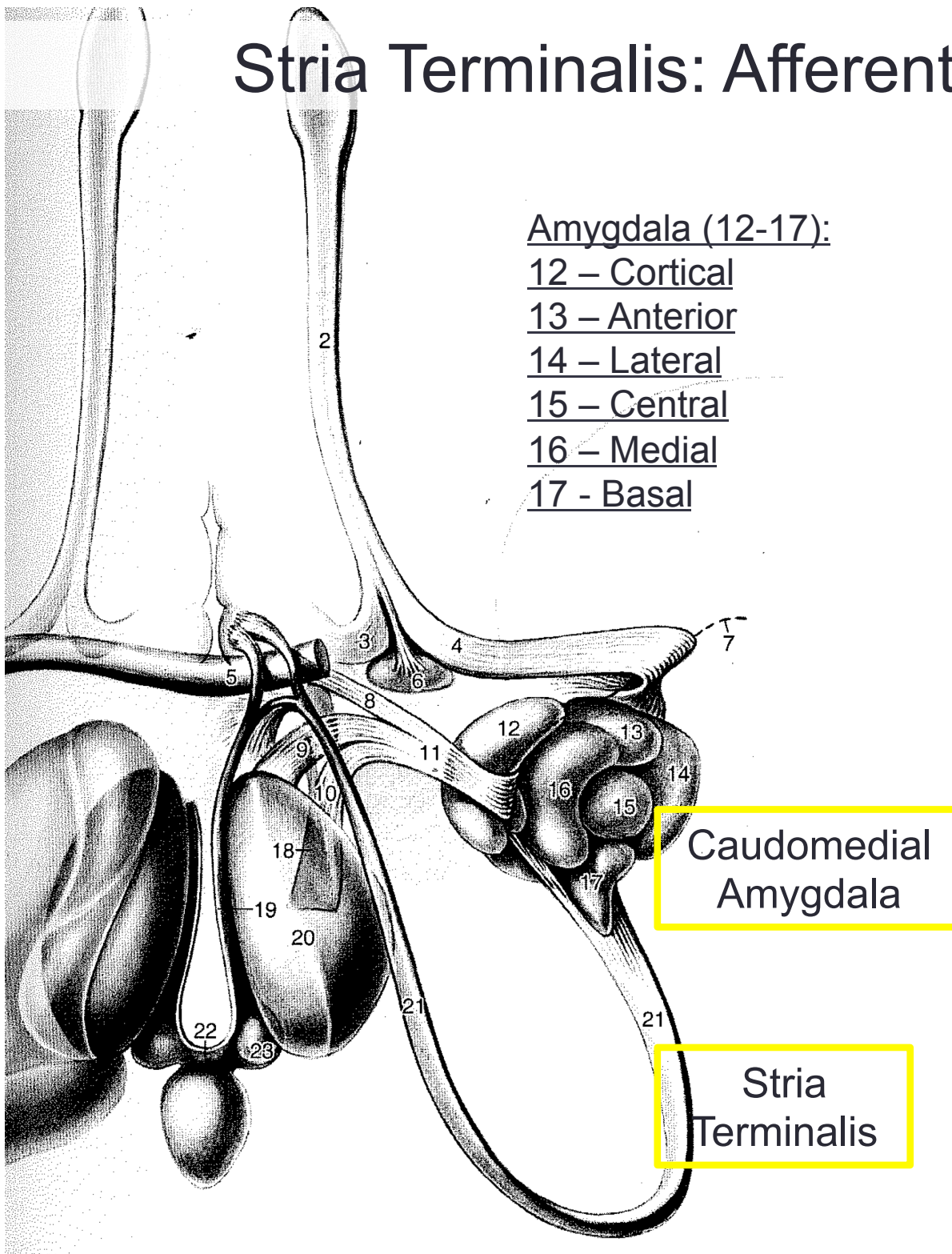
13 – Anterior

14 – Lateral

15 – Central

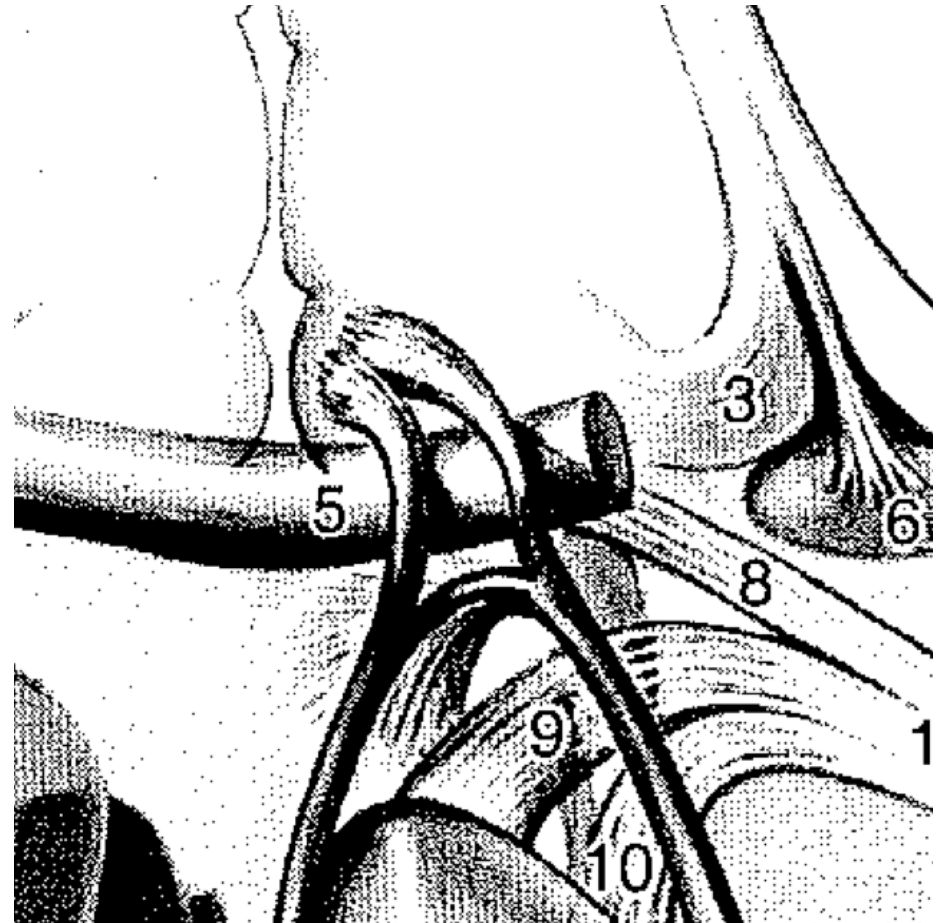
16 – Medial

17 – Basal



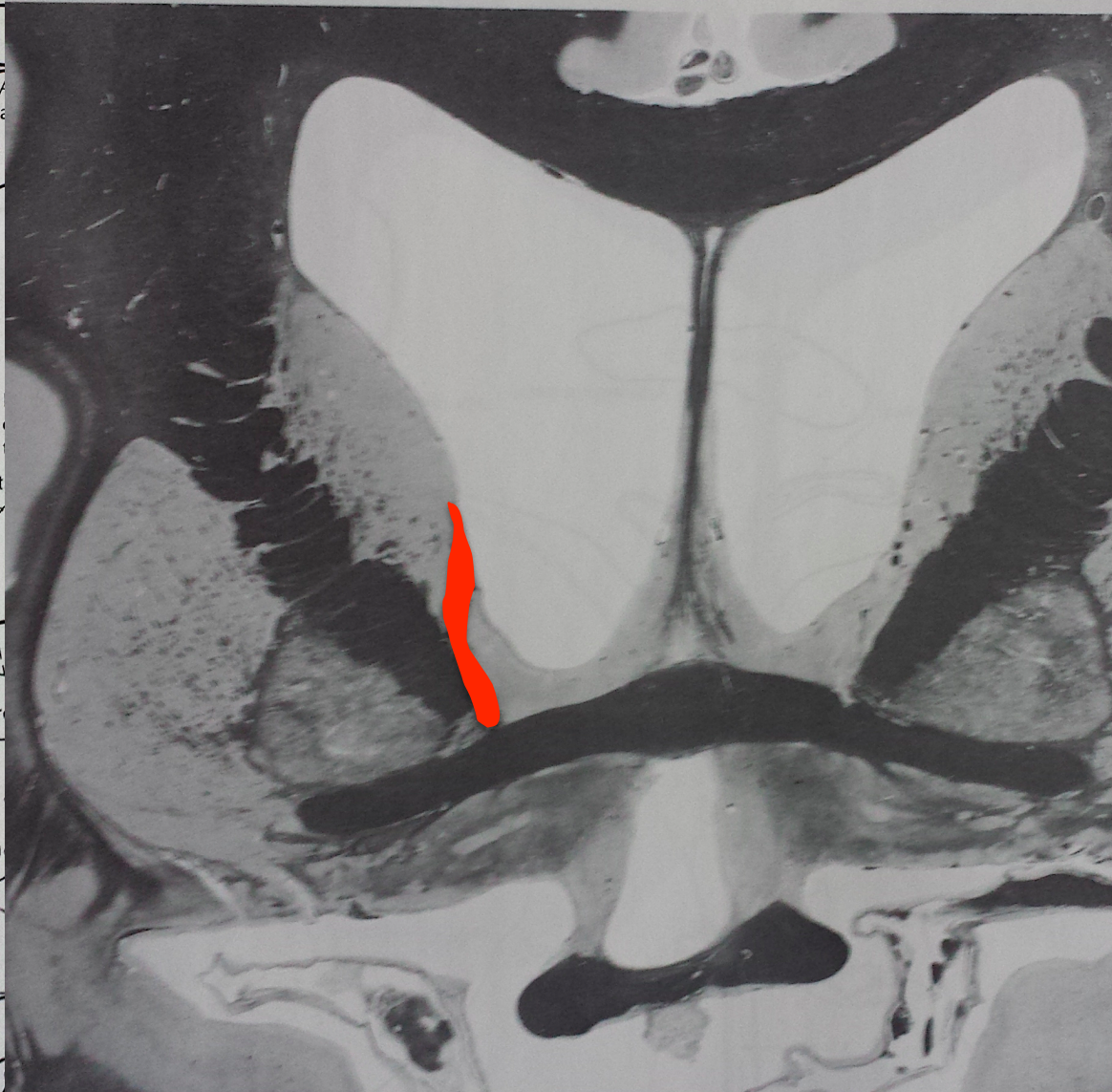
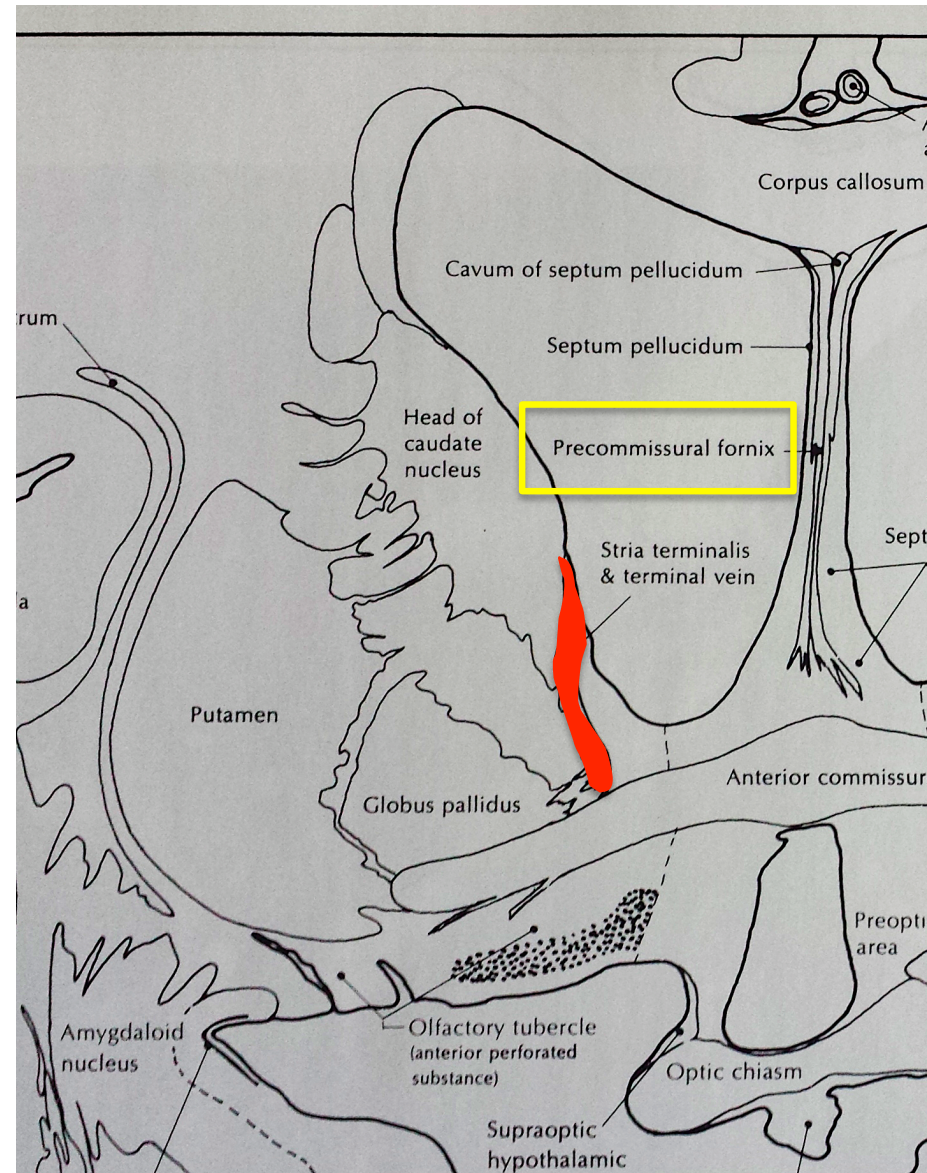
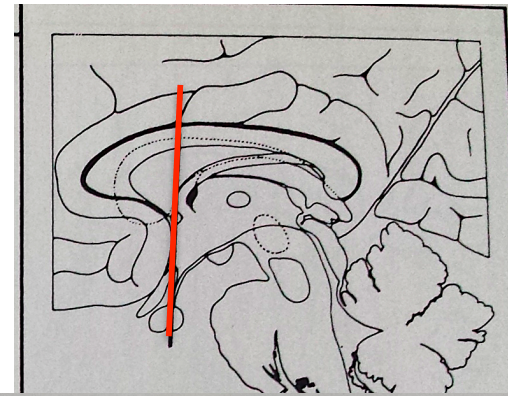
Stria Terminalis: Afferents/Topography

1. Precommissural/
supracommissural/dorsal
– BNST, hypothalamus
2. Commissural
3. Postcommissural/
preoptic/ventral -
hypothalamus



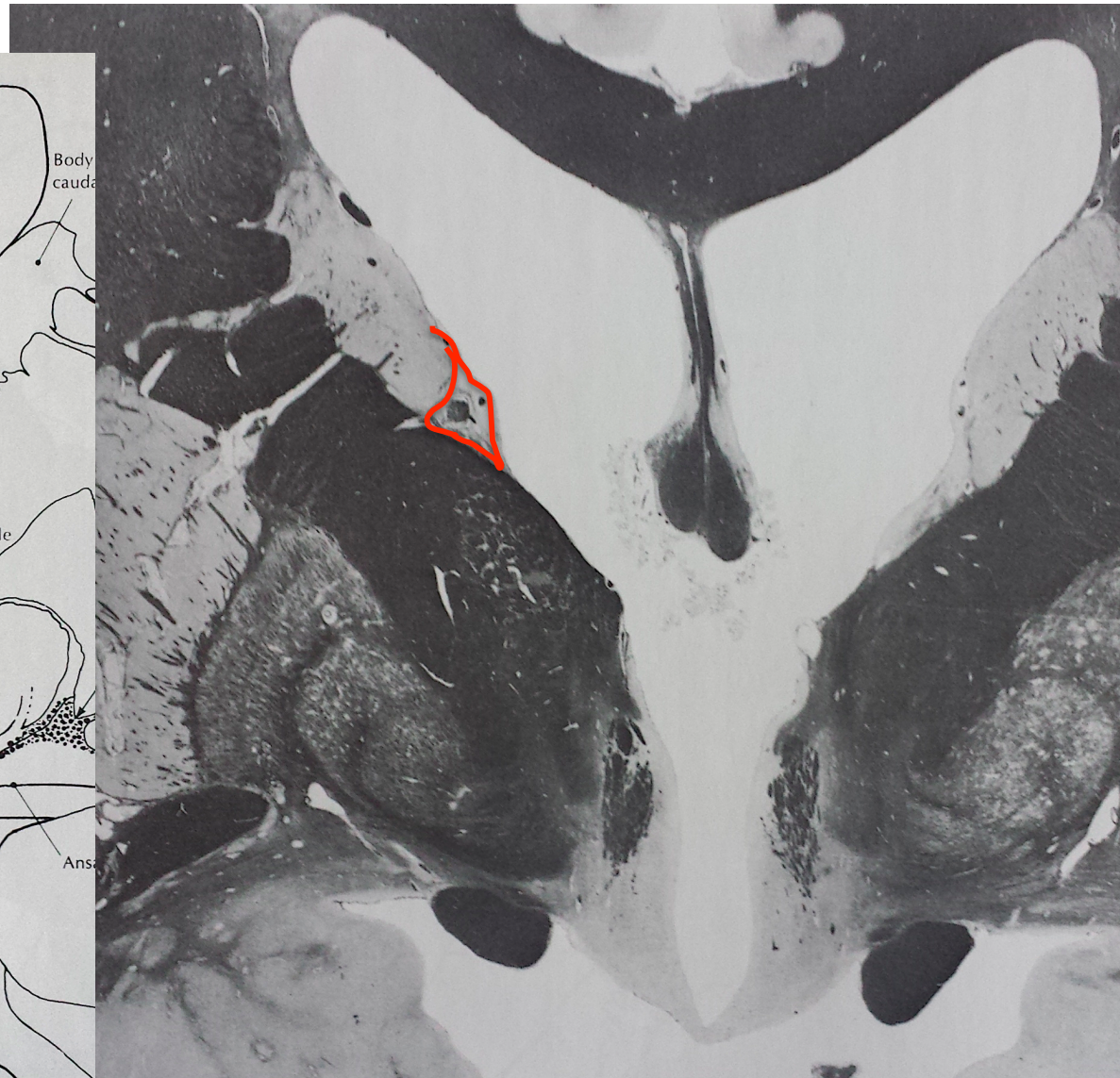
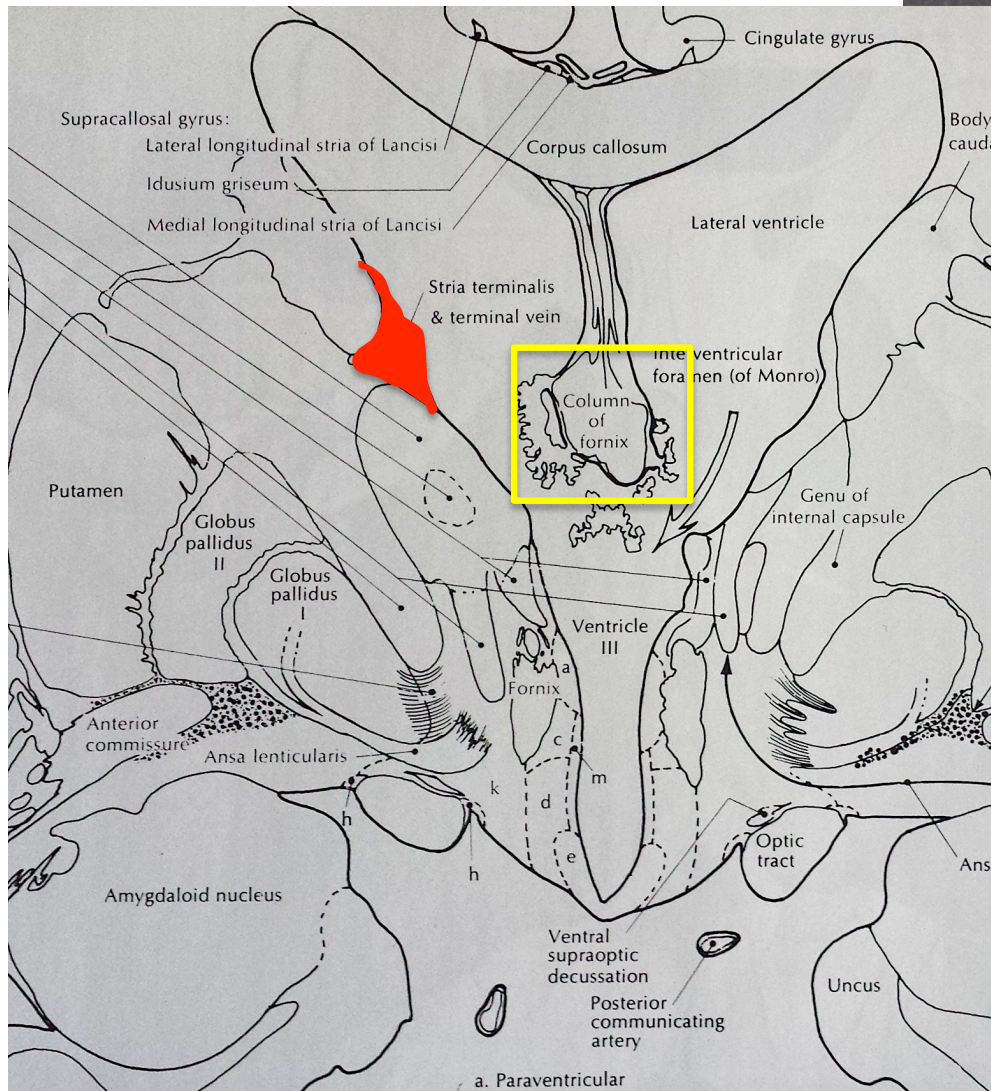
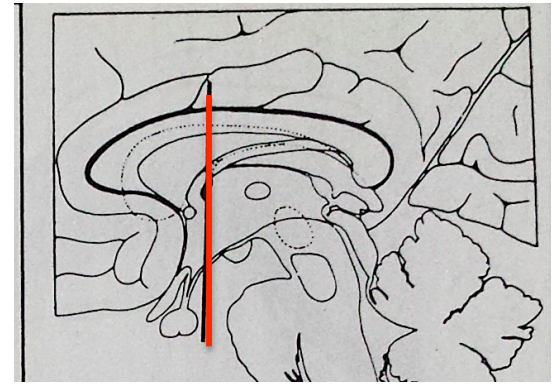
Stria Terminalis:

the following images are from
**Structure of the Human Brain, A Photographic
Atlas, 3rd ed., DeArmond, Fusco and Dewey**



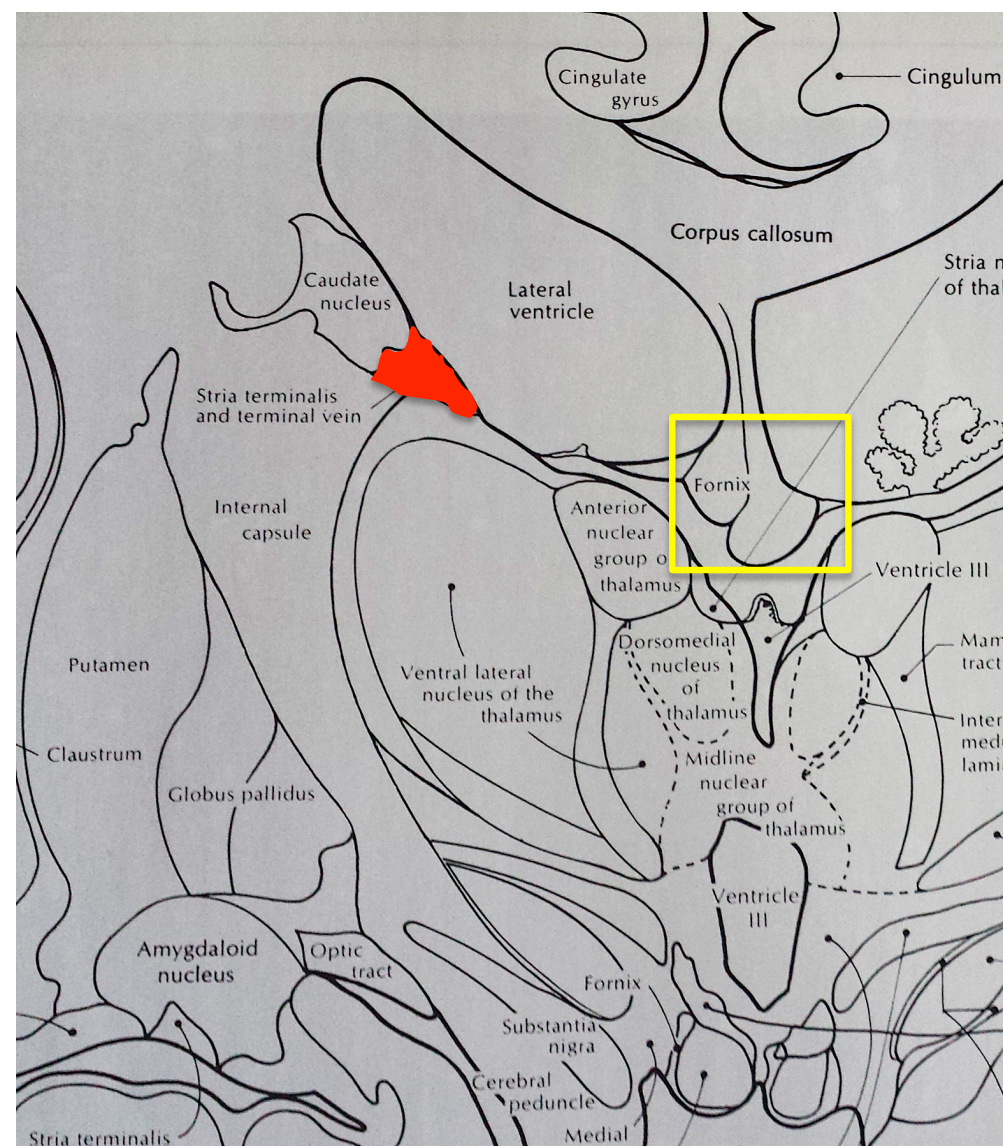
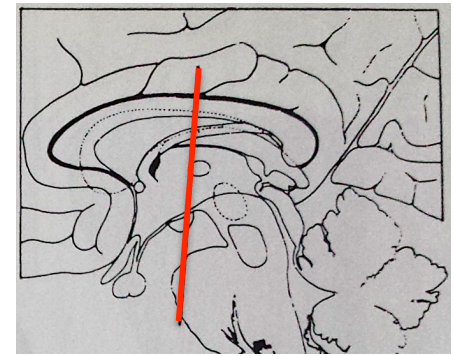
Stria Terminalis

Structure of the Human Brain

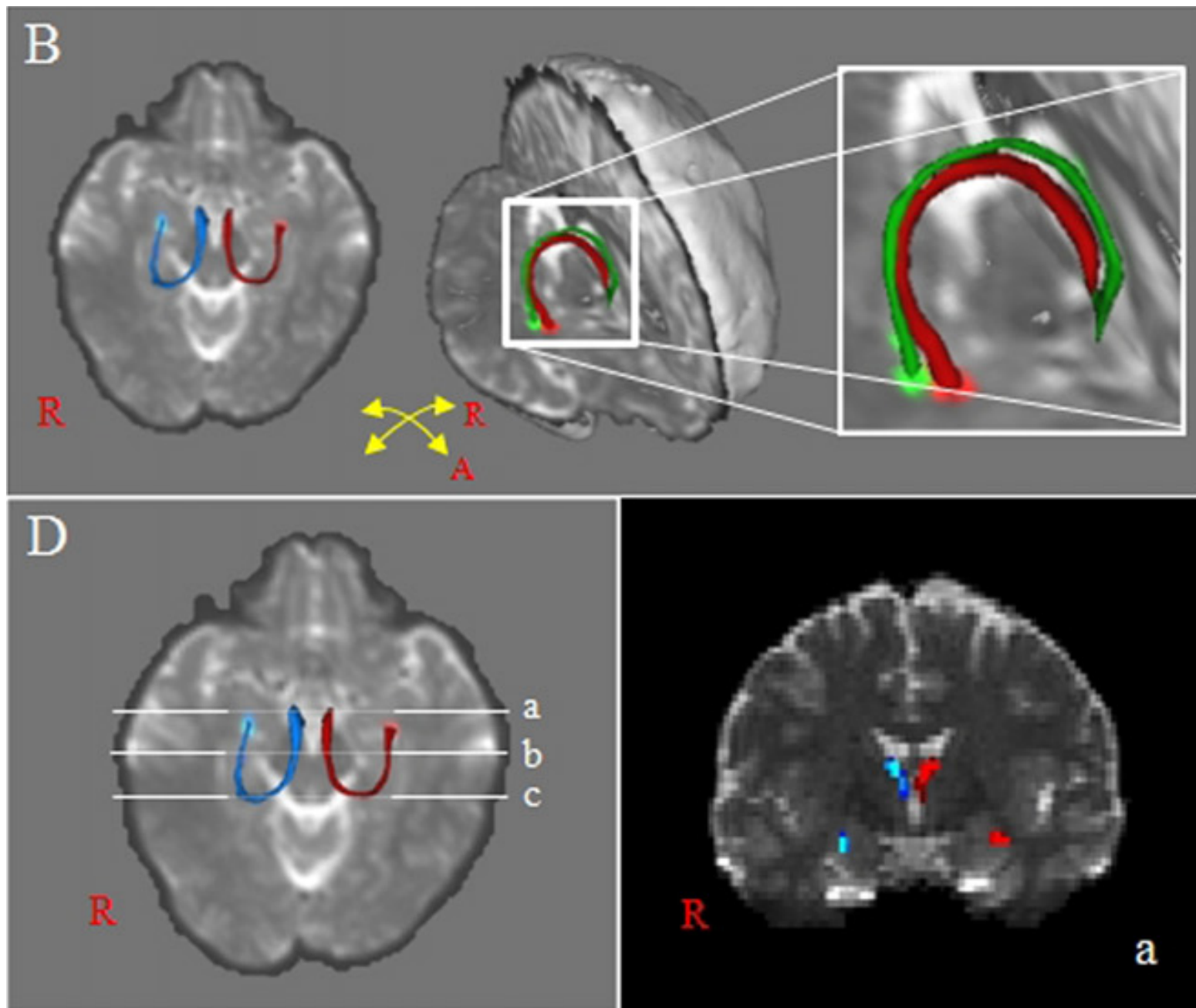


Stria Terminalis

Structure of the Human Brain



Stria Terminalis: Tractography



Tractography

- Load CMU-80
- Load T1 image posted at folder icon at top
- ROIs:
 - JHU:
 - Fornix (column and body)
 - Fornix (cres)/Stria terminalis (L and R)
 - Aal or SRI24_tzo
 - Amygdala (L and R)
 - Hippocampus (L and R)
- General
 - Save tracking parameters
 - Keep versions with deleted fibers