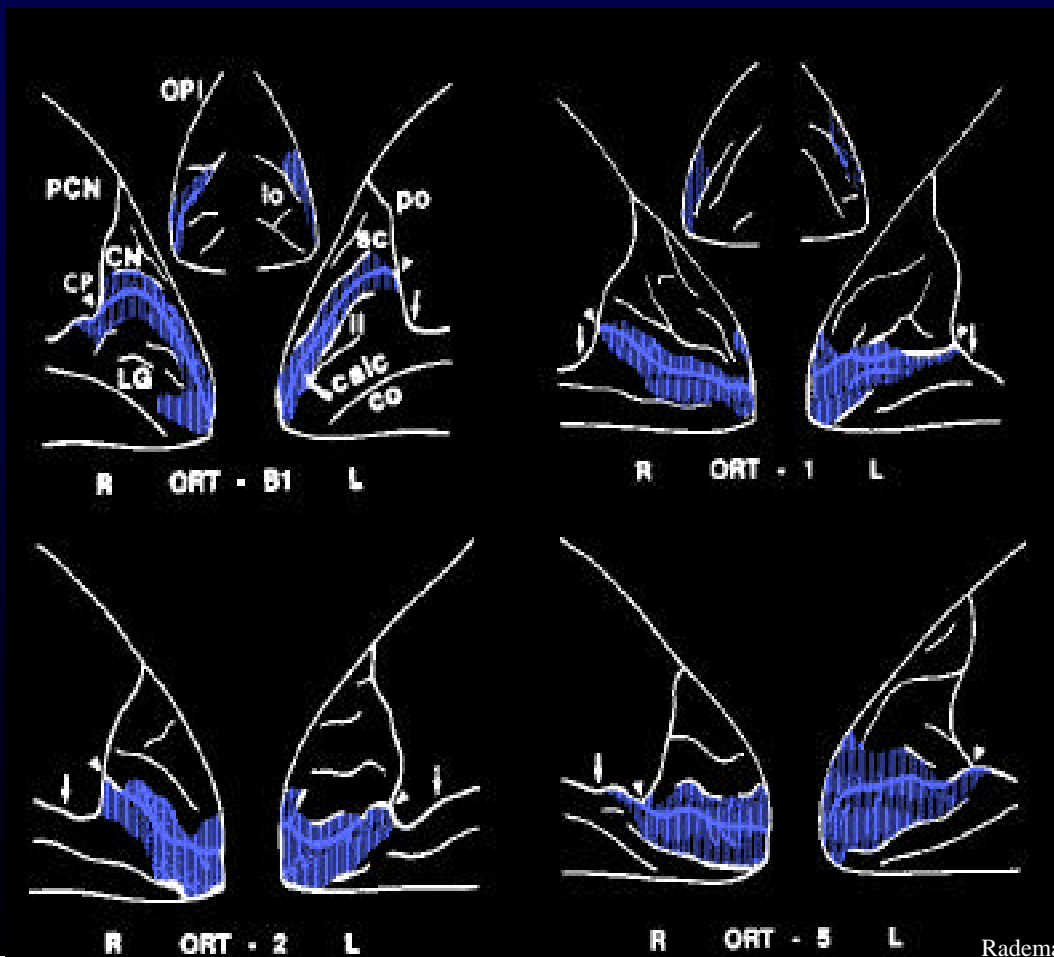
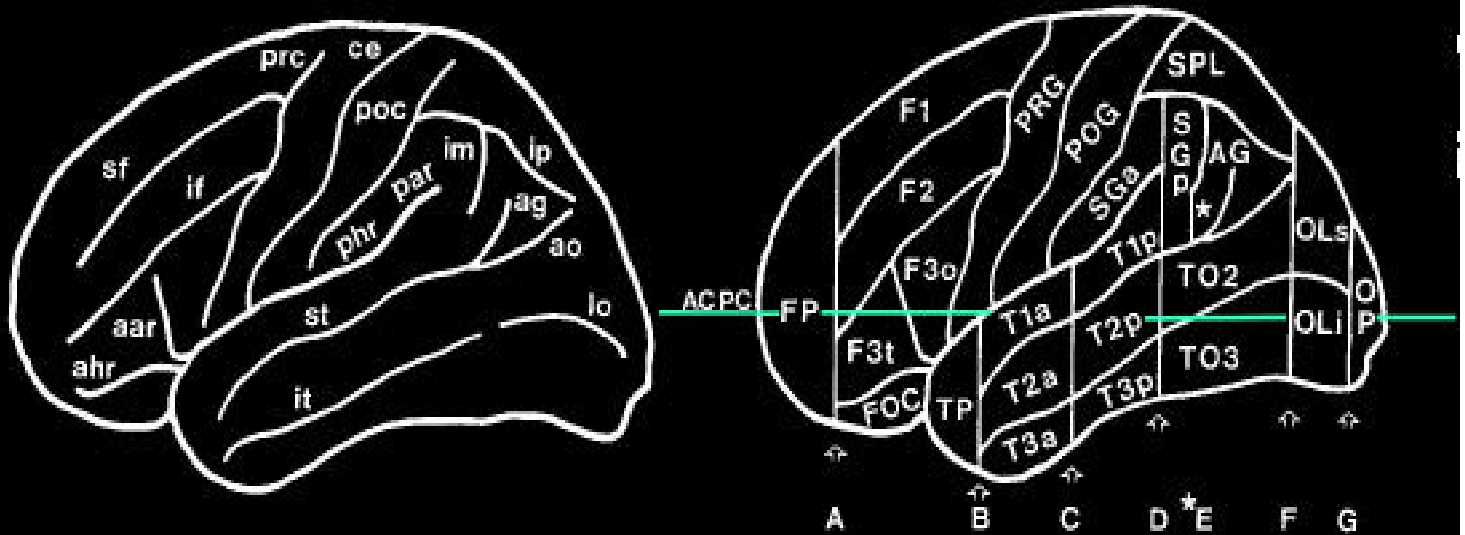


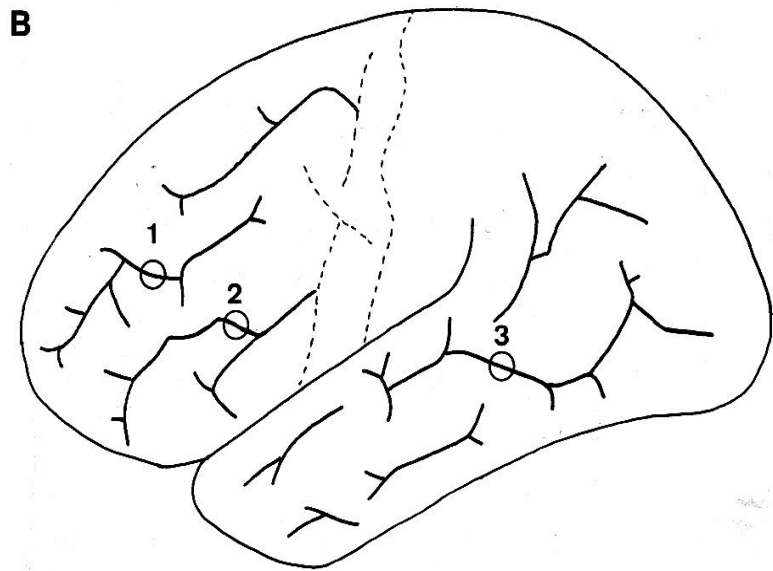
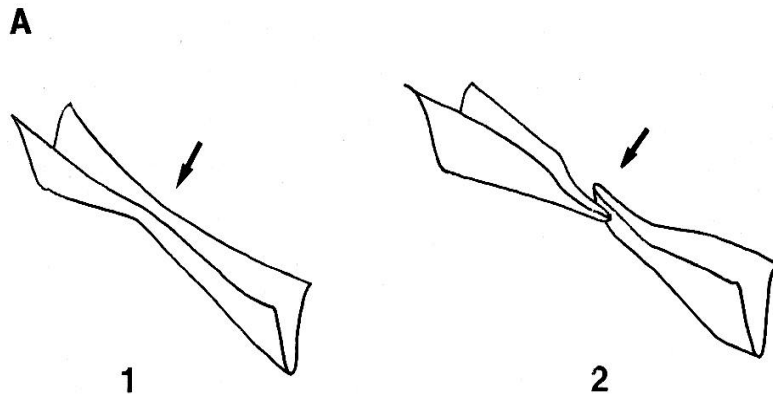
Anatomic Variability: Area 17



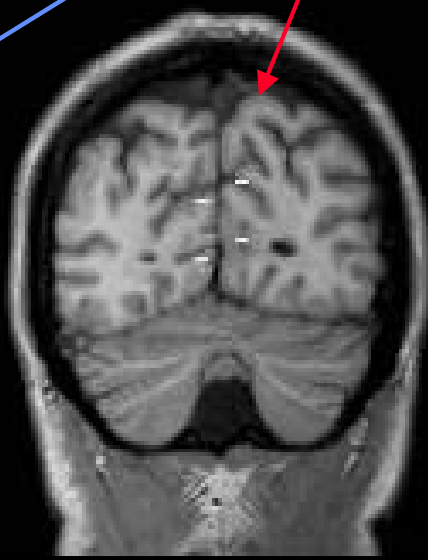
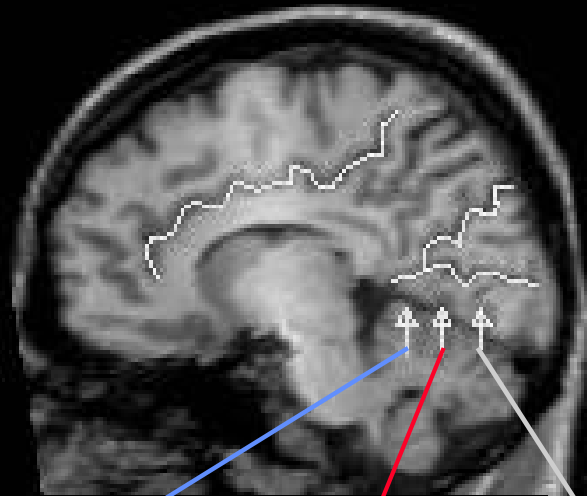
Limiting Fissures and Planes: Lateral View



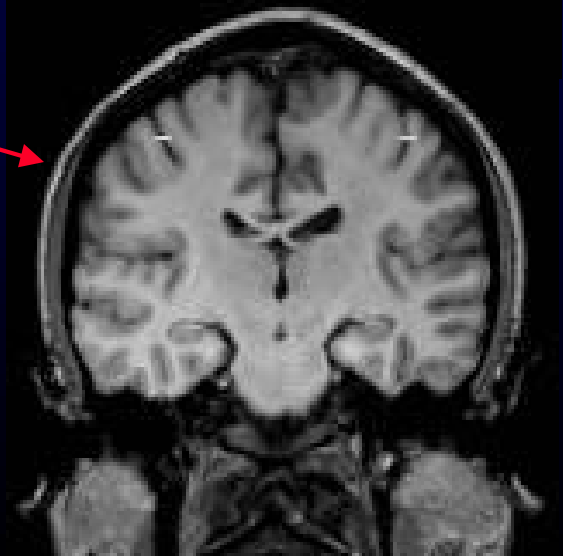
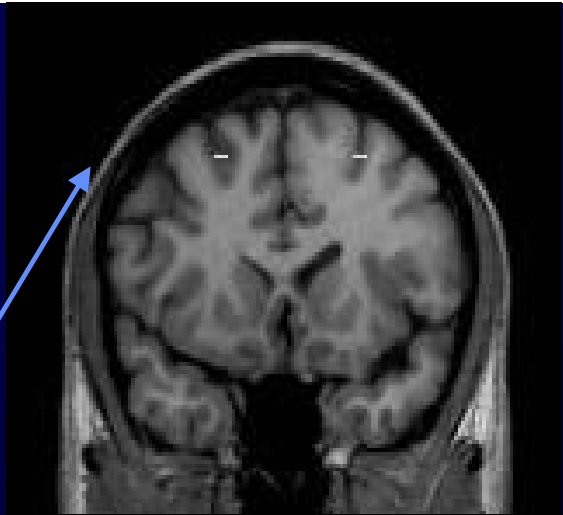
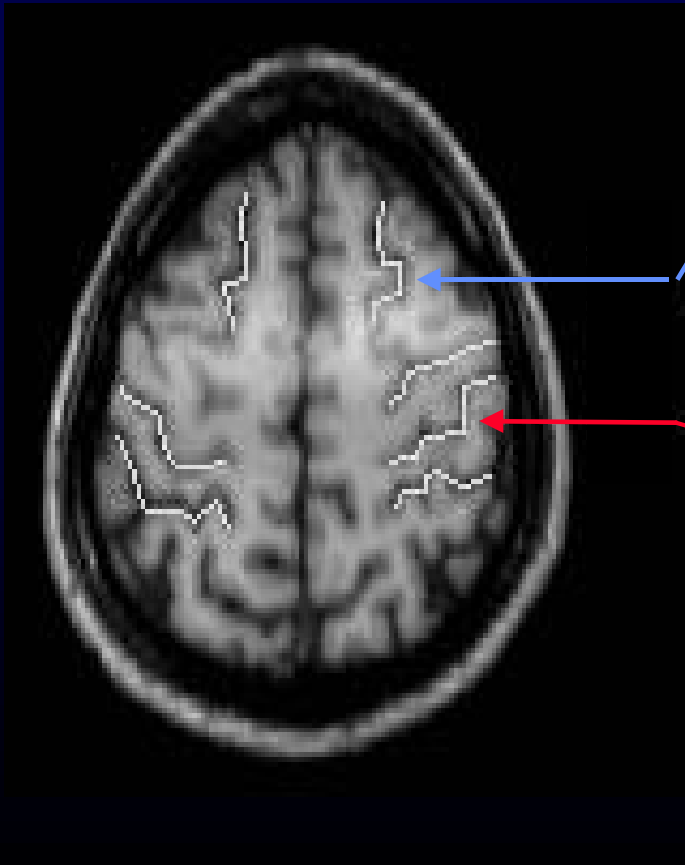
Sulcal Complexity



Anatomic Cross Referencing



Anatomic Cross Referencing



Cardviews Interface

Quit Load 3D Data Set otl Path
SULCI Write Sulci draw sulci hide big lines auto trans
Displayed Projection

NAV SEG REV
tile display

med orbitl
NAV base sbparietal

COR: 10 Transform
SAG: 135 Transform
AXI: 154 Transform



OVERLAY /Data/100/23/otl/135.otl
Prefix: _____ K z

10



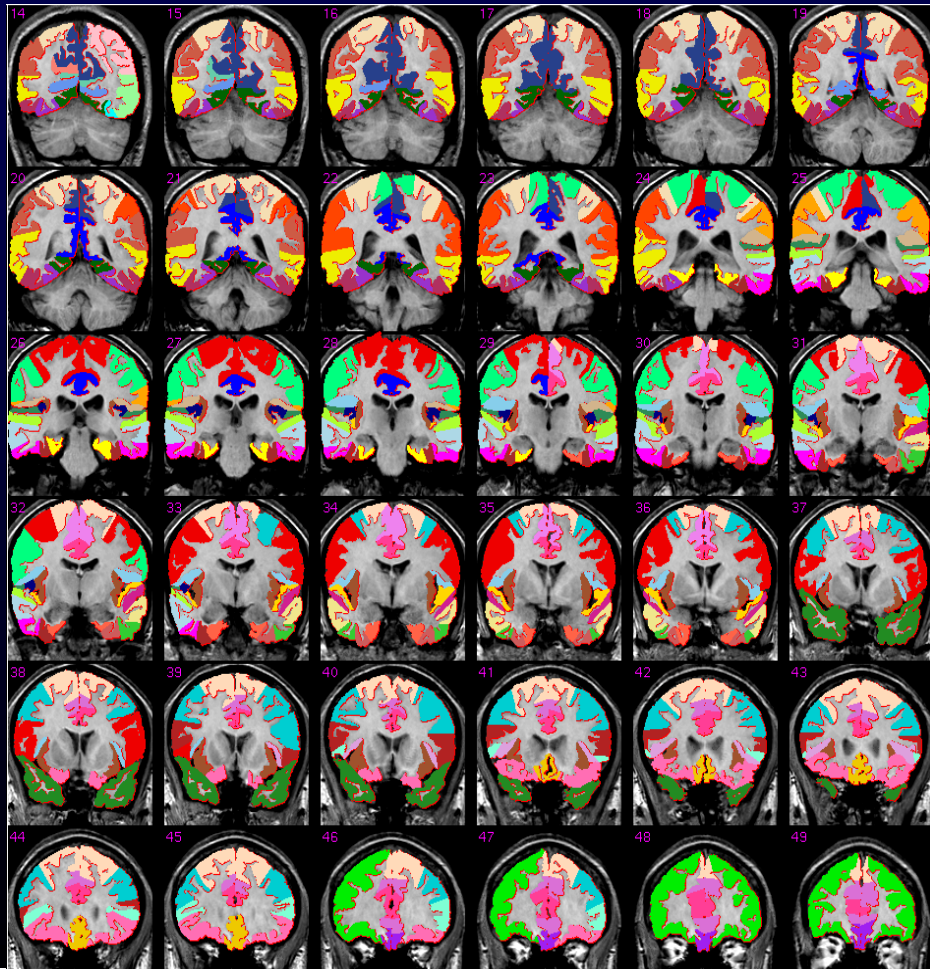
135

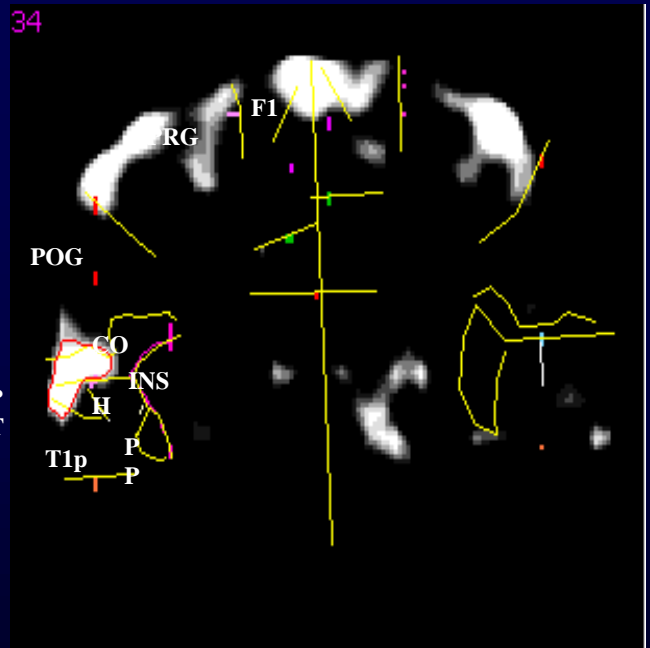
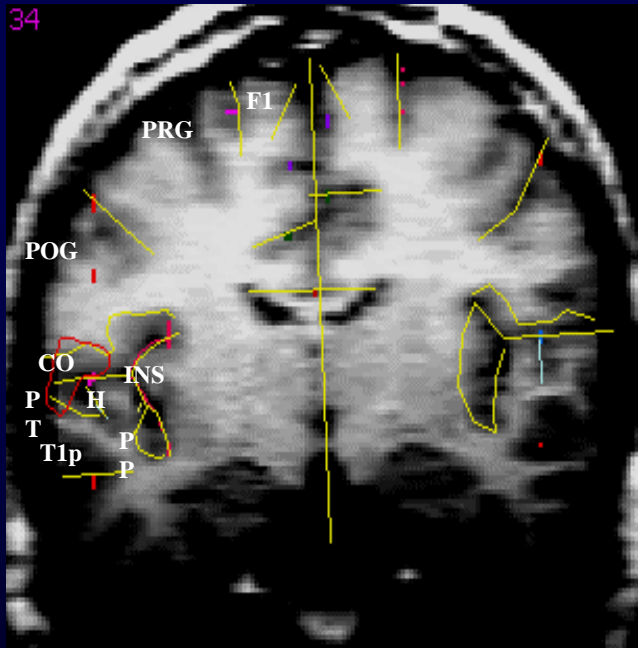


154



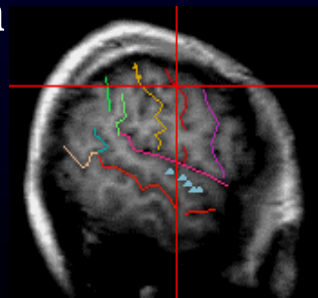
Results of Cortical Parcellation





Anatomic Scan

Functional Scan

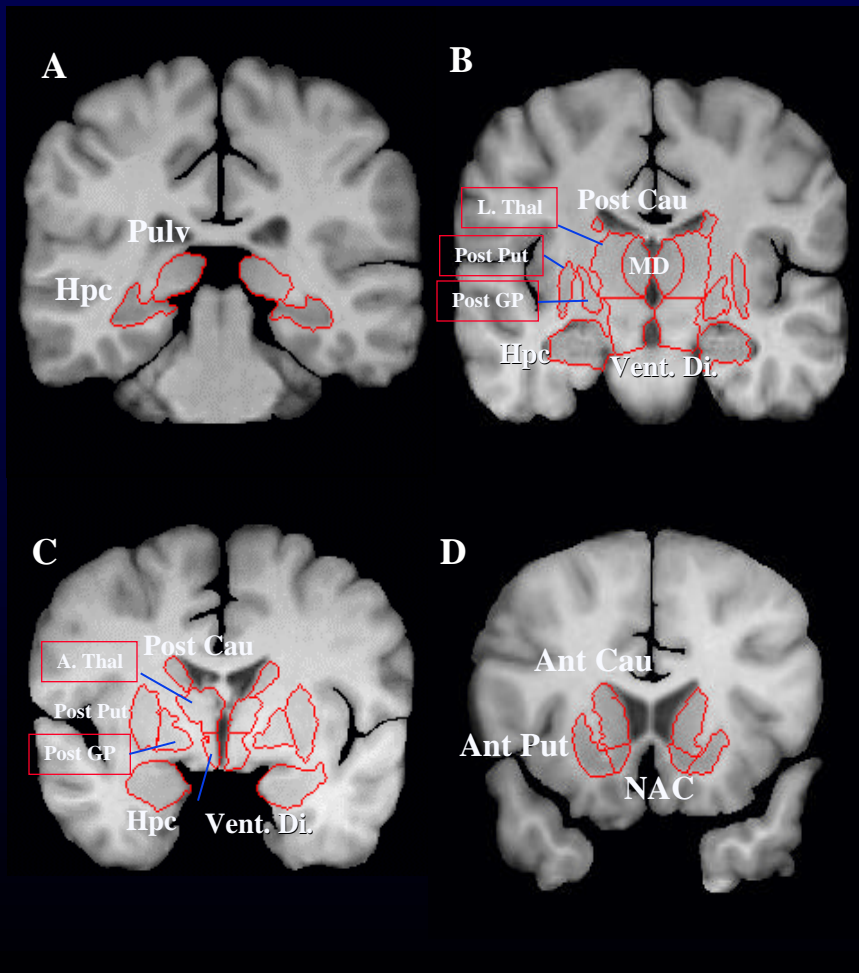
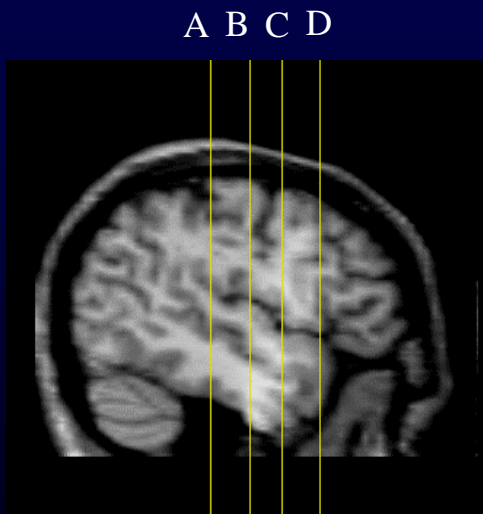


Sagittal Cross Reference

Example of localization of activation

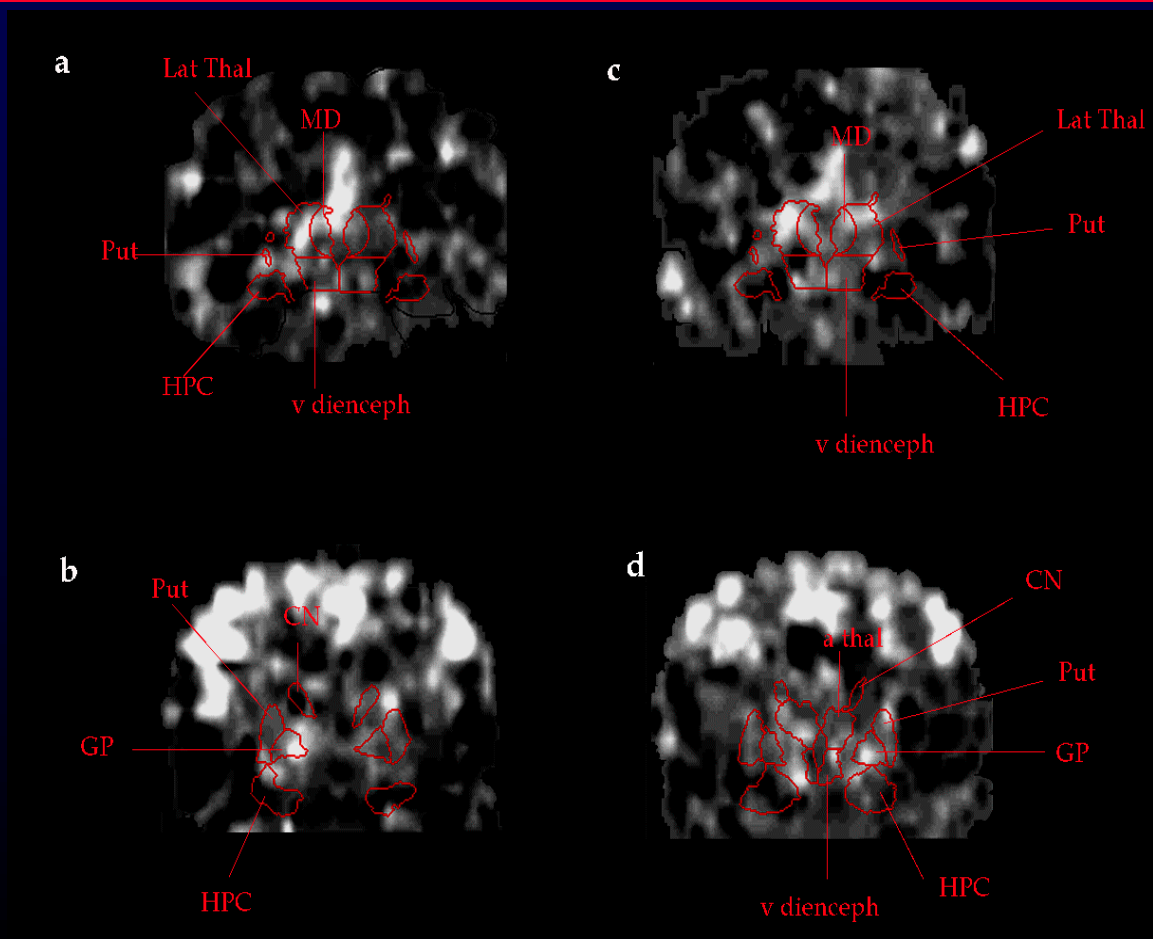
But What About White Matter...

Subcortical Parcellation



Subcortical Parcellation

Localization of Activation - Selective Attention fMRI Study



BrainMap Database

WWW Access-

<http://ric.uthscsa.edu/services>

As of 3/97:

217 Papers

733 Experiments

7508 Locations (Foci)



BrainMap Search & View

for the World-Wide-Web

General Information

You are logged in as user *guest* (Guest User), Userlevel: *Guest*.

The database currently contains:

217 papers, 733 experiments and 7508 locations

[Access the online help pages](#)

Database Access

[Create a new query](#)

[Apply for a full account with the Database](#)

*Copyright © Sept 1995 by [The Research Imaging Center](#)
University of Texas Health Science Center at San Antonio
Interface Design and Programming by
[Thomas Ganslandt \(ganslan@uni-muenster.de\)](mailto:ganslan@uni-muenster.de)*

BrainMap Data Entry

- Behavioral Criteria

BrainMap Search and View: [Menu](#) | [Help](#)

Add Behavioral Criteria

Behavioral Effects	Paradigm
<input type="button" value="AND"/> AND <input type="button" value="OR"/> OR	<input type="button" value="AND"/> AND <input type="button" value="OR"/> OR
Cognition, Attention Cognition, Language Cognition, Mathematics Cognition, Memory Disease Drug Emotion	Anxiety, Anticipatory Anxiety Attention, Visual Selective Attention Auditory Detection Colored 'Mondrian' Controls Chorus Reading Controls Solo Reading Cued movements

Stimulus	Response
<input type="button" value="AND"/> AND <input type="button" value="OR"/> OR	<input type="button" value="AND"/> AND <input type="button" value="OR"/> OR
, None , Objects Auditory, Abstracts Auditory, None Auditory, Objects Auditory, Words	Head-Neck Limb-Motor None Oculomotor Speech

BrainMap Data Entry

- Location Criteria

BrainMap Search and View: [Area](#) | [Help](#)

Add Location Criteria

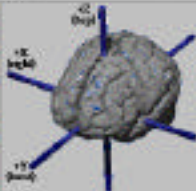
Electrode Coordinate Space

X = X-Range +/-

Y = Y-Range +/-

Z = Z-Range +/-

All fields have to be filled. Zero has to be written as 0.0



Erdmann's Area

1
03
11
12
13
17
18

Functional Area

VL
A2
CIC
M1
SMA
S1
S2

Conventional Name

superior parietal
??-no data
Broca homologue
Broca's area
Brocas Area
Brocas area
Caudate

Lobar Outline

Lobe

Frontal Lobe

Limbic Lobe

Occipital Lobe

Parietal Lobe

Temporal Lobe

Cerebellum

Surface

Basal Surface

Medial Surface

Lateral Surface

AP Axis

Anterior

Middle

Posterior

SI Axis

Superior

Middle

Inferior

ML Axis

Medial

Middle

Lateral

BrainMap Data Entry

- Protocol Criteria

BrainMap Search and View: [Menu](#) | [Help](#)

Add Protocol Criteria

Modality	Measurement Variable
<input type="button" value="AND"/> ERP MRI-ERP PET PET-MRI PET/ERP SPECT/MRI fMRI	<input type="button" value="AND"/> CBF CBV CMRGlu Electrical potentials rCBF rCMRGlu

Tracer

(C11) fluoromethane (F18) fluoro-deoxyglucose (Tc99) HMPAO O-15 CO2 18-FDG FDG Gd.DTPA 2-

Lab

Clarke Institute - Toronto Good Samaritan-Phoenix, Arizona Hammersmith Hos Hammersmith Hospital - London Harvard University/Massachusetts General Hospital Heinrich-Heine University - Dusseldorf Johns Hopkins University
--

BrainMap Data Entry

- Reference Criteria

BrainMap Search and View [Home](#) | [Help](#)

Add Reference Criteria

Author

AND

- Alchana S
- Alford L
- Aligiani A
- Alkhatib S
- Alkon T
- Alkon J H
- Alpert H H

First author only

Journal

AND

- Acta Neurologica Scandinavica
- American Journal of Psychiatry
- Annals of Neurology
- Archives of General Psychiatry
- Archives of Neurology
- Biological Psychiatry
- Brain

Journal

AND

- Acta Neurologica Scandinavica
- American Journal of Psychiatry
- Annals of Neurology
- Archives of General Psychiatry
- Archives of Neurology
- Biological Psychiatry
- Brain

Keyword

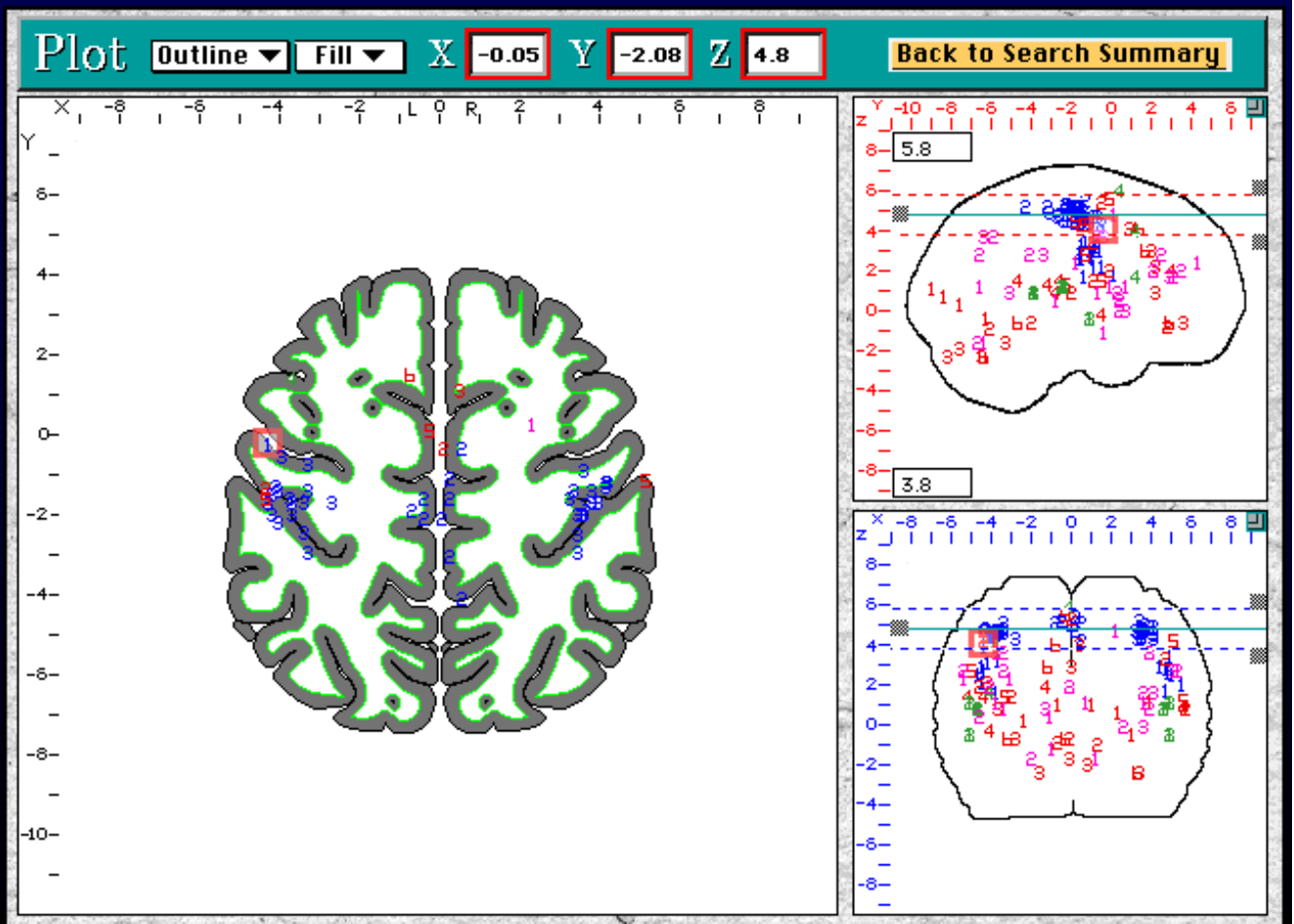
AND

- Bipolar Disorder
- Broca's area
- CT
- Fenfluramine
- Functional MRI
- MRI
- Motor cortex

Keyword in Title

AND

Example Search Results



Brain Atlas for Functional Imaging Clinical and Research Applications

Version 1.0



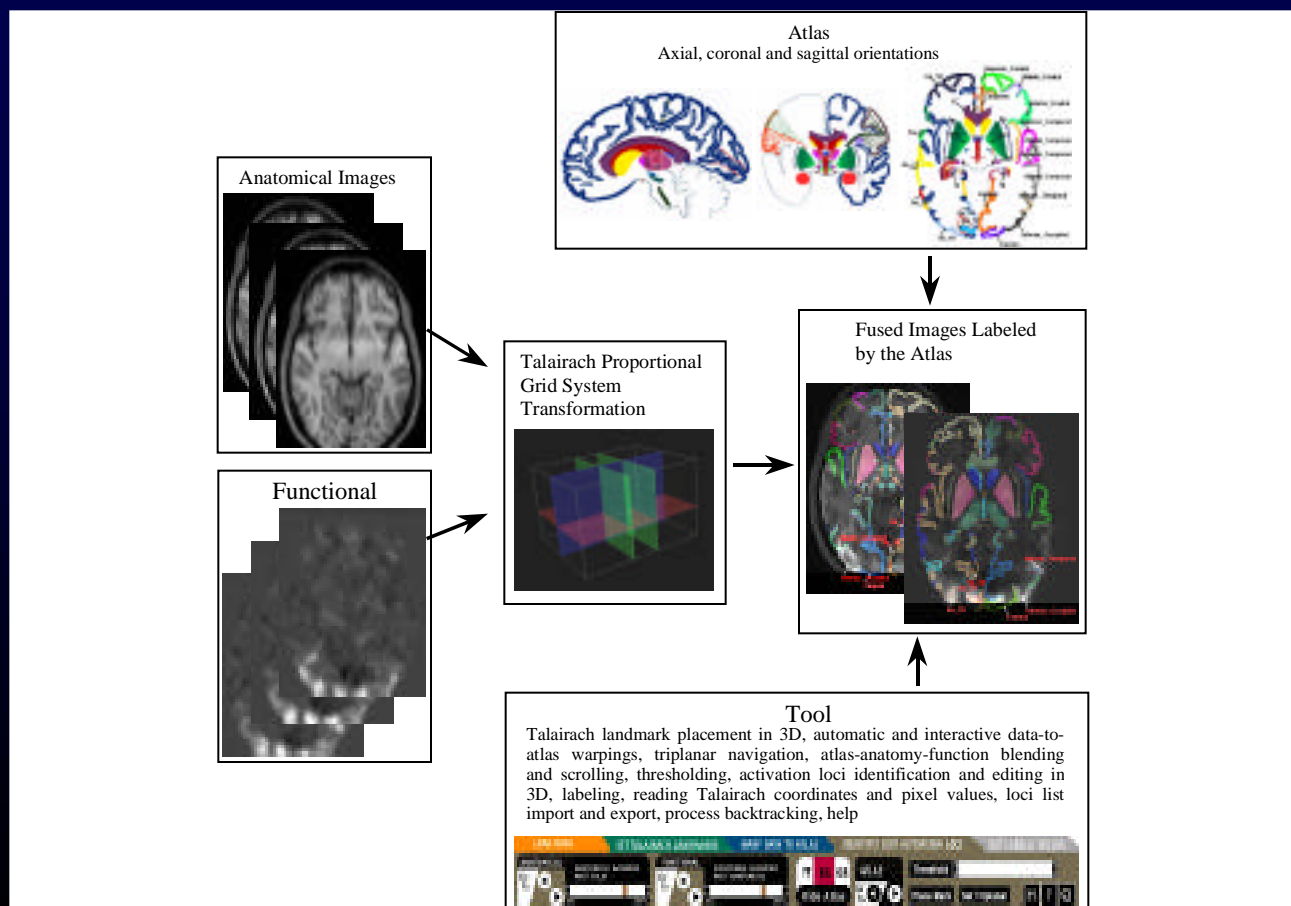
Wieslaw L. Nowinski and A. Thirunavuukarasuu
Biomedical Lab, Kent Ridge Digital Labs, Singapore

David N. Kennedy
Massachusetts General Hospital, USA



Singapore, 2000

Brain Atlas for Functional Imaging



Brain Atlas for Functional Imaging

LOAD DATA SET TALADRACH LANDMARKS WARP DATA TO ATLAS IDENTIFY/ EDIT ACTIVATION LOCUS GET LABELS/ VALUES

ANATOMICAL ANATOMICAL ELEMENTS FUNCTIONAL FUNCTIONAL ELEMENTS

Go To 0% 100% Go To 0% 100%

TT BG GB ATLAS Hide Atlas Go To Get Triplanar H ? Q

Anatomical: anat_ax_2518: 0.00mm Anterior TTBBs: / +1mm
 Functional: func_ax_2518: 0.00mm

Right Left

Superior TTc: / -65mm

Right Left

Inferior Flip Atlas

Superior TTc: / +95mm

Anterior Posterior

Right Left

Inferior Flip Atlas

Atlas Grid
 brodmann_18 (ba_18), A: 128 F: 212

	Clear List	Delete Locus	Save List
01	(R-L) (P-A) (I-S)		
01	52.0 -66.6 1.6		
	L:ba_37; inferior_T		
	A: 104 F: 121		
02	30.9 -99.9 0.0		
	L:ba_18; inferior_C		
	A: 145 F: 139		
03	13.6 -59.3 0.0		
	L:ba_17; Duneau		
	A: 155 F: 176		
04	-12.2 -82.9 0.0		
	L:ba_17; Unguis		
	A: 193 F: 197		
05	-35.0 -94.3 0.0		
	L:ba_19; inferior_C		
	A: 128 F: 212		
06	49.1 -70.0 6.4		
	L: Middle_Occipital		
	A: 110 F: 151		
07	27.7 -97.9 6.4		
	L:ba_18; Middle_O		
	A: 124 F: 171		

	Clear Labels	Full Name
		brodmann_18 (ba_18)
		brodmann_19 (ba_19)
		brodmann_21 (ba_21)
		brodmann_22 (ba_22)
		brodmann_24 (ba_24)
		brodmann_27 (ba_27)
		brodmann_30 (ba_30)
		brodmann_32 (ba_32)
		brodmann_37 (ba_37)
		brodmann_38 (ba_38)
		brodmann_45 (ba_45)



How The Brain Works