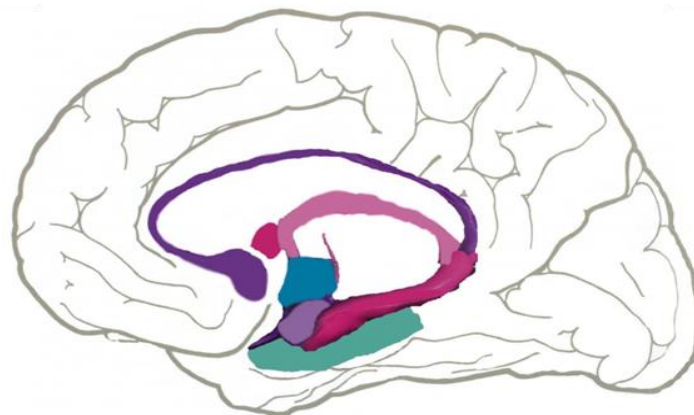




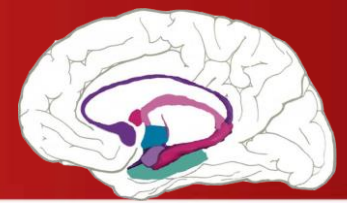
TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER™
EL PASO

Southwest Brain Bank



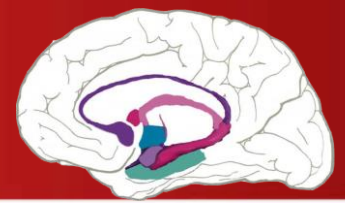
Texas Tech University Health Sciences Center
Paul L. Foster School of Medicine
Department of Psychiatry

Peter Thompson, M.D., M.S. Director
Angelica Forero, M.A. Senior Research Scientist
Matthew Fagan, M.S. Senior Research Scientist
Katherine Najera, M.S. Research Aide



The Southwest Brain Bank occupies lab space in the Medical Sciences Building at TTUHSC El Paso, Paul L. Foster School of Medicine. We also have a -80°C freezer room, and a separate space for the dissection and processing of donated tissue.





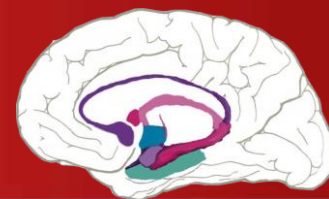
Regulation

State of Texas Anatomical Review Board

- Health and Safety Code Title 8. Death and Disposition of the Body. Subtitle B. Disposition of the Body Chapter 691. Anatomical Board of the State of Texas.
- Subchapter B. Donation and Distribution of Bodies and Anatomical Specimens.
- 691.022. General duties. (a) The board shall distribute bodies and anatomical specimens to institutions authorized to receive them.

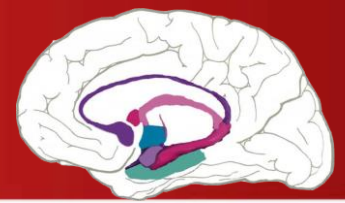
TTUHSC El Paso-Institutional Review Board

- NOK Interview: Protocol # E16046.
- Longitudinal Study: Protocol # E16046.



Tissue Collection Programs

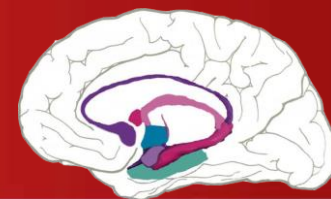
- Mental Illness Brain Bank: schizophrenia, depression, bipolar disorder, Post Traumatic Stress Disorder (PTSD), suicide, alcohol abuse. Normal controls are also collected.
- Longitudinal Donor Program: Individuals can enroll in this program to donate their brain to the SWBB after death.



Tissue Collection Sites

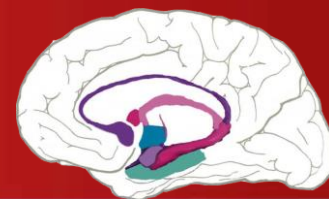
- Bexar County Medical Examiner's Office (Dr. Frost)
- El Paso County Medical Examiner's Office (Dr. Rascon)





Focus of Research

- Bipolar Disorder
- Post Traumatic Stress Disorder (PTSD)
- Suicide
- Schizophrenia
- Depression
- Alcoholism
- Drug Addiction
- Frontotemporal Lobar Degeneration (Dementia)



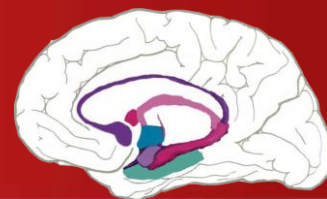
Inclusion/Exclusion Criteria

Inclusion Criteria:

- Mental Illness.
(Depression, Bipolar, Suicide, PTSD)
- Normal Controls.
- Postmortem Interval <48 hrs.
- Age <85 yrs.
- Next-of-kin (NOK) consents to donation and interview.
- Medical Examiner releases brain.

Exclusion Criteria:

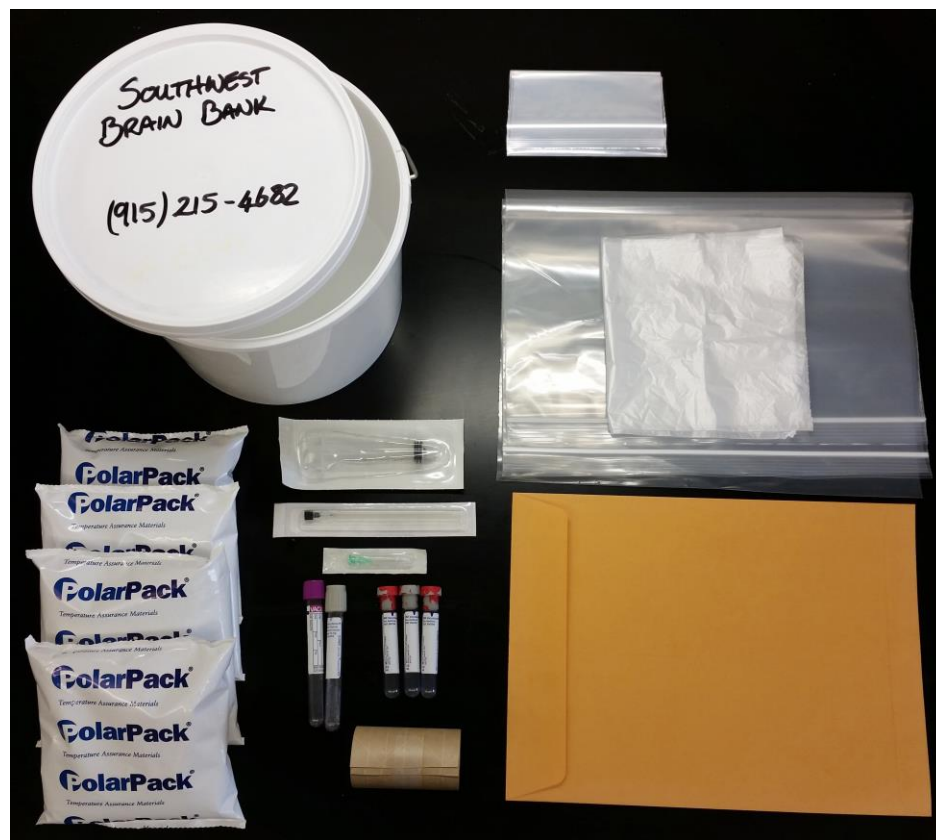
- History of seizures.
(childhood febrile and alcohol withdrawal case by case)
- On ventilator >24 hrs.
- Contagious bacterial or viral infection.
(Hep A, C; meningitis; HIV; SARS; etc.)
- Brain hemorrhage, infarcts, tumors.
- Decomposed.
- Sepsis.

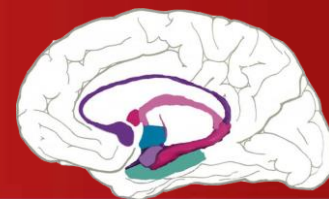


Tissue is extracted at on-site and, for locations outside of El Paso, packed and shipped to our lab. Donations are shipped by the quickest possible route and arrive at the lab the same day.

The shipping materials include a watertight container, ice packs, watertight bags, and collection tubes for additional blood and cerebrospinal fluid (CSF).

Once received, the tissue is processed immediately for storage.

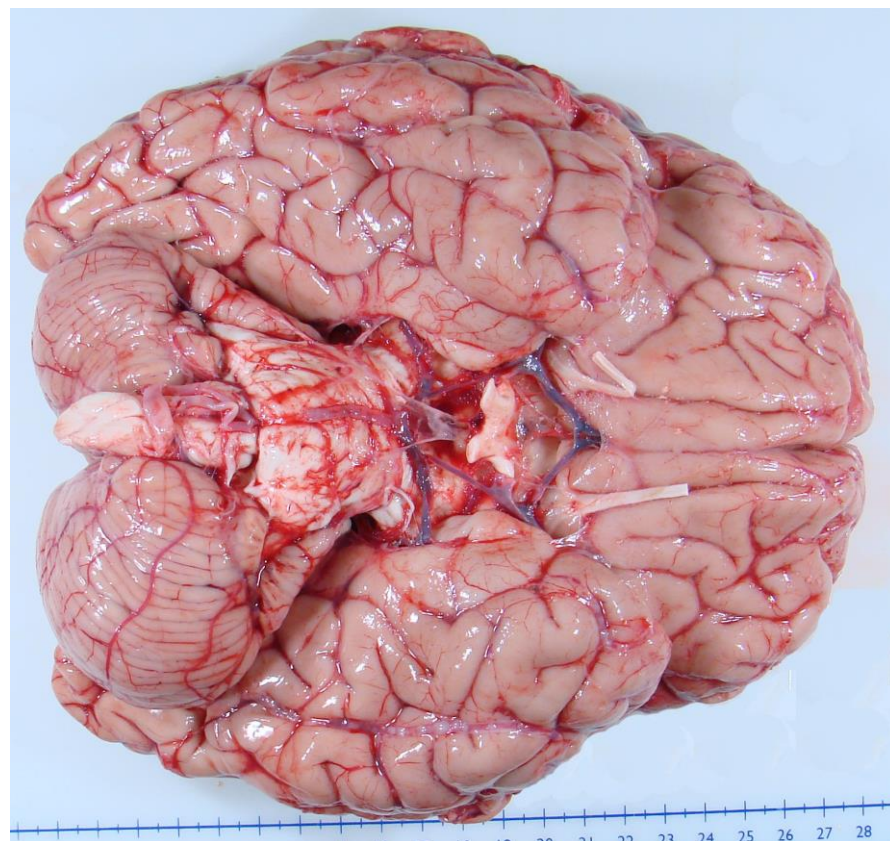
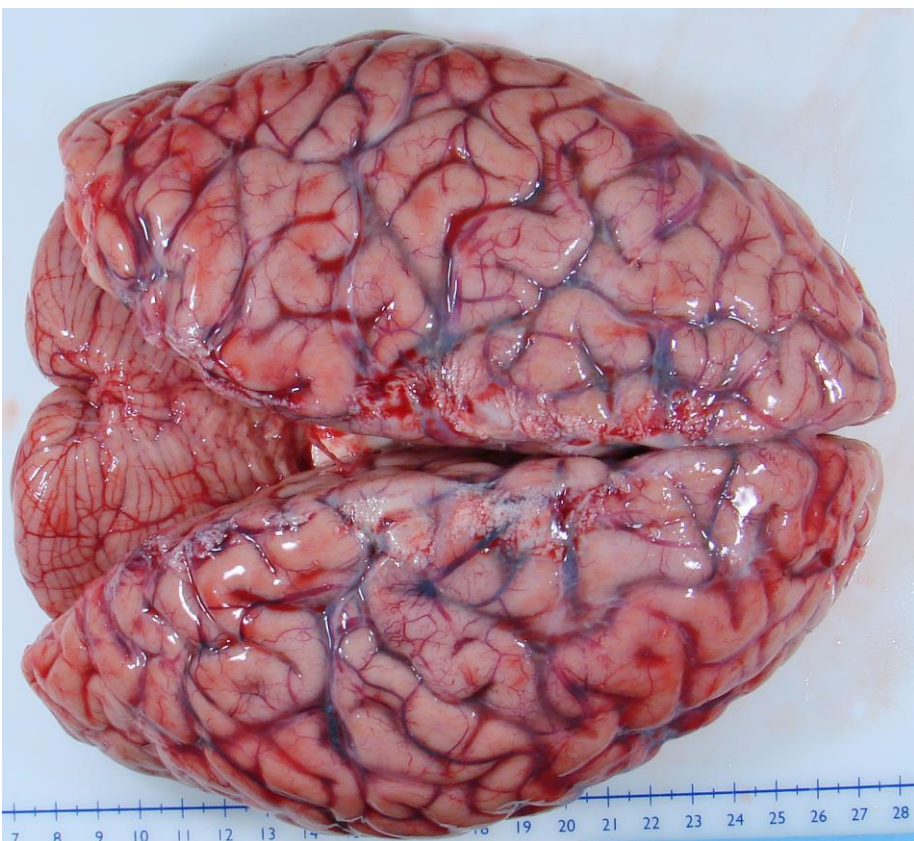




Whole Brain

Dorsal View

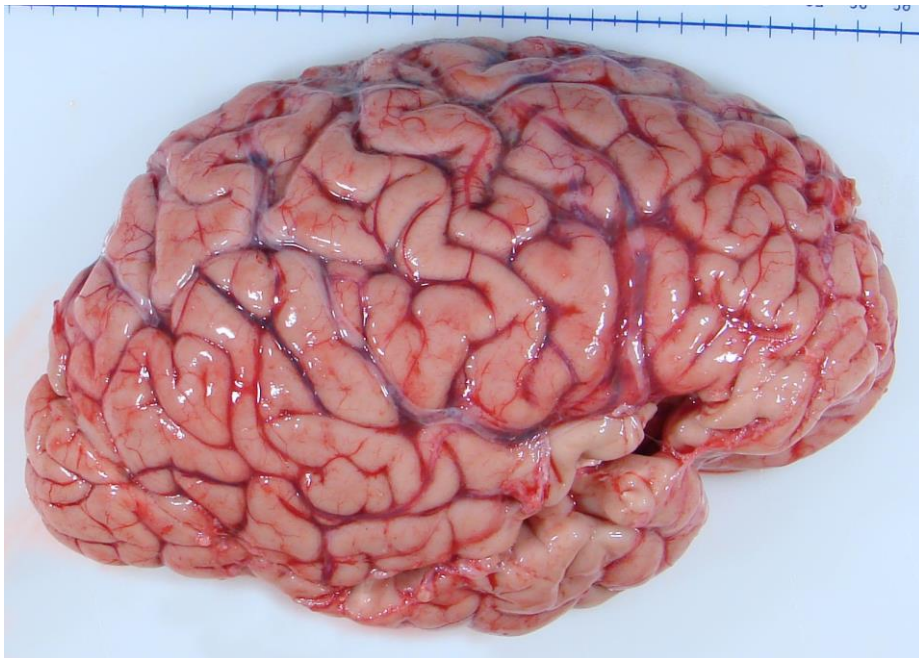
Ventral View



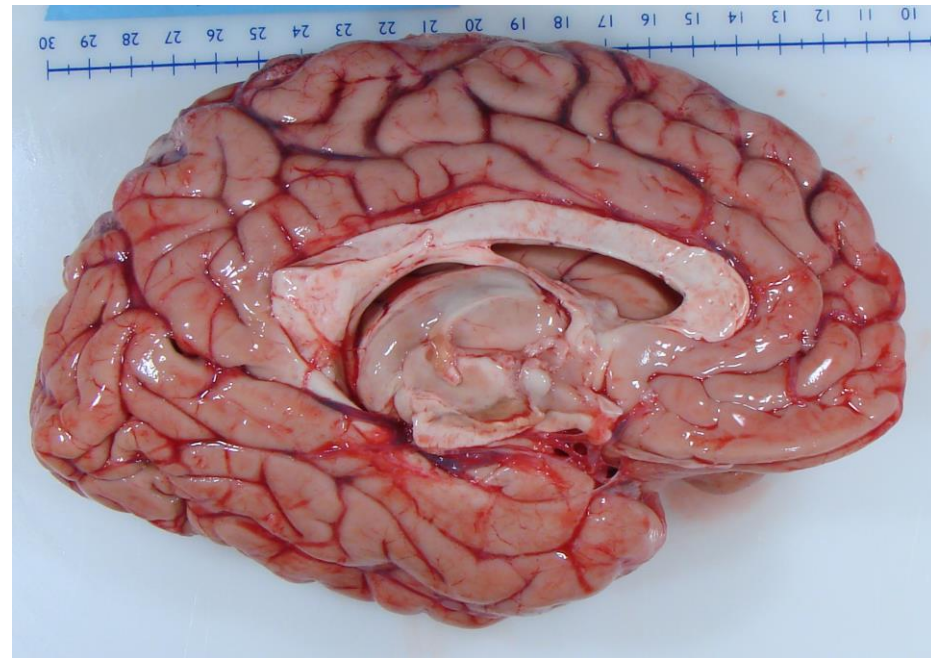


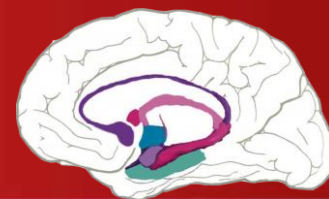
Bisected Brain

Lateral View



Medial View

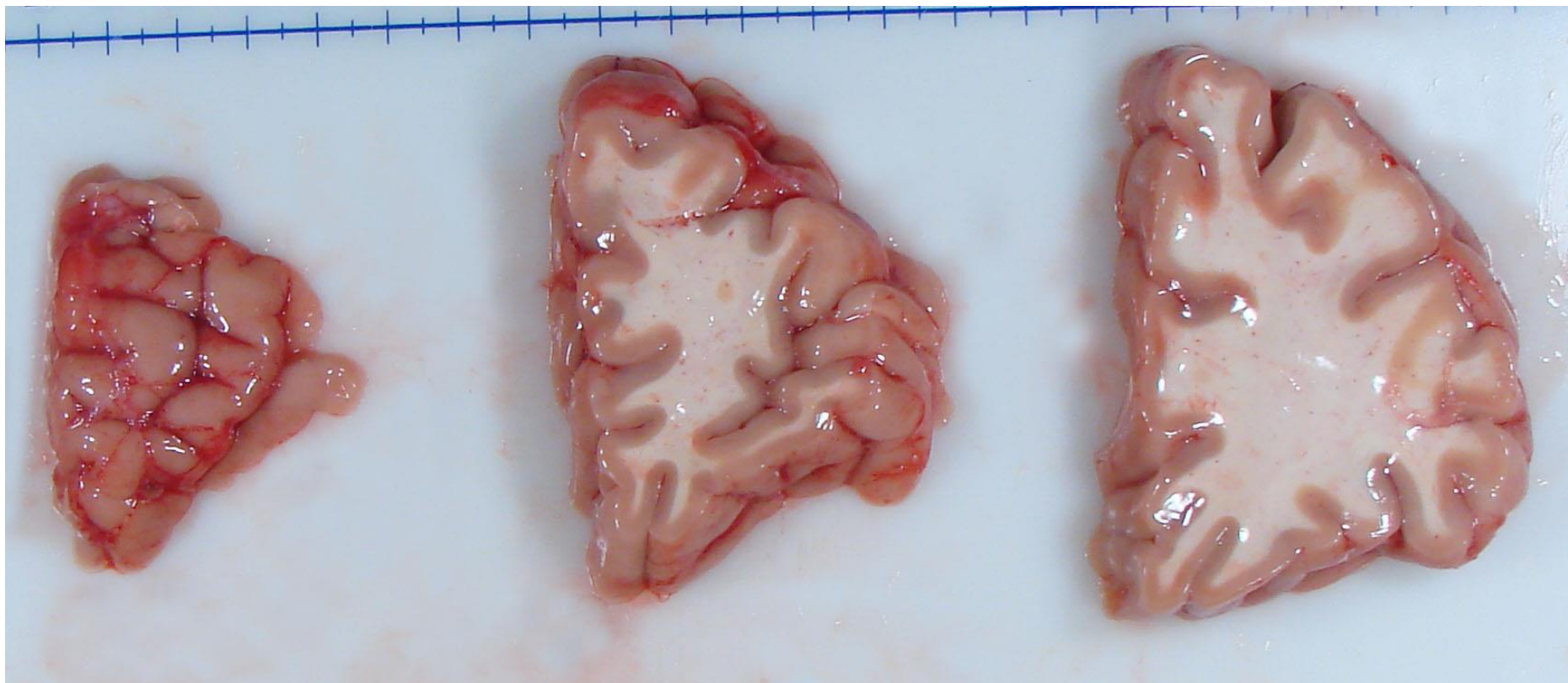


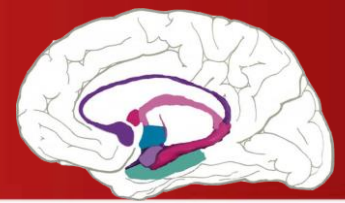


Cut Brain Sections - Cerebrum

After bisecting the brain, it is cut front to back (coronally) into 1cm thick blocks

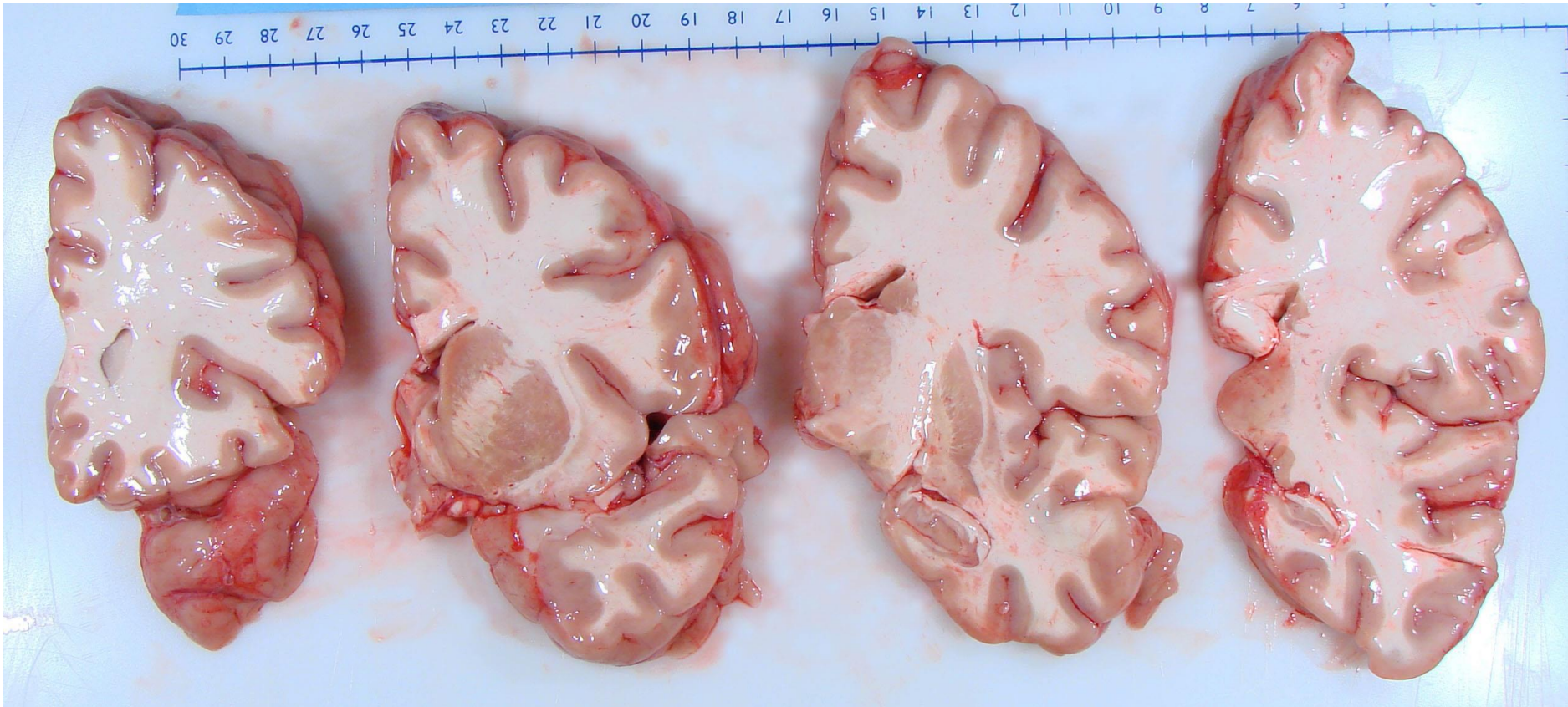
Frontal Blocks 1-3

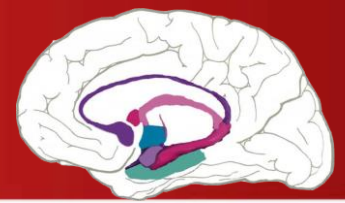




Cut Brain Sections - Cerebrum

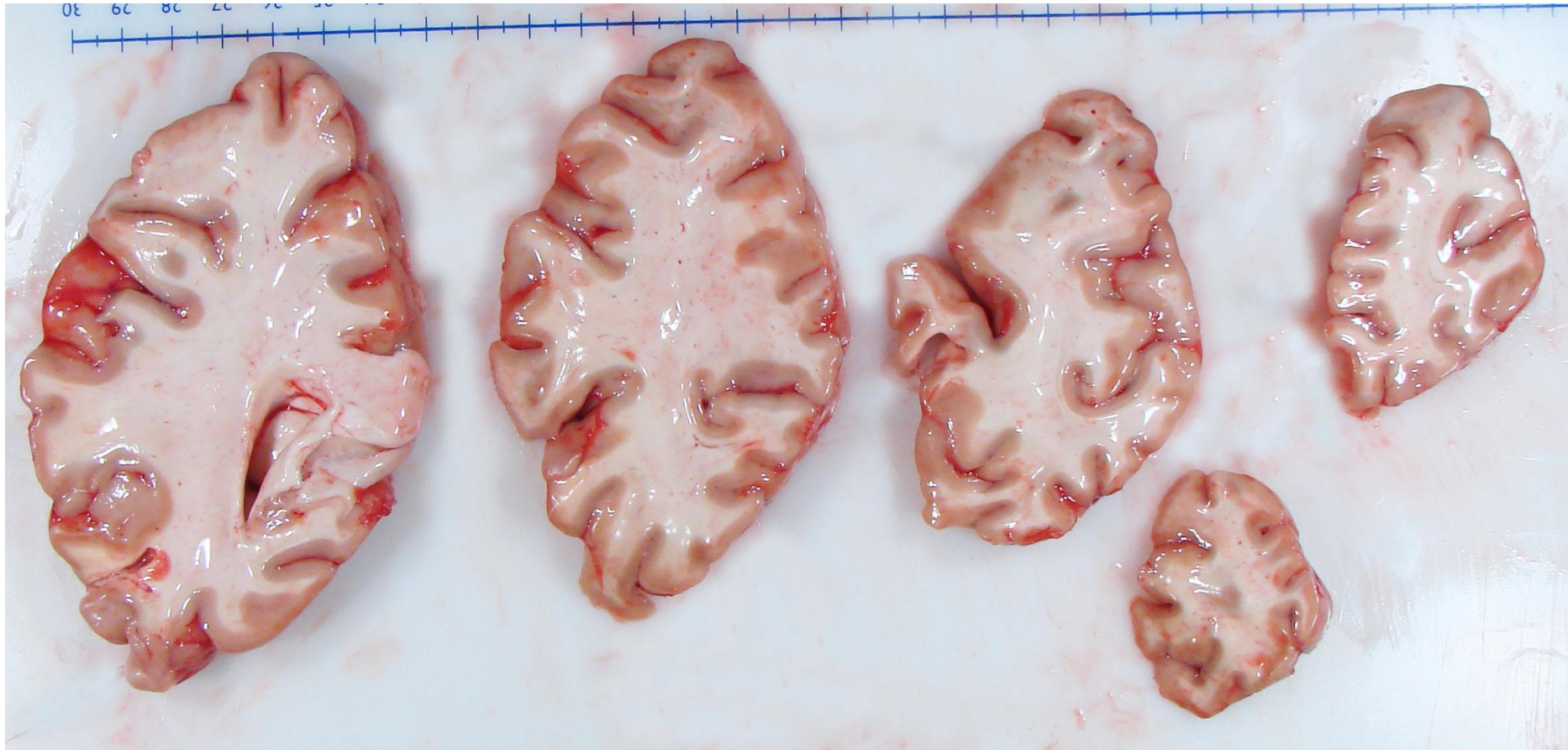
Frontal-Parietal-Temporal Blocks 4-7

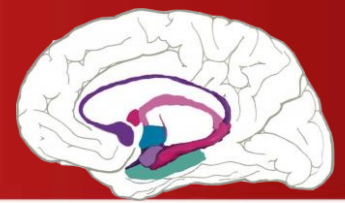




Cut Brain Sections - Cerebrum

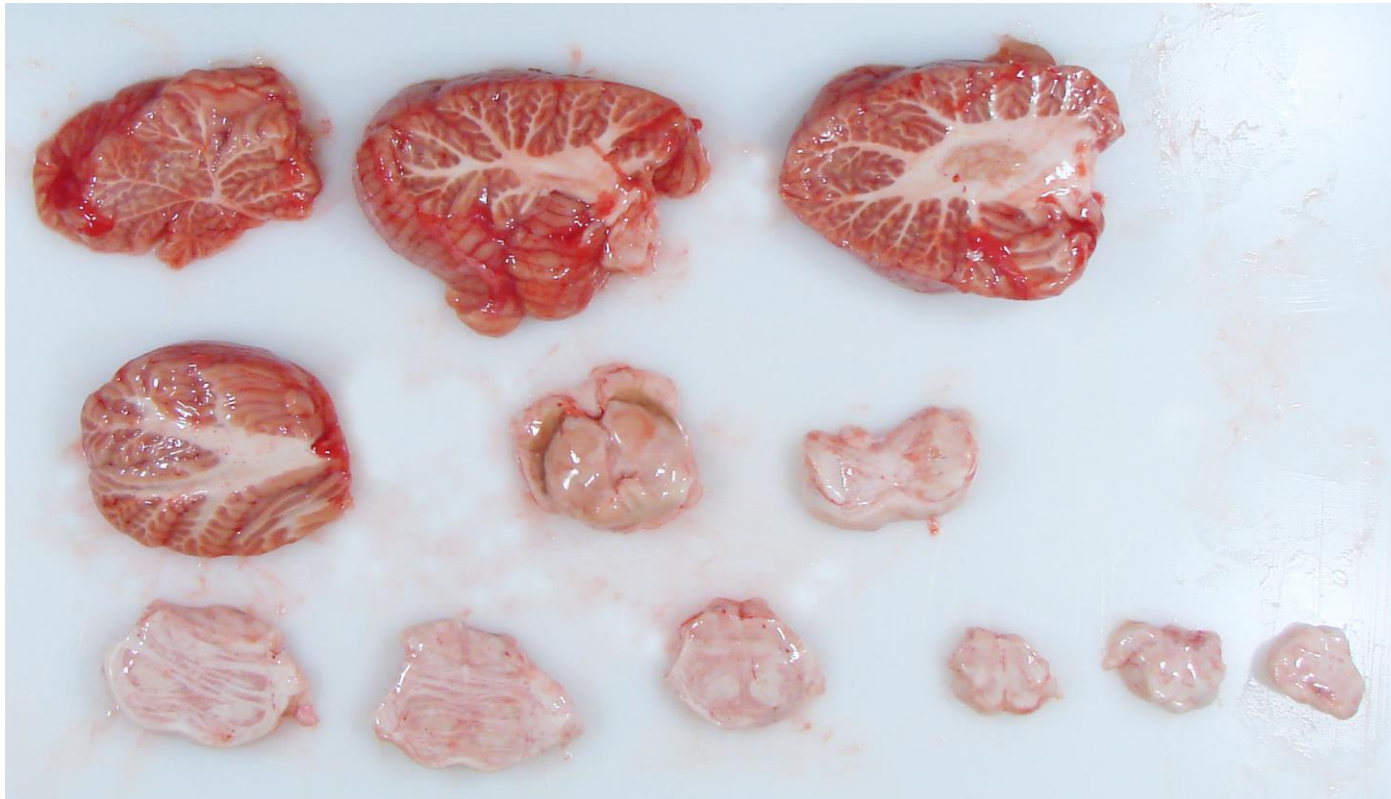
Parietal-Occipital Blocks 8-12

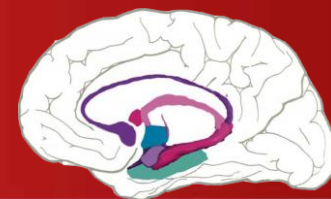




Cut Brain Sections - Cerebellum and Brain Stem

Removed and processed separately, the cerebellum and brain stem are cut from the center-line outwards (sagittal) into 1cm blocks.





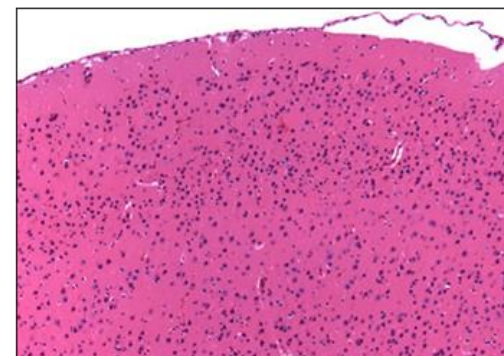
Neuropathological Evaluation

Samples for Neuropathology

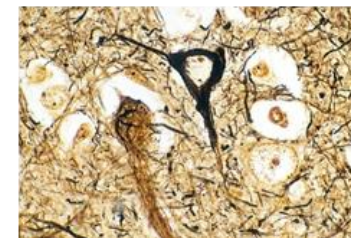
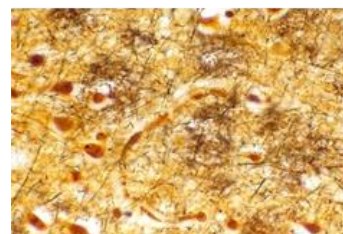
1. Frontal cortex
2. Striatum
3. Pons
4. Medulla
5. Hippocampus and Entorhinal cortex
6. Substantia Nigra
7. Cerebellum (including dentate nucleus)

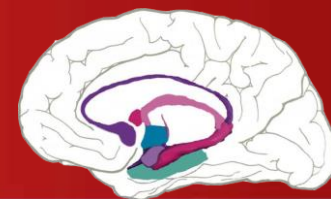
Sections are stained using **Hematoxylin and Eosin (H&E)**, and **Bielschowsky silver stain**. H&E staining is used to visualize the cell bodies of neurons and glial cells, while the Bielschowsky stain is used to show normal axons and dendrites.

Hematoxylin &
Eosin Stain



Bielschowsky
Silver Stain



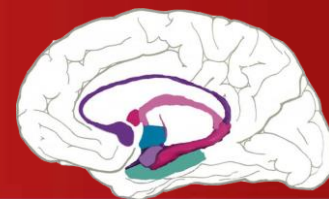


Postmortem Consensus Diagnosis


All cases undergo an extensive review by a panel of three independent, licensed clinicians (a minimum of two are board certified psychiatrists). The information reviewed includes:

- Postmortem psychiatric assessment using several instruments (questions answered by the next of kin).
- Medical records released by next of kin.
- Toxicology reports.
- Neuropathology reports.

After review of information, a DSM-IV/V psychiatric diagnosis is given to each subject.



Tissue collected by the Southwest Brain Bank is available to other researchers with approved projects. Along with submitting a tissue request, researchers sign an agreement that covers the risks involved with postmortem brain tissue, the regulatory burden, in addition to other legal aspects involved in receiving tissue.



TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER™
Paul L. Foster School of Medicine
Department of Psychiatry
Southwest Brain Bank Tissue Request Form

Name: _____

Department: _____

Institution: _____

Mailing Address: _____ Shipping Address: _____

Email: _____

Phone#: _____ Fax#: _____

Project Funding Source: _____

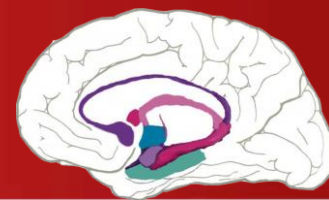
Tissue requested, including: brain region, amount, preservation method (frozen, fixed) etc.:

Subject Information:

Diagnoses	# of Subjects	Age Range	Sex	Ethnicity	PMI Range (hrs)

PLEASE ATTACH A BRIEF BACKGROUND OF THE PROJECT, A STATEMENT OF GOALS AND OBJECTIVES, AND THE EXPERIMENTAL DESIGN FOR USE OF THE TISSUE REQUESTED, AND EMAIL TO swbb.elp@ttuhsc.edu.

Southwest Brain Bank Tissue Request Form



Links:

National Institute of Mental Health

<http://www.nimh.nih.gov/>

National Alliance on Mental Illness

<http://www.nami.org/>

Depression and Bipolar Support Alliance

<http://www.dbsalliance.org/>