



Department of Veterans Affairs Biorepository Brain Bank

VABBB



Committed to research on brain disorders that affect Veterans

THE VA BIOREPOSITORY BRAIN BANK

AN INTERNATIONAL RESOURCE FOR NEUROLOGICAL RESEARCH

The VA Biorepository Brain Bank (VABBB) supports research on conditions affecting Veterans such as amyotrophic lateral sclerosis (ALS).

Over the past 10 years, we have assembled a large inventory of whole brain and spinal cord samples from Veterans with ALS and control participants. See the table below for details about our tissue repository. Enrollment into the VABBB is ongoing. Veterans from across the U.S. are enrolled in the study. Regular follow-up calls with participants and their families collect valuable functional, cognitive, health, and demographic data. This information is collected from the time of enrollment until the participant's passing. Tissue recoveries are conducted nationally. 88% of recovered tissue is good quality

(RIN > 4) for research. After gross and microscopic assessments, a diagnostic neuropathology report is completed for all cases. Most cases also undergo analysis for known ALS genetic mutations. investigators from any country may request tissue and data from the VABBB. Requests may be made for regular or pilot studies. For more information on requesting tissue, please see below.

Additional information about the VABBB may be found at our web site (https://www.research.va.gov/programs/tissue_banking/als/) or by calling 866-460-1158.

The VABBB is funded by the Biomedical Laboratory Research and Development Service (BLR&D) of the Department of Veterans Affairs.



To request tissue:

Call or email Dr. Ian Robey to inquire about our samples at **(520) 792-1450 x4436** or email at **lan.robey@va.gov**.

Applications may be submitted at any time, and are reviewed monthly. PIs that have already been approved for tissue may resubmit for additional samples on the same project.

Investigators will be required to complete Material Transfer Agreements (provided by the VABBB) before specimens are shipped.

VABBB Tissue Inventory Summary (Updated as of 05/08/2019)

Variable	Subject Type	
	ALS (n=229)	Control (n=45)
Males / Females, no.	222 / 7	35 / 9
Age at death, mean (range), y	69 (34-90+)	68.5 (22-89)
PMI-f ^a , mean, hrs	36	65
RIN ^b , mean	5.8	5.1
pH ^b , mean	6.3	6.2
Disease duration, mean (range), mos	117 (6-505)	---
ALS Type: SALS/FALS ^c	145 / 8(10 f hx)	---
TDP-43 Positive Inclusions ^d	152	---
C9ORF72 mutations ^e	4	---
Other mutations ^f	11	---

CALL US FOR QUESTIONS ABOUT OUR STUDY & PROCEDURES:

866-460-1158

Principal Investigator:
Neil Kowall, MD

Director of Scientific Operations:
Christopher Brady, Ph.D.

Director of Technical Operations
Ian Robey, Ph.D.

DATA AVAILABLE WITH VABBB TISSUES:

ALS Functional Rating Scale—Extended (ALSFERS-EX), participant or caregiver administered cognitive function assessments, demographics (age, sex, race), medical history, known ALS genetic mutations, neuropathology report

^aPMI-f: Post-mortem interval, approximate time from death to specimen freezing or 10% formalin fixation (hours). ^bIndicators of tissue quality: RNA Integrity Number (RIN), tissue pH (indicator of subject agonal state). ^cFALS, familial ALS; SALS, sporadic ALS; f hx, known family history only, possible FALS; data known for 164 ALS cases. ^dTDP-43; data complete on 191 cases. ^eC9ORF extension mutation complete on 200 cases. ^fMutations include TDP-43, SOD1, FUS, NEK1, SETX, PFN1, DCTN1, and OPTN mutations on 200 cases.