

Banking on Brain Tissue

Executive Director, Paula Grammas, Ph.D., has been studying Alzheimer's disease for over 20 years and knows first-hand the importance of human tissue research.

"The banking of brain tissue creates an invaluable resource for scientists because there are no animal models that can precisely replicate the human brain," Dr. Grammas said.

To meet this need, the GIA established the Brain Bank in January 2007. This program helps researchers and medical practitioners fully understand Alzheimer's disease with a neuropathology diagnosis on the brain. There have been 59 cases from around the United States thus far and they have helped researchers at the Garrison Institute on Aging make significant discoveries.

While it is important to enroll patients with dementia, it is equally important to enroll people with no history of diagnosed age-related diseases. These samples enable researchers to make comparisons to brain tissue from dementia patients.

Ruben Gonzales, senior director of the DNA Brain Bank & GIA research division, couldn't stress enough the importance of having "control" brains, which enables researchers to more accurately produce results that can help them move closer to a cure.

"People don't have to be sick in order to help," Mr. Gonzales said. "They still can make a difference no matter what their health condition may be."

Those who wish to enroll in the program must also understand the importance of time. Ideally, arrangements must be made in advance to participate in the program. The GIA has prepared documentation and will help anyone complete the packet and distribute the forms to the appropriate parties.

The GIA Brain Bank is unique because unlike similar programs, it is available to anyone who would like to make a donation without being enrolled in a current research program.

Families who have donated to the brain bank are motivated by personal experience. They too want to help find a solution to this debilitating disease and memorialize anyone who has been diagnosed with Alzheimer's disease. Brain donation is a legacy for future generations.

For more information, please contact:

GIA Brain Bank

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Breaking News

A publication titled, "Brain Endothelial Cells Synthesize Neurotoxic Thrombin in Alzheimer's Disease", will appear in the *American Journal of Pathology*, one of the nation's premier scientific journals. Thank you to the families who support and participate in the Brain Bank program. This important work would not have been possible without human tissue.

Holistic Research at the GIA

Debjani Tripathy, Ph.D., a researcher at the GIA, is currently submitting a grant to study the effects of plant extracts, more specifically *Withania somnifera*, on brain nerve cells. Exciting preliminary results show that *Withaferin A*, plant product of *Withania somnifera*, prevents the release of toxic proteins that kill brain nerve cells. This work has important implications as brain nerve cell death is the cause of Alzheimer's disease. Dr. Tripathy's future work will determine whether this plant product helps slow the progression of Alzheimer's disease.

