



BRAIN TRUST

PROMOTING AWARENESS OF THE BRAIN ENDOWMENT BANK • UNIVERSITY OF MIAMI SCHOOL OF MEDICINE

May 12-18, 1996

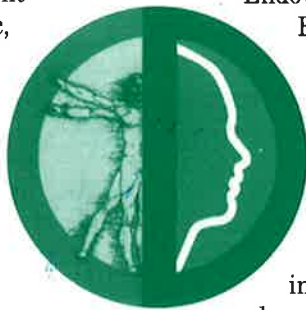
Join the Brain Endowment Bank In Celebrating Brain Awareness Week

The University of Miami Brain Endowment Bank has joined with more than 115 scientific, educational and advocacy organizations across the country to promote **Brain Awareness Week, May 12-18.** *Brain Research for the Life of Your Mind* is the week's theme, planned to educate, excite and garner support from the public about the advances and promise of brain research.

The UM's Brain Endowment Bank is a designated partner in Brain Awareness Week, organized by the Dana Alliance for Brain Initiatives.

"We have worked hard to bring the importance of brain research into the public eye," said Lilian Dominkovics, Program Coordinator for the Brain Bank. "I hope all our friends and supporters will do their part and join us in this national observance."

Founded by Dr. Deborah Mash in 1987, UM's Brain



Endowment Bank is committed to educating South Floridians about brain research and to use its tissue resources to unlock the mysteries of brain disorders. It has grown to become the third largest brain bank in the country.

How can you get involved? A local letter-writing campaign directed at members of Congress will seek to demonstrate just how pervasive brain disorders are and how continuing research can improve the quality of life and reduce medical costs for those afflicted. Call the Brain

Bank today if you have not already received your letter-writing information packet, 1-800-UM BRAIN. You can also take the National Brain Quiz (below).

Other events will include a Capitol Hill reception, conferences and lectures, exhibits and tours of brain research laboratories throughout the U.S. Watch for special showings of the series *Your Brain* on public television (May 19th on WLRN and WPBT in South Florida).

TAKE THE CHALLENGE - THE BRAIN QUIZ



It weighs three pounds, looks like an unshelled walnut and is the world's most complex structure. What is it? Your brain, of course. Your body's most

vital organ. Take a few minutes to do the Brain Quiz and do your part in spreading the message of the importance of brain research during National Brain Awareness Week, May 12 -18. *Answers on Page 3.*

1. Which of the following are disorders of the brain?

- a. Cerebral palsy, epilepsy, paralysis, spinal cord injury, multiple sclerosis.
- b. Schizophrenia, depression, alcohol addiction, anxiety disorders.
- c. Autism, anorexia, learning disabilities, Rett syndrome, dyslexia, migraines.
- d. Alzheimer's, Tourette's syndrome, Parkinson's, brain tumor, Lou Gehrig's disease.
- e. All of the above.

2. "Use it or lose it" is a phrase that can be applied to the brain.

- True False

3. It is possible to recover from brain damage due to stroke or injury.

- True False

4. Forgetfulness is a sign that something is wrong with the brain.

- True False

5. Doctors and scientists can see the human brain working.

- True False

6. If one of your parents had Alzheimer's disease, you will inevitably get it.

- True False

7. What is the leading cause of disability in the U.S.?

- a. Cancer
- b. Heart disease
- c. Brain and Central Nervous System disorders (CNS)

8. There are effective treatments for which of the following diseases/disorders?

- a. Depression
- b. Diabetes
- c. High blood pressure
- d. All of the above.

Comprehensive Health Care for Parkinson's Disease

Lisa M. Shulman, M.D.
Assistant Professor of Neurology
University of Miami School of Medicine

When patients visit the Parkinson's Disease and Movement Disorders Center in Miami, they not only have access to the special medical expertise of the Parkinson's disease specialists, but can also benefit from the resources of the National Parkinson Foundation and the University of Miami Brain Endowment Bank. The Parkinson's Disease and Movement Disorders Center is a division of the Department of Neurology and the only health care facility in South Florida specifically designed for the needs of individuals with Parkinson's and their families.

The Center was established in 1983 by Dr. William J. Weiner. Under his direction, it has grown and is now staffed by three additional Parkinson's and movement disorder specialists: Dr. Juan R. Sanchez-Ramos, Dr. Carlos Singer and Dr. Lisa M. Shulman. During the past decade, thousands of patients with Parkinson's and other movement disorders, including dystonia, essential tremor, Huntington's disease and Tourette's syndrome, have visited the Center. During consultation with a movement disorders specialist, the patient receives a comprehensive evaluation and an individualized plan of management. Patients receive the most up-to-date information and therapy and have the opportunity to participate in clinical research studies covering a range of Parkinson's disease-related topics, including sleep disturbance, depression, anxiety, fatigue, memory loss, sexual dysfunction and loss of balance. Patients are also kept apprised of ongoing drug studies.

Also available to patients is The Parkinson's Resource Center, a joint collaboration of the National Parkinson Foundation and the Parkinson's Disease and Movement Disorders Center. When patients visit

their physician, they can also meet with the Center's health care consultants, Caroline Stephen R.N. and Tessie Braker, R.N. They can provide information regarding physical, occupational and speech therapy; aquatic exercise, support groups, adult day care, nutrition, medications, psychological services, social services and educational programs.

Patients also benefit from active clinical and basic science research programs. Clinical research studies strive to improve our understanding of the symptoms of Parkinson's disease and to develop strategies to prevent deterioration due to the disorder, while basic science is directed at finding the underlying cause of nerve cell degeneration and discovering how it can be prevented.



Dr. Lisa Shulman examines a patient.

The Brain Endowment Program is an indispensable asset to the research program, providing a continuity between the clinic and basic research programs. Lilian Dominkovics, Program Coordinator of the Brain Bank, is available to provide information regarding the brain donor program.

Superior medical care, excellent support services and the opportunity to both participate and benefit from up-to-the-minute research underscore the comprehensive approach of the Parkinson's Disease and Movement Disorders Center.

IN MEMORIAM

of those friends of the
Brain Bank who passed away during the past year

Thomas Antonsen
 Carl Bauer
 Arthur Bitts
 Siegfried Blaschke
 Sally Blum
 Helen Bond
 Elizabeth Brandl
 Clyde Drumheller
 Roland Earle
 Elinore Faye
 Herbert Flack
 Margaret Grutzbach
 Mary Harlow

Kenneth Haun
 James Hayes
 Sara Hershfield
 Faye Israel
 Albert Krissinger
 Marie La Porte
 Stuart Lathrop
 Richard Lewinson
 Dona March
 Peggy Maynor
 Maybeth Peltier
 Velda Perrin
 Joan Picks

Alfred Preston
 Fern Rice
 Luis Rodriguez
 Manuel Rodriguez
 Irene Sartain
 Barbara Schintzius
 Evelyn Schneider
 Sally Stewart
 Lynn Strousse
 Frederick Vial
 Phillip Wendroff
 Babins Young
 David Young

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DECADE OF THE BRAIN

Windows on the Brain

How Diagnostic Technology Gives Us A Look Inside

Dr. Deborah Mash, Director of Research, Brain Endowment Bank

Hidden inside the skull, the brain has kept its secrets. Diseases of the brain were explained by primitive cultures by good and bad spirits. But within the last century, new technologies have allowed us to look inside the brain and understand something about its structure, electric signaling, blood flow and metabolism.

Computerized tomography (CT) scans, a type of x-ray technology, are now a part of standard care, providing information about swelling, brain atrophy, tumors and other conditions. **Positron emission tomography (PET)** relies on radioactive tracers to light up particular chemical circuits in the brain. A very low amount of radioactive tracers is injected into the body and accumulates in the brain, allowing a sophisticated camera to create an image. This technology, although expensive and not widely available, has provided valuable insights about schizophrenia, depression, epilepsy and Parkinson's disease. Another approach is **Single photon emission computer tomography (SPECT)**. It is more readily available, but not as quantitative as PET. **Nuclear magnetic resonance (NMR)** is at the forefront of brain imaging technology and neuroscientists are now using it to provide very sharp pictures of the brain.

The last and very best view of the

brain comes when it is studied after death. Brain endowments give scientists a bird's-eye view of the microanatomy, chemistry and genetics of the brain. We are very proud to have received the support of so many brain donors who recognize the fundamental importance of brain endowments. Your altruism reflects the highest level of generosity and personal existence. A brain endowment is a final gift that will help millions of other people and their children and grandchildren. It is a gift of that part of us that makes us uniquely human. As we learn more about the human brain, it will affect the quality of life in a very positive, healing way. Brain aging will be



Dr. Deborah Mash, Director of Research, Brain Endowment Bank

slowed, neurodegenerative diseases will be cured and the suffering caused by serious mental illness will end.

Thank you for working with us and supporting brain research today and into the 21st century.

Answers to the BRAIN QUIZ

1. (e) All of the above. Disorders as different as addiction, learning disabilities and Lou Gehrig's disease all have their roots in the brain.

2. True. Mental exercise is as important as physical exercise for keeping our brains "fit." Those who stay mentally active by learning new things and challenging themselves are more likely to remain psychologically healthy throughout life.

3. True. The brain can recover from trauma by finding alternate routes for processing information. Scientists are studying the recovery mechanisms and hoping to develop ways to help the brain heal itself.

4. False. Forgetting is very normal and it has been shown that some memory loss is to be expected with age. Forgetfulness can be reduced by staying active and simplifying your life by concentrating on the things that are the most important.

5. True. Modern technologies such as magnetic resonance imaging (MRI) and positron emission tomography

(PET) enable scientists to map brain functions, track disorders and monitor the effects of treatments.

6. False. There are indeed at least three genes associated with Alzheimer's, but neither having the genes nor having a parent with Alzheimer's means you will get it. "Inherited" Alzheimer's explains only 25 percent of existing cases, meaning that other factors are important too.

7. (c) Brain and CNS disorders are currently the nation's leading cause of disability and account for more hospitalizations and prolonged care than almost all other diseases combined. Many brain disorders also tend to begin early in life and extend throughout life.

8. (d) Depression, formerly thought to be a mental illness, has been found to have its causes linked to biology. Modern treatments, including medication and psychological therapies, are helping 70 - 90 percent of people with depression live normal, healthy lives.

Looking Ahead

Don't miss the next issue of Brain Trust, including:

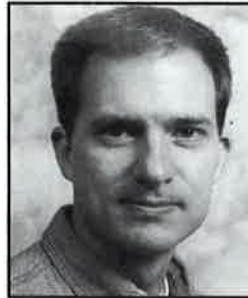
- Photos and recap of National Brain Awareness Week Activities
- Article on Alzheimer's disease & memory loss

Craig Kovera Joins Brain Bank Team

Craig Kovera, Coordinator of Patient Relations, joined the Brain Bank in early 1996 and has been working with Lilian Dominkovics to improve the organization's communications, scheduling and record-keeping.

One of Craig's responsibilities is scheduling the annual neuropsychological assessments of the registered donors. Formerly with the Oregon Health Sciences University, Craig has already met with many donors over the phone and discussed the research activities of the Brain Bank.

"One of the positive changes we have been striving for is increased frequency of communications with donors," Craig said. "Our minimum goal is to talk with you on the phone and exchange mail at least once a year. It has also been more convenient to arrange for our



Craig Kovera, Ph.D.

donors to have their annual examination performed at home."

He emphasized that regardless of a donor's health or relocation, the Brain Bank is committed to retaining each and every donor despite changing circumstances, for as long as possible.

"It has been thrilling for me to hear the enthusiasm and ideas from donors regarding our program," Craig said. "Especially now during Brain Awareness Week, your efforts to convince others about the importance of brain research is invaluable."

Brain Bank Family Mourns Passing of Supporter Thomas Antonsen

Thomas Antonsen, the first Parkinson's disease patient to pledge his brain to the UM Brain Endowment Bank and a longtime supporter, recently passed away at age 76 in his Palm Bay, FL home. Although he suffered from Parkinson's for 19 years, Mr. Antonsen remained extremely active in his retirement.

"We have lost a true friend and a very special individual who had a strong interest in brain research and its potential benefits," said Dr. Deborah Mash, Brain Bank Director of Research.

Aside from his interest in the Brain Bank, he was a founding member of the Brevard County Parkinson's Disease Support Group, serving as president and newsletter

editor and organizing regular meetings and special events.

He was a World War II Navy veteran and graduate of St. Johns University in Brooklyn. An accountant for 33 years, at his retirement he was partner in charge of the international accounting firm Hurdman and Cranstoun. While living in Ramsy, New Jersey, he served on the Board of Education for 11 years and was president for four years.

Upon pledging his brain to the Brain Bank, he said: "When I reach the point when I can no longer use my



Thomas & Elsa Antonsen at their 50th wedding celebration

brain, I can use it to help someone else."

He is survived by his wife, Elsa.

OUR DEEP APPRECIATION TO ALL THOSE WHO HAVE MADE DONATIONS IN THE MEMORY OF THOMAS M. ANTONSEN

Thank You!

For your financial support. Our next issue will include a complete listing of all those who have shown their generosity with a gift to the University of Miami Brain Endowment Bank.

BRAIN TRUST

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