

THE EVELYN F. McKNIGHT  
CENTER FOR AGE-RELATED MEMORY LOSS

PROGRESS REPORT  
July 15, 2008-December 31, 2008

PRESENTED TO  
THE McKNIGHT BRAIN RESEARCH FOUNDATION  
BOARD OF TRUSTEES



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## 1. SUMMARY OF SCIENTIFIC ACHIEVEMENTS

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In 2008, two important steps occurred in realizing the purpose of the McKnight Brain Research Foundation:

1. The appointment of Ralph L. Sacco as Executive Director of the Evelyn F. McKnight Center for Age Related Memory Loss.
2. The appointment of Clinton B. Wright as Scientific Director of the Evelyn F. McKnight Center for Age Related Memory Loss.

Dr. Wright began on July, 15, 2008 by evaluating the infrastructure and personnel needed to achieve the McKnight Brain Research Foundation's purpose in establishing the Center. The Center's day to day operations occur within the Department of Neurology and several areas of support were identified as necessary to achieve the stated goals, including administrative support and help from the Division of Clinical Research to develop intramural and extramural outreach for the Center. For example, a website for the Center has been created and will be expanded to include professional and educational components.

The Center has had an exciting beginning in the latter half of 2008 as research projects and collaborations as well as faculty have been brought in to its circle. The Center identified genetics and neuroimaging as two existing strengths at the University of Miami Leonard M. Miller School of Medicine and has begun three research projects (two actual, and one potential) that capitalize on these strengths. A multidisciplinary team of neurologists, neuropsychologists, geneticists, radiologists, and physicists have been brought within the McKnight Center umbrella to forge a productive Working Group, in keeping with the Gift, and this group is addressing the specific aims of the research projects that have begun.

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## 2. PUBLICATIONS

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The publications listed below provide a view of the research being conducted at the University of Miami by McKnight Center affiliates, collaborators, and trainees (see section 5 and Table below). Most of this work was not supported by the McKnight Gift, but represents research that focuses on the objectives of the Center and with whom partnerships are developing for federal and other grant proposals.

### MCKNIGHT CENTER MEMBERS

#### **Gardener, Hannah-Publications**

Gardener, H, Spiegelman D, Buka SL. Prenatal risk factors for autism: A comprehensive meta-analysis. British Journal of Psychiatry. In press.

Gilman, SE, Gardener H, Buka SL. Maternal smoking during pregnancy and children's cognitive and physical development: A causal risk factor? American Journal of Epidemiology 2008; 168(5):522-531.

**Isaacson, Richard-Publication**

Isaacson RS, Utley B, Cheng, N, Portnoy, K. Advice to Medical Students: Neurology. American Academy of Neurology website, August 2008. Published in print and on-line at <http://www.aan.com/go/education/students/medical/advice>. 7

**Levin, Bonnie-Book Chapter**

Levin, B. Behavioral/Neuropsychological Outcomes and Quality of Life Endpoints. In Woodbury-Harris KM, Coull BM (eds): Clinical Trials in Neuroscience. Front Neurol Neurosci. Basel, Karger, 2009, vol 25, pp 1-15. ?

**Loring, Jessica-Publications**

Loring, J, Yoshita, M, Marquez, C, Elkind, MSV, Sacco, RL, DeCarli, C, Wright, CB. White Matter Hyperintensity Volume is Associated with Depressive Symptoms: the Northern Manhattan Study. Under review for presentation at the 2009 American Society of Neuroradiology Meeting.

**Marcus, Justin-Abstract**

Marcus, Justin; Gardener, Hannah, Yoshita, Mitsuhiro, Guzman, Joanna, Elkind, Mitchell S. V., Sacco, Ralph L., DeCarli, Charles, Wright, Clinton B. Diastolic and not systolic blood pressure is associated with subclinical cerebrovascular damage: the Northern Manhattan Study. Submitted to the American Academy of Neurology (AAN) for the annual meeting in April 2009, Seattle, WA.

**Nahab, Fatta-Publications**

Nahab FB, Hattori N, Saad ZS, Hallett M. Contagious yawning and the frontal lobe: An fMRI study. *Human Brain Mapping* 2008 Oct 20 (Epub ahead of print). ?

Kundu P, Nahab FB, Horovitz S, Hallett M. Whole Brain Functional Connectivity Elucidated with fMRI and Graph Analysis. International Congress of Parkinson's disease and Movement Disorders 6/08. ?

**Rundek, Tatjana-Publications**

Rundek T, Bennett DA. Cognitive leisure activities, but not watching TV, for future brain benefits. *Neurology*. 2006;66(6):794-5. ?

Fillit H, Nash DT, Rundek T, Zuckerman A. Cardiovascular risk factors and dementia. *Am J Geriatr Pharmacother*. 2008;6(2):100-18. ?

Della Morte D, Abete P, Gallucci F, Scaglione A, D'Ambrosio D, Gargiulo G, De Rosa G, Dave KR, Lin HW, Cacciatore F, Mazzella F, Uomo G, Rundek T, Perez-Pinzon MA, Rengo F. Transient ischemic attack before non lacunar ischemic stroke in the elderly. *J Stroke Cerebrovasc Dis*. 2008;17(5):257-62.

### Sacco, Ralph-Publications

Jones DW, Peterson ED, Bonow RO, Gibbons RJ, Franklin BA, Sacco RL, Faxon DP, Bufalino VJ, Redberg RF, Metzler NM, Solis P, Girgus M, Rogers K, Wayte P, Gardner TJ; American Heart Association. Partnering to reduce risks and improve cardiovascular outcomes: American Heart Association initiatives in action for consumers and patients. *Circulation*. 2009 Jan 20;119(2):340-50. Epub 2009 Jan 5.

Liao YC, Lin HF, Rundek T, Cheng R, Guo YC, Sacco RL, Juo SH. Segment-specific genetic effects on carotid intima-media thickness: the Northern Manhattan study. *Stroke*. 2008 Dec;39(12):3159-65. Epub 2008 Sep 11.

Nickolas TL, Khatri M, Boden-Albala B, Kiryluk K, Luo X, Gervasi Franklin P, Paik M, Sacco RL. The association between kidney disease and cardiovascular risk in a multiethnic cohort: findings from the Northern Manhattan Study (NOMAS). *Stroke*. 2008 Oct;39(10):2876-9. Epub 2008 Jul 10.

Eguchi K, Boden-Albala B, Jin Z, Rundek T, Sacco RL, Homma S, Di Tullio MR. Association between diabetes mellitus and left ventricular hypertrophy in a multiethnic population. *Am J Cardiol*. 2008 Jun 15;101(12):1787-91.

### Wright, Clinton-Publications

Wright, CB, Festa J, Paik MC, Schmiedigen AP, Brown TR, Yoshita M, DeCarli C, Sacco RL, Stern Y. White Matter Hyperintensities and Subclinical Infarction: Associations with Psychomotor Speed and Cognitive Flexibility. *Stroke* 2008;39:800-805.

Asllani I, Borogovac A, Wright CB, Sacco RL, Brown TR, Zarahn E. An investigation of statistical power for continuous arterial spin labeling imaging at 1.5 T. *NeuroImage* 2008;39:1246-56.

### Wright, Clinton-Abstracts

Wright CB, Sacco RL, Yoshita M, Li L, Cordonnier C, DeCarli C. Brain microbleeds in a community-based sample: the Northern Manhattan Study. *Journal of the Neurological Sciences* (in press).

Wright CB, Sacco RL, Paik MC, Stern Y. Education and physical activity are associated with less cognitive decline. *Journal of the Neurological Sciences* (in press).

Wright CB, Sacco RL, Yoshita M, DeCarli C, Stern Y. Subclinical Infarct Location Determines Performance on a List Learning Task. *Stroke* 2008;39:682.

Wright CB, Brickman AM, Doyle M, Perez T, Stern Y, Boden-Albala B. Cognitive Function in Stroke and TIA patients is Associated with Health Knowledge and Competence. International Stroke Conference 2008, February 20-22, New Orleans, LA.

Wright CB, Moon Y, Santiago M, Rabbani LE, Sacco R, Elkind M. Interleukin 6 Is Associated with Cognitive Decline: The Northern Manhattan Study. *Neurology* 2008;70:A399. A

Noble J, Borrell LN, Papapanou PN, Elkind M, Scarmeas N, Wright CB. Association of the Periodontitis Pathogen *Porphyromonas gingivalis* with Poor Memory: Analysis of the Third National Health and Nutrition Examination Survey (NHANES-III). *Neurology* 2008;70:A191. A

### MCKNIGHT CENTER COLLABORATORS

#### **Czaja, Sara-Publications**

Ownby, R., Czaja, S.J., Loewenstein, D., Rubert, M. (2008) Cognitive Abilities that Predict Success in a Computer-Based Training Program. *The Gerontologist*, Vol. 48, No. 2, 170-180.

Pak, Richard, Czaja, S.J., Sharit, J., Rogers, Wendy A., Fisk, Arthur D. The Role of Spatial Abilities and age in Performance in an Auditory Computer Navigation Task. *Elsevier, Computers in Human Behavior* 24 (2008) 3045-3051.

Czaja, S.J., Sharit, J., & Nair, S.N. (2008). Usability of the Medicare Health Website, *JAMA*, 300, 790-792.

Schulz, R., McGinnis, K.A., Zhang, S., Martire, L.M., Hebert, R.S., Beach, S.R., Zdaniuk, B., Czaja, S.J., & Belle, S.H. (2008). Dementia Patient Suffering and Caregiver Depression. *Alzheimer Disease & Associated Disorders*, Vol. 22., No. 2, 170-186, April- June.

Lee, C., Czaja, S.J., & Sharit, J. (2009). Training Older Workers for a Technology-Based Jobs. *Educational Gerontology* 35: 15-3.

#### **Dave, Kunjan-Abstracts**

Dave, Kunjan, Raval, Ami, DeFazio, Richard, Perez-Pinzon, Miguel. Activation of protein kinase c delta following oxygen glucose deprivation leads to release of cytochrome c from mitochondria. Society for Neuroscience 2008, November 15-19, Washington, DC (In Press). ?

DeFazio, R Anthony, Dashkin, O, Pérez-Pinzón, Miguel, Dave, Kunjan, Lin, Kevin HW, Della Morte, David, Saul, Isabel, Raval, Ami P. (In Press). Enhanced interneuron firing and network activity in CA1 region of the rat hippocampus after cardiac arrest. Society for Neuroscience 2008, November 15-19, Washington, DC. ?

#### **Loewenstein, David-Publications**

Loewenstein, D.A., Acevedo, A., Agron, J., Martinez, G. & Duara. R. (In Press). The Use of Amnesic and Non-Amnesic Composite Measures at Different Thresholds in the Neuropsychological Diagnosis of MCI. *Journal of Clinical and Experimental Neuropsychology*. ?

Acevedo, A., Loewenstein, D.A., Agron, J & Duara, R. (In Press). Influence of Socio-Demographic Variables on Neuropsychological Test Performance in Spanish-Speaking Older Adults. *Journal of Clinical and Experimental Neuropsychology*. ?

Loewenstein, D.A., Acevedo, A., Agron, J. & Duara (In Press). Stability of Neurocognitive Impairment in Different Subtypes of Mild Cognitive Impairment. *Dementia and Geriatric Cognitive Disorders*.

#### Moraes, Carlos-Publications

The mitochondrial impairment, oxidative stress and neurodegeneration connection: reality or just an attractive hypothesis? (2008) Hirokazu Fukui and Carlos T. Moraes. *Trends in Neurosciences* 31: 251-256. ?

Mechanisms of formation and accumulation of mitochondrial DNA deletions in aging neurons (in press 2009) Hirokazu Fukui and Carlos T. Moraes. *Human Molecular Genetics*. ?

Lack of cytochrome c in mouse fibroblasts disrupts assembly/stability of respiratory complexes I and IV (in press 2009) Uma D. Vempati, Xianlin Han, Carlos T. Moraes. *Journal of Biological Chemistry*.

#### Naj, Adam-Publication

Rampersaud E, Mitchell BD, Naj AC, Pollin TI. Investigating parent of origin effects in studies of type 2 diabetes and obesity. *Curr Diabetes Rev.* 2008 Nov;4(4):329-39.

#### Raval, Ami-Abstracts

Pérez-Pinzón, Miguel A., Raval, Ami P., Dave, Kunjan R., DeFazio, Richard Anthony (In Press) Ischemic Preconditioning-induced neuroprotection against cerebral ischemia in vitro requires brain-derived growth factor (BDNF). Society for Neuroscience 2008, November 15-19, Washington, DC.

Raval, Ami P., Saul, Isabel, Dave, Kunjan R., DeFazio, Richard Anthony, Perez-Pinzon, Miguel A., Bramlett, Helen (In Press). Estradiol-17 $\beta$  Priming Activates Cyclic-AMP Response Element Binding Pathway and Protects the Brain against Cerebral Ischemia in Rat. Society for Neuroscience 2008, November 15-19, Washington, DC.

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### 3. PRESENTATIONS

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#### Presentations at scientific meetings (peer reviewed)

- McKnight Brain Research Foundation Reception and Poster Session, Society for Neuroscience - 11/17/09, JW Marriot Hotel, Washington, DC.

- Cerebral Ischemia Research Group. Department of Neurology, Miller School of Medicine - 12/22/08, Department of Neurology, Miller School of Medicine, Miami, FL.

Presentations at public (non-scientific) meetings or events - non peer reviewed

- Dr. Isaacson presented data on cognitive aging to the Adolph and Rose Levis Jewish Community Center members (see Education below).

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**4. AWARDS RECEIVED**

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**National Scientist Development Grant**

Source: American Heart Association (0735387N)

Principal Investigator: Clinton Wright, MD MSc

**Independent Scientist Award**

Source: NINDS (K02NS059729)

Principal Investigator: Clinton Wright, MD MSc

**Stroke Incidence and Risk Factors in a Tri-ethnic Region**

Source: NIH, NINDS (NS 029993-14)

Principal Investigator: Ralph Sacco MD MSc

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**5. RECRUITMENT**

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The table below lists individuals who have been brought into the Center since July 2008. The term "affiliate" is reserved for individuals who receive some support from the Center, and the term "collaborator" refers to those involved in research that focuses on the objectives of the Center and with whom partnerships are developing for federal and other grant proposals.

(Abbreviated vitae attached as appendix).

Name	Center Role	Area of Expertise
<b>Faculty</b>		
Susan Blanton, PhD	Member	Genetics
Richard Isaacson, MD	Member	Education, Neurology, Cognition
Heather Katzen, PhD	Member	Neuropsychology
Bonnie Levin, PhD	Member	Neuropsychology
Tatjana Rundek, MD PhD	Member	Epidemiology
Ralph Sacco, MD MS	Executive Director	Neurology, Epidemiology
Clinton Wright, MD MS	Scientific Director	Neurology, Epidemiology, Cognition
Sara Czaja, PhD	Collaborator	Aging, Psychology, Engineering
David Loewenstein, PhD	Collaborator	Neuropsychology
Andrew Maudsley	Collaborator	Radiology
Carlos Moraes, PhD	Collaborator	Neuroscience
Fatah Nahab, MD	Collaborator	Neurology, Functional MRI



## Trainees

*Hannah Gardener, PhD	Post-Doctoral Fellow	Epidemiology
*Jessica Loring	MD-PhD Student	Epidemiology, Imaging, Cognition
Justin Marcus	MD Student	Epidemiology, Imaging, Cognition
Matthew Markert	MD-PhD Student	Epidemiology, Imaging, Cognition
Adam Naj, PhD	Post-Doctoral Fellow	Genetics

\* Trainee partially supported by the Center

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## 6. CLINICAL/TRANSLATIONAL PROGRAMS

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### New Programs

The largest undertaking is a genome wide association study initiated by doctors Wright and Sacco, and Dr. Margaret Pericak-Vance from the Miami Institute of Human Genomics, in the longstanding Northern Manhattan Study (NOMAS). The objective of this work is to examine genetic associations with neuropsychological and imaging biomarkers of cognitive aging in 1,300 participants from the NOMAS sample. Preliminary analyses of these associations are planned to begin in 2009.

In addition, Dr. Wright initiated an application to the National Institute on Aging in response to the Request for Applications sponsored with the McKnight Brain Research Foundation. In keeping with the objectives of the Center to foster inter- and intra-institutional collaborations, the project is multi-disciplinary in nature and unites investigators from the departments of Engineering, Psychology, Psychiatry, Neurology, and Radiology. This project involves a sample of older individuals who have been established to be cognitively normal at baseline and who would be studied to identify structural, functional MRI, and brain metabolic correlates of cognitive aging.

### Update- Existing Clinical Studies

Our operation commenced in July 2008 and all studies are in their early stages as relate to the McKnight Center goals.

### New Treatments

Treatments have not been identified since operations began in July 2008.

### Drug Trials

No drug trials have been initiated since the center began operations in July 2008.

### Plans for Future Research and/or Clinical Initiatives

We are working with Dr. Bernard Roos, Director of Geriatric Medicine, and a range of investigators from endocrinology, psychology, and other departments to develop a registry of information from aging individuals.

Data would be collected over three days in three sessions, including assessments of 1) general health and function, 2) cognition and affect, and 3) physical performance. Within each of these sessions a wide array of data would be collected that would be relevant to the goals of the McKnight Center. A neuropsychological battery would allow us to identify those with and without normal cognitive aging. Instruments to assess quality of life, social engagement, sleep quality, fatigue, and physical measures of strength and gait would be administered, as well as measurement of blood and anthropomorphic measures. This registry provides the first step in establishing the feasibility and infrastructure that would lead to grant proposals with specific aims directed at understanding age-related memory loss.

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## 7. TECHNOLOGY

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There are no technologies that have been developed under the auspices of the McKnight Center at this time.

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## 8. FINANCES

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- a) **Budget update:** The first budget for the Center is attached for 2008-2009.
- b) **Status of matching funds:** See attached report. All funds have been matched. The Schoninger Foundation has made a commitment for \$3.5M of which we have received \$219,779 and the balance to be received over the next 4 years is \$3,380,221.
- c) **Projected budget:** A budget for 2009-2010 is attached.
- d) **Extramural funding:** At this time we have no extramural funding.
- e) **Endowment Report:** See attached report.

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## 9. EDUCATIONAL PROGRAMS FOCUSING ON AGE RELATED MEMORY LOSS

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### Scientific

Dr. Richard Isaacson has designed a study entitled: "Evaluating the Effectiveness of a Cognitive Aging Curriculum for Medical Students and Residents" due to the paucity of research on how to best teach healthcare providers (e.g. medical students, residents) about cognitive aging. Considering all of these factors, it was our goal to develop and test an evidence-based cognitive aging curriculum. In order to determine the effectiveness of this new curriculum, we used the practice-pattern-based curriculum development model and implemented it to medical students, Internal Medicine Residents and Neurology Residents (n=104) at the University of Miami Miller School of Medicine/Jackson Memorial Hospital.

### Public

Educational Outreach Program on Cognitive Aging for Community Elders: In the Fall, Dr. Isaacson moderated a forum on aging at the Adolph and Rose Levis Jewish Community Center in Boca Raton, FL. During his presentation, Dr. Isaacson spoke with a large group of community elders about cognitive aging and age-related memory loss. After the presentation, Dr. Isaacson answered questions from the audience and highlighted some of the ongoing research of his team and the McKnight Center at U. Miami.

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## 10. COLLABORATIONS

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### With other McKnight Institutes

We have no collaborative programs with other McKnight Institutes at this time. Our Center hopes to be able to work with the McKnight Institute in Tucson to study brain MRI scans from individuals from the Northern Manhattan Study population using voxel-based morphometry methods. We have discussed sending a graduate student to work with Gene Alexander. However, we are hoping that the Travel Award program could be used for this purpose.

### With non-McKnight Institutions

Our collaboration with Columbia University allows the Northern Manhattan Study to continue to follow its stroke-free cohort for vascular events and deaths. In addition, the sub sample of 1,290 participants that underwent neuropsychological testing has begun to come in for the second evaluation.

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## 11: FUNDS USED FOR A PROHIBITED PURPOSE DURING THE REPORT PERIOD

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No funds were used for prohibited purposes.

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## 12: RECOMMENDED MODIFICATIONS TO THE PURPOSE OR MANDATES IN THE GIFT AGREEMENT

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No modifications are requested at this time.

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## 13: LIST ANY ACTIVITIES DURING THE REPORT THAT DID NOT FURTHER THE PURPOSE

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None. All the Center activities have been for the purpose of furthering research and treatment of age related memory loss.

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## 14: DESCRIBE INSTITUTIONAL PROGRESS COMPARED TO THE ORIGINAL GOALS

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Progress toward original goals is proceeding according to plan and includes the establishment of core resources within the Center, the recruitment of key faculty and support staff, and the development of collaborations both within and outside the University of Miami.

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## 15: NEGATIVE EVENTS IMPACTING THE EXECUTION OF THE GIFT AGREEMENT

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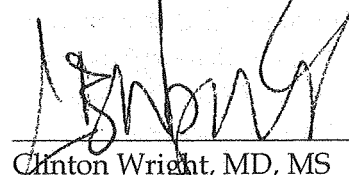
The recession has impacted the Fund and is projected to result in a decrease in revenue for the upcoming year. However, carry overs from previous years will allow us to maintain our current budget expenditures at 2008 levels. The length and depth of the economic downturn will have an impact on these projections.

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**16: GENERAL COMMENTS OR THOUGHTS NOT COVERED IN THE REPORT**

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We are energized by the opportunity to create this special Center and look forward to working with the McKnight Brain Research Foundation and other centers to make a difference in the research and treatment of age-related memory loss and cognitive dysfunction.



Clinton Wright, MD, MS  
Scientific Director

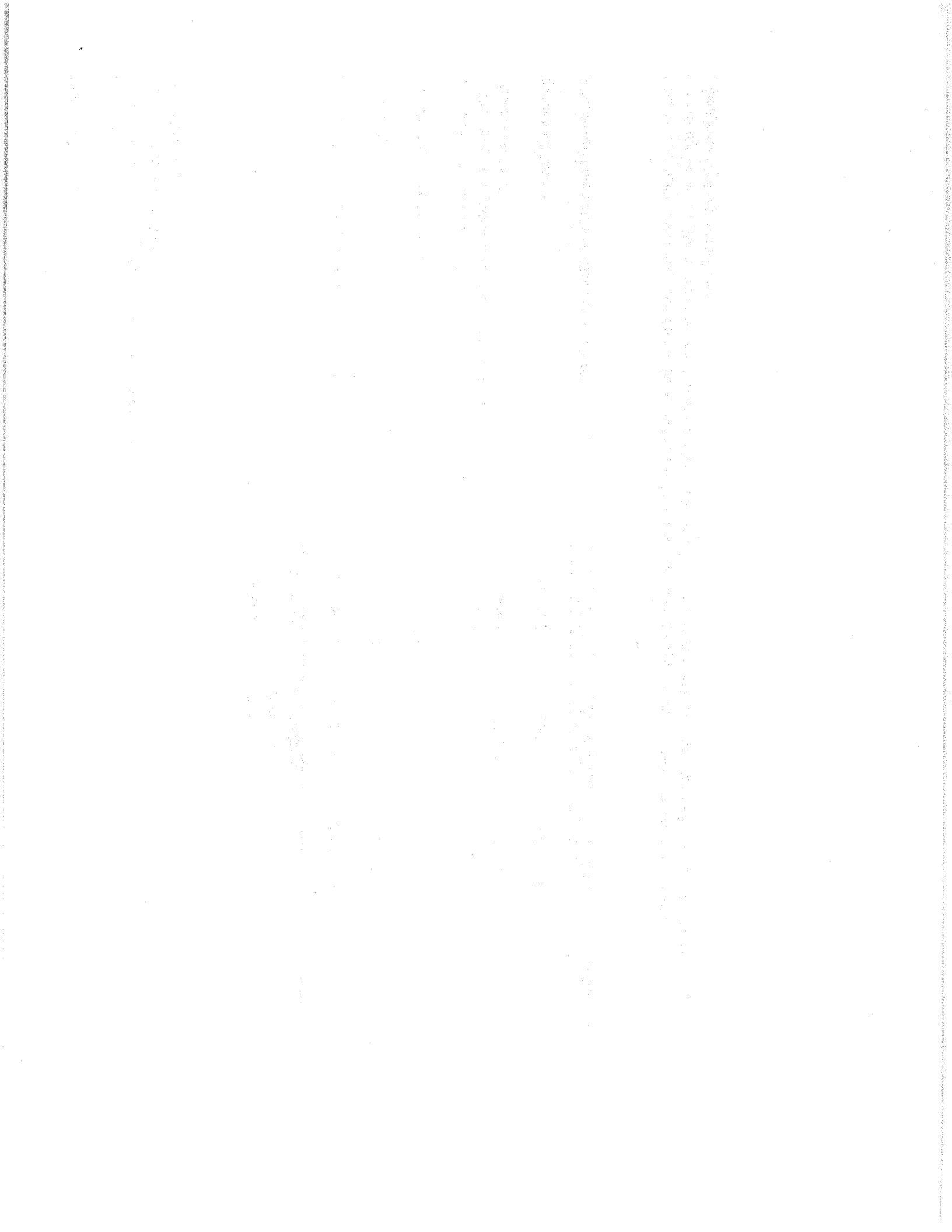
Evelyn F. McKnight Center for Age Related Memory Loss.

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University of Miami  
Evelyn F. McKnight Center for Age Related Memory Loss Fund  
Summary Analysis at Market  
December 31, 2008

	262080	262293	Total	Unmatched Balance
Endowment Corpus Market Balance - 5/31/08	\$7,024,283	\$1,187,559	\$8,211,842	\$3,600,000
UM Match	219,779		219,779	(219,779)
Transfer from other sources*	352,800		352,800	
Distributions for spending:				
Cumulative distribution for previous fiscal years	(757,781)		(757,781)	
Fiscal year 08-09	(304,871)	(55,568)	(360,439)	
Investment Return	(1,723,711)	(320,178)	(2,043,889)	
Endowment Corpus Market Balance - 12/31/08	<u>\$4,810,499</u>	<u>\$811,813</u>	<u>\$5,622,313</u>	<u>\$3,380,221</u>

\* The amount that would have been distributable per the UM Endowment Spending Policy on the Unmatched Balance or, if greater, the average actual rate of return earned by the Growth Pool for the 3 years ended the prior fiscal year (9.8% for period ended 5/31/08) and then added to the Endowment Balance.



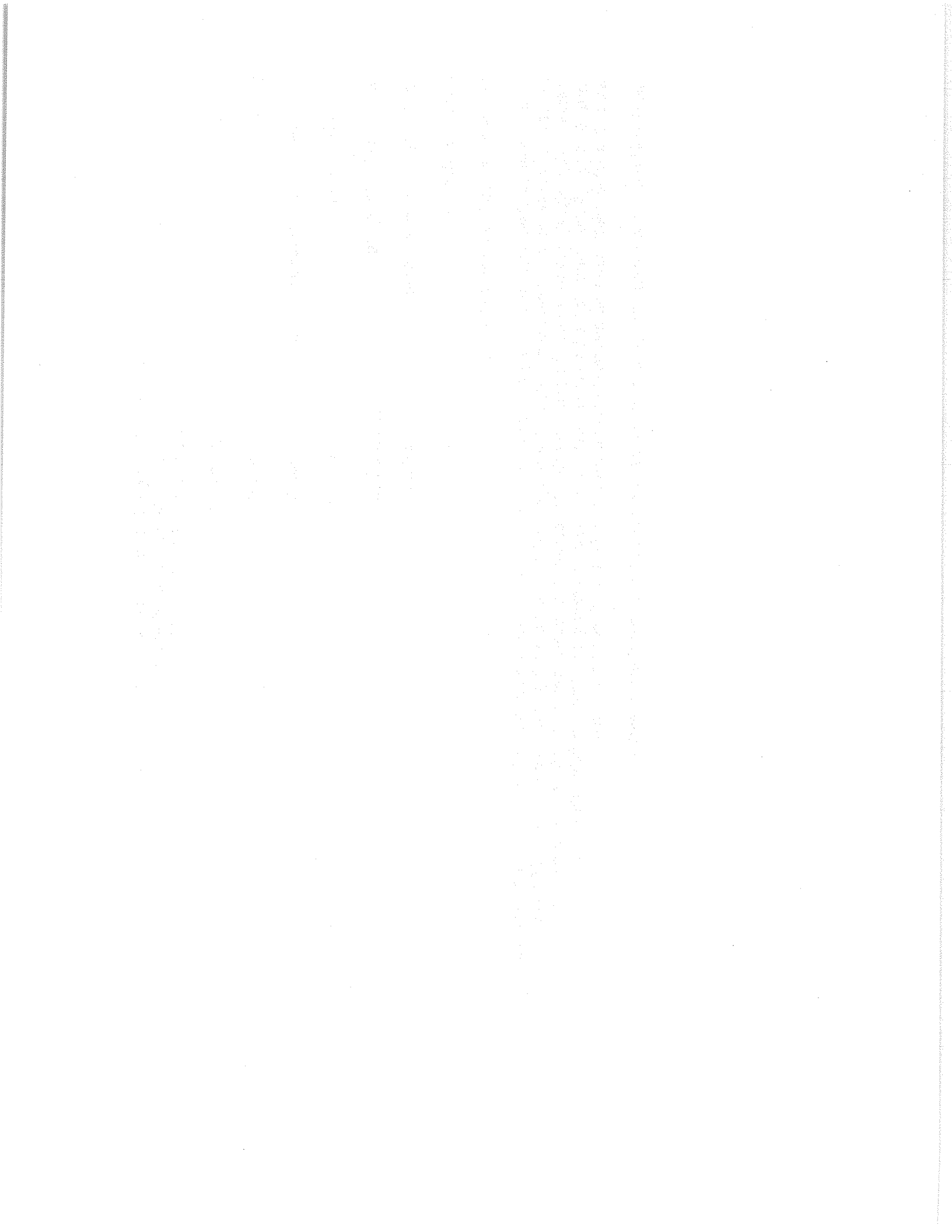
**Evelyn F. McKnight Center for Age Related Memory Loss  
at the Miller School of Medicine  
Fund Balance for FYE 12/31/2008**

Mcknight Contribution	\$5,000,000
UM Match	1,670,692
Transfers from Other University Funds	352,800
Investment Return	(282,959)
Distributions for Spending	<u>(1,118,220)</u>
12/31/2008* Endowment Balance	\$5,622,313
Unmatched Balance**	\$3,380,221

\*\*University's Fiscal Year End is May 31st

\*\*The Unmatched Balance is the University's matching requirement. The University agrees that each year it will distribute from other sources the amount that would have been distributable per the UM Endowment Spending Policy on the Unmatched Balance or, if greater, the average actual rate of return earned by the Growth Pool for the 3 years ended the prior fiscal year (9.8% for period ended 5/31/08) and then added to the Endowment Balance, in support of the program. The Unmatched Balance will be reduced as actual match payments are transferred into the Growth Pool (the Endowment Balance).

The University will provide a report of the Endowment Balance and the Unmatched Balance, annually.





University of Miami  
 Department of Neurology  
 300279  
 Proposed Budget for the period of June 1, 2008 - May 31, 2009

**EVELYN F.McKNIGHT CTR AGE MEMORY LOSS FD**

<u>Revenue</u>	<u>Prior Bal. FY 08</u>	<u>FY 09</u>	<u>Total</u>
Income	757,781.32	360,438.62	1,118,219.94

Clinical and Clinical Research Program

**Subtotal Faculty Salary** 290,029.88

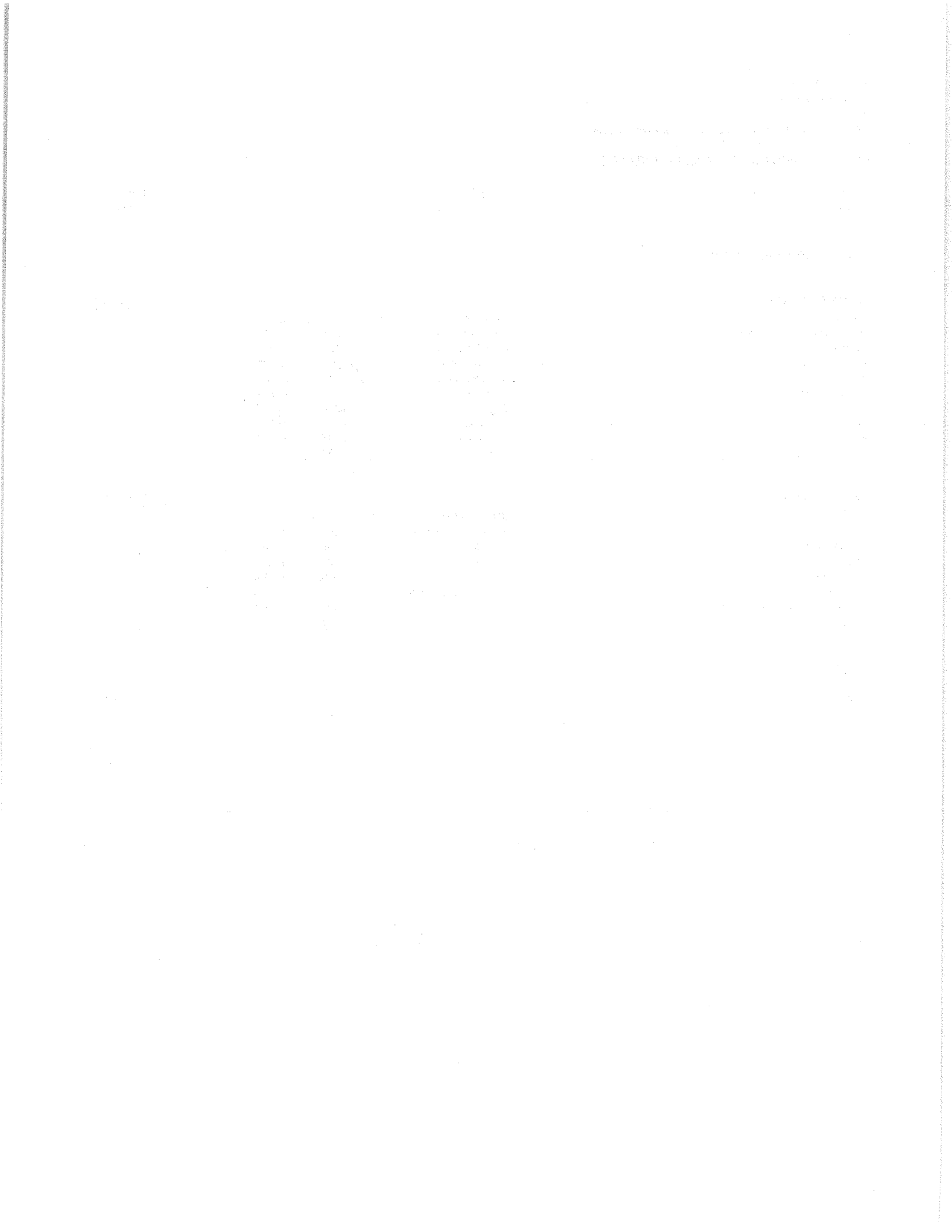
<u>Faculty</u>	<u>Role in Project</u>	<u>Effort</u>	<u>CFB Rate</u>
Clinton Wright, MD (7/15/08)	Scientific Director	29.00%	22.00%
Ralph Sacco, MD	Executive Director	10.00%	22.00%
Tanja Rundek, MD	Co-investigator	10.00%	25.50%
Bonnie Levin, MD	Neuropsychology	35.00%	25.50%
Heather Katzen	Neuropsychology	5.00%	25.50%
Susan H. Blanton (1/1/08)	Genetics	8.00%	25.50%
Jason Hsu (1/1/08)	Radiology	30.00%	22.00%
Richard Isaacson	Educational Director	20.00%	22.00%
Chuanhui Dong(1/05/2009)	Statistics	5.00%	25.50%

**Subtotal Staff Salary and CFB** 65,908.56

<u>Staff</u>	<u>Role in Project</u>	<u>Effort</u>	<u>CFB Rate</u>
Edison Sabala	Administrative Support	10%	33.90%
Hannah Gardner PhD	Statistics	20%	33.90%
Mario Perez	Statistics	10%	33.90%
Jessica Loring	Educational	30%	33.90%
Jessica Suarez	Administrative Support	10%	33.90%
Khushnuma Unwalla (7/22/2008)	Administrative Support	10%	33.90%
James West	Accounting	10%	33.90%

Program Non Personnel Expenses

GWAS 1290 Nomias Subjects	80,000.00
Computers	2,700.00
Supplies	2,000.00
Domestic Travel	12,250.00
Honorarium	5,000.00
Miscellaneous Expenses	22,894.42
<b>Grand Total Expenses</b>	<b><u>480,782.86</u></b>
<b>Balance Available</b>	<b><u>637,437.08</u></b>



University of Miami  
 Department of Neurology  
 300279  
 Proposed Budget for the period of June 1, 2009 - May 31, 2010  
 EVELYN F.McKNIGHT CTR AGE MEMORY LOSS FD

<u>Revenue</u>	<u>Prior Bal. FY 09</u>	<u>FY 10</u>	<u>Total</u>
Income	647,207.91	200,000.00	847,207.91

Clinical and Clinical Research Program

Subtotal Faculty Salary 350,820.22

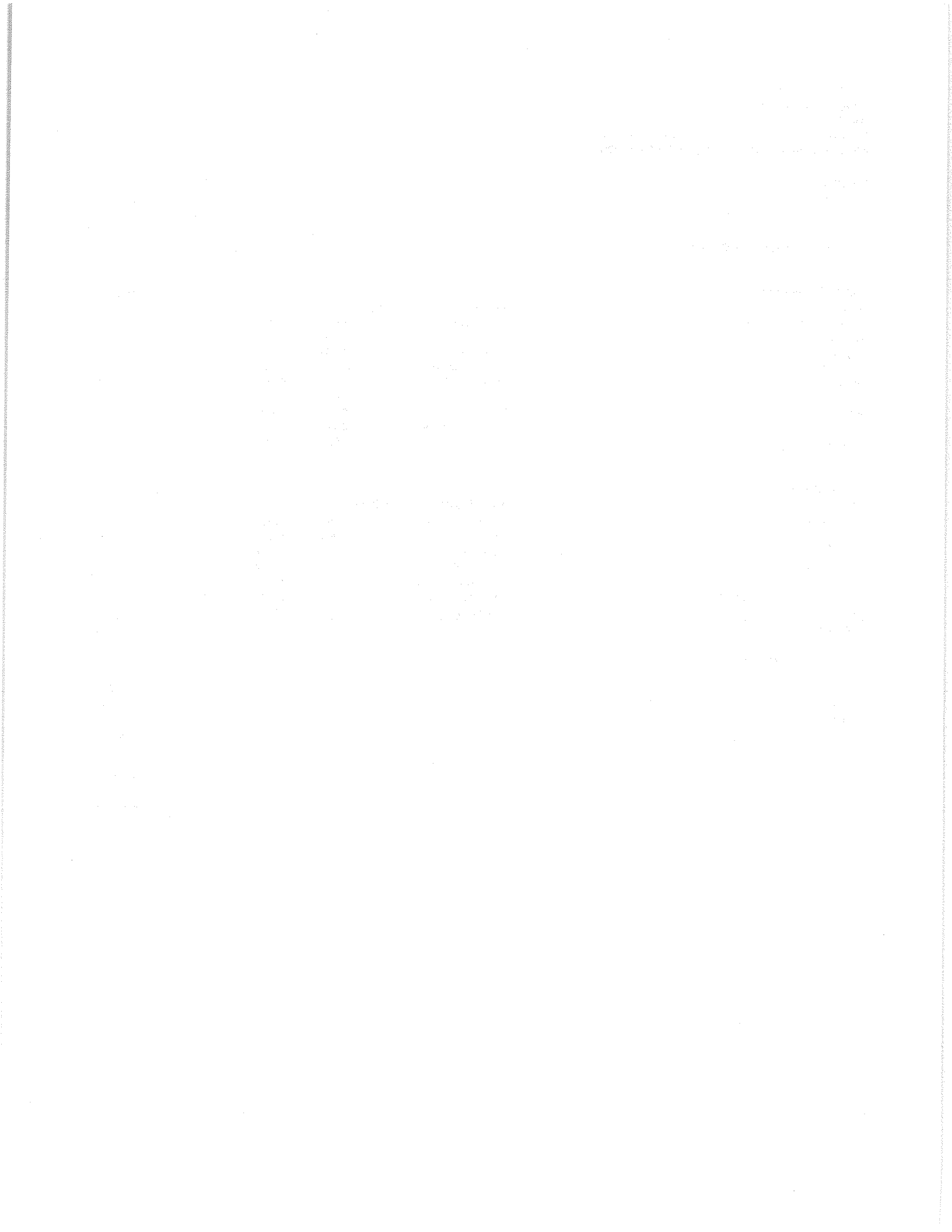
<u>Faculty</u>	<u>Role in Project</u>	<u>Effort</u>	<u>CFB Rate</u>
Clinton Wright, MD (7/15/08)	Scientific Director	29.00%	22.00%
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Tanja Rundek, MD	Co-investigator	10.00%	25.50%
Bonnie Levin, MD	Neuropsychology	35.00%	25.50%
Heather Katzen	Neuropsychology	5.00%	25.50%
Susan H. Blanton (1/1/08)	Genetics	8.00%	25.50%
Jason Hsu (1/1/08)	Radiology	30.00%	22.00%
Richard Isaacson	Educational Director	20.00%	22.00%
Chuanhui Dong(1/05/2009)	Statistics	5.00%	25.50%

Subtotal Staff Salary and CFB 50,422.34

<u>Staff</u>	<u>Role in Project</u>	<u>Effort</u>	<u>CFB Rate</u>
Edison Sabala	Administrative Support	10%	33.90%
Hannah Gardner PhD	Statistics	20%	33.90%
Mario Perez	Statistics	10%	33.90%
Jessica Loring	Educational	30%	33.90%
Jessica Suarez	Administrative Support	10%	33.90%
Khushnuma Unwalla (7/22/2008)	Administrative Support	10%	33.90%
James West	Accounting	10%	33.90%
Subtotal Salary			

Program Non Personnel Expenses

GWAS 1290 Nomias Subjects	40,000.00
Supplies	2,000.00
Domestic Travel	12,250.00
Honorarium	5,000.00
Miscellaneous Expenses	22,974.63
<u>Grand Total Expenses</u>	<u>483,467.19</u>
<u>Balance Available</u>	<u>363,740.72</u>



## BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.  
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Loring, Jessica Rene eRA COMMONS USER NAME (credential, e.g., agency login)	POSITION TITLE MD/PhD Student, Department of Epidemiology & Public Health Research Assistant, Department of Neurology		
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of California, Los Angeles	B.S.	2004	Physiological Science
University of California, Los Angeles	M.S.	2005	Biomedical Engineering
University of Miami Miller School of Medicine	M.D.	In Progress	Medicine
University of Miami Miller School of Medicine	Ph.D.	In Progress	Epidemiology

### A. Positions and Honors.

#### Positions and Employment

2003-2005 Research Assistant, National Neurological AIDS Bank, Los Angeles, CA  
 2004-2005 Research Associate, Glaucoma Institute – Beverly Hills, Los Angeles, CA  
 2006- Tutor, Advanced Learners, Miami, FL  
 2008- Research Assistant, Department of Neurology, University of Miami Miller School of Medicine, Miami, FL

#### Other Experience and Professional Memberships

2003-2005 Volunteer, UCLA Medical Center Neurology Clinic and Olive View Hospital, Los Angeles, CA  
 2004-2005 Research Assistant, Departments of Physiological Science and Biomathematics, UCLA, Los Angeles, CA  
 2005-2008 Research Director, Department of Community Service (DOCS), UMMSM  
 2005- Medical Student Section, American Medical Association (AMA-MSS), Florida Medical Association, Dade County Medical Association  
 2006-2007 National Committee on Scientific Issues, AMA-MSS  
 2006-2008 Chapter Chair, AMA-MSS, UMMSM  
 2006 Community Service Convention Committee, AMA-MSS  
 2006 Research Assistant, Department of Psychiatry & Behavioral Sciences  
 2006- Medical Genetics Pathway of The Dr. John T. MacDonald Foundation Center for Medical Genetics, UMMSM  
 2006- Research Assistant, The Victor Center, UMMSM  
 2007- Teaching Assistant, Graduate Programs in Epidemiology & Public Health, UMMSM  
 2008- Senator, Public Health Student Association, UMMSM

#### Honors

2001 Regents' Scholarship, UCLA  
 2001 National Merit Scholarship, UCLA  
 2004 Physiological Science Departmental Highest Honors, UCLA  
 2004 College Honors, College of Letters & Sciences, UCLA  
 2004 Phi Beta Kappa  
 2004 Chancellor's Service Award, UCLA  
 2004 Vice Provost's Recognition Award and Dean's Prize Nominee, UCLA Divisions of Life and Physical Sciences Poster Day  
 2004 Mortar Board National Senior Honor Society

**B. Selected peer-reviewed publications (in chronological order).**

1. Dy CJ, Loring J, Materson B. The Effect of Length of Residence on the Prevalence of Elevated Blood Pressures and Cardiovascular Risk Factors in the Haitian-American Community. Abstract published in the 2006 Abstract Supplement of the *Journal of the American Society of Nephrology*. Presented at the American Society of Nephrology's 2006 Renal Week Meeting.
2. Dy CJ, Loring J, Kannan G, Koch S, Materson B. Hypertension in South Florida's Ethnic Communities. Abstract published in the 2006 Abstract Supplement of the *Journal of the American Society of Nephrology*.
3. Morales A, Wierenga A, Cuthbert C, Sacharow S, Jayakar P, Acosta P, Velazquez D, Loring J, Barbouth D. Expanded Newborn Screening in Puerto Rico and the US Virgin Islands: Education and Barriers Assessment. Accepted for publication on 27 Oct 2008 in *Genetics in Medicine*.
4. Barbouth D, Wasserman D, Loring J, Zakarin L, Herman E, Herbstman D, Rosen S, Shnaider A. Awareness, attitudes and barriers of Jewish Genetic Screening: A Florida experience. Abstract to be presented at the 2009 American College of Medical Genetics Annual Clinical Genetics Meeting.
5. Loring J, Yoshita M, Marquez C, Elkind MSV, Sacco RL, DeCarli C, Wright CB. White Matter Hyperintensity Volume is Associated with Depressive Symptoms: the Northern Manhattan Study. Under review for presentation at the 2009 American Society of Neuroradiology Meeting.

## BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.  
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Nahab, Fatta B.		POSITION TITLE Assistant Professor of Neurology University of Miami Miller School of Medicine	
eRA COMMONS USER NAME (credential, e.g., agency login)			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
La Sierra University (Riverside, CA)	B.S.	1992-1996	Biology
Loma Linda University (Loma Linda, CA)	M.D.	1996-2000	Medicine
Loma Linda University Medical Center (Loma Linda, CA)	Internship Residency Chief Resident	2000-2001 2001-2004 2003-2004	Internal Medicine/Psychiatry Neurology
Human Motor Control section, NINDS National Institutes of Health, Bethesda, MD	Fellowship	2004-2008	Movement Disorders and Functional MRI

### A. Positions and Honors

#### Professional Experience:

2004-2008 Neurology Consultant, NIH Clinical Center, Bethesda, MD

2005-2008 Director, NIH Botulinum Toxin Clinic, Bethesda, MD

2005-2007 General Medical Hospitalist, Shady Grove Adventist Hospital, Rockville, MD

2007-2008 Assistant Clinical Investigator, NINDS, NIH, Bethesda, MD

2008-present Assistant Professor of Neurology, University of Miami, Miami, FL

2008-present Director of Research, Section of Movement Disorders, Dept. of Neurology, University of Miami

Scientific Reviewer: Clinical Neurophysiology, Human Brain Mapping Conference, Journal of Psychiatric Research,  
Movement Disorders, Brain

#### Professional Memberships:

2001-present American Academy of Neurology

2004-present Movement Disorder Society

#### Honors and Awards (selected):

1997 Summer Research Scholarship, MacPherson Society

1998 Excellence in Research Award, Western Medical Student Research Forum

1998 Outstanding Service Award, Iacono Movement Disorder and Neuroscience Group

2002-2004 Academic Development Award, Loma Linda University Dept of Neurology

2004 Resident Scholarship, American Academy of Neurology

2004 Alpha Omega Alpha

2008 J. Stephen Fink, MD PhD American Society for Experimental NeuroTherapeutics (ASENT) Fellow

### B. Publications (in chronological order):

#### PEER-REVIEWED

1. Nahab FB, Peckham E, Hallett M. Essential tremor: deceptively simple... *Pract Neurol* 2007; 7(4): 222-233.

- Nahab FB, Peckham E, Hallett M. Pilot study of botulinum toxin type A for the treatment of refractory restless legs Syndrome. *Neurology* 2008; 71 (12): 950-.
- Nahab FB, Hattori N, Saad ZS, Hallett M. Contagious yawning and the frontal lobe: An fMRI study. *Human Brain Mapping* 2008 Oct 20 (Epub ahead of print).

#### REFERENCE TEXTBOOKS/CHAPTERS

- Nahab FB and Hallett M. In: Yousry T, ed. *Neuroimaging Clinics of North America*. The role of fMRI in the diagnosis of movement disorders. (In press)

#### ABSTRACTS/PRESENTATIONS

- Nahab FB, Baines S, Ippolito D, Hallett M. Long duration accelerometry to assess efficacy of oral 1-octanol in patients with essential tremor. [International Congress of Parkinson's Disease and Movement Disorders 6/07].
- Nahab FB, Toro C, Wittevrongel L, Hallett M. Therapeutic effect of 1-octanol mediated by conversion to octanoic acid in adults with essential tremor. [International Congress of Parkinson's Disease and Movement Disorders 6/08].
- Kundu P, Nahab FB, Horovitz S, Hallett M. Whole Brain Functional Connectivity Elucidated with fMRI and Graph Analysis. [International Congress of Parkinson's Disease and Movement Disorders 6/08].

#### **C. Research Support**

##### Ongoing Research Support

International Essential Tremor Foundation Nahab (PI) 7/08-6/09

Identification of the neural generator(s) in essential tremor using functional magnetic resonance imaging.

This study will identify the neural network responsible for generating essential tremor.

Role: PI

##### Completed Research Support

Intramural NIH 07-N-0160 Nahab (PI) 2007-2008

NINDS/NIH

Pilot study of botulinum toxin, type A for the treatment of restless legs syndrome

This study assessed the utility of botulinum toxin for the treatment of restless legs syndrome in a randomized, double-blind, placebo control design.

Role: PI

Intramural NIH 07-N-0117 Nahab (PI) 2006-2008

NINDS/NIH

BOLD-fMRI of the Perception of Volition in Functional Movement Disorders

This study utilized fMRI to determine whether patients with functional movement disorders had volitional control over their movements.

Role: PI

Intramural NIH 06-N-0243 Hallett (PI) 2006-2008

NINDS/NIH

Brain Connectivity between visual input and motor output.

The neural networks recruited for visually guided vs. unguided movements were studied with fMRI.

Role: Associate Investigator

Intramural NIH 06-N-0139 Peckham (PI) 2006-2008

NINDS/NIH



Treatment for Psychogenic Movement Disorders.

This pilot treatment trial of psychogenic movement disorders studied the use of biofeedback.

Role: Associate Investigator

Intramural NIH 06-N-0128 Hallett (PI) 2006-2008

NINDS/NIH

fMRI studies of task specificity in Focal Hand Dystonia.

This fMRI study identified the writing motor program in healthy controls and compared this region in patients with focal hand dystonia.

Role: Associate Investigator

Intramural NIH 06-N-0084 Hallett (PI) 2006-2008

NINDS/NIH

Brain Networks Responsible for Sense of Agency: An EEG study.

This study followed a similar study I designed using fMRI to study the sense of self-agency.

Role: Associate Investigator

Intramural NIH 06-N-0023 Nahab (PI) 2005-2008

NINDS/NIH

Brain networks responsible for self-agency: An fMRI study.

This fMRI study identified the neural network associated with the perception of voluntary/involuntary control in healthy controls and compared these findings with the networks in patients with functional movement disorders.

Role: PI

Intramural NIH 05-N-0092 Nahab (PI) 2004-2008

NINDS/NIH

Clinical Trial Characterizing the Bioavailability of 1-Octanol in Adults with Ethanol-responsive Essential Tremor. 1-octanol pharmacokinetics, efficacy, and safety were assessed in this phase I/II IND study in patients with ET.

Role: PI

Intramural NIH 05-N-0032 Nahab (PI) 2004-2006

NINDS/NIH

Functional MRI Study of Brain Activation with Observation of Facial Expressions.

This fMRI protocol studied the neural correlates of non-pathologic contagious motor programs (yawning) to determine whether similar networks were involved in tic disorders.

Role: PI

Intramural NIH 04-N-0153 Pirio Richardson (PI) 2004-2006

NINDS/NIH

Timing of Voluntary Movement in Patients with Tourette Syndrome and Chronic Tic Disorder Using EEG and Surface EMG.

This study measured the timing of tic onset using a Libet-type paradigm.

Role: Associate Investigator

Intramural NIH 04-N-0151 Pirio Richardson (PI) 2004-2006

NINDS/NIH

Timing of Voluntary Movement in Patients with Schizophrenia Using EEG and Surface EMG.

This study measured the timing of tic onset using a Libet-type paradigm.

Role: Associate Investigator

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**LRP BIOGRAPHICAL SKETCH**  
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NAME Isaacson, Richard Scott		POSITION TITLE Assistant Professor of Neurology and Medicine	
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Missouri–Kansas City Kansas City, MO	B.A.	1995-1997	Liberal Arts
University of Missouri–Kansas City School of Medicine	M.D.	1997-2001	Medicine
Mount Sinai Medical Center, University of Miami Beth Israel Deaconess Med Ctr, Harvard Med	Internship Residency	2001-2002 2002-2005	Internal Medicine Neurology

**A. Positions and Honors.** List in chronological order previous positions, concluding with your present position. List any honors. Include present membership on any Federal Government public advisory committee.

**Positions and Employment**

2004-2005 Chief Resident (Neurology), Harvard Medical School, Beth Israel Deaconess Medical Center  
 2002-2005 Clinical Fellow in Neurology, Harvard Medical School  
 2005-2007 Associate Medical Director, Wien Center for Alzheimer's Disease and Memory Disorders, MSMC  
 2005-2007 Director, Research Unit in Medical Education, Mount Sinai Medical Center  
 2005-2007 Attending Neurologist, Mount Sinai Medical Center  
 2005- pres American Academy of Neurology, Undergraduate Education Subcommittee  
 2005- pres Assistant Professor of Medicine, University of Miami Miller School of Medicine  
 2007- pres Assistant Professor of Neurology, University of Miami Miller School of Medicine  
 2007- pres Director, Neurology Residency Training Program, University of Miami Miller School of Medicine  
 2007- pres Associate Director, Neurology Medical Student Clerkship, U. Miami Miller School of Medicine  
 2008- pres Co-Director, Neuromodule, Neuroscience and Behavior 1<sup>st</sup> year medical student course  
 2008-pres Consortium of Neurology Clerkship Directors Task Force, ED-2/Core Curriculum for Medical Students  
 2008- pres Associate Chair of Education, Department of Neurology, U. Miami Miller School of Medicine  
 1997, 1999 Laboratory of Central Nervous System Studies, National Institute of Neurological Disorders and (summer) Stroke, National Institutes of Health, Bethesda, MD; Mentor: Dr. Clarence J. Gibbs

**Other Experience and Professional Memberships**

2001- pres American Academy of Neurology  
 2004 Harvard Academy Medical Education Symposium, Workshops in Medical Education  
 2004 Laboratory teaching assistant, Harvard Medical School, Human Nervous System and Behavior, Second year medical student course  
 2004 Study Group Instructor, Tufts University Medical School, Neuroanatomy and Neurophysiology  
 2005- pres Movement Disorders Society  
 2005- 2007 Graduate Medical Education/Academic Affairs Committee, Mount Sinai Medical Center

2006- 2007 Vice-Chair, Continuing Medical Education Committee, Mount Sinai Medical Center  
2007- pres Association of University Professors of Neurology  
2008- pres Graduate Medical Education Committee (Voting member), U. Miami/Jackson Memorial Hospital  
2008- pres Associate Member, Educational Development Office, U. Miami Miller School of Medicine  
2008- pres Board of Directors, Florida Society of Neurology

### Honors

2003 Congressional Representative for the American Academy of Neurology, Neurology on the Hill  
2005 Teacher of the Year/Attending of the Year, Internal Medicine Residency Training Program, Mount Sinai Medical Center  
2006 Invited Course Director/Speaker, ACGME Annual Educational Conference, March 2007, Orlando, FL;  
Topic: "Practice-Pattern-based Curriculum Development"  
2006 Florida International University – Distinguished Lecture Series  
Topic: "Alzheimer's Disease – Unraveling the Mystery"  
2006 Alumni of Distinction Award, Commack High School, Commack, NY  
2007 Invited Speaker, Cuban Medical Association Conference  
Topic: "Alzheimer's disease: Epidemiology, Diagnosis and Treatment"  
2008 Invited Speaker, American Academy of Neurology 2008 Annual Meeting  
Topic: "Measuring Educational Outcomes in Neurology"; Clerkship and Program Directors Conference  
2008 Invited Speaker, Association of University Professors of Neurology – Clerkship Directors Boot Camp Topic: "Education Research Methods in Dementia"  
2008 American Academy of Neurology Leadership Development Program  
2008 Congressional Representative for the American Academy of Neurology, Neurology on the Hill  
2008 Chairman's Award for Teaching Excellence, Dept of Neurology, U. Miami Miller School of Medicine

### **B. Selected peer-reviewed publications (in chronological order).**

1. Silberstein S, Isaacson RS. Clinical course in migraine-conceptualizing migraine transformation. Neurology Podcast: Headache. American Academy of Neurology, September 8, 2008. <http://www.aan.com/rss/?event=feed&channel=1>.

2. Isaacson RS, Utley B, Cheng N, Portnoy K. Advice to Medical Students: Neurology. American Academy of Neurology website, August 2008. Published in print and on-line at <http://www.aan.com/go/education/students/medical/advice>.

### Abstracts:

1. Isaacson RS. Evaluating the Effectiveness of Continuum as a Teaching Tool for Residents and Medical Students: A Pilot Study. *Neurology*. 2008; 70 (suppl): A13.

### **C. Research Support.**

#### Ongoing Projects:

Genetic and Environmental Determinants of White Matter Hyperintensities and Vascular Cognitive Impairment  
Principal Investigator: Ralph L. Sacco, MD, MS, FAAN, FAHA  
Miami McKnight Center for Cognitive Aging/  
National Institutes of Health – Clinical Research LRP

---

Role: Co-Investigator

Evaluating the Effectiveness of *Continuum* as a Teaching Tool for Medical Students

Principal Investigator: Richard S. Isaacson, MD

American Academy of Neurology

Role: Principal Investigator

Cyanobacterial toxin (BMAA) in brain and hair tissue of Alzheimer's disease patients

Principal Investigator: Spyridon Papapetropoulos, MD, Ph. D

Alzheimer's Association

Role: Co-Investigator

Completed Projects:

Cognitive-Cardiovascular Screening and Intervention Program for Hispanics and Non-Hispanics

Principal Investigators: Richard S. Isaacson, MD (Education), Ranjan Duara, MD (Clinical)

Mount Sinai Medical Center Foundation

Role: Co-Principal Investigator

Alzheimer's Disease Neuroimaging Initiative (ADNI)

Principal Investigator (MSMC Site): Ranjan Duara, MD

National Institutes of Health

Role: Co-Investigator/Study Physician (MSMC site)

A Randomized Double-Blind Placebo-Controlled Trial of the Effects of Docosahexaenoic Acid (DHA) in Slowing the Progression of Alzheimer's Disease

Principal Investigator (MSMC Site): Ranjan Duara, MD

National Institute on Aging, Alzheimer's Disease Cooperative Study (ADCS)

Role: Co-Investigator/Study Physician (MSMC site)

A Multi-center, Randomized, Double-blind, Placebo-controlled trial of Simvastatin to slow the progression of Alzheimer's Disease

Principal Investigator (MSMC Site): Ranjan Duara, MD

National Institute on Aging, Alzheimer's Disease Cooperative Study (ADCS)

Role: Co-Investigator/Study Physician (MSMC site)

A Randomized, Double-blind, Placebo-controlled trial of Valproate to Attenuate the Progression of Alzheimer's Disease

Principal Investigator (MSMC Site): Ranjan Duara, MD

National Institute on Aging, Alzheimer's Disease Cooperative Study (ADCS)

Role: Co-Investigator/Study Physician (MSMC site)

A One Year, Multicenter, Randomized, Double-blind, Placebo-controlled Evaluation of the Efficacy and Safety of Donepezil Hydrochloride (E2020) in subjects with Mild Cognitive Impairment

Principal Investigator (MSMC Site): Ranjan Duara, MD

Pfizer Inc./Eisai Inc

Role: Co-Investigator/Study Physician (MSMC site)

A Multi-centered, Randomized, Double Blind, Placebo-controlled Trial of Estrogen to Prevent Alzheimer's Disease and loss of memory in women

Principal Investigator (MSMC Site): Ranjan Duara, MD

National Institute on Aging, Alzheimer's Disease Cooperative Study (ADCS)

Role: Co-Investigator/Study Physician (MSMC site)

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A longitudinal study of cognitive and functional abilities of subjects with either mild to moderate Alzheimer's Disease, Mild Cognitive Impairment, or normal cognition using a neuropsychological test battery (NTB)

Principal Investigator (MSMC Site): Ranjan Duara, MD

Elon Pharmaceuticals, Inc.

Role: Co-Investigator/Study Physician (MSMC site)

## BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.  
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME <b>Tatjana Rundek</b>	POSITION TITLE <b>Associate Professor of Neurology Miller School of Medicine University of Miami, Miami, FL</b>		
eRA COMMONS USER NAME <b>TR89XX</b>			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Zagreb, College of Mathematics, Croatia	B.S.	1979-1983	Applied Mathematics
Medical School University of Zagreb, Croatia	M.D.	1984-1989	Medicine
Medical School University of Zagreb, Croatia	M.S.	1989-1991	Epidemiology/Bioinformatics
Ludwig-Maximillian University, Munich, Germany	Ph.D.	1991-1995	Neuroscience
Medical School University of Zagreb, Croatia	Residency	1991-1994	Neurology
Columbia University, New York, NY	Research Fellow	1998-2000	Stroke/Neuroepidemiology

### A. POSITIONS AND HONORS POSITIONS AND EMPLOYMENT

#### Traineeship:

1990-91	Medicine Internship	Clinical Hospital for Pulmonary Diseases, Zagreb, Croatia
1991-94	Neurology Residency	Grosssharden Spital Munich, Germany
1995-96	Neurosonology Post-Doctoral Fellow	Neurosonology Laboratory University of Ulm, Germany
1998-00	Stroke Fellow (Epidemiology)	Columbia University, New York, NY

#### Academic Appointments:

1994-96	Assistant Professor of Neurology	Department of Neurology, University of Zagreb, Croatia
1996-98	Associate Professor of Neurology	Department of Neurology, University of Zagreb, Croatia
2000-02	Associate Research Scientist	Columbia University, New York, NY
2002-07	Director, Neurosonology Laboratory	Columbia University, New York, NY
2002-07	Assistant Professor of Neurology	Columbia University, New York, NY
2007-	Associate Professor of Neurology	Miller School of Medicine, University of Miami, Miami, FL

#### Hospital Appointments:

1994-98	Stroke Attending	Department of Neurology, University of Zagreb, Croatia
1995-98	Director, Neurosonology Laboratory	Department of Neurology, University of Zagreb, Croatia
2002-07	Director, Neurosonology Laboratory	Columbia University, New York, NY
2007-	Director, Clinical Translational Research Division in Neurology	Department of Neurology, Miller School of Medicine, University of Miami, Miami, FL

### OTHER EXPERIENCE AND PROFESSIONAL MEMBERSHIPS

#### Editorial Board Member of the Professional Journals:

Stroke, Neurology, The Journal of CardioMetabolic Syndrome

#### Ad Hoc Reviewer for the Professional Journals:

Stroke, Neurology, Neuroepidemiology, Cerebrovascular Diseases, Scandinavian Journal of Rheumatology, Circulation, American Journal of Ultrasound in Medicine

## **Memberships:**

- 1997- American Academy of Neurology
- 1997- American Heart Association
- 1997- European Federation of Neurological Societies - Dementia Panel Delegate
- 1994- American Institute of Ultrasound in Medicine
- 1994- European Society of Neurosonology and Cerebral Hemodynamics

## **HONORS**

- 1997 Fulbright Award and Scholarship, Neurological Institute, Columbia University, New York, NY
- 1996 George Soros Scholarship, Neurology Seminars, University of Krems, Austria
- 1995 Humbolt Award, Neurosonology Laboratory, University of Ulm, Germany
- 2006 Nassau Women Physicians Foundation Award for Stroke Research in Women; Long Island, NY

## **B. SELECTED PEER-REVIEW PUBLICATIONS**

1. **Rundek T**, Elkind MS, Di Tullio MR, Carrera E, Jin Z, Sacco RL, Homma S. Patent Foramen Ovale and Migraine. A Cross-Sectional Study from the Northern Manhattan Study (NOMAS). *Circulation*. 2008;118(14):1419-24.
2. **Rundek T**. PFO in stroke: a direct association or coincidence? *Eur J Neurol*. 2008;15(9):887-8.
3. **Rundek T**, Sacco RL. Risk factor management to prevent first stroke. *Neurol Clin*. 2008;26(4):1007-45.
4. **Rundek T**, Arif H, Boden-Albala B, Elkind MS, Paik MC, Sacco RLS. Carotid plaque thickness predicts ischemic stroke, myocardial infarction and vascular death: The Northern Manhattan Study. *Neurology* 2008;70(14):1200-7.
5. Fillit H, Nash DT, Rundek T, Zuckerman A. Cardiovascular risk factors and dementia. *Am J Geriatr Pharmacother*. 2008;6(2):100-18.
6. Della Morte D, Abete P, Gallucci F, Scaglione A, D'Ambrosio D, Gargiulo G, De Rosa G, Dave KR, Lin HW, Cacciatore F, Mazzella F, Uomo G, Rundek T, Perez-Pinzon MA, Rengo F. Transient ischemic attack before non lacunar ischemic stroke in the elderly. *J Stroke Cerebrovasc Dis*. 2008;17(5):257-62.

## **C. RESEARCH SUPPORT**

### **Ongoing Research Support**

#### **Genetic Determinants of Subclinical Carotid Disease**

**R01 NS 047655**

NIH/NINDS

PI: T. Rundek

01.01.04-12.31.09

This is a cross-sectional study evaluating potential candidate genes related to carotid IMT and distensibility in the Northern Manhattan Study cohort.

#### **Primary Hyperparathyroidism: Non-Classical Manifestations**

**1 R01 DK 66329**

NIH

PI: S. Silverberg; T. Rundek, Co-Investigator

7.01.05-06.30.10

The main objective of this study is to detect subclinical abnormalities that are sufficiently sensitive to define cardiovascular features of primary hyperparathyroidism. The specific aims are to determine whether there is structural and functional evidence of increased vascular stiffness or cardiovascular calcification in patients with mild asymptomatic PHPT and to determine the reversibility of these manifestations after parathyroidectomy in a randomized controlled clinical trial.

#### **Aortic, cardiovascular disease and silent brain infarcts, Columbia University, NY (PI: Marco R. Di Tullio)**

NINDS/ R01 NS 36286

PI: M. Di Tullio; T.Rundek: Co-Investigator

7.01.05-06.30.10



The objective of this study was to investigate cardiac sources of silent brain infarcts and cerebral white matter disease.

### **Stroke Incidence and Risk Factors in a Tri-Ethnic Region**

**2 R01 NS 029993-11**

NIH/NINDS

PI: R.L. Sacco; T. Rundek, Co-Investigator 01.07.93-03.31.15

The major goals of this project are to determine the effect of risk factors for stroke, MI, and vascular death, as well as evaluate predictors of cognitive impairment and the importance of subclinical MRI findings in a prospective cohort study of 3,300 persons from 3 race-ethnic groups from Northern Manhattan.

### **Family Study of Stroke Risk and Carotid Atherosclerosis**

**1 R01 NS 40807**

NIH/NINDS

PI: R.L. Sacco; T. Rundek, Co-Investigator 05.01.02-04.30.08

The major goal of this study is to evaluate heritability and genetic linkage of new vascular risk factors (homocysteine, carotid intima-media thickness, carotid distensibility, brachial endothelial reactivity and left ventricular mass) among the families of high-risk Caribbean Hispanics.

### **Oral Infections, Carotid Atherosclerosis and Stroke (INVEST)**

**1 R01 DE 13094**

NIH/NIDCR

PI: M. Desvarieux; T. Rundek, Co-Investigator 06.15.06-05.31.11

This cohort study will examine the effect of chronic periodontal disease and inflammation as a risk factor for stroke and carotid atheroma progression.

### **MESA (Multi-Ethnic Subclinical Atherosclerosis)**

NIH/NHLBI-HC

CU PI: S. Shea; T. Rundek, Site Investigator 06.15.02-05.31.10

The objective of this large NIH contract is to examine traditional and novel risk factors and markers of subclinical atherosclerosis in a large sample of individuals from multi-ethnic communities.

### **Clopidogrel versus Aspirin Carotid Ultrasound Stroke Study (CASS)**

*Sanofi-Aventis/BM*

PI: T. Rundek 7.01.05-12.30.08.

This is a 3-year single center clinical trial aimed to test the hypothesis that clopidogrel is superior in improving carotid artery wall properties over aspirin in the patients with non-disabling stroke from a multi-ethnic community.

### **Completed Research Support**

#### **A Multicenter, Randomized, Double-Blind Placebo-Controlled Study to test the Safety and Efficacy of Lipitor (atorvastatin) in Reducing the Progression of Carotid IMT in Early Childhood SLE", The Atherosclerosis Prevention in Pediatric Lupus Erythematosus (APPLE) Study**

NIH/NIAMS BAA-02

PI: L.E. Schanberg, Duke; T. Rundek, Site Co-I 06.15.04-05.31.08

The objective of this study is to assess the efficacy of atorvastatin in reducing carotid IMT in children with systemic lupus erythematosus.

#### **STARR (The Study of Atherosclerosis with Ramipril and Rosiglitazone)**

Canadian Institutes of Health Research, Aventis Pharma, King Pharmaceuticals and GlaxoSmithKline

PI: Eva Lonn, McMaster University, Hamilton, Canada

T. Rundek, CU Site PI 01.01.02-12.31.07

STARR is a multi-centre, international, randomized controlled clinical trial aimed to evaluate the effects of ramipril and of rosiglitazone on atherosclerosis progression, as determined by B-mode carotid ultrasound. It is a substudy of DREAM (Diabetes REDuction Assessment with Ramipril and Rosiglitazone Medication) trial.

#### **Carotid Artery Distensibility and Risk of Stroke**

*The Gilbert Baum Memorial Grant and the American Institute of Ultrasound in Medicine Award*

PI: T. Rundek

7.01.04-06.30.05

The objective of this case-control study was to determine whether impaired carotid distensibility assessed by ultrasound is associated with an increased risk of stroke. The specific aims of this study were to determine whether the stroke risk associated with carotid distensibility varies among different stroke types and different age, gender and race-ethnic groups at various levels of carotid intima-media thickness (IMT) and carotid plaque.

#### **The Hazel K. Goddess Fund for Stroke Research in Women**

*The Hazel K. Goddess Fund*

PI: T. Rundek

7.01.01-06.30.04

The major goals of this project was to determine the effects of structural and functional carotid artery wall properties on the risk of stroke, MI or death in a prospective cohort study of 360 postmenopausal women over age 55 from 3 race-ethnic groups from northern Manhattan.

#### **The Effect of Atorvastatin on Carotid Plaque Morphology Assessed by Gray Scale Ultrasound Densitometry**

*Pfizer, Inc.*

PI: T. Rundek

7.01.05-06.30.06

This was a 1-year single center study clinical trial aimed to assess the potential effect of atorvastatin on carotid artery plaque density within 30 days of treatment with a single dose of atorvastatin among individuals with hypercholesterolemia.

#### **A Pilot Study to Evaluate Potential Screening Factors for Atherosclerosis in Survivors of Childhood and Young Adult Hodgkin's Disease**

*The Columbia Cancer Institute*

PI: K. Kelly, Co-Investigator: T. Rundek

7.01.05-06.30.06

To main objective of this study was to obtain pilot data to evaluate the prevalence and severity of asymptomatic carotid artery disease in a cohort of survivors of childhood or young adult Hodgkin's disease who had remained in a continuous complete remission for at least 5 years after the completion of all therapy in comparison to their unaffected siblings.

#### **The PACTS-HOPE Project: Premature Atherosclerosis and Cardiovascular Risk in Children: Carotid Ultrasound Sub-study**

CDC

PI: E. Abrams, T.Rundek: Co-Investigator

7.01.05-06.30.06

The objective of this substudy was to examine the presence of subclinical atherosclerosis in HIV positive children and its associations with increased risk of CVD in children on the AZT medication.

#### **Comparison of IMT thickness, Clinical Outcomes and Dynamic Vascular Analysis (DVA)**

*New Health Sciences, Inc*

PI: T.Rundek

01.01.05-06.30.07

The objective of this study was to compare carotid IMT with parameters in cerebral hemodynamic parameters.

## BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.  
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Bonnie E. Levin, Ph.D.		POSITION TITLE Associate Professor of Neurology and Psychology	
eRA COMMONS USER NAME bonnie_levin			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Georgetown University	BS	1974	Psychology
Temple University	Ph.D.	1983	Psychology

### A. PROFESSIONAL EXPERIENCE

#### EMPLOYMENT:

1979-1980 Fellow in Psychology, Department of Psychiatry, Harvard Medical School, Boston, MA  
1979-1980 Intern, Clinical Pediatric Neuropsychology, Children's Hospital Center, Boston, MA.  
1980 Extern, Boston Veteran's Administration Hospital, Boston, MA  
1981-1982 Instructor, Department of Neurology, University of Miami  
1981 Director, Division of Neuropsychology, Department of Neurology, University of Miami  
1986-1992 Assistant Professor, Department of Neurology, University of Miami  
1992- Associate Professor, Department of Neurology, University of Miami

#### AWARDS AND OTHER PROFESSIONAL EXPERIENCE:

1974-Cum Laude, Georgetown University; Psi Chi Honor Society  
Fellow, Mahoney Residential College  
International Neuropsychology Society (INS) Program Chair-1997  
INS Board of Governors 1998-2001  
NINDS Study Section Member NSD-K, 2001-2005  
NINDS AD hoc Reviewer-NSD-A 2001, 2002  
NINDS Special Emphasis Panels 7/1998, 8/1999, 12/1999, 5/2000, 8/2000, 10/2000, 12/2001, 6/2001, 10/2001, 8/2002, 12/2002, 1/2004, 8/2004, 12/2004, 2/2005, 1/2006, 10/2006, 11/2006, 11/2006, 6/2007, (6/24 & 6/29) 3/2008, 4/2008.  
NINDS Ad hoc reviewer, NSD-K, 2006 - 2008  
Alzheimer Association Medical and Scientific Council Reviewer, 1999, 2002  
Consultant: University of Miami Brain Endowment Bank, Department of Neurology; Clinical Neuroscience Unit, UM Department of Neurology  
Member, NABIS: H II Date Safety of Monitoring Board  
Pediatrics; UM Sleep Center, Department of Neurology.  
Professional Advisory Board: Epilepsy Foundation of South Florida  
Editorial Boards: Neuropsychology, Journal of the International Neuropsychological Society (JINS), Aging, Neuropsychology and Cognition, Journal of Clinical & Experimental, Neuropsychology (JCEN)

### B. SELECTED PUBLICATIONS:

Ravdin L.D. & Katzen, H., Relkin, N.R. (2008). Gait Measures Associated With Positive Response to Tap Test in Patients with Normal Pressure Hydrocephalus. *Clinical Neurology and Neurosurgery*, 110(5):455-61.

Scanlon, B. K., Katzen, H. L., Levin, B. E., Singer, C., & Papapetropoulos, S. (2008). A formula for the conversion of UPDRS-III scores to Hoehn and Yahr stage. *Parkinsonism & Related Disorders*, 14(4), 379-380.

Nation, D. A., Katzen, H. L., Scanlon, B. K., Papapetropoulos, S., Duncan, R., Rodriguez, R. A., Singer, C. & Levin, B. E. Defining Subthreshold Depression in Parkinson's Disease. *International Journal of Neuropsychiatry* (in press)

Papapetropoulos, S., Katzen, H., Schrag, A., Singer, C., Scanlon, B. K., Nation, D., Guevara, A., & Levin, B. (2008). A questionnaire-based (UM-PDHD) study of hallucinations in Parkinson's disease. *BMC Neurology*, 8(21).

### **Book Chapters:**

Levin, B. Behavioral/Neuropsychological Outcomes and Quality of Life Endpoints . In Woodbury-Harris KM, Coull BM (eds): *Clinical Trials in Neuroscience*. Front Neurol Neurosci. Basel, Karger, 2009, vol 25, pp 1–15

Ravdin, L.D. & Katzen, H. Idiopathic Normal Pressure Hydrocephalus (in press). *Casebook of Clinical Neuropsychology*. Oxford University Press.

Relkin, N.R. & Katzen, H. Normal Pressure Hydrocephalus: A Review. In: David Geldmacher (Ed.), Other Dementias. (2008). Florida: Carma Publishing.

### **Selected Refereed Abstracts:**

Assuras, S., Choe, L., Katzen, H. Lee, K., & Relkin, N.R. Proteomic Analysis of Cerebrospinal Fluid in Idiopathic Normal Pressure Hydrocephalus (INPH). Accepted for oral presentation at the annual Hydrocephalus meeting, Hannover, Germany, September 2008.

Assuras, S., Katzen, H.L., Ravdin, L.D., Tsakanikas, D., & Relkin, N.R. Gait and Neuropsychological Response to Shunt in Patients with Normal Pressure Hydrocephalus. Presented at the annual meeting of the American Academy of Clinical Neuropsychology, Boston, MA, June 2008.

1. Scanlon, B. K., Katzen, H. L., Levin, B. E., Singer, C., & Papapetropoulos, S. (2008). A formula for the conversion of UPDRS-III scores to Hoehn and Yahr stage. *Parkinsonism & Related Disorders*, 14(4), 379-380.
2. Papapetropoulos, S. Katzen, H., Schrag, A., Singer, C., Scanlon, B. K., Nation, D. Guevara, & Levin, B.E (in press) A questionnaire-based (UM-PDHD) study of hallucinations in Parkinson's disease. *BMC Neurology*.

## **C. RESEARCH SUPPORT**

### **ACTIVE:**

**2U01NS38529-07A1** (Benavente/ Romano, site PI) 02/01/2008-06/30/2011

**NIH/NINDS** Secondary Prevention of Small, Subcortical Strokes (SPS3)

This project compares aspirin versus Plavix in prevention of secondary strokes and cognitive decline examines standard of care in high blood pressure management.

**1 UO1 NS052478-01A2** (Adelson) 07/30/07 – 06/30/2013

(Site Neuropsychologist)

Pediatric Traumatic Brain Injury Consortium: Hypothermia

This is a multicenter clinical trial to determine the efficacy of early induced moderate hypothermia after severe TBI in a pediatric sample. Subject mortality at 3 months is the primary measure of outcome.

Secondary outcome measures included functional assessment and performance based neuropsychological measures. Role: Study Principal Investigator of the Outcome Center.

COMPLETED:

A Pilot Study of Moderate Hypothermia for Severe Traumatic Brain Injury in Children, N.I.H., P. Davis Adelson (PI) Univ. of Pittsburgh.

This study examined the impact of hypothermia treatment on outcome in children following severe TBI.

Role: Site Neuropsychologist.

Cognitive and Psychological Correlates of Acute and Chronic Ciguatera Poisoning: A Pilot Study. NIEHS Marine and Freshwater Biomedical Services Center.

This project examined the neurobehavioral sequelae of Ciguatera Poisoning.

Role: Consultant/Site Neuropsychologist

PENDING:

**R01 NS055107-05 (Maudsley)**

Volumetric MRSI Evaluation of Traumatic Brain Injury

03/01/2009-02/28/2014

Goals are to evaluate MRI and metabolic imaging methods for injury assessment and prognosis, and for evaluation of post concussive injury syndrome, following mild and moderate traumatic brain injury.

OVERLAP: NONE

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## BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME: <b>Clinton Burnet Wright</b>	POSITION TITLE Associate Professor of Neurology (pending)		
eRA COMMONS USER NAME: WRIGHTCL			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
George Washington University; Washington DC	B.A.	1990	Psychology
Columbia University College of P&S; New York, NY	M.D.	1997	Medicine
Columbia University, Mailman School of PH; New York, NY	M.S.	2003	Epidemiology

### A. Positions and Honors.

#### Positions and Employment

1997-1998	Intern, Internal Medicine.
1998-2001	Resident, Neurology, New York Presbyterian Hospital; New York, NY
2001-2003	Fellowship in Cerebrovascular Disease, Columbia University College of Physicians and Surgeons, New York, NY
2001-2008	Assistant Attending in Neurology, New York Presbyterian Hospital, New York, NY
2003-2008	Assistant Professor of Neurology, Columbia University, New York, NY
2008-present	Adjunct Professor of Neurology, Columbia University, New York, NY (pending)
2008-present	Associate Professor of Neurology, University of Miami, Miami, FL (pending)

#### Other Experience and Professional Memberships

1998-present	American Academy of Neurology
2001-present	American Heart Association, Council on Epidemiology and Prevention

### B. Selected peer-reviewed publications (in chronological order).

1. **Wright CB**, Festa J, Paik MC, Schmiedigen AP, Brown TR, Yoshita M, DeCarli C, Sacco RL, Stern Y. White Matter Hyperintensities and Subclinical Infarction: Associations with Psychomotor Speed and Cognitive Flexibility. *Stroke* 2008;39:800-805.
2. Boden-Albala B, Sacco RL, Lee H-S, Grahame-Clarke C, Rundek T, Elkind MV, **Wright CB**, Giardina EV, DiTullio MR, Homma S, Paik MC. Metabolic Syndrome and Ischemic Stroke Risk: Northern Manhattan Study. *Stroke* 2008;39:30-35.
3. Boden-Albala B, Cammack S, Chong J, Wang C, **Wright CB**, Rundek T, Elkind MSV, Paik MC, Sacco RL. Diabetes, Fasting Glucose Levels, and Risk of Ischemic Stroke and Vascular Events: Findings from the Northern Manhattan Study (NOMAS). *Diabetes Care* 2008;31:1-6.
4. Asllani I, Borogovac A, **Wright CB**, Sacco RL, Brown TR, Zarahn E. An investigation of statistical power for continuous arterial spin labeling imaging at 1.5 T. *NeuroImage* 2008;39:1246-56.

#### Abstracts

1. Birnbaum L, **Wright CB**, Rundek T, Huang L, Li L, Yoshita M, DeCarli C, Sacco R. Carotid Intima-media Thickness is Associated with Subclinical Cerebral Infarcts: The Northern Manhattan Study. *Stroke* 2007;38:453.
2. **Wright CB**, Sacco RL, Yoshita M, Li L, Cordonnier C, DeCarli C. Brain microbleeds in a community-based sample: the Northern Manhattan Study. *Journal of the Neurological Sciences* (in press).
3. **Wright CB**, Sacco RL, Paik MC, Stern Y. Education and physical activity are associated with less cognitive decline. *Journal of the Neurological Sciences* (in press).

4. **Wright CB**, Sacco RL, Yoshita M, DeCarli C, Stern Y. Subclinical Infarct Location Determines Performance on a List Learning Task. *Stroke* 2008;39:682.
5. Evensen LA, Doyle M, Perez T, Moats HL, **Wright CB**, Stillman J, Sacco RL, Klein CD, Boden-Albala B. Stroke In The Young And Social Resources: The Swift Study. *Stroke* 2008;39:627.
6. **Wright CB**, Brickman AM, Doyle M, Perez T, Stern Y, Boden-Albala B. Cognitive Function in Stroke and TIA patients is Associated with Health Knowledge and Competence. International Stroke Conference 2008, February 20-22, New Orleans, LA.
7. **Wright CB**, Moon Y, Santiago M, Rabbani LE, Sacco R, Elkind M. Interleukin 6 Is Associated with Cognitive Decline: The Northern Manhattan Study. *Neurology* 2008;70:A399.
8. Noble J, Borrell LN, Papapanou PN, Elkind M, Scarmeas N, **Wright CB**. Association of the Periodontitis Pathogen *Porphyromonas gingivalis* with Poor Memory: Analysis of the Third National Health and Nutrition Examination Survey (NHANES-III). *Neurology* 2008;70:A191.

### C. Research Support

#### Ongoing Research Support

**1K02NS059729-01A1 (Wright)** 09/01/2008 - 08/31/13  
NIH/NINDS

*Vascular Risk and Cognition in a Multi-ethnic Cohort*

The purpose of this grant is to examine vascular risk factors for cognitive dysfunction in a stroke-free multi-ethnic sample. Aims focus on brain imaging correlates of vascular damage and their relationship to cognitive dysfunction as well as the identification of genetic markers that mediate these associations.

**AHA 0735387N (Wright)** 07/01/2008- 06/30/2011  
AHA

*Vascular Risk and Cognition in a Tri- Ethnic Community*

The purpose of this grant is to examine vascular risk factors as correlates of cognitive dysfunction in a stroke-free multi-ethnic sample. Aims will focus on the role of both traditional and novel vascular risk factors.

**R01 NS029993** Sacco (PI) 01/07/93 - 03/31/15

NIH/NINDS: Subcontract to Columbia University

*Stroke Incidence and Risk Factors in a Tri- Ethnic Region*

This prospective cohort study (Northern Manhattan Study, NOMAS) investigates risk factors for stroke and other vascular outcomes in a multi-ethnic, urban population. In addition, the study seeks to understand the relationships between these risks factors and cognition and MRI-defined cerebrovascular disease.

Role: Co-investigator

#### Completed Research Support

**NS 049060-03** Marshall (PI) 09/30/04 - 07/14/08  
NIH/NINDS

*New York Columbia Collaborative Specialized Program of Translational Research in Acute Stroke (SPOTRIAS: Project 1)*

The major goals of this program project are to perform three innovative acute stroke projects: (1) a dose escalation safety trial of high-dose statins in acute stroke; (2) determine the functional significance of contralateral fMRI activity in acute stroke; and (3) develop and test the efficacy of an innovative behavioral modification intervention to train people how to react if they are having stroke warning symptoms.

**NS 049060-03** Marshall (PI) 09/30/04 - 07/14/08  
NIH/NINDS

*New York Columbia Collaborative Specialized Program of Translational Research in Acute Stroke (SPOTRIAS: Project 3)*



### **Family Study of Stroke Risk and Carotid Atherosclerosis**

Role: PI; Agency: NIH/NINDS; Type: 1R01 (NS 240807); Period: 05.01.02-04.30.09

Aims: The major goals of this project are to determine the heritability and genetic linkage of various stroke risk factors among high-risk Caribbean Hispanic families of the NOMASS.

### **Genetic Determinants of Subclinical Carotid Disease**

Role: Co-I; PI: Tanja Rundek; Agency: NIH/NINDS; Type: R01 (NS 047655); Period: 01.01.04-12.31.09

Aims: This is a cross-sectional study evaluating potential candidate genes related to carotid IMT and distensibility in the Northern Manhattan Study cohort.

### **Oral Infections, Carotid Atherosclerosis and Stroke**

Role: Co-PI; PI: Desvarieux; Agency: NIH/NIDCR; Type: 1R01 (DE 13094); Period: 07.01.00-12.31.09

Aims: To determine the effect of chronic periodontal disease and inflammation as a risk factor for stroke and carotid atheroma progression.

### **Subclinical Cardiovascular Disease Study: MESA Field Center**

Role: Co-I; PI: Shea; Agency: NIH/NHLBI; Type: Contract (NHLBI-HC-98-08); Period: 03.01.99-08.31.08

Aims: To identify subclinical predictors of atherosclerotic disease in a multi-center prospective cohort study.

### **Hispanic Community Health Study/Study on Latinos: Miami Field Center**

Role: Co-I; PI: Schneiderman; Agency: NIH/NHLBI; Type: Contract; Period: 10.01.07-10.01.12

Aims: To determine the role of acculturation in the prevalence and development of disease, and to identify risk factors playing a protective or harmful role in Hispanics/Latinos.

### **Prior Research Support**

#### **New York Columbia Collaborative SPOTRIAS (Specialized Program on Translational Research in Acute Stroke)**

Role: PI; Agency: NIH/NINDS; Type: P50 (NS 049060); Period: 09.30.04-05.31.09

Aims: The major goals of this program project are to perform three innovative acute stroke projects: (1) a dose escalation safety trial of high-dose statins in acute stroke; (2) determine the functional significance of contralateral fMRI activity in acute stroke; and (3) develop and test the efficacy of an innovative behavioral modification intervention to train people how to react if they are having stroke warning symptoms.

#### **Inflammation and Infection as Risk Factors in Stroke**

Role: Mentor; PI: Elkind; Agency: NIH/NINDS; Type: K23 (NS 42912); Period: 01.15.02-12.31.06

Aims: This K23 award is a nested case-control study to evaluate inflammation and other infection exposures as a risk factor for ischemic stroke in the Northern Manhattan Study.

#### **Inflammation, Leukocyte activation and Stroke Risk**

Role: Co-I; PI: M Elkind; Agency: AHA/Grant-In-Aid (0355596T); Period: 07.01.03-06.30.06

Aims: This is a study to evaluate inflammatory markers as risk factors for vascular outcomes within NOMAS.

#### **Inflammatory and Infectious Burden and Risk of Stroke**

Role: Co-I; PI: Elkind; Agency: NIH/NINDS; Type: R01 (NS 048134); Period: 03.01.04-02.28.09

Aims: This is a prospective analysis of inflammatory markers and infectious markers as risk factors for vascular outcomes within the Northern Manhattan Study cohort

#### **Aortic, Cardiovascular Disease and Silent Brain Infarcts**

Role: Co-I; PI: Di Tullio; Agency: NIH/NINDS; Type: 1R01 (NS 36286); Period: 06.01.97-05.31.10

Aims: To determine whether aortic arch plaques and cardiovascular exposures are risk factors for silent infarcts and vascular outcomes within a prospective cohort study.

#### **Vascular predictors of cognitive impairment and decline in a tri-ethnic community**

Role: Mentor; PI: Clinton Wright; Agency: NIH/NCRR; Type: K12 RR017648; Period: 08.01.03-07.31.06.

Aims: To identify vascular risk factors that contribute to cognitive abnormalities.

#### **Familial Intracranial Aneurysm Study**

Role: Co-I; PI: Broderick; Agency: NIH/NINDS; Type: R01 (NS 39512); Period: 07.01.02-06.30.07

Aims: This is a multicenter epidemiological family study to investigate the genetic determinants of familial intracranial aneurysms through linkage analysis.

## BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.  
Follow this format for each person. DO NOT EXCEED FOUR PAGES.

NAME <b>Ralph Lewis Sacco</b>		POSITION TITLE Chairman and Professor of Neurology, Epidemiology, and Human Genetics		
eRA COMMONS USER NAME SACCORL				
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>				
INSTITUTION AND LOCATION		DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Cornell University, College of Engineering		B.S. distinction	1975-79	BioElectrical Engineering
Boston University, School of Medicine		M.D. cum laude	1979-83	Medicine
Columbia University, School of Public Health		M.S.	1987-89	Epidemiology
Neurological Institute, Presbyterian Hospital		Residency	1984-87	Neurology
Columbia College of Physicians & Surgeons		Fellow	1987-89	Cerebrovascular Disease

### A. Positions

- 1989-97 Asst Professor of Neurology & Public Health (Epidemiology) in the Sergievsky Center  
1997-02 Assoc Professor of Neurology & Public Health (Epidemiology) in the Sergievsky Center (with tenure)  
2003-07 Professor of Neurology & Epidemiology, Columbia University, College of Physicians and Surgeons, Mailman School of Public Health, and the Sergievsky Center (with tenure)  
2007- Olemberg Family Chair in Neurological Disorders, Miller Professor of Neurology, Epidemiology and Human Genetics and Chairman of Neurology, Miller School of Medicine, University of Miami

### Honors

- 1982 Alpha Omega Alpha 2001 Fellow of the American Heart Association  
1998 American Neurological Association 2004 Fellow of the American Academy of Neurology  
2006 AHA/ASA William Feinberg Award 2007 AHA Chairman's Award  
2008 NINDS Jacob Javits Award in the Neurosciences

### Other Professional Experience

- 1999-05 American Academy of Neurology - Clinical Research Subcommittee, Chair  
1997-03 NINDS, Performance Safety & Monitoring Committee, VISP Trial  
2004-06 NINDS Neurosciences Training Grant Review Group, Member  
2002-03 Center for Scientific Review, EDC-3  
2003-06 FDA, Peripheral and Central Nervous System Drug Advisory Panel  
2005-07 AHA, NYC Affiliate, President Board of Directors  
2005-08 AHA, National Board of Directors  
2005-08 ASA, Chair Stroke Advisory Committee  
2005- American Academy of Neurology, Board of Directors

### B. Selected Peer-Reviewed Publications

1. Boden-Albala B, Sacco RL, Lee HS, Grahame-Clarke C, Rundek T, Elkind MV, Wright C, Giardina EG, DiTullio MR, Homma S, Paik MC. Metabolic syndrome and ischemic stroke risk. 2008;39:30-5. PMID: 18063821
2. Rundek T, Arif H, Boden-Albala B, Elkind MS, Paik MC, Sacco RL. Carotid plaque, a subclinical precursor of vascular events: the Northern Manhattan Study. **Neurology**. 2008 Apr 1;70(14):1200-7. PMID: 18354078

### C. Ongoing Research Support

#### **Stroke Incidence and Risk Factors in a Tri-Ethnic Region**

Role: PI; Agency: NIH/NINDS; Type: R37 (formerly 2R01) (NS 29993); Period: 01.07.93-03.31.15

Aims: To determine the effects of risk factors including subclinical carotid and brain disease on the risk of stroke, MI, and vascular death in a prospective cohort of 3299 stroke-free community subjects from Northern Manhattan.

#### **Aortic, cardiovascular disease and silent brain infarcts, Columbia University, NY (PI: Marco R. Di Tullio)**

Role: Co-I; PI: M. Di Tullio; Agency: NINDS ; Type: R01 NS 36286 Period: 7.01.05-06.30.10

The objective of this study was to investigate cardiac sources of silent brain infarcts and cerebral white matter disease.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for ensuring the integrity and reliability of financial data. This section also outlines the various methods and tools used to collect and analyze financial information.

The second part of the document focuses on the role of internal controls in preventing fraud and errors. It details the various types of internal controls, such as segregation of duties, authorization requirements, and independent verification. The text also discusses the importance of a strong internal control environment and the role of management in ensuring its effectiveness.

The third part of the document addresses the challenges of financial reporting and the need for transparency. It discusses the various factors that can influence financial reporting, such as accounting standards, management bias, and external pressures. The text also outlines the importance of providing clear and concise financial statements to stakeholders.

The fourth part of the document discusses the role of external audits in providing an independent assessment of a company's financial statements. It details the various types of audits, such as statutory audits, tax audits, and internal audits. The text also discusses the importance of a strong audit trail and the role of auditors in ensuring the accuracy and reliability of financial data.

The fifth part of the document discusses the role of financial analysts in providing an independent assessment of a company's financial performance. It details the various methods and tools used by financial analysts to evaluate a company's financial health, such as ratio analysis, trend analysis, and benchmarking. The text also discusses the importance of providing clear and concise financial analysis to investors and other stakeholders.

The sixth part of the document discusses the role of financial institutions in providing financial services to companies. It details the various types of financial institutions, such as banks, credit unions, and investment firms. The text also discusses the importance of a strong financial institution and the role of financial institutions in ensuring the accuracy and reliability of financial data.

The seventh part of the document discusses the role of financial regulators in ensuring the integrity and reliability of financial markets. It details the various types of financial regulators, such as the SEC, the FDIC, and the CFTC. The text also discusses the importance of a strong financial regulator and the role of financial regulators in ensuring the accuracy and reliability of financial data.

The major goals of this program project are to perform three innovative acute stroke projects: (1) a dose escalation safety trial of high-dose statins in acute stroke; (2) determine the functional significance of contralateral fMRI activity in acute stroke; and (3) develop and test the efficacy of an innovative behavioral modification intervention to train people how to react if they are having stroke warning symptoms.

**NS 049060-03** Marshall (PI) 09/30/04 - 07/14/08

NIH/NINDS

*New York Columbia Collaborative Specialized Program of Translational Research in Acute Stroke (SPOTRIAS: Core C)*

The major goals of this program project are to perform three innovative acute stroke projects: (1) a dose escalation safety trial of high-dose statins in acute stroke; (2) determine the functional significance of contralateral fMRI activity in acute stroke; and (3) develop and test the efficacy of an innovative behavioral modification intervention to train people how to react if they are having stroke warning symptoms.

# MCKNIGHT BRAIN RESEARCH FOUNDATION

February 17 & 18, 2009

(RidgeWorth Board Room, Lincoln Plaza Building, 16<sup>th</sup> Floor)  
Orlando, Florida

## AGENDA

Tuesday, February 17, 2009

5:30 p.m.  
*tentative* Dinner – Grand Bohemian Hotel – Private Dining room 1st floor  
Approval of Minutes from October 21, 2008 Board Meeting  
Update on Inter-Institutional Meeting in Birmingham, Alabama – April 2009  
Board Meeting & Leadership Council Retreat - Orlando, FL August 2009  
Board Meeting October 20 & 21, 2009 – TBD  
Travel Award Program  
NIA & FNIH - Cognitive Aging Summit II  
IASIA Conference Request

Wednesday, February 18, 2009 (RidgeWorth Board Room, Lincoln Plaza Building, 16<sup>th</sup> Floor)

~~7:30 a.m. Continental Breakfast~~

8:00 a.m. Call to Order Teresa Borcheck

~~8:15 a.m. – 9:45 a.m. Investment Review~~ Michael Hill

~~9:45 a.m. – 11:15 a.m. 990 PF for fiscal year ending 6/30/2008~~ Teresa Borcheck

~~Minimum Distribution Calculation~~ Teresa Borcheck

~~Annual Report (Univ. of Alabama)~~ Trustees

~~Annual Report (Univ. of Arizona)~~ Trustees

~~Annual Report (Univ. of Florida Foundation)~~ Trustees

~~Annual Report (Univ. of Miami)~~ Trustees

~~11:15 a.m. – 12:00 p.m. New Trustee Interview Dr. Judith Salerno~~ Trustees

~~12:00 p.m. – 12:45 p.m. Lunch Buffet (RidgeWorth Board Room, Lincoln Plaza Building, 16<sup>th</sup> Floor)~~

~~12:45 p.m. – 1:00 p.m. Break~~

~~1:00 p.m. – 1:30 p.m. Interview Debrief~~ Trustees

~~1:30 p.m. – 2:30 p.m. UAB Proposal~~ *Walk from Down* Dr. Rich & Dr. Sweatt

2:30 p.m. – 3:30 p.m. UAB Proposal Discussion Trustees  
Wrap Up – Other Business

3:30 p.m. Adjournment

Note to Trustees – other items for consideration

Annual compensation review/updated in July 2008 – no new information available at this time

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY

PHYSICAL CHEMISTRY

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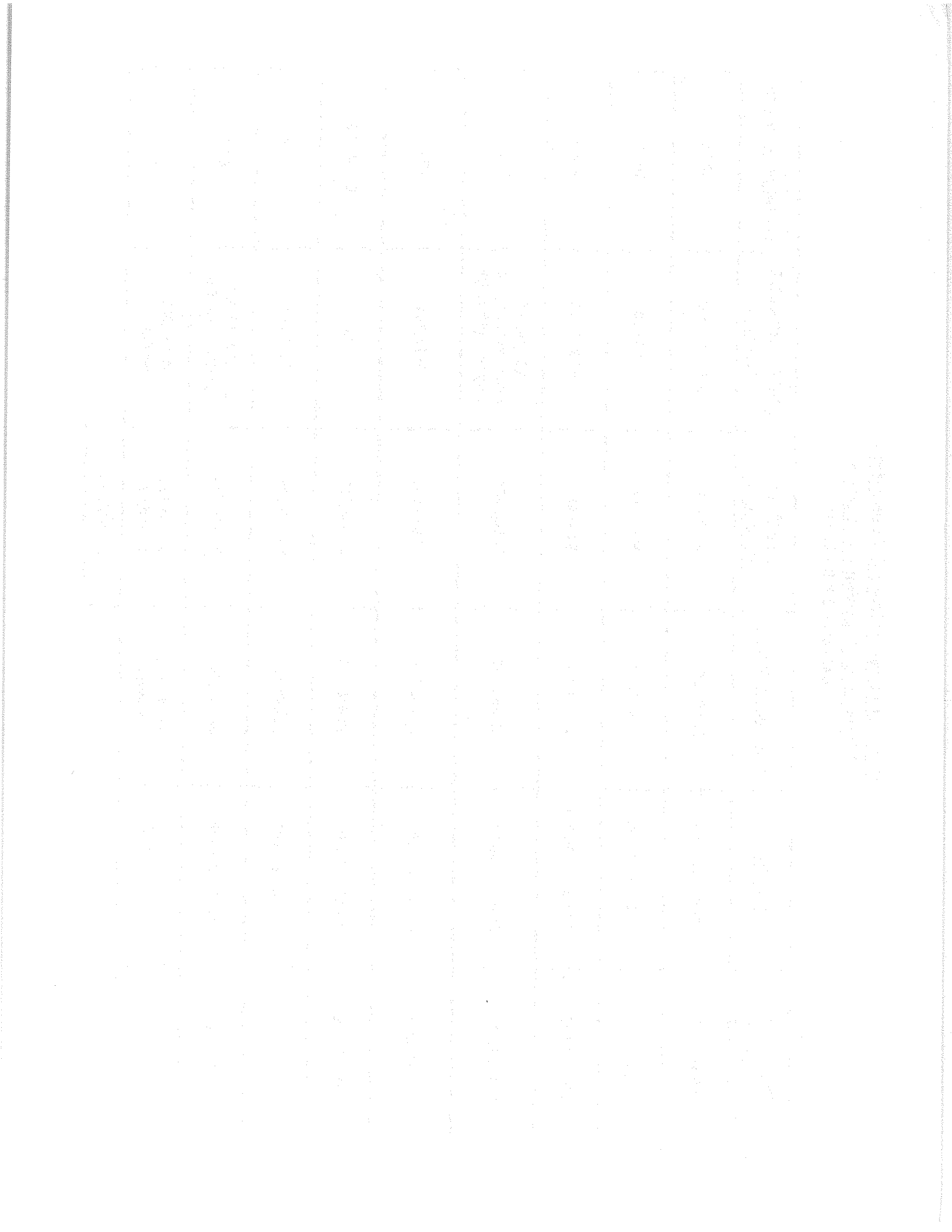
PHYSICAL CHEMISTRY

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PHYSICAL CHEMISTRY

**McKnight Brain Research Foundation**  
**Minimum Distribution Calculation**  
**Fiscal years 2000 - 2008**

<u>Market Value</u>	<u>Tax Year</u>	<u>Distributable Amount</u>	<u>Qualifying Distributions</u>	<u>Excess Distributions Carryover</u>	<u>Undistributed Income</u>
<u>Dec 1999 - \$69,126,583</u>					
\$49,585,746	7/1/00 - 06/30/01	\$2,581,909	\$177,042	\$10,128,483.99	\$0.00
\$46,511,035	7/1/01 - 06/30/02	\$2,401,671	\$181,194	\$7,908,007	\$0.00
\$45,973,696	7/1/02 - 6/30/03	\$1,954,735	\$148,481	\$5,953,272	\$0.00
\$51,867,213	7/1/03 - 6/30/04	\$2,352,435	\$1,665,404	\$5,266,241 (last year we could carryover gift to UF)	\$0.00
\$51,898,266	7/1/04 - 6/30/05	\$2,450,345	\$3,026,049	\$575,704	\$0.00
\$55,777,369	7/1/05 - 6/30/06	\$2,620,008	\$2,036,659	\$0	\$7,645.00
\$62,782,831	7/1/06 - 6/30/07	\$2,843,725	\$3,299,931	\$448,561	\$0.00
\$54,753,484	7/1/07 - 6/30/08	\$2,817,569	\$3,110,508	\$741,500 (07&08) (\$292,939 - 2008)	\$0.00
\$36,871,735 as of 1/31/2009	7/1/08-6/30/09	\$1,815,932 (estimate)	\$2,534,771 (estimate)	\$1,460,338 (estimate)	\$0.00
			\$31,043,661		





# McKnight Brain Research Foundation

## Projected Minimum Investment Return Calculations

(As of 1/31/2009)

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Average Fair Market Value	\$36,871,735.00
Less:	
Cash held for charitable purposes (1 1/2 %)	<u>(\$553,076.03)</u>
Net value of non-charitable use assets	\$36,318,658.98
Minimum Investment Return (5%)	\$1,815,932.95

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### Net Minimum Investment Return Calculation:

Minimum investment return	\$1,815,932.95
Less:	
Trustee fees	(\$80,000.00)
SunTrust Fees	(\$50,000.00)
Travel & Miscellaneous	(\$85,000.00)
Printing Fees	(\$990.45)
D&O Insurance Premium	(\$1,651.00)
Legal	(\$16,135.47)
ASF	(\$495.00)
Distributions as of 01/31/09	<u>(\$2,300,500.00)</u>
sub total Qualifying Distributions	<u>(\$2,534,771.92)</u>
	(\$718,838.97)
Excess distribution carryover	(\$741,500.00)

**2008 Excess Distribution Carryover - Estimated**

**(\$1,460,338.97)**

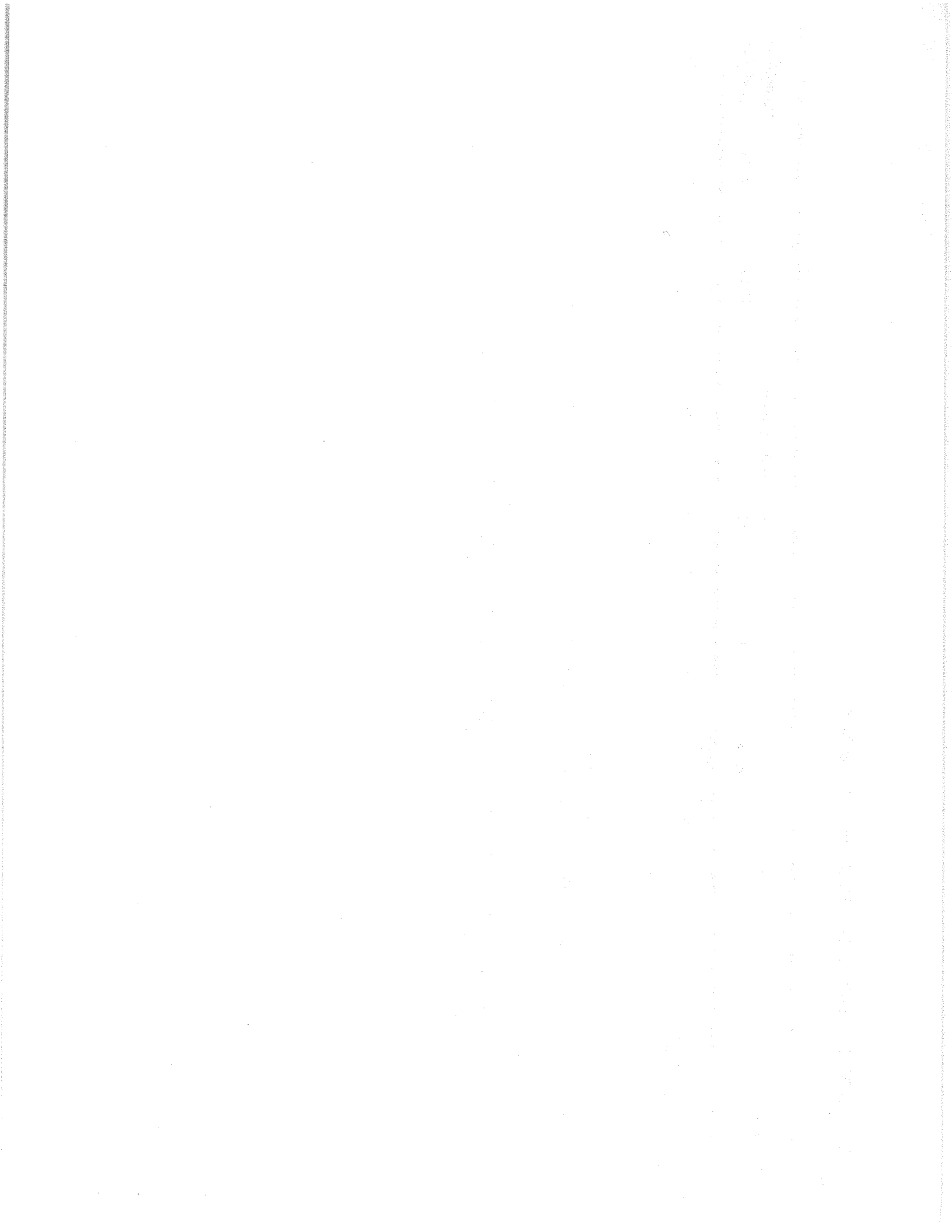


# Grant Commitment Schedule (6 years)

2/4/2009

Organization Grant Amount	Total Paid	Scheduled Payments						Remaining Balance
		2009	2010	2011	2012	2013	2014	
Foundation for the National Institutes of Health \$5,000,000.00 <i>Research Partnership in Cognitive Aging</i>	\$0.00	Payable 7/1/2009 \$1,000,000.00	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00	\$0.00	\$0.00
University of Arizona \$5,300,000.00 <i>McKnight Brain Institute</i>	\$3,300,000.00	Payable 7/25/2009 \$1,000,000.00	\$1,000,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Grand Total</b>	<b>\$3,300,000.00</b>	<b>\$2,000,000.00</b>	<b>\$2,000,000.00</b>	<b>\$1,000,000.00</b>	<b>\$1,000,000.00</b>	<b>\$1,000,000.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

(2 items)



**MINUTES**  
**MCKNIGHT BRAIN RESEARCH FOUNDATION**  
**BOARD OF TRUSTEES MEETING**

**October 21 & 22, 2008**

The quarterly trustee's meeting of the McKnight Brain Research Foundation (MBRF) was called to order at 12:00 p.m. on October 21<sup>st</sup>, at the Evelyn F. McKnight Brain Institute at the University of Alabama in Birmingham.

The following members were present:

- Dr. J. Lee Dockery, Trustee
- Dr. Michael Dockery, Trustee
- Dr. Nina Ellenbogen Raim, Trustee
- Dr. John Clarkson, Trustee
- Mrs. Teresa Borcheck, Corporate Trustee

SunTrust Bank Institutional Investment Management Administration

Others attending:

- Mr. Henry H. Raatama, Jr., Legal Counsel
- Mr. Michael Hill, Managing Director, Trusco Capital Management (via conference call)
- Mr. Dan Ledbetter, Lighthouse Partners (via conference call)
- Mrs. Daphne Shephard, SunTrust Bank, Charitable Services Group (via conference call)
- Dr. Robert A. Rich, Senior Vice President and Dean, University of Alabama at Birmingham
- Dr. David Sweatt, The Evelyn F. McKnight Chair in Learning and Memory in the Aging, Director of

The Evelyn F. McKnight Brain Institute, University of Alabama at Birmingham

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Orlando at the SunTrust Bank Offices. The Leadership Council Retreat will also take place during the August Meeting (Attachment 4).

**Action Item 4: The trustees received the calendar of events for information (Attachment 4).**

#### **5. Society for Neuroscience Event November 17, 2008**

The trustees reviewed the final contract (Attachment 5). The event is an Evelyn F. McKnight Brain Research Foundation sponsored event for students from each of the four institutions for which the MBRF provides funding, who are attending the Annual Society for Neuroscience Meeting. The event will feature scientific poster sessions from each of the four institutions. The event will be held on November 17, 2008 at the JW Marriott Hotel on Pennsylvania Avenue in Washington, D.C. Dr. J. Lee Dockery along with Mrs. Teresa Borcheck will be the trustees in attendance at the event.

**Action Item 5: Dr. J. Lee Dockery and Mrs. Teresa Borcheck, MBRF trustees, will attend the MBRF sponsored poster session at the Annual Society for Neuroscience meeting, November 17, 2008 in Washington, D.C.**

#### **6. McKnight Brain Research Foundation Travel Award Program**

After review of the initial proposal and discussion of suggested changes provided by Dr. Lee Dockery, the concept of a McKnight Brain Research Foundation Collaborative Travel Award Program was approved (Attachment 6). The proposed budget of \$100,000 over two years was tentatively approved. The trustees will ask for a revised application addressing the questions posed by them on October 6, 2008. In addition, they will inquire as to why a representative from the University of Miami was not placed on the proposed selection committee. It is anticipated that a preliminary report could be presented by the Leadership Council at the August 2009 meeting.





## **9. Investment Review**

Mr. Hill presented the investment review and key economic and investment factors for the third quarter (Attachment 9). Equity markets, both domestically and globally sold off during the period. During the period small cap value stocks generated a positive return due in part to their limited exposure to international earnings. The growth and value styles continue to wrestle for control and the volatility is likely to persist into the first part of 2009.

The main driver of the current market sell-off continues to appear to be directly related to the credit crisis and the lack of liquidity for short-term financing. Volatility has increased to historic levels as forced liquidations have depressed values of both stocks and non-government bonds.

During the quarter, exposure to international equity and was reduced and the allocation shifted into high quality large cap U.S. equities. The international bond position was hedged during the 3<sup>rd</sup> quarter by shifting from an unhedged currency for international bond holdings to a hedge currency position expecting further strength in the U.S. Dollar vs. foreign currencies.

Performance of the international equity sector for the period was negative due to the remaining international equity positions. Attribution reports show that active managers added value versus their benchmarks for the period.

With questions from the trustees on continuing to use Lehman as a benchmark, Mr. Hill assured the trustees that we do not have direct exposure to Lehman stocks or bonds. The industry as a whole has not moved away from the Lehman complex of fixed income indices and will undergo continued monitoring of the situation. However, Lehman Bros. is currently viewed as an appropriate benchmark.

The first part of the document discusses the importance of maintaining accurate records. It highlights the need for regular updates and the role of technology in streamlining the process. The text emphasizes that proper record-keeping is essential for compliance and operational efficiency.

In the second section, the author explores various methods for data collection and analysis. It compares traditional manual entry with modern digital solutions, noting the benefits of automation in reducing errors and saving time. The text also touches upon the importance of data security and access control.

The third part of the document focuses on the integration of different systems. It discusses how data from various sources can be consolidated to provide a comprehensive view of the organization's performance. The text mentions the challenges of interoperability and the need for standardized protocols.

Finally, the document concludes by summarizing the key points and offering recommendations for future improvements. It stresses the importance of continuous learning and adaptation in a rapidly changing technological landscape. The author encourages stakeholders to embrace change and invest in the necessary infrastructure.

The document is intended for a wide audience of professionals and managers. It provides a clear and concise overview of the current state of record-keeping and offers practical advice for enhancing the process. The text is well-structured and easy to read, making it a valuable resource for anyone interested in this field.

### **11. Amendment to Appendix B**

The modified Appendix B was reviewed. One change was made: What is referred to as Static Benchmark #2 should be titled Target Policy Benchmark. Appendix B was approved as amended (Attachment 11).

**Action Item 11: Appendix B was approved as amended (Attachment 11).**

### **12. Update from Dr. Rich and Dr. Sweatt**

Dr. Rich provided the trustees with an update on the Evelyn F. McKnight Institute at the University of Alabama (Attachment 12). They are requesting renewed funding for the Institute, the majority of which would be endowed, to continue new initiatives and collaborative pilot projects as well as to continue to recruit new faculty. The trustees determined that a formal proposal should be submitted in order to clearly understand the need and use of funds. The discussion will continue once a written proposal is received. Dr. Lee Dockery will advise Dr. Rich that the MBRF trustees would consider reviewing a written proposal.

**Action Item 12: Dr. Lee Dockery to advise UAB to submit a more formal proposal for review.**

### **13. New Trustee Discussion**

Dr. Ellenbogen decided to withdraw the name of her previous nominee Dr. Li-Huei Tsai. Dr. Judith Salerno is the final candidate for the new trustee position. She is expected to attend the February 2009 meeting, arriving at 11:30 AM for a formal interview to be followed by lunch on February 18, 2009, at which time the trustees will have the opportunity to continue their discussions in an informal setting. The goal will be to develop a standardized set of questions. Each trustee was asked to help create two questions and submit to Mrs. Borcheck. The complete list will be circulated for review and

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**Summary of Action Items:**

**Action Item 1: The trustees approved the minutes of the July 22 – 23, 2008 meeting as presented (Attachment 1).**

**Action Item 2: The trustees received the Minimum Distribution Calculation for information (Attachment 2).**

**Action Item 3: Corporate Trustee to send a letter confirming the MBRF trustees reviewed and approved the proposal for completion of the match at the October 21, 2008 meeting.**

**Action Item 4: The trustees received the calendar of events for information (Attachment 4).**

**Action Item 5: Dr. J. Lee Dockery and Mrs. Teresa Borcheck, MBRF trustees, will attend the MBRF sponsored poster session at the Annual Society for Neuroscience meeting, November 17, 2008 in Washington, D.C.**

**Action Item 6: Dr. Lee Dockery will communicate the request to Dr. John Hablitz at UAB regarding the tentative approval of the MBRF Travel Award pending submission of a revised application which satisfactorily addresses the questions of the trustees.**

**Action Item 7: Dr. Lee Dockery will communicate the dates and location of the Leadership Council retreat with Dr. Carol Barnes.**

**Action Item 8: Mrs. Borcheck will follow up with Dr. Sweatt and the UAB team on obtaining an agenda and budget for the 2009 inter-institutional meeting.**

**Action Item 9: The trustees received the Investment Review for information (Attachment 9).**

**Action Item 10: The trustees received the Lighthouse Package for information (Attachment 10).**

**Action Item 11: Appendix B was approved as amended (Attachment 11).**

The first part of the document discusses the importance of maintaining accurate records.

It is essential to ensure that all data is properly documented.

The second section covers the various methods used for data collection.

These methods include surveys, interviews, and focus groups.

The third part of the document describes the analysis techniques used.

Statistical analysis is used to identify trends and patterns in the data.

The final section discusses the implications of the findings.

The results suggest that there is a significant correlation between the variables.

Overall, the study provides valuable insights into the research topic.

The findings have important implications for future research and practice.

Further research is needed to explore the underlying mechanisms.

The study also highlights the need for more comprehensive data collection.

It is recommended that future studies use a mix of qualitative and quantitative methods.

The research team is grateful to the participants for their time and contribution.

The authors would like to thank the funding agency for their support.

The study was conducted in accordance with the ethical guidelines.

The data is available upon request to interested parties.

The authors have no conflicts of interest to declare.

The research was approved by the local ethics committee.

The study is registered with the appropriate authorities.

The findings are consistent with previous research in the field.

The results are robust and reliable.

The study has been published in a peer-reviewed journal.

The authors are available for further inquiries.

The study is a contribution to the field of research.

### **Neuroepidemiology Training Program**

Role: Co-PI; PI: Hauser; Agency: NIH/NINDS; Type: T32 (NS 07153); Period: 07.01.04-06.30.09  
Aims: To train neurologists in epidemiology.

### **A Primary Hyperparathyroidism - non-classical Manifestations**

Role: Co-I; PI: Silverberg; Agency: NIH/NIDK; Type: R01 (DK 066329); Period: 4.15.05-03.31.10  
Aims: This is a prospective study to evaluate the effects of hyperparathyroidism on carotid disease and other cardiovascular outcomes.

### **Evaluation of Intensive Education and Social Support on BP Status Among Minority Women Post Stroke**

Role: Co-PI; PI: Boden-Albala; Agency: AHA; Type: Grant; Period: 07.01.01-06.30.04  
Aims: To evaluate a program of education and social support for BP control post-stroke among minority women.

### **Epidemiologic Study of Stroke Outcome in 3 Ethnic Groups**

PI: Sacco; Agency: NIH/NINDS; Type: 2R01 (NS 27517); Period: 09.01.89-05.31.00  
Aims: To identify the risk and determinants of recurrent stroke and death in 3 ethnic groups.

### **Warfarin Aspirin Recurrent Stroke Study**

Role: Co-PI; PI: Mohr; Agency: NIH/NINDS; Type: 2R01 (NS 28371); Period: 07.01.92-06.30.03  
Aims: To test warfarin vs ASA in the prevention of stroke recurrence in a randomized clinical trial.

### **Patent Foramen Ovale in Cryptogenic Stroke Study**

Role: Co-I; PI: Homma; Agency: NIH/NINDS; Type: 1R01 (NS 32525); Period: 09.30.94-12.31.00  
Aims: To determine the effect of patent foramen ovale on stroke outcome among patients in WARSS.

### **Antiphospholipid Antibody Stroke Study**

Role: Co-I; PI: Levine; Agency: NIH/NINDS; Type: 1R01 (NS 30896); Period: 04.01.96-03.31.02  
Aims: To determine the effect of antiphospholipid antibodies on stroke outcome among patients in WARSS.

### **Chronic Chlamydia Pneumoniae Infection and Stroke Risk**

Role: Co-I; PI: Elkind; Agency: CDC; Type: R01 (CDC 99003); Period: 03.01.99-02.28.03  
Aims: To determine if C. Pneumoniae is a risk factor for stroke in a population-based case-control study.

### **Stroke Risk and Lipoprotein (a) in a Racially Mixed Area**

Role: Mentor; PI: Kargman; Agency: NINDS; Type: K08 (NS 01782); Period: 1994-99  
Aims: To evaluate whether Lp(a) is a risk factor for stroke.

### **Glycine Antagonist in Neuroprotection**

Role: PI; Agency: Glaxo-Wellcome; Type: Contract; Period: 1997-00  
Aims: To evaluate the safety and efficacy of a novel neuroprotective agent after acute ischemic stroke.

### **Lubeluzole Acute Stroke Trial**

Role: PI (local site); Agency: Janssen Pharmaceutical; Type: Contract; Period: 1995-97  
Aims: To evaluate the safety and efficacy of a novel neuroprotective agent after acute ischemic stroke.

### **International Stroke Trial**

Role: National Coordinator; PI: Sandercock; Agency: UK; Type: Contract; Period: 1991-97  
Aims: To evaluate the efficacy of aspirin and subcutaneous heparin in the treatment of acute stroke.

### **Trial of Organon in Acute Stroke Therapy (TOAST)**

Role: PI (local site); PI: Adams; Agency: NINDS; Type: R01 (NS 27863); Period: 1990-97  
Aims: To test the efficacy of heparinoids in the treatment of acute stroke.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. This is essential for ensuring the integrity of the financial statements and for providing a clear audit trail. The records should be kept up-to-date and should be easily accessible to all relevant parties.

2. The second part of the document outlines the various methods used to collect and analyze data. These methods include interviews, surveys, and focus groups. Each method has its own strengths and weaknesses, and it is important to choose the most appropriate one for the specific research objectives.

3. The third part of the document describes the process of data analysis. This involves identifying patterns and trends in the data, and then interpreting these findings in the context of the research objectives. It is important to use a systematic and transparent approach to data analysis to ensure the reliability of the results.

4. The fourth part of the document discusses the importance of reporting the results of the research. This involves presenting the findings in a clear and concise manner, and providing a detailed explanation of the methods used and the limitations of the study. It is also important to discuss the implications of the findings and to provide recommendations for future research.

5. The fifth part of the document describes the various ethical considerations that must be taken into account when conducting research. These include issues such as informed consent, confidentiality, and the potential for harm to participants. It is important to ensure that the research is conducted in a responsible and ethical manner.

6. The sixth part of the document discusses the importance of maintaining the integrity of the research process. This involves ensuring that the data is collected and analyzed in a fair and unbiased manner, and that the results are reported accurately and honestly. It is also important to be transparent about any conflicts of interest or other potential biases.

7. The seventh part of the document describes the various ways in which research can be used to inform decision-making. This includes using research to identify new opportunities, to evaluate existing programs, and to develop new policies and procedures. It is important to ensure that the research is used in a way that is consistent with the organization's values and mission.



## BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.  
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME		POSITION TITLE	
Hannah Gardener, ScD		Post-Doctoral Associate	
eRA COMMONS USER NAME			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Dartmouth College, New Hampshire	AB	1996-2000	Psychological and Brain
Harvard School of Public Health, Massachusetts	ScD	2003-2007	Epidemiology

### A. Positions and Honors.

- 2007-08 Post-Doctoral Associate (Epidemiologist), University of Miami School of Medicine,  
Department of Neurology, Miami, FL
- 2002-07 Research Assistant, Harvard School of Public Health, Boston, MA

### B. Selected peer-reviewed publications (in chronological order).

Gardener H, Spiegelman D, Buka SL. Prenatal risk factors for autism: A comprehensive meta-analysis. *British Journal of Psychiatry*. In press.

Gardener H, Munger KL, Chitnis T, Spiegelman D, Alberto A. The relationship between handedness and risk of multiple sclerosis. *Multiple Sclerosis*. In press.

Gardener H, Munger KL, Chitnis T, Michels KB, Spiegelman D, Alberto A. Prenatal and perinatal factors and risk of multiple sclerosis. *Epidemiology*. In press.

O'Reilly E, Chen H, Gardener H, Gao X, Schwarzschild MA, Ascherio A. Smoking and Parkinson's Disease: Using parental smoking as a proxy to explore causality. *American Journal of Epidemiology* 2009.

Gilman, SE, Gardener H, Buka SL. Maternal smoking during pregnancy and children's cognitive and physical development: A causal risk factor? *American Journal of Epidemiology* 2008; 168(5):522-531..

### C. Research Support.

#### Ongoing Research Support

None at this time.

MEMORANDUM FOR THE RECORD

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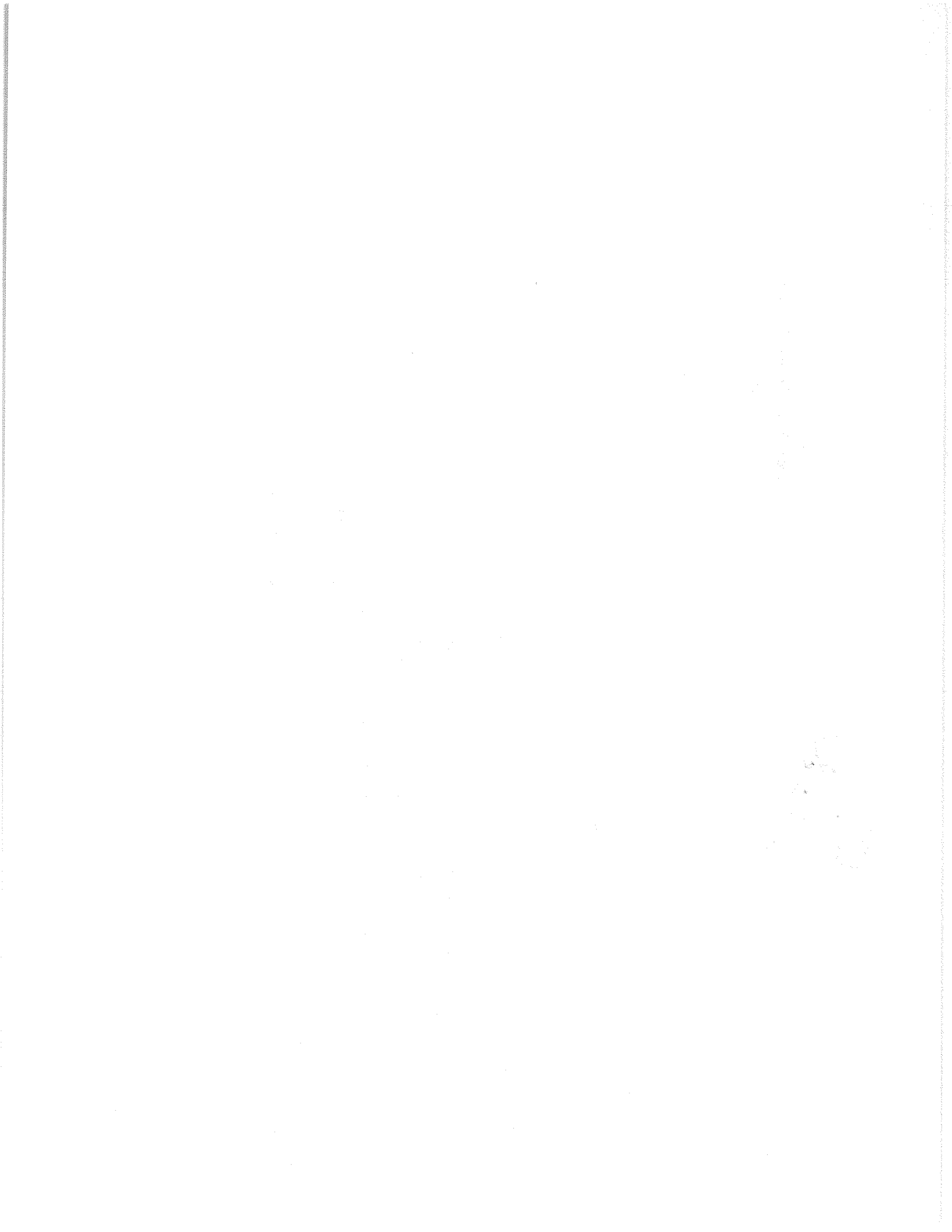
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WF / Jennifer  
Dr

**Mcknight Brain Research Funds**  
**Balance As Of 2/17/2009**

<b>Revenue:</b>		
	Mcknight Research Funds	\$ 2,735,554.83
<b>Expenses:</b>		
	To Be Hired Faculty	\$ 1,000,000
	To Be Hired Faculty	\$ 1,000,000
	Programmatic Research Initiatives	\$ <u>150,000</u>
		\$ <u>2,150,000</u>
<b>Balance</b>		\$ 585,554.83



University of Miami  
 Department of Neurology  
 300279  
 Proposed Budget for the period of June 1, 2009 - May 31, 2010  
 EVELYN F. MCKNIGHT CTR AGE MEMORY LOSS FD

<u>Revenue</u>	<u>Prior Bal. FY 09</u>	<u>FY 09</u>	<u>Total</u>
Income	637,437.08	200,000.00	837,437.08

Clinical and Clinical Research Program

<b>Subtotal Faculty Salary</b>			<u>350,820.22</u>
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<u>Faculty</u>	<u>Role in Project</u>	<u>Effort</u>	<u>CFB Rate</u>
Clinton Wright, MD (7/15/08)	Scientific Director	29.00%	22.00%
Ralph Sacco, MD	Executive Director	10.00%	22.00%
Tanja Rundek, MD	Co-investigator	10.00%	25.50%
Bonnie Levin, MD	Neuropsychology	35.00%	25.50%
Heather Katzen	Neuropsychology	5.00%	25.50%
Susan H. Blanton (1/1/08)	Genetics	8.00%	25.50%
Jason Hsu (1/1/08)	Radiology	30.00%	22.00%
Richard Isaacson	Educational Director	20.00%	22.00%
Chuanhui Dong(1/05/2009)	Statistics	5.00%	25.50%

<b>Subtotal Staff Salary and CFB</b>			<u>50,422.34</u>
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<u>Staff</u>	<u>Role in Project</u>	<u>Effort</u>	<u>CFB Rate</u>
Edison Sabala	Administrative Support	10%	33.90%
Hannah Gardner PhD	Statistics	20%	33.90%
Mario Perez	Statistics	10%	33.90%
Jessica Loring	Educational	30%	33.90%
Jessica Suarez	Administrative Support	10%	33.90%
Khushnuma Unwalla (7/22/2008)	Administrative Support	10%	33.90%
James West	Accounting	10%	33.90%
Subtotal Salary			

Program Non Personnel Expenses

GWAS 1290 Nomas Subjects	40,000.00
Supplies	2,000.00
Domestic Travel	12,250.00
Honorarium	5,000.00
Miscellaneous Expenses	22,974.63
<b>Grand Total Expenses</b>	<u>83,467.19</u>

<b>Balance Available</b>	<u>353,969.89</u>
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