

BIOGRAPHICAL SKETCH

NAME David F. Tate, PhD		POSITION TITLE Instructor of Radiology; Adjunct Assistant Professor of Neurology	
ERA COMMONS USER NAME Davidtate			
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Brigham Young University	BS/BA	12/94	Psychology/Anthropology
Brigham Young University	PhD	12/03	Clinical Psychology
Brown Medical School Training Consortium	Internship	2002-2003	Neuropsychology
Brown Medical School-Infectious Disease	Fellowship	2003-2005	Neuropsychology/Immunology

A. Positions and Honors**Positions and Appointments**

1996-present	Research Facilitator, David M. Kennedy International Field Studies, Coimbatore, India
1996-1999	Primary Interview, Utah Youth Suicide Study, Utah State Health Department, Salt Lake City, UT
1999-2003	Research Assistant, Brain and Behavior Laboratory, Brigham Young University, Provo, UT
2002-2003	Pre-Doctoral Internship, Department of Psychiatry and Behavioral Medicine, Brown University Medical School Training Consortium, Providence, RI
2003-2005	T32 National Institutes of Health Research Fellow, Immunology, Miriam Hospital, Brown Medical School, Providence, RI
2005-2006	Brigham and Women's Hospital/Harvard Medical School Visiting Fellow, Center for Neuroimaging, Radiology Department, Brigham and Women's Hospital, Boston, MA
2005-present	Assistant Professor, Department of Psychiatry and Behavioral Medicine, Miriam Hospital, Providence, RI
2006-present	Instructor, Department of Radiology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA

Awards and Honors

1994	David M. Kennedy International Field Studies Research Scholarship
1996	David M. Kennedy International Field Studies Research Scholarship
2001-2002	Brigham Young University Graduate Student Research Award
2003-2005	T32-National Research Award, National Institutes of Health
2005-2010	Mentored Patient-Oriented Career Development Award (K23), NIMH

B. Selected peer-reviewed publications

1. **Tate DF**, Bigler ED, McMahan W, & Lainhart, JE. (2007). Non-neural Contributions to Measures of Head Circumference in Autistic Children: Occipital-Frontal Circumference Measures and Brain Size Revisited. *Neuropediatrics*, 38(1): 18-24.
2. Haley AP, Sweet LH, Gunstad J, Forman DE, Poppas A, Paul RH, **Tate DF**, Cohen RA. (2007). Verbal working memory and atherosclerosis in patients with cardiovascular disease: an fMRI study. *J Neuroimaging*, 17(3): 227-233.
3. Jefferson AL, **Tate DF**, Poppas A, Brickman AM, Paul RH, Gunstad J, Cohen RA. (2007). Lower cardiac output is associated with greater white matter hyperintensities in older adults with cardiovascular disease. *J Am Geriatr Soc.*, 55(7): 1044-1048.
4. Paul RH, Laidlaw DH, **Tate DF**, Lee S, Hoth KF, Gunstad J, Zhang S, Lawrence J, Flanigan T. (2007). Neuropsychological and neuroimaging outcome of HIV-associated progressive multifocal leukoencephalopathy in the era of antiretroviral therapy. *J Integr Neurosci.*, 6(1): 191-203.
5. Hoth KF, **Tate DF**, Poppas A, Forman DE, Gunstad J, Moser DJ, Paul RH, Jefferson AL, Haley AP, Cohen RA. (2007). Endothelial function and white matter hyperintensities in older adults with cardiovascular disease. *Stroke*, 38(2): 308-312.
6. Zimmerman ME, Brickman AM, Paul RA, Grieve SM, **Tate DF**, et al., (2006). The relationship

- between frontal gray matter volume and cognition varies across the healthy adult lifespan. *Am J Geriatr Psychiatry*, 14(10):823-833.
7. Gunstad J, Poppas A, Smeal, S, Paul R, **Tate DF**, Jefferson AJ, Forman D, Cohen R. (2006). Elevated BNP levels and reduced cognitive performance in older adults with cardiovascular disease. *American Journal of Cardiology*, 98(4): 538-540.
 8. Brickman AM, Zimmerman ME, Paul RH, Grieve SM, **Tate DF**, et al., (2006). Regional white matter and neuropsychological functioning across the adult lifespan. *Biol Psychiatry*, 60(5):444-453.
 9. Gunstad J, Cohen RA, **Tate DF**, Paul RA, Poppas A., Hoth K, MacGregor K, Jefferson AL. (2005). Blood Pressure Variability and White Matter Hyperintensities in Older Adults with Cardiovascular Disease. *Blood Press*. 14(6):353-358.
 10. Paul RH, Gunstad J, Poppas A, **Tate DF**, Foreman D, Brickman AM, Jefferson AL, Hoth K, & Cohen RA. (2005). Neuroimaging and cardiac correlates of cognitive function among patients with cardiac disease. *Cerebrovasc Dis*. 20(2): 129-133.
 11. Paul RH, Haque O, Gunstad J, **Tate DF**, Grieve SM, Hoth K, Brickman AM, Cohen R, Lange K, Jefferson AL, MacGregor KL, & Gordon E (2005). Subcortical hyperintensities impact cognitive function among a select subset of healthy elderly. *Arch Clin Neuropsychol*. 2005 20(6):697-704.
 12. Paul RH, Brickman AM, Navia B, Hinkin C, Malloy PF, Jefferson AL, Cohen RA, **Tate DF**, & Flanigan TP (2005). Apathy is associated with volume of the nucleus accumbens in patients infected with HIV. *J Neuropsychiatry Clin Neurosci*. 17(2):167-71.
 13. Paul R, Gunstad J, Poppas A, **Tate D**, Foreman D, Brickman AM, Jefferson A, Hoth K, & Cohen R (2005). Neuroimaging and cardiac correlates of cognitive function among patients with cardiac disease. *Cerebrovascular Diseases*, 20(2), 697-704.
 14. Hopkins RO, **Tate DF**, & Bigler ED. (2005). Anoxia versus traumatic brain injury: The amount of tissue loss not etiology, alters cognitive and emotional functioning. *Neuropsychology*, 19 (2), 233-242.
 15. Rice SA, Bigler ED, Cleavinger HB, **Tate DF**, et al., (2005). Macrocephaly, corpus callosum morphology, and autism. *Journal of Child Neurology*. 20(1):34-41.
 16. Paul R, Flanigan TP, Tashima K, Cohen R, Lawrence J, Alt E, **Tate D**, Ritchie C, Hinkin C (2005). Apathy correlates with cognitive function but not CD4 status in patients with human immunodeficiency virus. *Journal of Neuropsychiatry and Clinical Neuroscience*, 17(1):114-8.
 17. Bergeson AG, Lundin R, Parkinson RB, **Tate DF**, Victoroff J, Hopkins RO, & Bigler ED. (2004). Clinical Rating of Cortical Atrophy and Cognitive Correlates Following Traumatic Brain Injury. *The Clinical Neuropsychologist*, 18 (3): 1-12.
 18. Bigler ED, Neeley ES, Miller MJ, **Tate DF**...Welsh-Bohmer K. (2004). Cerebral volume loss, cognitive deficit and neuropsychological performance: Comparative Measures of Brain Atrophy: I. Dementia. *Journal of the International Neuropsychology Society*, 10(3): 442-452.
 19. Bigler ED, Lowry CM, Kerr B, **Tate DF**, Hessel CD, Earl HD, Miller MJ, Rice SA, Smith KH, Tschanz JT, Welsh-Bohmer K, Plassman B, Victoroff J. (2003). Role of white matter lesions, cerebral atrophy, and APOE on cognition in older persons with and without dementia: The Cache County, Utah, study of memory and aging. *Neuropsychology*, 17(3): 339-352.
 20. **Tate D**, Paul RH, Flanigan TP, Tashima K, Nash J, Adair C, Boland R, Cohen RA. (2003). The impact of apathy and depression on quality of life in patients infected with HIV. *AIDS Patient Care STDS*, 17(3): 115-120.
 21. Bigler ED, **Tate DF**,...Welsh-Bohmer KA. (2002). Dementia, asymmetry of temporal lobe structures, and apolipoprotein E genotype: Relationships to cerebral atrophy and neuropsychological impairment. *J International Neuropsychological Society*, 8(7): 925-933.
 22. Bigler ED, Kerr B, Victoroff J, **Tate DF**, Breitner JC. (2002). White matter lesions, quantitative magnetic resonance imaging, and dementia. *Alz Disease Assoc Disorders*, 16(3): 161-170.
 23. Bigler ED, **Tate DF**. (2001). Brain volume, intracranial volume, and dementia. *Investigative Radiology*, 36(9): 539-536.
 24. **Tate DF**, Bigler ED. (2000). Fornix and hippocampal atrophy in traumatic brain injury. *Learning and Memory*, 7(6): 442-446.

C. Research Support**Active Research Support**

K23-MH073416-01A1 (Tate)	08/01/06-07/31/10	9.12 calendar
--------------------------	-------------------	---------------

Mentored Patient-Oriented Career Development Award (K23) NIH	\$131,785	
--------------------------------------------------------------	-----------	--

Cognitive Performance and Diffusivity in HIV Patients

The purpose of the grant is to investigate the relationship between white matter changes as measured by diffusion tensor imaging (DTI) and cognitive outcome. Each participant will receive an extensive neuropsychological battery and undergo DTI. The relationships between various subcortical white matter pathways and cognition will be investigated.

R01-NS036524-07 (Navia)	07/2006-06/2009	0.72 calendar (in kind effort)
-------------------------	-----------------	--------------------------------

NINDS/NIH	\$73,893	
-----------	----------	--

Longitudinal structural imaging change in the era of HAART

The purpose of this grant is to examine the longitudinal structural change of the whole brain, the basal ganglia, white matter signal abnormalities, and hippocampus using quantitative MRI (qMRI) methods to examine the associations between qMRI variables and MRS, neuropsychological, and clinical variables being collected by the parent study.

R01-NS52470 (Paul)	07/2007-06/2012	0.72 calendar (in kind effort)
--------------------	-----------------	--------------------------------

NINDS	\$65,895	
-------	----------	--

Neuromarkers of age-related cognitive decline

The purpose of this grant is to examine the relationship between novel neuroimaging markers based on DTI fiber tracking models, genetic polymorphisms of vascular disease and inflammation, and age-related cognitive decline in healthy individuals.

CFAR Developmental Grant (Tate)	10/2006-09/2007	0.72 calendar (in kind effort)
---------------------------------	-----------------	--------------------------------

Center for AIDS Research	\$40,000	
--------------------------	----------	--

Neuroimaging Evidence of Relapsing/Remitting HIV Encephalitis

The purpose of this grant is to obtain pilot data examining the variability of white matter change in patients infected with HIV. We will collect prospective neuroimaging data on a subset of patients with identifiable white matter abnormalities. Using time series image analyses, we will then examine the white matter abnormalities for changes that might provide evidence of waxing and waning HIV encephalitis.