

## BIOGRAPHICAL SKETCH

NAME William J. Jagust		POSITION TITLE Professor of Public Health and Neuroscience, UCB Faculty Senior Scientist, LBNL	
eRA COMMONS USER NAME wjagust			
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Reed College, Portland, OR	B.A.	1974	Psychology
SUNY Stony Brook, Stony Brook, NY	M.D.	1978	Medicine
St. Elizabeth's Hospital, Boston, MA	Intern	1978-1980	Medicine
Boston University Medical Center, Boston, MA	Resident	1980-1983	Neurology

### A. Positions and Honors

- 1983 - 2003: Staff Neurologist, Veterans Administration Medical Center, Martinez, CA
- 1983 - 1997: Attending Neurologist, Highland General Hospital, Oakland, CA
- 1983 - 1986: Postdoctoral Fellow (Drs. TF Budinger and R Friedland), Lawrence Berkeley Laboratory
- 1986 - 2003: Assistant, Associate, Full Professor, Department of Neurology, UC Davis
- 1985 - 2003: Director, UC Davis Alzheimer's Disease Center
- 1987 - 1998: Associate Faculty Medical Scientist, Lawrence Berkeley Laboratory
- 1997 - 1999: Member, Human Development and Aging-2 (HUD2) Study Section, DRG, NIH
- 1998 - 2003: Chair, Department of Neurology, University of California, Davis
- 2000 - 2005: Member, Neurosciences of Aging Study Section, NIH (Chair 2004-2005)
- 2004 - Present: Professor of Public Health and Neuroscience, University of California, Berkeley
- 2004 - Present: Faculty Senior Scientist, Lawrence Berkeley National Laboratory
- 2005 - Present: University Endowed Chair in Geriatrics, UC Berkeley
- 2006 - Present: Adjunct Professor of Neurology, University of California San Francisco

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

(from 150 peer-reviewed publications and 45 book chapters and reviews)

- Friedland, R.P., Prusiner, S.B., **Jagust**, W.J., Budinger, T.F., and Davis, R.L. Bitemporal hypometabolism in Creutzfeldt-Jakob disease measured by positron emission tomography with 18F-2-fluorodeoxyglucose. *J. Comput. Assist. Tomogr.*, **8**: 978-981, 1984.
- Friedland, R.P., Budinger, T.F., Brant-Zawadzki, M.N. and **Jagust**, W.J. The diagnosis of Alzheimer-type dementia: a preliminary comparison of PET and proton NMR imaging. *Journal of the American Medical Association*, **252**: 2750-2752, 1984.
- Jagust**, W. J., Budinger, T. F., and Reed, B. R. The diagnosis of dementia with single photon emission computed tomography. *Archives of Neurology* **44**:258-262, 1987.
- Seab, J.P., **Jagust**, W.J., Wong, S.T.S., Roos, M.S., Reed, B.R., Budinger, T.F. Quantitative NMR measurements of hippocampal atrophy in Alzheimer's disease. *J Mag Res Med*, **8**:200-208, 1988.
- Jagust**, W.J., Seab, J.P., Huesman, R.H., Valk, P.E., Mathis, C.A., Reed, B.R., Budinger, T.F. Diminished glucose transport in Alzheimer's disease: dynamic PET studies. *J. Cerebral Blood Flow and Metabolism*, **11**: 323-330, 1991.
- Jagust**, W.J., Reed, B.R., Martin, E.M., Eberling, J.L., Nelson-Abbott, R.A. Cognitive function and regional cerebral blood flow in Parkinson's disease. *Brain*, **115**:521-537, 1992.
- Jagust**, W.J., Eberling, J.L., Biegon, A., Taylor, S.E., VanBrocklin, H.F., Jordan, S., Hanrahan, S.M., Roberts, J.A., Brennan, K.M., Mathis, C.A. 123I-5-iodo-6-nitroquipazine: SPECT radiotracer for imaging the serotonin transporter. *Journal of Nuclear Medicine*, **37**:1207-1214, 1996.
- Paller, K.A., Acharya, A., Richardson, B.C., Plaisant, O., Shimamura, A.P., Reed, B.R., **Jagust**, W.J. Functional neuroimaging of cortical dysfunction in alcoholic Korsakoff's syndrome. *Journal of Cognitive Neuroscience*, **9**:277-293, 1997.

- Jordan, S., Eberling, J.L., Bankiewicz, K.S., Rosenberg, D., Coxson, P.G., VanBrocklin, H.F., O'Neil, J.P., Emborg, M.E., **Jagust**, W.J. 6-[<sup>18</sup>F] Fluoro-L-m-tyrosine: Metabolism, PET Kinetics, and MPTP Lesions In Primates. *Brain Research*, **750**:264-276, 1997.
- Haan MN, Shemanski L, **Jagust** WJ, Manolio T, Kuller L. The role of APOE epsilon4 in modulating effects of other risk factors for cognitive decline in elderly persons. *Journal of the American Medical Association*, **282**:40-46, 1999.
- Reed BR, Eberling JL, Mungas D, Weiner MW, **Jagust** WJ. Memory failure has different mechanisms in subcortical stroke and Alzheimer's disease. *Annals of Neurology*, **48**:275-284, 2000.
- Jagust** W, Thisted R, Devous MD, VanHeertum R, Mayberg H, Jobst K, Smith D, Borys N. SPECT perfusion imaging in the diagnosis of Alzheimer's disease: A clinical-pathological study. *Neurology*, **56**:950-956, 2001.
- Jagust** WJ. Untangling Vascular Dementia. *Lancet*, **358**:2097-2098, 2001
- Jagust** WJ, Eberling JL, Wu CC, Finkbeiner A, Mungas D, Valk P, Haan MN. Brain function and cognition in a community sample of elderly Latinos. *Neurology*, **59**: 378-383, 2002.
- Wu CC, Mungas D, Petkov CI, Eberling JL, Zrelak PA, Buonocore MH, Brunberg JA, Haan MN, **Jagust** WJ. Brain structure and cognition in a community sample of elderly Latinos. *Neurology*, **59**: 383-391, 2002.
- Haan MN, Mungas DM, Gonzales HM, Ortiz TA, Acharya A, **Jagust** WJ. Prevalence of dementia in older Latinos: the influence of type 2 diabetes, stroke, and genetic factors. *Journal of the American Geriatrics Society*, **51**:169-177, 2003.
- Eberling JL, Wu C, Tong-Turnbeaugh R, **Jagust** WJ. Estrogen and Tamoxifen Associated effects on brain structure and function. *Neuroimage*, **21**:364-371, 2004.
- Tullberg M, Fletcher E, DeCarli C, Mungas D, Reed BR, Harvey J, Weiner MW, Chui HC, **Jagust** WJ. White matter lesions impair frontal lobe function regardless of their location. *Neurology*, **63**:246-253, 2004.
- DeCarli C, Mungas D, Harvey D, Reed B, Weiner M, Chui H, **Jagust** W. Memory impairment, but not cerebrovascular disease, predicts progression of MCI to dementia. *Neurology*, **63**:220-227, 2004.
- Jagust** WJ, Harvey D, Mungas D, Haan MN. Central obesity and the aging brain. *Archives of Neurology*, **62**:1545-1548, 2005.
- Nordahl CW, Ranganath C, Yonelinas AP, DeCarli C, Reed BR, **Jagust** WJ. Different mechanisms of episodic memory failure in mild cognitive impairment. *Neuropsychologia*, **43**:1688-1697, 2005.
- Nordahl CW, Ranganath C, Yonelinas AP, DeCarli C, Fletcher E, **Jagust** WJ. White matter changes compromise prefrontal cortex function in healthy elderly individuals. *Journal of Cognitive Neuroscience*, **18**:418-429, 2006.
- Jagust** WJ, Gitcho A, Sun F, Kuczynski B, Mungas D, Haan M. Brain imaging evidence of preclinical Alzheimer's disease in normal aging. *Annals of Neurology*, **59**:673-681, 2006.
- Sun FT, Schriber RA, Greenia JM, He J, Gitcho A, **Jagust** WJ. Automated template-based PET region of interest analyses in the aging brain. *Neuroimage*, **34**:608-617, 2007.
- Rabinovici GD, Furst AJ, O'Neil JP, Racine CA, Mormino EC, Baker SL, Chetty S, Patel P, Pagliaro TA, Klunk WE, Mathis CA, Rosen HJ, Miller BL, **Jagust** WJ. 11C-PIB PET imaging in Alzheimer disease and frontotemporal lobar degeneration. *Neurology*, **68**:1205-1212, 2007.
- Boxer AL, Rabinovici GD, Kepe V, Goldman J, Furst AJ, Huang SC, Baker SL, O'Neil JP, Chui H, Geschwind MD, Small GW, Barrio JR, **Jagust** W, Miller BL. Amyloid imaging in distinguishing atypical prion disease from Alzheimer's disease. *Neurology*, **69**: 283-290, 2007.
- Reed BR, Mungas DM, Kramer JH, Ellis W, Vinters HV, Zarow C, **Jagust** WJ, Chui HC. Profiles of neuropsychological impairment in autopsy-defined Alzheimer's disease and cerebrovascular disease. *Brain* **130**:731-739, 2007
- Jagust** W, Reed B, Mungas D, Ellis W, DeCarli C. What does fluorodeoxyglucose PET imaging add to a clinical diagnosis of dementia? *Neurology*, **69**:871-877, 2007.
- Cools R, Gibbs SE, Miyakawa A, **Jagust** W, D'Esposito M. Working memory capacity predicts dopamine synthesis capacity in the human striatum. *Journal of Neuroscience*, **28**:1208-1212, 2008.
- Jagust** WJ, Zheng L, Harvey DJ, Mack WJ, Vinters HV, Weiner MW, Ellis WG, Zarow C, Mungas D, Reed BR, Kramer JH, Schuff N, DeCarli C, Chui HC. Neuropathological basis of MR images in aging and dementia. *Annals of Neurology*, **63**:72-80, 2008.
- Rabinovici GD, **Jagust** WJ, Furst AJ, Ogar JM, Racine CA, Mormino EC, O'Neil JP, Lal RA, Dronkers NF, Miller BL, Gorno-Tempini ML. A $\beta$  amyloid and glucose metabolism in three variants of primary progressive aphasia. *Annals of Neurology*, In press.

## C. Research Support

### ONGOING

- NIH AG027859** (PI Jagust, William) 03/01/07 - 02/28/10  
National Institutes of Health  
*Amyloid imaging in frontotemporal dementia and Alzheimer's disease*  
This project will use amyloid imaging with the Pittsburgh compound B to assess the use of PET in the differentiation of Alzheimer's disease and frontotemporal lobar degeneration
- NIH AG027984** (PI Jagust, William) 04/15/07 - 02/28/10  
National Institutes of Health  
*Molecular and functional imaging of age-related cognitive decline*  
This project will evaluate the relationships between dopamine neurochemistry (using PET and the radiotracer fluorometatyrosine), physiology (fMRI) and cognition underlying changes in working memory in aging.
- NIH AG015303** (PI Eberling, Jamie) 07/01/06 - 06/30/11  
National Institute on Aging  
*Effects of Chemotherapy on Brain Function*  
This project employs PET and MR imaging to study cognitive, anatomical and molecular changes in brain function consequent to chemotherapy for breast cancer in post-menopausal women. Dr. Jagust is a co-investigator.
- NIH AG12435** (PI Chui, Helena) 07/01/08 - 06/30/13  
National Institute on Aging  
*The Aging Brain: Vasculature, Ischemia, and Behavior*  
This is a program project with the study of patients with ischemic vascular dementia using a variety of tools including neuropsychology, MRI, MRS, and PET. Dr. Jagust is a co-investigator.
- NIH AG24904-01** (PI Weiner, Michael) 09/30/04 - 08/31/09  
National Institute on Aging  
*Alzheimer's Disease Neuroimaging Initiative*  
This is a multicenter cooperative agreement to image patients with AD, MCI and normal aging using MRI and PET scanning. Dr. Jagust leads the PET component of this project.
- ZEN-08-87090** (PI Jagust, William) 09/01/08 – 08/31/11  
Alzheimer's Association  
The Detection of Alzheimer's disease in normal older people  
This grant will support PIB-PET and MRI scanning of a small number of normal older people in an effort to define amyloid uptake and predict Alzheimer's disease in normal older people.
- DE-AC02-05CH11231** (PI Jagust, William) 10/01/00-09/30/09  
Department of Energy  
*Experimental Medicine Development of Radionuclides*  
The programmatic objective encompasses the development of accelerator targetry and isotope generators, training of young scientists in all aspects of radiochemistry, and development of new radiopharmaceuticals.
- W81XWH-07-1-0432** (PI Fields, Howard) 07/01/07-06/30/09  
DOD prime/Ernest Gallo Clinic & Research Ctr (UCSF) subcontract  
*Human Functional Imaging of Central Nervous System Opioids in Alcohol Reward*  
This is a subcontract from the UCSF Gallo Research center to perform PET studies of the endogenous opiate system in alcohol using C-11 carfentanil.

## RECENTLY COMPLETED

**NIH AG12975** (PI Haan, Mary)

07/01/03 - 06/30/08

National Institute on Aging

*Epidemiology of Functional Status in Elderly Hispanics*

This grant will evaluate a community-dwelling cohort of Hispanic subjects for incident and prevalent dementia and will utilize MRI measures to characterize brain structure. Dr. Jagust is a co-investigator.