

May, 2018

Curriculum Vitae

**JOHN HART, JR., M.D.**

**OFFICE:**

John Hart, Jr., M.D.  
Distinguished Chair in Neuroscience  
Professor of Behavioral and Brain Sciences  
University of Texas at Dallas  
Professor of Neurology & Neurotherapeutics and Psychiatry  
University of Texas Southwestern Medical Center  
The University of Texas at Dallas  
Callier Center A115  
Dallas, Texas 75235  
Telephone: 972-883-3212  
Fax: 972-883-3231  
Email: jhart@utdallas.edu

**HOME:**

6900 Crystal Falls Drive  
Plano, TX 75024

**EDUCATION:**

B.A., 1979                      The Johns Hopkins University, 1975-1979. Major:  
Psychology.  
M.D., 1983                      University of Maryland School of Medicine, 1979-1983.

**POSTGRADUATE  
MEDICAL  
TRAINING:**

1983-1984                      Medical Internship, Union Memorial Hospital,  
Baltimore, MD.  
1984-1986                      Assistant Resident in Neurology, The Johns Hopkins  
Hospital.  
1986-1990                      Fellow in Cognitive Neurology and Neuropsychology,  
Dept. of Neurology, The Johns Hopkins Hospital.  
Advisors: Barry Gordon, M.D., Ph.D. & Ola Selnes, Ph.D.  
1995-1996                      Assistant Resident and Resident in Neurology,  
The Johns Hopkins Hospital

**FACULTY  
POSITIONS:**

current:  
2005-                              Distinguished Chair in Neuroscience  
Professor of Behavioral and Brain Sciences  
University of Texas at Dallas  
2006-                              Professor, Departments of Neurology & Neurotherapeutics  
and Psychiatry, University of Texas Southwestern Medical  
Center  
2010-                              Graduate School Faculty, Clinical Psychology Program,

University of Texas Southwestern Medical Center

2016- Affiliate Professor, Dept. of Bioengineering, Erik Jonsson School of Engineering and Computer Science, University of Texas at Dallas

2005- Institute of Biomedical Sciences and Technology  
University of Texas at Dallas

previous:  
2005-2016 Jane and Bud Smith Distinguished Chair, Medical Science Center for BrainHealth, University of Texas at Dallas

2005-2006 Clinical Associate Professor, Department of Psychiatry, University of Texas Southwestern Medical Center

2001-2005 Associate Professor, Depts. of Geriatrics, Neurology, and Radiology, University of Arkansas for Medical Sciences

2003-2005 Associate Professor, Department of Audiology and Speech Pathology, College of Health Related Professions, University of Arkansas for Medical Sciences

1993-2001 Assistant Professor, Department of Neurology, The Johns Hopkins University School of Medicine (On LOA 10/1/95-11/30/96).

1996-2001 Assistant Professor (Joint Appointment), Department of Cognitive Science, The Johns Hopkins University

1990-2001 Associate Member, The Zanvyl Krieger Mind/Brain Institute, The Johns Hopkins University.

1990-1993 Research Associate, Dept. of Neurology, The Johns Hopkins University School of Medicine.

**STAFF POSITIONS:**

current:  
2006- Neurology Staff, University of Texas Southwestern Medical Center, Zale Lipshy Hospital, Clements Hospital

Director, BrainHealth Institute for Professional Athletes, University of Texas at Dallas

previous:  
2004-2005 Associate Director, Clinical Programs and Evaluation, GRECC of CAVHS

2001-2005 Director, Laboratory of Cognition & Brain Imaging, Donald W. Reynolds Center on Aging, UAMS

2002-2005 Staff Physician, Central Arkansas Veterans Healthcare System

2002-2005 Physician Researcher, GRECC, CAVHS

2002-2005	Director of the Geriatric Memory Disorders Clinic, CAVHS
1998-2001	Deputy Director, Division of Cognitive Neurology and Neuropsychology, Department of Neurology, The Johns Hopkins University
1997-2001	Neurology Staff, The Johns Hopkins Hospital
1998-2001	Chairman, Protocol Review Committee, F. M. Kirby Research Center for Functional Brain Imaging, Kennedy Krieger Institute

**MEDICAL  
LICENSURE:**

Maryland D46185 (exp. 9/30/18); Arkansas E-3591 (exp. 5/31/18); Texas N0583 (exp. 11/30/17)

**SOCIETY  
MEMBERSHIPS:**

Academy of Aphasia (1990-)  
American Academy of Neurology (1987-)  
American Assoc. for the Advancement of Science (1987-)  
American Epilepsy Society (1991-)  
Society for Behavioral and Cognitive Neurology (1987-)  
New York Academy of Sciences (1993-)  
Society for Neuroscience (1994-)  
Cognitive Neuroscience Society (2001-)

**HONORS:**

1979	Psychology Departmental Honors, The Johns Hopkins University
1982	Dean's Fellowship for Research, University of Maryland School of Medicine
1983	The William Alexander Hammond Award for Excellence in Neurology, University of Maryland School of Medicine

**TEACHING:**

1991-2001	Lectures in "Introduction to the Human Brain" (The Johns Hopkins University)
1992-1994; 2000-2001	Lectures in the "Neurology Basic Clerkship" (The Johns Hopkins University School of Medicine)
1993-2001	Lectures in "Human Neuropsychology" (The Johns Hopkins University)
1995-2001	Lectures in "Language and Mind" (The Johns Hopkins University)
1996-2001	Lectures in "Neurology Resident Clinical Teaching Conferences" (The Johns Hopkins University School of Medicine)
1996-2001	Lectures in "Neuroscience I: Cognitive Neuroscience" (The

	Johns Hopkins University)
1996-2001	Basic Science Medical Student Lectures in "Neurology/Neuropathology Course" (The Johns Hopkins University School of Medicine)
1996-2001	Neuropsychology Research Tutorial (The Johns Hopkins University)
1997-98	Clinical medical student teaching in "Introduction to Clinical Medicine" (The Johns Hopkins University School of Medicine)
1997-2001	Clinical medical student teaching in "Neurology Basic Clerkship" (The Johns Hopkins University School of Medicine)
1997-2001	Lectures in "Topics in Neuroscience" (The Johns Hopkins University)
1997-2001	Elective in Cognitive Neurology (Neurology residents, The Johns Hopkins Hospital)
1997-2001	Elective in Language, Memory, and Higher Order Vision (The Johns Hopkins University School of Medicine)
1998-2001	Clinical medical student teaching in "Neurology Clinical Skills" (The Johns Hopkins University School of Medicine)
2000-2001	Basic Science Medical Student Lectures in "Neuroscience Course" (The Johns Hopkins University School of Medicine)
2002-2005	Clinical medical student teaching in Geriatric Medical Student Rotation (University of Arkansas for Medical Sciences)
2002-2005	Geriatric fellow lectures in mental status examination and dementia (University of Arkansas for Medical Sciences)
2002-2005	Neurology resident lectures in mental status, dementia, memory (University of Arkansas for Medical Sciences)
2004-2005	Neurology Clerkship, Clinical Medical Student Teaching (University of Arkansas for Medical Sciences)
2006-	"Neural Basis of Semantic Memory," Graduate Course, University of Texas at Dallas
2006-	Academic Rounds Attending, Department of Psychiatry (University of Texas Southwestern Medical Center)
2008-	"Neural Correlates of Cognition," Graduate Course, University of Texas at Dallas

2006-	Research in Behavioral and Brain Sciences, Undergraduate Course, University of Texas at Dallas
2006-	Directed Research in Behavioral and Brain Sciences, Undergraduate Course, University of Texas at Dallas
2006-	Individual Study in Behavioral and Brain Sciences, Undergraduate Course, University of Texas at Dallas
2009-	Honors Thesis in Behavioral and Brain Sciences, Undergraduate Course, University of Texas at Dallas

**Post-Doctoral Fellows trained (Neuroscience Research and Clinical):**

1999-2001	Lauren Moo, M.D.
1999-2001	Scott Slotnick, Ph.D.
2004-2005	Juan Li, Ph.D.
2006-2008	Jacque Gamino, Ph.D.
2007-2009	Gail Tillman, Ph.D.
2008-2010	Raksha Anand Mudar, Ph.D.
2008-2010	Elizabeth Kanter Bartz, Ph.D.
2013-2014	Marisara Dieppa, M.D.
2015-2016	H-Sheng Chiang, M.D., Ph.D.
2016-2017	Bambi DeLaRosa, Ph.D.

**Graduate student supervised**

2006-2008	Raksha Anand
2006-2007	Peter Fauver
2007-2009	Khamid Bhadikirov
2009-2010	Leonardo Estevez
2009-2015	H-Sheng Chiang (Ph.D. Committee Chair)
2010-2015	Jeremy Strain (Ph.D. Committee Chair)
2010-2015	Neena Rao (Ph.D. Committee Chair)
2011-2012	Leah Bowen
2012-2016	Bambi de la Rosa (Ph.D. Committee Chair)
2012-	Justin Eroh (Ph.D. Committee Chair)
2012-2013	Lindy Loneman
2013-2013	Laura Bobzien
2012-2013	Zorica Simic
2012-2017	Penelope Jones
2011-2012	Julie Van
2013-	Julie Fratantoni (Ph.D. Committee Chair)
2013-2016	Lindy Fields

**Undergraduate degree students supervised (Neuroscience Research):**

1996	Lauren Roginski
1997-99	Tiffini Smith
1999-2000	Felix Yu
2006-10	Matthew Brier
2009-12	Shehznaz Baqui
2008-10	Rajen Patel
2009-10	Nistha Jajal
2009-10	Michael Lugo
2010-2011	Ben Kunze
2010-2011	Shadi Lavasani

2010-2011	Megha Bhatia
2010-2011	Kim Vu
2010-2011	Najam Siddique
2010-2012	Rigoberto Hernandez
2010-2012	Briana Flores
2010-2013	Seth Mansinghani
2011-2012	Palak Patel
2011-2012	Robert Bell
2011-2012	Carissa Dees
2011-2015	Demi Krieger
2012-2015	Athula Pudhiyidath
2013-2014	Gregory Frank
2012-2017	Scott Shakal
2014-2015	Jihyeon Choi
2015-2015	Ryan Tychinkski
2015-2016	Kylee Yeatman
2015-2016	Mohamed Mahmoud
2015-2016	Rebecca Border
2015-2016	Sahithi Kaza
2015-2016	Shezai Padani
2016-2017	Rachel O’Hair
2016-2017	Reana Limones

**Medical students supervised (Neuroscience Research):**

1997-99	W. Leo Sugrue
2009	Colin Donovan

**Residents supervised for senior research tutorial:**

1996-97	Ellen Deibert, M.D.
1998-99	Lauren Moo, M.D., Isaac Silverman, M.D.

<b>DOCTORAL COMMITTEES:</b>	1996	"Development of nuclear magnetic resonance techniques for functional neuroimaging in human stroke," Brian J. Soher, Ph.D., Department of Biomedical Engineering, The Johns Hopkins University.
	1996	"The influence of semantic representations on arithmetic fact," John Whalen, Ph.D., Department of Cognitive Science, The Johns Hopkins University.
	2006	"The Effects of the Female Menstrual Cycle on Hemispheric Asymmetry in Dichotic Listening," Gail Tillman, Ph.D., School of Behavioral and Brain Sciences, The University of Texas at Dallas.
	2008	"Differences between GIST and Detail Processing," Raksha Anand, Ph.D., School of Behavioral and Brain Sciences, The University of Texas at Dallas.
	2008	"Semantic Priming Effects Across the Lifespan: an ERP Study," Jyutika Mehta, Ph.D., School of Behavioral and Brain Sciences, The University of Texas at Dallas.
	2008	"Dimensions of Discourse: Diagnostic, Neuroimaging,

- and Neuropsychological Correlates In Early Fronto-temporal Lobar Degeneration,” Stephanie Chiu Wong, Ph.D., School of Behavioral and Brain Sciences, The University of Texas at Dallas.
- 2009 “Effects of Middle Age on Interaural Asymmetry in a Competing Speech Task,” Tara Davis, School of Behavioral and Brain Sciences, The University of Texas at Dallas.
- 2011 “Can we go the distance to predict how the brain represents the world? A distance-based partial least squares regression approach,” Anjali Krishnan, School of Behavioral and Brain Sciences, The University of Texas at Dallas.
- 2011 “Cross-sectional differences in brain activity supporting working memory,” Laura Dewey, Clinical Psychology, University of Texas Southwestern Medical Center.
- 2014 “Fluid Intelligence: A multiprocess framework for individual differences, item difficulty, and neural network dynamics,” Ehsan Shokri Kojori, School of Behavioral and Brain Sciences, The University of Texas at Dallas.
- 2014 “Imageability and word and class: An ERP investigation of nouns, verbs, and adjectives,” Lynda Sides, School of Behavioral and Brain Sciences, The University of Texas at Dallas.
- 2015 “Anatomical damage and cognitive deficits in herpes encephalitis,” Jeremy Strain, School of Behavioral and Brain Sciences, The University of Texas at Dallas. (Ph.D. Committee Chair).
- 2015 “The neurophysiological mechanisms of semantic object memory retrieval.” Hsueh-Sheng Chiang, School of Behavioral and Brain Sciences, The University of Texas at Dallas. (Ph.D. Committee Chair).
- 2015 “Neural correlates of category by valence visual object organization in Posttraumatic Stress Disorder: An fMRI study,” Neena Rao, School of Behavioral and Brain Sciences, The University of Texas at Dallas. (Ph.D. Committee Chair).
- 2015 “Electrophysiological dynamics during visual threat processing in combat-related Post-Traumatic Stress Disorder,” Bambi DeLaRosa, School of Behavioral and Brain Sciences, The University of Texas at Dallas. (Ph.D. Committee Chair).
- 2016 “The Effects of Pairing Vagus Nerve Stimulation with Motor Training on Functional Recovery and Cortical Map Plasticity after Traumatic Brain Injury,” David Pruitt, School of Behavioral and Brain Sciences, The University of Texas at Dallas.

- 2016 “The neural correlates of encoding memory associations,” Jenny Wong, School of Behavioral and Brain Science, The University of Texas at Dallas.
- 2017 “Evoking automated word reading,” Anna Middleton, School of Behavioral and Brain Science, The University of Texas at Dallas.
- 2017 (proposal) “Identifying differences in the neural correlates underlying semantic and syntactic development,” Julie Schneider, School of Behavioral and Brain Science, The University of Texas at Dallas.

**COMMITTEES:**

- 2016- Committee on Qualifications, University of Texas at Dallas
- 2016- Faculty Personnel Review Committee, BBS, UTD
- 2014-2017 AAN Annual Meeting Scientific Committee, Topic Chair
- 2013- Representative of UTD, UT System Neuroscience Council
- 2011 Testified to Texas House Public Health Committee on behalf of concussion bill HB2038
- 2010 AAN representative presenting the diagnostic codes for Corticobasal Degeneration, Visual Agnosia, Prosopagnosia, Simultagnosia to ICD panel at CMMS
- 2009- AAN Media Expert for Behavioral Neurology, Dementia/Cognitive Decline/Aging and Hyperactivity
- 2009- Texas State Plan on Alzheimer’s Disease Committee
- 2008-2009 VA Advisory Committee on Gulf War Veterans to the Secretary of the Veterans Administration (Presidential-Appointed Committee)
- 2008- Aging, Dementia, and Cognitive Neurology Topic Work Group, Education Committee, American Academy of Neurology
- 2007 Coding Subcommittee, Medical Economics and Management Committee, American Academy of Neurology
- 2007 Medical Economics and Management Committee, American Academy of Neurology
- 2007-2009 Chairman, Nominating Committee, Behavioral Neurology Section, American Academy of Neurology
- 2006- Behavioral Neurology and Neuropsychiatry Fellowship Exam Certification Committee of the United Council of



Neurological Subspecialties

2006-	Protocol Review and Monitoring Committee, Advanced Imaging Research Center, University of Texas
2002-	Membership Committee, Academy of Aphasia
2000-2009	Medical Economics and Management Committee, American Academy of Neurology, Behavioral Neurology Representative
1999-2009	Executive Committee, Behavioral Neurology Section, American Academy of Neurology
2006	AAN Representative to the RUC for approval and establishing of relative value units to for Functional Brain Mapping (2/2-5/06)
2005-2007	President Behavioral Neurology Section of the American Academy of Neurology
2005-2007	President Society for Behavioral and Cognitive Neurology
2005	AAN representative presenting the diagnostic codes for Mild Cognitive Impairment to ICD panel at CMMS
2005	AAN representative and original sponsor of Functional Brain Mapping billing code approved by AMA CPT Committee
2004-2005	Adult Day Healthcare Advisory Program Committee, CAVHS
2004-2005	Telehealth Care Implementation Team, CAVHS
2004-2005	VISN 16, Care Coordination and Telehealth
2002-2005	President-elect Behavioral Neurology Section of the American Academy of Neurology
2002-2005	President-elect Society for Behavioral and Cognitive Neurology
2002-2005	Co-Chairman, Linkages Committee, Dept. of Geriatrics, UAMS
2002	AAN representative presenting the diagnostic codes for Frontotemporal Dementia and Dementia with Lewy Bodies to ICD panel at CMMS
2002	Co-Chairman, Faculty Retreat, Dept. of Geriatrics, UAMS
2001-2004	Chairman, Subspecialty Certification Committee, Behavioral Neurology Section, American Academy of Neurology
2000-2002	Secretary/Treasurer Behavioral Neurology Section of the American Academy of Neurology

	2000-2002	Secretary/Treasurer Society for Behavioral and Cognitive Neurology
	1999-2007	Chairman, Practice Issues Committee, Behavioral Neurology Section, American Academy of Neurology
	1999-2001	Co-Chair, Residency Selection Committee (Neurology Department, The Johns Hopkins University School of Medicine)
	1998-2001	Psychosurgery Review Committee (The Johns Hopkins Hospital)
	1998-2001	Committee on Appointments and Promotions (Neurology Department, The Johns Hopkins University School of Medicine)
	1998	Coding and Reimbursement Subcommittee of the Scope of Practice Committee (American Academy of Neurology)
	1997-2001	Functional Imaging Committee (The Johns Hopkins University)
<b>EDITORIAL ACTIVITIES:</b>	1998- 2006-2009 2007-	Editorial Board, <i>Neurocase</i> Editorial Board, <i>Neuropsychology</i> Editorial Board, <i>Journal of Innovative Optical Health Sciences</i>
	2009- 2010-	Editorial Board, <i>World Journal of Radiology</i> Review Editorial Board, <i>Frontiers in Neuropsychiatric Imaging and Stimulation</i>
	2011- 2015-16	Editorial Board, <i>World Journal of Psychiatry</i> Editorial Board, <i>Journal of Alzheimer's Disease</i>
<b>AD HOC REVIEWER:</b>	Journals:	<i>Annals of Neurology; Archives of Neurology; Archives of Physical Medicine and Rehabilitation; Behavioral Neurology; Brain; Brain and Language; Brain Research; Cognitive Neuropsychology; Cognitive and Behavioral Neurology; Epilepsia; Human Brain Mapping; Journal of Cognitive Neuroscience; Journal of the American Medical Association; JAMA Neurology; Journal of Infectious Diseases; Journal of Neurophysiology; Journal of Neurotrauma; Journal of the International Neuropsychological Society; Journal of Psychiatric Research; Journal of Telemedicine and Telecare; Journal of Theoretical Biology; Lancet; Multiple Sclerosis; Neurobiology of Aging; Neuroimage; Neurology; Neuropsychiatry, Neuropsychology, and Behavioral Neurology; Neuropsychologia; Neuroscience Letters; PLoS ONE; Psychiatry Research; Science</i>
	Agencies:	NIH - Neurology A Study Section (1993-1995); Initial Review Board of the Medical and Scientific Advisory Council of the

Alzheimer's Disease and Related Disorders Association (2000-); BioSciences and BioEngineering Section of the Science Foundation of Ireland (2007-); UT Health BRAIN Initiative (2014-); DOD - US Army MOMRP BAA (2014-)

**CONSULTANT:** Publications: *Time-Life Books*  
Media: *CSI: New York*

**PREVIOUS SPEAKER:** Eisai Pharmaceuticals, Pfizer Pharmaceuticals;  
Bayer Pharmaceuticals; Forrest Pharmaceuticals

**BOARD MEMBERSHIP:** Britton Chance Center for Biomedical Photonics (BCCBP) of Huazhong University of Science of Technology (HUST) of Wuhan, China  
  
The Winston School, Dallas, TX

## PUBLICATIONS

### ORIGINAL ARTICLES AND INVESTIGATIONS IN PEER REVIEWED JOURNALS

1. Hart, J., Berndt, R.S., & Caramazza, A. Category-specific naming deficits following cerebral infarction. **Nature**, 316:439-440, 1985.
2. Hart, J., & Gordon, B. Delineation of single-word semantic comprehension deficits in aphasia, with anatomical correlation. **Annals of Neurology**, 27:226-231, 1990.
3. Fisher, R.S., Cysyk, B.J., Lesser, R.P., Pontecorvo, M.J., Ferkany, M., Schwerdt, P.R., Hart, J., & Gordon, B. Dextromethorphan for treatment of complex partial seizures. **Neurology**, 40:547-549, 1990.
4. Burnstine, T.H., Lesser, R.P., Hart, J., Uematsu, S., Zinreich, S.J., Krauss, G.L., Fisher, R.S., Vining, E.P.G., & Gordon, B. Characterization of the basal temporal language area in patients with left temporal lobe epilepsy. **Neurology**, 40:966-970, 1990.
5. Gordon, B., Selnes, O.A., Hart, J., Hanley, D., & Whitley, R.J. Long-term cognitive sequelae of Acyclovir-treated Herpes simplex encephalitis. **Arch. Neurol.**, 47:646-647, 1990.
6. Gordon, B., Lesser, R.P., Rance, N.E., Hart, J., Webber, R., Uematsu, S., & Fisher, R.S. Parameters for direct cortical electrical stimulation in the human: Histopathologic confirmation. **EEG and Clin. Neurophys.**, 75:371-377, 1990.
7. Hart, J., & Gordon, B. Early-onset dementia and extrapyramidal disease: Clinicopathologic variant of Gerstmann-Straussler-Scheinker and Alzheimer's disease? **J. Neurol. Surg. Psych.**, 53:932-934, 1990.
8. Uematsu, S., Lesser, R.P., Fisher, R.S., Krauss, G.L., Hart, J., Vining, E.P., Freeman, J., & Gordon, B. Resection of the epileptogenic area in critical cortex with the aid of a subdural grid. **J. Stereotactic and Functional Neurosurgery**, 54+55: 34-45, 1990.
9. Hart, J., Lesser, R.P., Fisher, R.S., Schwerdt, P., Bryan, R.N., & Gordon, B. Dominant-side intracarotid amobarbital spares comprehension of word-meaning. **Arch. Neurol.**, 48:55-58, 1991.
10. Jeffery, P.J., Monsein, L.H., Szabo, Z., Hart, J., Fisher, R.S., Lesser, R.P., DeBrun, G., Gordon, B., Wagner,

- H.N., & Camargo, E.E.* Mapping the distribution of Amobarbital in the intra-arterial Sodium Amobarbital (Wada) test with Tc-99m HMPAO SPECT. **Radiology**, 178:847-850, 1991.
11. *Selnes, O.A., Pestronk, A., Hart, J., & Gordon, B.* Limb apraxia without aphasia from a left-sided lesion in a right-hander. **J. Neurol. Neurosurg. Psych.**, 54: 734-737, 1991.
  12. *Arroyo, S., Krauss, G.L., Lesser, R.P., Gordon, B., Hart, J., Carson, B.S., & Uematsu, S.* Simple partial seizures: Clinico-functional correlation. A case report. **Neurology**, 42:642-646, 1992.
  13. *Hart, J., & Gordon, B.* Neural subsystems for object knowledge. **Nature**, 359:60-64, 1992.
  14. *Hart, J., Lesser, R.P., & Gordon, B.* Selective interference with the representation of size in the human by direct cortical electrical stimulation. **Journal of Cognitive Neuroscience**, 4:337-344, 1992.
  15. *Hart, J., Lewis, P.J., Lesser, R.P., Fisher, R.S., Monsein, L.H., Schwerdt, P., Bandeen-Roche, K., & Gordon, B.* Anatomic correlates of memory from intracarotid amobarbital injections with Tc-99m HMPAO SPECT. **Archives of Neurology**, 50: 745-750, 1993.
  16. *Arroyo, S., Lesser, R.P., Gordon, B., Uematsu, S., Hart, J., Schwerdt, P., Andreasson, K., & Fisher, R.S.* Mirth, laughter, and gelastic seizures. **Brain**, 116: 757-780, 1993.
  17. *Arroyo, S., Lesser, R.P., Fisher, R.S., Vining, E.P., Krauss, G.L., Bandeen-Roche, K., Hart, J., Gordon, B., Uematsu, S., & Webber, R.* Clinical and electroencephalographic evidence for sites of origin of seizures with diffuse electrodecremental pattern. **Epilepsia**, 35: 974-987, 1994.
  18. *Small, S., Hart, J., Nguyen, T., & Gordon, B.* Distributed representations of semantic knowledge in the brain. **Brain**, 118: 441-453, 1995.
  19. *Small, S., Holland, A.L., Hart, J., Forbes, M.M., & Gordon, B.* Response variability in picture naming: A computational study. **Clinical Aphasiology**, 23: 25-38, 1995.
  20. *Krauss, G.L., Fisher, R., Plate, C., Hart, J., Uematsu, S., Gordon, B., & Lesser, R.P.* Cognitive effects of resecting basal temporal language areas. **Epilepsia**, 37 (5): 476-483, 1996.
  21. *Boatman, D., Miglioretti, D.L., Hart, J., Lamberti, N., Rothlisberger, B., & Gordon, B.* Localization and variability in the cortical representation of auditory syllable discrimination and comprehension. **Brain and Language**, 55:150-152, 1996.
  22. *Gordon B, Hart J Jr, Lesser RP, & Arroyo S.* Mapping cerebral sites for emotion and emotional expression with direct cortical electrical stimulation and seizure discharges. **Prog Brain Res**, 107:617-22, 1996.
  23. *Kraut, M., Hart, J., Soher, B.J., & Gordon, B.* Object shape processing in the visual system evaluated using functional MRI. **Neurology**, 48:1416-1420, 1997.
  24. *Hart, J., Crone, N.E., Lesser, R.P., Sieracki, J., Miglioretti, D.L., Hall, C., Sherman, D., & Gordon, B.* Temporal dynamics of verbal object comprehension. **Proceedings of the National Academy of Sciences (USA)**, 95: 6498-6503, 1998.
  25. *Boatman, D., Hart, J., Lesser, R.P., Honeycutt, N., Anderson, N.B., Miglioretti, D., & Gordon, B.* Right hemisphere speech perception as revealed by intracarotid Sodium Amobarbital injection and electrical cortical interference. **Neurology**, 51:458-464, 1998.
  26. *Deibert, E., Kraut, M., Kremen, S., & Hart, J.* Neural pathways in tactile object recognition. **Neurology**, 52: 1413-1417, 1999.

27. Hillis, A.E., Boatman, D., Hart, J., & Gordon, B. Making sense out of jargon: A neurolinguistic and computational account of jargon aphasia with intact semantics. **Neurology**, 53: 1813-1824, 1999.
28. Hart, J., Kraut, M., Kremen, S., Soher, B., & Gordon, B. Neural substrates of orthographic lexical access as demonstrated by functional brain imaging. **Neuropsychiatry, Neuropsychology, and Behavioral Neurology**, 13: 1-7, 2000.
29. Boatman, D., Gordon, B., Hart, J., Selnes, O., Miglioretti, & Lenz, F. Transcortical sensory aphasia: Revisited and Revised. **Brain**, 123: 1634-42, 2000.
30. Boatman, D., Alidoost, M., Bergey, G., Gordon, B., Crone, N., Hart, J., & Lenz, F. Right hemisphere language dominance in a right handed patient with late-onset seizures. **Epilepsy and Brain**, 1: 281-286, 2000.
31. Slotnick, S., Moo, L.R., Tesoro, M., & Hart, J. Hemispheric asymmetry in categorical versus coordinate visuospatial processing revealed by temporary cortical deactivation. **Journal of Cognitive Neuroscience**, 13:1088-1096, 2001.
32. Crone NE, Hao L, Hart J Jr, Boatman D, Lesser RP, Irizarry R, Gordon B. Electrographic gamma activity during word production in spoken and sign language. **Neurology**. 2001 Dec 11;57(11):2045-53.
33. Kraut, M., Kremen, S., Segal, J., Calhoun, V., Moo, L., & Hart, J. Object activation from features in the semantic system. **Journal of Cognitive Neuroscience**, 14:24-36, 2002.
34. Kraut, M., Kremen, S., Moo, L., Segal, J., Calhoun, V., & Hart, J. Object activation in semantic memory from visual multimodal feature input. **Journal of Cognitive Neuroscience**, 14:37-47, 2002.
35. Moo, L., Murphy, K.J., Gailloud, P., Tesoro, M., & Hart, J. Tailored cognitive testing with provocative amobarbital injection preceding AVM embolization. **American Journal of Neuroradiology**, 23:416-421, 2002.
36. Kraut, M., Moo, L., Segal, J., & Hart, J. Neural activation during an explicit categorization task: Category- or feature-specific effects? **Brain Research Cognitive Brain Research**, 13:213-220, 2002.
37. Slotnick, S., Moo, L., Krauss, G., & Hart, J. Large-scale cortical displacement of a human retinotopic map. **NeuroReport**, 13:41-46, 2002.
38. Slotnick, S., Moo, L., Kraut, M., Lesser, R., & Hart, J. Thalamic modulation of cortical rhythms during semantic memory recall in humans. **Proceedings of the National Academy of Sciences (USA)**, 99(9): 6440-6443, 2002.
39. Segal, J.B., Moo, L.R., & Hart, J. The effect of age on rate of functional recovery after intracarotid amobarbital injection. **Epilepsia**, 43(6):659-661, 2002.
40. Moo, L.R., Slotnick, S., Krauss, G., & Hart, J. A prospective study of motor recovery following multiple subpial transections. **Neuroreport**, 13(5):1-5, 2002.
41. Moo, L., Slotnick, S., Zee, D., Tesoro, M., & Hart, J. Interlocking-finger test: A bedside screen for parietal lobe dysfunction. **Journal of Neurology, Neurosurgery, and Psychiatry**, 74(4):530-532, 2003.
42. Slotnick, S., Moo, L.R., Segal, J.B. & Hart, J. Distinct prefrontal cortex associated with item memory and source memory for visual shapes. **Brain Research Cognitive Brain Research**, 17(1):75-82, 2003.
43. Segal, J.B., Kraut, M.A., Williams, R., & Hart, J. Semantic memory deficit with a left thalamic infarct. **Neurology**, 61(2):252-254, 2003.

44. Kraut, M., Calhoun, V., Pitcock, J.A., Cusick, C., Hart, J. Neural hybrid model of semantic object memory: Implications from event-related timing using fMRI. **Journal of the International Neuropsychological Society**, 9:1031-1040, 2003.
45. Hogervorst, E., Bandelow, S., Hart, J., & Henderson, V. Telephone word-list recall tested in the rural aging and memory study: two parallel versions for the TICS-M. **International Journal of Geriatric Psychiatry**, 19:875-80, 2004.
46. Kraut, M., Pitcock, J., & Hart, J. Neural mechanisms of semantic memory. **Current Neurology and Neuroscience Reports**, 4(6):461-5, 2004.
47. Assaf, M., Rivkin, P., Kuzu, C., Calhoun, V., Kraut, M., Groth, K., Yassa, M., Hart, J., & Pearlson, G. Abnormal object-recall and anterior cingulate overactivation correlate with formal thought disorder in schizophrenia. **Biological Psychiatry**, 59:452-9, 2006.
48. Roca, V., Hart, J., Kimbrell, T., Freeman, T. Cognitive Function and Dissociative Disorder Status Among Veteran Subjects with Chronic Posttraumatic Stress Disorder: A Preliminary Study. **J Neuropsychiatry Clin Neurosci**, 18:226-230, 2006.
49. Assaf, M., Calhoun, V., Kuzu, C., Kraut, M., Rivkin, P., Hart, J. & Pearlson, G. Neural Correlates of the Object Recall Process in Semantic Memory. **Psychiatry Research**, 147(2-3):115-26, 2006.
50. Kraut, M., Pitcock, J., Calhoun, V., Li, J., Freeman, T., Hart, J. Neuroanatomic organization of sound memory in humans. **Journal of Cognitive Neuroscience**, 18(11):1877-88, 2006.
51. Kraut, M., Cherry, B., Pitcock, J., Vestal, L., Henderson, V. & Hart, J. The Semantic Object Retrieval Test (SORT) in normal aging and Alzheimer's disease. **Cognitive and Behavioral Neurology**, 19(4):177-84, 2006.
52. Freeman, T., Kimbrell, T., Booe, L., Myers, M., Cardwell, D., Lindquist, D., Hart, J., & Komoroski, R. Evidence of Resilience: Neuroimaging in Former Prisoners of War. **Psychiatry Research**, 30; 146(1):59-64, 2006.
53. Vestal, L., Smith-Olinde, L., Hicks, G., Hutton, T., Hart, J. Efficacy of language assessment in Alzheimer's disease: Comparing in-person examination and telemedicine. **Clinical Interventions in Aging**, 1(4):467-71, 2006.
54. Kraut, M., Cherry, B., Pitcock, J., Li, J., Vestal, L., Pippenger, M., Henderson, V., & Hart, J. The Semantic Object Retrieval Test (SORT) in Amnesic Mild Cognitive Impairment. **Cognitive and Behavioral Neurology**, 20(1):62-7, 2007.
55. Hart, J., Rao, S., Nuwer, M. Clinical Functional Magnetic Resonance Imaging. **Cognitive and Behavioral Neurology**, 20(3):141-4, 2007.
56. Hart, J., Jr, Anand, R., Zoccoli, S., Maguire, M., Gamino, J., Tillman, G., King, R., Kraut, M. Neural substrates of semantic memory. **J Int Neuropsychol Soc.**, 13(5):865-80, 2007.
57. Brier, M., Maguire, M., Tillman, G., Hart, J, Kraut, M. Event-related potentials in semantic memory retrieval. **J Int Neuropsychol Soc.**, 14(5):815-2, 2008.
58. Hart, J., Kimbrell, T., Fauver, P., Cherry, B., Pitcock, J., Booe, L., Pippenger, M., Freeman, T. Cognitive dysfunctions associated with PTSD: Evidence from former prisoners of war. **The Journal of Neuropsychiatry and Clinical Neurosciences**, 20(3):309-16, 2008.

59. *Freeman, T., Hart, J., Kimbrell, T., Ross, E.D.* Comprehension of affective prosody in veterans with chronic Posttraumatic Stress Disorder. **The Journal of Neuropsychiatry and Clinical Neurosciences**, 21(1):52-8, 2009.
60. *Ferree, T., Brier, M., Hart, J., Kraut, M.* Space-time frequency analysis of EEG data using within-subject statistical tests followed by sequential PCA. **Neuroimage**, 45(1):109-21, 2009.
61. *Assaf, M., Jagannathan, K., Calhoun, V., Kraut, M., Hart, J Jr, Pearlson, G.* Temporal sequence of hemispheric network activation during semantic processing: a functional network connectivity analysis. **Brain and Cognition**, 70(2):238-46, 2009.
62. *Maguire, M., Brier, M., Moore, P., Ferree, T., Ray, D., Mostofsky, S., Hart, J., Kraut, M.* The influence of perceptual and semantic categorization on inhibitory processing as measured by the N2-P3 response. **Brain and Cognition**, 71: 59, 2009.
63. *Anand, R., Hart, J., Moore, P., Chapman, S.* Frontotemporal lobar degeneration: Characterizing semantic binding and abstracted meaning abilities. **Perspectives on Neurophysiology and Neurogenic Speech and Language Disorders**, 19: 117-125, 2009.
64. *Calley, C., Tillman, G., Womack, K., Moore, P., Hart, J., Jr., Kraut, M.* Subjective report of word-finding and memory deficits in normal aging and dementia. **Cognitive and Behavioral Neurology**, 23 (3): 185-91, 2010.
65. *Tillman, G., Green, T., Ferree, T., Calley, C., Maguire, M., Briggs, R., Hart, J, Haley, R., Kraut, M.* Impaired response inhibition in ill Gulf War veterans. **Journal of Neurological Sciences**, 297 (1-2); 1-5, 2010.
66. *Brier, M., Ferree, T., Maguire, M., Moore, P., Spence, J., Tillman, G., Hart, J., Kraut, M.* Frontal theta and alpha power and coherence changes are modulated by semantic complexity in Go/NoGo tasks. **International Journal of Psychophysiology**, 78 (3): 215-24, 2010.
67. *Calley, C.S., Buhl, V., Tillman, G.D., Green, T.A., Hart, J. Jr., Haley, R.W., Kraut, M.A.* Impaired word finding in ill Gulf War veterans. **Brain Imaging and Behavior**, 4(3-4):248-55, 2010.
68. *Anand, R., Chapman, S., Rackley, A., Keebler, M., Zientz, J., Hart, J.* Gist reasoning training in cognitively normal seniors. **International Journal of Geriatric Psychiatry**, 9: 961-968, 2011.
69. *Tillman, G., Kimbrell, T., Calley, C., Kraut, M., Freeman, T., Hart, J Jr.* Repetitive Transcranial Magnetic Stimulation and threat memory: Selective reduction of combat threat memory P300 response after right frontal lobe stimulation. **The Journal of Neuropsychiatry and Clinical Neurosciences**, 23:40-47, 2011.
70. *Xu, F., Uh, J., Brier, M., Hart, J., Yezhuvath, U., Gu, H., Yang, Y., Lu, H.* The influence of carbon dioxide on brain activity and metabolism in conscious humans. **The Journal of Cerebral Blood Flow and Metabolism**, 31(1): 58-67, 2011.
71. *Frohman, T., Castro, W., Shah, A., Courtney, A., Orstadt, J., Davis, S., Logan, D., Abraham, T., Abraham, J., Remington, G., Treadaway, K., Graves, D., Hart, J., Stuve, O., Lemack, G., Greenberg, B., Frohman, E.* Symptomatic therapy in multiple sclerosis. **Therapeutic Advances in Neurological Disorders**, 4(2): 83-98, 2011.
72. *Li, X., Spence, J.S., Buhner, D.M., Hart, J. Jr., Cullum, C.M., Biggs, M.M., Hester, A.L., Odegard, T.N., Carmack, P.S., Briggs, R.W., Haley, R.W.* Hippocampal dysfunction in Gulf War Veterans: Investigation with ASL Perfusion MR imaging and physostigmine challenge. **Radiology**, 261(1):218-225, 2011.
73. *Ahmadi A., Jafari R., Hart J.* Light-weight single trial EEG signal processing algorithms: computational

- profiling for low power design. **Conf Proc IEEE Eng Med Biol Soc.** 2011: 4426-30, 2011.
74. Tao, R., Calley, C., Hart, J., Mayes, T., Nakonezny, P., Lu, H., Kennard, B., Tamminga, C., Emslie, G. Brain Activity in Adolescent Major Depressive Disorder: Pre- and Post- Fluoxetine Treatment. **The American Journal of Psychiatry**, 1/19, 2012.
  75. Tillman, G., Calley, C., Green, T., Buhl, V., Biggs, M., Spence, M., Briggs, R., Haley, R., Hart, J., Kraut, M. Event-related potential patterns associated with hyperarousal in Gulf War Illness Syndrome groups. **Neurotoxicology**, 33(5):1096-105, 2012.
  76. Spence, J.S., Brier, M.R., Hart, J., Ferree, T.C. Removing an inter-subject variance component in a general linear model improves multiway factoring of event-related spectral perturbations in group EEG studies. **Human Brain Mapping**, 34(3):651-64, 2013.
  77. Hart, J., Kraut, M., Womack, K., Strain, J., Didebhani, N., Bartz, E., Conover, H., Mansinghani, S., Lu, H., Cullum, C.M. Neuroimaging of cognitive dysfunction and depression in aging retired NFL players: A cross-sectional study. **JAMA Neurology**, 70(3):326-35, 2013.
  78. Hart, J., Maguire, M., Motes, M., Mudar, R., Chiang, H-S., Womack, K., Kraut, M. Semantic memory retrieval circuit: Role of BA6 and thalamus. **Brain and Language**, 126(1):89-98, 2013.
  79. Tillman, G. Calley C., Green, T., Buhl, V., Biggs, M., Spence, J., Briggs, R., Haley, R., Kraut M., Hart, J. Jr. Visual event-related potentials as markers of hyperarousal in Gulf War Illness: evidence against a stress-related etiology. **Psychiatric Research: Neuroimaging** 211(3):257-67, 2013.
  80. Calley, C., Motes, M., Chiang, H-S., Buhl, V., Spence, J., Abdi, H., Anand, R., Maguire, M., Estevez, L. Briggs, R., Freeman, T., Kraut, M., Hart, J. Jr. Threat as a feature in visual semantic object memory. **Human Brain Mapping**, 34(8): 1946-55, 2013.
  81. Strain, J.F., Didebhani, N., Cullum, C.M., Mansinghani, S., Conover, H., Kraut, M., Hart, J., Womack, K.B. Depressive symptoms and white matter dysfunction in retired NFL players with concussion history. **Neurology**, 81(1): 25-32, 2013.
  82. Didebhani, N., Cullum, C.M., Mansinghani, S., Conover, H., Hart, J. Depressive symptoms and concussions in aging retired NFL players. **Archives of Clinical Neuropsychology**, 28(5): 418-24, 2013.
  83. Chiang, H., Motes, M., Anand, R., Rao, N., Brier, M., Maguire, M., Kraut, M., Hart, J. Influence of perceptual and semantic factors on inhibitory responses: An fMRI study. **Neuroreport**, 24(16): 889-93, 2013.
  84. Hart, J. Womack, K.B., Powers, L.B., Nuwer, M. Coding for Behavioral Neurology. **Continuum**, 19(2):480-8, 2013.
  85. Motes, M., Gamino, J., Chapman, S., Rao, N., Maguire, M., Brier, M., Kraut, M., Hart, J. Inhibitory Control Gains from Higher-Order Cognitive Strategy Training. **Brain and Cognition**, 84(1): 44-62, 2014.
  86. Hart, J., Tillman, G., Kraut, M., Chiang, H.S., Strain, J., Li, Y., Agrawal, A., Jester, P., Gnann, J., Whitley, R. West Nile Virus Encephalitis: Neurological Manifestations and Prospective Longitudinal Outcomes. **BMC Infectious Diseases**, 14(1):248, 2014.
  87. Chiang, H-S., Mudar, R., Spence, J., Pudhiyidath, A., Eroh, J., DeLaRosa, B., Kraut M., Hart J. Age-related changes in feature-based object memory retrieval as measured by event-related potentials. **Biological Psychology**, 100:106-114, 2014.
  88. DeLaRosa, B., Spence, J., Shakal, S., Motes, M., Calley, C., Calley, V., Hart, J., Kraut M. Electrophysiological spatiotemporal dynamics during implicit visual threat processing. **Brain and Cognition**, 91:54-61, 2014.



89. Chapman, S., Asian, S., Hart, J., Bartz, E., Mudar, R., Keebler, M., Gardner, C., DeFina, L., Lu, H. Neural mechanisms of brain plasticity with complex cognitive training in healthy seniors. **Cerebral Cortex**, 25(2):296-405, 2015.
90. Beh, S., Muthusamy, B., Calabresi, P., Hart, J., Zee, D., Patel, V., Frohman, E. Hiding in plain sight: a closer look at posterior cortical atrophy. **Practical Neurology** 15:5-13, 2015.
91. Strain, J., Womack, K., Didehabani, N., Spence, J., Conover, H., Hart, J., Kraut, M., Cullum, C.M. Imaging correlates of memory and concussion history in retired NFL athletes. **JAMA Neurology**, 72(7):773-80, 2015.
92. Chiang H-S., Mudar, R., Pudhiyidath, A., Spence, J., Womack, K., Cullum, C.M., Tanner, J., Kraut, M., Hart, J. Altered neural activity during semantic object memory retrieval in amnesic mild cognitive impairment as measured by event-related potentials. **Journal of Alzheimer's Disease**, 46(3):703-17, 2015.
93. Gnann, J., Sköldenberg, B., Hart, J., Aurelius, E., Schliamser, S., Studahl, M., Eriksson, B., Hanley, D., Aoki, F., Jackson, A., Griffiths, P., Miedzinski, L., Hanfelt-Goade, D., Hinthorn, D., Ahlm, C., Aksamit, A., Cruz-Flores, S., Dale, I., Cloud, G., Jester, P., Whitley, R., and the National Institute of Allergy and Infectious Diseases (NIAID) Collaborative Antiviral Study Group (CASG). Herpes Simplex Encephalitis: Lack of clinical benefit of long-term valacyclovir therapy. **Clinical Infectious Diseases**, 61(5):683-91, 2015.
94. Mudar, R., Chiang H-S., Maguire, M., Spence, J., Eroh, J., Kraut, M., Hart, J. Effects of age on cognitive control during semantic categorization. **Behavioural Brain Research**, 287:285-93, 2015.
95. Daffner, K., Gale, S., Barrett, A., Boeve, B., Chatterjee, A., Coslett, B., D'Esposito, M., Finney, G., Gitelman, D., Hart, J., Lerner, A., Meador, K., Pietras, A., Voeller, K., Kaufer, D. Improving clinical cognitive testing: Report of the AAN Behavioral Neurology Section Workgroup. **Neurology**, 85(10):910-18, 2015.
96. Moffett, K. L., Crosson, B., Spence, J., Case, K., Levy, I. F., Gopinath, K. S., Shah, P., Goyal, A., Fang, Y., Briggs, R., Hart, J., Moore, A., Haley, R. Word-finding impairment in veterans of the 1991 Persian Gulf War. **Brain and Cognition**, 98:65-73, 2015.
97. Hubbard, N. A., Hutchison, J. L., Turner, M. P., Sundaram, S., Oasay, L., Robinson, D., Strain, J., Weaver, T., Davis, S. L., Remington, G. M., Huang, H., Biswal, B. B., Hart, J., Jr., Frohman, T. C., Frohman, E. M., & Rypma, B. Asynchrony in executive networks predicts cognitive slowing in Multiple Sclerosis. **Neuropsychology**, 30(1):75-86, 2016.
98. Mudar, R., Chiang, H-S., Eroh, J., Nguyen, L., Maguire, M., Spence, J., Kung, F., Kraut, M., Hart, Jr., J. The effects of amnesic Mild Cognitive Impairment on Go/NoGo Semantic Categorization Task Performance and Event-Related Potentials, **Journal of Alzheimer's Disease**, 60(2): 577-90, 2016.
99. To, W.T., Hart, J., De Ridder, D., Vanneste, S. Considering the influence of stimulation parameters on the effect of conventional and high-definition transcranial direct current stimulation. **Expert Rev Med Devices** 2:1-14, 2016.
100. Chiang, H.S., Eroh, J., Spence, J., Motes, M., Maguire, M., Krawczyk, D., Brier, M., Hart, J., Kraut, M. Common and differential electrophysiological mechanisms underlying semantic object memory retrieval probed by features presented in different stimulus types. **International Journal of Psychophysiology**, 106:77-86, 2016.
101. LoBue, C., Wilmoth, K., Cullum, M., Rossetti, H., Lacritz, L., Hynan, L., Hart, J., Womack, K., Traumatic brain injury history is associated with earlier age of onset in Frontotemporal dementia. **Journal of Neurology, Neurosurgery, and Psychiatry**, 87(8): 817-820, 2016.

102. Kozel, F.A., Didehbani, N., DeLaRosa, B., Bass, C., Schraufnagel, C., Morgan, C., Jones, P., Spence, J., Hart, J. Factors impacting functional disability and PTSD symptoms in OEF/OIF/OND Veterans with PTSD. **The Journal of Neuropsychiatry and Clinical Neurosciences**, 28(2): 112-117, 2016.
103. LoBue, C., Denney, D., Hynan, L., Rossetti, H., Lacritz, L., Hart, J., Womack, K., Cullum, C.M. Self-reported traumatic brain injury and Mild Cognitive Impairment: Increased risk and earlier age of diagnosis. **Journal of Alzheimer's Disease**, 31(3):727-36, 2016.
104. Hubbard, N.A., Turner, M., Hutchison, J.L., Ouyang, A., Strain, J., Oasay, L., Sundaram, S., Davis, S.L., Remington, G., Brigante, R.M., Huang, H., Hart, Jr., J., Frohman, T.C., Frohman, E., Biswal, B.B., & Rypma, B. Multiple sclerosis-related white matter microstructural change alters the BOLD hemodynamic response. **Journal of Cerebral Blood Flow and Metabolism**, 36(11):1872-1884, 2016.
105. To, W.T., James, E., Ost, J., Hart, J. Jr., De Ridder, D., Vanneste, S. Differential effects of bifrontal and occipital nerve stimulation on pain and fatigue using transcranial direct current stimulation in fibromyalgia patients. **Journal of Neural Transmission**, 124(7):799-808, 2017.
106. Hubbard, N.A., Sanchez, Araujo Y., Caballero, C., Ouyang, M., Turner, M.P., Himes, L., Faghihahmadabadi, S., Thomas, B.P., Hart, J., Huang, H., Okuda, D.T., Rypma, B. Evaluation of Visual-Evoked Cerebral Metabolic Rate of Oxygen as a Diagnostic Marker in Multiple Sclerosis. **Brain Sciences**, 7(6), pii: E64, 2017.
107. Nguyen, L.T., Mudar, R.A., Chiang, H.S., Schneider, J.M., Maguire, M.J., Kraut, M.A., Hart, J. Jr. Theta and Alpha Alterations in Amnesic Mild Cognitive Impairment in Semantic Go/NoGo Tasks. **Frontiers in Aging Neuroscience**, 9:160, 2017.
108. Fratantoni, J.M., DeLaRosa, B.L., Didehbani, N., Hart, J., Kraut, M.A. Electrophysiological correlates of word retrieval in traumatic brain injury. **Journal of Neurotrauma**, 34(5):1017-1021, 2017.
109. Tillman, G.D., Calley, C.S., Buhl, V.I., Chiang, H.S., Haley, R.W., Hart, J. Jr., Kraut, M.A. Electrophysiological correlates of semantic memory retrieval in Gulf War Syndrome 2 patients. **Journal of the Neurological Sciences**, 373:66-72, 2017.
110. Strain, J.F., Didehbani, N., Spence, J., Conover, H., Bartz, E.K., Mansinghani, S., Jeroudi, M.K., Rao, N.K., Fields, L.M., Kraut, M.A., Cullum, C.M., Hart, J., Womack, K.B. White matter changes and confrontation naming in retired aging National Football League athletes. **Journal of Neurotrauma**, 34(2):372-379, 2017.
111. LoBue, C., Wadsworth, H., Wilmoth, K., Clem, M., Hart, J. Jr., Womack, K.B., Didehbani, N., Lacritz, L.H., Rossetti, H.C., Cullum, C.M. Traumatic brain injury history is associated with earlier age of onset of Alzheimer disease. **Clinical Neuropsychologist**, 31(1):85-98, 2017.
112. To, W.T., De Ridder, D., Menovsky, T., Hart, J., Vanneste, S. The role of the dorsal Anterior Cingulate Cortex (dACC) in a cognitive and emotional counting Stroop task: Two cases. **Restorative Neurology and Neuroscience**, 35(3):333-345, 2017.
113. To, W.T., Ost, J., Hart, J. Jr., De Ridder, D., Vanneste, S. The added value of auditory cortex transcranial random noise stimulation (tRNS) after bifrontal transcranial direct current stimulation (tDCS) for tinnitus. **Journal of Neural Transmission**, 124(1):79-88, 2017.
114. Kozel, F.A., Motes, M., Didehbani, N., DeLaRosa, B., Bass, C., Schraufnagel, C., Jones, P., Morgan, C., Spence, J., Kraut, M., Hart, J. Repetitive TMS to augment Cognitive Processing Therapy in combat veterans of recent conflicts with PTSD: A randomized clinical trial. **Journal of Affective Disorders**, 229: 506-514, 2017.

115. Hubbard, N.A., Turner, M.P., Ouyang, M., Himes, L., Thomas, B.P., Hutchison, J.L., Faghihahmadabadi, S., Davis, S.L., Strain, J.F., Spence, J., Krawczyk, D.C., Huang, H., Lu, H., Hart, J., Jr., Frohman, T.C., Frohman, E.M., Okuda D.T., Rypma, B. Calibrated imaging reveals altered grey matter metabolism related to white matter microstructure and symptom severity in multiple sclerosis. **Human Brain Mapping**, 38(11):5375-5390, 2017.
116. Motes, M.A., Rao, N.K., Shokri-Kojori, E., Chiang, H.-S., Kraut, M.A., & Hart, J. Jr. Trial-level regressor modulation for fMRI designs requiring strict periodicity of stimulus presentations: Illustrated using a Go/No-Go task. **Magnetic Resonance Insights**, Dec 15;10:1178623X17746693, 2017.
117. To, W.T., Eroh, J., Hart, J. Jr., Vanneste, S. Exploring the effects of anodal and cathodal high definition transcranial direct current stimulation targeting the dorsal anterior cingulate cortex. **Scientific Reports**, 8(1): 4454, 2018.
118. To, W.T., De Ridder, D., Hart, J., Vanneste, S. Changing brain networks through non-invasive neuromodulation. **Frontiers in Human Neuroscience**, 13(12): 128, 2018.
119. Wilmoth, K., LoBue, C., Clem, M.A., Reddy, R., Hynan, L.S., Didehbani, N., Bell, K., Womack, K.B., Hart, J. Jr., Batjer, H., Cullum, C.M. Consistency of traumatic brain injury reporting in older adults with and without cognitive impairment. **Clinical Neuropsychology**, 32(3): 524-529, 2018.
120. LoBue, C., Woon, F., Rossetti, H., Hynan, L., Hart, J., Cullum, C.M. Traumatic brain injury history and progression from mild cognitive impairment to Alzheimer disease. **Neuropsychology**, 32(4):401-409, 2018.
121. Turner, M., Hubbard, N., Sivakolundu, D., Himes, L., Hutchison, J., Hart, J., Spence, J., Frohman, E., Frohman, T., Okuda, D., Rypma, B. Preserved canonicity of the BOLD hemodynamic response reflects healthy cognition: Insights into the healthy brain through the window of Multiple Sclerosis. **Neuroimage**, in press.
122. Wadsworth, H., Dhima, K., Womack, K., Hart, J., Weiner, M., Hynan, L., Cullum, C.M. Validity of Teleneuropsychological Assessment in Older Patients with Cognitive Disorders. **Arch Clin Neuropsychol**, in press.

#### MISCELLANEOUS JOURNAL PUBLICATIONS AND EDITORIALS

1. Hart, J. & Gordon, B. Anterior choroidal or anterior temporal artery. In reply. **Archives of Neurology**, 51: 749, 1994.
2. Pullicini, P. & Hart, J. "Does heart failure lead to cognitive impairment?" **Neurology**, 57:1945-1946, 2001.
3. Hart, J. Coding table. **Continuum: Behavioral Neurology**, 16(4), 2010.

#### BOOKS

1. Hart, J. Neurobiology of Cognition and Behavior. Oxford University Press: Oxford, 2015.

#### BOOKS (EDITED EDITIONS)

1. Hart, J. & Kraut, M. (Ed.) Neural Basis of Semantic Memory. Cambridge University Press: London, 2007.

**BOOK CHAPTERS AND REVIEWS**

1. *Caramazza, A., Berndt, R.S., & Hart, J.* "Agrammatic" reading. In F. Pirozollo and M. Wittrock (Eds.), Neuropsychological and Cognitive Processes in Reading. Academic Press: New York, 1981.
2. *Morris, M.S., Reggia, J., Ahuja, S.B., & Hart, J.* Slips: A database system for computer storage and analysis of phonological errors. In R. Dayhoff (Ed.), Proceedings Seventh Annual Symposium on Computer Applications in Medical Care. IEEE Press, 1983.
3. *Uematsu, S., Lesser, R.P., Fisher, R.S., Krauss, G., Hart, J., Vining, E.P., Freeman, J., & Gordon, B.* Resection of the epileptogenic area in critical cortex with the aid of a subdural electrode grid. In Ph.L. Gildenberg (Ed.), Stereotactic and Functional Neurosurgery, Karger: Basel, 1990.
4. *Lesser, R.P., Gordon, B., Fisher, R.S., Hart, J., & Uematsu, S.* Evaluation of epilepsy with subdural electrodes. In H. Lueders (Ed.), Surgery of Epilepsy, Raven Press: New York, 1992.
5. *Lesser, R.P., Arroyo, S., Hart, J., & Gordon, B.* The use of subdural electrodes for the study of language functions. In A. Kertesz (Ed.), Localization and Neuroimaging in Neuropsychology, Academic Press: San Diego, 1994.
6. *Gordon, B., Hart, J., Boatman, D., Crone, N., Nathan, S., Uematsu, S., Holcomb, H., Krauss, G., Selnes, O.A., & Lesser, R.P.* Language and brain organization from the perspectives of cortical electrical interference, direct cortical recording, PET scanning, and acute lesion studies. In D.C. Gajdusek & G.M. McKhann (Eds.), Evolution and Neurology of Language, Vol. X, No. 1 & 2, Elsevier: New York, 1994.
7. *Gordon, B., Hart, J., Boatman, D., & Lesser, R.P.* Cortical stimulation (interference) during behavior. In T. Feinberg & M. Farah (Es.), Behavioral Neurology and Neuropsychology, McGraw-Hill: New York, 1996.
8. *Small, S. L., Hart, J., Nguyen, T., & Gordon, B.* Distributed representations of semantic knowledge in the brain: Computational experiments using feature based codes. In J. A. Reggia, E. Ruppin, & R.S. Berndt (Eds.), Neural Modeling of Brain and Cognitive Disorders, Singapore: World Scientific, 1996.
9. *Gordon, B., Boatman, D., Lesser, R.P., & Hart, J.* Recovery from Acquired Reading and Naming Deficits Following Focal Cerebral Lesions. In S.H. Broman & J.M. Fletcher (Eds.) The Changing Nervous System: Neurobehavioral Consequences of Early Brain Disorders. New York: Oxford University Press, 1999.
10. *Hart, J.* Review of "Neuropsychology, Handbook of Perception and Cognition (2nd Edition)" (D.W. Zaidel, Ed.), **Electroencephalography and Clinical Neurophysiology**.
11. *Hart, J., Moo, L., Segal, J.B., Adkins, E., & Kraut, M.* Neural Substrates of Semantics. In A. Hillis (Ed.) Handbook of Language Disorders. Philadelphia: Psychology Press, 2002.
12. *Hart, J. & Selnes, O.A.* Acquired Disorders of Language. In A. K. Asbury, G. McKhann, W.I. McDonald, P.J. Goadsby, J.C. McArthur (Eds.) Diseases of the Nervous System: Clinical Neuroscience and Therapeutic Principles, 3rd edition. New York: Cambridge University Press, 2002.
13. *Hart, J., Pitcock, J., Sobkoviak, R., Kraut, M.* Presurgical Planning of neoplasms and arteriovenous malformations. In M. D'Esposito (Ed.) Functional MRI: Applications in Clinical Neurology and Psychiatry. Abingdon: Informa Healthcare, 2006.
14. *Hart, J. & Kraut, M.A.* Neural Hybrid Model of Semantic Object Memory (ver 1.1). In J. Hart & M. Kraut (Eds.) Neural Basis of Semantic Memory. Cambridge: Cambridge University Press, 2007.

15. Assaf, M. Rivkin, P., Kraut, M., Calhoun, V., Hart, J. & Pearlson, G. Schizophrenia and Semantic Memory. In J. Hart & M. Kraut (Eds.) Neural Basis of Semantic Memory. Cambridge: Cambridge University Press, 2007.

#### PAPERS PRESENTED AT PROFESSIONAL MEETINGS

1. Reggia, J., Price, T., Pula, T., Hart, J., & Zagoria, R. "A general medical decision support system for the physician." *Society for Medical Decision Making*, 2nd Annual Meeting, Washington, D.C., September, 1980.
2. Berndt, R.S., Caramazza, A., & Hart, J. "Agrammatic reading in Broca's aphasia." Symposium on Broca's Aphasia, *Academy of Aphasia*, 18th Annual Meeting, Bass River, Massachusetts, October, 1980.
3. Berndt, R.S., & Hart, J. "Patterns of anomia: Four cases." *Academy of Aphasia*, 21st Annual Meeting, Minneapolis, October, 1983.
4. Hart, J., Koo, E.H., Lutley, J.A., & Gordon, B. "Early onset dementia with extrapyramidal signs: Gerstmann-Straussler-Scheinker syndrome with Alzheimer changes." *American Academy of Neurology*, 39th Annual Meeting, New York, New York, April, 1987, (**Neurology** 37:156-157, 1987).
5. Koo, E.H., DeArmond, S.J., Hart, J., Gordon, B., Selkoe, D.J., & Price, D.L. "Cerebellar plaques in presenile dementia: Gerstmann-Straussler syndrome or Alzheimer's disease?" *American Association of Neuropathology*, Seattle, May, 1987.
6. Hart, J., Selnes, O., & Gordon, B. "Semantic and phonological deficits in anomia: CT correlates." *American Academy of Neurology*, 40th Annual Meeting, Cincinnati, April, 1988, (**Neurology** 38:300, 1988).
7. Selnes, O.A., Gordon, B., Hart, J., & Hanley, D.F. "Long-term neuropsychological sequelae of Acyclovir treated HSE." *American Academy of Neurology*, 40th Annual Meeting, Cincinnati, April, 1988, (**Neurology** 38:120, 1988).
8. Hart, J., Lesser, R.P., Fisher, R.S., & Gordon, B. "Complex semantic comprehension is preserved during Wada testing of the language dominant hemisphere." *American Neurological Association*, 113th Annual Meeting, Philadelphia, October, 1988, (**Ann Neurol** 24:135, 1988).
9. Lesser, R.P., Fisher, R.S., Hart, J., & Gordon, B. "Electrical cortical stimulation: Effects of afterdischarges on cognitive and motor performance." *American Epilepsy Society*, San Francisco, October, 1988, (**Epilepsia** 29: 672, 1988).
10. Gordon, B., Hart, J., Fisher, R.S., & Lesser, R.P. "Language during electrical cortical stimulation: Variety of errors and dissociations and reliability of results." *American Epilepsy Society*, San Francisco, October, 1988, (**Epilepsia** 29:668, 1988).
11. Hart, J., & Gordon, B. "Implications for semantic organization from a case of category specific anomia." *Academy of Aphasia*, 26th Annual Meeting, Montreal, Canada, October, 1988.
12. Gordon, B., Hart, J., Lesser, R.P., Selnes, O.A., Fisher, R., & Uematsu, S. "Dissociations in mixed transcortical aphasia produced by direct cortical electrical stimulation." *Academy of Aphasia*, 26th Annual Meeting, Montreal, Canada, October, 1988.
13. Gordon, B., Hart, J., Lesser, R.P., Uematsu, S., & Resor, S. "Pure alexia and models of orthographic-to-phonologic mapping." *Academy of Aphasia*, 26th Annual Meeting, Montreal, Canada, October, 1988.

14. Burnstine, T.H., Lesser, R.P., Gordon, B., Zinreich, S.J., Krauss, G.L., Hart, J., & Fisher, R.S. "Localization of the basal temporal speech area in patients with left temporal lobe epilepsy." *American Academy of Neurology*, 41st Annual Meeting, Chicago, April, 1989, (**Neurology** 39:298, 1989).
15. Gordon, B., Lesser, R., Hart, J., Selnes, O., & Uematsu, S. "Fractionation of language functions by direct electrical cortical stimulation: Functional and neuroanatomic aspects." *American Academy of Neurology*, 41st Annual Meeting, Chicago, April, 1989, (**Neurology** 39:175, 1989).
16. Selnes, O.A., Hart, J., & Gordon, B. "Early Alzheimer's disease: Aphasia is not a consistent finding." *American Neurological Association*, 114th Annual Meeting, New Orleans, September, 1989, (**Ann Neurol** 26:136, 1989).
17. Gordon, B., Lesser, R.P., Hart, J., Selnes, O.A., Uematsu, S., Zinreich, S.J., Thakor, N., & Schwerdt, P. "Functional and anatomical organization of language revealed by direct cortical electrical interference mapping." *Academy of Aphasia*, 27th Annual Meeting, Santa Fe, October, 1989.
18. Hart, J., Gordon, B., Lesser, R.P., Fisher, R.S., & Schwerdt, P. "Intracarotid amobarbital injection: Results of a standardized memory test protocol in 30 patients." *American Epilepsy Society*, Boston, December, 1989, (**Epilepsia** 30:713, 1989).
19. Gordon, B., Lesser, R.P., Hart, J., Uematsu, S., Fisher, R.S., Schwerdt, P., & Zinreich, J. "Direct electrical stimulation in language areas can predict deficits with structural lesion." *American Epilepsy Society*, Boston, December, 1989, (**Epilepsia** 30:724, 1989).
20. Lesser, R.P., Gordon, B., Hart, J., Fisher, R.S., Schwerdt, P., Uematsu, S., & Zinreich, J. "Hypertonicity as well as inhibition of motor movements can be produced by stimulation of the premotor cortex." *American Epilepsy Society*, Boston, December, 1989, (**Epilepsia** 30:643, 1989).
21. Lesser, R.P., Gordon, B., Hart, J., Fisher, R.S., Vining, E.P., & Uematsu, S. "Use of subdural electrodes for investigating cortical function." *American Epilepsy Society*, Boston, December, 1989, (**Epilepsia** 30:723, 1989).
22. Fisher, R.S., Cysyk, B.J., Lesser, R.P., Hart, J., Schwerdt, P., & Gordon, B. "A controlled pilot trial of dextromethorphan as adjunct therapy for complex partial seizure." *American Epilepsy Society*, Boston, December, 1989, (**Epilepsia** 30:679, 1989).
23. Gordon, B., Hart, J., Lesser, R.P., Pettis, M., & Sieracki, J. "Reading aloud as a target for neural modeling." *Neural Network Society Meeting*, Applied Physics Laboratory, Laurel, MD, January, 1990.
24. Monsein, L.H., Szabo, Z., Fisher, R.S., Hart, J., Sostre, S., Wagner, H.N., & Camargo, E.E. "Tc-99m HMPAO SPECT for mapping the distribution of Amytal in the intra-arterial Sodium Amytal test." *Mideastern Chapter Society of Nuclear Medicine*, 20th Annual Meeting, Annapolis, April, 1990.
25. Hart, J., Gordon, B., Lesser, R., Uematsu, S., Schwerdt, P., Pettis, M., & Zinreich, S.J. "Alexia without agraphia from restricted inferotemporal lesions." *American Academy of Neurology*, 42nd Annual Meeting, Miami, May, 1990, (**Neurology** 40:171, 1990).
26. Gordon, B., Hart, J., Lesser, R., Schwerdt, P., Bare, M., Fisher, R., Krauss, G., Uematsu, S., & Selnes, O. "Individual variations in perisylvian language representation." *American Academy of Neurology*, 42nd Annual Meeting, Miami, May, 1990, (**Neurology** 40:172, 1990).
27. Krauss, G.L., Lesser, R.P., Gordon, B., Fisher, R.S., Hart, J., & Uematsu, S. "Epilepsy and functional representation in human cortex." *American Academy of Neurology*, 42nd Annual Meeting, Miami, May, 1990, (**Neurology** 40:257, 1990).

28. Gordon, B., Hart, J., Lesser, R., Selnes, O., & Uematsu, S. "Intrahemispheric connectivity and individual variations in neuroanatomic organization of language revealed by direct cortical electrical interference mapping." *Theoretical and Experimental Neuropsychology Conference*, Montreal, May, 1990.
29. Uematsu, S., Lesser, R.P., Fisher, R.S., Krauss, G.L., Hart, J., Vining, E.P., Freeman, J., & Gordon, B. "Tailored resection of epileptogenic cerebral tissue with aid of a subdural grid-electrode." *Second International Cleveland Clinic Epilepsy Symposium*, Cleveland, June, 1990.
30. Jeffery, P.J., Monsein, L.H., Szabo, Z., Fisher, R.S., Hart, J., Sostre, S., Wagner, H.N., & Camargo, E.E. "Tc-99m HMPAO SPECT for mapping the distribution of Amytal in the intra-arterial Sodium Amytal test." *The Society of Nuclear Medicine*, 37th Annual Meeting, Washington, D.C., June, 1990.
31. Monsein, L.H., Jeffery, P.J., Szabo, Z., Fisher, R.S., Hart, J., Riesenbach, M., Debrun, G.M., & Camargo, E.E. "Tc-99m HMPAO SPECT for mapping the distribution of Amytal in the intra-arterial Sodium Amytal test." *Symposium Neuroradiologicum*, 14th Annual Meeting, London, June, 1990.
32. Hart, J., Lesser, R.P., & Gordon, B. "Modularity in the verbal-visual representation of size shown by cortical electrical interference." *Society for Neuroscience*, 20th Annual Meeting, St. Louis, October, 1990, (**Soc Neur Abs** 16:27, 1990).
33. Lesser, R.P., Jeffery, P.J., Monsein, L.H., Hart, J., Fisher, R.S., Gordon, B., Szabo, A., Wagner, H.N., & Camargo, E.E. "Mesial temporal perfusion of amobarbital does not usually occur during the Wada test: Correlations with Single-Photon Emission Computerized Tomography (SPECT)." *American Epilepsy Society*, San Diego, November, 1990, (**Epilepsia** 31:677, 1990).
34. Krauss, G.L., Lesser, R.P., Hart, J., Gordon, B., & Uematsu, S. "Cognitive outcome following resection of basal temporal language areas mapped with cortical stimulation." *American Epilepsy Society*, San Diego, November, 1990, (**Epilepsia** 31:679, 1990).
35. Hart, J., Jeffery, P.J., Monsein, L.H., Lesser, R., Fisher, R., Schwerdt, P., Reusing, S., & Gordon, B. "Anatomic correlates of memory impairments from intracarotid amobarbital injections with HMPAO SPECT." *American Academy of Neurology*, 43rd Annual Meeting, Boston, April, 1991, (**Neurology** 41:300, 1991).
36. Boatman, D., Pettis, M., Hart, J., Lesser, R., & Gordon, B. "Reading deficits revealed by interruption of external auditory feedback." *American Academy of Neurology*, 43rd Annual Meeting, Boston, April, 1991, (**Neurology** 41:408, 1991).
37. Schwerdt, P., Hart, J., Lesser, R., Fisher, R., Reusing, S., Boatman, D., & Gordon, B. "Longitudinal study of cognitive performance in patients status-post temporal lobectomy." *American Academy of Neurology*, 43rd Annual Meeting, Boston, April, 1991, (**Neurology** 41:299, 1991).
38. Gordon, B., Hart, J., Lesser, R., Schwerdt, P., Bare, M., Selnes, O., Fisher, R., & Uematsu, S. "Visual confrontation naming mapped with direct cortical electrical stimulation." *American Academy of Neurology*, 43rd Annual Meeting, Boston, April, 1991, (**Neurology** 41:186-187, 1991).
39. Hart, J., Lesser, R., Monsein, L., Jeffery, P., Fisher, R.S., & Gordon, B. "Hemispheric language representation as shown by the Intracarotid Amobarbital Procedure." *American Neurological Association Annual Meeting*, Seattle, Oct. 1, 1991, (**Ann Neurol** 30:293, 1991).
40. Gordon, B., Hart, J., Lesser, R., Boatman, D., Uematsu, S., Fisher, R.S., & Masdeu, J. "Loss of visual word recognition in pure alexia from left lateral occipital lesion: A prospective, longitudinal study." *American Neurological Association Annual Meeting*, Seattle, Oct. 1, 1991, (**Ann Neurol** 30:240, 1991).

41. Boatman, D., Gordon, B., Hart, J., Lesser, R., Schwerdt, P., Uematsu, S. "Mechanisms of speech perception: Evidence from a temporarily lesioned patient." *Academy of Aphasia Annual Meeting*, Rome, Italy, October 13-15, 1991.
42. Hart, J., Gordon, B., Lesser, R., Schwerdt, P., Reusing, S., Fisher, R., Krauss, G., & Uematsu, S. "Anomia before and after temporal lobectomy." *American Epilepsy Society Annual Meeting*, Philadelphia, Dec. 10, 1991, (**Epilepsia** 32:73, 1991).
43. Gordon, B., Uematsu, S., Lesser, R., Schwerdt, P., Fisher, R., Vining, E.P.G., & Hart, J. "Utility of intraoperative neuropsychological testing with stepwise resection." *American Epilepsy Society Annual Meeting*, Philadelphia, Dec. 6-10, 1991, (**Epilepsia** 32:87, 1991).
44. Hara, K., Uematsu, S., Lesser, R., Fisher, R., Gordon, B., Hart, J., & Vining, E.P.G. "Representation of primary motor cortex in humans: studied with chronic subdural grid." *American Epilepsy Society Annual Meeting*, Philadelphia, Dec. 6-10, 1991, (**Epilepsia** 32:23-24, 1991).
45. Horwitz, B., Heilman, K., Fox, P., Sergent, J., Hart, J. "What do different techniques reveal about the cognitive functions of critical brain regions." *25th Annual Winter Conference on Brain Research*, Steamboat Springs, Jan. 25-31, 1992.
46. Selnes, O., Gordon, B., Hart, J., Charnas, L., & Holcomb, H.H. "Primary progressive dysarthria: Behavioral and 5-year FDG-PET follow-up." *American Academy of Neurology*, May, 1992, (**Neurology** 42:348, 1992).
47. Schwerdt, P., Boatman, D., Lesser, R.P., Hart, J., & Gordon, B. "The intra- and inter-hemispheric organization of language in a bilingual as tested with the intracarotid amobarbital procedure (IAP)." *American Academy of Neurology*, May, 1992, (**Neurology** 42:449, 1992).
48. Small, S., Hart, J., & Gordon, B. "Automated boxology: A modular connectionist approach to modeling with application to picture naming." *Academy of Aphasia Annual Meeting*, Toronto, Ontario, October 25-27, 1992.
49. Medina, A., Hart, J., Lesser, R., Krauss, G., Uematsu, S., & Gordon, B. "Retrograde amnesia following left temporal lobectomy." *American Epilepsy Society Annual Meeting*, Philadelphia, Dec. 9, 1992, (**Epilepsia** 33:139, 1992).
50. Boatman, D., Crone, N., Lesser, R.P., Nathan, S., Hart, J., Schwerdt, P., Sieracki, J., Poon, P., Webber, R., Uematsu, S., & Gordon, B. "The localization of speech perception processes using direct cortical electrical interference and electrocorticography." *American Epilepsy Society Annual Meeting*, Philadelphia, Dec. 9, 1992, (**Epilepsia** 33: 119, 1992).
51. Crone, N., Vining, E.P.G., Lesser, R.P., Uematsu, S., Hart, J., & Gordon, B. "Bilateral (mixed) language dominance: Effects of corpus callosotomy." *American Epilepsy Society Annual Meeting*, Philadelphia, Dec. 7, 1992, (**Epilepsia** 33:27, 1992).
52. Lesser, R.P., Hart, J., & Gordon, B. "Evidence for orientation-specific channels in human visual information processing." *American Academy of Neurology*, New York, April, 29, 1993, (**Neurology** 43:A353, 1993).
53. Gordon, B., Lesser, R.P., & Hart, J. "Etiology of anomia from a temporal lobe lesion." *American Academy of Neurology*, New York, April 29, 1993, (**Neurology** 43:A403, 1993).
54. Small, S.L., Hart, J., Gordon, B., & Holland, A.L. "Performance variability in a diffusely lesioned model of semantic representation for object naming." *American Academy of Neurology*, New York, April 29, 1993, (**Neurology** 43:A405, 1993).
55. Hart, J., Lesser, R.P., & Gordon, B. "Studies of knowledge representation and neuroanatomic associations." *American Academy of Neurology*, New York, April 29, 1993, (**Neurology** 43:A405, 1993).



56. Small, S.L., Holland, A.L., Hart, J., Forbes, M.M., & Gordon, B. "Response variability in naming: A computational study." *Clinical Aphasiology Conference*, Sedona, Arizona, June 6, 1993.
57. Small, S., Hart, J., Nguyen, T., & Gordon, B. "Distributed representations of semantic knowledge in the brain." *Society for Neuroscience*, Washington, D.C., November 7-12, 1993.
58. Small, S., Hart, J., Holland, A., & Gordon, B. "Neural networks and naming: Diffuse and focal lesions." *Academy of Aphasia Annual Meeting*, Tucson, Arizona, October, 1993.
59. Hart, J., Pettis, M., Lesser, R.P., Holcomb, H., & Gordon, B. "Selective preservation of color processing in severe visual object agnosia." *American Neurological Association*, San Francisco, October, 1994, (**Ann Neurol** 36:262, 1994).
60. Gordon, B., Uematsu, S., Lesser, R.P., Krauss, G., Vining, E.P., Cyszk, B., Reusing, S., Hart, J., Nii, Y., & Hall, C.B. "Extent of removal of epileptogenic foci predicts success of surgical treatment of temporal lobe epilepsy." *American Neurological Association*, San Francisco, October, 1994, (**Ann Neurol** 36:277, 1994).
61. Crone, N.E., Hart, J., Boatman, D., Lesser, R.P., & Gordon, B. "Regional cortical activation during language and related tasks identified by direct cortical electrical recording." *Academy of Aphasia Annual Meeting*, Boston, October, 1994, (**Brain and Language** 47:466-468, 1994).
62. Gordon, B., Hart, J., Lesser, R.P., & Selnes, O.A. "Recovery and its implications for cognitive neuroscience." *Academy of Aphasia Annual Meeting*, Boston, October, 1994, (**Brain and Language** 47:521-524, 1994).
63. Hart, J., & Gordon, B. "Category-specific anomia: Implications for the neural bases of object knowledge." *Society for Neuroscience*, Miami, Nov. 1994, (**Soc Neur Abs** 20:1664, 1994).
64. Crone, N.E., Hart, J., Lesser, R.P., & Gordon, B. "The time course of regional cerebral activation during cognitive tasks: Results of direct cortical electrical recording in humans." *Society for Neuroscience*, Miami, Nov. 1994, (**Soc Neur Abs** 20:1001, 1994).
65. Krauss, G., Plate, C., Lesser, R.P., Hart, J., Uematsu, S., & Gordon, B. "Effects of resecting basal temporal language areas identified by cortical stimulation." *American Epilepsy Society Annual Meeting*, New Orleans, December, 1994, (**Epilepsia** 35:30, 1994).
66. Crone, N.E., Hart, J., Lesser, R.P., Boatman, D., & Gordon, B. "Spectral changes associated with regional cerebral processing: results of direct cortical recording in humans." *American Epilepsy Society Annual Meeting*, New Orleans, December, 1994, (**Epilepsia** 35:103, 1994).
67. Small, S., Hart, J., Holland, A., & Gordon, B. "Semantic representations of words in normal and damaged brains." *First Annual Meeting of the Cognitive Neuroscience Society*, San Francisco, 1994.
68. Kraut, M., Soher B., Sieracki, J., Bryan, R.N., Gordon, B., & Hart, J. "Object shape recognition in the human visual system as shown by fMRI." *Society for Neuroscience*, San Diego, November, 1995, (**Soc Neur Abs** 21:1497, 1995).
69. Hart, J., Kraut, M., Crone, N.E., Soher, B., Sieracki, J., Bryan, R.N., & Gordon, B. "Determination of critical brain regions for object recognition in the visual system." *Society for Neuroscience*, San Diego, November, 1995, (**Soc Neur Abs** 21:1497, 1995).
70. Boatman, D., Crone, N., Hart, J., Jr., Lesser, R.P., & Gordon, B. "Interrelatedness of syllable perception and production: Evidence from direct cortical electrical interference and recording." *Academy of Aphasia, Annual Meeting*, San Diego, November, 1995, (**Brain and Language**, 4:466-468, 1995).

71. Tesoro, M.A., Hart, J., Schwerdt, P., Lesser, R.P., Carson, K., Krauss, G., Vining, E.P.G., Monsein, L., Boatman, D.F., & Gordon, B. "Language laterality as determined by a standardized intracarotid amobarbital procedure." *American Epilepsy Society*, Baltimore, December, 1995, (**Epilepsia**, 36 [Suppl. 1995]).
72. Kraut, M., Kremen, S., Soher B., Bryan, R.N., Gordon, B., & Hart, J. "Neural correlates of lexical access as shown by fMRI." *Society for Neuroscience*, November, 1996.
73. Boatman, D., Miglioretti, D., Hart, J., Lamberti, N., Rothlisberger, B., & Gordon, B. "Localization and variability in the cortical representation of syllable discrimination and comprehension." *Academy of Aphasia*, Annual Meeting, London, November, 1996, (**Brain and Language**, 55:149-151, 1996).
74. Rios, M., Hart, J., Lesser, R., & Gordon, B. "Right hemisphere language mapping in patients with bilateral speech: A comparison of cortical stimulation and intracarotid amobarbital procedure." *American Epilepsy Society*, December, 1996.
75. Deibert, E., Kraut, M., Kremen, S., & Hart, J. "Neural pathways in tactile object recognition." *Society for Neuroscience*, New Orleans, October, 1997.
76. Tesoro, M., Miglioretti, D., Lesser, R., Krauss, G., Vining, E.P.G., Lenz, F., Smith, T., Kremen, S., & Hart, J. "SPECT and memory function during the intracarotid amobarbital injection." *American Epilepsy Society*, December, 1998, (**Epilepsia**, 39, [Suppl. 6], 245, 1998).
77. Moo, L., Hart, J., Kraut, M., Crone, N., Lenz, F., Kremen, S., & Krauss, G. "fMRI evaluation of motor recovery after multiple subpial transections." *American Epilepsy Society*, December, 1998, (**Epilepsia**, 39, [Suppl. 6], 91, 1998).
78. Crone, N.E., Hart, J., Hao, L., Miglioretti, D., Lesser, R.P., & Gordon, B. "Functional mapping of word production in human sign language using electrocorticographic spectral analysis." *American Academy of Neurology*, Toronto, April, 1999, (**Neurology** 52:A233, 1999).
79. Kraut, M., Calhoun, V., Hart, J., Crawford, T., & Mandir, A. "Regional segregation of task-timing related activation in human supplementary motor area, studied by fMRI." *Society for Neuroscience*, Miami Beach, October, 1999 (**Soc Neur Abs** 25:1303, 1999).
80. Moo, L., Crone, N., Krauss, G., & Hart, J. Plasticity of Human Language Cortex. *American Academy of Neurology*, 2000, (**Neurology** 2000; 54: A101).
81. Slotnick, S., Moo, L., Zee, D., Tesoro, M. & Hart, J. Utility of an Interlocking Finger Test in a Neurologic Examination. *American Academy of Neurology*, 2000 (**Neurology** 2000; 54: A310).
82. Deibert, E., Edwards, D., Hart, J., Krupp, J., Ball, C., Kremen, S., Aiyagari, V., & Diringer, M. "Development of a Bedside Cognitive Scale for Acutely Ill Neurology/Neurosurgery Patients." *American Academy of Neurology*, 2000 (**Neurology** 2000; 54: A310).
83. Hart, J., Kremen, S., Segal, J., & Kraut, M. "Object Activation via Feature Binding in the Semantic System Using fMRI." *American Academy of Neurology*, 2000 (**Neurology** 2000; 54: A398).
84. Moo, L., Tesoro, M., & Hart, J. "Inter- and intra-hemispheric variation in the neural basis of reading." *Society for Neuroscience*, 2000.
85. Kraut, M., Segal, J.B., Kremen, S., Moo, L., & Hart, J. "Cortical and subcortical activation in multimodal binding." *Cognitive Neuroscience Society*, March, 2001.

86. Moo, L., Slotnick, S., Tesoro, M., & Hart, J. "Intracarotid amobarbital injections confirm differential hemispheric specialization in categorical versus coordinate visuospatial processing." *Cognitive Neuroscience Society*, March, 2001.
87. Moo, L., Tesoro, M.A., Beyderman, L., Breitstein, J., & Hart, J. "Shifts of cortical substrates subserving word repetition." *American Academy of Neurology*, May, 2001.
88. Kraut, M.A., Moo, L.R., Segal, J.B., & Hart, J. "Functional MRI investigation of brain regions involved in categorizing objects." *RSNA*, Chicago, 2001.
89. Hillis, A. & Hart, J. "Mechanisms of early recovery of language comprehension after stroke." *Society for Neuroscience*, 2001.
90. Moo, L., Segal, J., Kraut, M., & Hart, J. "Distinct cortical loci for hand vs. foot-related items in an implicit categorization task." *Cognitive Neuroscience Society*, March, 2002.
91. Segal, J.B., Moo, L., Kraut, M., Hart, J. "A distinct form of thalamic aphasia due to a semantic feature-binding deficit." *Cognitive Neuroscience Society*, March, 2002.
92. Kraut, M.A., Moo, L.R., Segal, J.B., Slotnick, S., & Hart, J. "Comparison of Neural Activity During Letter and Object Processing." *ASNR*, Vancouver, 2002.
93. Slotnick, S. & Hart, J. "Thalamocortical evidence for a constructive memory framework." *Society for Neuroscience*, 2003.
94. Assaf, M., Kuzu, C., Rivkin, P., Calhoun, V., Kraut, M., Yassa, M., Hart, J., & Pearlson, G. "fMRI evidence for abnormal semantic processing in schizophrenia." *Society of Biological Psychiatry*, 2004.
95. Rivkin, P., Yassa, M., Hart, J., Kraut, M., Kanaan, R., Calhoun, V., & Pearlson, G. "Absence of anterior cingulate activation in schizophrenic individuals during a semantic feature-binding task." *Society of Biological Psychiatry*, 2004.
96. Gardner, E., Chelonis, J., Dornhoffer, J., Henderson, V., Hart, J., Blake, D., Paule, M. "Delayed matching-to-sample performance across the lifespan: Effects on accuracy and latency." *Association for Behavior Analysis*, Boston, 2004.
97. Hart, J. "Neural hybrid model of semantic object recall." *International Neuropsychological Association and Australian Society for the Study of Brain Impairment*, Brisbane, Australia, 2004. (**Brain Impairment** 2004; 5: 27).
98. Hart, J., Pitcock, J., Calhoun, V., Li, J., Kraut, M. "Neuroanatomic organization of sound memory in humans." *American Academy of Neurology*, April, 2005.
99. Li, J., Kimbrell, T., Pitcock, J., Freeman, T., Hart, J. "Threat-Relevant P3 Event-Related Potentials in Post-Traumatic Stress Disorder." *Cognitive Neuroscience Society*, April, 2005.
100. Hart, J., Li, J., Pitcock, J., Calhoun, V., Kraut, M. "Cortical rhythms during semantic object recall in Mild Cognitive Impairment." *American Academy of Neurology*, April, 4, 2006.
101. Li, J., Kraut, M., Pitcock, J., Hart, J. "Changes of low frequency cortical rhythms during semantic memory recall in Mild Cognitive Impairment." *Cognitive Neuroscience Society*, April, 2006.
102. Brier, M., Maguire, M., Tillman, G., Xavier, P., Ferree, T., Kraut, M., Hart, J. Neurophysiological marker of semantic object retrieval. *Proceedings of the International Neuropsychological Society*, June, 7, 2008.

103. Calley, C., Tillman, G., Maguire, M., Moore, P., Henderson, V., Hart, J., Kraut, M. Reliability of subjective memory rating in predicting neuropsychological performance. *Proceedings of the International Neuropsychological Society*, June, 7, 2008.
104. Anand, R., Maguire, M., Chapman, S., Hart, J., Moore, P. Gist-based and detail-based processing of information: Effects of normal cognitive aging. *Proceedings of the International Neuropsychological Society*, June, 7, 2008
105. Brier, M., Ferree, T., Tillman, G., Maguire, M., Hart, J., Kraut, M. Neural oscillations in semantic object retrieval. *Cognitive Neuroscience Society*, October, 2008.
106. Anand, R., Maguire, M., Chapman, S., Hart, J. Seeing the forest and the trees: Exploring the neurological underpinnings of gist and detail processing. *Cognitive Neuroscience Society*, October, 2008.
107. Brier, M., Maguire, M., Moore, P., Gelman, Y., Kraut, M., Hart, J. N2 amplitude is modulated by semantic complexity in an inhibition task. *Society for Neuroscience*, November 17, 2008.
108. Hart, J., Calley, C., Tillman, G., Green, T., Motes, M., Kirk, A., Kraut, M. Threat: Featural organization to visual object memory. *Society for Neuroscience*, November 16, 2008.
109. Calley, C., Tillman, G., Green, T., Kraut, M., Hart, J. fMRI BOLD response in threat processing. *Society for Neuroscience*, November 16, 2008.
110. Brier, M.R., Maguire, M.J., Moore, P.S., Gelman, Y., Kraut, M.A., Hart, J. P3 Amplitude is Modulated by Semantic Complexity in an Inhibition Task. *Society for Neuroscience Meeting*, November 15 - 19, 2008.
111. Ferree, T.C., Brier, M.R., Hart, J., Kraut, M.A. Space-Time-Frequency analysis of EEG data in single subject and group data. *Cognitive Neuroscience Society Meeting*, March 21 – 24, 2009.
112. Calley, C.S., Brier, M.R., Ferree, T.C., Patel, R.H., Gelman, Y., Tillman, G.D., Kraut, M.A., Hart, J. EEG correlates of processing visual threatening stimuli. *Cognitive Neuroscience Society Meeting*, March 21 – 24, 2009.
113. Brier, M.R., Maguire, M.J., Ferree, T.C., Hart, J. Arithmetic recall and number comparison as revealed by event-related potentials. *University of Texas at Dallas Undergraduate Research Poster Competition*, April 23, 2009.
114. Xu, F., Yezhuvath, U., Brier, M.R., Hart, J., Kraut, M.A., Moore, P.S., Lu, H. CO2 breathing suppresses cerebral metabolic rate of oxygen. *International Society for Magnetic Resonance in Medicine*, May 3 – 9, 2009.
115. Brier, M.R., Maguire, M.J., Ferree, T.C., Gelman, Y., Patel, R., Hart, J., Kraut, M.A. Arithmetic Processing and Number Comparison as Revealed by Event Related Potentials. *Society for Neuroscience Meeting*, 2009.
116. Briggs, R., Cheshkov, S., Lu, H., Li, X., McColl, R., Buhner, D., Ferree, T., Hart, J., Haley, R. Objective brain abnormalities by 3T MRI and EEG in Gulf War Illness. *Society of Toxicology*, March 8, 2010.
117. Ringe, W., Briggs, R., Gopinath, K., Kraut, M., Rypma, B., Odegard, T., Bartlett, J., Crosson, B., Hart, J., Haley, R. Functional neuroimaging shows abnormalities in brain function underlying symptoms of Gulf War Illness. *Society of Toxicology*, March 8, 2010.
118. Horn, K., Crosson, B., Levy, I., Moffett, K., Kaundinya, G., Spence, J., Hart Jr, J., Moore, A. Subcortical and Cognitive Deficits in 1991 Gulf War Syndrome 2. *Cognitive Neuroscience Society Annual Meeting*, Montréal, Canada, April 17-18, 2010.

119. Tillman, G., Green, T., Ferree, T., Calley, C., Maguire, M., Briggs, R., Hart, Jr., J., Haley, R., & Kraut, M. Impaired Response Inhibition in Ill Gulf War Veterans. *Cognitive Neuroscience Society Annual Meeting*, Montréal, Canada, April 17-18, 2010.
120. Calley, C., Brier, M., Ferree, T., Patel, R., Gelman, Y., Tillman, G., Kraut, M., Hart, Jr., J. EEG correlates of threatening visual stimuli. *Cognitive Neuroscience Society Annual Meeting*, Montréal, Canada, April 17-18, 2010.
121. Calley, C., Kraut, M., Green, T., Buhl, V., Grinnan, J., Tillman, G., Hart Jr., J. Word-Finding Deficits Assessed in Veterans with Gulf War Illness: an fMRI Study. *Cognitive Neuroscience Society Annual Meeting*, Montréal, Canada, April 17-18, 2010.
122. Buhl, V., Calley, C., Hart Jr., J., Tillman, G., Green, T., Grinnan, J., Kraut, M. Threat Response and Hyperarousal Assessed in Veterans with Gulf War Syndrome: an fMRI Study. *Cognitive Neuroscience Society Annual Meeting*, Montréal, Canada, April 17-18, 2010.
123. Kraut, M., Brier, M., Maguire, M., Ferree, T., Hart, J. Frontal theta and alpha power and coherence changes are modulated by semantic complexity in Go/NoGo tasks. *Cognitive Neuroscience Society Annual Meeting*, Montréal, Canada, April 17-18, 2010.
124. Bartz, E., Keebler, M., Gardner, C., Anand, R., Uh, J., Lu, H., Cooper, K., Chapman, S., Hart, J. Brain and cognitive changes after physical training in cognitively normal seniors. *Cognitive Neuroscience Society Annual Meeting*, Montréal, Canada, April 17-18, 2010.
125. Strain, J., Hart, J., Diaz-Arrastia, R., Womack, K. White matter diffusivity: Changes between select dementia groups. *Cognitive Neuroscience Society Annual Meeting*, Montréal, Canada, April 17-18, 2010.
126. Chiang, H.-S., Calley, C., Kraut, M.A., Hart, J. Spatially distributed activation in neostriatal systems corresponds to increased levels of semantic difficulty in response inhibition. *Society for Neuroscience Meeting*, Washington, D.C., November, 15, 2010.
127. Biggs, M., Hester, A., Posamentier, M., Ringe, W., Cullum, M., Hart, J., Haley, R. Mental health status of U.S. veterans who served in the First Gulf War.
128. Anand, R., Chiang, H., Kraut, M., Bartz, E., Maguire, M., Hart, J. Effects of semantics on inhibitory processes in aging. *Cognitive Neuroscience Society Annual Meeting*, San Francisco, April 2-5, 2011.
129. Rao, N., Jantz, T., Salinas, M., Brier, M., Maguire, M., Chapman, S., Gamino, J., Hart, J., Motes, M. Complexity of semantic processing differentiates inhibitory brain response in adolescents with ADHD. *Cognitive Neuroscience Society Annual Meeting*, San Francisco, April 2-5, 2011.
130. Salinas, M., Jantz, T., Rao, N., Maguire, M., Brier, M., Hart, J., Chapman, S., Gamino, J., Motes, M. Strategic Memory & Reasoning Training benefits frontal-mediated executive function in adolescents. *Cognitive Neuroscience Society Annual Meeting*, San Francisco, April 2-5, 2011.
131. Strain, J., Diaz-Arrastia, R., Hart, J., Womack, K. White Matter Diffusivity: Changes between select dementia groups. *Cognitive Neuroscience Society Annual Meeting*, San Francisco, April 2-5, 2011.
132. Tillman, G., Calley, C., Green, T., Buhl, V., Biggs, M., Spence, J., Briggs, R., Haley, R., Hart, J., Kraut, M. Neurobiologic correlates of hyperarousal in patients with Gulf War Illnesses. *Cognitive Neuroscience Society Annual Meeting*, San Francisco, April 2-5, 2011.

133. Ahmadi, A., Jafari, R., Hart, J., Jr. Light-weight single trial EEG signal processing algorithms: Computational profiling for low power design. *International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, Boston, MA, August 30 -September 3, 2011.
134. Hodics T., Upreti, B. Alex, A., Xu, B., Hidler, J., Kowalske, K., Hart, J., Dromerick, A., Pezzullo, P., Cohen L. Transcranial Direct Current Stimulation (tDCS) enhanced stroke recovery and cortical reorganization-ongoing Clinical Trial. *European Federation of Neurological Societies Meeting 2011*, Budapest, September 10-13, 2011.
135. Chiang, H., Anand, R., Eroh, J., Strain, J., Patel, R., Bartz, E., Martin-Cook, K., Kraut, M., Hart, J. An electrophysiological marker of an object abstraction deficit in mild cognitive impairment. *Society of Psychophysiological Research, Annual Meeting*, Boston, September 14-18, 2011.
136. Strain, J., Diaz-Arrastia, R., Hart, J., Womack, K. White matter and letter fluency: A correlational study with Frontotemporal Lobar Degeneration, *Society for Neurobiology of Language*, Annapolis, Nov. 9–11, 2011.
137. Chiang, H., Kraut, M., Anand, R., Hart, J. Which one is heavier? Which one is larger? Electrophysiological evidence of semantic size and weight processes in the brain. *Society for Neuroscience*, Washington, D.C., November 14, 2011.
138. Hodics, T., Upreti, B., Hidler, J., Xu, B., Kowalske, K., Hart, J., Dromerick, A., Pezzullo, J., Cohen, L. Transcranial Direct Current Stimulation (tDCS) enhanced stroke recovery and cortical reorganization *International Stroke Conference 2012*, February 1-3, 2012, New Orleans.
139. Rao, N., Motes, M., Calley, C., Tillman, G., Kraut, M., Hart, J. Threat as a feature of semantic auditory memory. *Cognitive Neuroscience Annual Meeting*, Chicago, March 31-April 3, 2012.
140. Strain, J., Diaz-Arrastia, R., Hart, J., Womack, K. The examination of white matter correlates with letter and category fluency in Frontotemporal Lobar Degeneration with two Diffusion Tensor Imaging approaches. *Cognitive Neuroscience Society Annual Meeting*, Chicago, March 31-April 3, 2012.
141. Chiang, H.-S., Anand Mudar, R., Bartz, E. K., Kraut, M. A., & Hart, J. Jr. Event-related potentials (ERPs) reflect a distinctive frontal activity in a feature-based object knowledge retrieval process in aging. *Cognitive Neuroscience Society Annual Meeting*, Chicago, March 31-April 3, 2012.
142. Mudar, R., Chiang, H. -S., Motes, M., Maguire, M., Bartz, E., Hart, J. Neural Basis of Gist and Detail Processing: Effects of Normal Aging. *Cognitive Neuroscience Society Annual Meeting*, Chicago, March 31-April 3, 2012.
143. Zou, Y., Hart, J., Jafari, R. Automatic EEG artifact removal based on ICA and hierarchical clustering. *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Kyoto, Japan, March 25-30, 2012.
144. Womack, K., Strain, J., Hynan, L., Devous, M., Hart, J., Jr., McColl, R., Diaz-Arrastia, R. A novel method for quantifying white matter disease burden using Diffusion Tensor Imaging. *American Academy of Neurology, 2012*, New Orleans, April 21-28, 2012.
145. Chiang, H., Anand, R., Bartz, E., Martin-Cook, K., Kraut, M., Hart Jr., J. Loss of differentiation in Event-Related Potentials (ERPs) to reflect a feature-based object memory retrieval process in patients with Mild Cognitive Impairment. *American Academy of Neurology, 2012*, New Orleans, April 21-28, 2012.
146. Mudar, R., Chiang, H. -S., Eroh, J., Rackley, A., Venza, E., Martin-Cook, K., Womack, K., Hart, Jr. J., Chapman, S. Benefits of cognitive training in individuals with Mild Cognitive Impairment. *Cognitive Neuroscience Society Annual Meeting*, San Francisco, April, 2013.

147. Chiang, H. -S., Mudar, R. A., Rackley, A., Venza, E., Pudhiyidath, A., Van, J., Martin-Cook, K., Womack, K., Kraut, M.A., Hart, Jr., J. An early fMRI marker of semantic memory deficits in patients with amnesic Mild Cognitive Impairment. *Alzheimer's Association International Conference*, Boston, July, 2013.
148. Womack, K., Strain, J., Didehbani, N., Cullum, M., Kraut, M., Hart, J. The Association of Impaired White Matter Integrity with the Presence and Severity of Depression in Retired Football League Athletes. *American Academy of Neurology, 65<sup>th</sup> Annual Meeting, 2013.*
149. Strain, J., Didehbani, N., Conover, H., Mansinghani, S., Kraut, M. Cullum, M., Hart, J., Womack, K. White Matter Changes and Confrontation Naming in Retired Aging NFL Athletes. *Cognitive Neuroscience Society, 20<sup>th</sup> Annual Meeting, 2013.*
150. Strain, J., Didehbani, N., Conover, H., Bartz, E., Mansinghani, S., Kraut, M., Cullum, M., Hart, J., Womack, K. Neuropsychological Assessment and White Matter Correlates within Professional Athletes: a Correlation Study. *Sports Neuropsychological Society, 1<sup>st</sup> Annual Meeting, 2013.*
151. Womack, K., Strain, J., Chen, K., Spence, J., Didehbani, N., Cullum, M., Hart, J. The impact of games played on age related changes in white matter mean diffusivity among retired NFL athletes. *American Academy of Neurology, 67<sup>th</sup> Annual Meeting*, Wash DC, April, 2015.
152. Wilmoth, K., LoBue, C., Strain, J., Hart, J., Cullum, C.M., Dieppa, M., & Didehbani, N. Reliability of Self-Reported Concussion History in Retired Professional Football Players with and without Cognitive Impairment. *Annual Conference of the National Academy of Neuropsychology*, Austin, TX, November, 2015.
153. LoBue, C. Clem, M., Wilmoth, K., Wadsworth, H., Rossetti, H., Woon, F., Hart, J., Womack, K., Cullum, C.M. Earlier Age of Diagnosis in Alzheimer Disease by Sex: The Additive Effect of Traumatic Brain Injury History and Apolipoprotein e4. *International Neuropsychological Society, February, 2016.*
154. Jones, B., Hart, J., Kiel, L.D. The challenges and prospects of using neuroscience techniques in public management research. *Neuroethics Network of the Ethics and Society Association*, Paris, France. June 29, 2016.
155. Didehbani, N., Aslan, S., Strain, J., Fields, L., Hart, J., Cullum, C.M. Functional and Structural Brain Changes of High School Football Athletes after One Season. *National Academy of Neuropsychology*, Austin, TX, November, 2015.
156. Wilmoth, K., LoBue, C., Didehbani, N., Hart, J., Womack, K., Bell, K., Batjer, H., & Cullum, C.M. Reliability of self-reported concussion history with and without cognitive impairment. *92nd annual meeting of the American Congress of Rehabilitation Medicine*, Dallas, TX, October, 2015.
157. Wilmoth, K, Didehbani, N., Hynan, L.S., Hart, J., & Cullum, C.M. Cognitive Performance in MCI Patients with and without a history of Concussion. *North American Brain Injury Society, San Antonio, TX, May, 2015.*
158. Fields, L., Hart, J., Cullum, C.M., Dieppa, M., & Didehbani, N. Naming and Verbal Memory Performance in Retired Professional Athletes. *Sports Neuropsychology Society*, Atlanta, GA., May, 2015.
159. Wilmoth, K., LoBue, C., Strain, J., Hart, J., Cullum, M.C., Dieppa, M., & Didehbani, N. Reliability of Self-Reported Concussion History in Retired Professional Football Players. *Sports Neuropsychology Society*, Atlanta, GA, May, 2015.
160. Fields, L., Wilmoth, K., Didehbani, N., Hynan, L., Hart, J., & Cullum, C. M. (2016). Verbal memory in athlete and non-athlete MCI patients with and without a history of concussion. *Annual Concussion Symposium of the Sports Neuropsychology Society Sport Concussion Symposium*, Houston, TX, 2016.

161. Kozel, F.A., Didehbani, N., Motes, M.A., Jones, P., Schraufnagel, C.D., DeLaRosa, B., Bass, C., Spence, J.S., & Hart, J. Augmenting Cognitive Processing Therapy with rTMS in Combat Veterans of Recent Conflicts with PTSD. *Society of Biological Psychiatry's 71st Annual Scientific Convention and Program*, Atlanta, GA, May, 2016.
162. Hart, J., Jr., Kozel, F.A., Motes., M., Didehbani, N., Bass, C., Jones, P., Tillman, G., Spence, J., Cullum, M., & Kraut, M. Randomized Placebo Trial of rTMS + CPT vs. sham rTMS + CPT for Combat-Related PTSD. *Military Health System Research Symposium*, Kissimmee, FL., 2016.
163. Motes, M., Kozel, F.A., Didehbani, N., Bass, C., Jones, P., Spence, J., Cullum, M., Kraut, M., & Hart, J., Jr. Functional Magnetic Resonance Imaging Correlates of Treatment Response in PTSD. *Military Health System Research Symposium*, Kissimmee, FL., 2016.
164. Kraut, M., Kozel, F.A., Tillman, G., Motes., M., Didehbani, N., Bass, C., Jones, P., Spence, J., Cullum, M., & Hart, J., Jr. Brain Electrophysiological Correlates of rTMS-Associated Treatment Response in PTSD. *Military Health System Research Symposium*, Kissimmee, FL, 2016.
165. Clem, M.A., LoBue, C., Wilmoth, K., Hart, J., & Cullum, C.M. (2016). History of Depression is Associated with Earlier Age of Diagnosis in Alzheimer's Disease. *Archives of Clinical Neuropsychology*, 31(6), 611, 2016.
166. Fields, L. M., Wilmoth, K., Strain, J., LoBue, C., Hynan, L. S., Womack, K., Hart, J., Cullum, C. M., & Didehbani, N. Cognitive Functioning in MCI Patients with and without a History of Sports-Related Concussion. Poster to be presented at the 45<sup>th</sup> Annual Meeting of the International Neuropsychological Society (INS), New Orleans, LA., February, 1-4, 2017.

Shapiro, E., Bass, C., Schraufnagel, C. D., Jones P., Hart, J., Cullum, M., & Didehbani, N. Impact of Mild Traumatic Brain Injury on PTSD Treatment Outcomes. Poster to be presented at the International Neuropsychological Society Annual Meeting, Washington DC., February 14-17, 2018.

### **INVITED LECTURES AND PRESENTATIONS**

- "Visual and category-specific deficits in knowledge representations." Baltimore-Washington Area Neuropsychology Group, Baltimore, February, 1988.
- "Current understanding of the functions of the left temporal neocortex." Special Lecture, Japanese Society of Aphasiology, 13th Annual Meeting, Hamamatsu, Japan, November, 1989.
- "Disorders of language." Clinical Neurosciences and Brain Pathophysiology Lectures, Division of Neuroradiology, The Johns Hopkins Hospital, December, 1990.
- "Semantic and semantic-to-phonology impairments detected with direct electrical cortical interference." Cognitive Neuroscience Seminar, Department of Neurology, The Johns Hopkins Hospital, October, 1991.
- "Access to phonology from the visual system: Functional and anatomic correlations." Neurobiology of Language Seminar, The Zanvyl Krieger Mind/Brain Institute, February, 1992.
- "Categorical organization of object knowledge: Functional and neural bases." Neuropsychology Seminar, Department of Neurology, University of Maryland School of Medicine, March, 1992.
- "The nature of the mental vocabulary." Probing the Mysteries of the Human Brain Course, The Smithsonian Institute, June, 1992.



- "The neurobehavior of severe aphasia and implications for augmentative and alternative communication." International Society for Augmentative and Alternative Communication, Fifth Biennial Conference, Philadelphia, PA, August, 1992.
- "Naming impairments studied through direct cortical electrical stimulation and surgical lesions." World Federation of Neurology, London, Ontario, October, 1992.
- "Organization of object knowledge and its influence on aphasic deficits." Department of Communication Disorders, Kennedy Krieger Institute, March 1, 1993.
- "Neuroanatomical localization of word meaning." Neurology Grand Rounds, Department of Neurology, University of Maryland School of Medicine, November 17, 1993.
- "Categorical organization of object knowledge." Psychology Seminar, Department of Psychology, Carnegie-Mellon University, September, 1994.
- "Categorical organization of object knowledge." Center for Neuroscience Program Retreat, University of Pittsburgh, September, 1994.
- "Language - the basis for human communication." The Smithsonian Institute Campus-on-the-Mall, Montgomery County Center, December, 1994.
- "Categorical organization as studied through lesions and cortical stimulation." Baltimore-Washington Area Neuropsychology Group, Baltimore, December, 1994.
- "Object knowledge in the human brain." Neurobiology Seminar, Department of Neurobiology, Texas A & M University, April, 1995.
- "Categorical organization of object knowledge: Implications for neurosystems." Neurology Grand Rounds, Department of Neurology, The Johns Hopkins University School of Medicine, May, 1995.
- "Categorical organization of object representation in humans." David Bodian Seminars in Neuroscience, Zanvyl Krieger Mind/Brain Institute, The Johns Hopkins University, September 18, 1995.
- "Object representation in the visual system." Functional Imaging Retreat, Department of Radiology, The Johns Hopkins University School of Medicine, July, 1995.
- "Visual object recognition." Topics in Neuropsychology, Kennedy Krieger Institute, February, 1996.
- "Object recognition in the human visual and verbal systems." Advisory Council Meeting, The Zanvyl Krieger Mind/Brain Institute, December, 1996.
- "Object processing in the verbal and visual systems." Laboratory of Neuropsychology. National Institute of Mental Health, February, 1997.
- "Alzheimer's disease: Current therapies." Medical Grand Rounds, Peninsula General Hospital, March 18, 1997.
- "Alzheimer's disease: An update." Psychiatry Grand Rounds, Harford Memorial Hospital, May 8, 1997.
- "Functional neuroimaging." Clinical Neurosciences and Brain Pathophysiology Lectures, Division of Neuroradiology, The Johns Hopkins Hospital, May 14, 1997.
- "Neural correlates of language comprehension." Neurology Grand Rounds, The Johns Hopkins Hospital, December 10, 1998.

Course Director, "Neuropsychiatry Colloquium on Alzheimer's disease", The Johns Hopkins University School of Medicine, November 21, 1998.

"Alzheimer's disease and related cognitive functions: An update." Neurology Grand Rounds, Medical College of Virginia, April 29, 1999.

"Where we see what we see." First F.M. Kirby Symposium on Functional Brain Imaging, F.M. Kirby Center for Functional Brain Imaging, May 11, 1999.

"Dementia: Diagnosis and Management." Tenth Annual Neurology for the Primary Practitioner, Johns Hopkins University School of Medicine, December 11, 1999.

"Treatment options, prescription and OTC." Alzheimer's Disease Educational Program, Novartis Preceptorship, The Johns Hopkins Hospital, March 14, 2000.

"Neural substrates of semantics." University of California, Berkeley. Dept. of Psychology, April, 2000.

"Dementia: Diagnosis and neuroimaging update." Clinical Neurosciences and Brain Pathophysiology Lectures, Division of Neuroradiology, The Johns Hopkins Hospital, December, 2000.

"Neural substrates of semantics." Oberlin College. Dept. of Psychology, December, 2000.

"Overview of services available at the F. M. Kirby Research Center for Functional Brain Imaging." Grand Rounds, Kennedy Krieger Institute, January, 2001.

"Investigations into mechanisms of word finding." Neurology Grand Rounds, The Johns Hopkins University School of Medicine, January 18, 2001.

"Neural substrates of semantics." Neuropsychiatry Conference, Dept. of Psychiatry, The Johns Hopkins University School of Medicine, February 8, 2001.

"Semantics and the structure of knowledge." American Neuropsychiatric Association, 12th Annual Meeting, February 26, 2001.

"Mechanisms of semantic memory and implications for word finding." Neurology Grand Rounds, Medical College of Virginia, March 8, 2001.

"Semantic memory: Temporal dynamics and recall mechanisms." Clinical Neuroscience Research Seminars, NIH, NINDS, April, 2001.

"Semantic Knowledge (Electrophysiology and fMRI)." Behavioral Neurology: Issues in Cognitive Neuroscience, AAN, Philadelphia, PA, April, 2001.

"Infections of the mind." Medicine Grand Rounds, Karolinska Institute, Stockholm, Sweden, June 2, 2001.

"Semantic organization: Evidence from electrophysiological and functional imaging studies." MR Research Center, Karolinska Institute, Stockholm, Sweden, June, 1, 2001.

"Semantic memory mechanisms: Implications for word finding difficulties in aging and dementia." Reynolds Center on Aging, University of Arkansas, June, 27, 2001.

"Memory and Herpes Simplex Encephalitis." Annual CASG Meeting, Bethesda, Maryland, Feb., 2002.

"Neural Mechanisms of Object Memory." Neurology Grand Rounds, University of Arkansas, 2002.

- “Semantic Knowledge (Electrophysiology and fMRI).” Behavioral Neurology: Issues in Cognitive Neuroscience, AAN, Denver, CO, April 14, 2002 (Course Director).
- “Neural activation during an explicit categorization task: Category- or feature-specific effects?” World Federation of Neurology, Villefranche, France, May 30, 2002.
- “Object activation from features in semantics as demonstrated by fMRI and electrophysiology studies.” World Federation of Neurology, Villefranche, France, May 29, 2002.
- ”Neuropsychological Sub-Study Summary.” Annual European CASG Meeting at the Karolinska Institute, Stockholm, Sweden, June 4, 2002
- “Neuroimaging.” Linking Geriatric Mental Health to Research Practice, MIRECC, Little Rock, AR, June 13, 2002.
- “Memory Models and Implications for Alzheimer’s Disease.” First Annual UAMS Alzheimer’s Disease Research Day, Donald W. Reynolds Center on Aging, Little Rock, AR, September 13, 2002.
- “The Non-Alzheimer’s Dementias.” Dementia Update 2002, UAMS Department of Neurology, Little Rock, AR, November 1, 2002.
- “Semantic Memory: Normal Aging Psychiatric and Neurologically-Impaired Patients,” Olin Neuropsychiatry Research Center, Yale University School of Medicine Department of Psychiatry, Hartford, CT, March 19, 2003.
- “Early Alzheimer’s Disease,” Alzheimer’s Association of Arkansas, Little Rock, AR, March 24, 2003.
- “Semantic Memory,” Behavioral Neurology: Issues in Cognitive Neuroscience Course, American Academy of Neurology, Honolulu, Hawaii, March 31, 2003 (Course Director).
- “AD: Where do we begin, and when do we end,” UAMS/UALR Department of Audiology and Speech-Language Pathology Workshop, Little Rock, AR, May 16, 2003.
- “Post-Traumatic Stress Disorder: The Underlying Scientific Evidence,” Neurology Grand Rounds, University of Arkansas for Medical Sciences, Little Rock, AR, September 5, 2003.
- “Neurological Reasons for Weight Loss,” Arkansas Medical Director’s Association, Little Rock, AR, October 4-5, 2003.
- “HSE: Neuroanatomy vs. Neuropsychology and Symptomatology,” Third Annual HSE Meeting at the Karolinska Institute and Hospital, October, 8, 2003.
- “HSE: A Model Disease to Understand Neuroanatomy and Semantic Memory.” Department of Infectious Disease, Karolinska and Huddinge University Hospitals, October 9, 2003.
- “The Dementias: An Overview,” Dementia Update 2003, UAMS Department of Neurology, Little Rock, AR, November 14, 2003.
- “Society for Behavioral and Cognitive Neurology Workshop,” Co-Chair, American Neuropsychiatric Association, Bal Harbour, FL, February 21, 2004.
- “Glutamate in Cognitive Neuropsychiatry: Emerging Perspectives and Prospects,” American Neuropsychiatric Association, Bal Harbour, FL, February 21, 2004.
- “Semantic Memory: Implications for Neuropsychiatric Disease,” Neurology Grand Rounds, University of Arkansas, Dept. of Neurology, April 2, 2004.

- “Semantic Memory and Alzheimer’s Disease,” Psychiatry Grand Rounds, University of Oklahoma, Dept. of Psychiatry, April 15, 2004.
- “Cognitive Dysfunction in PTSD,” Best Practices in the Continuum of Care: Mental Health in Older Adults, GRECC/AGEC, Little Rock, April 21, 2004.
- “Scientific Highlights: Behavioral Neurology and Dementia,” American Academy of Neurology, San Francisco, CA, April 29, 2004.
- “Semantic Memory,” Behavioral Neurology: Issues in Cognitive Neuroscience Course, American Academy of Neurology, San Francisco, CA, May 1, 2004 (Course Director).
- “Memory,” Mini-Medical School, University of Arkansas, May 6, 2004.
- “Neural Basis of Semantic Memory: Implications for Neuropsychiatric Disease,” UAMS Alzheimer’s Disease Center Seminar Series, UAMS, May 11, 2004.
- “Dementia and Alzheimer’s Disease,” Philippine Medical Association of Oklahoma, The Oklahoma Department of Mental Health and Substance Abuse Services, May 15, 2004.
- “Semantic Memory and the Neural Hybrid Model.” Department of Speech Pathology and Audiology, University of Queensland, Brisbane, Australia, July, 2004.
- “New Advances in Alzheimer’s Treatment,” Baptist Medical Center, Medical Grand Rounds, Little Rock, AR, August 18, 2004.
- “Update on Treatment of Dementia,” Arkansas Medical Director’s Association Educational Symposium, Little Rock, AR, October 2, 2004.
- “Memory in Aging and Degenerative Diseases,” Geriatrics: Memory and Function Course, Department of University Rehab, UAMS, Little Rock, AR, November 6, 2004
- “Semantic Memory Functions: Insights into Cognitive Impairments,” Behavioral Neurology: Issues in Cognitive Impairment Course, American Academy of Neurology, Miami, FL, April 15, 2005 (Course Director).
- “Delirium and Dementia,” Physical Medicine and Rehabilitation Seminar, CAVHS, North Little Rock, AR, April 19, 2005
- “Semantic Memory: Implications for Neuropsychiatric Disorders,” Psychiatry Grand Rounds, UAMS, Little Rock, AR, April 21, 2005.
- “Nonverbal Sound Memory and Implications for Neuropsychiatric Disease,” Neurology Grand Rounds, UAMS, Little Rock, AR, May 6, 2005.
- “Semantic Memory: Implications for Neuropsychiatric Disease,” Neurology Grand Rounds, Oklahoma University Health Sciences Center, Department of Neurology, Oklahoma City, OK, October, 2005.
- “Semantic Memory: Implications for Neuropsychiatric Disease,” Neurology and Psychiatry Grand Rounds, University of Texas at Southwestern, School of Medicine, Dallas, TX, October, 12, 2005.
- “Memory Glitches and Senior Moments,” Institute for Interesting People, Dallas, TX, January 31, 2006.
- “Update on Memory and Alzheimer’s disease,” Neurology Grand Rounds, University of Kansas, Department of Neurology, Kansas City, KS, February 10, 2006.

- “Behavioral Neurology: Insights in Cognitive Impairments,” American Academy of Neurology, San Diego, CA, April 3, 2006 (Course Director).
- “Understanding Memory Loss in Alzheimer’s Disease,” Friends of the Alzheimer’s Association, UTSW, April 11, 2006.
- “Advanced Imaging Technologies in Neurologic Practice,” Opportunities Rising in Academic Neurology Seminar, Association of University Professors of Neurology, Leadership Course, Chicago, October, 2006.
- “Reimbursement/Training Issues,” MCW Workshop: Presurgical Mapping Using fMRI and DTI, Chicago, November, 6, 2006.
- “Neural Basis of Semantic Memory,” Neurology Grand Rounds, The Johns Hopkins University School of Medicine, Department of Neurology, Baltimore, MD, March 8, 2007.
- “Clinical Evaluation of Dementing Disorders,” NER Foundation Symposium, American Society of Neuroradiology, 45<sup>th</sup> Annual Meeting, Chicago, IL, June, 2007.
- “West Nile Virus,” 35<sup>th</sup> Annual CASG Meeting, Collaborative Anti-Viral Study Group (NIH-NIAID), Bethesda, MD, February, 2008.
- “Biotech Discovery to Advance BrainHealth,” Texas Instruments, Dallas, TX, July 15, 2008.
- “Imaging of Thought Disorders in Schizophrenia,” National Alliance for Mental Illness, Dallas, TX, August 7, 2008.
- “Behavioral Neurology: Contemporary Topics.” American Academy of Neurology, Seattle, WA, April, 2009.
- “Fellowship Panel,” American Academy of Neurology, Seattle, WA, April, 2009.
- “Functional Neuroimaging and Electrophysiological Correlates of Semantic Memory,” Annual Behavioral Neuroscience Seminar, Harvard Institutes of Medicine, Cambridge, MA, April 2, 2009.
- “Gulf War Illness,” Gulf War Advisory Committee, Washington, D.C., May, 6, 2009
- “Memory Storage and Retrieval: Implications for Psychiatric Disorders,” Grand Rounds, Department of Psychiatry, University of Texas Southwestern Medical Center, November 4, 2009.
- “Neural Basis of Object Memory,” Neurology Chairman Committee, University of Arkansas for Medical Sciences, November, 16, 2009.
- “Object Memory in Neurological Disorders,” Grand Rounds, Department of Neurology, UAMS, Little Rock, AR, 2009.
- “Neural Basis of Object Memory,” Callier Brown Bag, Callier Center, University of Texas at Dallas, Dallas, TX, 2009.
- “Neural Basis of Object Memory,” Center for BrainHealth Brown Bag, University of Texas at Dallas, Dallas, TX, 2009.
- “Memory Dysfunction in Neurotoxic Exposure,” Grand Rounds, Department of Neurology, University of Texas Southwestern Medical Center, February 3, 2010.
- “Neuroscience, Learning, and Critical Thinking,” Raytheon ELCAN Optical Technologies Corporation Retreat, University of Texas Southwestern Medical Center, August 13, 2010.

“Memory, Dementia, and Brain Health,” The 11<sup>th</sup> Annual Neuroscience Update, Four Seasons Resort, Dallas, TX, September 17, 2010.

“Updates in Alzheimer’s Disease Treatments,” AWARE Alzheimer’s Disease Group, Dallas, TX, September 13, 2010.

“Memory, Dementia, and BrainHealth,” 11<sup>th</sup> Annual Neuroscience Update, Dallas, TX, September, 17, 2010.

“Neural Hybrid Model of Semantic Memory,” Rice University Department of Psychology Colloquium, Houston, TX, October 8, 2010.

“Memory and Aging,” Keynote Address, Pilot International Conference, Dallas, TX, July 15, 2011.

“Brain Computer Interface and Future Directions,” The Analog Circuits Symposium, TxACE Analog Symposium, Dallas, TX, October 24, 2011.

“New Approaches to Help Returning Warriors Home,” The Rotary Club of Park Cities, Dallas, TX, November 11, 2011.

“Neural Basis of Semantic Memory,” Tulane University Department of Psychology Colloquium, New Orleans, LA, November 18, 2011.

“PTSD,” Plano Rotary Club, Plano, TX, February 15, 2012.

“Memory Retrieval Circuits: Implications for Neuropsychiatric Disease,” Grand Rounds, Department of Psychiatry, University of Texas Southwestern Medical Center, March 12, 2014.

“Multidisciplinary Management of Persistent Problems following Sports Concussion,” Sports Neuropsychology Concussion Symposium, Sports Neuropsychology Society, April 25, 2014.

“Emotional Features in Semantic Memory,” Neuroscience Research Conference, University of Texas at Dallas, June 6, 2014.

“Beyond the Test Tubes: Skill Sets for Scientific Success in America,” Austin College, April 6, 2017.

“New Approaches to Brain Stimulation for Clinical Purposes,” Brain Symposium *Neuroimaging is a Team Sport: The Promise of Multimodal Imaging and Cross-Institutional Collaborations*, UT Southwestern Peter O’Donnell Jr. Brain Institute, January 26, 2018.

## **GRANT AND PROJECT PARTICIPATION**

### **CURRENT:**

Investigator, Neurobiology of Alzheimer's Disease and Aging - (Genetics of Dementing Brain Diseases) and Genetic and Biomarker Study of Alzheimer's Disease and Alzheimer’s Disease Center, Clinical Core, NIH And TARCC. 8% effort.

Principal Investigator, Retired Professional Athletes Aging and Concussion Study, Rainwater Foundation (\$200,000, 1/30/2016 – no end date). 0% effort.

Principal Investigator, Treatment of Memory Disorders in Gulf War Illness with High Definition Transcranial Direct Cortical Stimulation, Department of Defense (\$948,911, 9/30/2016 – 9/29/2019). 5% effort.

Principal Investigator, Multi-site confirmatory efficacy treatment trial of combat-related PTSD, Department of Defense (\$6,964,372, estimated 8/1/2018 – 7/31/2023). 10% effort.

Principal Investigator, Assessment and Treatment of Veterans with TBI and/or PTSD, Boot Campaign (\$339,963, 9/29/2016 – no end date). 10% effort.

Co-Investigator, Direct Current Stimulation for Pain Treatment in Gulf War Illness, Department of Defense (PI: Vanneste, \$956,198, 7/14/2017 – 7/13/2020). 5% effort.

Co-Investigator, The Effect of Neural-Vascular Coupling Changes on Cognitive Performance in Multiple Sclerosis, National Multiple Sclerosis Society (PI: Rypma, \$494,072, 4/1/2016 – 3/31/2019). 5% effort.

Co-Investigator, Non-invasive Brain Stimulation to Improve Memory Retrieval in Patients with Mild Cognitive Impairment, Darrell K. Royal Research Fund for Alzheimer's Disease (PI: Vanneste, \$156,750, 11/5/2015 – 11/4/2018). 5% effort.

PENDING:

Co-Investigator, Translational Research Enhancing Neuromodulation Research, National Institutes of Health (PI: McClintock, \$135,937, 5 years). 8% effort

FORMER:

Principal Investigator, Identifying and Characterizing Auditory Processing Disruptions in Multiple Sclerosis, National Multiple Sclerosis Society (\$692,330, 4/1/2014 – 3/31/2018). 5% effort.

Principal Investigator, Novel Treatment of Emotional Dysfunction, Department of Health and Human Services, (direct costs \$625,000, 12/13 – 6/16). 25% effort.

Principal Investigator, BrainHealth and Repair, DOD (direct costs of project \$723,690). 0% effort.

Co-PI, Non-Contact and Dry-Contact Reconfigurable Electroencephalography, Texas Instruments TxACE Research Advisory Committee (PI, Jafari, \$140,971, 2/12-2/15).

Principal Investigator, Novel Treatment of Emotional Dysfunction, Department of Defense, CDMRP, W81XWH-09-DMRDP-ARATDA, (year 1 direct costs \$750,000, total direct costs \$2,898,003, 5/11-5/14). 25% effort.

Investigator, Modulation of Brain Activity by Control of the Inspired Air, NIH/NINDS R01 (PI, Lu; Hart PI of UTD subcontract, year 1 UTD direct costs \$62,240, total UTD direct costs \$233,516, 8/10-7/14). 8% effort.

Co-PI, Using Gate and Sway Biofeedback to Reduce Falls in the Elderly, NIH R15, (PI, Jafari, \$366,746, 9/11-8/14).

Co-PI, Neural Markers of Cognitive Impairment, Alzheimer's Association, (PI, Mudar, 9/11-8/13). 0% effort.

Co-PI, Enhancing Soldier Performance and Brain Repair Using Virtual Reality Hapto-Robotic Training, Telemedicine and Advanced Research Technology Research Center, TATRC, DOD (Co-PI, Jafari; \$ 94,848, 8/11-8/12). 2% effort.

Mentor, Radiological Biomarkers for Frontotemporal Lobar Degeneration, NIA K23AG030006 (PI: Womack; 5 year total direct costs, \$725,000, 9/30/07-8/31/12). 0% effort.

Co-PI, Staving off Alzheimer's Disease, RGK Foundation, (PI, Mudar, \$250,000, 7/11-7/12).

Collaborator, Middle School Brain Years, Meadows Foundation and State of Texas, (PI, Chapman; 2 year total direct costs \$6,000,000, 9/1/09-8/31/11). 0% effort.

Mentor, TDCS-Enhanced Stroke Recovery and Cortical Regeneration, NIH, (PI, Hodics, 5/8-4/12). 0% effort.

Director, Berman Laboratory in Learning and Memory, Center for BrainHealth, University of Texas at Dallas, (\$700,000). 0% effort.

Protocol Co-Chair, HSE Sub-Study: Correlations of Herpes Simplex Virus (HSV) Viral Load with Neuropsychological Outcomes. NIAID and NINDS (N01-A1-65306, 9/98-12/11; \$43,600 yearly direct; \$221,419 recent 5 year total direct). 5% effort.

Co-PI, Brain and Cognitive Changes after Reasoning or Physical Training in Cognitively Normal Seniors, NIH (year 1 direct costs \$379,038, total direct costs \$1,000,000, 9/09-8/11). 3% effort.

Principal Investigator, Word Retrieval in Gulf War Illness, Veterans Administration (year 1 direct costs \$193,180, total costs \$285,740; two year project direct costs \$381,175, total costs \$566,901).

Principal Investigator, Neuropsychiatric Projects, Investigations into Gulf War Illness, Veterans Administration (year 1 direct costs \$1,112,318, total costs \$2,845,766; two year project direct costs \$2,567,897, total costs \$3,917,531).

Principal Investigator, Neuropsychological and Cognitive Paradigm Sub-Core, Investigations into Gulf War Illness, Veterans Administration (year 1 direct costs \$358,101, total costs \$508,660; two year project direct costs \$718,934, total costs \$1,115,593).

Principal Investigator, EEG Sub-Core, Investigations into Gulf War Illness, Veterans Administration (year 1 direct costs \$608,228, total costs \$826,674; two year project direct costs \$954,251, total costs \$1,376,257).

Co-PI, Emotional Memory Circuits in Gulf War Illness, Veterans Administration (year 1 direct costs \$229,547, total costs \$354,802; two year project direct costs \$442,780; total costs \$677,900).

Co-PI, Complex Verbal Functions and Basal Ganglia, Veterans Administration (year 1 direct costs \$508,407, total costs \$773,664; two year project direct costs \$987,220, total costs \$1,491,168).

Protocol Co-Chair, CASG #211 "Investigation of the Natural History of West Nile Virus Infection in Patients with or at Risk for Progression to West Nile Virus Encephalitis and/or Myelitis." NIAID and NINDS (N01-A1-65306, 9/98-8/08).

Protocol Co-Chair, CASG #210 "A Phase II Randomized Placebo-Controlled Trial to Assess the Safety and Efficacy of Intravenous Immunoglobulin (Omr-IgG-Am™) Containing High Anti-West Nile Virus Antibody Titers in Patients with, or at Risk for Progression to West Nile Virus (WNV) Encephalitis and/or Myelitis." NIAID and NINDS (N01-A1-65306, 9/98-8/08).

Co-PI, (PI, Nestler), Center for Advanced ADHD Research, Treatment, and Education, Sparrow Foundation (7/06-6/09).

Consultant, (PI, Pearlson), Quantitative Neuroimaging in Psychosis (NIMH, MH43775-14, 3/1/05-2/28/09).

Co-PI, (PI, Tao), The Role of Prefrontal Cortex and Amygdala in Self-harming Behavior among Depressed Youth, Grants for Collaborative Research UTSW-UTD (5/07-4/08).

Investigator, (PI, Sullivan), Manifestations, causes, and consequences of Protein Energy Undernutrition in elderly TCU residents, Investigator Initiated Research Veterans Administration, (6/05-5/07)



Collaborator, (PI, Assaf), Differential Diagnosis of Psychotic Patients Investigates Activation Patterns Related to Semantic Retrieval in Manic Bipolar and Schizophrenia Patients, and its Relationship to Formal Thought Disorder Severity (Donaghue Foundation, 7/1/05-6/30/08).

Principal Investigator, Monitoring Electrophysiological Changes in Object Recall in Semantic Memory during Feature Binding. GlaxoSmithKline, (10/02-9/06).

Principal Investigator, Predicting Response to Acetylcholinesterase Inhibitors for New Learning and Semantic Memory in Mild Cognitive Impairment and Alzheimer's Disease, MIRECC, 5/04-4/06).

Principal Investigator, Assessment of Object Memory in Normal Aging and Mild Cognitive Decline. Biomedical Research Fund, VA. (6/02-5/05).

Investigator (PI of Core, Liem), Alzheimer's Disease Center, Clinical Core, NIH, (AG-00-002, 8/02-7/05).

Investigator (PI, Chernoff), Geriatric Mental Health on the Move, Arkansas Geriatric Education Center, HRSA, GEC Grant 1D 31 HP80009.

Investigator (PI, Crone), Electrocorticographic Correlates of Language, NIH (R01, 5/01-4/06).

Investigator (PI, Corey) Measuring the Hippocampus: A Comparison of Alternative Methods, MIRECC, (7/01-6/02)

Principal Investigator, AChE Inhibitor Therapy in the Treatment of Cognitive Deficits Associated with Static Brain Lesions. Pfizer-Eisai (9/99-9/02).

Investigator (PI, van Zijl), Resource Center Grant for the F. M. Kirby Research Center for Functional Brain Imaging, NIH (8/01-7/06).

Investigator, Neurobehavioral Research Unit, Kennedy-Krieger Institute. NICHD.

Investigator, fMRI Correlates of Language Recovery in Children Undergoing Left Hemispherectomy. Dana Foundation (7/00-6/03).

Investigator, AchE Inhibitor Therapy in the Treatment of Memory Disorders in Patients with Epilepsy. Pfizer-Eisai (3/01-3/03).

Investigator (PI, Hoehn-Saric), Assessment of Citralazam Treatment for GAD with fMRI, Forrest Laboratories.

Principal Investigator, Verbal and Visual Semantic Object Processing Impairments. K08 DC00099, 4/1/94- 5/31/00.

Investigator, Investigation of Human Cortical Language Maps Using Complementary Functional Localization Techniques: Functional MRI, Cortical Electrical Stimulation, and Electrographic Recordings. Dana Clinical Hypotheses in Neuroscience Research Program, 1/97-1/00.

Investigator, Cognitive and Neuroanatomic Studies of Acquired Dyslexias. NIH RO1 NS 29973, 12/1/92-11/30/98.

Investigator, Metrifonate Investigational Nationwide Trial (MINT). Bayer Pharmaceutical Division, 12/97-12/98.

Investigator, The Efficacy, Safety, and Tolerability of Lazabemide (Ro 19-6327) vs. Placebo, Administered for One Year in Patients with Probable Alzheimer's Disease (NINCDS/ADRDA Criteria) (PDL 1000P, dated 12/2/96). Protodigm, 5/97-12/98.

Investigator, A 24-Week, Multicenter, Randomized, Double-Blind Placebo-Controlled Evaluation of the Efficacy and Safety of Donepezil Hydrochloride (E2020) in Patients with Dementia Associated With Cerebrovascular Disease (E2020-307, 5/5/97). Eisai, Inc., 9/97-12/98.

Investigator, An Open-label, Six Month Extension of SDZ ENA 713 Studies B351 and B352 to Prospectively Evaluate the Long-term Safety, Tolerability, and Efficacy of 1 through 6 mg b.i.d. (2-12 mg/day) SDZ ENA 713 in Outpatients with Probable Alzheimer's disease, Sandoz Pharmaceuticals Corporation, 1/96-12/97.

Investigator, An Open Label, Multicenter Clinical Trial Evaluating the Safety and Efficacy of Donepezil Hydrochloride (E2020) in Patients with Alzheimer's Disease (Protocol #E2020-A001-314), Eisai America, 11/96-12/97.

Investigator, A 54-Week, Randomized, Double Blind, Placebo Controlled Evaluation of the Effects of Donepezil Hydrochloride (E2020) on Functional Outcome in Patients with Alzheimer's Disease With a Staged Crossover to Open Label Donepezil Hydrochloride (E2020) Treatment (Sponsor #E2020-A001-312), Eisai America, 9/96-12/97.

Investigator, A 52-Week, Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Multicenter Study of Milameline (CI979\RU 35926) in Patients with Probable Alzheimer's Disease With Long-Term Open-Label Extension. Protocol 979-15-16, Warner-Lambert Company, 6/96-12/97.

Investigator, An Open-label, Multicenter, Extended Evaluation of the Safety and Efficacy of E2020 in Patients with Alzheimer's Disease. Protocol E2020-A001-303, Eisai America, Inc., 7/94-5/97.

Investigator, Clinical Evaluation of the Safety and Efficacy of AF102B vs. Placebo in the Treatment of Patients with Dementia of the Alzheimer's Type, Protocol #94-001FL-105CR, Forrest Laboratories, 1/95-6/96.

Investigator, Open-label Extension of Study #94-001FL-1005CR to Evaluate Long-Term Administration of AF102B in the Treatment of Patients with Dementia of the Alzheimer Type, Forest Laboratories, Inc, 1/96-9/96.

Investigator, Promoting Recovery after Damage to the Human Brain: What Triggers the Recovery Process. Seaver Foundation, 7/92-7/96.

Investigator, A Prospective, Double-blind, Placebo-controlled, Parallel Group Comparison of the Efficacy and Safety of Two Doses of SDZ 713, 1-4 mg per Day and SDZ ENA 713 6-12 mg per Day in Patients with Alzheimer's disease. Sandoz Pharmaceuticals Corporation, 4/95-5/96.

Investigator, Charles A. Dana Center for Study of Memory and Aging. Dana Foundation, 7/92-7/95.

Investigator, A 30-week, Multicenter, Randomized, Double-blind, Placebo-controlled Evaluation of the Safety and Efficacy of E2020 in Patients with Alzheimer's Disease, Protocol E2020-001-302, Eisai America, 1/94-6/95.

Investigator, A Dose-ranging Study of F102B in Patients with Dementia of the Alzheimer's Type (DAT). Forrest Laboratories.

Investigator, Language Organization Studied by Cortical Stimulation. NINDS R01 NS26553, 4/89-8/95.

Investigator, A Trial of <sup>99m</sup>TcTechnetium Bicisate in Healthy Elderly Volunteers and Patients with Mild to Moderate Dementia of the Alzheimer Type, Protocol 198-017, DuPont Merck Pharmaceutical Company, 2/93-6/94.

Investigator, The Neurobiology of Language (extension grant). McDonnell Foundation-Pew Charitable Trusts, 1/93 - 9/93.

Investigator, The Neurobiology of Language. McDonnell Foundation-Pew Charitable Trusts, 1/90-12/92.

Investigator, A Long Term Randomized Placebo Controlled Study of DuP 996 90 and 120 mg Daily in Patients with Mild to Moderate Dementia of the Alzheimer Type (Long-term study) (U.S.A. Study); Protocol 996-025, DuPont Merck Pharmaceutical Company, 10/91-12/93.

Investigator, A Randomized Placebo Controlled Study of DuP 996 90 and 120 mg Daily in Patients with Mild to Moderate Dementia of the Alzheimer Type (U.S.A. Study), Protocol 996-019, DuPont Merck Pharmaceutical Company, 6/91-12/92.

Principal Investigator, Object Representation in Language and Sensory Cortices. McDonnell Foundation-Pew Charitable Trusts, 7/91-6/92.

Investigator, Oxiracetam in the Treatment of Patients with Cognitive Impairment Associated with Dementia of the Alzheimer's Type, SmithKline Beecham, 7/90-1/91.

Investigator, Safety and Efficacy of Long-term Use of Oxiracetam in the Treatment of Patients with Cognitive Impairment Associated with Dementia of the Alzheimer's Type, SmithKline Beecham, 10/90-1/91.

Investigator, Dyslexia Studied by Direct Electrical Cortical Interference in Humans. Seaver Foundation, 7/89-12/91.

Investigator, A Controlled Pilot Trial of Dextromethorphan as Adjunct Therapy for Complex Partial Seizures, Nova Pharmaceuticals.