

CURRICULUM VITAE

Argye Elizabeth Hillis, MD, MA

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DEMOGRAPHIC INFORMATION

Current Appointment: Professor & Deputy Director,
 Department of Neurology,
 Johns Hopkins University School of Medicine;
 Joint appointment in Department of Physical Medicine and Rehabilitation
 Joint appointment in Cognitive Science, Johns Hopkins University

Contact Information:
 Phipps 126; Johns Hopkins University School of Medicine
 600 N. Wolfe Street; Baltimore, MD 21287
 Business telephone: (410) 614-2381; FAX (410) 614-9807
 e-mail: argye@JHMI.edu

EDUCATION AND TRAINING:

B.A. in Speech Pathology/Audiology The George Washington University	September, 1977- May, 1981 Washington, D.C.
M.A. in Speech Pathology The George Washington University	May, 1981-May, 1982 Washington, D.C.
M.D. Johns Hopkins University School of Medicine	September 1991-May, 1995 Baltimore, MD
Resident (PGY 1) in Internal Medicine Greater Baltimore Medical Center	June, 1995 - June, 1996 Baltimore, Maryland
Resident in Neurology Johns Hopkins University School of Medicine	June, 1996 - June, 1999 Baltimore, Maryland
Fellow-by-Courtesy; Dept. of Cognitive Science Johns Hopkins University	October, 1998 - June, 1999 Baltimore, Maryland

PROFESSIONAL EXPERIENCE:

Professor; Department of Neurology Johns Hopkins University School of Medicine;	June, 2006-present
Deputy Director (Executive Vice Chair), Department of Neurology	July 2006-present
Director, Neurology Residency Program	June 2005-present

- Co-Director, Division of Cerebrovascular Disease June 2005-present
Joint appointment in Cognitive Science, Johns Hopkins University
Joint appointment in Physical Medicine and Rehabilitation
- Associate Professor; Department of Neurology** November, 2003-June 2006
Johns Hopkins University School of Medicine;
Joint appointment in Cognitive Science, Johns Hopkins University
Joint appointment in Physical Medicine and Rehabilitation effective November 2004
- Assistant Professor; Department of Neurology** July, 1999 – Oct., 2003
Johns Hopkins University School of Medicine Baltimore, Maryland
Joint appointment in Cognitive Science; School of Arts and Sciences
- Associate Research Scientist,** December, 1991-June, 1995
Cognitive Neuropsychology Laboratory
Johns Hopkins University, Dept. of Cognitive Science Baltimore, Maryland
- Director, Neurological Rehabilitation** August, 1989 - August, 1991
& **Acting Center Administrator, 1990**
Medical Rehabilitation Center of Maryland Baltimore, Maryland
- Director, Speech-Language Pathology** March, 1985 - August, 1989
Medical Rehabilitation Center of Maryland Baltimore, Maryland
- Instructor, Speech-Language Pathology** Spring, 1988
Loyola College of Maryland Baltimore, Maryland
- Speech-Language Pathologist** June, 1982 - March 1985
The Good Samaritan Hospital of Maryland Baltimore, Maryland

RESEARCH ACTIVITIES:

PUBLICATIONS:

Peer-reviewed Original Research Articles:

1. Siebens, H., **Hillis Trupe, A.E.**, Cook, F., Anshen, S., Hanauer, R. & Oster, G. (1986).
Correlates and consequences of eating dependency in institutionalized elderly. Journal of the American Geriatric Society, 34, 192-198.
2. Caramazza, A. & **Hillis, A.E.** (1989). The disruption of sentence production: Some dissociations. Brain and Language, 36, 625-650.
3. **Hillis, A.E.** (1989). Efficacy and generalization of treatment for aphasic naming errors. Archives of Physical Medicine and Rehabilitation, 70, 632-636.

4. **Hillis, A.E.** & Caramazza, A. (1989). The graphemic buffer and attentional mechanisms. Brain and Language, 36, 208-235.
5. Badecker, W., **Hillis, A.E.**, & Caramazza, A. (1990). Lexical morphology and its role in the writing process: Evidence from a case of acquired dysgraphia. Cognition, 35, 205-244.
6. Caramazza, A. & **Hillis, A.E.** (1990). Where do semantic errors come from? Cortex, 26, 95-122.
7. Caramazza, A. & **Hillis, A.E.** (1990). Spatial representation of words in the brain implied by studies of a unilateral neglect patient. Nature, 346, 267-269.
8. Caramazza, A. & **Hillis, A.E.** (1990). Levels of representation, coordinate frames, and unilateral neglect. Cognitive Neuropsychology, 7, 391-445.
9. Caramazza, A., **Hillis, A.E.**, Rapp, B.C., & Romani, C. (1990). The multiple semantics hypothesis: Multiple confusions? Cognitive Neuropsychology, 7, 161-190.
10. **Hillis, A.E.**, Rapp, B.C., Romani, C. & Caramazza, A. (1990). Selective impairment of semantics in lexical processing. Cognitive Neuropsychology, 7, 191-244.
11. **Hillis, A.E.** & Caramazza, A. (1991). Mechanisms for accessing lexical representations for output: Evidence from a category-specific semantic deficit. Brain and Language, 40, 106-144.
12. Caramazza, A. & **Hillis, A.E.** (1991). Lexical organization of nouns and verbs in the brain. Nature, 349, 788-790.
13. **Hillis, A.E.** & Caramazza, A. (1991). Category-specific naming and comprehension impairment: A double dissociation. Brain, 114, 2081-2094.
14. **Hillis, A.E.** & Caramazza, A. (1991). Spatially-specific deficit to stimulus-centered letter shape representations in a case of "unilateral neglect". Neuropsychologia, 29, 1223-1240.
15. **Hillis, A.E.** (1992). Facilitating written language. Clinics in Communication Disorders, 2, 19-33.
16. **Hillis, A.E.** & Caramazza, A. (1992). Not everything is the same: some things are worse than others. Brain and Language, 43, 519-527.
17. **Hillis, A.E.** (1993). The role of models of language processing in rehabilitation of language impairments. Aphasiology, 7, 5-26.
18. Rapp, B.C., **Hillis, A.E.**, & Caramazza, A. (1993). The role of representations in cognitive theory: More on multiple semantics and the agnosias. Cognitive Neuropsychology, 10, 235-249.

19. Caramazza, A. & Hillis, A.E. (1993). For a theory of remediation of cognitive deficits. Neuropsychological Rehabilitation, 3, 217-234.
20. Hillis, A.E., Rapp, B.C. & Caramazza, A. (1995). Constraining claims about theories of semantic memory: More on unitary vs. multiple semantics. Cognitive Neuropsychology, 12, 175-186.
21. Hillis, A.E. & Caramazza, A. (1995). Converging evidence for the interaction of semantic and phonological information in accessing lexical information for spoken output. Cognitive Neuropsychology, 12, 187-227.
22. Hillis, A.E. & Caramazza, A. (1995). Spatially-specific deficits in processing graphemic representations in reading and writing. Brain and Language, 48, 263-308.
23. Hillis, A.E. & Caramazza, A. (1995). Cognitive and neural mechanisms underlying visual and semantic processing. Journal of Cognitive Neuroscience, 7, 457-478.
24. Hillis, A.E. & Caramazza, A. (1995). The representation of grammatical categories of words in the brain. Journal of Cognitive Neuroscience, 7, 396-407.
25. Hillis, A.E., Benzing, L., Epstein, C. & Lyketsos, C. (1995). Cognitive gains and losses of patients with Alzheimer's Disease during frequent practice. American Journal and Speech Language Pathology, 4, 150-156.
26. Hillis, A.E. & Caramazza, A. (1995). A framework for interpreting distinct patterns of hemispatial neglect. Neurocase, 1, 189-207.
27. Hillis, A.E. & Caramazza, A. (1995). The compositionality of lexical-semantic representations: clues from semantic errors in object naming. Memory, 3, 333-358.
28. Hillis, A.E., Lenz, F.A., Zihl, T.A., Dougherty, P.M., Eckel, T.S., Jackson, K. (1998) Hemispatial somatosensory and motor extinction after stereotactic thalamic lesions. Neurocase, 4, 21-34.
29. Hillis, A.E. (1998). Treatment of naming disorders: new issues regarding old therapies. Journal of the International Neuropsychological Society, 4, 648-660.
30. Hillis, A.E., Rapp, B., Benzing, L. & Caramazza, A. (1998). Dissociable coordinate frames of unilateral spatial neglect: viewer-centered neglect. Brain and Cognition, 37, 491-526.
31. Hillis, A.E. & Rapp, B.C. (1998). Dissociable reference frames of neglect: A comment on Farah, Brunn, Wallace, Wong & Carpenter (1990). Neuropsychologia, 36, 1257-62,
32. Hillis, A.E., Mordkoff, T., Caramazza, A. (1999). Mechanisms of spatial attention revealed by hemispatial neglect. Cortex, 35, 433-442.

33. **Hillis, A.E.**, Rapp, B.C. & Caramazza, A. (1999). When a rose is a rose in speaking but a tulip in writing. Cortex, *35*, 337-356.
34. **Hillis, A.E.** & Selnes, O. (1999). Cases of aphasia or neglect due to Creutzfeldt-Jakob Disease. Aphasiology, *13*, 743-754
35. **Hillis, A.E.**, Boatman, D., Hart, J. & Gordon, B. (1999). Making sense out of jargon: a neurolinguistic and computational account of jargon aphasia. Neurology, *53*, 1813-1824.
36. **Hillis, A.E.**, Anderson, N.B., Sampath, P., Rigamonti, D. (2000). Cognitive impairments after surgical repair of ruptured and unruptured aneurysms. Journal of Neurology, Neurosurgery, and Psychiatry, *69*, 608-615.
37. **Hillis, A.E.**, Wang, P., Beauchamp, N., Barker, P., Gordon, B. Wityk, R. (2000) Magnetic resonance perfusion imaging: a new method for localizing regions of brain dysfunction associated with specific lexical impairments? Aphasiology, *14*, 471-483.
38. **Hillis, A.E.**, Barker, P., Beauchamp, N., Gordon, B. & Wityk, R. (2000). MR perfusion imaging reveals regions of hypoperfusion associated with aphasia and neglect. Neurology, *55*, 782-788.
39. Selnes, O. & **Hillis, A.E.** (2000). Patient Tan Revisited: A case of atypical Global aphasia? Journal of the History of the Neurosciences, *9*, 233-237.
40. **Hillis, A.E.**, Barker, P., Beauchamp, N., Winters, B. Mirski, M. Wityk, R. (2001). Restoring blood pressure reperfused Wernicke's area and improved language, Neurology, *56*, 670-672.
41. Worrall, B., Farace, E., **Hillis, A.E.**, Hutson, R.K., Saver, J., Wityk, R., Johnston, K.C., Haley, E.C. (2001). Correlation of aphasia and /or neglect with cortical infarction in a subpopulation of RANTTAS. Journal of Cerebrovascular Disease, *11*, 257-264.
42. Wityk, R.J., Goldsborough, M.A., **Hillis, A.E.**, Beauchamp, N., Barker, P. Borowicz, L., McKhann, G. (2001). Diffusion- and perfusion-weighted brain magnetic resonance imaging in patients with neurologic complications after cardiac surgery. Archives of Neurology, *58*, 571-576.
43. **Hillis, A.E.**, Kane, A. Barker, P., Beauchamp, N., Wityk, R. (2001). Neural substrates of the cognitive processes underlying reading: evidence from Magnetic Resonance Perfusion Imaging in hyperacute stroke, Aphasiology, *15*, 919-931.
44. **Hillis, A.E.**, Wityk, R.J., Tuffiash, E., Beauchamp, N.J., Jacobs, M.A., Barker, P.B., Selnes, O.A. (2001). Hypoperfusion of Wernicke's area predicts severity of semantic deficit in acute stroke. Annals of Neurology, *50*, 561-566.

45. **Hillis, A.E.**, Kane, A., Tuffiash, E., Ulatowski, J.A., Barker, P., Beauchamp, N., Wityk, R. (2002). Reperfusion of specific brain regions by raising blood pressure restores selective language functions in subacute stroke. Brain and Language, 79, 495-510.
46. **Hillis, A.E.**, Wityk, R.J., Barker, P.B., Beauchamp, N.J., Gailloud, P., Murphy, K., Cooper, O., Metter, E.J. (2002). Subcortical aphasia and neglect in acute stroke: the role of cortical hypoperfusion, Brain, 125, 1094-1104.
47. **Hillis, A.E.**, Kane, A., Tuffiash, E., Beauchamp, N., Barker, P.B., Jacobs, M.A., Wityk, R. (2002). Neural substrates of the cognitive processes underlying spelling: Evidence from MR diffusion and perfusion imaging. Aphasiology, 16, 425-438.
48. **Hillis, A.E.** & Heidler, J. (2002). Mechanisms of early aphasia recovery: evidence from MR perfusion imaging. Aphasiology, 16, 885-896.
49. Selnes, O.A., van Zijl, P., Barker, P.B., **Hillis, A.E.**, Mori, S. (2002). MR Diffusion Tensor Imaging documented Arcuate Fasciculus lesion in a patient with normal repetition performance. Aphasiology, 16, 897-902.
50. Gailloud, P., **Hillis, A.E.**, Perler, B., Murphy, K.J. (2002). Vertebrobasilar stroke as late complication of a Blalock-Taussig shunt. Annals of Neurology, 52, 231-234.
51. **Hillis, A.E.**, Tuffiash, E., Wityk, R.J., Barker, P.B. (2002). Regions of neural dysfunction associated with impaired naming of actions and objects in acute stroke. Cognitive Neuropsychology, 19, 523-534.
52. **Hillis, A.E.**, Tuffiash, E. & Caramazza, A. (2002). Modality specific deterioration in oral naming of verbs. Journal of Cognitive Neuroscience, 14, 1099-1108.
53. Restrepo, L., Wityk, R.J., Grega, M., Borowicz, L., Barker, P.B., Jacobs, M.A., Beauchamp, N.J., **Hillis, A.E.**, McKhann, G.M. (2002). Diffusion and perfusion weighted magnetic resonance imaging of the brain before and after coronary artery bypass grafting surgery. Stroke, 33, 2909-2915.
54. Wityk, R., **Hillis, A.**, Beauchamp, N., Barker, P.B., Rigamonti, D. (2002). Perfusion-weighted MRI in adult moyamoya syndrome: characteristic patterns and change after surgical intervention: case report. Neurosurgery, 51, 1499-1506.
55. **Hillis, A.E.**, Wityk, R., Barker, P.B., Caramazza, A. (2003). Neural regions essential for writing verbs. Nature Neuroscience, 6, 19-20.
56. **Hillis, A.E.**, Ulatowski, J.A., Barker, P.B., Torbey, M., Ziai, W., Beauchamp, N., Oh, S., Wityk, R. (2003). A pilot randomized trial of induced blood pressure elevation: Effects on function and focal perfusion in acute and subacute stroke. Cerebrovascular Diseases, 16: 236-246.

57. Tuffiash, E., Tamargo, R., & **Hillis, A.E.** (2003). Craniotomy for repair of unruptured aneurysms does not result in cognitive dysfunction. Stroke, 34, 2195-2199.
58. **Hillis, A.E.**, Wityk, R.J., Barker, P.B., Ulatowski, J.A., Jacobs, M.A. (2003). Change in perfusion in acute nondominant hemisphere stroke may be better estimated by tests of hemispatial neglect than by the NIHSS, Stroke, 34, 2392-2398.
59. **Hillis, A.E.**, Wityk, R.J., Ulatowski, J.A., Beauchamp, N., Jacobs, M., Barker, P.B. (2004). MR perfusion weighted imaging as a marker of treatment response in acute and subacute stroke. Neuroradiology, 46, 31-39.
60. **Hillis, A.E.**, Oh, S., Ken, L. (2004). Deterioration of naming nouns versus verbs in primary progressive aphasia. Annals of Neurology, 55, 268-275.
61. Breese, E.L. & **Hillis, A.E.** (2004). Auditory comprehension: is multiple choice really good enough? Brain and Language, 89, 3-8.
62. **Hillis, A.E.**, Barker, P.B., Wityk, R.J., Aldrich, E., Restrepo, L., Breese, E.L. & Work, M. (2004). Variability in subcortical aphasia is due to variable sites of cortical hypoperfusion. Brain and Language, 89, 524-530.
63. **Hillis, A.E.**, Work, M., Breese, E.L., Barker, P.B., Jacobs, M.A. & Maurer, K. (2004). Re-examining the brain regions crucial for orchestrating speech articulation. Brain, 127, 1479-1487.
64. **Hillis, A.E.**, Chang, S., Breese, E. (2004). The crucial role of posterior frontal regions in modality specific components of the spelling process. Neurocase, 10, 157-87.
65. Duinkerke, A., Williams, M.A., Rigamonti, D., & **Hillis, A.E.** (2004). Cognitive recovery in idiopathic normal pressure hydrocephalus. Cognitive and Behavioral Neurology, 17, 179-184.
66. **Hillis, A.E.**, Newhart, M., Heidler, J., Barker, P.B., Herskovits, E., and Degaonkar, M. (2005). The roles of the “visual word form area” in reading. NeuroImage, 24, 548-559.
67. Hussain, NS, Rumbaugh, J., Kerr, D., Nath, A., **Hillis, A.E.** (2005). The effects of prednisone and plasma exchange on cognitive impairment in Hashimoto’s encephalopathy. Neurology, 64, 165-166.
68. Reineck, L., Agarwal, S. & **Hillis, A.E.** (2005). The “diffusion-clinical mismatch” predicts early language recovery in acute stroke. Neurology, 64, 828-833.
69. **Hillis, A.E.**, Newhart, M., Heidler, J., Barker, P.B., Degaonkar, M. (2005). Anatomy of spatial attention: insights from perfusion imaging and hemispatial neglect in acute stroke. Journal of Neuroscience, 25, 3161-3167.

70. **Hillis, A.E.**, Newhart, M., Heidler, J., Marsh, E.B., Barker, P.B., Dagaonkar, M. (2005). The neglected role of the right hemisphere in spatial representation of words for reading. *Aphasiology*, 19, 225-238.
71. Charles, R. & **Hillis, A.E.** (2005). Posterior Cortical Atrophy: clinical presentation and cognitive deficits compared to Alzheimer's Disease. *Behavioural Neurology*, 16, 15-23.
72. Marsh, E.B. & **Hillis, A.E.** (2005). Cognitive and neural mechanisms underlying reading and naming: evidence from letter-by-letter reading and optic aphasia. *Neurocase*, 11, 325-318.
73. Thomas, G., McGirt, M.J., Woodworth, G., Heidler, J., Rigamonti, D., **Hillis, A.E.**, Williams, M.A. (2005). Baseline neuropsychological profile and cognitive response to CSF shunting for idiopathic normal pressure hydrocephalus. *Dementia and Geriatric Cognitive Disorders*. 20, 163-8.
74. Huang, H., Zhang, J., Jiang, H., Wakana, S., Poetscher, L., Miller, M.I., van Zijl, P.C., **Hillis, A.E.**, Wityk, R., Mori, S. (2005). DTI tractography based parcellation of white matter: application to the mid-sagittal morphology of corpus callosum. *Neuroimage*, 26,195-205.
75. Chang, S., Agarwal, S., Williams, M.A., Rigamonti, D, **Hillis, A.E.** (2006). Demographic factors influence cognitive recovery after shunt for normal pressure hydrocephalus. *The Neurologist*, 12, 39-42.
76. **Hillis, A.E.**, Heidler-Gary, J., Newhart, M., Chang, S., Ken, L. & Bak, T. (2006). Naming and comprehension in primary progressive aphasia: the influence of grammatical word class. *Aphasiology*, 20, 246-256.
77. **Hillis, A.E.**, Kleinman, K.T., Newhart, M., Heidler-Gary, J., Gottesman, R., Barker, P.B., Aldrich, E, Llinas, R., Wityk, R., Chaudhry, P. (2006). Restoring cerebral blood flow reveals neural regions critical for naming. *Journal of Neuroscience*, 26, 8069-8073.
78. Aralasmak, A., Ulmer, J.L., Kocak, M., Salvan, C.V., **Hillis, A.E.**, Yousem, DM. (2006). Association, commissural and projection pathways and their functional deficits reported in literature. *Journal of Computer Assisted Tomography*, 30. 695-715.
79. **Hillis, A.E.**, Chang, S., Heidler-Gary, J., Newhart, M., Kleinman, J.T., Davis, C., Barker, P.B., Aldrich, E., Ken, L. (2006). Neural correlates of modality-specific spatial extinction. *Journal of Cognitive Neuroscience*. 18, 1889-1898.
80. Edden, R., Schlar, M., **Hillis, A.E.**, Barker, P.B. (2006). Optimised detection of lactate at high fields using inner volume saturation. *Magnetic Resonance in Medicine*. 56, 912-917.
81. Prabhakaran, V., Raman, S., Grunwald, M., Mahadevia, A., Hussain, N., Lu, H., Van zijl, P.C.M., **Hillis, A.E.** Neural substrates of word generation during stroke recovery: the influence of cortical hypoperfusion. (2007). *Behavioral Neurology*, 18, 45-52.

82. Philipose, L.E., Alphas, H., Prabhakaran, V., **Hillis, A.E.** (2007). Testing conclusions from functional imaging of working memory with data from acute stroke. Behavioural Neurology, 18, 37-43.
83. Lee, A.W., Davis, C., Puttgen, H.A. **Hillis, A.E.** (2007). Urgent intervention to reduce functional deficits after post-operative stroke. Nature Clinical Practice Neurology, 3, 173-177.
84. Newhart, M., Ken, L., Kleinman, J.T., Heidler-Gary, J., & **Hillis, A.E.** (in press). Neural networks essential for naming and word comprehension. Cognitive and Behavioral Neurology, 20, 25-30.
85. Gottesman, R. **Hillis, A.E.**, Grega, M., Borowicz, L., Selnes, O., Baumgartner, W., McKhann, G. (in press). Early postoperative cognitive dysfunction and blood pressure during coronary artery bypass grafting. Archives of Neurology.
86. Bilello, M., Lao, Z., Krejza, J., **Hillis, A.E.**, Herskovits, E.H. (in press). Statistical atlas of acute stroke from MR diffusion-weighted-images of the brain. Neuroinformatics.
87. Marsh, E.B., **Hillis, A.E.** (in press) Dissociation between egocentric and allocentric visuospatial and tactile neglect in acute stroke. Cortex.
88. Chaudhry, P., Kharkar, S., Heidler-Gary, J. **Hillis, A.E.**, Newhart, M., Kleinman, J.T., Davis, C., Rigamonti, D., Wang, P., Irani, D., Williams, M.A. (in press) Characteristics and reversibility of dementia in Normal Pressure Hydrocephalus. Behavioural Neurology.
89. Kleinman, J.T., Newhart, M., Davis, C., Heidler-Gary, J., Gottesman, R. & **Hillis, A.E.** (in press). Right hemispatial neglect: frequency and characterization following acute left hemisphere stroke. Brain and Cognition.
90. Heidler-Gary, J., Gottesman, R., Newhart, M., Chang, S., Ken, L. **Hillis, A.E.** (in press). Utility of behavioral vs. cognitive measures in differentiating between subtypes of frontotemporal Lobar Degeneration and Alzheimer's Disease. Dementia and Geriatric Cognitive Disorders.
91. DeLeon, J., Gottesman, R.F., Kleinman, J.T., Newhart, M., Davis, C., Heidler-Gary, J., Lee, A., **Hillis, A.E.** Neural regions essential for distinct cognitive processes underlying picture naming. Brain. (e-published on line ahead of print)

Invited Review Articles:

1. Gottesman, R.F., Komotar, R. & **Hillis, A.E.** (2003). Neurologic aspects of traumatic brain injury. International Review of Psychiatry, 15, 302-309.

2. Mesulam, M.M., Grossman, M., **Hillis, A.E.**, Kertesz, A., Weintraub, S. (2003). The core and halo of primary progressive aphasia and semantic dementia. Annals of Neurology. 2003, 54, Suppl 5, S11-14.
3. **Hillis, A.E.** (2004). Systemic blood pressure and stroke outcome and recurrence. Current Atherosclerosis Reports, 6, 274-280.
Reprinted in:
Current Hypertension Reports, 7, 72-78 (2005).
4. **Hillis, A.E.** (2005). What can acute aphasia tell us about the brain? Japanese Journal of Neuropsychology, 21, 2-17. (published in English and Japanese).
5. **Hillis, A.E.** (2005). Stages and mechanisms of recovery from aphasia. Japanese Journal of Neuropsychology, 21, 35-43 (published in English and Japanese).
6. **Hillis, A.E.** & Heidler, J. (2005). Contributions and limitations of the “Cognitive neuropsychological approach” to treatment: illustrations from studies of reading and spelling therapy. Aphasiology, 19, 985-993.
7. **Hillis, A.E.** (2005). Brain/language relationships identified with diffusion and perfusion MRI: clinical applications in neurology and neurosurgery. Proceedings of the New York Academy of Sciences, 1064, 149-161.
8. Jordan, L.C & **Hillis, A.E.** (2005). Aphasia and right hemisphere syndromes in stroke. Current Neurology and Neuroscience Reports. , 5:458-464
9. **Hillis, A.E.** (2006). Rebalancing parietal activation underlies resolution of hemispatial neglect after right frontal stroke. Future Neurology, 1, 25-30.
10. **Hillis, A.E.** (2006). The neurobiology of hemispatial neglect. The Neuroscientist, 12, 153-163.
11. Lee, A., Kannan, V. & **Hillis, A.E.** (2006) The contribution of neuroimaging to the study of language and aphasia. Neuropsychology Review. 171-183.
12. **Hillis, A.E.** (2006). Rehabilitation of unilateral spatial neglect: new insights from magnetic resonance perfusion imaging. Archives of Physical Medicine and Rehabilitation. 12, 43-49.
13. Marsh, E.B.& **Hillis, A.E.** (2006). Recovery from aphasia following brain injury: the role of reorganization. Progress in Brain Research. 157,143-56.
14. Rafii, MS & **Hillis, A.E.** (2006). Compendium of cerebrovascular diseases. International Review of Psychiatry, 18, 395-407.
15. Lee, A, Kannan, V., **Hillis, A.E.** (2006) The contribution of neuroimaging to the study of

language and aphasia. *Neuropsychology Reviews*, 16(4), 171-183.

16. **Hillis, A.E.** (2006). Pharmacological, surgical, and neurovascular interventions to augment acute aphasia recovery. *American Journal of Physical Medicine and Rehabilitation*, 87(Suppl. 12), 43-49.
17. Jordan, L. & **Hillis, A.E.** (2006). Disorders of speech and language: aphasia, apraxia, and dysarthria. *Current Opinion in Neurology*, 19, 580-585.
18. **Hillis, A.E.** (in press). Magnetic resonance perfusion imaging in the study of language. *Brain and Language*.
19. Jordan, L. & **Hillis, A.E.** (in press). Hemorrhagic stroke in children. *Pediatric Neurology*.
20. **Hillis, A.E.** (in press). Aphasia: progress in the last quarter of a century. *Neurology*.

Other Review Articles

1. Barrett, A.M., Buxbaum, L.J., Coslett, H.B., Heilman, K.M., **Hillis, A.E.**, Milberg, W.P. & Robertson, I.H. (2006) Cognitive rehabilitation interventions for neglect and related disorders: moving from bench to bedside in stroke patients. *Journal of Cognitive Neuroscience*, 18,1223-1236.

Invited Editorials

1. **Hillis, A.E.** (2002) Does the right make it right? Questions about recovery of language after stroke. *Annals of Neurology*, 51, 537.
2. **Hillis, A.E.** (2005). Tailoring treatment for aphasia to the right time after stroke. *International Journal of Therapy and Rehabilitation*, 8, 328-329.
3. **Hillis, A.E.** (2005). Can shift to the right be a good thing? *Annals of Neurology*, 58, 346.
4. **Hillis, A.E.** (2005). Progressive nonfluent aphasia versus semantic dementia: a matter of semantics. *Neurology India*.
5. **Hillis, A.E.** (2006). Lessons from the heart: urgent evaluation and treatment of cerebral ischemia. *Nature Clinical Practice Neurology*, 3, 117.
6. **Hillis, A.E.** (2006). The right place at the right time. *Brain*, 129, 1351-1352.
7. Ringman, J. & **Hillis, A.E.** (2006) Visualizing language deterioration in progressive aphasia. *Neurology*, 67, 1738 – 1739.

Book Chapters, Monographs:

1. **Hillis Trupe, A.E.** (1984). Reliability of rating spontaneous speech in the Western Aphasia Battery: Implications for classification. In R.H. Brookshire (Ed.), Clinical Aphasiology, 1984. Minneapolis: BRK Publishers, pp. 55-69.
2. **Hillis Trupe, A.E.** & Hillis, A.I. (1985). Paucity vs. verbosity: Another analysis of right hemisphere communication deficits. In R.H. Brookshire (Ed.), Clinical Aphasiology, 1985. Minneapolis: BRK Publishers, pp. 83-96.
3. **Hillis Trupe, A.E.** (1986). Effectiveness of retraining phoneme to grapheme conversion. In R.H. Brookshire (Ed.), Clinical Aphasiology, 1986. Minneapolis: BRK Publishers, pp. 163-171.
4. **Hillis, A.E.** & Caramazza, A. (1987). Model-driven treatment of dysgraphia. In R.H. Brookshire (Ed.), Clinical Aphasiology, 1987. Minneapolis: BRK Publishers, pp. 84-105.
5. **Hillis, A.E.** (1991). Effects of a separate treatments for distinct impairments within the naming process. In T. Prescott (Ed.), Clinical Aphasiology, Vol. 19. Austin, Texas: Pro-Ed, pp. 255-265.
6. **Hillis, A.E.** & Caramazza, A. (1990). The effects of attentional deficits on reading and spelling. In A. Caramazza (Ed.), Cognitive Neuropsychology and Neurolinguistics: Advances in Models of Cognitive Function and Impairment. London: LEA, pp. 289-310.
7. Caramazza, A. & **Hillis, A.E.** (1991). Modularity: A perspective from analysis of acquired dyslexia and dysgraphia. In R. Malatesha Joshi (Ed.), Written Language Disorders. Dordrecht, Holland: Kluwer Academic Publishers, pp. 71-84.
8. **Hillis, A.E.** & Caramazza, A. (1991). Category-specific naming and comprehension impairment: Theoretical and Clinical Implications. In T. Prescott (Ed.), Clinical Aphasiology, Vol. 20. Austin, Texas: Pro-Ed, pp. 191-200.
9. Caramazza, A. & **Hillis, A.E.** (1992). For a theory of rehabilitation. In A. Mazzucchi (Ed.), New Frontiers in Neurorehabilitation. Bologna, pp. 11-26.
10. **Hillis, A.E.** & Caramazza, A. (1992). The reading process and its disorders. In D. Margolin (Ed.), Cognitive Neuropsychology in Clinical Practice. New York: Oxford University Press, pp. 229-261.
11. **Hillis, A.E.** & Caramazza, A. (1994). Theories of lexical processing and theories of rehabilitation. In G. Humphreys & M.J. Riddoch, (eds.), Cognitive Neuropsychology and Cognitive Rehabilitation, Hillsdale, NJ: Lawrence Erlbaum Associates, pp. 449-482.
12. **Hillis, A.E.** (1994). Contributions from cognitive analyses. In R. Chapey (Ed.), Language intervention strategies in adult aphasia. Baltimore: Williams and Wilkens, pp. 207-219.

13. Caramazza, A., **Hillis, A.E.**, Leek, E. & Miozzo, M. (1994). The organization of lexical knowledge in the brain: Evidence from category- and modality-specific deficits. In L. Hirschfeld and S. Gelman (Eds.), Mapping the mind: domain specificity in cognition and culture. Cambridge: Cambridge University Press, pp. 68-84.
14. **Hillis, A.E.** & Caramazza, A. (1994). Category- and modality specific deficits in lexical processing. In M. Sugishita (ed.), New Horizons in Neuropsychology. Amsterdam: Elsevier, pp. 209-224.
15. **Hillis, A.E.** & Caramazza, A. (1995). "I know it but I can't write it: Selective deficits in long and short-term memory. In R. Campbell (ed.), Broken Memories: Neuropsychological Case Studies. London: Blackwell, pp. 344-365.
16. Young, M.A., **Hillis, A.E.**, Lenz, F.A. (1996). Sensory sequelae/ cranial central pain. In R. MacFarlane & D.G. Hardy (eds.), Outcome of Head, Neck, and Spinal Trauma: A Medicolegal Guide. Oxford: Butterworth Heinemann, pp. 81-90.
17. **Hillis, A.E.** (1998). What's in an Name? A Model of the Cognitive Processes Underlying Object Naming. In E. Vischbrink & R. Baastiaanse (eds.), Linguistic Levels in Aphasia. New York: Singular, pp. 35-48.
18. **Hillis, A.E.** (2000). Organization of the lexical system. In B.C. Rapp (ed.), The Handbook of Cognitive Neuropsychology. Philadelphia: Psychology Press, pp.185-210.
19. **Hillis, A.E.** & Bahr, D.C. (2000). Neurological and Anatomical Bases of Speech. In D.C. Bahr (ed.), Oral Motor Assessment and Treatment: Ages and Stages. Needham heights, MA: Allyn & Bacon, pp. 1-41.
20. Beeson, P. & **Hillis, A.E.** (2001). Comprehension and production of written words. In R. Chapey (ed.), Language Intervention Strategies in Aphasia and Related Neurogenic Communication Disorders (4th edition). Baltimore: Williams and Wilkens, pp. 572-604.
21. **Hillis, A.E.** (2001). Cognitive neuropsychological approaches to rehabilitation of language disorders. In R. Chapey (ed.), Language Intervention Strategies in Adult Aphasia (4th edition). Baltimore: Williams and Wilkens, pp.513-523.
22. **Hillis, A.E.** & Caramazza, A. (2003). Aphasia. In L. Nadel (ed.), Encyclopedia of Cognitive Neuroscience. London: Macmillan Reference Ltd. pp. 469-470.
23. **Hillis, A.E.**, & Breese, E. L. (2003). Aphasia recovery: stages and mechanisms. In A. Freddi (ed.) Stroke Today. Rome: San Raffaele Termini, pp. 288-297.
24. **Hillis, A.E.** (2003). Alexia. R. Kent (ed.), MIT Encyclopedia of Communication Disorders. Cambridge, MA: MIT Press., pp. 236-240.

25. **Hillis, A.E.** & Rapp, B.S. (2004). Cognitive and neural substrates of written language comprehension and production. In M. Gazzaniga (ed.), The New Cognitive Neurosciences (3rd Edition). Cambridge, MA: MIT Press, pp. 755-788.
26. **Hillis, A.E.** (2005). For a theory of rehabilitation: progress in the decade of the brain. In P. Halligan & D. Wade (eds.), Effectiveness of Rehabilitation of Cognitive Deficits. Oxford, UK: Oxford University Press; pp. 271-280.
27. **Hillis, A.E.** (2005). Application of magnetic resonance perfusion and diffusion imaging to the study of linguistics. In K. Brown (Ed.), Encyclopedia of Language and Linguistics, 2nd Edition. Oxford: Elsevier, pp. 469-470.
28. **Hillis, A.E.** (2005). Acute ischemic stroke. In RT Johnson, J Griffin & J McArthur (eds). Current Therapy in Neurologic Disease (7th edition). St. Louis, MO: Mosby. pp. 213-217.
29. Rosenberg, J.D., Gottesman, R. & **Hillis, A.E.** (2006). General medical management of stroke. In R. Wityk & R. Llinas (eds.), Diagnosis and Treatment of Stroke. American College of Physicians.
30. **Hillis, A.E.** & Chang, S. (2006). Medical intervention for acute aphasia. In P. Marien & E. Robert. Afasie en afasietherapie. Antwerpen, Belgium: Garant Uitgeverij (translated into Dutch).
31. **Hillis, A.E.** (2006). Language and frontal cortex. In B.L. Miller & J. Cummings (eds). The Human Frontal Lobes (2nd Edition). New York: The Guilford Press.
32. **Hillis, A.E.** (in press). Alexia and agraphia. In O. Godefroy & J. Bogousslavsky (Eds.), The Behavioural and Cognitive Neurology of Stroke. Cambridge: Cambridge University Press.
33. **Hillis, A.E.** (in press). Imaging acute aphasia. In B. Schaller (Ed.), State-of-the-Art Imaging in Stroke: The Present State and Implications for the Future. Basel: Karger Publishers.
34. **Hillis, A.E.** (in press). Cognitive processes underlying reading and writing and their neural substrates. In B. Miller & G. Goldenberg (Eds.). Neuropsychology and Behavior, A Volume in *Handbook of Clinical Neurology Series*, (3rd edition, edited by M. Aminoff, F. Boller, & D. Swaab). Amsterdam: Elsevier.
35. Shapiro, K., **Hillis, A.E.**, & Caramazza, A. (in press). The semantic representation of verbs. In J. Hart (ed.), The neural basis of semantic memory. Cambridge: Cambridge University Press.
36. **Hillis, A.E.** (in press). Neural correlates of the cognitive processes underlying reading: Evidence from Magnetic Resonance Perfusion Imaging. In P. Cornelissen, P. Hansen, M. Kringelbach & K. Pugh (eds), The neural basis of reading. Oxford: Oxford University Press.

37. Alexander, M. & **Hillis, A.E.** (in press). Aphasia. In B. Miller & G. Goldenberg (Eds.). Neuropsychology and Behavior, A Volume to *Handbook of Clinical Neurology Series*, (3rd edition, edited by M. Aminoff, F. Boller, & D. Swaab). Amsterdam: Elsevier.

Edited Book:

- Hillis, A.E.** (2002). Handbook of Adult Language Disorders: Integrating Cognitive Neuropsychology, Neurology, and Rehabilitation. Philadelphia: Psychology Press. (460 pages).

Edited Special Issues:

- Hillis, A.E.** (2002). New techniques for identifying the neural substrates of language and language impairments. Special issue of *Aphasiology* (sold separately as a book by Psychology Press).

- Hillis, A.E.** (2004). Progress in cognitive neuroscience research on dysgraphia. Special issue of *Neurocase*. Vol 10, issue 2.

Edited Supplement:

- Kertesz A, **Hillis A**, Munoz DG. (2003). Frontotemporal degeneration and Pick's disease. *Annals of Neurology*; 54, Suppl 5.

Invited Book Reviews:

- Hillis, A.E.** (2001). Review of *Brain Mapping: The Systems and Brain Mapping: The Disorders*. *Annals of Neurology*, 49, 551-552.

- Hillis, A.E.** (2003). Review of *Stroke Syndromes and Unusual Causes of Stroke*. *Neuropsychiatry, Neuropsychology, and Behavioral Neurology*, 15, 156-157.

- Hillis, A.E.** (2003). Review of *The Cognitive and Neural Bases of Spatial Neglect*. *Annals of Neurology*, 54, 844.

- Hillis, A.E.** (2004). Review of *The Parietal Lobes*. *Annals of Neurology*, 56, 605.

- Hillis, A.E.** (2005). Review of *Human Brain Function*. *Annals of Neurology*, 58, 343-344.

PUBLISHED ABSTRACTS (> 100) available upon request

EXTRAMURAL SPONSORSHIP

Completed

1/1/92-12/31/95 “Mechanisms Underlying Disorders of Naming”

R01 NS19330

Sponsor: NIH

Total direct costs: \$214,528

Current year direct cost: n/a

PI: A. Caramazza

Role: Co-Primary Investigator (25% effort)

1/01/93-6/39/93 “Deterioration of Specific Language Functions in Alzheimer’s Disease,”
(Medical Student Research Grant)

No identification number

Sponsor: Hartford Foundation/American Federation on Aging

Total direct costs: \$2000

Current year direct cost: n/a

PI: A.E. Hillis (Mentor: C. Lyketsos)

Role: Primary investigator

4/1/93 – 7/31/00 “Cognitive-Linguistic Mechanisms of Writing Disorders”

RO1 NS22201

Sponsor: NIH/NINDS

Total direct costs: \$249,416

Current year direct cost: n/a

PI: A. Caramazza

Role: Consultant

2/00-1/01 “Perioperative strokes detected by DWI MR in high risk patients undergoing CABG”

Sponsor: SmithKline-Beechum

No identification number

Total direct costs: \$100,000

Current year direct cost: n/a

PI: G. McKhann

Role: Investigator

9/10/96-7/30/00 “Mechanisms of Neglect Dyslexia”

RO1 NS34073

Sponsor: NIH/NINDS

Total direct costs: \$225,000

Current year direct cost: n/a

PI: A. Caramazza

Role: Consultant

5/1/00-4/30/04 “Reperfusion Therapy in Acute and Subacute Stroke: Selection of Candidates
Using Magnetic Resonance Perfusion and Diffusion Imaging”

Clinical Hypotheses in Neuroscience Program, No identification number

Sponsor: Charles A. Dana Foundation

Total Direct Costs: \$100,000

Current year direct cost: n/a

PI: A.E. Hillis

Role: Primary Investigator

7/1/99 - 6/30/02 "Neural Basis for Anomia and Neglect in Hyperacute Stroke"

K23: DC00174-01,

Sponsor: NIH/NIDCD

Total Direct Costs: \$300,000

Current year direct cost: n/a

PI: A.E. Hillis

Role: Primary Investigator

1999-2004 "Limb Apraxia: Neural Mechanisms in Left and Right Hemispheric Stroke"

VA Rehabilitation Research and Development Merit Review Grant E2121

Sponsor: Veteran's Administration

Total Direct Costs: \$202,000

Current year direct cost: n/a

PI: A. Foundas

Role: Consultant

7/1/99 - 6/30/01 "Identifying the neural basis of cognitive deficits in acute stroke with DWI and PWI"

National Stroke Association Research Fellowship (no identification number)

Sponsor: National Stroke Association

Total Direct Costs: \$50,000

Current year direct cost: n/a

PI: A.E. Hillis

Role: Primary investigator

Dates 9/5/99-5/31/04 "Intraoperative Hypothermia for Aneurysm Surgery Trial 2"

RO1 NS038554

Current year direct cost: n/a

Sponsor: NIH/ NINDS

PI: M.Todd

Role: Co-investigator

Dates 9/25/98-7/31/03 "Warfarin vs. Aspirin for Symptomatic Intracranial Disease"

RO1 NS36643

Sponsor: NIH/ NINDS

Current year direct cost: n/a

PI: M.Chimowitz

Role: Co-investigator

Current:

7/1/02- 6/30/07 (competitive renewal approved for funding 7/1/07 – 6/30/12)
“Neural Basis for Lexical Processes in Hyperacute Stroke”

5R01 DC005375-05

Sponsor: NIH/NIDCD

Total direct cost: \$1,411,427

Current annual direct cost: \$250,025

PI: A.E. Hillis

Role: Primary Investigator

7/1/04 – 6/30/08 “Neural Basis of Unilateral Spatial Neglect”

5R01NS047691-03

Sponsor: NIH/NINDS

Total direct cost: \$1,674,518

Current annual direct cost: \$323,196;

PI: A.E. Hillis

Role: Primary Investigator

8/1/03-7/31/06 “Neurological Predictors of Aphasia Recovery”

R03 DC005915

Sponsor: NIH/ NIDCD

Total Direct Costs \$289,000

PI: J. Fridriksson

Role: Consultant

6/1/03-5/30/07 “Induced Hypertension for Acute Ischemic Stroke”

R01 NS42607-01

Sponsor: NIH/NINDS

Total direct costs: 948,138

Current annual direct cost: \$316,046

PI: R. Wityk

Role: Investigator

6/1/04 – 5/30/09 “Neuroimaging the Treatment and Recovery of Written Language”

RO1 DC006740

Sponsor: NIH/NIDCD

PI: B. Rapp

Total direct costs: \$2,112,435

Current annual direct cost: \$422,487

Role: consultant

8/15/05 - 5/31/09 “Lexical Processing in Word Production”

RO1 DC006242-03

Sponsor: NIH/NIDCD

Total direct costs: \$800,000

Current annual direct cost: \$200,000

P.I.: M. Miozzo

Role: consultant

7/1/04 – 6/30/07 “Development of a Diffusion- Clinical Perfusion Mismatch Scale to Guide Management in Ischemic Stroke”

K12 RR17627 (Institutional K12)

Sponsor: NIH

Total direct costs:\$3,357,854

Current direct costs: \$863,421

Project PI: R. Gottesman (Program PI: F. Adkinson)

Role: Mentor

7/1/05- 6/30/08 “Phonological Processing Impairments after Acute Stroke in Children and Young Adults”

K12 RR17627 (Institutional K12)

Sponsor: NIH

Total direct costs: \$3,357,854

Current direct costs: \$863,421

Project PI: L. Jordan (Program PI: F. Adkinson)

Role: Mentor

7/1/05- 6/30/09 “Electrocorticographic Studies of Human Cognition”

R01 NS40596

Sponsor: NIH/ NINDS

Total direct costs: \$925,000

Current annual direct costs: \$231,250

PI: N. Crone

Role: Investigator

5/1/05-3/28/10 “The Biology of Human Cortical Pain-related Activity”

R01 NS38493

Sponsor: NIH/NINDS

Current annual direct costs: \$314,442

PI: F. Lenz

Role: Co-Investigator

3/1/07-2/28/12 “Anosognosia for Hemiplegia: Neural Basis, Psychological Correlates, and Recovery.”

1K23HD052774-01A1

Sponsor: NIH

PI: K. Kortte

Role: Mentor

7/1/06-4/30/11 “Dissociating components of the attentional network in neglect.”

1R01NS054266-01A1

Sponsor : NIH/NINDS

PI: C. Rorden

Role: Consultant

EDUCATIONAL ACTIVITIES:

TEACHING:

Classroom instruction

Lecturer, Neurology Resident Noon Lecture Series

Annual Lectures: Stroke Syndromes (annually since 8/2000); Delirium (annually since 7/02); Differential Diagnosis of Dementia I and II (annually since 9/03); Apraxia and Agnosia (4/02, 4/04, 4/05); Interpreting Neuropsychological Tests (1/05); Alexia, Agraphia, and other Cognitive Syndromes (annually since 2/04); Starting a Career in Academic Neurology (6/06, 2/07)

Lecturer, Physical Medicine and Rehabilitation Lecture Series

Lectures: Dementia (10/05, 4/07), Neuroimaging (11/05)

Lecturer, Medical Psychology Seminar Series

Lectures: Subcortical Aphasia (9/03), Hemispatial Neglect (3/05), Mechanisms of Aphasia Recovery (10/06)

Lecturer, Medical Student Neurology Clerkship Lecture Series (Cognitive Disorders, every 4 week session, since 2002)

Lecturer, Medical Student Neuroscience Course (Aphasia; annually since 3/01)

Lecturer, Neuroscience and Cognition II, Dept. of Neuroscience. (Neuroanatomy of Language, Annually since 1/01)

Lab Instructor, Medical Student Neurology and Neuropathology Course (2/00, 2/01, 2/02, 2/03)

Lecturer, Johns Hopkins School of Nursing (neurological exam 5/02, 5/03; communication disorders, 4/05, 4/06, 4/07)

Lecturer, Department of Radiology; Neuroradiology Fellows Lecture Series (Perfusion-weighted imaging to study cognitive deficits and recovery)

Clinical instruction

“Chairman’s Rounds”, Johns Hopkins Bayview Medical Center, Neurology (bimonthly)

Morning report, Neurology residency (2005-2006)

Instructor/Preceptor, Medical Student Clinical Skills Course (annually, 2/99-2/07)

Instructor/Preceptor; Medical Student Clerkship, Outpatient Neurology Clinic (weekly, 1999-present)

CME Instruction

Cerebrovascular Topics: Focus on Acute Stroke Treatment. JHSOM. March, 2001. Lecturer

Behavioral Neurology Course. Harvard Medical School; October, 2001; Lecturer

Second Annual Residential Course for Young Neurologists: Restoration of Function in Neuropsychology. Alviano, Italy; June, 2001. Lecturer

Behavioral Neurology Course. Harvard Medical School; November, 2002; Lecturer

3rd International Congress Genetics and Regeneration in Neuroscience; Terni, Italy; June,

2002. Lecturer.

11th Annual Update on The Treatment Of Alzheimer's and Related Disorders: Defining the Standard of Care. JHSOM; March, 2005. Lecturer

Looking Forward: Tomorrow's Neurology. JHSOM; November, 2005. Lecturer

MENTORING:

Research Advisees (medical and pre-medical students and residents):

Elizabeth Tuffiash, BS (medical student) June, 2000 -2002.

First authored abstract pre sented at *Congress of Neurologic Surgeons*, September, 2002.

Article: **Tuffiash E**, Tamargo R, & Hillis AE. *Stroke* 2003; 34:2195-2199.

John Hixson, MD (Medical Student; now at U. of Pennsylvania) September, 2000 – Nov., 2001.

First authored abstract presented at *The Annual Meeting of the American Academy of Neurology*; April, 2002.

Sang Oh, MD (Medical Student; now at University of Maryland) September & Oct., 2001.

First authored abstract presented at *American Academy of Neurology*; April, 2002. Co-author of article in *Annals of Neurology*.

Anja Duinkerke, MD (medical Student, Erasmus University Medical School). April-Sept. 2002.

First authored abstract presented at *Congress of Neurological Surgeons*, 2003

Article: **Duinkerke A**, Williams M, Rigamonti D, Hillis AE, *Cognitive and Behavioral Neurology*, 17(3):179-184.

Jared Medina, BS (doctoral student in Cognitive Science) Sept., 2002 - June, 2003.

First authored abstracts presented at *The Annual Meeting of the American Academy of Neurology*; April, 2003 and Cognitive Neuroscience Society April 2003.

(Journal article under review)

Raquel Charles, MD (medical student; currently fellow in Medicine) October 2002-May 2003.

Article: **Charles R** & Hillis AE, *Behavioural Neurology*, 2005, 16, 15-23.

Lora Reineck, BS (medical student) May 2003-August 2003.

Recipient of American Heart Association Medical Student Research Award. First authored abstract presented at the *International Stroke Conference*, February 2003.

Article: **Reineck L**, Agarwal S, & Hillis AE, *Neurology*, 2005, 64, 828-833.

Elisabeth Breese Marsh, BS (medical student) January-August, 2003; May-August 2004.

Recipient of American Heart Association Medical Student Research Award.

First authored abstract presented at the International Stroke Conference, February 2005

First authored articles:

Breese E & Hillis AE *Brain and Language*, 89, 3-8, 2004;

Marsh E.B. & Hillis AE. *Neurocase*, 11, 325-318, 2005.

Marsh, E.B. & Hillis, A.E. *Progress in Brain Research*, in press

Marsh, E.B & Hillis, A.E. *Cortex*, in press

Shannon Chang (pre-medical student; currently at Baylor Medical School) August 2004-August 2005. First authored abstract presented at the *American Academy of Neurology*, 2003.

Article: **Chang S**, Agarwal S, Williams MA, Rigamonti D, Hillis AE. *The Neurologist*, 12, 39-42, 2005.

Vivek Prabhakaran, MD, PhD (neurology and neuroradiology resident) July 2003- present
First authored abstracts presented at *Cognitive Neuroscience Society, 2004, Society for Neuroscience, American Neurological Association.*

Article: Prabhakaran, V., Raman, S., Grunwald, M., Mahadevia, A., Hussain, N., Lu, H., Van zijl, P.C.M., Hillis, A.E. Neural substrates of word generation during stroke recovery: the influence of cortical hypoperfusion. (2007). *Behavioral Neurology*, 18, 45-52.

Lynda Ken (pre-medical student; currently at U. Michigan School of Medicine) July 2003-2005.

First authored abstract presented at the *American Academy of Neurology*, 2005. (co-author on *Annals of Neurology* article, 2003)

Lisa Philipose, BS. (medical student) 2004-2005.

Winner of Ehrlich Award, Young Investigators' Day. JHUSOM.

First authored abstracts presented at *Society for Neuroscience, 2004, International Stroke Conference* in February, 2006 and *American Academy of Neurology* in April, 2006.

Article: Philipose, L.E., Alphas, H., Prabhakaran, V., **Hillis, A.E.** (2007). Testing conclusions from functional imaging of working memory with data from acute stroke. *Behavioural Neurology*, 18, 37-43.

Revised manuscript under review, *Annals of Neurology*.

Melissa Newhart, BA (graduate student) 2004-2006

Article: Newhart, M., Ken, L., Kleinman, J.T., Heidler-Gary, J., & **Hillis, A.E.** (2007). Neural networks essential for naming and word comprehension. *Cognitive and Behavioral Neurology*, 20, 25-30.

Heidler-Gary, J. (graduate student) 2000-2006

Article: Heidler-Gary, J., Gottesman, R., Newhart, M., Chang, S., Ken, L. Hillis, A.E. (in press).

Utility of behavioral vs. cognitive measures in differentiating between subtypes of frontotemporal Lobar Degeneration and Alzheimer's Disease. *Dementia and Geriatric Cognitive Disorders*.

Revised manuscript under review, *ALS*.

Co-author on numerous articles; first-authored presentations at Clinical Aphasiology Conference and international conferences on Amyotrophic Lateral Sclerosis and on Frontotemporal Dementia.

Pushpa Raja, BS (medical student) Summer 2005.

First authored abstract presented at the *International Stroke Conference* in February, 2006

Sachin Agarwal, MD, MPH (graduate student) 2004-2005

First authored abstracts presented at 30th *International Stroke conference*

Article: Reineck L, **Agarwal S**, Hillis A.E. *Neurology*. 2005; 64(5): 828-33.

Leah Gold (undergraduate student). Summer 2005.

First authored abstract presented at the *American Academy of Neurology* in April, 2006;
manuscript under review

Jonathon Kleinman (undergraduate premedical student). 2004-2006.

First authored abstracts presented at the *American Academy of Neurology* in April, 2006 and
April 2007; and American Heart Association February 2007.

Article: Kleinman, J.T., Newhart, M., Davis, C., Heidler-Gary, J., Gottesman, R. &
Hillis, A.E. (in press). Right hemispatial neglect: frequency and characterization
following acute left hemisphere stroke. Brain and Cognition.

Cameron Davis (post-baccalaureate student) Co-author on numerous articles; first-authored
presentations at Clinical Aphasiology Conference. Article: Davis et al. (2006) Speech and
language functions that depend on Broca's Area. Brain and Language, 99, 142-143.

Thesis Committees:

Fero Kuminiak, PhD in Cognitive Science. Dissertation committee, July, 2001.

Matthew Goldrick, PhD in Cognitive Science. Dissertation committee, September, 2002.

Adam Buchwald, PhD in Cognitive Science, Dissertation committee, September, 2005

Marlis Gonzalez-Fernandez, GTPCI PhD candidate in the Department of PM & R 2005-2006

Rebecca Gottesman, GTPCI PhD candidate in the Department of Neurology, 2005-2007

Lori Jordan, GTPCI PhD candidate in the Department of Neurology, 2006-2008

Thesis Examiner: Ruth Brundson, PhD, Macquarie University, Sydney, Australia, April, 2005

Thesis Examiner: Britta Biedermann, PhD, Macquarie University, Sydney, Australia, 2006

Post-Doctoral Fellows:

Rebecca Gottesman, MD (2004-2006)

Awarded institutional K12, then CSA under my mentorship; K23 submitted

Lori Jordan, MD (2005-2007)

Awarded institutional K12 under my mentorship

Andrew Lee (2006-2007)

Lauren Cloutman (2007-2008)

Training Grant Participation

K12 RR17627 (PI: Franklin Adkinson). Role: Faculty mentor 2004-2007

K12 RR17627 (PI: Franklin Adkinson). Role: Faculty mentor 2005-2008

Post-baccalaureate Research Education Program. Role: Faculty mentor 2005-2006

EDITORIAL ACTIVITIES:

Co-Editor, *Neurocase*, 3/2007-
Co-Editor in Chief, *Behavioural Neurology*, 2004-present
Section Editor, *Nature Clinical Practice Neurology*- 2006-present
Associate Editor, *Annals of Neurology*, 2002-2005
Associate Editor, *Language and Cognitive Processes*, 2000-2006
Action Editor, *Cognitive Neuropsychology*, 1997-2006.
Associate Editor, *American Journal of Speech Language Pathology*, 2004-2006

Other Editorial Boards:

Aphasiology 2000- present
Brain and Language, 1999-present
Neurocase, 2003-present
Future Neurology, 2005-present
Nature Clinical Practice Neurology (Advisory Board) 2005-present

Guest peer reviewer, journals:

Acta Neurologica Scandinavica
American Journal of Speech Language Pathology
Annals of Neurology (1999-2002; 2006-)
Aphasiology (1990-2000)
Brain
Brain and Language (1995-1999)
Brain and Cognition
Cognition
Cognitive Neuropsychology (1992-1997)
Cognitive and Behavioral Neurology
Cortex
European Journal of Neurology
Journal of Cerebral Blood Flow and Metabolism
Journal of Cognitive Neuroscience
Journal of Neurology
Journal of Neuroscience
Journal of Neurology, Neurosurgery, and Psychiatry
Language and Cognitive Processes (1995-2000)
Multiple Sclerosis
Neurocase (1995-2002)
NeuroImage
Neurology
Neurology India
Neuropsychological Rehabilitation
Neuropsychologia
Neuropsychology
Neurorehabilitation and Neural Repair

Stroke

CLINICAL ACTIVITIES:

SPECIALTY CERTIFICATION and LICENSURE:

American Board of Neurology and Psychiatry: Certificate Number: 49324
Maryland Medical License Number: DOO54472

SERVICE RESPONSIBILITIES:

Current:

Attending Neurologist, Clinical Stroke Service, 1 month per year; additional weekend and evening acute stroke call
Inpatient Cognitive Neurology Consultations, Acute Stroke Consultations (4-6/ month)
Cognitive Disorders and Cerebrovascular Disease Clinic (half day per week)

Previous:

Attending Neurologist, Neurology Consultation Service (2 weeks per year)
Attending Neurologist, Inpatient Neurology Service (2-4 weeks per year)

ORGANIZATIONAL ACTIVITIES:

INSTITUTIONAL ADMINISTRATIVE APPOINTMENTS:

Deputy Director (Executive Vice Chair), Department of Neurology
Neurology Residency Program Director (July 2005-present)
Co-Director, Division of Cerebrovascular Disease (July 2005-present)
Appointments and Promotions Committee (Neurology and Neurosurgery Department; 2001- present; Co-Chair 2006-present)
Johns Hopkins Medicine Committee on Education Value and Reward (2007-present)
Johns Hopkins Medicine Diversity Committee; Subcommittee on Talent (2006-present)
Advisory Board of *Hopkins Medicine* (2005-present)
Radiology Advisory Committee (2006-present)
Working Group on Human Trials of Human Stem Cell Based Interventions (2004-2007)
Medical School Council, Chair (2004-2005, 2005-2006); Vice-Chair (2003-2004); Agenda Committee (2002-2006);
Advisory Board of the Medical Faculty (2003-2006); Agenda Committee (2004-2006)
Committee on Clinician Educators, and Subcommittee on Promotion of Clinician Educators (2004-2006)
Strategic Planning Committee: Cardiovascular and Cerebrovascular Diseases (2003-2006)
Search Committee: Director of Neuroscience (2004-2005)
LCME Institutional Self-Study Task Force,
Steering Committee and Faculty Subcommittee (2004-2005)
Medical School Admissions Committee (2002-2005)
Neurology Residency Selection Committee (1999-2005; Chair 2001-2002)
Brain Injury Recovery Center, Organizational Committee (2000-2002)

PROFESSIONAL SOCIETIES AND LEADERSHIP:

World Federation of Neurology- Research Group on Aphasia and Cognitive Disorders;
 Chair, 2004-2008.
 F1000 Medicine (Faculty 1000 Medicine) Evaluation Board
 American Neurological Association; Scientific Program Committee (2004-2006)
 American Heart Association Stroke Council; Abstract Reviewer for the International Stroke
 Conference (2003-2007); Scientific Session Chair, 2005, 2006
 Academy of Aphasia, Nominating committee (2002-2004; Chair, 2004)
 Clinical Aphasiology Conference; Program committee 1985, 1992;
 Program Chair 2003; Conference Chair 2004; Steering Committee (2003-present)
 American Academy of Neurology (and Section on Behavioral Neurology)
 Presenter of Scientific Highlights: Behavioral Neurology (2002); Course faculty 2002,
 2003, 2005, 2006, 2007; Abstract Reviewer for Annual Meeting (2003)
 Scientific Session Chair (2004)
 XXIInd International Symposium on Cerebral Blood Flow, Metabolism, and Function
 Abstract Reviewer
 Behavioral Neurology Society
 Operation Stroke, Emergency Medical Service committee & Medical Advisory committee
 Cognitive Neuroscience Society
 Society for Neuroscience
 American Congress of Rehabilitation Medicine,
 Committee on Legislation (1985-89); Committee on Reimbursement (1990-92)
 Academy of Neurologic Communication Disorders and Sciences,
 Professional Affairs (1989), Professional Practices Committee (1990-92)
 National Aphasia Association, Chair of Public Relations for Maryland (1988-1991)

ADVISORY COMMITTEES and REVIEW GROUPS:

Grant Review Committees

American Speech and Hearing Foundation - 1988
 National Science Foundation - outside grant reviewer 1997, 1998, 2003
 Cognitive Neuroscience Panel, 2002
 Charles A. Dana Foundation - 1999- present
 Medical Research Council (U.K.), ad hoc grant reviewer – 2003, 2004, 2005, 2006
 Wellcome Trust (U.K.), ad hoc grant reviewer 2002, 2003, 2004, 2005, 2006
 Leverhulme Trust (U.K.), ad hoc grant reviewer 2003, 2004
 Biotechnical and Biological Sciences Research Council (U.K.), ad hoc grant reviewer
 2004
 American Heart Association, Bugher Peer Review Committee – 2005
 Israel Science Foundation (Israel) – 2005
 American Stroke Association, Brain3 Peer Review Committee - 2006

NIH Study Sections:

Center for Scientific Review, Study Section, Biobehavioral and Behavioral Processes 3- 2002

(ad hoc member)
Center for Scientific Review, Study Section, Language and Communication (2003-2007)
(standing member)
Center for Scientific Review, Special Emphasis Panel - July 1999
Center for Scientific Review, Special Emphasis Panel, ZRG1 BBBP - December, 2000
Center for Scientific Review, Special Emphasis Panel, ZDC1 SRB - November, 2001
Center for Scientific Review, ZAG1 SRC(99)- June, 2003

RECOGNITION:

Awards, Honors:

Alpha Omega Alpha
Phi Beta Kappa
HealthSouth Special Achievement Award for Outstanding Clinical Services
The Sol Goldman Award, 1993-94 (for medical students in geriatric medicine)
Maryland Speech-Language-Hearing Association Award for Outstanding Contributions
Intern of the Year, 1995-96, Greater Baltimore Medical Center
American Neurological Association, Derek Denny-Brown Young Neurological Scholar Award,
2003
American Academy of Neurology, Norman Geschwind Prize in Behavioral Neurology, 2004
America's Top Doctors 2005

INVITED LECTURES, PANELS:

Local and National Invited Lectures (Keynote Addresses, Visiting Scholar Lectures, Grand Rounds, etc.)

Recent Advances in Cognitive Remediation Techniques. *Rehabilitation Update*, Florence, S.C.;
October, 1986.

Cognitive and Communicative Rehabilitation Following Traumatic Brain Injury. *Conference on
Rehabilitation of the Head Injured Adult*. Florence, S.C.; June, 1988.

Studies on Remediation of Neurogenic Writing Deficits. *Annual Convention of the Maryland
Speech and Hearing Association*, Frederick, MD; March 1989.

Some aspects of language processing revealed by recent aphasia research. *Distinguished
Speakers Lecture Series*, Loyola College, Baltimore, MD; October, 1989.

Single subject studies of aphasia. *Aphasia Practice in the 90's*, National Rehabilitation Hospital,
Washington D.C.; June, 1990.

For a Theory of Remediation of Cognitive Deficits. *NIDCD Workshop on Treatment of Aphasia*,
Bethesda, MD; June, 1991.

Evaluation and Treatment of Reading Disorders Consequent to Brain Injury. *Sixth National Traumatic Brain Injury Symposium*, Baltimore, MD; March, 1991.

The Application of Cognitive Neuropsychological Research to the Assessment and Treatment of Aphasia. *The New York Speech-Language-Hearing Association Convention*. New York; April, 1994.

What More Can We Learn about Language? Guest lecture for the Hooding Ceremony of the *Communication Sciences and Disorders Program, Massachusetts General Hospital*. Boston, MA; June, 1994.

Where Do Semantic Errors Come From, and Where Do They Go? *Understanding Language and Cognition through Damaged Brains. Special Colloquium, Harvard University*. Boston, MA, April, 1997.

What's Left? What Studies of Hemispatial Neglect Tell Us about the Neural Representations of Space. *Grand Rounds, National Rehabilitation Hospital*, Washington, DC, November, 1999.

Treatment of Cognitive Impairments in Acute Stroke. *Conjoint Clinic, Johns Hopkins Hospital*; Baltimore, MD; January, 2000.

The heterogeneous syndrome of hemispatial neglect. *District of Columbia Speech and Hearing Association Winter Workshop*; Washington, DC; February, 2000.

Converging pathways toward understanding how language breaks down and recovers after stroke. *Voyages and Discoveries Series*, Johns Hopkins University, Krieger School of Arts and Sciences; Baltimore, MD; March, 2000.

Recent Advances in Stroke Prevention and Management. *Medical Grand Rounds*; Suburban Hospital, Washington, DC, June, 2000.

Regions of Hypoperfused but Viable Tissue in Acute Stroke: Implications for Intervention and Neurobehavioral Theory. *Johns Hopkins Department of Neurology 30th Birthday Symposium*. Baltimore, MD, June, 2000

Salvaging Brain Tissue. *Psychiatry Grand Rounds*; Springfield Hospital Center, Sykesville, MD, August, 2000.

New Treatments for Acute Stroke. *Noon Lecture Series of the Family Practice Residency Program; University of Maryland School of Medicine*; Baltimore, MD February, 2001.

Cortical Organization of the Language: Evidence from MR Perfusion and Diffusion Imaging. *Clinical Neuroscience Research Series*. Johns Hopkins University School of Medicine. Baltimore, MD; February, 2001.

- Selective Language Impairments Associated with Regions of Poor Perfusion in Acute Stroke. *Institute for Research in Cognitive Science; University of Pennsylvania School of Medicine*. Philadelphia, PA; March, 2001.
- Differential Diagnosis of Alzheimer's Disease. *Pfizer Preceptorship: Alzheimer's Disease Educational Program*. Johns Hopkins University School of Medicine; Baltimore, MD; March, 2001.
- Stroke Treatment: Future Directions. *Cerebrovascular Topics: Focus on Acute Stroke Treatment*. Johns Hopkins University School of Medicine; March, 2001.
- Conducting Research in a Clinical Setting. *Annual Convention of the Maryland Speech-Language and Hearing Association*. Towson, MD; May, 2001.
- Behavioral Neurology and the Practicing Neurologist: Aphasia. Dinner Seminar, *American Academy of Neurology*, Philadelphia, May, 2001.
- New Treatment of Acute Stroke: Insights Toward Understanding Brain-language Relationships. *Biennial meeting of the Alumni Association*. Johns Hopkins University School of Medicine. June, 2001.
- Aphasia and the Brain: New Insights from Acute Stroke Treatment. *Medical Grand Rounds, Greater Baltimore Medical Center*; Baltimore, MD; October, 2001.
- Neural Basis of Language Deficits in Acute Stroke: Evidence from MR Perfusion and Diffusion Imaging. *Behavioral Neurology Course*. Harvard Medical School; Boston, MA; October, 2001.
- Improving Language by Increasing Perfusion in Acute Aphasia Due to Stroke. *Behavioral Neurology Course*. Harvard Medical School; Boston, MA; October, 2001.
- Neuroimaging in Aphasia Research. *Annual Convention of the American Speech-Language and Hearing Association*. New Orleans, November, 2001.
- Subcortical Aphasia and Neglect: the Role of Cortical Hypoperfusion. *Clinical Neuroscience Research Series*. Johns Hopkins University School of Medicine. Baltimore, MD; January, 2002.
- New Neuroimaging Techniques to Study Language. *Visiting Scholar*, Towson University; Baltimore, MD; February, 2002
- Disturbances in Cerebral Blood Flow and Language Function. *Visiting Scholar*, City University of New York; New York; March, 2002
- Agnosia and Apraxia. *Brain Injury Association of Maryland Annual Education Conference*. Baltimore, MD; March, 2002.

Advanced Neuroimaging of Brain Injury. *Brain Injury Association of Maryland Annual Education Conference*. Baltimore, MD; March, 2002.

Study of the Neuroanatomical and Neurophysiological Correlates of Language Processing in Brain Damaged Individuals Using Neuroimaging Techniques. *NIDCD workshop entitled, "The Role of Neuroimaging in the Study of Aphasia Recovery and Rehabilitation: Research Needs and Opportunities"* Bethesda, MD; May, 2002.

The Amazing Brain: Understanding Aphasia and Recovery. *Third National Conference of the National Aphasia Association*. June, 2002.

Sharpening the Image: Advances in Neuroimaging to Investigate Language and Aphasia. *5th Annual Conference on Medical Speech-Language Pathology*. MGH Institute for Health Professionals, Boston, MA; October, 2002.

Acute aphasia: a window on the neural basis of language processing. *Neurology Grand Rounds*, University of Maryland School of Medicine; Baltimore, MD; October, 2002.

Early Medical Intervention for Aphasia. *Behavioral Neurology Course*. Harvard Medical School; Boston, MA; November, 2002.

Neural Correlates of Unilateral Spatial Neglect. *Cognitive Neuroscience Colloquium Series*. Baylor University Medical Center. Houston, TX. January, 2003.

Neural Substrates of Lexical Processes. *Cognitive Science Lecture Series*. Rice University. Houston, TX. January, 2003.

Highlights of Behavioral Neurology. *Annual Meeting of the American Academy of Neurology*. Honolulu, HI. April, 2003.

Neural Correlates of Hemispatial Neglect. *Institute for Research in Cognitive Science*. University of Pennsylvania. Philadelphia, PA. April, 2003

Developing a theory of cognitive rehabilitation. *Visiting Scholar*, Towson University. Towson, MD. April, 2003.

Cognitive and neural substrates of written language comprehension and production. *Summer Institute in Cognitive Neuroscience*. Tahoe, CA. July, 2003.

Broca's area and beyond: a new twist on localization of cognitive functions. *The Derek Denny-Brown Lecture, The 128th Annual Meeting of the American Neurological Association*. San Francisco, CA. October, 2003.

Localization of Language Functions in the Brain Using Diffusion and Perfusion Imaging. *Visiting Scholar*, Tulane University School of Medicine; New Orleans. November, 2003.

Space: the Next Frontier for Neuroimaging. *Neurology Grand Rounds, Johns Hopkins University School of Medicine*. Baltimore, MD. December, 2004.

Evaluating the Neural Basis of Cognitive Processes with Magnetic Resonance Perfusion Imaging. *Annual Meeting of the International Neuropsychological Society*. Baltimore, MD. February, 2004.

Lesion-Deficit Association Studies: Don't throw the baby out with the bath water. *Annual Meeting of the Behavioral Neurology Society*. San Francisco, CA. April, 2004.

Pharmaceutical adjuncts to aphasia therapy. *Cognitive Rehabilitation Research: Mapping Theory to Treatment Intervention*; Philadelphia, PA; May, 2004.

The dominant role of the nondominant hemisphere in computing spatial representations for reading and writing. *Clinical Aphasiology Conference*. Deer Valley, Utah; May 2004.

Diffusion Tensor Imaging and Perfusion MRI in acute stroke. *White Matter in Cognitive Science: Advances in Diffusion Tensor Imaging and Its Applications*. New York Academy of Sciences. August, 2004.

Improving Cognitive Function with Neurosurgery: What Do the Effects Tell Us about the Brain? *Neurosurgery Grand Rounds*. Johns Hopkins Hospital, Baltimore, MD.

On the Brink: Recovering from Stroke. *A Woman's Journey 2004*. Baltimore, MD; November, 2004.

Focal Dementia Syndromes: What do they reveal about the brain? *Neurology Grand Rounds*, George Washington University School of Medicine. Washington, DC. December, 2004.

New Imaging in Stroke: Applications in Stroke Intervention and Cognitive Science. *Visiting Scholars Program*. Temple University/ Moss Rehabilitation Institute. January, 2005

Imaging Aphasia Recovery. *Neurology Grand Rounds, Johns Hopkins University School of Medicine*. Baltimore, MD. March, 2005.

Differentiating Alzheimer's from Non-Alzheimer's Dementia. *11th Annual Update on The Treatment Of Alzheimer's and Related Disorders: Defining the Standard of Care*. Johns Hopkins; March, 2005.

New Insights about Language and Stroke Recovery from Imaging Aphasia. *7th Annual National Meeting on Rehabilitation Psychology*. Baltimore, MD. April, 2005.

Recovery from Stroke: Phases and Brain Bases. *Kick-off Lecture for the Grover Lecture Series*, College of Health and Human Services, Ohio University. Columbus, Ohio; May, 2005

Localizing Function in the Brain: A New Twist on Lesion-Deficit Studies. *Visiting Scholar*, College of Health and Human Services, Ohio University. Columbus, Ohio; May, 2005

Mechanisms of Acute and Chronic Recovery from Stroke. *Medical Grand Rounds*. Johns Hopkins Hospital. Baltimore, MD. September, 2005

Transitioning from K23 to Independent Investigator. *American Neurological Association/NINDS Career Development Symposium*. San Diego, CA; September, 2005

Novel Approaches to Assessing and Treating Acute Ischemic Stroke. *Looking Forward: Tomorrow's Neurology*. Baltimore, MD. November, 2005.

Mechanisms of Language Recovery after Stroke. *Neurology Grand Rounds*. Massachusetts General Hospital. January, 2006.

Key Note Address, A Review of Neuroimaging and Insights into the Neural Basis of Aphasia and Recovery. Maryland Speech Language and Hearing Association Annual Convention. Frederick, Maryland. March, 2006.

Cognitive Improvements after Shunting. Dinner Seminar, Evaluation and Management of Normal Pressure Hydrocephalus. *Annual Meeting of the American Academy of Neurology*, April, 2006

Language. Half-day course, Behavioral Neurology: Issues in Cognitive Impairment, the *Annual Meeting of the American Academy of Neurology*, April, 2006

Imaging Recovery from Stroke. *Neurology Grand Rounds*, Weill Medical College, Cornell University. November, 2006.

Neural Mechanisms Underlying Recovery from Aphasia. *The Tom Parker Lectureship*, *Neurology Grand Rounds*, Oklahoma University Health Sciences Center, November, 2006.

Stroke. *A Woman's Journey*. Johns Hopkins Medicine. Baltimore, MD. November, 2006.

Brain Mapping of Cognitive Functions: More than Phrenology? *Neurosurgery Grand Rounds*. Johns Hopkins Hospital. January, 2007.

Update on Medical Intervention for Stroke and Progressive Aphasia. *ASHA Health Care 2007*. Bethesda, MD, March, 2007.

Category-Specificity of Anomia in PPA. *Symposium on Primary Progressive Aphasia: Language Impairment, Network Reorganization and Genetic Linkages*. Society for Neuroscience. San Diego, CA, November, 2007.

Cognitive Assessment. Dinner Seminar, Evaluation and Management of Normal Pressure Hydrocephalus. *Annual Meeting of the American Academy of Neurology*, April, 2007

Language. Half-day course, Neurorehabilitation: Strategies to Improve Walking, Upper Extremity Function, and Language Across Disease, the *Annual Meeting of the American Academy of Neurology*, April, 2007

Stroke Recovery: Mechanisms and Interventions. *Neurology Grand Rounds*. New York University Medical Center. New York, April, 2008.

Perfusion MRI to Image Acute Tissue Dysfunction and Recovery. *Neuroimaging in the Study of Neural Recovery and Rehabilitation*. Philadelphia, PA; June, 2007.

Mechanisms of Recovery from Hemispatial Neglect. *Neuroplasticity Research: Progress in Translation to Rehabilitation*. Washington, DC, October, 2007

Potential roles of speech-language pathologists in evaluating and guiding neurological and neurosurgical interventions. *Annual Convention of the American Speech and Hearing Association*. Boston, MA, November, 2007

International Invited Lectures

Levels of Representation, Coordinate Frames, and Unilateral Neglect. *Visual Dyslexia/ Disorders of Reading and Writing*. Grange-over-Sands, England; March, 1990.

The relationship between theories of lexical processing and theories of rehabilitation. *Cognitive Neuropsychology and Cognitive Rehabilitation*. Birmingham, England; September, 1990.

Levels of Spatial Representation in Reading, Spelling, and Nonlexical Object Processing: Evidence from Dissociable Patterns of Unilateral Spatial "Neglect". *Theoretical issues in Cognitive Neuropsychology*, Trieste, Italy; May, 1993.

Category- and Modality Specific Deficits in Lexical Processing. *The Ninth International Symposium of the Tokyo Metropolitan Institute for Neuroscience*. Tokyo; November, 1993.

Where Do Semantic Errors Come From? Here, There, and Everywhere. *The Twelfth European Workshop on Cognitive Neuropsychology*. Bressanone, Italy; January, 1994.

A Series of Therapy Studies for Naming Disorders. *Birkbeck College Seminar Series*. London, England; January, 1995.

Evidence for the Interaction of Phonological and Semantic Processes in Reading. *Workshop on the Cognitive Neuropsychology of Reading and Writing*. Paris, France; January, 1995.

- What's in a Name? A Model of the Cognitive Processes Underlying Picture Naming. *International conference on aphasiology (Sponsored by the Dutch Aphasia Foundation and the Association for Clinical Linguists)*. Groningen, Holland; May, 1995.
- Trials and Tribulations in the Treatment of Naming Impairments. *International Conference on Aphasiology*. Groningen, Holland; May, 1995.
- Regions of Hypoperfusion Associated with Selective Levels of Impairment in the Reading Process. *World Federation of Neurology Research Group on Aphasia and Cognitive Disorders*; Salvador, Brazil; August, 2000.
- Apraxia and Agnosia. *Second Annual Residential Course for Young Neurologists: Restoration of Function in Neuropsychology*. Alviano, Italy; June, 2001.
- Neuropsychological Testing for Apraxia and Agnosia. *Second Annual Residential Course for Young Neurologists: Restoration of Function in Neuropsychology*. Alviano, Italy; June, 2001.
- Cognitive Rehabilitation of Naming Impairments. *Second Annual Residential Course for Young Neurologists: Restoration of Function in Neuropsychology*. Alviano, Italy; June, 2001.
- Modality-specific Deterioration in Naming Verbs: Implications for Models of Lexical Access. *International Neuropsychological Society*. Brazilia, Brazil; July, 2001.
- Neural Substrates of Lexical Processes: Evidence from MR Perfusion and Diffusion Imaging. *Inaugural Scientific Meeting of the Institute for Brain Sciences*. Hopital Purpan, Toulouse, France; May, 2002.
- Mechanisms of Language Recovery after Stroke: Neuroplasticity, Compensation and Reperfusion. *3rd International Congress Genetics and Regeneration in Neuroscience*; Terni, Italy; June, 2002.
- For a theory of rehabilitation: What have we learned in the decade of the brain? *International Scientific Meeting on Effectiveness of Rehabilitation of Cognitive Deficits*. Cardiff, Wales. September, 2002.
- Deterioration of naming in primary progressive aphasia: Word class and modality effects. *Frontotemporal Dementia and Pick's Disease Conference*. London, Ontario. September, 2002.
- Reperfusion and Neuroplasticity in Language Recovery. *Symposium on Cerebral Blood Flow*. Rome, Italy. November, 2002.
- On Saying and Writing Sleigh versus Slay and Rite versus Write. *Verbs: Properties, Processes and Problems*. University College London. London, UK. April, 2003.

Investigations of the Neural Substrates of Language with MR Perfusion Imaging. Cambridge University. Cambridge, UK. May, 2003.

Prognosis for recovery from subcortical aphasia. *Neurorehabilitation of Aphasia*. Institute Guttman, Barcelona, Spain. May, 2003.

Mechanisms of Language Recovery after Stroke. *International Congress, "Stroke Today."* Spoleto, Italy. June, 2003.

Imaging of Language Processing and Disorders. *Joint meeting of the International Neuropsychological Society and the German Neuropsychological Society*; Berlin, Germany; July, 2003.

Brain and Language: the Contribution of Perfusion Scanning. *Annual Science of Aphasia Conference*; Trieste, Italy; August 2003.

The Cognitive Neuropsychological Approach to Treatment: Limitations and Contributions. *Aphasia Therapy Workshop: Current Approaches to Aphasia Therapy*. Vienna, Austria. October, 2003

Acquired Aphasic Syndromes: A Primer for Neurologists, Psychiatrists, and Neuropsychologists. *Annual Meeting of the British Neuropsychiatry Association*. London, England. February, 2004.

Studies of the neural bases of cognitive functions using MR Perfusion imaging. *Functional Imaging Laboratory*; Wellcome Department of Imaging Neuroscience; Institute of Neurology. London, England. February, 2004.

Subcortical aphasia and neglect. *Fourth Conference of Neurology*. Santiago, Cuba. March, 2004.

What can acute aphasia tell us about the brain? *Key Note Address, 28th Annual Convention of the Neuropsychology Association of Japan*. Hiroshima, Japan; September, 2004.

Stages and mechanisms of recovery from aphasia. *28th Annual Convention of the Neuropsychology Association of Japan*. Hiroshima, Japan; September, 2004.

Neural basis of hemispatial neglect. *Seminar Series, Showa University*. Tokyo, Japan; September, 2004.

Neurology Career Tracks: Clinical Investigator. *Residents' Symposium, Annual Meeting of the American Neurological Association*. Toronto, CA; October, 2004.

The neural basis of recovery and response to therapy. *Congress on Aphasia Rehabilitation*. Rotterdam, Holland. November, 2004.

- Integration of Cognitive Neuropsychology and Neuroscience to plan aphasia rehabilitation. *Congress on Aphasia Rehabilitation*. Rotterdam, Holland. November, 2004.
- Imaging aphasia recovery. *British Neuroscience Association*. Brighton, UK; April 2005.
- New Insights regarding the anatomic basis for normal and abnormal language. *McGill University; Department of Neurology*; Montreal, CA. May, 2005
- Mechanisms of cognitive recovery: evidence from imaging. *Imaging Recovery from Stroke*. Hamburg, Germany. May 2005.
- Mechanisms of Aphasia Recovery after Acute Ischemic Stroke. *Beijing Tiantan Stroke Conference*. Beijing, China. July 2005.
- Treatment of Letter-by-letter Reading (Discussant). *World Federation of Neurology Research Group on Aphasia and Cognitive Disorders*. Buenos Aires, Argentina. March, 2006.
- Neural Substrates of Hemispatial Neglect and Recovery of Spatial Attention. Turkish Cognitive Symposium. Marmaris, Turkey. May, 2006.
- Inhibition/Excitation of the Perilesional Area in Acute Stroke: Implications for Recovery and Rehabilitation. *Neuroimaging of Stroke and Functional Recovery*. Montalcino, Italy. June, 2006.
- Neurobiology of Hemispatial Neglect. *Japanese Neuroscience Society*. Kyoto, Japan. July, 2006.
- Treatment of Acute Ischemic Stroke. *International Stroke Conference*. Hyderabad, India. March, 2007-03-20
- Mechanisms of Recovery and Rehabilitation after Stroke. *International Stroke Conference*. Hyderabad, India. March, 2007-03-20
- Stroke Prevention. *International Stroke Conference*. Hyderabad, India. March, 2007-03-20
- Neural Mechanisms Underlying Stroke Recovery. *Cognitive IV, An International Cognitive Neuroscience Symposium*. Marmaris, Turkey. May, 2007
- Broca's Area: What is it essential for? *International Neuropsychological Symposium*. Mati, Greece. June, 2007.
- Mechanisms of Recovery from Aphasia, 4th *World Conference of the International Society of Physical Medicine and Rehabilitation*. Seoul, Korea. June, 2007
- Keynote Speaker, *British Aphasiology Society*. Edinburgh, UK. September, 2007

Treatment of Semantic versus Lexical Access Deficits. *Science of Aphasia Conference*
Taranto, Italy. September, 2007

Invited Panels and Workshops:

NIH Workshop on Aphasia Treatment, June, 1991

NIH Workshop on the Role of Neuroimaging in the Study of Aphasia Recovery and
Rehabilitation: Research Needs and Opportunities, May, 2002

NIH Workshop on Cognitive Rehabilitation; September, 2004

Lerici II Consensus Conference on Aphasia Treatment, June, 2005

NIH (NINDS) Workshop, Hydrocephalus: Myths, New Facts, and Clear Directions. September,
2005.