

## BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed for Form Page 2.  
Follow the sample format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME	POSITION TITLE		
Kirshner, Howard	Professor of Neurology		
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Williams College, Williamstown, MA	BA	1968	Liberal Arts
Harvard Medical School, Boston, MA	MD	1972	Medicine, cum laude

NOTE: The Biographical Sketch may not exceed four pages. Items A and B (together) may not exceed two of the four-page limit. Follow the formats and instructions on the attached sample.

### A. Positions and Honors.

#### Professional Experience:

1972-1973 Intern in Medicine. Massachusetts General Hospital.  
 1973-1975 Staff Associate. Laboratory of Perinatal Physiology. National Institute of Neurological and Communicative Disorders and Stroke. (USPHS, Active Duty, commissioned officer)  
 1975-1978 Resident in Neurology. Massachusetts General Hospital.  
 1975-1980 U.S.P.H.S., Reserve.  
 1978-1983 Assistant Professor. Neurology. Vanderbilt University School of Medicine.  
 1980-1983 Assistant Professor. Division of Hearing & Speech Sciences. Vanderbilt University School of Medicine.  
 1983-1987 Associate Professor. Neurology & Hearing & Speech Sciences. Vanderbilt University School of Medicine.  
 1987-Present Professor of Neurology, Psychiatry, and Hearing and Speech Sciences  
 Vice Chairman, Department of Neurology. Vanderbilt University School of Medicine  
 Director, Vanderbilt Stroke Center  
 Program Director, Stroke Service, Vanderbilt Stallworth Rehabilitation Hospital  
 Staff Neurologist: Nashville Veterans Administration Medical Center  
 Consultant: St. Thomas Hospital

#### Honors:

1964-1968 B.A. Summa Cum Laude, Williams College.  
 1968-1972 M.D., Cum Laude, Harvard Medical College.  
 Phi Beta Kappa  
 Alpha Omega Alpha  
 1996-2001 Editorial Board, Neurology.  
 2000-pres Editor, Managing Editor, EMedicine.  
 2004-pres Book Review Editor, Journal of Cognitive and Behavioral Neurology  
 2004 Award for Excellence in Teaching (Teaching Medical Students, Residents, and/or Fellows in the Clinical Setting)  
 2005 American Academy of Neurology Award for Excellence in Neurologic Education, 2005

#### Memberships:

1979-present Academy of Aphasia.  
 1986-present American Neurological Association. Fellow.  
 1987-present National Aphasia Association Medical and Scientific Board.  
 1994-1997 Representative to Tennessee Division of American Heart Association.  
 1998-2000 5-State Southeast Regional Board.  
 2000-Present Director of Professional Advisory Board. Operation Stroke, Nashville.

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

### PUBLICATIONS:

1. Kirshner HS and Sidman M (1972). Scanning patterns in aphasic patients during matching-to-sample tests. *Neuropsychologia* 10:179-184.
2. Kirshner HS, Blank, WF Jr., and Myers RE (1975). Brain extracellular potassium activity during hypoxia in the cat. *Neurology* 25:1001-1005.
3. Kirshner HS, Blank WF Jr., and Myers RE (1976). Changes in cortical subarachnoid fluid potassium concentrations during hypoxia. *Archives of Neurology* 33:83-90.
4. Blank WF, Jr. and Kirshner HS (1977). The kinetics of extracellular potassium changes during hypoxia and anoxia in the cat cerebral cortex. *Brain Research* 123:113-124.
5. Davis JM, Davis KR, Kirshner HS, et al (1978). Computed tomography of herpes simplex encephalitis with clinicopathological correlation. *Radiology* 129:409-417.
6. Kirshner HS and Webb WG (1981). Selective involvement of the auditory-verbal modality in an acquired communication disorder: Benefit from sign language therapy. *Brain and Language* 13:161-170.
7. Lazaro RP and Kirshner HS (1980). Proximal muscle weakness in uremia: Case reports and review of the literature. *Archives of Neurology* 37:555-558.
8. Duncan GW, Kirshner HS, and Stone WJ (1980). Cervical bruits in hemodialysis patients. *Stroke* 11:672-674.
9. Arnold E, Rudd S, and Kirshner HS (1980). Manic psychosis following rapid withdrawal from baclofen. *American Journal of Psychiatry* 137:1466-1467.
10. Kirshner HS, Webb WG, and Duncan GW (1981). Word deafness in Wernicke's aphasia. *Journal of Neurology, Neurosurgery, and Psychiatry* 44:197-201.
11. Peterson LN and Kirshner HS (1981). Gestural impairment and gestural ability in aphasia: A review. *Brain and Language* 14: 333-348.
12. Roback HS, Kirshner HS, Roback E (1981-1982). Physical self-concept changes in a mildly, facially disfigured neurofibromatosis patient following communication skill training. *International Journal of Psychiatry in Medicine* 11:137-143.
13. Kirshner HS and Graber AL (1981). Painful diabetic peripheral neuropathy. Diabetes clinical care conference. *Journal of the Tennessee Medical Association* 74:594-595.
14. Kirshner HS and Webb WG (1982). Word and letter reading and the mechanism of the third alexia. *Archives of Neurology* 39:84-87.
15. Oviatt DL, Kirshner HS, Stein RS (1982). Successful chemotherapeutic treatment of epidural compression in non-Hodgkin's lymphoma. *Cancer* 49:2446-2448.
16. Kirshner HS, Staller J, Webb Wg, and Sachs P (1982). Transtentorial herniation with posterior cerebral artery territory infarction: A new mechanism of the syndrome of alexia with agraphia. *Stroke* 13:243-246.
17. Kirshner HS and Webb WG (1982). Alexia and agraphia in Wernicke's aphasia. *Journal of Neurology, Neurosurgery, and Psychiatry* 45:719-724.
18. Kirshner HS, Kistler KH (1982). Aphasia following right thalamic hemorrhage. *Archives of Neurology* 39:667-669.
19. Kirshner HS, Webb WG, Kelly M, and Wells C (1984). Language disturbance: a presenting symptom of degenerative disorders and dementia. *Archives of Neurology*, 41:491-496.
20. Kirshner HS, Webb WG, Kelly M (1984). The naming disorder of dementia. *Neuropsychologia*, 22:23-30.
21. Runge VM, Price AC, Kirshner HS, Allen JH, Partain LL, James AE (1984). Magnetic resonance imaging of multiple sclerosis: A study of pulse-technique efficacy. *Am J Radiol* 143:1015-1026.
22. Kirshner HS, Tsai SI, Runge VM, Price AC (1985). Magnetic resonance imaging and other techniques in the diagnosis of multiple sclerosis. *Archives of Neurology* 42:859-863.
23. Robbins J, Logemann JA, Kirshner HS (1986). Swallowing and speech production in Parkinson's disease. *Annals of Neurology* 19:283-287.
24. Tanridag O and Kirshner HS (1985). Aphasia and agraphia in lesions of the posterior internal capsule and putamen. *Neurology* 35:1797-1801.
25. Kirshner HS, Casey PF, Kelly MP, Webb WG (1987). Anomia in cerebral diseases. *Neuropsychologia* 25:701-705.
26. Tanridag O, Kirshner HS, Casey PF (1987). Memory functions in aphasic and nonaphasic stroke patients. *Aphasiology* 1:201-214.
27. Tanridag O, Kirshner HS (1987). Language disorders in stroke syndromes of the dominant capsulostriatum: a clinical review. *Aphasiology* 1:107-117.
28. Kirshner HS, Tanridag O, Thurman L, Whetsell WO Jr. (1987). Progressive aphasia without dementia: Two cases with focal, spongiform degeneration. *Annals of Neurology* 22:527-532.
29. Tanridag O, Kirshner HS (1987). Magnetic resonance and CT scan imaging in neurobehavioral syndromes. *Psychosomatics* 28:517-528.
30. Parris WCV, Kirshner HS, Brin E (1988). Herpes zoster ophthalmicus associated with contralateral hemiplegia. *The Clinical Journal of Pain* 3:219-222.

31. Kirshner HS, Casey PF, Henson J, Heinrich JJ (1989). Behavioral features and lesion localization in Wernicke's aphasia. *Aphasiology* 3:169-176.
32. Kirshner HS (1989). Causes of neurogenic dysphagia. *Dysphagia* 3:184-188.
33. Deitch D, Kirshner HS (1989). Subdural hematoma after normal CT. *Neurology* 39:985-987.
34. Dickstein R, Edmonstone BS, Stivens K, Shiavi R, Kirshner HS (1991). Therapeutic weight shift in hemiparetic patients: surface EMG activity of lower extremity muscles during postural tasks. *Journal of Neurological Rehabilitation*; 4:17-25.
35. Kirshner HS, Bakar M (1995). Syndromes of language dissolution in aging and dementia. *Compr Ther* 21(9):519-23.
36. Welch L, Kirshner H, Heath A, Gilliland R, and Broyles S (1991). Chronic neuropsychological and neurological impairment following acute exposure to a solvent mixture of toluene and methyl ethyl ketone (MEK). *Clinical Toxicology* 29:435-445.
37. Kirshner HS (1992). Apraxia of speech: a linguistic enigma. A neurologist's perspective. *Seminars in Speech and Language* 13:14-24.
38. Kirshner HS (1993). The neuropsychology of dementia: modular and traditional approaches. *Contemporary Psychology* 38:808-810.
39. Parris WCV, Kirshner HS (1993). Motor paralysis of the lower extremities following lumbar sympathetic block. *Anesthesiology* 78:981-983.
40. Charles PD, Abou-Khalil R, Abou-khalil B, Wertz RT, Ashmead DH, Welch L, Kirshner HS (1994). MRI Asymmetries and Language Dominance. *Neurology* 44:2050-2054.
41. Kirshner HS (1994). A case of ictal aphasia with MRI, PET, and EEG correlation. *Brain and Language* 47:500-503.
42. Thirumalai S, Kirshner HS (1994). Anticardiolipin antibody and stroke in an HIV-positive patient. *AIDS* 8:1019-1020.
43. Kirshner HS, Bakar M, Collen M, Wertz RT (1995). Crossed aphasia: Clinical, CT, and PET or SPECT correlations. *Brain and Language* 51:65-68.
44. Kirshner HS, Hughes T, Fakhoury T, Abou-Khalil B (1995). Aphasia secondary to partial status epilepticus of the basal temporal language area. *Neurology* 45:1616-1618.
45. Bakar M, Kirshner HS, Wertz RT (1996). Crossed aphasia: Functional brain imaging with PET or SPECT. *Arch Neurol* 53:1026-1032.
46. Kirshner HS (1996). Medical revolution: the prevention and treatment of stroke, 1996. Part I of Stroke prevention of stroke and acute stroke therapy. *Tennessee Medicine* 89:410-412.
47. Kirshner HS (1996). Medical revolution: the prevention and treatment of stroke, 1996. Part II of Medical prevention of stroke and acute stroke therapy. *Tennessee Medicine* 89:410-412.
48. Kirshner HS (1997). Disorders of the pharyngeal and esophageal stages of swallowing in Parkinson's disease. (Editorial). *Dysphagia* 12:19-20.
49. Charles PD, Abou-Khalil B, Atkinson DS Jr, Bakar M, Mayville CL, Kirshner HS (1997). Occipital pole area and language dominance. *J Neuroimaging* 7:89-91.
50. Stroke rehabilitation (1997). *Tennessee Medicine* 90:147-149.
51. Wertz RT, Henschel CR, Auther LL, Ashford JR, Kirshner HS (1998). Affective prosodic disturbance subsequent to right hemisphere stroke: A clinical application. *Neurolinguistics*, 11:89-102.
52. Wertz RT, Auther LL, Burch-Sims GP, Miller T, Abou-Khalil R, Kirshner HS. Auditory evoked responses in aphasic African-Americans and Caucasians. *Aphasiology*, in press.
53. Bakar M, Kirshner HS, Niaz F (1998). The opercular-subopercular syndrome: four cases with review of the literature. *Behavioural Neurology* 11: 97-103.
54. Kirshner HS. Language studies in the Third Millenium. *Brain and Language* 2000;71:124-128.
55. Kirshner HS (1999). Language Disorders. *Current Practice of Medicine* 2:177-184.
56. Auther LL, Wertz RT, Miller TA, Kirshner HS. Relationships among the mismatch negativity (MMN) event-related potential; auditory comprehension, and site of lesion in aphasic adults. *Aphasiology* 2000;14:461-470.
57. Kirshner HS. Stroke mimicry. Four cases eligible for tPA therapy. *The Neurologist* 2000;6:220-223.
58. Kirshner HS, Alberts M, Carter T, Meschia J, Beatty J, Hamilton J, Lane M, Carucci J, Todd H. Stroke Center Guidelines. A statement of the working group on stroke centers of the stroke belt consortium. *Journal of Stroke and Cerebrovascular Diseases* 2000;9:144-146.
59. Triggs WJ, Kirshner HS. Improving brain function with transcranial magnetic stimulation? *Neurology* 2001; 56:429-430 (editorial).
60. Kirshner HS (2001). Behavioral neurology in the emergency room: language testing, brain imaging, and acute stroke therapy. *Ann Neurol* 50:559-560 (editorial).
61. Gelb DJ, Gunderson CH, Henry KA, Kirshner HS, Jozefowicz RF. The neurology clerkship core curriculum. *Neurology* 2002;58:849-852.
62. Kirshner HS (2003). Medical prevention of stroke, 2003. *Southern Medical Journal* 96:354-358.
63. Kirshner HS (2003). Stroke rehabilitation. New insights from neuroscience. A focused review. *Turkish Journal of Neurology* 9:45-60.
64. Farkouh ME, Kirshner H, Harrington RA, et al. (2004). Comparison of lumiracoxib with naproxen and ibuprofen in the Therapeutic Arthritis Research and Gastrointestinal Event Trial (TARGET), cardiovascular outcomes: randomized controlled trial. *Lancet* 364:675-684.
65. Kirshner HS, Biller J, Callahan AS III (2005). Long-term therapy to prevent stroke. *J Am Board Fam Pract* 18:528-40.

66. Churchill L, Kirshner HS, Perry J (2005). The Terri Schiavo case: legal, ethical, and medical perspectives. *Ann Int Med* 2005;143:744-748..
67. Kirshner HS (2005). Mild Cognitive Impairment: To Treat or Not to Treat. *Current Neurology and Neurosurgery Reports*, 5:455-457.
68. Caplan L, Kirshner H (2005). Stroke: effective strategies for secondary prevention. *Therapeutic Spotlight: December*: 1-20.
69. Kirshner H, Lavin PJM (2006). Posterior cortical atrophy: a brief review. *Current Neurology and Neurosurgery Reports* 6: in press.

### C. Research Support.

#### **Kirshner, Howard** **ACTIVE**

2R01 NS33430-08 (Gorelick)	August 1998 - Dec 2003	5% Effort Only
NIH consortium site agreement	Rush Presbyterian-St. Lukes Medical Center,	
<i>Rush University</i>	\$ 156,000	
African American Antiplatelet Stroke Prevention Study		

SPARCL #98-124 (Kirshner, P.I.)	1998-2006	5% Effort
Pfizer Pharmaceutical Company	\$165,750	

Stroke Prevention with Aggressive Reduction in Cholesterol Level

MATCH # SR25990C (Kirshner, P.I.)	Oct 2001- Dec 2003	5% Effort
Sanofi-Synthelabo.	\$165,750	

This involves Plavix plus aspirin versus Plavix alone in high risk TIA and stroke patients.

#FK506 (Kirshner, PI)	Feb 2002 – January 2004	5% Effort
Fujisawa Healthcare, Inc.	\$96,030.00	

The study of FK506 Lipid Complex in patients with Ischemic Stroke

ONO-2506 IV Infusion (Kirshner, PI)	Aug 2002 – August 2004	5% Effort
Ono Pharma USA Incorporated	\$68,097	

IV infusion on the Amelioration of Neurological Damage & Improvement of Stroke Assessment Scale Scores in pts with Acute Ischemic Stroke.

Profess (Kirshner, PI)	Jan 2003 – Dec 2008	5% Effort
Boehringer-Ingelheim	\$ 200,000	

Prevention Regimen for Effectively avoiding Second Strokes: A double blind, active & placebo controlled study of Aspirin-ER dipyridamole vs Clopidogrel + Aspirin , with and without telmisartan.

SPS3 (Benavente, PI, Kirshner, local PI)	March, 2004-2008
NIH Consortium	

ALIAS (Ginsberg, M, PI, Kirshner, local PI)
NIH Consortium

Prevention of lacunar stroke with aspirin versus aspirin + clopidogrel, also randomization to usual systolic blood pressure control (130-149 mm Hg), versus aggressive control (<130 mm Hg)