

UNIVERSITY OF PENNSYLVANIA – SCHOOL OF MEDICINE

Curriculum Vitae

Date: February, 2009

Roy Hoshi Hamilton, MD, MS

Education:

1995 B.A. Harvard University (Magna Cum Laude, Psychology)
2001 M.D. Harvard Medical School (Cum Laude)
2001 M.S. Massachusetts Institute of Technology (Health Sciences
and Technology)

Postgraduate Training and Fellowship Appointments:

2001 – 2002 Intern in Medicine, UCLA Medical Center
2002 – 2005 Resident in Neurology, University of Pennsylvania
2005—2006 Fellowship, Cognitive Neurology, University of Pennsylvania

Positions

1/07—12/08 Instructor in Neurology, Cognitive Division, University of
Pennsylvania
1/09 – Present Assistant Professor in Neurology, Cognitive Division, University
of Pennsylvania

Speciality Certification:

2006 Diplomate, American Board of Psychiatry and Neurology

Licensure:

Pennsylvania

Awards, Honors, and Membership in Honorary Societies:

2005 Steven L. Galetta Teaching Award, University of Pennsylvania
Department of Neurology
2005 University of Pennsylvania School of Medicine “Penn Pearls”
Teaching Award
2005 American Medical Association Foundation Young Physicians
Leadership Award
2004 Third Annual Dementia Congress Travel Fellow
2001 Kurt J. Isselbacher Humanitarian Award, Harvard Medical School
2000 Society for Neuroscience Minority Travel Fellow
2000 RIKEN Brain Science Institute Summer Fellow
1999 Aesculapean Club, Harvard Medical School
1999 American Academy of Neurology Education & Research
Foundation Hoechst Marion Roussel Scholar
1999 Bristol-Myers Squibb Academic Medicine Fellow
1999 Lakewood Medical Center Foundation Lester Baker Award

- 1998 Virginia A. Linnane and Lt. Joseph A. Linnane Scholarship for academic excellence and community leadership
- 1997 American Psychiatric Association Program for Minority Research Training in Psychiatry (PMRTP) “Mini”-Fellowship
- 1995, 1996 Derek Bok Award for excellence in teaching undergraduates at Harvard University
- 1995 Harvard Psychology Department Faculty Prize for distinguished thesis research
- 1992 Max Factor Family Scholarship for academic excellence among undergraduate minorities in the biological and medical sciences

Membership in Professional & Scientific Societies and Other Professional Activities:

International:

Society for Neuroscience (Member, 1998 - present)

National:

American Academy of Neurology (Member, 1998 - present)

American Medical Association (Member, 2002 - present)

Local:

Pennsylvania Medical Society (Member, 2003 - present)

Academic and Institutional Activities:

- 2008-present Patient Oriented Research Committee, Dept. of Neurology
- 2008-present Associate Director, Clinical Neurosciences Tract
- 2007 - 2008 Member, Committee on Admissions, School of Medicine
- 2006 - present Interviewer, Committee on Admissions, School of Medicine

Major Academic and Clinical Teaching Responsibilities:

- 2004 - present Curriculum Director, Medicine Educational Pipeline Program, University of Pennsylvania School of Medicine
- 2004 - present Lecturer, Clinical Clerkship in Neurology
- 2005 - present Behavioral Neurology Seminar Series, Coordinator
- 2006 - present Small Group Instructor, Brain and Behavior Module
- 2006 - present Curriculum Head for Medicine, Provost’s Summer Mentorship Program for High School Students
- 2007-present Lecturer, Brain and Behavior Module (two lectures/year)

Other Professional Activities:

Ad Hoc Reviewer: Cognitive and Behavioral Neurology, Journal of Cognitive Neuroscience, Neuroscience Letters

Invited Lectures:

1. The course of treatment of patients with depression and mild cognitive impairment *in* Dark Horizons: Depression and Cognitive Impairment (Symposium). 2007 American Psychiatric Association Annual Meeting. San Diego, CA. May 20, 2007.
2. Common dementia syndromes. Pennsylvania Hospital Grand Rounds. Philadelphia, PA. March 25, 2008.
3. Case presentation and discussion (Normal Pressure Hydrocephalus). Philadelphia Neuropsychological Society Grand Rounds. Philadelphia, PA. March 26, 2008.
4. Magnetic brain stimulation in the treatment of stroke and aphasia *in* Behavioral Neurology: Contemporary Topics: Language. Course given at 60th Annual American Academy of Neurology Annual Meeting. Chicago, IL. April, 2008.
5. The Penn neuroscience pipeline program: Building bridges to the community through neuroscience *in* University-Assisted Community Schools, Health Promotion & Youth Engagement (Symposium). Coalition for Community Schools National Forum 2008. Portland, OR. April 30, 2008.
6. Transcranial magnetic stimulation in the investigation and treatment of neglect *in* Applications of Transcranial magnetic Stimulation to the Rehabilitation of Cognitive and Motor Sequelae of Stroke. American Academy of Physical medicine and Rehabilitation 2008 Annual Assembly. San Diego, CA. November 21, 2008.
7. The plastic brain: from observation to induction. University of Pennsylvania Department of Neurology Grand Rounds. Philadelphia, PA. December 5, 2008.

Bibliography (in chronological order):**Research Publications, peer reviewed:**

1. Keenan J.P., Freund S., Hamilton R., Ganis G., Pascual-Leone A. Hand response differences in a self-identification task. Neuropsychologia 38: 1047-1053, 2000.
2. Hamilton R.H., Keenan J.P., Catala M., Pascual-Leone A. Braille alexia following occipital stroke in an early blind woman, Neuroreport 11(2): 237-240, 2000.
3. Van Boven R.W., Hamilton R.H., Kauffman T., Keenan J.P., Pascual-Leone A. Tactile spatial resolution in blind Braille readers. Neurology 54: 2230-2236, 2000.
4. Pascual-Leone A., Hamilton R.H.: The metamodal organization of the brain. Progress in Brain Research 134: 427-445, 2001.
5. Liebeskind D.S., Wong S., Hamilton R.H.: Faces of the giant panda and her cub: MRI correlates of Wilson's disease. Journal of Neurology Neurosurgery and Psychiatry 74: 682, 2003.
6. Hamilton, R.H., Pascual-Leone A., Schlaug, G.: Absolute pitch in blind musicians. Neuroreport. 15: 803-806, 2004.

7. Hamilton R.H., Shenton J. T., Coslett H. B. An acquired deficit of audiovisual speech processing. Brain and Language. 98. 66-73, 2006.
8. Chatterjee A., Hamilton R.H. Amorapanth P.X. Art produced by a patient with Parkinson's disease. Behavioral Neurology. 17(2): 105-108, 2006.
9. Sullivan J., Hamilton R., Hurford M., Galetta S. L., Liu G.T. Neuro-ophthalmic findings in Wernicke's encephalopathy after gastric bypass surgery. Neuro-Ophthalmology. 30:1-5, 2006.
10. Hamilton R., Hamilton K., Jackson B., Dahodwala N. Residents in the Hospital, Mentors in the Community: The Educational Pipeline Program at Penn. Neurology. 68 (19): E25, 2007
11. Edlow L.B., Hamilton K., Hamilton R.H. Teaching about the brain and reaching the community: Undergraduates in the Pipeline Program at the University of Pennsylvania. Journal of Undergraduate Neuroscience Education. 5(2): A63-A70, 2007.
12. Hamilton R.H., Coslett H.B., Buxbaum L.J., Whyte J., Farne A., Frassinetti F., Ferraro M.K. Inconsistency of performance on neglect subtype tests following acute right hemisphere stroke. Journal of the International Neuropsychological Society. 14(1): 23-32, 2008.
13. Merabet L.B., Hamilton R., Schlaug G., Swisher J.D., Kiriakopoulos E.T., Pitskel N.B., Kauffman T., Pascual-Leone A. Rapid and reversible recruitment of early visual cortex for touch. PloS One. 3(8): 1-12, 2008.
14. Wiener M., Hamilton R., Turkeltaub P., Matell M., Coslett B. Fast forward: Supramarginal gyrus stimulation alters time measurement. Journal of Cognitive Neuroscience. *In press*.

Research Publications, peer reviewed reviews:

1. Pascual-Leone A., Tarazona F., Keenan J., Tormos J.M., Hamilton R., Catala M.D. Transcranial magnetic stimulation and neuroplasticity. Neuropsychologia 37, 207-217, 1999.
2. Hamilton R.H., Pascual-Leone A. Cortical plasticity associated with Braille learning. Trends in Cognitive Neuroscience 2(5): 168-174, 1998.

Abstracts (Last 4 years):

1. Clark, C., Lee, E., Hamilton, R., Knapik-Czajka, M., Shaw, L., Lee, V.Y.-M., Trojanowski, J., Grady, S. Lumbar and ventricular concentrations of AD biomarkers and correlation with histopathology in patients with normal pressure hydrocephalus. AD/PD 2009. March, 2009. Prague, Czech Republic.
2. Hindy, N.C., Hamilton, R.H., Coslett H.B., Thompson-Schill S.L. Do distinct regions of ventrolateral prefrontal cortex play different roles in cognitive control? A transcranial magnetic stimulation (TMS) test of neuroimaging findings. Annual meeting of the Society for Neuroscience, Washington D.C. November, 2008.

3. Wiener, M., Hamilton, R.H., Matell, M.S., Coslett, H.B. Fast Forward: Repetitive Transcranial Magnetic Stimulation of Parietal Cortex Disrupts Temporal Perception. 16th Annual Cognitive Neuroscience Society Meeting, San Francisco, CA, April 2008
4. Hamilton, A.C., Hamilton, R.H., Bockow, T., Coslett, H.B., & Thompson-Schill, S. Induced exaggerated proactive interference with transcranial magnetic stimulation. 48th Annual Meeting of the Psychonomic Society, Long Beach, CA, November 2007.
5. Hamilton R. H., Clark C. M., Chang D., Jackson E. M., Basil A., Grady M. S. Outcomes and CSF biomarker correlates of patients undergoing ventriculoperitoneal shunt for normal pressure hydrocephalus. 59th Annual Meeting of the American Academy of Neurology, Boston, MA, May 2007.
6. Hamilton R.H., Shenton J. T., Coslett H. B. A case of an acquired deficit of audiovisual integration of speech. Annual Meeting of the International Neuropsychological Society, Boston, MA, 2006.
7. Hamilton R.H., Shenton J.T., Jimenez R.B., Coslett H.B. Deficits of audiovisual integration induced using repetitive transcranial magnetic stimulation. Annual Meeting of the Society for Neuroscience, Washington D.C., 2005.

Editorials, Reviews, Chapters, including participation in committee reports:

1. Pascual-Leone A., Hamilton R., Tormos J.M., Keenan J., Catala M.D. Neuroplasticity in the adjustment to blindness. Eds Grafman J. and Christen Y. Neuroplasticity: Building a bridge from the laboratory to the clinic. New York: Springer Verlag, 93-108, 1999.
2. Hamilton, R.H. and Pascual-Leone, A. The brain atlas: A visual guide to the human nervous system by J. Hanaway, T.A. Woolsey, M.H. Gado and M.P. Roberts, Jr. Trends in Neuroscience. 23: 89.
3. Pascual-Leone A., Hamilton R. Metamodal cortical processing in the occipital cortex of blind and sighted subjects. Virtual Lesions: Examining cortical functions with reversible deactivation. Eds Lomber, S. and Gulaske, R. Oxford Univ. Press, 2002.

Research Support

Ongoing Support

1K01NS060995-01A1

Hamilton (PI)

5/15/08 – 5/15/13

TMS to Explore Interhemispheric Interactions and to Treat Aphasia and Neglect

This project uses Transcranial Magnetic Stimulation (TMS) to address specific hypotheses regarding the organization of language and spatial attention in the brain, and also to improve aphasia and neglect in patients who have suffered from ischemic stroke.

Role: PI

Completed Support

SfN/MNFP *Coslett (PI)* 5/31/05-5/31/06

Society for Neuroscience Minority Neuroscience Fellowship Program

This program recruited, trained and tracked minority trainees to work in preeminent research laboratories, and provided salary support for fellowship training in the Division of Cognitive Neurology at the University of Pennsylvania.

Role: Post-doctoral fellow

NIH/LRP *Coslett (PI)* 9/01/05-9/01/07

Effects of Cortical Stimulation on Mental Motor Imagery and Pain

This program provides loan repayment to support a two-year commitment to conduct qualified research at a nonprofit institution, funded by a domestic nonprofit or US government (Federal, state or local) entity. The study is an investigation of the effects of transcranial magnetic stimulation (TMS) of the parietal cortex on mental motor imagery, followed by investigations of relationship between mental motor imagery and chronic pain and the impact of TMS on both motor imagery and the subjective experience of pain.

Role: Post-doctoral Fellow

C2006-112 *Coslett (PI)* 7/1/06-6/31/08

American Academy of Neurology Foundation Clinical Research Training Fellowship (AAN/CTRF)

Transcranial Magnetic Stimulation in the Treatment of Paresis After Stroke

This program provides salary support for fellowship training in the Division of Cognitive Neurology at the University of Pennsylvania. The project it supports is an investigation of the efficacy of contralesional low-frequency transcranial magnetic stimulation (TMS) as rehabilitative treatment for lateralized neurologic deficits in patients with chronic stroke.

Role: Fellow, Cognitive Neurology