

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed on Form Page 2.
Photocopy this page or follow this format for each person.

NAME Christopher I. Moore		POSITION TITLE Associate Professor	
EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Oberlin College	B.A.	1986-1990	Neuroscience & Philosophy
Massachusetts Institute of Technology (MIT)	Ph.D.	1992-1998	Brain & Cognitive Science
Martinos Center /Harvard Medical School	Postdoctoral Fellow	1998-2002	Systems Neuroscience
UC San Francisco (UCSF) Keck Center	Visiting Scientist	2001-2002	Systems Neuroscience
MIT McGovern Institute for Brain Research	Assistant Professor	2003-2008	Systems Neuroscience
	Associate Professor	2008-	Systems Neuroscience

JOINT APPOINTMENTS

Harvard Biophysics; MIT/Harvard HST; Harvard Medical, Radiology; Marine Bio. Lab, Woods Hole, MA

AWARDS/FELLOWSHIPS

1990 High Honors in Neuroscience, Oberlin College
 1995 Angus N. MacDonald Excellence in Teaching Award
 1997 Fellow, McDonnell-Pew Institute for Cognitive Neuroscience, Dartmouth College
 1998 Fellow, Kira Institute on Science and Values, Amherst College
 1999-2002 Postdoctoral Fellowships, Individual NIH NRSA and McDonnell-Pew Foundation
 2000 NIH workshop on Opportunities in Cognitive Neuroscience
 2005- NIH Ad Hoc grant reviewer, Sensory-Motor Integration Committee
 2005 MIT School of Science Prize for Excellence in Undergraduate Teaching
 2005-2008 Mitsui Career Development Chair
 2006-2010 Marine Bio. Lab., Woods Hole, Instructor 'Neural Systems & Behavior' 2 wks/yr
 2008 NIH Group Leader, Sensorimotor Prosthetics Workshop
 2008- COSYNE Program Committee
 2009 NIH Challenge grant reviewer

MEMBERSHIPS

Society for Neuroscience: Member, Social Issues Committee (2004-2005)

SELECTED INVITED SEMINARS AND SIMILAR, SPRING 2007-SPRING 2009

Harvard University, Medical School, Seminar
 Organizer, Special Emphasis Workshop, COSYNE (Utah)
 Florida International University, Seminar
 Human Brain Mapping, Seminar
 Cleveland Clinic Heart-Mind Institute, Seminar

Session Chair, Society for Neuroscience Meeting 2007
 Yale University, Seminar
 Columbia University, Seminar
 Brown University, Seminar
 HHMI (Janelia Farms), Seminar, Workshop on Force-Gated Ion Channels
 Harvard University, Main Campus, Seminar
 Barrels, Seminar
 Oberlin College, Symposium Honoring Dennison Smith, Seminar
 USC, Seminar
 Stanford, Seminar
 UCSF, Seminar
 Berkeley, Seminar

PUBLICATIONS (PEER REVIEWED)

Cardin, J., Carlén, M., Meletis, K., Knoblich, U. Zhang, F., Deisseroth, K., Tsai, L.-H. & **Moore, C. I.** (2009) Activation of Fast Spiking Interneurons Induces Gamma Oscillations and Shapes Sensory Transmission. *Nature* 459:663-7.

Konkle, T., Wang, Q., Hayward, V. & **Moore, C. I.** (2009) Motion After-Effects Transfer Between Touch and Vision. *Current Biol* 19:745-50.

Cao, R., Higashikubo, B. T., Cardin, J., Knoblich, U., Nelson, M., **Moore, C. I.** & Brumberg, J. (2009) Pinacidil Induces Vascular Dilation and Hyperemia *in vivo* and Does Not Impact Biophysical Properties of Neurons and Astrocytes *in vitro*. *Cleveland Clinic Journal of Medicine* 76:S80-5.

Ritt, J., Andermann, M. and **Moore, C. I.** (2008) Embodied Information Processing: Vibrissa Mechanics and Texture Features Shape Micro-Motions in Actively Sensing Rats *Neuron* 57:599-613.

Moore, C. I. & Cao, R. (2008) The Hemo-Neural Hypothesis: On the Role of Blood Flow in Information Processing. Invited Review, *J Neurophys* 99:2035-2047. Epub ahead of print, Oct 3, 2007.

Andermann, M. L. & **Moore, C. I.** (2008) Mechanical Resonance Enhances the Sensitivity of the Vibrissa Sensory System to Near-Threshold Stimuli. *Brain Research*, 1235:47-81.

Carter, O., Konkle, T., Hayward, V., Wang, Q. & **Moore, C. I.** (2008) Tactile Rivalry Demonstrated with An Ambiguous Apparent Motion Quartet. *Current Biol*, 18(14):1050-4.

Bonneh Y., Belmonte M., Pei F., Iversen P., Kenet T., Akshoomoff N., Adini Y., Simon H., **Moore C. I.**, Houde J. & Merzenich M. (2008) Cross-Modal Extinction in a Boy with Severely Autistic behavior and High Verbal Intelligence. *Cog Neuropsy*. 25(5):635-52.

Ritt, J. & **Moore, C. I.** (2008) Listening to What the Vibrissae Tell Us: Response to Diamond and Colleagues. *Neuron*, 60(5):745-747.

Jones, S. R., Pritchett, D., Stufflebeam, S., Hamalainen, M. & **Moore, C. I.** (2007) Neural Correlates of Tactile Detection: A Combined MEG and Biophysically Based Computational Modeling Study. Featured Article, *J Neurosci* 27:10751-64

- Kerr, C., Wasserman, R. & **Moore, C. I.** (2007) Cortical dynamics as a therapeutic mechanism for touch healing. *J Alt Comp Med* 13:59-66.
- Andermann, M. L. & **Moore, C. I.** (2006) A Sub-Columnar Direction Map in Rat Barrel Cortex. *Nature Neuroscience* 9:543-551.
- Haslinger, R., Ulbert, I., **Moore, C. I.**, Brown, E. & Devor, A. (2006) Analysis of LFP Phase Predicts Sensory Response of Barrel Cortex. *J Neurophysiol* 96:1658-63.
- Schaechter, J., **Moore, C. I.**, Connell, B., Rosen, B. & Dijkhuizen, R. (2006) Structural and functional plasticity in the somatosensory cortex of chronic stroke patients. *Brain* 129:2722-33.
- Lazar, S., Kerr, C., Wasserman, R., Gray, J., Greve, D., Treadway, M., McGarvey, M., Quinn, B., Dusek, J., Benson, H., Rauch, S., **Moore, C. I.** & Fischl, B. (2005) Meditation experience is associated with increased cortical thickness. *Neuroreport* 16:1893-7.
- Andermann, M. L., Ritt, J., Neimark, M. A. & **Moore, C. I.** (2004) Neural Correlates of Vibrissa Resonance: Band-Pass and Somatotopic Representation of High-Frequency Stimuli. *Neuron* 42:452-463.
- Moore, C. I.** (2004) Frequency-Dependent Information Processing in the Vibrissa Sensory System. Invited Review in *J Neurophysiol* 91:2390-2399.
- Cunningham, M. G., Bolay, H., Scouten, C. W., **Moore, C. I.**, Jacoby, D., Moskowitz, M. & Sorensen, J. C. (2004) Preclinical Evaluation of a Novel Intracerebral Microinjection Instrument Permitting Electrophysiologically Guided Delivery of Therapeutics. *Neurosurgery* 54:1497-1507.
- Neimark, M. A., Andermann, M. L., Hopfield, J. J. & **Moore, C. I.** (2003) Vibrissa Resonance as a Transduction Mechanism for Tactile Encoding *J Neurosci* 23:6499-6509.
- Garabedian C.E., Jones S.R., Merzenich M.M., Dale A. and **Moore C. I.** (2003) Band-pass response properties of rat SI neurons. *J Neurophysiol* 90:1379-91.
- Moore, C. I.**, Stern, C. E., Dunbar, C., Kostyk, S. Gehi, A., & Corkin, S. (2000) Referred Phantom Sensations and Cortical Reorganization After Spinal Cord Injury in Humans. *PNAS USA* 97:14703-14708.
- Moore, C. I.**, Stern, C., Corkin, S., Fischl, B., Gray, A., Rosen, B. & Dale, A. M. (2000) Segregation of somatosensory activation in the human hand area using fMRI. *J Neurophysiol* 84: 558-569.
- Cramer, S. C., **Moore, C. I.**, Finklestein S. P. & Rosen, B. R. (2000) A Pilot Study of Somatotopic Mapping After Cortical Infarct. *Stroke* 31: 668-671.
- Hui, K., Liu, J., Markis, N., Gollub, R., Shen, A., **Moore, C. I.**, Kennedy, D. N., Rosen, B. R., & Kwong, K. K. (2000) Accupuncture modulates the limbic system and subcortical gray structures of the human brain—direct evidence by fMRI. *Hum Brain Map* 9:13-25.

Moore, C. I., Nelson, S. B. & Sur, M. (1999) Dynamics of neuronal integration in rat somatosensory cortex *TINS* 22: 513-520.

Moore, C. I. & Nelson, S. B. (1998) Spatio-temporal subthreshold receptive fields in the vibrissa representation of rat primary somatosensory cortex. *J Neurophysiol* 80: 2882-2892.

Sheth, B. R., **Moore, C. I.** & Sur, M. (1998) Temporal modulation of spatial borders in rat barrel cortex. *J Neurophysiol* 79:464-470.

Locasio, J. J., Jennings, P. J., **Moore, C. I.** & Corkin, S. (1997) Time series analysis in the time domain and resampling methods for studies of functional magnetic resonance brain imaging. *Hum Br Map* 5:168-193.

Nayak, A., **Moore, C. I.** & Browning, M. B. (1996) Ca²⁺/calmodulin-dependent Protein Kinase II Phosphorylation of the Presynaptic Protein Synapsin I is Persistently Increased During Long-Term Potentiation. *Proc Natl Acad Sci, USA* 93:15451-15456.

Cramer, K., **Moore, C. I.** & Sur, M. (1995) Transient expression of NADPH-Diaphorase in the lateral geniculate nucleus of the ferret during development *J Comp Neurol* 353:306-316.

Moore, C. I., Browning, M. B. & Rose, G. M. (1993) Hippocampal Plasticity Induced by Primed Burst, But Not LTP, Stimulation is Impaired in Area CA1 of Aged Fischer-344 Rats. *Hippocampus* 3: 57-66.