

**Vincent P. Clark, PhD**

**October 4, 2012**

**Educational History:**

***Intramural Research Fellow, 1993-1997***

Laboratory of Brain and Cognition, National Institute of Mental Health, NIH.  
10 Center Dr., MSC 1366, Bldg. 10, Room 4C104, Bethesda, MD 20892-1366  
Major Field of Study: Neuroimaging, Mentors: Dr. Leslie Ungerleider and Dr. James Haxby

***Ph.D. in Neuroscience, 1987-1993***

Graduate Program in Neuroscience, University of California, San Diego  
9500 Gilman Drive, La Jolla CA 92093-0634  
Dissertation Advisor: Dr. Steven A. Hillyard  
Dissertation Title: *Localization and Identification of Functional Regions within the Human Visual System*

***B.S. in Psychobiology with Honors in Psychology, 1982-1987***

Department of Psychology, University of California, Los Angeles  
1285 Franz Hall, Box 951563, Los Angeles, CA 90095-1563

**Employment History - Principal Positions:**

***Professor, 2012-Present***

Translational Neuroscience, The Mind Research Network, 1101 Yale Blvd. NE, Albuquerque, New Mexico 87106

***Associate Professor, 2009-Present***

Translational Neuroscience, The Mind Research Network, 1101 Yale Blvd. NE, Albuquerque, New Mexico 87106

***Scientific Director, 2006-2009***

The Mind Research Network, 1101 Yale Blvd. NE, Albuquerque, New Mexico 87106

***Director of Neuroscience, 2004-2006***

The Mental Illness and Neuroscience Discovery (MIND) Institute, 1101 Yale Blvd. NE, Albuquerque, New Mexico, 87106

***Staff Scientist, 2002-2004***

The Mental Illness and Neuroscience Discovery (MIND) Institute, 1101 Yale Blvd. NE, Albuquerque, New Mexico, 87106

***Associate Professor, 2002-Present***

Department of Psychology, University of New Mexico, MSC03-2220, 1 University of New Mexico, Albuquerque, NM 87131-1161

***Assistant Professor, 1997-2002***

Department of Psychiatry, University of Connecticut Health Center, MC 1410, 263 Farmington Avenue Farmington, CT 06030-1410

**Employment History - Concurrent Appointments and Consultantships:**

***Director, 2011-Present***

Clinical Neuroscience Center in Psychology, University of New Mexico  
1 University of New Mexico, MSC03-2220, Albuquerque, NM 87131-1161

***Area Head, 2006-2011***

Doctoral Program in Cognition, Brain and Behavior, Department of Psychology, University of New Mexico,  
MSC03-2220, 1 University of New Mexico, Albuquerque, NM 87131-1161

***Associate Professor, Secondary Appointment, 2003-Present***

Department of Neuroscience, University of New Mexico, MSC08-4740, 1 University of New Mexico,  
Albuquerque, NM 87131

***Faculty Member, 1998-2002***

Program in Biomedical Engineering, Room 217, A.B. Bronwell Building, 260 Glenbrook Road, Unit 2247,  
University of Connecticut, Storrs, CT 06269-2247

***Visiting Scientist and Lecturer, 1996-1997***

Department of Psychology, O'Boyle Hall Room 314, The Catholic University of America, Washington DC  
20064

**Professional Recognition, Honors, etc.:**

***Education Chair (Elected by peers), 2007-2010***

Organization for Human Brain Mapping

***Post-Doctoral Training Fellowship (Competitive), 1993***

McDonnell-Pew Center for Cognitive Neuroscience, UCSD

***Fellowship, 1991***

Dartmouth Summer Institute in Cognitive Neuroscience

***Pre-Doctoral Training Fellowship (Competitive), 1990-1993***

McDonnell-Pew Center for Cognitive Neuroscience, UCSD

***Honors in Psychology, 1987***

Department of Psychology, University of California, Los Angeles

***Dean's Honors List, 1982-1987***

College of Letters and Sciences, University of California, Los Angeles

***National Merit Scholarship Semifinalist, 1982***

Grosse Pointe South High School, Grosse Pointe, MI

## **Short Narrative Description of Research, Teaching and Service Interests**

My current research interests include three major topics: 1) The development of neuroimaging techniques for the study and diagnosis of neurological and psychiatric disorders. 2) The development of novel treatments for motor, brain and mental illness. 3) The development of brain stimulation techniques for neuroenhancement. I currently have 50 peer-reviewed publications and 3 in press, with an average of approximately 51 citations per publication, and an H-index of 21. I have helped to acquire over \$60 million in extramural funding, managing approximately \$8 million of this as PI and an additional \$23 million as Director. During my training and later as a Junior faculty member, I have helped to develop a number of new technologies and areas of study in cognitive neuroscience, summarized in a recent invited article for a special issue of *NeuroImage* commemorating the 20th anniversary of fMRI. I utilize neuroimaging (EEG, MEG, fMRI and MRS) and neurostimulation (tDCS) to address hypotheses regarding the processes involved in mental illness, primarily schizophrenia and addiction, and perception, attention and memory in healthy subjects. The recent illness of my youngest son has influenced me to pursue a new research direction, involving the development of new methods for the diagnosis and treatment of chronic pain and motor illness, which has produced some exciting results already, and led to a recent TEDx talk.

I supervise and maintain an active research laboratory for training, and I have also organized a variety of courses and professional meetings for the broader scientific community. I currently have three junior graduate students and one ABD. Two other students have recently completed their PhDs. My 3 junior graduate students have been very productive, publishing a total of 17 papers, with another 8 in submission, and are fully funded. I also have supported many undergraduates in my lab, and mentored two minority undergraduates from the McNair Achievement Program, and one has started graduate school in Neuroscience. I teach several courses including Brain and Behavior, Intro to Functional Neuroimaging, Advanced Functional Neuroimaging, Clinical Neuroimaging, and CBB Seminar. I am currently developing Intro to the CNC Lab to train students to use the facilities offered by our the new Center I am directing. I have chaired a number of scientific meetings here in Albuquerque, including a recent workshop entitled *Imaging Neuroinflammation and Neuropathic Pain* with 30 presenters from 7 countries, for which I am co-editing a special issue of the *Journal of NeuroImmune Pharmacology* based on these talks. I was elected Education Chair for the Organization for Human Brain Mapping, where I helped to organize 20 courses for approximately 1500 attendees for meetings in Melbourne, San Francisco and Barcelona.

My service interests have focused on facilitating cognitive neuroscience research and education nationally and internationally, and on developing and promoting research infrastructure locally for faculty and students, which barely existed when I arrived. I was recruited to UNM in 2002 to help build and organize the Mind Research Network ([www.mrn.org](http://www.mrn.org)). Setting this up was a large undertaking, but well worth the effort. While Director of Neuroscience, and then as MRN Scientific Director, I helped to purchase and organize its research infrastructure, including an HD-EEG suite, 3 MRI and 2 MEG systems, and its extensive computer resources. I also mentored 12 junior scientists and hired 3 senior scientists, and during these three years extramural funding increased from less than \$500,000 to more than \$20 million, with over 300 employees and volunteers. I also served as Area Head for the Graduate Program in Cognition, Brain and Behavior in Psychology for 5 years, mentoring approximately 25 students over this time. I currently serve on the Policy & Planning, Colloquium and Extended University Funding committees for Psychology, and the Junior Promotion and Tenure and Conflict of Interest Committees for the University. I also serve on the Program Committee for the Organization for Human Brain Mapping, and on the Scientific Advisory Committee for the Reflex Sympathetic Dystrophy Syndrome Association. In addition, I serve as Handling Editor for *NeuroImage*, and on the Editorial Boards of *Human Brain Mapping* and *Psychiatry Journal*. I also serve as an Advisor to the Science & Entertainment Exchange in the National Academy of Sciences. I have recently been asked to become Director of the newly created Clinical Neuroscience Center in Psychology, a 10,000 s.f. facility where with 3 HD EEG labs, a brain stimulation lab with TMS and tDCS/tACS, and a data processing core with over 20 CPUs and 35TB of data storage, along with behavioral testing labs, meeting and testing rooms and 5 faculty pods with offices for 20 students.

## Scholarly Achievements

### Books Authored or Co-authored:

None.

### Books Edited or Co-edited:

None.

### Articles in Refereed Journals:

(Contributing authorship indicated by “\*”)

1. \*Coffman, B.A., Trumbo, M.C., **Clark, V.P.** Enhancement of object detection with transcranial direct current stimulation is associated with increased attention. *BMC Neuroscience*, 13:108, 2012.
2. He, H., Sui, J., Yua, Q., Turner, J.A., Ho, B.C., Sponheim, S.R., Manoach, D.S., **Clark, V.P.**, Calhoun, V.D. Altered small-world brain networks in schizophrenia patients during working memory performance. *PLoS ONE*, 7(6):e38195, 2012.
3. \*Coffman, B.A., Trumbo, M.C., Flores, R.A., Garcia, C.M., van der Merwe, A.J., Wassermann, E.M., Weisend, M.P., **Clark, V.P.** Impact of tDCS on performance and learning of target detection: Interaction with stimulus characteristics and experimental design. *Neuropsychologia*, 50(7):1594-1602, 2012.
4. Sims, A.B., **Clark, V.P.**, Cooper, M.S. Suppression of movement disorders by jaw realignment. *Pain Medicine*, 13(5):731-732, 2012.
5. Falcone, B., Coffman, B.A., **Clark, V.P.**, Parasuraman, R. Transcranial direct current stimulation augments perceptual sensitivity and 24-hour retention in a complex threat detection task. *PLoS ONE*, 7(4): e34993, 2012.
6. \***Clark, V.P.** A history of randomized task designs in fMRI. *NeuroImage*, 62(2): 1190–1194, 2012.
7. Cullen, K.R. Wallace, S., Magnotta, V.A., Bockholt, J., Erlich, S., Gollub, R.L., Manoach, D., Ho, B.C., **Clark, V.P.**, Lauriello, J., Bustillo, J.R., Schulz, S.C., Andreasen, N.C., Calhoun, V.D., Lim, K.O., White, T. Cigarette smoking and white matter microstructure in schizophrenia. *Psychiatry Research: Neuroimaging*, 201(2):152-158, 2012.
8. \***Clark, V.P.**, Coffman, B.A., Mayer, A.R., Weisend, M.P., Lane, T.D.R., Calhoun, V.D., Raybourn, E.M., Garcia, C.M., Wassermann, E.M. TDCS guided using fMRI significantly accelerates learning to identify concealed objects. *NeuroImage*, 59(1):117-128, 2012.
9. \***Clark, V.P.**, Coffman, B.A., Trumbo, M.C., Gasparovic, C. Transcranial direct current stimulation (tDCS) produces localized and specific alterations in neurochemistry: A 1H magnetic resonance spectroscopy study. *Neuroscience Letters*, 500(1): 67-71, 2011.
10. Stone, D.B., Urrea, L.J., Aine, C.J., Bustillo, J.R., **Clark, V.P.**, Stephen, J.M. Unisensory processing and multisensory integration in schizophrenia: A high-density electrical mapping study. *Neuropsychologia*, 50(7): 1594-602, 2011.
11. Bullard, L.M., Browning, E.S., **Clark, V.P.**, Coffman, B.A., Garcia, C.M., Jung, R.E., van der Merwe, A.J., Paulson, K.M., Vakhtin, A.A., Wootton, C.L., Weisend, M.P. Transcranial direct current stimulation's effect on novice versus experienced learning. *Experimental Brain Research*, 213(1):9-14, 2011.
12. Plis, S., Weisend, M.P., Damaraju, E., Eichele, T., Mayer, A., **Clark, V.P.**, Lane, T.D.R., Calhoun, V.P. Effective connectivity analysis of fMRI and MEG data collected under identical paradigms. *Computers in Biology and Medicine*, 41(12): 1156–1165, 2011.
13. Allen, E.A., Erhardt, E.B., Damaraju, E., Gruner, W., Segall, J.M., Silva, R.F., Havlicek, M., Rachakonda, S., Fries, J., Kalyanam, R., Michael, A.M., Caprihan, A., Turner, J.A., Eichele, T., Adelsheim, S., Bryan, A., Bustillo, J., **Clark, V.P.**, Feldstein Ewing, S., Filbey, F., Ford, C., Hutchison, K., Jung, R.E., Kiehl, K.A., Kodituwakku, P., Komesu, Y., Mayer, A.R., Pearlson, G., Phillips, J., Sadek, J., Stevens, M.,

- Teuscher, U., Thoma, R.J., Calhoun, V.D. A baseline for the multivariate comparison of resting state networks. *Frontiers in Systems Neuroscience*, 5:2, 2011.
14. Abbott, C., Juárez, M., White, T., Gollub, R.L., Pearlson, G.D., Bustillo, J. Lauriello, J., Ho, B.C., Bockholt, H. J., **Clark, V.P.**, Magnotta, V., Calhoun, V.D. Antipsychotic dose and diminished neural modulation: A multi-site fMRI study. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, 35(2):473-482, 2011.
  15. White, T., Magnotta, V.A., Bockholt, H.J., Williams, S., Gollub, R.L., Mueller, B.A., Ho, B.C., Jung, R., **Clark, V.P.**, Lauriello, J., Bustillo, J.R., Schulz, S.C., Andreasen, N.C., Calhoun, V.D., Lim. K.O. Global white matter abnormalities in schizophrenia: a multisite diffusion tensor imaging study. *Schizophrenia Bulletin*, 37(1):222-232, 2011.
  16. Kim, D.I, Sui, J., Rachakonda, S., White, T., Manoach, D. S., **Clark, V. P.**, Ho, B. C., Schulz, S. C. and Calhoun, V. D. Identification of imaging biomarkers in schizophrenia: A coefficient-constrained independent component analysis of the Mind multi-site schizophrenia study. *Journal of NeuroInformatics*, 8(4):213-229, 2010.
  17. Ehrlich, S., Morrow, E.E., Roffman, J.L., Wallace, S.R., Naylor, M., Bockholt, H.J., Lundquist, A., Yendiki, A., Ho , B.C., White, T., Manoach, D., **Clark, V.P.**, Calhoun, V.D., Gollub, R.L., Holt, D.J. The COMT Val108/158Met polymorphism and medial temporal lobe volumetry in patients with schizophrenia and healthy adults. *NeuroImage*, 53(3): 992-1000, 2010.
  18. Michael, AM, Baum, SA, White, T, Demirci, O, Andreasen, NC, Segall, JM, Jung, RE, Pearlson, G, **Clark, VP**, Gollub, RL, Schulz, SC, Roffman JL, Lim, KO, Ho, BC, Bockholt, HJ, Calhoun, VD. Does function follow form?: Methods to fuse structural and functional brain images show decreased linkage in schizophrenia. *NeuroImage*, 49(3):2626-2637, 2010.
  19. Kim, D.I., Manoach, D.S., Mathalon, D.H., Turner, J.A., Mannell, M., Brown, G.G., Ford, J.M., Gollub, R.L., White, T., Wible, C., Belger, A., Bockholt, H.J., **Clark, V.P.**, Lauriello, J., O'Leary, D., Mueller, B.A., Lim, K.O., Andreasen, N., Potkin, S.G., Calhoun, V.D. Dysregulation of working memory and default-mode networks in schizophrenia using independent component analysis, an fBIRN and MCIC Study. *Human Brain Mapping*, 30(11):3795-3811, 2009.
  20. Demirci, O., Stevens, M.C., Andreasen, N.C., Michael, A., Liu, J., White, T., Pearlson, G.D., **Clark, V.P.**, Calhoun, V.D. Investigation of relationships between fMRI brain networks in the spectral domain using ICA and Granger causality reveals distinct differences between schizophrenia patients and healthy controls. *NeuroImage*, 46(2):419-431, 2009.
  21. Sui, J., Adali, T., Pearlson, G.D., **Clark, V.P.**, Calhoun, V.D. A method for accurate group difference detection by constraining the mixing coefficients in an ICA framework. *Human Brain Mapping*, 30(9): 2953-2970, 2009.
  22. \*Burge, J., Lane, T., Link, H., Qiu, S., **Clark, V.P.** Discrete dynamic Bayesian network analysis of fMRI data. *Human Brain Mapping*, 30(1):122-137, 2009.
  23. Segall, J.M., Turner, J.A., van Erp, T.G.M., White, T., Bockholt, H.J., Gollub, R.L., Ho, B.C., Magnotta, V., Jung, R.E., McCarley, R.W., Schulz, S.C., Lauriello, J., **Clark, V.P.**, Voyvodic, J.T., Diaz, M.T., Calhoun V.D. Voxel-based morphometric multi-site collaborative study on schizophrenia. *Schizophrenia Bulletin*, 35(1):82-95, 2009.
  24. Mayer, A.R., Franco, A., Hanlon, F.M., Thoma, R.J., **Clark, V.P.**, Canive, J.M. The neural networks underlying auditory sensory gating. *NeuroImage*, 44(1):182-189. PMID: 18801443.
  25. \*Leyba, L., Mayer, A.R., Gollub R.L., Andreasen, N.C, **Clark, V.P.** Smoking status as a potential confound in the BOLD response of patients with schizophrenia. *Schizophrenia Research*, 104(1):79-84, 2008.
  26. Roffman, J.L., Gollub, R.L., Calhoun, V.D., Wassink, T.H., Weiss, A.P., Ho, B.C., White, T., **Clark, V.P.**, Fries, J., Andreasen, N.C., Goff, D.C., Manoach, D.S. MTHFR 677C→T genotype disrupts prefrontal function in schizophrenia through an interaction with COMT 158Val→Met. *PNAS*, 105(45):17573-17578, 2008.
  27. Demirci, O., **Clark, V.P.**, Calhoun, V.D. A projection pursuit application to detect schizophrenia using fMRI data. *NeuroImage*, 39(4):1774-1782, 2008.

28. Demirci, O., **Clark, V.P.**, Magnotta, V.A., Andreasen, N.C., Lauriello, J., Kiehl, K.A., Pearlson, G.D., Calhoun, V.D. A review of challenges in the use of fMRI for disease classification / characterization and a projection pursuit application from multi-site fMRI schizophrenia study. *Brain Imaging and Behavior*, 2(3):207-226, 2008.
29. Whalen, D., Benson, R. Richardson, M., Swainson, B., **Clark, V.P.**, Lai, S., Mencl, W., Fulbright, R., Constable, R.T., Liberman, A. Differentiation of speech and non-speech processing within primary auditory cortex. *Journal of the Acoustical Society of America*, 119(1):575-581, 2006.
30. Stevens, M.C., **Clark, V.P.**, Prestwood, K.M. Low-dose estradiol alters brain activity. *Psychiatry Research: Neuroimaging*, 139(3):199-217, 2005.
31. \***Clark, V.P.** Orthogonal polynomial regression for the detection of response variability in event-related fMRI. *NeuroImage*, 17:344-363, 2002.
32. \***Clark, V.P.**, Lai, S., Deckel, A.W. Altered functional MRI responses in Huntington's disease. *Neuroreport*, 13(5):703-706, 2002.
33. \***Clark, V.P.**, Fannon, S., Lai, S., Benson, R. Paradigm-dependent modulation of event-related fMRI activity evoked by the oddball task. *Human Brain Mapping*, 2001, 14(2): 116-127, 2001.
34. Benson, R.R., Whalen, D. H., Richardson, M., Swainson, B., **Clark, V.P.**, Lai, S., Liberman, A.M. Parametrically dissociating speech and non-speech perception in the brain using fMRI. *Brain and Language*, 78:364-396, 2001.
35. \***Clark, V.P.**, Fannon, S., Lai, S., Benson, R., Bauer, L. Responses to rare visual target and distractor stimuli using event-related fMRI. *Journal of Neurophysiology*, 83(5): 3133-3139, 2000.
36. Deckel, A.W., Weiner, R., Szigeti, D. **Clark, V.**, and Vento, J. Altered patterns of regional cerebral blood flow in patients with Huntington's disease: A SPECT study during rest and cognitive or motor activation. *Journal of Nuclear Medicine*, 41: 773-780, 2000.
37. Haxby, J.V., Ungerleider, L.G., **Clark, V.P.**, Schouten, J.L., Hoffman, E.A., Martin, A. The effect of face inversion on activity in human neural systems for face and object perception. *Neuron*, 22: 189-199, 1999.
38. \***Clark, V.P.**, Maisog, J.Ma., Haxby, J.V. An fMRI study of face perception and memory using random stimulus sequences. *Journal of Neurophysiology*, 79: 3257-3265, 1998.
39. Bavelier, D., Corina, D., Jezzard, P., **Clark, V.**, Karni, A., Lalwani, A., Rauschecker, J.P., Braun, A., Turner, R and Neville, H.J. Hemispheric specialization for English and ASL: Left invariance - right variability. *Neuroreport*, 9:1537-1542, 1998.
40. Neville, H.J., Bavelier, D., Corina, D., Rauschecker, J., Karni, A., Lalwani, A., Braun, A., **Clark, V.P.**, Jezzard, P., Turner, R. Cerebral organization for language in deaf and hearing subjects: Biological constraints and effects of experience. *Proceedings of the National Academy of Sciences of the United States of America*, 95(3): 922-929, 1998.
41. \***Clark, V.P.**, Parasuraman, R., Keil, K., Kulansky, R., Fannon, S., Maisog, J.Ma., Ungerleider, L., Haxby, J.V. Selective attention to face identity and color studied with fMRI. *Human Brain Mapping*, 5(4): 293-297, 1997.
42. Petit, L., **Clark, V.P.**, Ingeholm, J., Haxby, J.V. Dissociation of saccade-related and pursuit-related activation in human frontal eye fields as revealed by fMRI. *Journal of Neurophysiology*, 77: 3386-3390, 1997.
43. Bavelier, D., Corina, D., Jezzard, P., Padmanabhan, S., **Clark, V.P.**, Karni, A., Prinster, A., Braun, A., Lalwani, A., Rauschecker, J., Turner, R., Neville, H. Sentence reading: A functional MRI study at 4 Tesla. *Journal of Cognitive Neuroscience*, 9: 664-686, 1997.
44. \***Clark, V.P.**, Keil, K., Maisog, J.Ma., Courtney, S.M., Ungerleider, L.G., and Haxby, J.V. Functional magnetic resonance imaging of human visual cortex during face matching: A comparison with positron emission tomography. *NeuroImage*, 4(1): 1-15, 1996.
45. **Clark, V.P.** and Hillyard, S.A. Spatial selective attention affects early extrastriate but not striate components of the visual evoked potential. *Journal of Cognitive Neuroscience*, 8(5): 387-402, 1996.
46. **Clark, V.P.**, Fan, S. and Hillyard, S.A. Identification of early visual evoked potential generators by retinotopic and topographic analyses. *Human Brain Mapping*, 2: 170-187, 1995.

47. Gomez, C.M.G., **Clark, V.P.**, Fan, S., Luck, S.J. and Hillyard, S.A. Sources of attention-sensitive visual evoked potentials. *Journal of Brain Topography*, 7(1):41-51, 1994.
48. Luck, S.J., Hillyard, S.A., Mouloua, M., Woldorff, M.G., **Clark, V.P.**, and Hawkins, H.L. Effects of spatial cueing on luminance detectability: Psychophysical and electrophysiological evidence. *Journal of Experimental Psychology, Human Perception and Performance*, 20(4): 887-904, 1994.
49. Mangun, G.R., Luck, S.J., Plager, R., Loftus, W., Hillyard, S.A., Handy, T., **Clark, V.P.** and Gazzaniga, M.S. Monitoring the visual world: Hemispheric asymmetries and subcortical processes in attention. *Journal of Cognitive Neuroscience*, 6(3): 267-275, 1994.
50. \***Clark, V.P.**, Courchesne, E., and Grafe, M. *In-vivo* myeloarchitectonic analysis of human striate and extrastriate cortex using magnetic resonance imaging. *Cerebral Cortex*, 2: 417-424, 1992.

### Articles Appearing in Chapters in Edited Volumes:

1. Clark, R.E., **Clark, V.P.** From neo-behaviorism to neuroscience: Perspectives on the origins and future contributions of cognitive load research. In: *Cognitive Load: Theory & Applications*. J.L. Plass, R. Moreno and R. Brünken (Eds.) Cambridge University Press, Cambridge, England, 203-228, 2010.
2. \***Clark, V.P.** Attention. In: Encyclopedia of Human Development. N.J. Salkind, Neil J. (Ed.). Sage Publications. Thousand Oaks, CA, pp. 133-136, 2006.
3. \***Clark, V.P.** Structural and Functional Brain Imaging. In: *Encyclopedia of Human Development*. N.J. Salkind, Neil J. (Ed.). Sage Publications. Thousand Oaks, CA, pp. 1232-1235, 2006.
4. \***Clark, V.P.** Huntington's Chorea. In: *Encyclopedia of Human Development*. N.J. Salkind, Neil J. (Ed.). Sage Publications. Thousand Oaks, CA, pp. 660-661, 2006.
5. Burge, J., **Clark, V.P.**, Lane, T., Link, H., Qiu, S. *Bayesian classification of fMRI data: Evidence for altered neural networks in dementia*. Technical Report TR-CS-2004-28, University of New Mexico, Albuquerque, NM, 2004.
6. Haxby, J.V., Courtney, S.C., **Clark, V.P.** Functional magnetic resonance imaging and the study of attention. In: *The Attentive Brain*. R. Parasuraman (Ed.). MIT Press, Cambridge, pp. 123-142, 1998.
7. Haxby, J.V., **Clark, V.P.**, Courtney, S.C. Distributed hierarchical neural systems for visual memory in human cortex. In: *Connections, Cognition, and Alzheimer's Disease*. B. Hyman, C. Duyckaerts, Y. Christen (Eds.). Springer, Berlin, pp. 167-180, 1997.
8. Hillyard, S.A., Anllo-Vento, L., **Clark, V.P.**, Heinze, H., Luck, S.J., and Mangun, G.R. Neuroimaging approaches to the study of visual attention: A Tutorial. In: *Converging Operations in the Study of Visual Selective Attention*. M. Coles, A. Kramer and G. Logan (Eds.). American Psychological Association, pp. 107-138, 1996.

### Other Writings: (not abstracts)

None.

### Works in Progress:

#### Accepted for publication:

1. \***Clark, V.P.**, Beatty, G., Anderson, R.E., Kodituwakku, P., Phillips, J., Lane, T.D.R., Kiehl, K.A., Calhoun, V.D. Reduced fMRI activity predicts relapse in patients recovering from stimulant dependence. *Human Brain Mapping*, In press, 2012.
2. Cooper, M.S., **Clark, V.P.** Neuroinflammation, neuroautoimmunity, and the co-morbidities of complex regional pain syndrome. *Journal of NeuroImmune Pharmacology*, In press, 2012.
3. White, T., Bockholt, H.J., Ehrlich, S., Ho, B.C., Manoach, D.S., **Clark, V.P.**, Gollub, R.L., Calhoun, V.D., Schulz, S.C., Andreasen, N.C., Lim, K.O., Magnotta, V.A. Spatial characteristics of white matter abnormalities in schizophrenia. *Schizophrenia Bulletin*, In press, 2012.

Submitted for publication:

1. \***Clark, V.P.**, Coffman, B.A., Trumbo, M., Wegele, A.R. An evolutionary perspective on attentional processes. In: G.R. Mangun (Ed.) *Cognitive Electrophysiology of Attention*. Elsevier Press, submitted August 2012.
2. Sergey Plis, Jing Sui, Terran Lane, Sushmita Roy, **Vincent P Clark**, Vamsi K Potluru, Andrew Michael, Michael P Weisend, and Vince Calhoun, Capturing high-order interactions to discriminate groups in a multi-task schizophrenia dataset. Submitted September 2012.
3. Jing Sui, Hao He, Godfrey D Pearlson, Tülay Adali, Kent A. Kieh, Qingbao Yu, **Vincent P Clark**, Tonya White, Bryon Mueller, Beng C Ho, Nancy C. Andreasen, Vince D Calhoun. Three-way (N-way) fusion of brain imaging data based on mCCA+jICA and its application to discriminating schizophrenia. Submitted July 2012.

In preparation:

1. Mark S. Cooper, Vincent P. Clark, Linda Chang. Imaging neuroinflammation and neuropathic pain: outcomes from a translational research workshop. To be submitted shortly.
2. Brian A. Coffman, Vincent P. Clark. A review of transcranial direct current stimulation effects on cognition. Invited review article for *Neuropsychologia*.
3. Randy L. Gollub, Jody M. Shoemaker, Margaret D. King, Tonya White, Stefan Ehrlich, Scott R. Sponheim, Vincent P. Clark, Jessica A. Turner, Byron A. Mueller, Vince Magnotta, Daniel O'Leary, Beng C. Ho, Stefan Brauns, Dara S. Manoach, Stuart Wallace, Larry Seidman, Juan Bustillo, John Lauriello, Jeremy Bockholt, Kelvin O. Lim, Bruce R. Rosen, S. Charles Schulz, Vince D. Calhoun, Nancy C. Andreasen. The MCIC collection: a shared repository of multi-modal, multi-site brain image data from a clinical investigation of schizophrenia.
4. Piyadasa W. Kodituwakku, Robert Anderson, Vincent P. Clark. Deficient response monitoring predicts relapse to stimulant abuse.
5. Chobok Kim, James K. Kroger, Vince D. Calhoun, and Vincent P. Clark. Frontopolar cortex recruitment in manipulation of integrated information in working memory.
6. James K. Kroger, Chobok Kim, Doerte Spring, Vincent P. Clark, Vince D. Calhoun. A dissociation between frontopolar activation during maintenance and manipulation of integrated information: an fMRI study. Submitted, in revision.
7. James K. Kroger, Chobok Kim, Doerte Spring, Vincent P. Clark, and Vince D. Calhoun. Frontopolar cortex recruitment in exogenously cued attention switching.
8. James K. Kroger, Doerte K. Spring, Chobok Kim, Alisha Craine, Hannah Kinkel, Vincent P. Clark. Mental manipulation of a complex visual stimulus: an ERP study.

**Invited or Refereed Abstracts and/or Presentations at Professional Meetings:**

1. Oral orthotics for the treatment of spasmodic torticollis. National Spasmodic Torticollis Association Meeting, New Orleans, LA, planned 2012.
2. Starting a Small Revolution in Medicine. TEDxABQ, Albuquerque, NM, 2012.
3. Using tDCS to Alter Visual Perception and Learning. Spaulding Rehabilitation Hospital, Harvard Medical School, Boston, MA, 2012.
4. Neuroimaging, Neuroinflammation, and Neural Information Processing. Imaging Neuroinflammation and Neuropathic Pain. Meeting of the Reflex Sympathetic Dystrophy Syndrome Association, Albuquerque, NM, 2011.
5. Prediction of Relapse to Stimulant Use with fMRI. University of Hawaii, Honolulu, HI, 2011.
6. Artificial Attention using Brain Stimulation. *Cognitive Electrophysiology: Signals of the Mind*, a Tribute to Steven A. Hillyard. San Francisco, CA, 2011.



7. Increased Learning and Performance using Brain Stimulation and Neuroimaging. Tulane University, New Orleans, LA, 2011.
8. Acceleration of Learning to Identify Concealed Threats using Brain Stimulation Targeted with Neuroimaging. Los Alamos National Laboratory, Los Alamos, NM, 2011.
9. Clark, V.P., Coffman, B.A., Garcia, C., Weisend, M. P., Lane, T.D.R., Mayer, A., Raybourn, E.M., Calhoun, V.D., Wassermann, E.M. Transcranial direct current stimulation (TDCS) targeted using brain imaging accelerates learning. Oral Presentation, Brain Stimulation session. Organization for Human Brain Mapping, Barcelona, Spain, 2010.
10. Improving Learning and Performance Using Electrical Brain Stimulation. PAL Talk, Dept. Psychology, UNM, 2010.
11. Learning to Recognize Concealed and Disguised Objects: A Combined Multimodal Imaging and Brain Stimulation Study. Center for Brain and Mind, UC Davis, Davis, CA, 2010.
12. Improving Learning and Performance Using Electrical Brain Stimulation Targeted with Multimodal Neuroimaging. National Institute of Mental Health, NIH, Bethesda, MD, 2010.
13. Enhancing Cognition and Learning using Brain Stimulation. Center of Excellence in Neuroergonomics, Technology, and Cognition (CENTEC), Washington, DC, 2010.
14. Bioprediction in Stimulant Addiction. Conference on Bioprediction. Co-Sponsored by the MacArthur Foundation and the Oxford Centre for Neuroethics. Washington, DC, 2010.
15. Using Brain Imaging to Guide Brain Stimulation. Human Factors and Applied Cognition Program, Department of Psychology, George Mason University. Fairfax, VA, 2010.
16. Brain Stimulation Targeted with Neuroimaging Accelerates Perceptual Learning. Universitätsklinik für Neurologie, Universitätsklinikum Magdeburg, Magdeburg, Germany, 2010.
17. Better Learning through Brain Stimulation. Erasmus University Rotterdam, 2010.
18. Transcranial Direct Current Stimulation Targeted with Brain Imaging Greatly Accelerates Visual Learning. Abteilung Klinische Neurophysiologie, Universitätsmedizin Göttingen – Georg-August-Universität, Göttingen, Germany, 2010.
19. \*Clark, V.P., Coffman, B.A., Garcia, C., Weisend, M. P., van der Merwe, A., Browning, E.S., Lane, T., Kelly, K., Mayer, A., Raybourn, E.M., Calhoun, V.D., Bikson, M., Wassermann, E.M., Phillips, J.P. Transcranial direct current stimulation (TDCS) targeted with brain imaging greatly accelerates visual learning. Oral Presentation, Neuronal Dynamics of Object and Category Perception Session #306, Society for Neuroscience, Chicago, IL, 2009.
20. \*Clark, V.P., Beatty, G.K., Anderson, R., Koditwakku, P., Phillips, J., Kiehl, K.A., Calhoun, V.D. Cingulate and insula activity predict relapse in recovering stimulant addicts. Abstract #1818, Oral Presentation, Psychiatric Disorders Session, Organization for Human Brain Mapping, San Francisco, CA, 2009.
21. Ethical Issues in Neurotechnology: Where Are We Headed? University of New Mexico Spring Research Ethics Symposium, Fostering Integrity in Research. UNM, 2009.
22. Stimulating Brain Science: The Future of Neurotechnology. Decade of the Mind Symposium, Neuroethics: Legal, and Social Issues. Potomac Institute, 2009.
23. \*Clark, V.P., Beatty, G.K., Anderson, R., Koditwakku, P., Phillips, J., Kiehl, K.A., Calhoun, V.D. fMRI activity in cingulate and insular cortex predicts relapse in recovering stimulant addicts. Oral presentation, Society for Neuroscience, Washington, DC, 2008.
24. The MIND Institute and National Defense. National Defense University, 2008.
25. Clark, V.P., Manoach, D., Gollub, R., Ho, B.C., Lim, K.O., Burge, J., Lane, T., Andreasen, N. C. A Multi-Site fMRI Study of Schizophrenia: Effects of Illness Type and Duration on Brain Function and Connectivity. International Congress on Schizophrenia Research, Colorado Springs, CO, 2007.
26. Brain Imaging at the MIND Institute. Neuroscience Day, Department of Neuroscience, UNM, 2007.
27. Brain Networks in Learning and Mental Illness. Neural Computation: Measure, Analysis & Modeling of Cellular and Network Dynamics, LANL, Santa Fe, 2007.

28. Brain Imaging Predicts Recovery from Drug Addiction. Institute of Neuroradiology, University of Zurich, Switzerland, 2006.
29. Effects of Stress on Learning and Performance. DARPA Accelerated Learning Workshop, Washington DC, 2006.
30. Attention Anticipates Abstinence in Addiction. Conference on Attention, Awareness and Action, Mind and Brain Center, UC Davis, 2006.
31. Addictions Research at the MIND Imaging Center. CASAA, UNM, 2005.
32. Neuroimaging at the MIND Institute. Colloquia, Department of Computer Science, UNM, 2005.
33. Resources, Ongoing Projects and How to Get Access to The MIND Institute. PAL Talk, Department of Psychology, UNM, 2005.
34. Challenges in Designing and Analyzing Multi-Site FMR Studies: The MIND Clinical Imaging Consortium. 10th International Congress on Schizophrenia Research, Savannah, GA, 2005.
35. Multi-Site Collaborative FMRI Studies of Auditory Target Detection in Schizophrenia, World Psychiatric Association, Florence, Italy, 2004.
36. The MIND Clinical Imaging Consortium – fMRI Studies. The MIND Institute Science Day, Santa Fe, NM, 2004
37. Low dose estrogen, fMRI, and cognitive function. Bench to Bedside: Estrogen as a Case Study Workshop. National Institute on Aging, Bethesda, MD 2004.
38. MIND Matters: An Overview of Developing Research Programs and Tools at the MIND Institute. Department of Neuroscience Seminar, UNM, 2004.
39. Understanding Cognition through Functional Brain Imaging, Second Annual Workshop on Cognitive Systems, Santa Fe, NM, 2004
40. Combining EEG and fMRI in Clinical Populations. University of Oregon, 2004.
41. Applications of Neuroimaging for Clinical Research. MIND Institute, 2004.
42. Neuroimaging: What's it Good For? Department of Cognitive Science, University of California at San Diego, 2003.
43. The Neural Mechanisms of Attention. Department of Psychology, University of New Mexico, Albuquerque, NM, 2002.
44. Predicting Relapse in Recovering Cocaine Addicts. Human Genetics Lecture Series, UConn. Health Center, 2002.
45. Using Brain Imaging to Predict Relapse in Recovering Cocaine Addicts. Department of Psychiatry, Wayne State University, Detroit, MI, 2002.
46. Studies of Attention and Perception using Functional Brain Imaging. Department of Psychology, Tufts University, Medford, MA, 2002.
47. Higher-Order Responses in Event-Related fMRI. Satellite Symposium on Brain Imaging Methods and Analysis Techniques. Seventh Annual Meeting of the Organization for Human Brain Mapping, Brighton, U.K., 2001.
48. FMRI Studies of Multimodal Selective Attention. Yale NMR Research Group fMRI Talk, Yale University School of Medicine, New Haven, CT, 2001.
49. FMRI Studies of Attention and Perception. University of New Mexico, 2001.
50. Applications of Multiple Regression in fMRI: Event-Related fMRI. Satellite Symposium on Brain Imaging Methods and Analysis Techniques, Sixth Annual Meeting of the Organization for Human Brain Mapping, San Antonio, TX, 2000.
51. Event-Related fMRI using P300 ERP Tasks. Yale NMR Research Group fMRI Talk, Yale University School of Medicine, New Haven, CT, 2000.
52. ERP Tasks Examined using Event-Related fMRI. Brainmap Talk, NMR Research Center, Mass General Hospital, Charleston, MA, 2000.
53. ERP Tasks using fMRI: What More Can It Tell Us? Center for the Neural Basis of Cognition, Mellon Institute, CMU, 2000.

54. Event-Related fMRI Designs. Department of Psychology, Dartmouth University, Hannover, NH, 2000.
55. Neuroimaging in Cocaine Dependence and Relapse. National Institute of Drug Abuse, NIH, Bethesda, MD, 1999.
56. Functional MRI Studies of Attention and Vigilance. Chinese University of Hong Kong, Hong Kong, 1999.
57. Event-Related Paradigms in Functional MRI. Haskins Institute. New Haven, CT, 1999.
58. Mapping the Brain with MRI. Department of Psychology, Tufts University, Boston, MA, 1999.
59. NeuroImaging of Attention. Brain and Behavior Research Rounds, IOL, Hartford, CT, 1998.
60. Functional MRI Studies of Attention and Memory. Department of Psychology, University of Connecticut, Storrs, CT, 1998.
61. Functional MRI Studies of Attention and Cognition. Department of Psychiatry, University of Connecticut Health Center, Farmington, CT, 1997.
62. Experimental Design for the Integration of fMRI and EEG data. FMRI Visiting Fellowship Program, MGH NMR Center, Harvard University, 1997.
63. Functional MRI Studies of Visual Attention and Perception. Salk Institute, La Jolla, CA, 1997.
64. \*Clark, V.P., Maisog, J.Ma., Keil, K., Ungerleider, L., and Haxby, J.V. Visual Area Topography as Revealed by fMRI vs. PET. Presented at the Second International Conference on Functional Mapping of the Human Brain. NeuroImage, 3(3):S1, Boston, MA, 1996.
65. Comparing PET to FMRI findings in Visual Perception. Brain Map 1996: Conference on Human Brain Mapping and Modeling, San Antonio, TX, 1996.
66. Studies of Visual Selective Attention and Object Recognition using Functional MRI. Department of Psychology, University of Pittsburgh, 1996.
67. Studies of Selective Attention using fMRI. Georgetown Institute for Cognitive and Computational Studies, Georgetown University, 1995.
68. Studies of Selective Attention using Evoked Potentials and fMRI. Center for Behavioral Neuroscience, SUNY at Stony Brook, 1995.
69. Mechanisms of Visual Attention studied with fMRI. Center for Neuroscience, University of California, Davis, 1994.
70. Mapping the Human Brain with MRI. Department of Psychology, Stanford University, 1994.
71. \*Clark, V.P., Courchesne, E., Grafe, M. In-vivo myeloarchitectonic analysis of human occipital and parietal cortex using magnetic resonance imaging. International Conference on Cognitive Neuroscience, Jerusalem, Israel, 5:13, 1992.

### **Contributed (un-refereed) Abstracts and/or Oral Presentations at Professional Meetings:**

1. \*B. A. Coffman, C. M. Garcia, M. P. Weisend, K. Kelly, R. A. Flores, V. P. Clark. Differences in spectrograms of oscillatory MEG activity between hidden target and nontarget stimuli. Society for Neuroscience, 2012.
2. Sergey Plis, Jing Sui, Terran Lane, Sushmita Roy, Vincent P. Clark, Vamsi K. Potluru, Andrew Michael, Michael Weisend, Vince Calhoun. Capturing high-order interactions in neuroimaging data. Selected for Oral Session Presentation, Modeling and Analysis Methods. Organization for Human Brain Mapping, Beijing, China, 2012.
3. \*V.P. Clark, B. A. Coffman, M. C. Trumbo, C. Gasparovic. Transcranial direct current stimulation (TDCS) produces localized and specific increases in glutamate/glutamine and NAA. #413.1 Society for Neuroscience, 2010.
4. L. Bullard, A. J. Van Der Merwe, E. S. Browning, V. P. Clark, B. A. Coffman, R. A. Flores, C. M. Garcia, E. B. Kimball, K. M. Paulson, D. Puffer, E. M. Raybourn, A. A. Vakhtin, E. M. Wassermann, C. L. Wootton, M. P. Weisend. The effect of TDCS on performance and fatigue during a threat detection task.

Society for Neuroscience, 2010.

5. C. L. Wootton, E. S. Browning, V. P. Clark, B. A. Coffman, R. A. Flores, C. M. Garcia, E. B. Kimball, A. J. Van Der Merwe, K. Paulson, L. E. Petree, D. Puffer, E. Raybourn, A. A. Vakhtin, E. Wassermann, M. P. Weisend. Learning effects of anodal transcranial direct current stimulation (TDCS) differ between electrode placements. Society for Neuroscience, 2010.
6. S. M. Plis, E. Damaraju, C. L. Wootton, L. M. Bullard, V. P. Clark, B. A. Coffman, E. B. Kimball, A. J. Van Der Merwe, K. Paulson, A. Vakhtin, D. Puffer, R. Barrow, C. Garcia, M. P. Weisend. Effective connectivity analysis of fMRI and MEG data collected under identical paradigms. Society for Neuroscience, 2010.
7. Stone, D.B., Urrea, L., Aine, C., Clark, V.P., Stephen, J.M. Alterations in auditory processing and multisensory integration in schizophrenic patients revealed using EEG. Center for Biomedical Research Excellence Meeting, NCRR, NIH, Washington DC, 2010.
8. Bullard, L. Browning, E., Clark, V.P., Coffman, B., Jung, R., Kimball, E., van der Merwe, A., Wootton, C., Weisend, M. Transcranial direct current stimulation's effect on novice versus experienced learning. Organization for Human Brain Mapping, Barcelona, Spain, 2010.
9. C.M. Garcia, B.A. Coffman, V.P. Clark, M. P. Weisend, R. Barrow, A. van der Merwe, E.S. Browning, D. Puffer, E.M. Rayborn, V.D Calhoun, E.M. Wassermann, J.P. Phillips. Sensation of TDCS as a function of current density and electrode size. 7th International Conference on Biomagnetism, Dubrovnik, Croatia 2010.
10. B.A. Coffman, V.P. Clark, C. Garcia, M. P. Weisend, R. Barrow, A. van der Merwe, E.S. Browning, D. Puffer, E.M. Rayborn, V.D Calhoun, E.M. Wassermann, J.P. Phillips, R. Jung. TDCS accelerated learning of covert threat detection is influenced by current strength and stimuli familiarity vs. novelty. 7th International Conference on Biomagnetism, Dubrovnik, Croatia 2010.
11. Coffman, B.A., Clark, V.P., Garcia, C., Weisend, M. P., Barrow, R., van der Merwe, A., Browning, E.S., Mayer, A.R., Raybourn, E.M., Kelly, K., Puffer, D., Calhoun, V.D., Wassermann, E.M., Phillips, J.P. Changes in brain networks with learning of covert threat cues. Poster Presentation, High Level Visual Perception and Brain Networks Session 380, Society for Neuroscience, 2009
12. Ehrlich, S, Morrow, EE, Wallace, SR, Naylor, MG, Bockholt, HJ, Holt, DJ, Lundquist, AP, Yendiki, A, Roffman, JL, Ho, BC, White, T, Manoach, DS, Clark, VP, Calhoun, VD, Gollub, RL. The COMT Val158Met Polymorphism and Temporal Lobe Volumetry in Patients with Schizophrenia and Healthy Adults. Abstract #539, Oral Presentation, Genetics Session, Organization for Human Brain Mapping, San Francisco, CA, 2009.
13. Juárez, M, White, T, Pearlson, GD, Bustillo, J, Lauriello, J, Ho, BC, Bockholt, HJ, Clark, VP, Gollub, R, Magnotta, V, Machado, G, Calhoun, VD. Functional connectivity differences in first episode and chronic schizophrenia patients during an auditory sensorimotor task revealed by independent component analysis of a large multisite study. Abstract #2322, Organization for Human Brain Mapping, San Francisco, CA, 2009.
14. Michael, AM, Baum, SA, Segall, JM, Bockholt, HJ, Clark, VP, Jung, RE, Gollub, RL, Roffman, JL, Ho, BC, Andreasen, NC, Lim, KO, White, TJ, Schulz, SC, Calhoun, VD. Inter-Voxel Cross-Correlation Reveals Aberrantly Low Structural-Functional Linkage in Schizophrenia in a Multi-Site Study. Abstract #337, Organization for Human Brain Mapping, San Francisco, CA, 2009.
15. White, T, Leyba, L, Ho, BC, Clark, VP, Calhoun, VD, Wallace, S, Bockholt, HJ, Gollub, RL, Andreasen, NC, Schulz, SC, Magnotta, VA, Lim, KO. Cigarette Smoking Disrupts White Matter Integrity in Patients with Schizophrenia. Abstract #1020, Organization for Human Brain Mapping, San Francisco, CA, 2009.
16. Lane T, Plis S, Clark VP, Anderson B, Oyen D. Bayesian Analysis of Neural-Behavioral Interactions in Mental Illness. Collaborative Research in Computational Neuroscience, 2008.
17. \*Clark, V.P., Beatty, G.K., Anderson, R., Kodituwakku, P., Phillips, J., Kiehl, K.A., Calhoun, V.D. FMRI activity in cingulate and insular cortex predicts relapse in recovering stimulant addicts. Slide presentation, Society for Neuroscience, 2008.
18. Scully, M.S. Anderson, B., Lane, T., Bockholt, H.J., Clark, V. P., Calhoun, V., Gollub, R., Ho, B.,

- Lauriello, J., White, T., Jung, R. A dynamic Bayesian network analysis of functional network differences during the auditory oddball task, related to general intelligence. Poster presentation, Society for Neuroscience, 2008.
19. Arfai, N., Wilson, M., Clark, V. P., Wallace, J. A. Accelerating recovery of behavioral & cognitive functions via single intracerebral injection of various neurotrophic factors after somatosensory contusion in adult rats. Poster presentation, Society for Neuroscience, 2008.
  20. M. A. Monnig, A. Caprihan, D. Ruhl, P. Lysne, C. Gasparovic, V. Clark, R. A. Yeo, M. Bogenschutz, & R. J. Thoma . Diffusion tensor imaging reveals callosal white matter abnormality in alcohol dependence and recovery. Research Society on Alcoholism, 2008.
  21. Chobok Kim, Doerte Spring, James K. Kroger, Vince Calhoun, Vince Clark. Exogenously cued attention switching recruits frontal pole: An fMRI study. Cognitive Neuroscience Society, 2008.
  22. James K. Kroger, Doerte Spring, Chobok Kim, Vince Clark, Vince Calhoun. Double dissociations between lateral and medial frontopolar cortex for maintenance and manipulation of integrated information: An fMRI study. Cognitive Neuroscience Society, 2008.
  23. J. Lauriello, J. Bustillo. S. C. Schulz, N. Andreasen, R. Gollub, B. C. Ho, V.P. Clark, J. Bockholt, K. O. Lim. Overview of the MIND Imaging Consortium, International Congress on Schizophrenia Research, 2007.
  24. \*Beatty, G. K., Anderson, R. E., Koditwakku, P. W., Fries, J. F., Calhoun, V. D., Clark, V.P. Response time variability and fMRI signal changes during a cognitive interference task in stimulant dependent patients. Society for Neuroscience, San Diego, CA, 2007.
  25. Machado, G.R., Clark, V. P., Gollub, R., Lauriello, J., Magnotta, V., White, T., Calhoun, V. D. Probing schizophrenia with a sensorimotor task: large-scale (n=273) independent component analysis of first episode and chronic schizophrenia patients. Society for Neuroscience, San Diego, CA, 2007.
  26. M. Benavidez, V. P. Clark, B. Ho, G. Kuperberg, J. Lauriello, K. Lim, V. Calhoun. Functional networks identified in an auditory oddball task of chronic and first episode schizophrenia patients (n=261) collected from the mind clinical imaging consortium. Society for Neuroscience, San Diego, CA, 2007.
  27. Anderson, R.E., Clark, V.P., Barnes, G.E. Test of a two-path model of addiction-prone personality traits in a clinical sample. 26th International Congress of Applied Psychology, July 16-21, 2006, Athens, Greece.
  28. Lysne, P., Montano, R., Hanlon, F., Bantz, R., Lundy, L., Euler, M., Weisend, M., Clark, V.P., Thoma, R., Hart, B. Intra-run stability of M50 auditory gating in a paired-click paradigm. Biomag 2006, Vancouver, BC, Canada.
  29. \*Clark, V.P., Anderson, R.E., England, R., Beatty, G., DiPasquale, T., Posse, S., Koditwakku, P., Rosen, A., Phillips, J.P., Blanco, R., Hicks, P., Bogenschutz, M. Multimodal imaging of relapse potential in recently abstinent stimulant dependent patients. Organization of Human Brain Mapping, Florence, Italy, 2006.
  30. \*Clark, V.P., Anderson, R.E., England, R., Beatty, G., DiPasquale, T., Posse, S., Koditwakku, P., Rosen, A., Phillips, J.P., Blanco, R., Hicks, P., Bogenschutz, M. A multimodal imaging study of relapse in stimulant dependence. Society for Cognitive Neuroscience, San Francisco, 2006.
  31. \*England, R.L., Clark, V.P. The Relationship Between Psychopathic Traits and Emotional Processing using fMRI. International Neuropsychological Society, Boston, MA, 2006.
  32. \*Clark, V.P., Friedman, L., Manoach, D., Ho, B.C., Lim, K., Andreasen, N. A collaborative fMRI study of the novelty oddball task in schizophrenia: Effects of illness duration. Society for Neuroscience Abstracts, Washington, DC, 2005.
  33. \*Clark, V.P., Friedman, L., Lim, K., Ho, B.C., Andreasen, N. A multi-site collaborative fMRI study of the novelty oddball task in schizophrenia. Organization for Human Brain Mapping, Toronto, CA, 2005.
  34. \*Burge, J., Lane, T., Clark, V.P. Dynamic Bayesian network classification of fMRI data reveals altered functional connectivity in dementia. Organization for Human Brain Mapping, Toronto, CA, 2005.
  35. Kovacevic, S., Clark, V.P., Okada, Y., Partridge, L.D. and C.J. Aine, C.J. Encoding of Visual Features and Their Conjunctions: An fMRI and MEG Study. Biomag 2004. Boston, MA, 2004.

36. \*Burge, J., Lane, T., Clark, V.P. Dynamic Bayesian network classification of fMRI data reveals enhanced amygdala connectivity in dementia. Society for Neuroscience Abstracts, San Diego, CA, 2004.
37. \*Clark, V.P., Stevens, M.C., Lai, S. Effects of object categorical vs. subordinate level discrimination on fMRI responses in the oddball task. Society for Cognitive Neuroscience, San Francisco, CA, 2002.
38. \*Clark, V.P., Stevens, M.C., Lai, S. Distractor novelty effects on event-related fMRI responses in the oddball task. Society for Neuroscience, 2001.
39. Stevens, M.C., Lai, S., Benson, R., Kaplan, R.K., Clark, V.P. Altered event-related fMRI activity with conduct disorder. 109th Annual Meeting of the American Psychological Association, 2001.
40. \*Clark, V.P., Stevens, M.C. Event-related fMRI responses to the oddball task. Research Society on Alcoholism, 2001. Alcoholism Clinical and Experimental Research, 2001, 25(5 Supplement A): 78A.
41. \*Clark, V.P., Stevens, M., Chua, E., Goff, E., Audie, J., Lai, S., and Benson, R. An fMRI study of multimodal selective attention: Effects of functional relatedness. Cognitive Neuroscience Society Eighth Annual Meeting. Journal of Cognitive Neuroscience Supplement, 2001, p. 110.
42. \*Deckel, A.W., Fannon, S., Lai, S., Benson, R., Clark, V.P. Altered fMRI activity during maze testing in Huntington's disease. Cognitive Neuroscience Society Eighth Annual Meeting, Journal of Cognitive Neuroscience Supplement, 2001, p. 21.
43. Lloyd, D., Chua, E. and Clark, V.P. Canonical subject analysis: Seeking the typical and atypical rather than the mean in multi-subject fMRI studies. Cognitive Neuroscience Society Eighth Annual Meeting, Journal of Cognitive Neuroscience Supplement, 2001, p. 109.
44. \*Wakefield, J., Anderson, E., Benson, R., Lai, S., Clark, V.P. An fMRI study of brain response to native and unknown languages. Cognitive Neuroscience Society Eighth Annual Meeting, Journal of Cognitive Neuroscience Supplement, 2001, p. 98.
45. Whalen, D.H., Benson, R., Richardson, M., Clark, V.P., Lai, S. fMRI of speech perception using sinewave speech and acoustically matched nonspeech. Cognitive Neuroscience Society Eighth Annual Meeting, Journal of Cognitive Neuroscience Supplement, 2001, p. 128.
46. \*Clark, V.P., Fannon, S., Lai, S., Benson, R. Studies of the three-stimulus oddball task using event-related fMRI. Presented at the seventh annual meeting of the Cognitive Neuroscience Society in San Francisco, CA, April, 2000.
47. \*Clark, V.P., Deckel, A.W., Fannon, S., Lai, S., Benson, R. Reduced activation during Porteus maze testing in Huntington's Disease: An fMRI study. 29th Annual Meeting of the Society for Neuroscience in Miami Beach, FL. Society for Neuroscience Abstracts. 1999, 25(1-2):831.
48. Lai, S., Glover, G.H., Benson, R., Clark, V.P., Fannon, S., Ramsby, G.R. Improving detection of brain activation by measuring subject- and cortex-specific impulse response. Society of Magnetic Resonance in Medicine, 1999, 3:1699.
49. \*Clark, V.P., Fannon, S., Benson, R., Lai, S., Bauer, L., Ramsby, G. fMRI study of visual target detection. Journal of Cognitive Neuroscience, 1999, 93.
50. Dagli, M.S., Ingeholm, J.E., Clark, V.P., Haxby, J.V. Localization of cardiac induced variability in fMRI signal. Presented at the Third International Conference on Functional Mapping of the Human Brain. NeuroImage, 1997, 5(4): 431.
51. \*Clark, V.P., Maisog, J.Ma., Keil, K., Ungerleider, L., and Haxby, J.V. Visual Area Topography as Revealed by fMRI vs. PET. Presented at the Second International Conference on Functional Mapping of the Human Brain. NeuroImage, 1996, 3(3):S1.
52. Petit, L., Clark, V.P., Ingeholm, J., Courtney, S., Keil, K., Maisog, J., and Haxby, J. Frontal eye fields activation during visually guided saccades and smooth pursuit in healthy humans studied with fMRI. Society for Neuroscience Abstracts, 1996, 22:724.
53. Bavelier, D., Corina, D., Jezzard, P., Clark, V.P., Braun, A., Turner, R., and Neville, H. Cortical organization for language in native deaf and hearing signers. Society for Neuroscience Abstracts, 1996, 22:724.
54. Bavelier, D., Corina, D., Jezzard, P., Clark, V.P., Karni, A., Padmanabhan, S., Rauschecker, J., Turner, R.,

- and Neville, H. Sentence reading: An fMRI study at 4 T., VIIth Conference on Theoretical and Experimental Neuropsychology (TENNET), Brain and Cognition, 1996, 32, 165-167.
55. Corina, D., Bavelier, D., Jezzard, P., Clark, V.P., Padmanabhan, S., Rauschecker, J., Braun, A., Turner, R., and Neville, H. Processing of American sign language and English in native deaf signers: An fMRI study at 4T. Brain and Language, 1996.
  56. \*Clark, V.P., Parasuraman, R., Keil, K., Maisog, J.Ma., Courtney, S.A., Ungerleider, L., Haxby, J.V. Cortical fields for face and color perception revealed with fMRI. Society for Neuroscience Abstracts, 1995, 21:18.
  57. \*Clark, V.P., Parasuraman, R., Keil, K., Maisog, J.Ma., Karni, A., Ungerleider, L.G., Haxby, J.V. FMRI studies of attention to color and face identity. Human Brain Mapping, 1995, Supplement 1:32.
  58. Bavelier, D., Corina, D., Clark, V.P., Jezzard, P., Prinster, A., Karni, A., Lalwani, A., Rauschecker, J., Turner, R., Neville, H. Sentence reading : An fMRI study at 4T. Human Brain Mapping, 1995, Supplement 1:239.
  59. \*Clark, V.P., Parasuraman, R., Keil, K., Maisog, J.Ma., Karni, A., Ungerleider, L., Haxby, J.V. Attention to color and face identity studied with fMRI. Cognitive Neuroscience Society, 1995, 2:58.
  60. Courtney, S.M., Clark, V.P., Karni, A., Martin, A., Ungerleider, L.G., Haxby, J.V. FMRI studies reveal that attention, working memory, and learning modulate activity in human visual neural systems. Investigative Ophthalmology and Visual Science, 1995, 36(4):S612.
  61. Maisog, J.Ma., Clark, V.P., Courtney, S., Haxby, J.V. Estimating the hemodynamic response and effective degrees of freedom in functional MRI time series. Human Brain Mapping, 1995, Supplement 1:147.
  62. Beresten, K., Clark, V.P. FMRI studies of face processing using an asymmetrical birdcage coil. Society of Magnetic Resonance, 1995, 3:857.
  63. Bavelier, D., Corina, D., Clark, V.P., Dale, A., Jezzard, P., Prinster, A., Karni, A., Lalwani, A., Rauschecker, J., Turner, R., Neville, H. Sentence reading: A 4T fMRI study of cortical regions active during an English reading task. Society for Neuroscience Abstracts, 1994 20: 352.
  64. \*Clark, V.P., Keil, K., Lalonde, F., Maisog, J.Ma., Courtney, S.M., Karni, A., Ungerleider, L., and Haxby, J.V. Identification of cortical processing areas for the perception of faces and locations using fMRI. Society for Neuroscience Abstracts, 1994, 20:839.
  65. Neville, H., Corina, D., Bavelier, D., Clark, V.P., Dale, A., Jezzard, P., Prinster, A., Karni, A., Lalwani, A., Rauschecker, J., Turner, R. Biological constraints and effects of experience on cortical organization for language: An fMRI study of sentence processing in English and American sign language (ASL) by deaf and hearing subjects. Society for Neuroscience Abstracts, 1994, 20:352.
  66. \*Clark, V.P., Silu, F., Herold, N., Rubin, T.C., Hillyard, S.A. Components of the visual evoked potential identified by topographic mapping: Evidence for multiple visual streams in humans. Society for Neuroscience Abstracts, 1993, 19:1604.
  67. \*Clark, V.P., Courchesne, E., Hillyard, S.A., Grafe, M. Identification of early visually evoked potential component sources in-vivo using magnetic resonance imaging. Society for Neuroscience Abstracts, 1992, 18:593.
  68. \*Clark, V.P., Fan, S., Hillyard, S.A. Localization and identification of visually evoked potential generators. Evoked Potentials International Conference, Eger, Hungary, 1992, 10: P-30.
  69. \*Clark, V.P., Fan, S., Hillyard, S.A. Stimulus position effects on the visually evoked potential: Analysis and localization with respect to brain morphology. International Brain Research Organization 3rd World Congress, 1991, 3:400.
  70. \*Clark, V.P., Fan, S., Hillyard, S.A. The effects of stimulus position in the visually evoked potential: Analysis and localization with MRI. Society for Neuroscience Abstracts, 1991, 17:656.
  71. Gomez, C., Clark, V P., Fan, S., Hillyard, S.A. Localization of the early components of the visual ERP during spatial-selective attention. Society for Neuroscience Abstracts, 1991, 17:656.
  72. Berka, C., Clark, V.P., Halgren, E. Event-related slow potentials topographic distribution during primary memory. Society for Neuroscience Abstracts, 1987, 13:848.

## Research Funding:

Fast Network Inference Methods for Connectome Analysis, R21MH097201

Terran Lane, PI  
NIMH, NIH  
2013-2015, \$395,914  
Co-Investigator

Effects of Orthotics on Brain Function

Vincent P. Clark, PI  
National Spasmodic Torticollis Association  
2010-2014, \$23,000  
Role: Principal Investigator

Noninvasive Neural Stimulation Technology, R44 NS080632

Timothy A. Wagner, PI  
NINDS, NIH  
2012-2016, \$2,973,728  
Role: Consultant

Alcohol Research Training in Neurosciences, T32AA014127

C. Fernando Valenzuela, PI  
NIAAA, NIH  
2012-2013, \$1,043,896  
Role: Mentor for Brian A. Coffman.

The Neurobiology and Developmental Trajectories in Children at Risk for Severe Psychopathology, 40-00812-98-11021

Tonya White, MD, PhD, PI  
Open Programma Gezondheidsonderzoek ZonMW TOP Grant, Netherlands  
2011-2015, €75,000  
Role: Co-Investigator

Clinical Neuroscience Core Renovation for Psychology at University of New Mexico, G20RR030839

Jane Smith, PhD, PI  
NCRR, NIH  
2010-2015, \$4,964,723  
Role: Center Director

Neural Mechanisms of Schizophrenia: Use of Multiple Neuroimaging Tools to Examine Dysfunctions in Neural Integration (COBRE), P20RR021938

Vince Calhoun, PhD, PI  
NCRR, NIH  
2009-2014, \$11,640,511  
Role: Mentor

Socio-Moral Processing in Psychopathy and Substance Abuse, R01DA026505

Kent Kiehl, PhD, PI  
NIDA, NIH  
2009-2014, \$3,808,796  
Role: Co-Investigator

The Cognitive Neuroscience of Female Psychopathy. R01MH085010



Kent Kiehl, PhD, PI  
NIMH, NIH  
2009-2014, \$3,916,112  
Role: Co-Investigator

Brain Stimulation to Accelerate Learning of Threat Detection, Phase II.  
DARPA, DOD  
2009-2011 \$3,804,403  
Role: Principal Investigator

Mind Research Network  
John Rasure, PI  
DOE  
2008-2009, \$11,400,000  
Role: Scientific Director

Brain Stimulation to Accelerate Learning of Threat Detection, Phase I, NBCHC070103  
Vincent P. Clark, PI  
DARPA, DOD  
2007-2009, \$1,999,692  
Role: Principal Investigator

Mind Research Network.  
John Rasure, PI.  
DOE  
2007-2008, \$7,000,000  
Role: Scientific Director

Multimodal Imaging of the Sensory Gating Deficit in Chronic Cocaine Abusers, R03DA022435  
Andrew Mayer, PI  
NIDA, NIH  
2007-2008, \$252,953  
Role: Co-Investigator

Brain and Behavioral Impairment in Alcohol Dependence and Schizophrenia, K23AA016544  
Robert Thoma, PI  
NIAAA, NIH  
2006-2011, \$556,944  
Role: Mentor

The Functional Role of Frontopolar Cortex: Dynamics of Frontopolar Recruitment  
James Kroger, PI  
NIGMS, NIH.  
2006-2008 \$320,352.  
Role: Consultant

fMRI Analysis of the Decision Making Processes of Human Subjects  
Vincent P. Clark, PI  
Sandia National Laboratories, LDRD Program.  
2006, \$63,957  
Role: Principal Investigator

The Effects of Angry and Fearful Emotion States on Decision-Making.  
Vincent P. Clark, PI  
Sandia National Laboratories, LDRD Program

2006, \$85,767  
Principal Investigator

Bayesian Analysis of Neural-Behavioral Interactions in Mental Illness, R01MH076282  
Terran Lane, PI  
CRCNS, NIMH, NIH  
2005-2008 \$1,012,500  
Role: Co-Investigator

Neural Function in Cocaine Dependence and Relapse. Subproject 8353 in University of 5M01RR000997, New Mexico - General Clinical Research Center  
Vincent P. Clark, PI  
NCRR, NIH  
2005-2007, \$169,305  
Role: Principal Investigator

fMRI Imaging of Learning Strategies. Project in Southwest Science of Learning Center Catalyst Grant, SBE 0350360  
Vincent P. Clark, PI  
NSF  
2004-2006, \$275,000  
Role: Principal Investigator

Interactive Real-time fMRI at High Fields with Automatic Classification of Activation Patterns, R01EB002618  
Stefan Posse, PI  
NIBIB, NIH  
2003-2006, \$1,077,563  
Role: Co-Investigator

Neural Function in Cocaine Dependence and Relapse, R01 DA012852  
Vincent Clark, PI  
NIDA, NIH  
2001-2007, \$1,425,000  
Role: Principal Investigator

Event-Related Functional MRI of Adult ADHD  
Leighton Huey, PI  
Donaghue Medical Research Foundation  
2002, \$57,949.  
Role: Co-Investigator

Functional MRI of Attention and Working Memory in Normal Aging and Alzheimer's Disease  
Brett Steinberg, PhD, PI  
2001, \$100,000  
UConn Research Foundation  
Role: Co-Investigator

fMRI of Prefrontal Cortex Function in Pathological Gamblers  
Vincent P. Clark  
National Center for Responsible Gaming  
2000-2004, \$172,056  
Role: Principal Investigator

fMRI Responses to the Oddball Task and Risk Factors for Alcoholism  
Vincent P. Clark

UConn Alcohol Research Center and UConn General Clinical Research Center  
1999-2002, \$60,000  
Role: Principal Investigator

Neural Mechanisms of Attention  
Vincent P. Clark  
Research Initiation and Support Enhancement Award  
University of Connecticut  
1998-1999 \$120,000  
Role: Principal Investigator

### **Pending Research Funding:**

Modifying Alcohol Approach Motivations with tDCS and Cognitive Retraining  
Eric Claus, PI  
2012-2014, \$450,000  
Co-Investigator  
Currently JIT

## Teaching

### Doctoral Advisement:

Nariman Arfai, Ph.D.; Defended 2010; Dissertation Title: *Effect of the Rerouting Rostral Migratory Stream on Recovery of Cognitive Function after Medial Frontal Aspiration in Rat.*

Leonard Leyba, M.D. Ph.D.; Defended 2007; Dissertation Title: *Cigarette Smoking and fMRI.*

### Masters Advisement:

Michael Hunter, B.S., Awarded Ford Foundation Graduate Fellowship. MS Thesis Title: *Large-scale intrinsic functional connectivity and attention in schizophrenia.* MS expected 2012. PhD expected 2016.

Brian Coffman, B.S., 2011, MS Thesis Title: *Investigation of the Context Dependent Learning Effects of TDCS using mock MRI.* PhD expected 2015.

Michael Trumbo, B.S., 2011, MS Thesis Title: *Investigating the Effects of TDCS on Attentional Processes.* PhD expected 2015.

Gregory Beatty, B.S., 2008, MS Thesis Title: *Response Time Variability, Functional Magnetic Resonance Imaging Signal Changes, and Event-Related Potential Amplitudes During Cognitive Interference in Stimulant Dependence.* Dissertation Title: *Are Cocaine and Methamphetamine Dependencies Differentially Associated with Deficits of Inhibitory Control and Alterations in Related Neural Networks?* PhD expected 2013.

Rebecca England, PhD, 2005, MS Thesis Title: *How Do Personality Traits Mediate Emotional Processing in an Abstinent Stimulant Addicted Sample? An fMRI Study.*

Joseph Audie, PhD, 2001 MS Thesis title: *Contrast Effects in fMRI Data Analysis.*

Elaine Goff, MS, 2000, MS Thesis Title: *fMRI of Face Attention and Perception.*

### Bachelor's Honors Advisement:

None.

### Undergraduate Student Mentoring:

Jason Long, B.S., 2008-2011, Ronald E. McNair Post-Baccalaureate Achievement & Research Opportunity Program.

Ashley Racheal Wegele, 2011-Present. Ronald E. McNair Post-Baccalaureate Achievement & Research Opportunity Program.

## **Classroom Teaching:**

- 2013, Fall; Psychology 240, Brain and Behavior (Online, Planned)
- 2012, Spring; Psychology 450/650, Clinical Neuroimaging (Planned)
- 2012, Fall; Psychology 450/650, Introduction to the Clinical Neuroscience Center Laboratory
- 2012, Fall; Psychology 450/650, EEG and MEG Analysis Laboratory, 1 Lecture
- 2011 Fall and 2012 Spring; Sabbatical
- 2011, Spring; Psychology 650, Advanced Topics in Neuroimaging
- 2011, Spring; CS 491/591 and ECE 595, Cognitive and Computational Neuroscience, 1 Lecture
- 2010, Fall; Psychology 641, Seminar in Cognition, Brain and Behavior
- 2010, Fall; Psych 391: Junior Honors Seminar, 1 Lecture
- 2010, Fall; ECE595: Cognitive Radios and Cognitive Radio Networks, 1 Lecture
- 2010, Spring; Psychology 650, Introduction to Functional Neuroimaging
- 2009, Fall; Psychology 641, Seminar in Cognition, Brain and Behavior
- 2008, Fall; Psychology 641, Seminar in Cognition, Brain and Behavior
- 2008, Spring; Master's of Science in Clinical/Translational Research (MSCR), Current and Emerging Technology; 1 lecture.
- 2007, Fall; Psychology 641, Seminar in Cognition, Brain and Behavior
- 2006, Spring; Psychology 450/650 Sec 5, Clinical Neuroimaging
- 2006, Spring; CS595, Learning from Cognitive, Computation, and Neuroscience, 1 Lecture
- 2005, Fall; Psychology 240, Brain and Behavior
- 2005, Fall; Psychology 450/650 Sec 5, Clinical Neuroimaging
- 2005, Spring; Psychology 240, Brain and Behavior
- 2004, Fall; Psychology 450/650 Sec 5, Magnetic Resonance Imaging and Spectroscopy: From Methods to Functional Brain Imaging
- 2004, Fall; Psychology Research Seminar, 1 Lecture
- 2004, Summer; Pre-medical Summer School Lecture Series, UNMHSC Medical School, 1 lecture.
- 2004, Spring; Psychology 240, Brain and Behavior
- 2003, Fall; Psychology 650, Applications of Functional Neuroimaging

2003, Fall; Psychology 505, Research Seminar, 1 Lecture

2003, Spring; Psychology 450/650, Sec 6, Functional Neuroimaging

2002; Seminar on fMRI and EEG Data Acquisition and Analysis Techniques

2002; Psychiatry Post-Graduate Year III lectures (2 lectures)

2002; Psychiatry Post-Graduate Year IV lectures (2 lectures)

2002; Systems Neuroscience (Meds 371; 1 session)

2001; Seminars on fMRI Data Acquisition and Analysis Techniques (6 sessions)

2001; Psychiatry Post-Graduate Year I (1 lecture)

2001; Neuroimaging Immersion (5 hours / week, 1 student)

2001; Neuroimaging in Mood Disorders (1 lecture)

2001; Psychiatry Post-Graduate Year II (1 lecture)

2001; Psychiatry Post-Graduate Year III (2 lectures)

2001; Psychiatry Medical Students Year III Didactic Series (5 lectures)

2000; Seminars on fMRI Data Acquisition and Analysis Techniques (6 lectures)

2000; Laboratory Rotation, 1 semester (Meds 496)

2000; Psychiatry Medical Students Year III Didactic Series (5 sessions)

2000; Systems Neuroscience (Meds 371)

1999; Seminars on fMRI Data Acquisition and Analysis Techniques (6 lectures)

1999; Director: Neuroscience 375, Current Topics in Human Brain Imaging

1999; Laboratory Rotation, 2 semesters (Meds 496)

1999; Physiological Digital Imaging (Meds 306), 1 lecture

1999; Neuroscience Seminars (Psych 358), UConn Storrs

1998; Initiated weekly fMRI Journal Club Seminars

1998; Seminar on Alcohol Research, Alcohol Research Center (1 lecture)

1998; Neurosciences Journal Club Seminars (2 lectures)

1998; Auditory Journal Club Seminar (1 lecture)

1998; Seminars on fMRI Data Acquisition and Analysis Techniques (12)

1998; Laboratory Rotation, 1 semester (Meds 496)

1998; Independent Study Course, 1 semester (Meds 495)

1998; Systems Neuroscience, 1 lecture (Meds 371)

1998; Research Seminar in Biopsychology, 1 lecture (Psych 356), UConn Storrs

1997; Human Brain Mapping, Foundation for Advanced Education in the Sciences, NIH

1996; Experimental Design for the Integration of fMRI and EEG data. FMRI Visiting Fellowship Program, MGH NMR Center, Charleston, MA. (1 invited lecture)

1996; Biological Basis of Behavior, Psychology 304; Department of Psychology, Catholic University

1990; Human Nutrition, Biology 22. Teaching Assistant.

### **Curriculum Development or Teaching Administrative Positions:**

Area Head, Graduate Program in Cognition Brain and Behavior; 2006-2011.

## Service:

### Editorships

- 2012-Present Editorial Board Member, *Psychiatry Journal*
- 2012-2014 Clark, V.P., Parasuraman, R., Editors. Special Issue on Neuroenhancement. *NeuroImage*, in preparation.  
Leaders in the field of brain stimulation and other techniques are contributing to this special issue of *NeuroImage* on Neuroenhancement.
- 2011-2013 Cooper, M.S., Clark, V.P., Chang, L., Editors. Special Issue on Imaging Neuroinflammation and Neuropathic Pain. *Journal of NeuroImmune Pharmacology*, in preparation.  
Selected papers from speakers at our October 2011 meeting, Imaging Neuroinflammation and Neuropathic Pain, are contributing peer-reviewed papers to this special issue.
- 2010-Present Handling Editor, *NeuroImage*  
One of 15 handling editors for the most highly cited journal specializing in neuroimaging. Identified reviewers and made decisions on 155 manuscripts since October 2010.
- 2009 Pietrini, P., Bookheimer, S. and Clark, V.P., Editors. Proceedings, Organization for Human Brain Mapping 15th Annual Meeting (Barcelona). *NeuroImage*, 47(S1).
- 2002-Present Editorial Board Member, *Human Brain Mapping*

### Reviewing for journals, ad-hoc

*American Journal of Psychiatry*  
*Archives of Psychiatry*  
*Biological Psychiatry*  
*Brain Research*  
*Cerebral Cortex*  
*Cognitive Brain Research*  
*Cognitive Neuropsychology*  
*European Journal of Neuroscience*  
*Human Brain Mapping*  
*IEEE Transactions on Medical Imaging*  
*JINS*  
*Journal of Cognitive Neuroscience*  
*Journal of NeuroImmune Pharmacology*  
*Journal of Neuroscience*  
*Journal of Neuroscience Methods*  
*Neurobiology of Aging*  
*NeuroImage*  
*Neuron*  
*Neuropsychiatric Genetics*



*Neuropsychologia*  
*Neuroscience Letters*  
*Psychobiology*  
*Psychophysiology*  
*Schizophrenia Research*

Reviewing for and national and international funding organizations

2011 Medical Research Council, Great Britain, ad-hoc reviewer  
2011 Netherlands Organization for Scientific Research, ad-hoc reviewer  
2008 Wise Reviewer, Canadian Foundation for Innovation  
Oct and  
July 2008 International and Cooperative Projects (ICP1) Study Section for Fogarty International Research Collaboration Award in Basic Biomedical Science, NIH.  
June 2007 NIDA Special Emphasis Panel ZDA1 KXN-G 05, NIDA, NIH  
Oct 2006 International and Cooperative Projects (ICP1) Study Section for Fogarty International Research Collaboration Award in Basic Biomedical Science, NIH.  
June 2005 RFA 05-006, Study Section ZDA1 MXS-M (31), NIDA, NIH  
June 2004 RPHB-B Special Emphasis Panel Study Section, NIH  
Oct 2000 and  
May 2001 NSD-A Study Section, NINDS, NIH  
2000-2012 Psychology/Neuroscience Study Section, Canadian Foundation for Innovation

Administrative work with professional societies, elected offices held

2005-2010 and  
2012-Present Program Committee Member, Organization for Human Brain Mapping  
2012-Present Scientific Advisory Committee Member, Reflex Sympathetic Dystrophy Syndrome Association  
2007-2010 Elected by peers as Education Chair, Organization for Human Brain Mapping, Organized Education Day courses in Melbourne, San Francisco and Barcelona.

Current administrative work in Department, College, University committees

2012-Present Member, EU (Online) Money Committee, Psychology, UNM

2010-Present Ad Hoc Chair and Member, Junior Tenure and Promotion Committee, College of Arts and Sciences, UNM

2006-Present Member, Conflict of Interest Committee-D, UNM

2006-Present Member, Policy & Planning, UNM Psychology

2003-Present Member, Executive Committee for Publications, MIND Clinical Imaging Consortium

2002-Present Faculty Member, Concentration in Behavioral Neuroscience, UNM Psychology

2002-Present Faculty Member, Concentration in Cognitive Neuroimaging, UNM Psychology

Previous administrative work in Department, College, University committees

2010-2011 Chair, Computer/Web Committee, UNM Psychology

2009-2011 Member, Grant Writing & Mentoring, UNM Psychology

2004-2011 Member, Walker Award Committee, UNM Dept. Neuroscience

2007-2009 Chair, DOE Internal Awards Progress Review, MRN

2007 Member, Salary Committee (elected by faculty), UNM Psychology

2006-2011 Area Head, Cognition, Brain and Behavior, UNM Psychology,

2005 Member, Committee on Distinction, UNM Psychology

2003-2005 Member, Science of Learning Center Advisory Committee

2005 Member, T-32 Grant Proposal Advisory Committee, UNM

2004-2005 Chair, Cognitive Search Committee, UNM Psychology

2002-2010 Member, Awards Committee, UNM Psychology

2002-2010 Member, Honors Committee, UNM Psychology

2002-2006 Admissions, UNM Psychology

2002-2005 Member, Computer Usage Committee, UNM Psychology

2002-2005 Member, Domenici Hall Design Committee

2002-2004 Member, MEG Purchasing Committee, MIND Imaging Center

2002-2004 Member, Lead Physicist Search Committee, Mind Imaging Center

2002-2003 Chair, MRI Purchase Committee, Mind Imaging Center

2001-2002 Member, Medical Admissions, UCHC.

- 2000-2002 Member, Computer Users Advisory Committee, UCHC
- 1998 Chair, NS-D Neurosciences Chair Search Committee, UCHC
- 1997-2002 Co-Director, Program in Functional NeuroImaging, UCHC

Community service

- 2008-Present Advisor, Science & Entertainment Exchange, National Academy of Sciences
- 2010 Judge, Dennis Chavez Elementary School Science Fair
- 2010 Presentation on Brain Research to APS Middle School students
- 2005-2009 Lectures on the Brain to Elementary School Children, Sunset Mesa Elementary School.
- 2000 Lectures (2), Drugs and the Brain: Mini Med School, UConn Health Center.
- 2000 Bulkeley High School Health Professions Center of Excellence Program