Curriculum Vitae
Andrew R. Mayer, Ph.D.
New Mexico License Number 0860

Undergraduate Education:

1990-1994: **B.A. in Psychology**
State University of New York at Buffalo
Summa Cum Laude; Phi Beta Kappa; Psi Chi.

Graduate Education:

1995-2001: **Pre-Doctoral Candidate, Clinical Psychology**
- FUHS/The Chicago Medical School
- Dissertation: A Functional Magnetic Resonance Imaging Study of Endogenous and Exogenous Visual-Spatial Attention.
- Ph.D. awarded in June of 2001

2000-2001: **APA Approved Predoctoral Clinical Internship**
- Southwest Consortium Predoctoral Psychology Internship

2001-2003: **Post-Doctoral Fellowship in Clinical Neuropsychology**
- University of New Mexico Hospital, Department of Neurology/The Mind Research Network
- Post-Doctoral Fellowship specializing in Clinical Neuropsychology and neuroimaging research
- Licensed Clinical Neuropsychologist (#0860) in the state of New Mexico, July, 2003.

Honors

1995	Tuition waiver for academic excellence
2001	Dean's Award for Outstanding Achievement in Research
2005	NIH Clinical Research Loan Repayment Award
2007	Junior Scholar Award to attend "Neuroimaging in the Study of Neural Recovery and Rehabilitation Conference" (Albert Einstein/University of Pennsylvania)
2009	Junior Scholar Award to attend "Electrical Stimulation in Neurologic Rehabilitation" (Albert Einstein/University of Pennsylvania)
2011	Nomination for Scholar Award in Understanding Human Cognition; McDonnell Foundation

Positions:

2004-2009	**Assistant Professor; Adjunct Assistant Professor** ♦ The Mind Research Network; University of New Mexico Hospital, Department of Neurology
2009-present	**Associate Professor** ♦ The Mind Research Network and University of New Mexico, Department of Psychology **Adjunct Assistant Professor**; University of New Mexico, Department of Neurology

Clinical Experience:

Site/Department:	Supervisor:	Duration:
Ph.D. Practicum The Chicago Medical School	Michael Seidenberg, Ph.D. Margaret Primeau, Ph.D.	12/95-7/97

♦ Responsibilities: neuropsychological assessment of children and medical students with ADHD and learning disorders, neuropsychological assessment of adults with neurological, neuropsychological and psychological assessment of children who were wards of the state, scoring and interpretation of test data, case synthesis, and the generation of full neuropsychological reports. 700 hours of experience.

Site/Department:	Supervisor:	Duration:
Ph.D. Practicum Medical College of Wisconsin	Thomas Hammake, Ph.D. Sara Swanson, Ph.D.	8/97-6/98

♦ Responsibilities: included neuropsychological assessment of adult patients with epilepsy, cerebral vascular accidents, traumatic brain injury, dementia, and other neurological disorders, the scoring and interpretation of test data, case synthesis, and the generation of full neuropsychological reports. Also attended weekly Neurology Rounds and Epilepsy Conference. 520 hours of experience.

Site/Department:	Supervisor:	Duration:
Rogers Memorial Hospital	Bradley Riemann, Ph.D.	06/98-02/00

♦ Responsibilities: included diagnostic interviews of patients with anxiety disorders, in-patient consultation for anxiety disorders, cognitive-behavioral intervention for patients with Obsessive-Compulsive Disorder and Panic Disorder, and cognitive-behavioral intervention for patients with other anxiety disorders. 1400 hours of experience.

Site/Department:	Supervisor:	Duration:

Internship VAMC; Albuquerque, NM	Kathleen Haaland, Ph.D. Rex Swanda, Ph.D.	9/00-9/01

♦ Responsibilities: neuropsychological assessment of veterans with a wide variety of neurological and psychiatric conditions, neuropsychological and psychological assessment of spinal cord injuries, participation in team meetings, psychotherapy with patients with medical conditions, CBT with rehabilitation population, general psychotherapy with Native Americans, scoring and interpretation of neuropsychological data, case synthesis, and the generation of full neuropsychological reports. 1750 hours of experience.

Site/Department:	Supervisor:	Duration:
Post-Doctoral Fellowship UNMH Department of Neurology Neuropsychology Associates P.C.	Rick Cambell, Ph.D. Rex Swanda, Ph.D. Stephen J. Chiulli, Ph.D.	1/02-12/03

♦ Responsibilities: Full neuropsychological assessment for a variety of neurological and psychiatric disorders, member of multi-disciplinary team assessing memory disorders, and clinical rotations in neuroradiology, epilepsy clinic, and movement disorders clinic.

Site/Department:	Duration:
Neuropsychology Associates P.C.	6/04-10/13

♦ Responsibilities: Full neuropsychological assessment for a variety of neurological and psychiatric disorders.

Research Positions and Affiliations:

Site/Department:	Supervisor:	Duration:
The Chicago Medical School Research Assistant	David Kosson, Ph.D.	9/95-8/98

♦ Responsibilities: administration of 2-hour semi-structured clinical interview to county inmates in a forensic setting, administration of behavioral tasks, database management, and statistical analyses of data. Fulfillment of requirements for a M.S. in Clinical Psychology.

Site/Department:	Supervisor:	Duration:
The Medical College of Wisconsin	Stephen Rao, Ph.D.	12/96-8/2001

Senior Research Technician — Michael Seidenberg, Ph.D.

♦ Responsibilities: supervision and training of over 15 undergraduate and graduate students, training of visiting faculty members from national and international institutions, and data analysis for over 20 FMRI experiments. Fulfillment of requirements for a Ph.D. in Clinical Psychology.

Site/Department:	Supervisor:	Duration:
The Mind Research Network UNM Department of Neurology	Deborah Harrington, Ph.D.	1/02-12/03

♦ Responsibilities: continued training of other professionals in the analyses of FMRI data, primary investigator on an FMRI study of auditory attention, participation in the design and analyses of FMRI studies on time perception and the effects of amphetamines on the BOLD response, intensive manuscript preparation and submission.

Site/Department:	Position:	Duration:
The Mind Research Network UNM Department of Neurology	Research Scientist Adjunct Assistant Professor	4/04-9/09
Departments of Neurology/Psychology	Associate Professor Adjunct Associate Professor	9/09-Present

♦ Responsibilities: Primary responsibilities include publication of peer reviewed research in both healthy and clinical populations and grant writing for extramural funding. Primary service duties included stimulus presentation programming for neuroimaging experiments, training of staff in FMRI analyses, and execution of FMRI analyses for staff. Administrative duties included Safety Officer, Database Repository Manager, Neuropsychological Testing Manager and policy development for all of the above.

Peer-reviewed Publications: (Conference papers and oral presentations are not tracked)

h-index = 28 (see http://scholar.google.com/citations?user=XnR3_rgAAAAJ&hl=en&oi=ao)

1. Crosson, B., Rao, S.M., Woodley, S.J., Rosen, A.C., Bobholz, J.A., **Mayer, A**., Cunningham, J.M., Hammeke, T.A., Fuller, S.A., Binder, J.R., Cox, R.W. and Stein, E.A. (1999). Mapping of semantic, phonological, and orthographic verbal working memory in normal adults with functional magnetic resonance imaging. *Neuropsychology,* 13(2):171-87.
2. Arrington, C.M., **Mayer, A.R**., Carr, T.H., and Rao, S.M. (2000). Neural mechanisms of visual attention: object-based selection of a region in space. *Journal of Cognitive Neuroscience,* 2:106-17.
3. Harrington, D.L., Rao, S.M., Haaland, K.Y., Bobholz, J.A., **Mayer, A**., Binder, J.R., and Cox, R.W. (2000). Specialized neural systems underlying representations of sequential movements. *Journal of Cognitive Neuroscience*, 12(1): 56-77.

4. Leveroni, C.L., Seidenberg, M., **Mayer, A.R**., Mead, L.A., Binder, J.R., and Rao, S.M. (2000). Neural systems underlying the recognition of familiar and newly learned faces. *Journal of Neuroscience,* 20(2): 878-86.
5. **Mayer, A. R**. & Kosson, D. S. (2000). Handedness and psychopathy. *Neuropsychiatry, Neuropsychology, and Behavioral Neurology,* 13(4): 233-8.
6. Cabeza, R., Rao, S.M., Wagner, A.D., **Mayer, A.R**., and Schacter, D. (2001). Can medial temporal lobe regions distinguish true from false? An event-related functional MRI study of veridical and illusory recognition memory. *Proceedings of the National Academy of Sciences of the United States of America,* 98(8): 4805-10. PMCID: PMC31915
7. **Mayer, A.R**., Zimbelman, J., Watanabe, Y., & Rao, S.M. (2001). Somatotopic organization of the medial wall of the cerebral hemispheres: A 3 Tesla fMRI study. *Neuroreport,* 12(17): 3811-8. Rao, SM, **Mayer, A.R**., & Harrington, DL. (2001). The evolution of brain activation during temporal processing. *Nature and Neuroscience,* 4(3): 317-23.
9. Harrington, D.L., Boyd, L.A., **Mayer, A.R**., Sheltraw, D.M., & Lee, R.R. (2002). Formulating representations of time: An event-related fMRI study. *Proceedings of the International Cognitive Neuroscience Society, 1,* 432-437.
10. Kosson, D. S., Suchy, Y, **Mayer, A. R**., & Libby, J. (2002). Facial affect recognition in criminal psychopaths. *Emotion, 2*(4): 398-411.
11. Mead, L.A., **Mayer, A.R**., Bobholz, J.A., Woodley, S.J., Cunningham, J.M., Hammeke, T.A., and Rao, S.M. (2002). Neural basis of the Stroop interference task: response competition or selective attention? *Journal of the International Neuropsychological Society,* 8(6): 735-42.
12. **Mayer, A.R**. & Kosson D.S. (2004). The effects of auditory and visual linguistic distracters on target localization. *Neuropsychology,* 18(2): 248-57.
13. Haaland, K., Elsinger, C., **Mayer, A.R**., Durgerian, S., & Rao, S.M. (2004). Motor sequence complexity and performing hand produce differential patterns of hemispheric lateralization. *Journal of Cognitive Neuroscience,* 16(4): 321-36.
14. Sweet, L.H., Rao, S.M., Primeau, M., **Mayer, A.R**., & Cohen, R.A. (2004). Functional magnetic resonance imaging of working memory among multiple sclerosis patients. *The Journal of Neuroimaging,* 14(2):150-7.
15. Harrington, D.L., Boyd, L.A., **Mayer, A.R**., Sheltraw, D.M., Lee, R.R., Huang, M. & Rao, S.M. (2004). Neural representation of interval encoding and decision making. *Cognitive Brain Research,* 21(2): 193-205.
16. **Mayer, A.R**., Seidenberg, M., Dorflinger, J., and Rao, S.M. (2004). An event-related fMRI study of exogenous orienting: supporting evidence for the cortical basis of inhibition of return? *Journal of Cognitive Neuroscience,* 16(7): 1262-71.
17. **Mayer, A.R**., Dorflinger, J., Rao, S.M., & Seidenberg, M. (2004). Neural networks underlying endogenous and exogenous visual-spatial orienting. *NeuroImage,* 23(2): 534-41.
18. **Mayer, A.R**., Harrington, D., Adair, J.C., & Lee, R. (2006). The neural networks underlying endogenous auditory covert orienting and reorienting. *NeuroImage,* 30(3): 938-49.
19. **Mayer, A.R**. & Kosson, D.S., Bedrick, E.J. (2006). Neuropsychological implications of selective attentional functioning in psychopathic offenders. *Neuropsychology*, 20(5): 614-624.
20. **Mayer, A.R**., Xu, J., Paré-Blagoev, J. & Posse, S. (2006). Reproducibility of activation in Broca's area during covert generation of single words at high field: a single trial FMRI study at 4 T. *Neuroimage*, 32(1):129-37.

21. **Mayer, A.R**., Harrington, D.L., Stephen, J., Adair, J.C., & Lee, R.R. (2007). An event-related fMRI Study of exogenous facilitation and inhibition of return in the auditory modality. *Journal of Cognitive Neuroscience,* 19(3): 455-67.
22. **Mayer, A.R**., Franco, A.R., Sanchez, N., Ling, J., & Canive, J. (2007). Assessment and quantification of head motion in neuropsychiatric functional imaging research as applied to schizophrenia. *Journal of the International Neuropsychological Society,* 13(5): 839-45.
23. Blagoev, K.B., Mihaila, B., Travis, B.J., Alexandrov, L.B., Bishop, A.R., Ranken, D., Posse, S., Gasparovic, C., **Mayer, A.R**., Aine, C.J., Ulbert, I., Morita, M., Müller, W., Connor, J. & Halgren E. (2007). Modelling the magnetic signature of neuronal tissue. *NeuroImage,* 37(1): 137-48.
24. **Mayer, A.R.,** Franco, A.R., Harrington, D.L. (2009). Neuronal modulation of auditory attention by informative and uninformative spatial cues. *Human Brain Mapping,* 30(5): 1652-66. "PMC Journal – In Process"
25. Franco, A.R., Ling, J., Caprihan, A., Calhoun, V.D., Jung, R.E., Heileman, G.L., **Mayer, A.R.** (2008). Multimodal and Multi-tissue Measures of Connectivity Revealed by Joint Independent Component Analysis. *Journal of Selected Topics in Signal Processing,* 2(6): 986-997. PMCID: PMC2748354
26. Leyba, L., **Mayer, A.R.,** Gollub, R.L., Andreasen, N.C., Clark, V.P. (2008). Smoking status as a potential confound in the BOLD response in patients with schizophrenia. *Schizophrenia Research*, 104(1-3): 79-84. PMCID: PMC2577169
27. **Mayer, A.R.,** Franco, A.R., Canive, J., Harrington, D.L. (2009). The effects of stimulus modality and frequency of stimulus presentation on cross-modal distraction. *Cerebral Cortex,* 19(5): 993-1007. "PMC Journal In Process"
28. **Mayer, A.R.,** Hanlon, F.M., Franco, A.R., Teshiba, T.M., Thoma, R.J., Clark, V.P., Canive, J.M. (2009). The neural networks underlying auditory sensory gating. *NeuroImage,* 44(1)*:*182-9. PMCID: PMC2656944
29. Franco, A.R., Pritchard, A., Calhoun, V.D., **Mayer, A.R.** (2009). Interrater and intermethod reliability of default mode network selection. *Human Brain Mapping,* 30(7): 2293-303. PMCID: PMC2751639
30. Thoma, R.J., Monnig, M., Hanlon, F.M., Miller, G.A., Petropoulos, H., **Mayer, A.R.**, Yeo, R., Euler, M., Lysne, P., Moses, S.N., Cañive, J.M. (2009). Hippocampus volume and episodic memory in schizophrenia. *Journal of the International Neuropsychological Society,* 15(2):182-95. PMCID: PMC2878285
31. Gasparovic, C., Yeo, R., Mannell, M., Ling, J., Elgie, R., Phillips, J., Doezema, D., & **Mayer, A.R**. (2009). Neurometabolite concentrations in gray and white matter in mild traumatic brain injury: an 1H-magnetic resonance spectroscopy study. *Journal of Neurotrauma,* 26(10): 1635-43. PMCID: PMC2822798
32**. Mayer, A.R.**, Mannell, M.V., Ling, J., Elgie, R., Gasparovic, C., Phillips, J.P., Doezema, D., and Yeo, R.A., (2009). Auditory orienting and inhibition of return in mild traumatic brain injury: a FMRI study. *Human Brain Mapping,* 30(12): 4152-66. PMCID: PMC2787969
33. Mannell, M., Franco, A.R., Calhoun, V.D., Canive, J.M., Thoma, R.J., & **Mayer, A.R.** (2010). Resting state and task-induced deactivation: A methodological comparison in patients with schizophrenia and healthy controls. *Human Brain Mapping,* 31(3): 424-37. PMCID: PMC2826505

34. **Mayer, A.R.**, Mannell, M.V., Ling, J., Gasparovic, C., Phillips, J.P., Doezema, D., Reichard, R. & Yeo, R.A. (2010). A prospective diffusion tensor imaging study in mild traumatic brain injury. *Neurology,* 74(8): 643-50. PMCID: PMC2830922
35. **Mayer, A.R.**, Mannell, M.V., Ling, J., Gasparovic, C., & Yeo, R.A. (2011). Functional connectivity in mild traumatic brain injury. *Human Brain Mapping,* 32(11): 1825-35. PMCID: PMC3204375
36. Ling, J., Merideth, F., Caprihan, A., Peña, A., Teshiba, T., & **Mayer, A.R.** (2012). Head injury or head motion? Assessment and quantification of motion artifacts in diffusion tensor imaging studies. *Human Brain Mapping,* 33(1): 50-62.
37. Yeo, R.A., Gasparovic, C., Merideth, F., Ruhl, D., Doezema, D., & **Mayer, A.R.** (2011). A longitudinal proton magnetic resonance spectroscopy study of mild traumatic brain injury. *Journal of Neurotrauma,* 28(1): 1-11. PMCID: PMC3019586
38. Clark, V.P., Coffman, B.A., **Mayer, A.R.,** Weisend, M. P., Lane, T.D.R., Calhoun, V.D., Raybourn, E.M., Garcia, C., Wassermann, E.M., (2012). TDCS guided using fMRI significantly accelerates learning to identify concealed objects. *NeuroImage,* 59(1):117-28. PMCID: PMC3387543
39. Komesu, Y.M., Ketai, L.H., **Mayer, A.R.**, Teshiba, T.M., & Rogers, R.G. (2011). Functional MRI of the Brain in Women with Overactive Bladder: Brain Activation During Urinary Urgency. *Female Pelvic Medicine and Reconstructive Surgery,* 17(1):50-54. PMCID: PMC3051367
40. 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.D., Bustillo, J., Clark, V.P., Feldstein Ewing, S.W., Filbey, F., Ford, C.C., Hutchison, K., Jung, R.E., Kiehl, K.A., Kodituwakku, P., Komesu, Y.M., **Mayer, A.R.,** Pearlson, G.D., Phillips, J.P., Sadek, J.R., Stevens, M., Teuscher, U., Thoma, R.J., and Calhoun, V.D.. (2011). A baseline for the multivariate comparison of resting-state networks. *Frontiers in Systems Neuroscience,* 5:2. PMCID: PMC3051178
41. Wilcox, C.E., Teshiba, T.M., Merideth, F., Ling, J., & **Mayer, A.R.** (2011). Enhanced cue reactivity and frontal-striatal functional connectivity in cocaine use disorders. *Drug and Alcohol Dependence,* 115(1-2):137-44. PMCID: PMC3090708
42. Gasparovic, C., Bedrick, E.J., **Mayer, A.R.,** Yeo, R.A., Chen., H., Damaraju, E., Calhoun, V.D., & Jung, R.E. (2011). Test-retest reliability of short-echo-time spectroscopic imaging of human brain at 3T. *Magnetic Resonance in Medicine,* 66(2): 324-32. PMCID: PMC3130105
43. Yeo, R. A., Gangestad. S. W., Gasparovic, C., Liu, J., Calhoun, V. D. Thoma, R. J., **Mayer, A. R.,** Kalnayam, R., & Hutchison, K. E. (2011). Rare copy number deletions predict individual variation in human brain metabolite concentrations in individuals with alcohol use disorders. *Biological Psychiatry,* 70(6): 537-44. PMCID: PMC3162096
44. **Mayer, A.R.,** Teshiba, T.M., Franco, A.R., Ling, J., Shane, M., Stephen, J.M., & Jung, R.E. (2012). Modeling conflict and error in the medial frontal cortex. *Human Brain Mapping,* 33(12): 2843-55. PMCID: PMC4091727
45. Plis, S., Weisend, M.P., Damaraju, E., Eichele, T., **Mayer, A.R.,** Clark, V.P., Lane, T., & Calhoun, V.D. (2011). Effective connectivity analysis of fMRI and MEG data collected under identical paradigms. *Computers in Biology and Medicine,* 41(12):1156-65. PMCID: PMC3174276
46. Shoemaker, J.M., Holdsworth, M.T., Aine, C., Calhoun, V.D., de La Garza, R., Feldstein Ewing, S.W., Hayek, R., **Mayer, A.R.,** Kiehl, K.A., Petree, L.E., Sanjuan, P., Scott, A.,

Stephen, J., Phillips, J.P. (2011). A practical approach to incidental findings in neuroimaging research. *Neurology,* 77(24): 2123-7. PMCID: PMC3235350

47. Turner, J. A., Chen, H., Mathalon, D. H., Allen, E. A., **Mayer, A.R.,** Abbott, C. C. and Bustillo, J. (2012). Reliability of the amplitude of low-frequency fluctuations in resting state fMRI in chronic schizophrenia. *Psychiatry Research:Neuroimaging,* 201(3):253-5. PMCID: PMC3361647
48. Teshiba, T.M., Ling, J., Ruhl, D.A., Bedrick, B.S., Peña A, & **Mayer A.R.** (2012). Evoked and intrinsic asymmetries during auditory attention: implications for the contralateral and neglect models of functioning. *Cerebral Cortex,* 23(3): 560-9. PMCID: PMC3563341
49. Abbott, C.C., Merideth, F., Ruhl, D., Yang, Z., Clarck, V.P., Calhoun, V.D., Hanlon, F.M. & **Mayer, A.R.** (2012). Auditory orienting and inhibition of return in schizophrenia: a functional magnetic resonance imaging study. *Progress in Neuro-Psychopharmacology and Biological Psychiatry,* 37(1): 161-8. PMCID: PMC3690330
50. **Mayer, A.R.**, Merideth, F., Ruhl, D., Ling, J., Hanlon, F.M., Bustillo, J., & Cañive, J. (2012). Functional imaging of the hemodynamic sensory gating response in schizophrenia. *Human Brain Mapping,* 34(9): 2302-12. PMCID: PMC4020570
51. Ling, J.M., Peña, A., Yeo, R., Merideth, F.L., Klimaj S., Gasparovic, C., & **Mayer, A.R.** (2012). Biomarkers of increased diffusion anisotropy in semi-acute mild traumatic brain injury: a longitudinal perspective. *Brain,* 135(Pt 4):1281-92. PMCID: PMC3326260
52. Yang, Z., Yeo, R.A., Pena, A., Ling, J., Klimaj, S., Campbell, R., Doezema, D. & **Mayer, A.R.** (2012). An fMRI study of auditory orienting and inhibition of return in pediatric mild traumatic brain injury. *Journal of Neurotrauma,* 29(12):2124-36. PMCID: PMC3419846
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54. **Mayer, A.R.,** Yang, Z., Yeo, R.A., Pena, A., Ling, J.M., Mannell, M.V., Stippler, M., and Mojtahed, K. (2012). A functional MRI study of multimodal selective attention following mild traumatic brain injury. *Brain Imaging and Behavior,* 6(2):343-54.
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57. **Mayer, A.R.,** Ling, J.M., Yang, Z., Pena, A., Yeo, R.A., & Klimaj, S. (2012). Diffusion abnormalities in pediatric mild traumatic brain injury. *Journal of Neuroscience,* 32(50):17961-9.
58. Yang, Z. and **Mayer, A.R.** (2012). An event-related FMRI study of exongenous orienting across vision and audition. *Human Brain Mapping,* 35(3): 964-74.
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60. **Mayer, A.R.,** Wilcox, C.E., Teshiba, T.M., Ling, J.M., & Yang, Z. (2013). Hyperactivation of the cognitive control network in cocaine use disorders during a multisensory Stroop task. *Drug and Alcohol Dependence,* 133(1): 235-41. PMCID: PMC3786052
61. Sui, J., He, H., Yu, Q., Chen, J., Rogers, J., Pearlson, G., **Mayer, A.R.,** Bustillo, J., Canive, J., & Calhoun, V.D. (2013). Combination of Resting state fMRI, DTI and sMRI Data to Discriminate Schizophrenia by N-way MCCA+jICA. *Frontiers in Human Neuroscience,* 7: 235. PMCID: PMC3666029
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63. Franco, A.R., Mannell, M.V., Calhoun, V.D. & **Mayer, A.R.** (2013). Impact of analysis methods on the reproducibility and reliability of resting-state networks. *Brain Connectivity,* 3(4): 363-74. PMCID: PMC3749744
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65. Ling, J.M., Klimaj, S., Toulouse, T. & **Mayer, A.R.** (2013). A prospective study of gray matter abnormalities in mild traumatic brain injury. *Neurology,* 81(24): 2121-7. PMCID: PMC3863349
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69. **Mayer, A.R.**, Ling, J.M., Allen, E.A., Klimaj, S.D., Yeo, R.A. & Hanlon, F.M. (in press). Static and Dynamic Intrinsic Connectivity following Mild Traumatic Brain Injury. *Journal of Neurotrauma,* 28(6): 688-688.
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84. Xue, W., Bowman, D., Pileggi, A.V., & **Mayer, A.R.** (2015). A multimodal approach for determining brain networks by jointly modeling functional and structural connectivity. *Frontiers in Computational Neuroscience*, 9:22. PMCID: PMC4335182
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86. Wilcox C.E., **Mayer A.R.,** Teshiba T.M., Ling J., Smith B., Wilcox G.L. & Mullins P.G. (2015) The Subjective Experience of Pain: An FMRI Study of Percept-Related Models and Functional Connectivity. *Pain Medicine.*
87. Quinn, D. Yeo, R. & **Mayer A.R.** (In press). Intracerebral Bullet Fragments: Toxic or Concussive Effect? Psychosomatics
88. Does incentive-elicited nucleus accumbens activation differ by substance of abuse? An examination with adolescents. *(in press). Developmental Cognitive Neuroscience.*
89. **Mayer, A.R.,** (in press). A Longitudinal Assessment of Structural and Chemical Alterations in MMA Fighters. *Journal of Neurotrauma*

Book Chapters

1. **Mayer, A. R.,** & Bellgowan, P. S. (2014). Functional Magnetic Resonance Imaging in Mild Traumatic Brain Injury. *In Concussions in Athletics* (pp. 249-270). Springer New York.

Manuscripts Under Review:

There are currently 3 manuscripts that are under review.

Teaching Experiences:

Fundamentals of AFNI (Analysis of Functional Neural Images): Practical training in the analysis of Functional MRI data. (Medical College of Wisconsin) - 6/97; 11/97; 6/98; 11/98; 6/99; 11/99; 10/2000; 6/2001

Responsibilities included course design and teaching a small group of individuals the basics of analyzing fMRI data using a locally developed software package. This practical training comprised one day of a three day workshop entitled "fMRI: An Introductory Course for Neuropsychologists," sponsored by the Medical College of Wisconsin (Course Director: Stephen M. Rao, Ph.D.) and attended by an international group of participants.

Cognitive Assessment: Teaching Assistant at Finch University of Health Sciences, Winter 1998

An Introduction to the Analysis of Functional Magnetic Resonance Data and Experimental Design: (State University of New York at Stony Brook) – 10/99

Organized and presented a two-day workshop on design issues in FMRI and the functional analysis of FMRI data. The workshop was attended by

faculty and staff from the institution.

Functional Magnetic Resonance Imaging Data and Experimental Design: (University of New Mexico) – 03/03; 03/04; 10/05; 11/06; 03/07; 03/08; 3/09

Yearly presenter for two graduate level lectures on design issues and the functional analysis of FMRI data for the departments of Electrical and Computer Engineering and Psychology.

An Introduction to Magnetic Resonance Imaging Techniques: (University of New Mexico; Department of Psychiatry) – 10/04-Present

Yearly presenter for an imaging series given to the clinical psychology interns and psychiatry fellows through the department of Psychiatry.

Fundamentals of Human Neuropsychology: (University of New Mexico; Department of Psychology) Spring Semester 2005

Full semester undergraduate course on brain-behavior relationships and the neuronal structures underlying human cognition.

Neuropsychological Assessment: (University of New Mexico; Department of Psychology) Fall Semester 2008

Full semester graduate course on the clinical assessment of cognition.

Introduction to Statistics: (University of New Mexico; Department of Psychology) Fall Semester 2011

Full semester undergraduate course on statistics and experimental design.

Current Research Support as Principle Investigator:

5R21DA031380-02 (PI Mayer) 7/1/2011 – 9/30/2015
NIH $467,500 Total Costs
Attentional Bias Modification: Efficacy and Mechanisms of Action in Cocaine Addiction
The goals of this project are to investigate the efficacy and mechanism of action of ABM in treating cocaine addiction and to determine which of the three neuronal abnormality or abnormalities are more predictive of relapse and drug utilization.

1R01MH101512-01A1 (PI Mayer) 4/1/14 – 3/31/18
NIH-NIMH $363,471 Direct Year 1
A Multidimensional Investigation of Cognitive Control Deficits in Psychopathology
The goal of this proposal is to utilize novel analytic methods and neuroimaging techniques to classify Psychotic Spectrum Disorders patients into meaningful sub-groups based on objective pathology within frontal brain circuits and genetic factors.

Current Research Support as Co-Investigator:

1 P20 RR021938-01 (PI Calhoun) 7/1/2013-6/30/2018
NIH
COBRE: Neural Mechanisms of Schizophrenia: Use of Multiple Neuroimaging Tools to Examine Dysfunctions in Neural Integration
Examines functional and anatomical connectivity in schizophrenia using multimodal neuroimaging techniques and analyses. Mentor for Junior PI.

1R01AT007171-01A1 (PI Ketai) 09/1/2012 – 06/30/2017
NIH, NCCAM
Brain-Centered Therapy versus Medication for Urgency Urinary Incontinence
The goal of this project is to examine the effect of hypnotherapy and pharmacotherapy on central functioning during a bladder extension task and during intrinsic activation.

W8iXWH-13-2-0047 (PI Barazanji) 09/30/2013 – 09/29/2016
DOD-USAARL
Improving Field Management and Safe Ground Transport of Patients with Head and Spine Injuries
The goal of this study is to carefully characterize the effects of transport on spinal injury and traumatic brain injury sustained in the open field exposures.

Completed Research Support as Principle Investigator:

I-CARE Program (PI) 4/1/2013-6/30/2014
State of New Mexico $1.5 million in total costs
Developed and implement a substance abuse program for State recipients of TANF designed to get parents back to work faster. Developed objective metrics for tracking progress throughout state program.

1 P20 RR021938-01 (*Project PI*) 6/1/2008-11/30/2013
NIH
COBRE: Neural Mechanisms of Schizophrenia: Use of Multiple Neuroimaging Tools to Examine Dysfunctions in Neural Integration
Examines functional and anatomical connectivity in schizophrenia using multimodal neuroimaging techniques and analyses. Emphasis on auditory attention.

R21NS064464 3/1/2009-2/28/2011
NIH
Attentional Dysfunction and Recovery in Traumatic Brain Injury (TBI)
To determine whether multimodal neuroimaging can be used as a biomarker of disorder cognition and the subsequent recovery in a civilian population of mild TBI patients

R21NS064464-01S1 10/1/2009-2/28/2011
NIH
Attentional Dysfunction and Recovery in Traumatic Brain Injury (TBI)

To determine whether electrophysiological measures can be used as a biomarker of disordered cognition and the subsequent recovery in mild TBI.

R24HD050836 12/01/2007-01/31/2009
AEN/NIH
Neuroimaging of Attentional Deficits in Traumatic Brain Injury
The study of attentional deficits in mild TBI during the semi-acute phase of injury.

1 R03 DA022435-01A1 01/01/2008-8/31/2009
NIH
Neurochemistry of Pain
To study common pathways between pain and negative emotion which result in drug seeking behavior and ultimately addiction.

1 R03 DA022435-01A1 9/01/2007 - 7/31/2009
NIH
Multimodal Imaging of the Sensory Gating in Cocaine Abuse
To study attention and sensory gating deficits in cocaine dependent individuals and increase our knowledge on the neurobiology of addiction which could be used as a bio-marker for determining the efficacy of alternative treatment regimens.

RAC Grant 01/01/06-12/31/06
University of New Mexico
A fMRI and Diffusion Tensor Imaging Study of Crossmodal Orienting
Investigate the neuronal substrates of exogenous and endogenous crossmodal orienting using event-related fMRI and diffusion tensor imaging in 30 healthy controls.

Internal Award 5/01/04-12/30/05
The Mind Research Network
Effects of stimulus rate and selective attention on the blood oxygen level dependent response in schizophrenia.
Examined the effects of stimulus rate and selective attention on the hemodynamic response in individuals with schizophrenia and healthy controls.

Internal Award 6/01/2008-9/31/2009
Mind Research Network
Bio-Markers in Traumatic Brain Injury
A study examining the utility of MR-based imaging techniques for providing bio-markers of neuronal injury following mild TBI.

Clinical LRP 07/01/05-6/30/07; 07/01/08-7/30/10
NIH
Multimodal Neuroimaging of Attentional Functioning In Healthy and Clinical Populations
Examine the neuronal substrates of attentional functioning in both clinical and healthy populations.

Completed Research Support as Co-Investigator:

RAC Grant 01/01/03-12/31/04
University of New Mexico
An Event-Related Study of Auditory Orienting.
Project investigating the neuronal substrates of exogenous and endogenous auditory orienting using in 25 healthy controls.

VA Merit Review Application 07/1/04-07/1/06
Department of Veterans Affairs
Corticostriatal Planning Deficits in Parkinson's Disease.
Project examining the neuronal substrates of planning in Parkinson's Disease.

RAC Grant 10/01/07-9/31/08
University of New Mexico
Emotion Recognition in Trans-sexual Individuals.
Project investigating the neuronal substrates of facial emotion recognition in trans-sexual individuals.

DARPA 6/25/2007 - 3/28/2009
Accelerated Learning
Development of quantitative and integrative neuroscience-based approaches for measuring, tracking and accelerating learning of threat detection, decision-making, and accurate response in warfighters through use of virtual reality environments, multimodal brain imaging techniques, novel methods for detection and analysis of non-linear brain networks, and direct brain stimulation to enhance attention.

LDRD 10/1/2009-9/30/2012
Sandia National Laboratories
Detection of Neuronal Currents
To determine whether magnetic resonance imaging techniques can be utilized to detect neuronal currents in vivo.

Student Mentoring:

Ph.D. Dissertation Committee:

Sanja Kovacevic, Ph.D. (Complete)
Leonard Leyba, Ph.D. (Complete)
Alexandre Franco (Complete)
Zhen Yang (Complete)
Sephira Ryman (On-going)

Masters Committee:

Jacki Janowich (On-going)

Bachelor's Level (Pre-Ph.D./M.D. School):

Jennifer Romero (Complete)
Maggie Mannell (Complete)
Amanda Pena (Complete)
Flannery Merideth (Complete)
David Ruhl (Complete)
Andrew Dodd (On-going)
Stefan Klimaj (Complete)
Nicholas Shaff (On-going)
Brigitte Stevens (On-going)

Amy Thompson (Complete)

UNMH Medical Students (Research Project):

Aaron Pritchard (Complete)
Irene Patniyot (Complete)
Kasra Mojtahed (Complete)

Post-Doctoral Fellows:

Duo Xu, Ph.D. (Complete)
Trent Toulouse Ph.D. (Complete)
Timothy Meier Ph.D. (On-going)

R01 COBRE

Christopher Abbott, M.D. (On-going)

K-Award

Claire Wilcox, M.D. (On-going)

Editorial/Reviewer Activity:

Ad-hoc Reviewer (2001-present):

Human Brain Mapping; NeuroImage; Psychiatry Research; Biological Psychiatry; Journal of Neuroscience; Journal of Neurotrauma; Brain; Biological Psychiatry; Brain Imaging and Behavior; Neuroradiology; Journal of the International Neuropsychological Society

2011-2013	Reviewer for Department of Veterans Affairs (Brain Injury, Rehabilitation Research and Development Service)
06/2012	Reviewer for NIH special emphasis panel on traumatic brain injury
02/2013	Reviewer for NIH Cognition and Perception Study section
7/2013	Reviewer for NIH section on chronic traumatic encephalopathy
2/2013	Reviewer for NIH special emphasis panel on traumatic headache
02/2014	Reviewer for NIH special emphasis panel on traumatic brain injury
06/2014	Reviewer for NIH I-START program
02/2015	Reviewer for NIH I-START program

PERSONAL REFERENCES

Deborah Harrington Ph.D.
University of California, San Diego
3510 Dunhill Street
San Diego, CA 92121
(858) 552-8585 ext. 7851
dharrington@ucsd.edu

Kathleen Haaland, Ph.D., ABPP-Cn
VAMC Albuquerque
Psychology Service
1501 San Pedro Dr SE
Albuquerque, NM 87108
(505) 265-1711 (x2093)
khaaland@unm.edu

Ronald Yeo, Ph.D.
Department of Psychology
MSC03 2220
1 University of New Mexico
Albuquerque, NM 87131-1161
505-277-4121
ryeo@unm.edu

Charles Gasparovic, Ph.D.
Department of Psychology
MSC03 2220
1 University of New Mexico
Albuquerque, NM 87131-1161
chuck@mrn.org