Curriculum Vitae
Andrew R. Mayer, Ph.D.

UNDERGRADUATE EDUCATION

1990 - 1994	**BA in Psychology** State University of New York at Buffalo, NY Summa Cum Laude; Phi Beta Kappa; Psi Chi

GRADUATE EDUCATION

1995 - 2001	**Pre-Doctoral Candidate, Clinical Psychology** Finch University of Health Sciences/The Chicago Medical School, Chicago, IL
Dissertation	A Functional Magnetic Resonance Imaging Study of Endogenous and Exogenous Visual-Spatial Attention
PhD awarded	June 2001
2000 - 2001	**APA Approved Predoctoral Clinical Internship** Southwest Consortium Predoctoral Psychology Internship Raymond G. Murphy VA Medical Center, Albuquerque, NM
2001 - 2003	**Post-Doctoral Fellowship in Clinical Neuropsychology and Neuroimaging** University of New Mexico Hospital, Department of Neurology and The Mind Research Network, Albuquerque, NM 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
2016	Expert Panel for the Fifth International Consensus Conference on Concussion in Sport
2017	NINDS Sports Concussion CDE Working Group
2019	Expert Panel for the Sixth International Consensus Conference on Concussion in Sport

2021 - Present	UCLA CARE4Kids U54 External Advisory Board member
2021 - Present	New Mexico Alzheimer's Disease Research Center Internal Advisory Committee member

POSITIONS

2004 - 2009	Assistant Professor of Translational Neuroscience The Mind Research Network, Albuquerque NM Assistant Professor of Research, Department of Psychology University of New Mexico, Albuquerque NM Adjunct Assistant Professor, Department of Neurology University of New Mexico Hospital, Albuquerque NM
2009 - 2018	Associate Professor of Translational Neuroscience The Mind Research Network - Lovelace Biomedical Research Institute, Albuquerque NM
2009 - Present	Associate Professor of Research, Department of Psychology University of New Mexico, Albuquerque NM Adjunct Associate Professor, Departments of Neurology/Psychiatry University of New Mexico Hospital, Albuquerque NM Adjunct Associate Professor, Departments of Neurology/Psychiatry University of New Mexico Hospital, Albuquerque NM
2014 - Present	Director of Trauma and En Route Casualty Care The Mind Research Network - Lovelace Biomedical Research Institute, Albuquerque NM
2018 - Present	Professor of Translational Neuroscience The Mind Research Network - Lovelace Biomedical Research Institute, Albuquerque NM Vice President of Translational Neuroscience The Mind Research Network - Lovelace Biomedical Research Institute, Albuquerque NM

CLINICAL EXPERIENCE

12/1995 – 07/1997	Ph.D. Practicum The Chicago Medical School, Chicago, IL Michael Seidenberg, Ph.D., Margaret Primeau, Ph.D.
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.

08/1997 – 06/1998 Ph.D. Practicum
Medical College of Wisconsin, Milwaukee, WI
Thomas Hammake, Ph.D., Sara Swanson, Ph.D.

Responsibilities 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.

06/1998 – 02/2000 Ph.D. Practicum
Rogers Memorial Hospital, Oconomowoc, WI
Bradley Riemann, Ph.D.

Responsibilities 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.

09/2000 – 09/2001 Internship
Raymond G. Murphy VA Medical Center, Albuquerque, NM
Kathleen Haaland, Ph.D., Rex Swanda, Ph.D.

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.

01/2002 – 12/2003 Post-Doctoral Fellowship
UNMH Department of Neurology, Neuropsychology Associates P.C.
Albuquerque, NM
Rick Cambell, Ph.D., Rex Swanda, Ph.D., Stephen J. Chiulli, Ph.D.

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.

06/2004 – 10/2013 Neuropsychologist
Neuropsychology Associates P.C., Albuquerque, NM
Ronald Yeo, Ph.D.

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

PEER-REVIEWED PUBLICATIONS (conference papers and presentations not tracked)

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. PMID: 10353369
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. PMID: 11506651
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. PMID: 10769306
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. PMCID: PMC6772415
5. **Mayer, A. R**. & Kosson, D. S. (2000). Handedness and psychopathy. *Neuropsychiatry, Neuropsychology, and Behavioral Neurology,* 13(4): 233-8. PMID: 11186158
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. *Neuro Report,* 12(17): 3811-4. PMID: 11726800
8. Rao, SM, **Mayer, A.R**., & Harrington, DL. (2001). The evolution of brain activation during temporal processing. *Nature and Neuroscience,* 4(3): 317-23. PMID: 11224550
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. PMID: 15464351
10. Kosson, D. S., Suchy, Y, **Mayer, A. R**., & Libby, J. (2002). Facial affect recognition in criminal psychopaths. *Emotion, 2*(4): 398-411. PMID: 12899372
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. PMID: 12240737
12. **Mayer, A.R**. & Kosson D.S. (2004). The effects of auditory and visual linguistic distracters on target localization. *Neuropsychology,* 18(2): 248-57. PMID: 15099147
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. PMID: 15165352
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. PMID: 15095561

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. PMID: 15464351
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. PMID: 15453978
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. PMID: 15488402
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. PMID: 16388970
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. PMID : 16938024
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. PMID: 16697224
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. PMID: 17335394
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. PMID: 17697415
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. PMID: 17544300
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. PMCID: PMC6870862
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. PMID:18787235
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. *PMCID: PMC6869898*
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
53. Yeo, R.A., Thoma, R.J., Gasparovic, C., Monnig, M., Harlaar, N., Calhoun, V.D., Kalyanam, R., **Mayer, A.R.,** Durazzo, T.C., & Hutchison, K.E. (2012). Neurometabolite concentration and clinical features of chronic alcohol use: a proton magnetic resonance spectroscopy study. *Psychiatry Research,* 211(2):141-7. PMCID: PMC3570754

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. PMID: 22673802
55. Hanlon, F. M., Houck, J. M., Klimaj, S.D., Caprihan, A., **Mayer, A. R.,** Weisend, M. P., Bustillo, J.R., Hamilton, D.A., Tesche, C.D. (2012). Frontotemporal anatomical connectivity and working-relational memory performance predict everyday functioning in schizophrenia. *Psychophysiology,* 49(10):1340-52. PMCID: PMC4077350
56. Yeo, R. A., Gangestad, S. W., Liu, J., Ehrlich, S., Thoma, R. J., Pommy, J., **Mayer, A. R.**, Schulz, S.C., Wassink, T.H., Morrow, E. M., Bustillo, J.R., Sponheim, S.R., Ho, B.C., & Calhoun, V. D. (2013). The impact of copy number deletions on general cognitive ability and ventricle size in patients with schizophrenia and healthy control subjects. *Biological Psychiatry,* 73(6): 540-5. PMCID: PMC3582736
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. PMCID: PMC6621719
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. PMID:23288260
59. Slobounov, S., Bazarian, J., Bigler., E., Cantu, R., Hallett, M., Harbaugh, R., Hovda, D., **Mayer, A.R.,** Nuwer, M.R., Kou, Z., Lazzarino, G., Papa, L, & Vagnozzi, R. (2013). Sports-related concussion: ongoing debate. *British Journal of Sports Medicine,* 48(2): 75-6. PMCID: PMC4511123
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
62. Claus, E.D., Blaine, S.K., Filbey, F.M., **Mayer, A.R.,** & Hutchison, K.E. (2013). Association between nicotine dependence severity, BOLD response to smoking cues, and functional connectivity. *Neuropsychopharmacology,* 38(12): 2363-72. PMCID: PMC3799055
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
64. Newsome, M.R., Scheibel, R.S., **Mayer, A.R.,** Chu, Z.D., Wilde, E.A., Hanten, G., Steinberg, J.L., Lin, X, Li, X., Merkley, T.L., Hunter, J.V., Vasquez, A.C., Cook, L., Lu, H., Vinton, K., & Levin, H.S (2013). How functional connectivity between emotion regulation structures can be disrupted: preliminary evidence from adolescents with moderate to severe traumatic brain injury. *Journal of the International Neuropsychological Society*, 19(8): 911-24. PMID: 23981357
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

66. **Mayer, A. R.**, Toulouse, T., Klimaj, S., Ling, J. M., Pena, A., & Bellgowan, P. S. (2014). Investigating the properties of the hemodynamic response function after mild traumatic brain injury. *Journal of Neurotrauma,* 31(2): 189-197. PMCID: PMC3900017
67. Wilcox, C. E., Dekonenko, C. J., **Mayer, A. R.**, Bogenschutz, M. P., & Turner, J. A. (2014). Cognitive control in alcohol use disorder: deficits and clinical relevance. *Reviews in the neurosciences,* 25(1): 1-24. PMCID: PMC4199648
68. Dodd, A. B., Epstein, K., Ling, J.M., & **Mayer, A.R.** (2014). Diffusion tensor imaging findings in semi-acute mild traumatic brain injury. *Journal of Neurotrauma,* 31(14): 1235-48. PMID:24779720
69. **Mayer, A.R.**, Ling, J.M., Allen, E.A., Klimaj, S.D., Yeo, R.A. & Hanlon, F.M. (2015). Static and Dynamic Intrinsic Connectivity following Mild Traumatic Brain Injury. *Journal of Neurotrauma*, 32(14):1046-55. PMCID: PMC4504345
70. **Mayer, A. R.**, Bedrick, E. J., Ling, J. M., Toulouse, T., & Dodd, A. (2014). Methods for identifying subject- specific abnormalities in neuroimaging data. *Human Brain Mapping,* 35(11): 5457-70. PMCID: PMC6869579
71. Yeo, R. A., Gangestad, S. W., Walton, E., Ehrlich, S., Pommy, J., Turner, J. A., Liu, J., **Mayer, A. R.**, Schulz, S. C., Ho, B. C., Bustillo, J. R., Wassink, T. H., Sponheim, S. R., & Calhoun, V. D. (2014). Genetic influences on cognitive endophenotypes in schizophrenia. *Schizophrenia Research*, 156(1): 71-75. PMCID: PMC4699552
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BOOK CHAPTERS

1. Mayer, A.R., & Bellgowan, P. S. (2014). Functional Magnetic Resonance Imaging in Mild Traumatic Brain Injury. In Concussions in Athletics. Springer New York.
2. Hanlon, F.M., Ryman, S.G., Dodd, A.B., & Mayer, A.R. (2016). Brain networks. Encyclopedia of Clinical Neuropsychology, 2nd Edition.
3. Mayer, A.R., Bellgowan, P. (2019). Functional Neuroimaging of Concussion. In J. Victoroff & E. Bigler (Eds.), Concussion and Traumatic Encephalopathy: Causes, Diagnosis and Management. Cambridge University Press. Cambridge
4. Gossner, E.C., Mayer, A.R., & Hillary, F.G. (2019). Neuroimaging and Sports-Related Concussion. In Arnett, P.A., Neuropsychology of Sports-Related Concussion. American Psychological Association.
5. Sicard, V., Hergert, D.C., Mayer, A.R. (2021, in press) Functional Magnetic Resonance Imaging in Sport-Related Concussions. In S. Slobounov (Ed.), Concussion in Athletics, 2nd edition
6. Mayer, A.R., Nelson, L.D., Bigler, E.D. (2021, in press). Traumatic Brain Injury. In T King (Ed.) the APA Handbook of Neuropsychology.

TEACHING EXPERIENCE

1997 - 2001	Fundamentals of AFNI (Analysis of Functional Neural Images): Practical training in the analysis of Functional MRI data

	Medical College of Wisconsin, Milwaukee, WI Course was part of a 3-day semi-annual workshop, "fMRI: An Introductory Course for Neuropsychologists." The 1-day AFNI training covered the basics of analyzing fMRI data using a locally developed software package.
Winter 1998	Teaching Assistant, Cognitive Assessment Finch University of Health Sciences, The Chicago Medical School Graduate-level course covering theoretical and practical issues of test construction and measurement.
10/1999	An Introduction to the Analysis of Functional Magnetic Resonance Data and Experimental Design State University of New York at Stony Brook, NY Course was 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.
2003 - 2009	Functional Magnetic Resonance Imaging Data and Experimental Design University of New Mexico Annual graduate-level seminar lecture series for the departments of Electrical and Computer Engineering and Psychology that covered design issues and the functional analysis of FMRI data.
10/2004 - Present	An Introduction to Magnetic Resonance Imaging Techniques University of New Mexico Part of an annual imaging seminar series offered to the clinical psychology interns and psychiatry fellows through the department of Psychiatry.
Spring 2005	Fundamentals of Human Neuropsychology University of New Mexico Full semester undergraduate-level course offered through the department of Psychology on brain-behavior relationships and the neuronal structures underlying human cognition.
Fall 2008	Neuropsychological Assessment University of New Mexico Full semester graduate-level course offered through the department of Psychology on the clinical assessment of cognition.
Fall 2011	Introduction to Statistics University of New Mexico Full semester undergraduate-level course offered through the department of Psychology on statistics and experimental design.

CURRENT RESEARCH SUPPORT (PI)

The Impact of Diffuse Mild Brain Injury on Clinical Outcomes in Children (PI: Mayer)
R01HD086704 07/01/2016 – 03/31/2022 Role: PI
NIH/NICHD $5,814,679 5.0 calendar
The goal of this application will utilize state-of-the-art neuroimaging techniques to quantify how diffuse gray and white matter injuries change during the dynamic course of pmTBI, and how they relate to neurobehavioral symptoms pmTBI in middle aged children, and how these patterns differ from adolescents.

Increasing Survival Rate Following Hemorrhagic Shock and Traumatic Brain Injury in Austere Environments (PI: Mayer)
W81XWH-17-2-0052 09/2920/17 – 09/29/2021 Role: PI
DOD/USAMRAA $2,853,435 1.8 calendar
The goals of this project are to determine whether a novel therapy prolongs survival time in a combined TBI+HS model in an austere treatment environment relative to sham and how rough ground transport affects both survivability as well as neurological outcome following combined TBI+HS.

Phase III COBRE: Multimodal Imaging of Neuropsychiatric Disorders (PI: Mayer)
P30GM122734 05/18/2018 - 04/30/2023 Role: PI
NIH/NIGMS $6,522,689 0.6 calendar
The overall goal of the Mind Research Network (MRN) Center of Biomedical Research Excellence (COBRE) Phase III (P-III) is to propel the research program and established research core facilities into a nationally recognized research center that can compete for COBRE-independent NIH program projects and center grants.

Siemens MAGENTOM Prisma/Prismafit Upgrade
S10OD025313 08/3/2018 - 05/2/2021 Role: PI
NIH $1,475,991 0.12 calendar
This funding was used to acquire a 3 Tesla Magnetom Prisma Magnetic Resonance Imaging System in support of neuroscience, mental health, engineering, and clinical research in the State of New Mexico. The new scanner is housed at the Mind Research Network (MRN), an independent, 501c3 not-for-profit research organization.

CURRENT RESEARCH SUPPORT (Co-I)

COBRE: University of New Mexico Center for Brain Recovery and Repair (PI: Shuttleworth)
P20 GM109089 09/15/2015 - 06/30/2025 Role: Co-I
NIH-NIMGS $160,000 1.2 calendar
The aims are to develop novel and translational therapies for promoting brain recovery following traumatic and acquired brain injury.

High Definition Transcranial Direct Current Stimulation (HD-tDCS) for Sensory Deficits in Complex Traumatic Brain Injury (PI: Quinn)

W81XWH-17-1-0432 09/30/2017 – 09/29/2021 Role: Co-I
DoD $200,000 (MRN subaward) 1.0 calendar
The aims of this project are to assess the efficacy of HD-tDCS combined with rehabilitation tasks to improve subjective postconcussive sensory symptoms, objective measures of cognitive control, and long-term quality of life in patients with complex TBI relative to rehabilitation training alone.

Control Network Neuromodulation to Enhance Cognitive Training in Complex Traumatic Brain Injury (The CONNECT-TBI Trial) (PI: Quinn)
W81XWH2010928/Sub: 3RJU8 09/30/2020 – 09/30/2025 Role: Co-I
DoD $720,000 (subaward only) 1.2 calendar
The goals of this project are to conduct a clinical trial of Attention Process Training-3 (APT-3) paired with high-definition transcranial direct current stimulation (HD-tDCS) or repetitive transcranial magnetic stimulation (rTMS) to improve executive function. The projected results are that these interventions will improve subjective PCS, objective cognitive control, and quality of life in veterans and active duty personnel with complex TBI to a greater degree than combined with sham.

COMPLETED RESEARCH SUPPORT (PI)

A Multidimensional Investigation of Cognitive Control Deficits in Psychopathology
NIH-NIMH 04/1/2014 – 03/31/2020 Role: PI
The goal of this proposal was to utilize novel analytic methods and neuroimaging techniques in order to classify Psychotic Spectrum Disorders patients into meaningful sub-groups based on objective pathology within frontal brain circuits and genetic factors.

Attentional Bias Modification: Efficacy and Mechanisms of Action in Cocaine Addiction
NIH 07/01/2011 – 09/30/2015 Role: PI
The goals of this project were 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.

Intensive Case Management, Recovery, and Employment (I-CARE) Program
State of New Mexico 04/01/2013 - 06/30/2014 Role: PI
The goal of this project was to develop and implement a substance abuse program for State recipients of TANF that was designed to get parents back to work faster. Developed objective metrics for tracking progress throughout state program.

COBRE: Neural Mechanisms of Schizophrenia: Use of Multiple Neuroimaging Tools to Examine Dysfunctions in Neural Integration
NIH 6/1/2008 - 11/30/2013 Role: PI
The goal of this project was to examine functional and anatomical connectivity in schizophrenia using multimodal neuroimaging techniques and analyses with an emphasis on auditory attention.

Hyperbaric Oxygen Therapy in Mild Traumatic Brain Injury
DoD 09/2011 Role: PI

Program management for examining the efficacy of hyperbaric oxygen therapy in military mild traumatic brain injury.

HYGE Program
DoD 04/2014 Role: PI
This funding was secured in order to develop realistic preclinical models of military traumatic brain injury.

Attentional Dysfunction and Recovery in Traumatic Brain Injury (TBI)
NIH 03/01/2009 - 02/28/2011 Role: PI
The goal was 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

Neuroimaging of Attentional Deficits in Traumatic Brain Injury
AEN/NIH 12/01/2007 - 01/31/2009 Role: PI
The goal of this study was to investigate attentional deficits in mild TBI during the semi-acute phase of injury.

Neurochemistry of Pain
NIH 01/01/2008 - 08/31/2009 Role: PI
The goal of this project was to study common pathways between pain and negative emotion which result in drug seeking behavior and ultimately addiction.

Multimodal Imaging of the Sensory Gating in Cocaine Abuse
NIH 09/01/2007 - 07/31/2009 Role: PI
The goal of this project was 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.

A fMRI and Diffusion Tensor Imaging Study of Crossmodal Orienting
RAC Grant, University of New Mexico 01/01/2006 - 12/31/0206 Role: PI
The goal was to investigate the neuronal substrates of exogenous and endogenous crossmodal orienting using event-related fMRI and diffusion tensor imaging in 30 healthy controls.

Effects of stimulus rate and selective attention on the blood oxygen level dependent response in schizophrenia.
Internal Award, The Mind Research Network 05/01/2004 - 12/30/2005 Role: PI
This study examined the effects of stimulus rate and selective attention on the hemodynamic response in individuals with schizophrenia and healthy controls.

Bio-Markers in Traumatic Brain Injury
Internal Award, Mind Research Network 06/01/2008 - 09/31/2009 Role: PI
This study examined the utility of MR-based imaging techniques for providing bio-markers of neuronal injury following mild TBI.

Multimodal Neuroimaging of Attentional Functioning in Healthy and Clinical Populations
Clinical LRP, NIH 07/01/2005 - 06/30/2007 Role: PI
07/01/2008 - 07/30/2010
This study examined the neuronal substrates of attentional functioning in both clinical and healthy populations.

COMPLETED RESEEARCH SUPPORT (Co-I)

RII Track 2 FEC: Developmental Chronnecto-Genomics (Dev-CoG): A Next Generation Framework for Quantifying Brain Dynamics and Related Genetic Factors in Childhood (PI: Calhoun)
NSF 8/1/2015 - 7/31/2019 Role: Co-I
The goals of this program were to educate next generation neuroscientists in the development of cutting-edge techniques for understanding links between brain function and genetics.

COBRE: University of New Mexico Center for Brain Recovery and Repair (PI: Shuttleworth)
NIH 9/15/2015-6/30/2020 Role: Co-I
The aims of this project were to develop novel and translational therapies for promoting brain recovery following traumatic and acquired brain injury.

COBRE: Neural Mechanisms of Schizophrenia: Use of Multiple Neuroimaging Tools to Examine Dysfunctions in Neural Integration
NIH - NIMH 04/01/2014 – 03/31/2019 Role: Mentor for Junior PI
The goal of this project was to examine functional and anatomical connectivity in schizophrenia using multimodal neuroimaging techniques and analyses.

Test Track and Human Subject Recruitment in Support for the Supine Human Response to Repeated Shock and Vibration During Ground Enroute Care Transport Period
Battelle, DOD/USAMRAA 09/29/2016 – 02/28/2019 Role: subaward PI
The overall objectives were to (1) measure vibration in supine healthy humans of different anthropometry and gender while subjected to a standardized road conditions, (2) characterize the effect of anthropometry and gender on the biodynamic of human response and (3) develop a dynamic model of the supine human.

Improving Field Management and Safe Ground Transport of Patients with Head and Spine Injuries
DOD-USAARL 09/30/2013 – 09/29/2016 Role: Co-I
The goal of this study was to carefully characterize the effects of transport on spinal injury and traumatic brain injury sustained in the open field exposures.

Brain-Centered Therapy versus Medication for Urgency Urinary Incontinence
Subaward from UNM 09/01/2012 – 06/30/2017 Role: Co-I
NIH, NCCAM
The goal of this project was to examine the effect of hypnotherapy and pharmacotherapy on central functioning during a bladder extension task and during intrinsic activation.

An Event-Related Study of Auditory Orienting
RAC Grant, University of New Mexico 01/01/2003-12/31/2004 Role: Co-I
This project investigated the neuronal substrates of exogenous and endogenous auditory orienting using in 25 healthy controls.

Corticostriatal Planning Deficits in Parkinson's Disease, VA Merit Review Application
Department of Veterans Affairs 07/01/2004 - 07/01/2006 Role: Co-I
This project examined the neuronal substrates of planning in Parkinson's Disease.

Emotion Recognition in Transsexual Individuals
RAC Grant, University of New Mexico 10/01/2007 - 09/31/2008 Role: Co-I
The goal of this project was to investigate the neuronal substrates of facial emotion recognition in transsexual individuals.

Accelerated Learning
DARPA-DoD 6/25/2007 - 3/28/2009 Role: Co-I
This project focused on the 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.

Detection of Neuronal Currents
LDRD, Sandia National Laboratories 12/09/2009 - 9/30/2012 Role: Co-I
The goal of this project was to determine whether magnetic resonance imaging techniques can be utilized to detect neuronal currents in vivo.

MIND Phase II COBRE: Multimodal Imaging of Neuropsychiatric Disorders (MIND): Mechanisms & Biomarkers
NIH/NIGMS 09/01/2013 – 04/30/2019 Role: Co-I, mentor
The goal of this project was to examine functional and anatomical connectivity in schizophrenia using multimodal neuroimaging techniques and analyses. Dr. Mayer served as a mentor to one of the junior PIs (Dr. Christopher Abbott) on the COBRE award. Dr. Abbott's project examined changes in functional connectivity and structural volume following electroconvulsive shock therapy in treatment resistant depression.

Cumulative and persistent intermediate effects of concussion and head impact exposure in CARE Consortium Military Service Academy members and NCAA Athletes
Subaward from The Medical College of Wisconsin, DoD 09/01/2018 – 08/31/2020 Role: Co-I
Dr. Mayer served as a Co-Investigator on the CARE Consortium. The specific aims of this project focused on contributing to the development and implementation of an ARC MRI protocol for image acquisition, transfer, quality control, processing, analysis, interpretation and storage.

MENTORSHIP

Ph.D. Dissertation Committee
Sanja Kovacevic (Complete)
Leonard Leyba (Complete)
Alexandre Franco (Complete)
Zhen Yang (Complete)
Sephira Ryman (Complete)
Jacki Janowich (Complete)

Masters Committee
Brandi Seamen (Complete)

UNMH Medical Students (Research Project)
Aaron Pritchard (Complete)
Irene Patniyot (Complete)
Kasra Mojtahed (Complete)

Bachelor's Level (Pre-Ph.D./M.D. School)
Jennifer Romero (Complete)
Maggie Mannell (Complete)
Amanda Pena (Complete)
Flannery Merideth (Complete)
David Ruhl (Complete)
Benjamin Wasserrot (Complete)
Amy Thompson (Complete)
Stefan Klimaj (Complete)
Nicholas Shaff (Complete)
Brigitte Stevens (Complete)
Christopher Wertz (Complete)

Albuquerque Academy High School
5 HS students

Post-Doctoral Fellows
Duo Xu, PhD (Complete)
Trent Toulouse, PhD (Complete)
Timothy Meier, PhD (Complete)
Ansam Al Sheikh, PhD (Complete)
Priyank Shukla (Complete)
David Stephenson, PhD (Complete)
Danielle Hergert, PhD (Complete)
Veronik Sicard, PhD (On-going)

R01 COBRE
Christopher Abbott, M.D. (Complete)
Davin Quinn, M.D. (Complete)
Jessica Richardson, Ph.D. (Ongoing)
Jeremy Hogeveen, Ph.D. (Ongoing)

James Cavanagh, Ph.D. (Complete)

K-Award
Claire Wilcox, M.D. (Complete)

EDITORIAL/REVIEWER ACTIVITY

2001 - Present	Ad-hoc Reviewer 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 - Present	Reviewer Brain Injury, Rehabilitation Research and Development Service, Veterans Affairs
06/2012	Reviewer NIH special emphasis panel on traumatic brain injury
02/2013	Reviewer NIH Cognition and Perception Study section
07/2013	Reviewer NIH section on chronic traumatic encephalopathy
2/2013	Reviewer NIH special emphasis panel on traumatic headache
02/2014	Reviewer NIH special emphasis panel on traumatic brain injury
06/2014	Reviewer Imaging-Science Track Award for Research Transition (I-START) program, NIH
02/2015	Reviewer Imaging-Science Track Award for Research Transition (I-START) program, NIH
05/2016	Reviewer European NEURON proposals
02/2014	Reviewer NIH special emphasis panel on traumatic brain injury
02/2014	Reviewer Acute Neural Injury and Epilepsy (ANIE), NIH
2017	Reviewer Translational Outcomes Project in Neurotrauma (TOP-NT), NIH

Personal references available upon request