

Julia M. Stephen, Ph.D.

Professional Address

The Mind Research Network
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Education History:

Ph.D., July 1997, University of Minnesota, Minneapolis, MN, Physics
B.S., May 1992, Northern Michigan University, Marquette, MI, Physics and Mathematics, summa cum laude.

Employment History:

The Mind Research Network, Albuquerque, NM

2009 – present **Director MEG Core**
2009 - present **Associate Professor of Translational Neuroscience**
2007 - 2009 **Research Scientist**

University of New Mexico, Albuquerque, NM

2007 - present **Adjunct Research Assistant Professor**, Dept. of Neurosciences
2004 - 2007 **Assistant Professor**, Department of Radiology
2000 - 2004 **Research Assistant Professor**, Department of Radiology
1997 - 2000 **Postdoctoral Fellow**, Department of Radiology, MEG Research

University of Minnesota, Minneapolis, MN

1994 - 1997 **Research Assistant** – Complex correlation analysis of MEG data
1995 - 1997 **Mentor Teaching Assistant** – Mentored physics teaching assistants
Summer 1995, 1996 **Introductory Lab Developer** – Developed undergraduate physics labs
1992 - 1995 **Teaching Assistant** – Taught introductory physics labs.

Minnesota Medical Research Foundation, Minneapolis, MN

Summer 1994 **Scientist Assistant** – Analyzed electromyography time series.

Michigan State University, East Lansing, MI

Summer 1991 **Research Experience for Undergraduates Intern**

Professional recognition, honors

Young Scientist Fellowship to 11th International Conference on Biomagnetism, 1998.
Outstanding Teaching Assistant, School of Physics and Astronomy, University of Minnesota, 1997.
Committee on Institutional Cooperation (CIC)/Women in Science and Engineering (WISE) travel grant recipient, 1997.
U.S. Department of Education/Graduate School/Phyllis St. Cyr Freier Fellowship recipient, 1992 - 1993.

Outstanding Graduating Senior, Physics Department, Northern Michigan University, 1992.
Outstanding Graduating Senior, Department of Mathematics and Computer Science, Northern Michigan University, 1992.
John R. Ogren Physical Sciences Prize for Outstanding Graduate in Chemistry or Physics, 1992.
Outstanding junior-level mathematics major, 1990.

Original research in refereed journals:

- *Gao, L., Zhang, T., Wang, J. & **Stephen, J.** Facilitating Neuronal Connectivity Analysis of Evoked Responses by Exposing Local Activity with Principal Component Analysis Preprocessing: Simulation of Evoked MEG. *Brain Topogr* In print.
- *Coffman BA, Kodituwakku PW, Kodituwakku EL, Romero L, Sharadamma NM, Stone DB, Stephen JM. Primary Visual Response (M100) Delays in Adolescents with FASD as Measured with MEG. *Human Brain Mapp*, In print.
- *Stephen JM, Kodituwakku PW, Kodituwakku EL, Romero L, Peters AM, Sharadamma NM, Caprihan A, Coffman BA. Delays in auditory processing identified in preschool children with FASD. *Alcohol Clin Exp Res*, In press. NIHMSID#354629
- Aine CJ, Sanfratello L, Ranken D, Best E, MacArthur JA, Wallace T, Gilliam K, Donahue CH, Montano R, Bryant JE, Scott A, Stephen JM. MEG-SIM: A web portal for testing MEG analysis methods using realistic simulated and empirical data. *Neuroinform* 2011, In press.
- Jody M Shoemaker, Mark T Holdsworth, Cheryl Aine, Vince D Calhoun, Raul de La Garza, Sarah W Feldstein Ewing, Reyaad Hayek, Andrew R Mayer, Kent A Kiehl Linda E Petree, Pilar Sanjuan, Adam Scott, Julia Stephen, and John P Phillips, A practical approach to incidental findings in neuroimaging research, *Neurology*, In press.
- *Stone DB, Urrea LJ, Aine CJ, Bustillo JR, Clark VP, Stephen JM. Unisensory processing and multisensory integration in schizophrenia: A high-density electrical mapping study. *Neuropsychologia* 2011 49:3178-3187.
- Mayer AR, Teshiba TM, Franco AR, Ling J, Shane MS, Stephen JM, Jung R. Modeling conflict and error in the medial frontal cortex. *Human Brain Mapp* 2011. In press.
- *Berchicci M, Zhang T, Romero L, Peters A, Annett R, Teuscher U, Bertollo M, Okada Y, Stephen J, Comani S. Development of mu rhythm in infants and preschool children. *Dev Neurosci* 2011 33(2):130-143.
- Aine CJ, Sanfratello L, Adair JC, Knoefel JE, Caprihan A, Stephen JM. Development and Decline of Memory Functions in Normal, Pathological and Healthy Successful Aging. *Brain Topogr* 2011 24: 323-339.
- *Stephen JM, Knoefel JE, Adair J, Hart B, Aine CJ. Aging-related changes in auditory and visual integration measured with MEG. *Neurosci Lett* 2010 484(1):76-80.
- Stephen JM, Montaña R, Donahue CH, Adair JC, Knoefel J, Qualls C, Hart B, Ranken D, Aine CJ. Somatosensory responses in normal aging, mild cognitive impairment, and Alzheimer's disease, *J Neural Trans* 2010 117(2):217-225.
- C.J. Aine, J.E. Bryant, J.E. Knoefel, J.C. Adair, B. Hart, C.H. Donahue, R. Montaña, R. Hayek, C. Qualls, D. Ranken, J.M. Stephen, Different strategies for auditory word recognition in healthy versus normal aging. *NeuroImage*, 2010 49(4):3319-3330.
- Pihko E, Nevalainen P, Stephen J, Okada Y, Lauronen L. Maturation of somatosensory cortical processing from birth to adulthood revealed by magnetoencephalography. *Clin Neurophysiol*. 2009;120(8):1552-61

- Mayer AM, Harrington D, Stephen J, Adair J, Lee RR. An event-related fMRI study of exogenous facilitation and inhibition of return in the auditory modality. *J Cogn Neurosci* 2007 19(3): 1-13.
- Stephen, JM, Ranken, DM, Aine, CJ. Frequency-following and Connectivity of Different Visual Areas in Response to Contrast-Reversal Stimulation. *Brain Topogr*, 2006 18(4): 257-72.
- Aine, CJ, Woodruff, CC., Knoefel, JE, Adair, JC, Hudson, D., Qualls, C., Bockholt, J, Best, E., Kovacevic, S, Cobb, W., Padilla, D, Hart, B, Stephen, JM. Aging: Compensation or Maturation? *NeuroImage*, 2006 32(4):1891-904.
- Stephen, JM, Ranken, DM, Aine, CJ, Weisend, MP, Shih, JJ. Differentiability of simulated MEG hippocampal, medial temporal and neocortical temporal epileptic spike activity. *J Clin Neurophysiol*, 2005 22(6): 388-401.
- Stephen JM, Ranken D, Best E, Adair J, Knoefel J, Kovacevic S, Padilla D, Hart B, Aine CJ. Aging changes and gender differences in response to median nerve stimulation measured with MEG. *Clin Neurophysiol*, 2006 17(1): 131-143.
- Kovacevic S, Qualls C, Adair JC, Hudson D, Woodruff CC, Knoefel J, Lee RR, Stephen JM, Aine CJ. Age-related effects on superior temporal gyrus activity during an auditory oddball task. *Neuroreport*. 2005 16(10):1075-9.
- Aine CJ, Adair JC, Knoefel JE, Hudson D, Qualls C, Kovacevic S, Woodruff CC, Cobb W, Padilla D, Lee RR, Stephen JM, Temporal Dynamics of Age-related Differences in Auditory Incidental Verbal Learning, *Cogn Brain Res*, 2005 24(1):1-18.
- Ranken DM, Stephen JM, George JS. MUSIC seeded multi-dipole MEG modeling using the Constrained Start Spatio-Temporal modeling procedure. *Neurol Clin Neurophysiol*. 2004 2004:80.
- Huang M, Davis LE, Aine C, Weisend M, Harrington D, Christner R, Stephen J, Edgar JC, Herman M, Meyer J, Paulson K, Martin K, Lee RR. MEG response to median nerve stimulation correlates with recovery of sensory and motor function after stroke. *Clin Neurophysiol*. 115(4):820-33, 2004.
- Stephen, JM, Davis LE, Aine CJ, Ranken D, Hudson D, Herman M, Huang M, Poole J. Investigation of the normal proximal somatomotor system in terms of stroke recovery and prognosis using MEG. *Clin Neurophysiol*, 114: 1781-1792, 2003.
- Aine CJ, Stephen JM, Christner RC, Hudson D. Task Relevance Enhances Early Transient and Late Slow-Wave Activity of Distributed Cortical Sources. *J Comp Neuroscience*, 15: 203-221, 2003.
- Stephen JM, Aine CJ, Ranken D, Hudson D, Shih JJ. Multidipole analysis of simulated epileptic spikes with real background activity. *J Clin Neurophysiol* 20(1): 1-16, 2003.
- Stephen JM, Aine CJ, Christner R, Ranken D, Huang M, Best E. Central versus peripheral visual field stimulation results in timing differences in dorsal stream sources as measured with MEG. *Vision Research*, 42:3059-3074, 2002.
- Aine, C., Huang, M., Stephen, J., Christner, R. Multi-start algorithms for MEG empirical data analysis reliably characterize locations and time-courses of multiple sources. *NeuroImage* 12: 159-172, 2000.
- Huang M, Aine C, Davis L, Butman J, Christner R, Weisend M, Stephen J, Meyer J, Silveri J, Herman M, Lee R, Sources on the anterior and posterior banks of the central sulcus identified from magnetic somatosensory evoked responses using multi-start spatio-temporal localization. *Human Brain Mapping* 11: 59-76, 2000.
- * Senior Author

Review articles appearing as chapters in edited volumes:

- Aine CJ, Stephen JM. MEG Studies of Visual Processing. In *The Cognitive Electrophysiology of Mind and Brain* (Alberto Zani and Alice Mado Proverbio Eds). Academic Press, 2002, 93-142.

Other writings and scholarly products:

- Stephen JM, Braeutigam S, Furlong PL, Ribary U, Roberts TPL, Virji-Babul N. Pediatric CNS Pathophysiology. IFMBE Proceedings Vol 28, 17th International Conference on Biomagnetism March 28-April 1, 2010, pp 242-245.
- Sanfratello L, Stephen JM, Ranken D, Best E, Wallace T, MacArthur J, Gilliam K, Aine CJ. MEG_SIM Portal: Reconstructions from Realistic Simulations of Sensory and Cognitive Processing. IFMBE Proceedings Vol 28, 17th International Conference on Biomagnetism March 28-April 1, 2010, pp 132-135.
- Okada Y, Stephen J. MEG studies of human brain development. Proceedings of the Japanese Biomagnetism and Bioelectromagnetic Society, May 27-29, 2009, Kanazawa City, Japan.
- Stephen JM, Romero L, Zhang T, Okada Y. Auditory and Somatosensory Integration in Infants. D. Cheyne, B. Ross, G. Stroink and H. Weinberg (Editors). International Congress Series: New Frontiers in Biomagnetism: Proceedings of the 15th International Conference on Biomagnetism, Vancouver, BC Canada, August 21-25, 2006.
- Ranken D, Stephen JM, George JS. MUSIC Seeded multi-dipole MEG modeling using the constrained start spatio-temporal modeling procedure. Proceedings of the 14th International Conference on Biomagnetism. Biomag 2004 Ltd. Boston, MA, pp 579-580.
- Stephen JM, Shih JJ, Ranken D, Hudson D, Aine C. A simulation study of frontal lobe epileptic spike localization using real background noise *Biomag 2002: Proceedings of the 13th International Conference on Biomagnetism*, VDE Verlag, Berlin, 2002, pp 267-269.
- Ranken D, Best E, Stephen J, Schmidt D, George J, Wood C, Huang M. MEG/EEG forward and inverse modeling using MRVIEW. *Biomag 2002: Proceedings of the 13th International Conference on Biomagnetism*, VDE Verlag, Berlin, 2002, pp 785-787.
- Stephen JM, Aine CJ, Christner R, Huang M, Ranken D. Visual areas identified in the frequency following response to alternating circular sinusoids. *Biomag2000, Proceedings of the 12th International Conference on Biomagnetism*, J. Nenonen, R.J. Ilmoniemi, and T. Katila, eds. (Helsinki Univ. of Technology, Espoo, Finland, 2001).
- Stephen J, Aine CJ, Huang M, Meyer J, Christner R, Silveri J, Weisend M. "Parietal and cingulate cortex activated in response to different auditory stimuli," In Yoshimoto, T., Kotani, M., Kuriki, S., Karibe, H., Nakasato, N. (Eds.) *Recent Advances in Biomagnetism: Proceedings of the Eleventh International Conference on Biomagnetism*, Tohoku University Press, Sendai, Japan, 1999.
- Huang M, Aine C, Weisend M, Stephen J, Meyer J, Christner R, Silveri J. "Pre- and Post-central Sulcal Sources Evoked by Stimulating the Median Nerve and Index Finger: Are Pre-central Sulcal Sources due to Passive Muscle Movement?" In Yoshimoto, T., Kotani, M., Kuriki, S., Karibe, H., Nakasato, N. (Eds.) *Recent Advances in Biomagnetism: Proceedings of the Eleventh International Conference on Biomagnetism*, Tohoku University Press, Sendai, Japan, 1999.
- Stephen JM, "A Magnetoencephalographic study of the response over the region of the auditory cortex to visual and auditory stimuli," Ph.D. Thesis, July 1997.
- Heller, P., Heller, K., Foster, T., Stephen, J., *Physics 1251-2-3 Labs* 2nd and 3rd eds. University of Minnesota Press, 1995,1996.
- Stephen JM, Broadhurst JH, Knuth KH, Schwartz BJ, "Determination of the nature of the connection between the auditory and visual cortices," In Aine, C.J., Flynn, E.R., Okada, Y., Stroink, G., Swithenby, S.J., Wood, C.C. (Eds.) *Biomag96:Advances in Biomagnetism Research*, Springer-Verlag, New York, 1999.

Invited Lectures

- J.M. Stephen, A Network Approach to Multimodal Imaging and Genetics in Schizophrenia: Strategies, Challenges, and Findings: Project 2. Workshop Talk, ICOSR, April 2-6, 2011, Colorado Springs, CO.
- Stephen J. Studies in Autism Spectrum Disorders: Insights from Functional Neuroimaging Studies. Osher Series UNM Continuing Education. September 20, 2010.
- Stephen, J. Imaging Tools for Functional Analysis, Sunrise Minicourse, 50th Annual Meeting of the Teratology Society, Louisville KY, June 26-30, 2010.
- Stephen, J. Braeutigam S, Furlong PL, Ribary U, Roberts TPL, Virji-Babul N., Pediatric CNS Pathophysiology. Human Brain Development Symposium, 17th International Conference on Biomagnetism. Dubrovnik, Croatia, March 27- April 1, 2010.
- Stephen, J. Autism (Long-range connectivity). Invited Talk Human Brain Development Satellite 17th International Conference on Biomagnetism. Dubrovnik, Croatia, March 27- April 1, 2010.
- Stephen, J. Understanding development through the pediatric MEG system called babySQUID. MRN talk, May 2009.
- Stephen, J. Investigating Neurodevelopment. Presentation to NM Chapter of the International Women's Forum, March 19, 2009.
- Stephen, J. Investigations into typical and atypical development using babySQUID. Brain and Behavior Initiative/BRAIN Seminar, UNM HSC, January 9, 2009.
- Stephen, J. COBRE Project 2 Update. Psychiatry Grand Rounds, UNM HSC December 19, 2008.
- Stephen, J. Investigations into Neurodevelopment Using the Pediatric MEG System Called babySQUID. Amazing Newborns Conference, Albuquerque, NM November, 12-14, 2008.
- Stephen, J. Studies in human brain development using babySQUID. Guest lecture Psychology Human Neurodevelopment Class, October, 23, 2008.
- Stephen, J. Investigations into Typical and Atypical Brain Development in Infants and Toddlers Using the Pediatric MEG System Called babySQUID, 16th International Conference on Biomagnetism, Sapporo, Japan, August 25-29, 2008.
- Stephen, J. Looking for a neurophysiological marker of Autism Spectrum Disorders in Infants and Toddlers, 3x5x5 event Signature Program in Child Health UNM HSC, May 15, 2008
- J. Stephen, How do we know when we have atypical development in infants and toddlers? MRN Board of Trustees Presentation, April 17, 2008
- Functional Neuroimaging In Children: In Search Of An Early Marker For Autism, Southwest Conference on Disability, Albuquerque, NM, Oct. 3-5, 2007.
- High Frequency Oscillations Associated with Epilepsy in Infants, Neurodevelopment Symposium, The MIND Institute, Albuquerque, NM, May 8-9, 2007.
- Sensory Integration in Autism, Neurodevelopment Symposium, The MIND Institute, Albuquerque, NM, May 8-9, 2007.
- Auditory and Somatosensory Integration in Infants, Contributed Talk, 15th International Conference on Biomagnetism. Vancouver, Canada August 21-25, 2006.
- babySQUID Applications, Developmental Neurology and Pediatric Neuroimaging classes, Department of Psychology, University of New Mexico, March, November 2006.
- A Case Study: Cerebral Palsy, Neurology Grand Rounds Lecture, University of New Mexico, October 2005.
- Clinical MEG, Functional Neuroimaging class, Department of Psychology, University of New Mexico, October 2005.
- Earliest Visual Responses: MEG's Contributions, Invited Talk, 14th International Conference on Biomagnetism. Boston, MA, August 8-12, 2004.

- Auditory and Visual Integration in Alzheimer's Disease. COBRE Seminar, University of New Mexico, July 2004.
- Auditory and Visual Integration to Near and Far Stimulation. COBRE Seminar Series, University of New Mexico, May 2004.
- MEG simulation studies related to epilepsy: What can MEG see and do? Mental Illness and Neuroscience Discovery Seminar, May 2004.
- MEG simulation studies related to epilepsy: What can MEG see and do? Biophysics Seminar, Physics Department, University of New Mexico, March 2004.
- MEG simulation studies related to epilepsy: What can MEG see and do? Neuroscience Seminar, University of New Mexico, December 2003.
- MEG Simulation Study for Frontal Lobe Epilepsy. COBRE Seminar Series, University of New Mexico, October 2003.
- A simulation study of frontal lobe epileptic spike localization using real background noise. COBRE Seminar Series, University of New Mexico, March 2002.
- Progress in MEG language studies, Neurology Grand Rounds, University of New Mexico, November 2001.
- A Magnetoencephalographic study of the response over the region of the auditory cortex to visual and auditory stimuli. Northern Michigan University, October 1997.
- A Magnetoencephalographic study of the response over the region of the auditory cortex to visual and auditory stimuli. Biophysics Seminar, University of Minnesota, July 1997.
- Implementation of Problem-solving Labs at the University of Minnesota. Physics Education Seminar, University of Washington, June 1997.
- A Magnetoencephalographic study of the response over the region of the auditory cortex to visual and auditory stimuli. Biophysics Seminar, Los Alamos National Lab, June 1997.
- Application of Fourier transform and cross correlation techniques to MEG data. Physics: 3516: Modern physics laboratory, University of Minnesota, April 1997.
- A magnetoencephalographic study of correlations over the region of the auditory cortex in response to auditory and visual stimuli. Center for Magnetic Resonance Research Seminar, University of Minnesota, March 1997.
- The ear and hearing. Guest lecture, Physics 1107: Introductory physics for premed majors, University of Minnesota, January 1997.
- Flash/Click Correlations. Biophysics Seminar, University of Minnesota, October 1996.
- The role of an experienced teaching assistant in TA orientation. Contributed talk, American Association of Physics Teachers Conference, College Park, MD, August 1996.

Abstracts and presentations at professional meetings:

- *Coffman BA, Stone DB, Kodituwakku EL, Kodituwakku PW, Stephen JM. Altered Functional Connectivity in Fetal Alcohol Spectrum Disorders (FASD): An Independent Components Analysis of Resting-State fMRI data. Abstract submitted to Society for Neuroscience Conference Oct. 2012.
- *Coffman BA, Stone DB, Romero, L, Kodituwakku EL, Kodituwakku PW, Stephen JM. Auditory Processing Delays in Adolescents with Fetal Alcohol Spectrum Disorders. Poster Presentation, 18th International Conference on Biomagnetism, Paris, France, August 2012.
- Stephen JM, Coffman BA, Bustillo JR, Aine CJ, Calhoun VD. Exploring Connectivity in Schizophrenia using Joing ICA to Combine MEG and DTI. Poster Presentation, 18th International Conference on Biomagnetism, Paris, France, August 2012.

- J. M. Stephen, E. L. Kodituwakku, L. Romero, N. Sharadamma, A. Peters, B. Coffman, P. Kodituwakku, Auditory Processing Delays in Preschool Children with Fetal Alcohol Spectrum Disorders. Poster Presentation, 18th International Conference on Biomagnetism, Paris, France, August 2012.
- *B.A. Coffman; P. Kodituwakku; L. Kodituwakku; L. Romero; N. Sharadamma; J.M. Stephen. “Delayed Primary Visual Response in Adolescents with FASD: An investigation of Sensory Processing using MEG”, FASD Data Talk at the FASD Study Group Meeting at RSA June 2011.
- J.M. Stephen; P. Kodituwakku; L. Kodituwakku; L. Romero; A. Peters; N. Sharadamma; B. Coffman. Delays in auditory processing in preschool children with FASD identified using MEG. Poster Presentation RSA June 2011, Atlanta, GA.
- J. M. Stephen, The influence of unisensory deficits on multisensory integration in schizophrenia, Poster Presentation ICOSR April 2-6, 2011, Colorado Springs, CO.
- J.M. Stephen, A Network Approach to Multimodal Imaging and Genetics in Schizophrenia: Strategies, Challenges, and Findings: Project 2. Workshop Talk, ICOSR, April 2-6, 2011, Colorado Springs, CO.
- J. M. Stephen, L. Urrea, A. Geeda, L. Romero, A. Gonzales, C. J. Aine, J. Bustillo. Auditory and visual integration differences from left temporal cortex in schizophrenia. Society for Neuroscience Abstract 2010:264.3.
- CJ Aine, L Sanfratello, D Ranken, E Best, T Wallace, JA MacArthur, K Gilliam, JM Stephen. MEG-SIM Portal: Database of Realistic MEG Simulations for Assessing Functional Connectivity, Society for Neuroscience Abstract 2010:208.11
- Stephen JM, Urrea L, Geeda AR, Romero L, Aine CJ. Characterizing responses to auditory and visual integration in schizophrenia using MEG. Poster presentation. National IDeA Symposium of Biomedical Research Excellence (NISBRE), Bethesda, MD, June 16-18, 2010.
- *Stone DB, Urrea L, Aine C, Clark VP, Stephen JM. Alterations in auditory processing and multisensory integration in schizophrenia patients revealed using EEG. Poster presentation. National IDeA Symposium of Biomedical Research Excellence (NISBRE), Bethesda, MD, June 16-18, 2010.
- Aine, C, Sanfratello, L, Stephen JM, Calhoun V. Image Analysis Core: Neural mechanisms of schizophrenia. Poster presentation. National IDeA Symposium of Biomedical Research Excellence (NISBRE), Bethesda, MD, June 16-18, 2010.
- *Berchicci M, Zhang T, Romero L, Peters A, Annett R, Teuscher U, Bertollo M, Okada U, Stephen J, Comani S. Dependence of Mu-rhythm on age in children 1-12 months-old. Poster presentation. 17th International Conference on Biomagnetism March 28-April 1, 2010.
- Sanfratello L, Stephen JM, Ranken D, Best E, Wallace T, MacArthur J, Gilliam K, Aine CJ. MEG_SIM Portal: Reconstructions from Realistic Simulations of Sensory and Cognitive Processing. Poster at 17th International Conference on Biomagnetism March 28-April 1, 2010.
- *Berchicci, et al. (2009). Characterization of Mu-rhythm in children aged 1-13 month-old, 7th Progress in Motor Control Conference, Marseille, France, July 23-25, 2009.
- *Berchicci M, Zhang T, Romero L, Peters A, Annett R, Teuscher U, Bertollo M, Okada U, Comani S, Stephen J. (2009). Mu-rhythm detection in infants. 15th Annual Meeting of the Organization for Human Brain Mapping, San Francisco, CA, June 18-23, 2009.
- Stephen, J. Zhang T, Hill D, Lopez B, Romero L, Peters A, Berchicci M, Okada Y. (2009) Increases in Coherence Index with Age in Neurotypical Children. 1st International Workshop on Perinatal Biomagnetism 2009, Chieti, Italy, April 4, 2009.

- *Berchicci, M., Zhang, T., Romero, L., Peters, A., Annett, R., Teuscher, U., Bertollo, M., Okada, Y., Comani, S., Stephen, J. (2009). Characterization of mu-rhythm in children aged 3-9 month-old. 1st International Workshop on Perinatal Biomagnetism 2009, Chieti, Italy, April 4, 2009.
- Aine, C., J. Bryant, J. Knoefel, J. Adair, B. Hart, C. Donahue, R. Montano, R. Hayek, C. Qualls, D. Ranken, J. Stephen. Aging, Dementia, and Pathology: Different Strategies for Auditory Word Recognition. Talk at Society for Neuroscience Conference, Washington, D.C. Nov. 15-19, 2008.
- Stephen, J., Romero, L., Okada, Y. Decreased latency with increasing age of the auditory and somatosensory multisensory integration response in infants measured with MEG. Poster at Society for Neuroscience Conference, Washington, D.C. Nov. 15-19, 2008.
- Supek, S., Golubic, S., Bryant, J., Donahue, C., Montano, R., Adair, J., Hart, B., Knoefel, J., Stephen, J., Aine, C. Neuromagnetic auditory activity reflects differences between normal aging, MCI and AD subjects: An oddball study. Poster at Biomag 2008 meeting, Sapporo, Japan, Aug 25-29, 2008.
- Aine, C., E. Best, D. Ranken, J. Bryant, C. Donahue, J. Bockholt, J. Stephen and M. Weisend (2008). Realistic Reconstructions of MEG Source Locations and Time in Visual Tasks. Poster at Biomag 2008 meeting, Sapporo, Japan, Aug 25-29.
- Aine, C., J. Bryant, J. Knoefel, J. Adair, B. Hart, C. Donahue, R. Montano, R. Hayek, C. Qualls, D. Ranken, J. Stephen (2008). Aging, Dementia, and Pathology: Different Strategies for Auditory Word Recognition. Poster at Biomag 2008 meeting, Sapporo, Japan, Aug 25-29.
- Aine, C., J. Bryant, C. Donahue, D. Ranken, H. Bockholt, J. Stephen and M. Weisend (2008). Realistic Reconstructions of MEG Source Locations and Time for Visual Tasks. Poster at 14th Annual Meeting of the Organization for Human Brain Mapping. Melbourne, Australia.
- Julia M. Stephen, Dina Hill, Brian Lopez, Lucinda Romero, Yoshio Okada' Exploring Brain Connectivity in Toddlers with Autism using the Pediatric MEG System called babySQUID. Poster Presentation Keystone Symposium Conference: Towards Identifying the Pathophysiology of Autistic Syndromes. Santa Fe, NM, February 24-28, 2008.
- Julia M Stephen, Christopher Atwood, Kevin Pratt, Yoshio Okada. Development of Auditory and Somatosensory Integration in Infants. Poster presentation at 12th Annual Meeting of the Organization for Human Brain Mapping, Florence, Italy, June 11-15, 2006.
- Cheryl J. Aine, Chad C. Woodruff, Janice E. Knoefel, John C. Adair, David Hudson, Clifford Qualls, Sanja Kovacevic, Denise Padilla, Wayne Cobb, Blaine Hart, Julia M. Stephen. Failing Memories or Maturation of Strategies? Poster presented at Human Brain Mapping Conference, Toronto Canada, June 12-16, 2005.
- Stephen JM, Ranken D, Aine CJ, Hart B, Adair J, Knoefel J. Integration of near and far, auditory and visual stimuli. Poster presented at 14th International Conference on Biomagnetism, Boston, MA, August 8-12, 2004.
- Ranken D, Stephen JM, George JS. MUSIC Seeded multi-dipole MEG modeling using the constrained start spatio-temporal modeling procedure. Poster presented at 14th International Conference on Biomagnetism, Boston, MA, August 8-12, 2004.
- Stephen JM, Ranken D, Aine CJ, Weisend MP, Shih J. Differentiability of simulated hippocampal, parahippocampal and lateral temporal sources. Poster presented at 14th International Conference on Biomagnetism, Boston, MA, August 8-12, 2004.
- Aine CJ, Adair J, Knoefel J, Hudson D, Qualls C, Cobb W, Padilla D, Kovacevic S, Stephen J. Age-related effects of priming in auditory association cortex. Poster presented at 14th International Conference on Biomagnetism, Boston, MA, August 8-12, 2004.

- Aine CJ, Hudson D, Bustillo J, Lauriello J, Rowland L, Lenroot R, Kovacevic S, Stephen J. Impoverished working memory network in schizophrenia. Poster presented at 14th International Conference on Biomagnetism, Boston, MA, August 8-12, 2004.
- J. Stephen, D. Ranken, C. Aine, J. Adair, J. Knoefel, D. Hudson, B. Hart. Effects of Aging on the Response to Near and Far, Auditory and Visual Stimuli, Poster presented at the International Multisensory Research Forum, June 1-5, 2004, Sitges, Spain.
- Aine C, Adair J, Knoefel J, Hudson D, Qualls C, Kovacevic S, Woodruff C, Lee R, Stephen J. MEG studies of cognition in healthy aging: Effects in the superior temporal gyrus. Presented at the 33rd Annual Meeting of the Society for Neuroscience, November 2003, New Orleans, LA.
- Stephen JM, Ranken D, Woodruff CC, Kovacevic S, Hudson D, Adair JC, Knoefel J, Qualls C, Aine CJ. Age-related changes to median nerve stimulation measured with MEG. Presented at the 9th International Conference on Functional Mapping of the Human Brain, June 19-22, 2003, New York, NY. Available on CD-Rom in NeuroImage, Vol. 19 (2), 2003.
- Kovacevic S, Stephen JM, Woodruff CC, Qualls C, Adair J, Hudson D, Knoefel J, Aine CJ. Aging Effects on Auditory Processing in an Oddball Task: An MEG Study. Presented at the 9th International Conference on Functional Mapping of the Human Brain, June 19-22, 2003, New York, NY. Available on CD-Rom in NeuroImage, Vol. 19 (2), 2003.
- Hudson D, Stephen JM, Adair J, Knoefel J, Qualls C, Kovacevic S, Woodruff CC, Aine CJ. Late Sustained Activity Evoked by Auditory Size Classification and Delayed Verbal Recognition Tasks: An MEG Study of Aging. Presented at the 9th International Conference on Functional Mapping of the Human Brain, June 19-22, 2003, New York, NY. Available on CD-Rom in NeuroImage, Vol. 19 (2), 2003.
- Woodruff C, Stephen J, Kovacevic S, Hudson D, Adair J, Knoefel J, Qualls C, Aine C. Comparison of Visual Responses in Young and Elderly Subjects in a Delayed Match to Sample Task. Presented at the 9th International Conference on Functional Mapping of the Human Brain, June 19-22, 2003, New York, NY. Available on CD-Rom in NeuroImage, Vol. 19 (2), 2003.
- Stephen JM, Shih JJ, Ranken D, Hudson D, Aine C. A simulation study of frontal lobe epileptic spike localization using real background noise. Poster, 13th International Conference on Biomagnetism, Jena Germany August 10-14, 2002.
- Ranken D, Best E, Stephen J, Schmidt D, George J, Wood C, Huang M. MEG/EEG forward and inverse modeling using MRIVIEW. Poster, 13th International Conference on Biomagnetism, Jena Germany August 10-14, 2002.
- Aine CJ, Stephen JM. Attention/memory primarily affects the magnitude, duration and synchrony of cortical sources localized during the 200-600 ms poststimulus interval. Talk, Society for Neuroscience Conference, November 2001.
- Stephen JM, Aine CJ, Christner R, Ranken D, Huang M, Best E. Differences in onset latencies of dorsal stream structures due to peripheral versus central visual field stimulation. Poster, Human Brain Mapping Conference 2001, June 10-14, 2001, Brighton, UK.
- Aine CJ, Stephen JM. Characterization of Cortical Response Profiles Evoked by Working Memory and Delayed Verbal Recognition Tasks using MEG. Poster presentation, Human Brain Mapping Conference 2001, June 10-14, 2001, Brighton, UK.
- Woodruff CC, Stephen JM, Aine CJ, Adair J. Spatiotemporal Characterization of Language Processing in the Brain Using Magnetoencephalography. Poster, Society for Cognitive Neuroscience, New York 2001.

- Ciesielski KT, Stephen JM, Lesnik PG; Aine CJ. Inhibitory brain subsystems in childhood OCD: MEG reveals hypoactivity of the anterior cingulate. Society for Neuroscience Conference 2000, Washington, D.C.
- Stephen JM, Aine CJ, Christner R, Huang M, Ranken D. "Visual areas identified in the frequency following response to alternating circular sinusoids," Poster, 12th International Conference on Biomagnetism, Espoo, Finland, August 2000.
- Stephen JM, Aine CJ, Christner RF, Ranken D, Huang M, Mosher JC, Leahy LM, "A study of the visual response to different temporal frequencies presented to parafoveal and peripheral visual fields using MEG," Poster, Fifth International Conference on Functional Mapping of the Human Brain, Düsseldorf, Germany, June 1999.
- Stephen J, et al. "Parietal and cingulate cortex activated in response to different auditory stimuli," Poster, 11th International Conference on Biomagnetism, Sendai, Japan, August 1998.
- Aine CJ, Huang M, Christner R, Stephen J, Meyer J, Silveri J, Weisend M. "R-MUSIC and Multistart Algorithms Reveal Multiple Cortical Regions of Activation in Response to Median and Tibial Nerve Stimulation," Poster, 11th International Conference on Biomagnetism, Sendai, Japan, August 1998.
- Huang M, Aine C, Weisend M, Stephen J, Meyer J, Christner R, Silveri J. "Pre- and Post-central Sulcal Sources Evoked by Stimulating the Median Nerve and Index Finger: Are Pre-central Sulcal Sources due to Passive Muscle Movement?" Poster, 11th International Conference on Biomagnetism, Sendai, Japan, August 1998.
- Stephen J, Aine CJ, Huang MX, Meyer J, Christner R, Silveri J, Weisend M. "Evidence of late auditory activity in response to tones using MEG," Poster, Fourth International Conference on Functional Mapping of the Human Brain, Montreal, Canada, June 1998.
- Aine CJ, Huang MX, Stephen J, Silveri J, Meyer J, Christner R. "Cingulate Cortex is Responsive to Simple Visual, Auditory and Somatosensory Stimulation: an MEG study," Poster, Fourth International Conference on Functional Mapping of the Human Brain, Montreal, Canada, June 1998.
- Stephen JM, Heller P. "The role of an experienced teaching assistant in TA orientation," Contributed talk, American Association of Physics Teachers Conference, College Park, MD, August 1996.
- Stephen JM, Broadhurst JH, Knuth KH, Schwartz BJ, "Determination of the nature of the connection between the auditory and visual cortex by measuring the response to a combined visual and auditory stimulus using a 37-SQUID biomagnetometer," Poster, Tenth International Conference on Biomagnetism, Santa Fe, NM, February 1996.

Membership in Professional Societies

- Society for Neuroscience, Member, 2000-present.
- Sigma Xi, Student Member, 1991-1993, Member, 2000-2002.
- American Physical Society, Student Member, 1992-1997.
- American Mathematical Society, Student Member, 1990-1991
- Phi Kappa Phi National Honor Society, inducted 1989.
- Golden Key National Honor Society, inducted 1989; NMU Branch Treasurer 1990 - 1991

National Committees

- 1999-2000, US representative to Neuromag, MEG manufacturer based in Helsinki, Finland. To facilitate communication between Neuromag users.
- 2010 – Present, Health and Environmental Sciences Institute Working Group on Neuroimaging.

Other extramural professional activities

Review Editorial Board: *Frontiers in Brain Imaging Methods*

Ad hoc reviewing for scientific journals:

Journal of Neuroscience, Journal of Cognitive Neuroscience, Cerebral Cortex, NeuroImage, Neuroscience Research, *Frontiers in Human Neuroscience*, Vision Research, *Epilepsia*, International Journal of Psychophysiology, Clinical Neurology and Neurosurgery, Human Brain Mapping, Alcoholism: Clinical and Experimental Research, Neuroinformatics, Developmental Neuroscience.

Reviewer for National Funding Organizations:

Ad hoc reviewer for NIH-BMIT Study Section - October 2005

Ad hoc reviewer for Azerbaijan-U.S. Bilateral Grants Program/U.S. Civilian Research & Development Foundation, November 2003.

Reviewer for Alzheimer's Association

Reviewer for International Funding Organizations:

External Reviewer, Italian Ministry of Health Annual Awards, October 2009.

Pre-baccalaureate student and honors student mentoring

Iris Mims, School year 2001-2002, Volunteer research assistant, helped with preliminary data analysis for publication Stephen, et al. 2003.

Laura Kuning, Spring 2007, Mentored for Albuquerque Academy research month.

Xinhe Ruth Wang, Summer 2007, 2009, High School Research Volunteer. Fall 2010, Undergraduate work study student.

Katie Gilliam, Summer 2008, 2009, Undergraduate Student Research Associate.

Tony Zhang, Summer 2009, 2011 High School Research Volunteer.

Jason MacArthur, Jan 2009 – 2011, Undergraduate Student Research Associate, ECE Graduate Spring 2011.

Celeste Schwartz, 2011 - present.

Wendy Morales, Undergraduate Research Advisor, MRN Internship Course Spring 2012, McNair Research Opportunity Program, 2012-present.

Alexandria Doerfler, Undergraduate Research Advisor, MRN Summer/Fall 2012.

Medical Student Mentoring

John Welker, Class of 2009

Elizabeth Elston, Class of 2010

Laura Urrea, Class of 2014

Jenny Zhang, Class of 2014

Classroom, laboratory teaching and tutoring:

Spring 2012, Guest Lecturer, "Why Timing Matters" Psychology Neural Basis of Cognitive Development Class.

Fall 2010. Guest Lecturer, "Using MEG to understand Neurodevelopment" Psychology Anxiety Disorders Classes.

Spring 2010. Guest Lecturer, Environmental toxin effects on brain development and Autism. UNM Psychology Class: Introduction to Functional Neuroimaging.

Fall 2008, 2009. Guest Lecturer, Studies in human brain development using babySQUID. UNM Psychology Human Neurodevelopment Class.

Spring 2007 – Team taught Radiation Therapy Physics for the Medical Physics master's program.

Fall 2006 – Team taught Radiation Physics for the Medical Physics master's program.

Spring 2006, 2007 – Taught MRI section of the Physics for Radiology Residents class, Physics for Cardiology Residents class and Introduction to Medical Imaging Class (ChNE 499).

2004 – 2007, Assist with teaching Physics for Radiology Residents class.

2001, Two day workshop on MEG, ~40 participants, Taught session on Experimental Design, Taught hands-on sessions on using MEGAN software and MEG data analysis. Albuquerque VA Medical Center.

1999, Spring Semester, Team taught Physics 501: Medical Physics and Brain Imaging, ~15 students, Taught Physics and Reconstruction techniques of Computed Tomography (CT), Single Photon Emission Computed Tomography (SPECT), and Positron Emission Tomography (PET), 4 lectures (4 weeks), University of New Mexico.

1995, 1996, Fall semester, Team taught CI5156: Techniques of Instruction - the first year teaching assistant training course. ~30 students This course discussed active learning, cooperative groups, problem solving techniques, common physics alternative conceptions, and techniques for consistent grading. Taught various components divided evenly with three other instructors. University of Minnesota.

1995-1997, Introductory physics, 2 students, Tutoring, 1-2 sessions/week, University of Minnesota.

1992 – 1995, All quarters, Ph1041, Ph1042: Introductory physics, 15-21 students/quarter, Taught physics laboratories (2/week) and recitation sessions (2/week), University of Minnesota.

Curriculum Development

1995, 1996, Summer Semester, Introductory physics. Improved introductory physics laboratory experiments and manuals.

Other Teaching and student mentoring activities:

Rebecca Montano, Research Assistant on Dr. Aine's Aging and Alzheimer's project. Mentored in MEG data acquisition and data analysis techniques, 2005 – 2006.

Christopher Donahue, Research Assistant on Dr. Aine's Aging and Alzheimer's project. Mentored in MEG data analysis techniques, 2005 – present.

Chad Woodruff, Research Assistant on Language project, Taught MEG data acquisition and data analysis techniques, 1999-2002.

Sanja Kovacevic, Research Assistant on Dr. Aine's Aging project. Mentored in matlab and MEG data analysis and acquisition techniques, 2000-2005.

David Hudson, Research Assistant on Dr. Aine's Aging project. Taught MEG data acquisition, paradigm development and data analysis techniques, 2000-2005.

Marika Berchicci, Graduate Research Assistant Advisor. Investigation of Mu-Rhythm Development in 3-9 month old children. 2008-2010.

Anil Reddy Geeda, Graduate Research Assistant Advisor. Connectivity Analysis in schizophrenia. 2010-2011. Master's thesis committee member. Graduated Dec. 2011.

David Stone, Graduate Research Assistant Advisor. Auditory and Visual Integration in schizophrenia using EEG and MEG. 2009-present.

Brian Coffman, Graduate Research Assistant. Fetal alcohol in adolescents and Auditory/Visual Integration in schizophrenia using MEG. 2010-present.

Relevant Coursework

Preparing Future Faculty, Grad8100: Teaching in Higher Education, University of Minnesota, 1997.

Physics 8950: Problems in Teaching and Higher Education, An introduction to collaborative grouping, problem-based, and inquiry-based teaching techniques. University of Minnesota, 1992.

Current Grant and Contract Funding:

Project Title: Preterm Infants' Mu Rhythm Suppression Evaluation Study (PrIMES)
Principal Investigator: Julia M. Stephen, PhD
Percent Effort: 25%
Funding Organization: NIH/NINDS 1R21 NS072729-01A1
Dates: 4/1/12-3/31/14
Amount: \$165,419 Annual Direct Costs

Project Title: COBRE: Neural mechanisms of schizophrenia: Use of Multiple Tools to Examine Dysfunctions in Neural Integration
Principal Investigator: Vince Calhoun, PhD
Percent Effort: 50% Project 2 PI: J. Stephen, Auditory and Visual Integration in Schizophrenia
Funding organization: NIH/NCRR 1P20 RR021938-01A2
Dates: 9/1/08-8/31/13
Amount: \$1,421, 200 Annual Direct Costs

Project Title: Imaging the Development of Memory Strategies in Aging
Principal Investigator: Cheryl J. Aine, Ph.D.
Percent Effort: 10%
Funding organization: NIH/NIA R01AG029495-01A2
Dates: 9/1/08-8/31/13
Amount: \$383,274 Annual Direct

Past Grant and Contract Funding:

Project Title: High frequency activity in infants with epilepsy
Principal Investigator: Julia M. Stephen, PhD
Percent Effort: 25%
Funding organization: NIH/NICHD 1R21HD057387-01
Dates: 6/1/08-5/31/12
Amount: \$275,000

Project Title: High frequency activity in infants with epilepsy Supplement
Principal Investigator: Julia M. Stephen, PhD
Percent Effort: Equipment grant 0%
Funding organization: NIH/NICHD 1R21HD057387-02S1
Dates: 6/1/10-5/31/12
Amount: \$98,920

Project Title: Realistic Simulations and Empirical Data: MEG Reconstructions of Time
Principal Investigator: Cheryl Aine, PhD
Percent Effort: 10%
Funding organization: NIH/NIMH 1R21 MH080141-01A1

Dates: 2/1/08-11/31/11
Amount: \$275,000

Project Title: Fetal ethanol-induced behavioral deficits: Mechanisms, diagnoses, and interventions Supplement

Principal Investigator: Daniel Savage, PhD
Percent Effort: 3% Project MRN Subaward PI: Julia Stephen, PhD.
Funding organization: NIH/NIAAA P20 AA017068-03S1
Dates: 7/1/10-6/30/11
Amount: \$85,375

Project Title: Towards Identifying an Early Marker for Fetal Alcohol Spectrum Disorders (FASD)

Principal Investigator: Julia Stephen, PhD
Percent Effort: 5%
Funding organization: DOE MRN Internal Grant award
Dates: 2/1/10-1/31/11
Amount: \$39,998

Project Title: Combining Heavy Metal Exposure, Genes and MEG to Identify Early Markers in Autism Spectrum Disorders

Principal Investigator: Julia Stephen, PhD
Percent Effort: 15%
Funding organization: DOE MRN Internal Grant award
Dates: 4/1/08-9/30/09
Amount: \$94,000

Project Title: Characterization of the Mirror Neuron System in 3-9 month old infants using the babySQUID MEG system

Principal Investigator: Robert Annett/ Julia Stephen, PhD
Percent Effort: 5%
Funding organization: UNM HSC CTSA – Novel Methods Pilot Project
Dates: 3/08-3/09
Amount: \$20,000

Project Title: Fetal ethanol-induced behavioral deficits: Mechanisms, diagnoses, and interventions

Principal Investigator: Daniel Savage, PhD
Percent Effort: 5% Project 7B PI: J. Stephen, Auditory and Somatosensory Integration in young children with FASD.
Funding organization: NIH/NIAAA P20 AA017068-01
Dates: 7/1/08-6/30/13
Amount: \$2.5M

Project Title: Functional Neuroimaging of Normal Aging and Alzheimer's Disease

Principal Investigator: Cheryl J. Aine, Ph.D.
Funding organization: NIH-NIA R01 AG020302
Dates: 5/15/04-12/31/08

Amount: \$ 1,845,383

Project Title: Auditory and Somatosensory Integration in young children with Autism: In Search of an Early Marker

Principal Investigator: Dina Hill, PhD

Percent Effort: 15%

Funding organization: UNM HSC CTSC

Dates: 11/1/07-6/30/09

Amount: \$50,000

Project Title: Cortical current imaging in human infants with babySQUID

Principal Investigator: Yoshio Okada, PhD

Funding organization: NIH – R21

Dates: 1/1/07-12/31/08

Amount: \$ 275,000

Project Title: Neuroimaging Successful vs. Normal Aging

Principal Investigator: Cheryl J. Aine, Ph.D.

Percent Effort: 10%

Funding organization: UNM CTSC

Dates: 6/1/06-5/30/08

Amount: \$50,000

Project Title: Development of the babySQUID MEG System

Percent Effort: 50%

Funding organization: The MIND Institute

Dates: 1/1/06 – 12/31/06

Project Title: Integrative Program in CNS Pathophysiology Research

Principal Investigator: Yoshio Okada, Ph.D.

Percent Effort: 50%

Funding organization: NIH (IDeA)

Dates: 2/1/01 – 1/31/06

Amount: \$ 9,854,374

Project Title: Functional Neuroimaging of Normal Aging

Principal Investigator: Cheryl J. Aine

Percent Effort: 30%

Funding organization: VA Merit Review

Dates: 10/1/01 – 9/30/04

Amount: \$423,900

Project Title: Dynamic Systems mediating verbal and spatial working memory tasks as characterized by MEG

Principal Investigator: Cheryl J. Aine, Ph.D.

Percent Effort: 20%

Funding organization: Mental Illness and Neuroscience Discovery Institute (MIND)
Dates: 1/1/03 – 12/30/03
Amount: \$150,000

Project Title: Auditory and Visual Integration in Aging
Principal Investigator: Julia M. Stephen, PhD
Funding organization: UNM-HSC Research Allocation Committee
Dates: 7/1/03-6/30/04
Amount: \$19,400

Project Title: Auditory and Visual Integration in Alzheimer's Disease
Principal Investigator: Julia M. Stephen, PhD
Funding organization: UNM COBRE grant
Dates: 1/1/04-7/31/04
Amount: \$15,000

Project Title: Characterization of Language Representation in the Brain to Object Naming and Word Reading Using Combined MEG and fMRI
Principal Investigator: Julia M. Stephen, Ph.D. Chad Woodruff
Percent Effort: 20%
Funding organization: National Foundation for Functional Brain Imaging
Dates: 11/1/00 – 10/30/01
Amount: \$ 41,254

Project Title: Dynamic Systems mediating verbal and spatial working memory tasks as characterized by MEG
Principal Investigator: Cheryl J. Aine, Ph.D.
Percent Effort: 20%
Funding organization: Mental Illness and Neuroscience Discovery Institute (MIND)
Dates: 1/1/02 – 12/30/02
Amount: \$150,000

Project Title: Functional Neuroimaging of Normal Aging and Alzheimer's Disease
Principal Investigator: Cheryl J. Aine, Ph.D.
Percent Effort: 20%
Funding organization: National Foundation for Functional Brain Imaging
Dates: 11/1/00 – 5/30/02
Amount: \$95,000

Amount: Project Title: Functional/Anatomical Characterization of the Recovery Process of a Sensorimotor Ischemic Stroke
Principal Investigator: Larry Davis, MD
Percent Effort: 5%
Funding organization: National Foundation for Functional Brain Imaging (NFFBI)
Dates: 11/1/00 – 10/30/01
Amount: \$ 120,000

Project Title: Neuromagnetic Mapping of Multiple Visual Areas in Humans

Principal Investigator: Cheryl Aine, Ph.D.

Percent Effort: 80%

Funding organization: NIH NEI (5RO1EY08610-10)

Dates: 9/1/97-8/31/00

Amount: \$ 600,000

Project Title: Functional/Anatomical Characterization of the Recovery Process of a Sensorimotor Ischemic Stroke

Principal Investigator: Larry Davis, MD

Percent Effort: 20%

Funding organization: National Foundation for Functional Brain Imaging (NFFBI)

Dates: 12/1/99-11/30/00

Amount: \$125,542

Pending Grant and Contract Funding:

Project Title: Early Indices of Atypical Neurodevelopment with Fetal Alcohol Exposure

Co-Principal Investigators: Julia M. Stephen, PhD, Ludmila Bakhireva, MD, PhD

Percent Effort: 25%

Funding organization: NIH/NIAAA

Amount: \$500,000 Annual Total Direct Costs

Project Title: Systematic Study of Multisensory Integration Benefits in Schizophrenia

Principal Investigator: Julia M. Stephen, PhD

Percent Effort: 30%

Funding organization: NIH/NIMH

Amount: \$293,499 Annual Total Direct Costs

Other Committee/Service Work

Member MRN Safety Committee – July 2009 – present.

Member of MRN Performance Evaluation Committee – August 2009 – 2010.

Member of MRN Internal Grants/Awards Committee – August 2009 – 2010.

Member of Radiation Control Committee, University of New Mexico Health Sciences Center, 2004-2007.

Member of University of New Mexico Faculty Senate Research Policy Committee, 2006-2007;
Intellectual Property Policy Subcommittee Chair 2007.

Community Service

Judge, SY Jackson Elementary School Science Fair, February 2011.

Judge, Junior Physics, Northwestern New Mexico Regional Science & Engineering Fair, March 2004.

Judge, Medical Student Research Day Poster Session, University of New Mexico School of Medicine, 2003, 2004, 2006.

Member of Albuquerque Mountain Rescue Council, 1998-2003.

Graduate Student Representative, Graduate Studies Committee, Physics Department, University of Minnesota, 1996.

Physics Presenter, Science is for Girls Summer Camp, University of Minnesota, Summer 1995.

Physics Presenter, Opportunities Day for Girls, University of Minnesota, 1994 and 1995.

Volunteer Guide, Opportunities Day for Girls, University of Minnesota, 1993.

Co-founder and President, Physics Club, Northern Michigan University, 1991 - 1992. Coordinated visit and lecture by Nobel-laureate in Physics Leon Lederman.

Judge's Assistant, Science Olympiad, Northern Michigan University, 1990 and 1991.