

**Amy M. Korzekwa**  
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## **Education**

B.S. in Psychology (Summa cum Laude), University of New Mexico: May 2007.

## **Research Experience**

Spring 2006-present: Participated in research project concerning the application of SOBI and Granger Causality to human high-density EEG data. Specific activity includes: assisting the recruitment of human subjects, assisting in the preparation of human subjects for EEG experiment, organizing data, localizing sources using BESA, performing statistical analysis on SOBI-Granger-Causality measures using Excel, preparing graphical summary of the data, assisting the preparation of reports for funding agency, assisting the writing of manuscript, preparing for conference presentation, performing literature search, copying, and filing.

Fall 2005-present: Participated in research project concerning the effects of early life stimulation on adulthood social, cognitive, and neuroendocrine function. Specific activity includes: coding social behaviors of the rats during dyadic interactions from video tape, coding of navigational behaviors of the rat in the spatial memory task, observing and recording maternal behavior in the rat, programming in Matlab for the analysis of social behavior, entering data and organizing data, analyzing and graphing data using Excel and SPSS, performing three types of experiments on rats (dyadic social interaction, open field, and Morris water task).

## **Publications and Conferences**

P. Sun, Z. Yang, A.M. Korzekwa, M.T. Sutherland, A.C. Tang (2007). Determining Gender from Local Network Synchronization in the Frontal Cortex. To appear in: *Proceedings of the International Conference for Cognitive Neurodynamics*. Shanghai, P.R.China.

A.C. Tang, M.T. Sutherland, P. Sun, Y. Zhang, M. Nakazawa, A.M. Korzekwa, Z. Yang, M. Ding (2007). Top-Down versus Bottom-up Processing in the Human Brain: Distinct Directional Influences Revealed by Integrating SOBI and Granger Causality. To appear in: *Proceedings of the International Conferences on Independent Components Analysis*. London, UK.

Z. Yang, R.D. Romeo, M. Nakazawa, A.M. Korzekwa, B.C. Reeb, B.S. McEwen, A.C. Tang (2007). Priming Adult Stress Response by Neonatal Novelty Exposure. *Society for Neuroscience Abs.*

A.C. Tang, M.T. Sutherland, P. Sun, Y. Zhang, M. Nakazawa, A.M. Korzekwa, Z. Yang, M. Ding (2007). Feed-forward versus Feedback Processing in the Human Brain: Distinct Directional Influences Revealed by Integrating SOBI and Granger Causality. *Society for Neuroscience Abs.*

P. Sun, Z. Yang, A.M. Korzekwa, M.T. Sutherland, M. Nakazawa, A.C. Tang (2007). Determining Gender from Local Network Synchronization in the Frontal Cortex. *Society for Neuroscience Abs.*

A.M. Korzekwa, P. Sun, P.G. Grieve, J.R. Isler, M.M. Myers, W.P. Fifer, A.C. Tang (2007). Measuring Feed-forward and Feed-back Influence in the Brains of 2-Day Old Human Infants by Integrating SOBI and Granger Causality. *Society for Neuroscience Abs.*

A.C. Tang, M.T. Sutherland, P. Sun, Y. Zhang, M. Nakazawa, A. Korzekwa, Z. Yang, M. Ding (2007). Top-Down versus Bottom-up Processing in the Human Brain: Distinct Directional Influences Revealed by Integrating SOBI and Granger Causality. *Independent Components Analysis.*

A.C. Tang, K.G. Akers, A.M. Korzekwa, B.C. Reeb (2007). Early Life Modulators of Adult Social Engagement during Dyadic Interaction. *Association for Psychological Science Abs.*

A.M. Korzekwa, Z. Yang, B.C. Reeb, A.C. Tang (2007). Creation of between-sibling differences: an induction by 60-minute neonatal non-shared environment. *Association for Psychological Science Abs.*

A.M. Korzekwa, E. Jaetao, B.C. Reeb, A.C. Tang (2006). Negative maternal behavior predicts offspring's spatial cognition. *International Society for Developmental Psychobiology Abs.*

M. Nakazawa, A.M. Korzekwa, K.G. Akers, A.C. Tang (2006). Ability to obtain social interest from conspecifics was impaired by brief neonatal oxygen deprivation. *International Society for Developmental Psychobiology Abs.*

A.C. Tang, K.G. Akers, B.C. Reeb, A.M. Korzekwa, L.N. Rogers (2006). What makes an adaptive rat – “better” mothers or early exposure to novelty? *International Society for Developmental Psychobiology Abs.*

## **Awards**

National Merit Scholar Finalist  
Presidential Scholarship, NAU  
Travel Award from the International Society for Developmental Psychobiology to attend and present at their annual conference, 2006.  
Travel Award from the UNM Student Conference Award Program to attend the International Society for Developmental Psychobiology annual conference.

## **Skills**

General computer skills: fluent with Windows, MS Word, MS Excel, MS PowerPoint.

Statistical analysis skills: use of Minitab, SAS, SPSS for data analysis.

Programming skills: wrote MatLab programs for data analysis.

Brain imaging data analysis skills: beginning use of BESA

Animal research skills: coding of behaviors, handling and caring for laboratory animals, familiarity with several experimental protocols (open field, Morris water task, social interactions)

## **Professional Affiliations**

Society for Neuroscience

International Society for Developmental Psychobiology

## **References**

Dr. Akaysha Tang, Associate Professor  
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