

# Michael T. Rubens

Michael@gazzaleylab.ucsf.edu

## EDUCATION

**Arizona State University**, Tempe, AZ. BA, December 2006

Major: Psychology

Cumulative GPA: 3.3

Second half GPA: 3.9

**FSL & FreeSurfer Course**. June 2009. San Francisco, CA.

## RESEARCH EXPERIENCE

**UC SAN FRANCISCO** San Francisco, CA (August 2007-present)

**Staff Research Associate**, Neurology, Physiology, Adam Gazzaley MD, PhD

Coordinated analysis stream across several fMRI studies. Significantly contributed to all aspects of several fMRI experiments. This included study design, data collection, developing analytical tools, data analysis, interpretation and manuscript composition. Contributed largely to analysis tool library (i.e., MATLAB script collection). Refined and improved functional connectivity analysis techniques. Explored novel multivariate analysis methodology such as Independent Component Analysis of fMRI data and Multi Voxel Pattern Analysis.

*Major research techniques:* MRI (3T) analyzed with SPM5, FSL and custom scripts. 64 Channel EEG analyzed with Analyzer and EEGLAB. TMS. Behavioral testing.

**UNIVERSITY OF MICHIGAN** Ann Arbor, MI (January 2007-July 2007)

**Research Assistant**, Chronic Pain & Fatigue Research Center, Daniel Clauw MD

Investigated manipulation of loci of control as a possible intervention for Fibromyalgia patients. Collected neural data and operated pain stimulus delivery system. Processed and analyzed fMRI data.

*Major research techniques:* MRI (3T) analyzed with SPM5. Unix shell scripting.

**WAYNE STATE UNIVERSITY** Detroit, MI (December 2006-June 2007)

**Research Technician**, Psychology, Behavioral & Cognitive Neuroscience, Ava Senkfor PhD

Utilized MATLAB to develop programs to satisfy the requirements of the PI. Goals were delineated and then code was composed independently. These requirements were generally related to the compilation and visualization of data from behavioral and/or imaging studies, as well as tools that facilitated the organization or simplification of data. Additionally, collected behavioral data, prepared stimuli for experimental presentation and assisted in the interpretation of data.

*Major research techniques:* computer programming with MATLAB. Behavioral testing.

**ARIZONA STATE UNIVERSITY** Tempe, AZ (January 2006-December 2006)  
**Research Assistant**, Social Cognition Lab, Psychology, Douglas Kenrick PhD  
Utilized eye-tracking to monitor visual attention in response to primed social goal-states.  
Collected eye-tracking and survey data. Assisted with analysis and interpretation of data.  
*Major research techniques:* Eye-tracker. Behavioral assessments.

## TEACHING EXPERIENCE

**ARIZONA STATE UNIVERSITY** Tempe, AZ (August 2006-December 2006)  
**Supplemental Instruction Leader**, Department of Psychology  
Conducted a series of review sessions for groups of students enrolled in introductory psychology courses. Designed instruction materials and devised review curriculum.  
Worked with associated faculty members to create meaningful review sessions.

## PUBLICATIONS

Clapp, W.C., **Rubens, M.T.**, Gazzaley, A. (2009). Mechanisms of Working Memory Disruption by External Interference. *Cerebral Cortex*.

## ABSTRACTS

Wais, P., Boccanfuso, J., **Rubens, M.T.** & Gazzaley, A. The Neural Correlates of Visual Distraction During Episodic Memory Retrieval. Program No. 279.23.2009 Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience, 2009. Online.

Zanto, T.P., **Rubens, M.T.**, Thangavel, A. & Gazzaley, A. Top-down modulation for visual features: Evidence from functional and causal connectivity. Program No. 701.01.2009 Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience, 2009. Online.

Wais, P., Boccanfuso, J., **Rubens, M.T.**, Gazzaley, A. The impact of distraction on long-term memory retrieval. San Francisco, CA: Cognitive Neuroscience Society meeting. 2009.

Clapp, W.C., **Rubens, M.T.**, Karlsson, J., Zanto, T.P., Gazzaley, A., (2008). Variations in Task Difficulty Dissociate Activity in Prefrontal Cortex and Medial Temporal Lobe During Working Memory Encoding. *Organization of Human Brain Mapping*, Melbourne, Australia.

Clapp, W.C., **Rubens, M.T.** & Gazzaley, A. Individual differences in attentional allocation to relevant and irrelevant distraction predicts working memory performance. Program No. 814.07.2008 Neuroscience Meeting Planner. Washington, D.C: Society for Neuroscience, 2008. Online.

## **SKILLS**

**Computer:** MATLAB expertise, SPM, FSL, AFNI, Voxbo, UNIX shell scripting, E-prime, Adobe Photoshop and Illustrator, MRICron, MRICro, OsiriX, SPSS, MS Office, Siemens scanner operation (Syngo), eye-tracker operation.

## **References:**

**Adam Gazzaley, MD PhD**, current PI, adamgazz@comewander.com

**Wesley Clapp, PhD**, research mentor/collaborator, wesleyclapp@gazzaleylab.ucsf.edu

**Douglas Kenrick, PhD**, former PI, Douglas.Kenrick@asu.edu

**Theodore Zanto, PhD**, Colleague, Theodore.Zanto@ucsf.edu