

# NIKKI MARINSEK

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updated summer 2015

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## EDUCATION

DOCTORAL STUDENT IN DYNAMICAL NEUROSCIENCE  
*University of California, Santa Barbara, 2012 – Present*

B.S. IN BIOLOGY & PSYCHOLOGY, MINOR IN CHEMISTRY  
*New Mexico Institute of Mining and Technology, 2008 – 2012*

## RESEARCH

GRADUATE STUDENT RESEARCHER

*Dr. Michael Miller's Memory and Neuroimaging Lab*  
*University of California, Santa Barbara, 2012 – Present*

I employ a variety of behavioral, neuroimaging, and analytical techniques to study the neural dynamics of causal inference making and belief updating.

RESEARCH ASSISTANT

*Dr. Snezna Rogelj's Drug Discovery Lab*  
*New Mexico Institute of Mining and Technology, 2010 – 2012*

I screened novel compounds for antifungal activity against *Candida albicans*, investigated synergistic relationships between antifungal drugs, and analyzed fungus morphology under various conditions.

RESEARCH INTERN

*Dr. Floh Thiels Lab*  
*Center for Neuroscience, University of Pittsburgh, Summer 2011*

I helped compile behavioral and neurobiological profiles of rats that were exposed to stress in order to establish an animal model of depression for the lab.

## TEACHING & MENTORSHIP

TEACHING ASSISTANT

*Psychological and Brain Sciences, UCSB, 2013 - 2014*

I held office hours, tutored students, proctored and graded exams, graded homework assignments, and led lab sessions for Advanced Research Methods, Cognition (2 quarters), and Cognitive Neuroscience.

MENTOR

*Research Mentorship Program, UCSB, 2013 - 2014*

I mentored a total of four high school students over two six-week periods. I helped them design a research study, collect and analyze data, and present their research findings in a paper, poster, and presentation.

LEARNING COACH

*Introduction to Chemistry, NMT, Fall 2011*

I co-led biweekly lab sessions, tutored students, led a homework discussion group, and graded homework sets for students identified as being at-risk.

**WORK**

RESIDENT ASSISTANT

*New Mexico Institute Of Mining And Technology, 2010 - 2012*

BOARD CERTIFIED PHARMACY TECHNICIAN

*Walgreen's Pharmacy, 2009 – 2013***AWARDS &  
FELLOWSHIPS**

GRADUATE RESEARCH PROGRAM FELLOW

*National Science Foundation, 2014 - Present*

Awarded three years of support to pursue proposed research goals.

DOCTORAL SCHOLAR

*Graduate Student Division, UCSB, 2012 - Present*

Awarded two years of support.

GRADUATE STUDENT FELLOW

*Sage Center For The Study Of The Mind, UCSB, 2012*

Awarded a \$5,000 scholarship.

MACEY SCHOLAR

*New Mexico Institute Of Mining And Technology, 2012*

Awarded a \$5,000 scholarship.

PSYCHOLOGY DEPARTMENTAL AWARD

*New Mexico Institute Of Mining And Technology, 2012*

ANALYTICAL AWARD

*American Chemistry Society, 2010***SKILLS**

LANGUAGES

MATLAB / Psychtoolbox / Bash / C / Python / HTML / CSS

SOFTWARE

FSL / Caret / Freesurfer / Osirix / EEGlab / ERPLab

ANALYSES

general linear model / functional connectivity / beta series regression / ROI analyses / model based fMRI / EEG ERPs and oscillations

**COURSES**

GRADUATE

Memory / Statistics / Neuroanatomy / Patient Studies / Neuroimaging / Computational Neuroscience / Cerebral Cortex / Cognitive Neuroscience / fMRI Data Analysis / Linear Systems / Ordinary Differential Equations / EEG

UNDERGRADUATE

Cognitive Psychology / Behavioral Neuroscience / Developmental Psychology / Physiology / Perception / Social Psychology / Technical Writing / Statistics / Experimental Psychology / Drugs &amp; Behavior / Abnormal Psychology

ONLINE

Statistical Learning (Stanford) / Python (codecademy)

## PUBLICATIONS

**Marinsek, N.**, Turner, B.O., Gazzaniga, M., & Miller, M.B. (2014). Divergent hemispheric reasoning strategies: reducing uncertainty versus resolving inconsistency. *Frontiers in Human Neuroscience*, 8(839), 1- 10. doi: 10.3389/fnhum.2014.00839

Turner, B.O., **Marinsek, N.**, & Miller, M.B. (2015). Hemispheric Lateralization in Reasoning. *The Year in Cognitive Neuroscience*. Manuscript under review.

**Marinsek, N.** & Miller, M.B. (2015). A novel paradigm for measuring unconstrained hypothesis making. Manuscript in preparation.

## CHAPTERS

**Marinsek, N.**, Miller, M.B., & Gazzaniga, M. S. (2015). Split-brain, split-mind. In S. Laureys & G. Tononi (Eds.), *The Neurology of Consciousness*. San Diego, CA: Academic Press. Chapter in press.

Colvin, M., **Marinsek, N.**, Miller, M. B., & Gazzaniga, M. S (2015) Split-brain cases. *Blackwell Companion to Consciousness*. Chapter under review.

## LECTURES

**Marinsek, N.** (2015, July). Functional Magnetic Resonance Imaging. 65th annual Nobel Laureate Conference, Lindau, Germany.

**Marinsek, N.** (2014, May). Hypothesis formation and evaluation in the brain. 38th annual mini-conference for the Psychological and Brain Sciences Department, University of California, Santa Barbara, CA.

## POSTERS

**Marinsek, N.**, Turner, B. O., Steindam, C., & Miller, M. B. (2015, March). Tracking the neural dynamics of hypothesis evaluation. Poster presented at the annual Cognitive Neuroscience Society conference, San Francisco, CA.

**Marinsek, N.**, Turner, B. O., & Miller, M. B. (2014, August). A Bayesian approach to identifying the neural correlates of hypothesis formation and evaluation. Poster presented at the annual Bay Area Memory Meeting, Stanford University, Palo Alto, CA.

**Marinsek, N.**, Turner, B. O., & Miller, M. B. (2014, April). Components of belief updating and their neural correlates. Poster presented at the annual Cognitive Neuroscience Society Meeting, Boston, MA.

**Marinsek, N.**, Turner, B. O., & Miller, M. B. (2013, November). The neural correlates of hypothesis formation and evaluation. Poster presented at the annual Society for Neuroscience Meeting, San Diego, CA.

**Marinsek, N.**, Turner, B. O., & Miller, M. B. (2013, August). The neural correlates of hypothesis formation and evaluation. Poster presented at the annual Bay Area Memory Meeting, San Francisco, CA.