

BRYAN ALVAREZ

University of California, Berkeley Graduate Student
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EDUCATION

University of California, Berkeley Berkeley, CA
Cognition, Brain, Behavior Program, Psychology Department, 2006 - present
Oberlin College Oberlin, OH
Bachelor of Arts, major in Biology, emphasis in Neuroscience, 2004
Oberlin Conservatory of Music Oberlin, OH
Bachelor of Music, major in Trombone Performance, 2004

RELEVANT EXPERIENCE

Publications:

Cavanaugh J, Alvarez BD, Wurtz RH (2006) Enhanced Performance With Brain Stimulation: Attentional Shift Or Visual Cue? *Journal of Neuroscience*, (*In press*).

Talks:

Alvarez BD, Gunther KL, Dobkins KR (2004) Induction effects for heterochromatic brightness matching, heterochromatic flicker photometry, and minimally distinct border: implications for the neural mechanisms underlying induction. Dept of Neuroscience, Oberlin College.

Poster Presentations:

Cavanaugh J, Alvarez BD, Wurtz RH (2005) Does superior colliculus stimulation directly shift attention or produce a visual cue? *Soc Neurosci Abstr* 165.8.

Research:

University of California, Berkeley, Berkeley, California, Summer 2006 – present
Graduate Student – Behavioral studies of color-graphemic synesthesia and its implications as a model to understand the neural mechanisms of feature to object binding and the role of attention in object formation. Graduate Research Advisor: Lynn Robertson, Professor, UC Berkeley.

National Institutes of Health, Bethesda, Maryland, Fall 2004 – Summer 2006
Post-Baccalaureate Fellowship – Psychophysical and electrophysiological studies of visual coordination and attention in Rhesus monkeys. Robert Wurtz, Senior Investigator, Laboratory of Sensorimotor Research, National Eye Institute, National Institutes of Health.

National Institutes of Health, Bethesda, Maryland, Summer 2004
Special Volunteer – Psychophysical and electrophysiological studies of visual coordination and attention in Rhesus monkeys. Principal Investigator: Robert Wurtz, Senior Investigator, LSR/NEI/NIH.

Oberlin College, Oberlin, OH, Spring 2004
Psychophysical studies of human color vision. Head of Laboratory: Karen Gunther, Visiting Professor of Neuroscience at Oberlin.

Coursework:

Neuroscience: Neurobiology of the Mind, Human Neurobiology, Neuroanatomy, Sensory Neuroscience, Neurobiology of Mental Illness

Psychology: Behavioral Psychology, Vision and Aesthetics, Statistics

Biology: Organismal Biology, Genetics, Evolution and Ecology, Vertebrate Structure and Evolution, Cell and Molecular Biology

Chemistry: Analytical Chemistry, Principles of Organic Chemistry

Lab Experience:

Neuroscience: Single cell recording and stimulation in awake behaving Rhesus Macaques, Electrophysiology (rats and worms), Histology (Nissl, AChE stains), Stereotaxonomy, Operant Conditioning, Behavioral Assessment of Anxiety, Rat Perfusion.

Evolutionary Biology: Dissection and study of bones, muscles, organs (including CNS), and integument of vertebrate organisms (Chondrichthyes, Anura, Necturus, Avia, Mammalia).

Molecular Biology: Isolation of cells by Buoyant Density Centrifugation, Basic Cytogenetic Techniques (slide making, G-banding), Sterile Technique and Quantization of Bacterial Culture, Gel Electrophoresis, Generation of Recombinant DNA Molecules.

Chemistry: Thin Layer Chromatography, Flash Column Chromatography, Mass Spectrometry, IR Spectroscopy, NMR Spectroscopy, Gas Chromatography.

LEADERSHIP **Graduate Student Instructor:** University of California, Berkeley, Fall 2006 – present. Teaching three discussion section classes of the Psychology of Dreaming. This upper division psychology course focuses on biological and neurophysiological explanations for sleep and dreaming and also their relationship to past and current dream analysis. Responsible for three sections per week with a total of approximately 90 students.

Panama Project: Panama City, Panama, Winter 2003.

Taught musical performance and practice techniques to students ranging in age from child to adult and in skill from beginner to professional. Prepared skill-appropriate lessons and coached ensembles.

Principal Trombone: Oberlin Conservatory, Oberlin, OH, Fall 1999 – 2004.

Lead the trombone section in the following performance ensembles: Oberlin Orchestra, Oberlin Chamber Orchestra, Oberlin Wind Ensemble, Oberlin Contemporary Music Ensemble, Brass Guild of Oberlin, Oberlin Brass Choir, Oberlin Trombone Choir.

GRANTS **NSF Graduate Fellowship:** (Honorable Mention) October, 2005. Can a contingent motion aftereffect produce a color-graphemic synesthetic experience; implications of a novel experiment in synesthesia.

SKILLS **Computer:** Facility using MS Office (Word, Excel, PowerPoint), Adobe (Photoshop, Acrobat). Familiarity with Matlab 7.0 analysis and programming, Presentation 10.1 psychophysical design program.

Language: Conversational fluency in Spanish.