

RAIN G. BOSWORTH, PH.D.
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University of California, San Diego
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CURRENT POSITION:

Assistant Project Scientist, III 2004-present

EDUCATION:

Ph.D. in Experimental Psychology 1995-2001

University of California, San Diego

B.A. in Psychology 1991-1994

University of California, San Diego

RESEARCH AWARDS AND HONORS:

R01 Supplemental Research Award, National Eye Institute 2004-2008

Postdoctoral Fellowship, National Eye Institute, PA-99-105 2001

Travel Award, ARVO/National Eye Institute 2000

Travel Award, Office of the Dean of Social Sciences, UCSD 1999, 2000

NIH Predoctoral Training Award, Institute for Neural Computation 1999-2000

NIH/NIDCD Predoctoral Training Award 1998-1999

Graduate Fellowship, Fight for Sight Research Division 1997-1998

Graduate Fellowship, Gallaudet University Alumni Association 1997-1998

NRS Predoctoral Training Award, Center for Human Information Processing 1996-1997

Graduated *Cum Laude* and with Distinctive Departmental Honors 1994

Undergraduate Merit Scholarship, Clair Burgener Foundation 1994

Psi Chi National Honor Society 1993-1994

Provost's Quarterly Honor Roll 1992-1994

Eva Augusta Josephi Undergraduate Merit Scholarship 1992-1993

RESEARCH EXPERIENCE:

Research Assistantships

Post-doctoral Fellowship, Retina Foundation of the Southwest 2001-2004

Psychology Undergraduate Honors Program, University of California, San Diego 1993-1994

Laboratory for Cognitive Neuroscience, Salk Institute for Biological Studies 1992-1996

Protein Sequencing Laboratory, University of California, San Diego 1992-1994

Temporal Bone Histopathology Laboratory, House Ear Institute, Los Angeles 1992

PROFESSIONAL AFFILIATIONS:

Member

Vision Science Society 2005-present

Association for Research in Vision & Ophthalmology 1996-present

Reviewer

Vision Research 2001-2006

Trends in Cognitive Sciences 2004

Psychonomic Bulletin 1999

Moderator

Association for Research in Vision & Ophthalmology 2004

TEACHING EXPERIENCE:

Teaching Appointments and Guest Lectures

Lecturer, Department of Linguistics	2004
American Sign Language courses (Dept. of Linguistics)	1999-2000
Completion of two-day workshop for language instructors	1999

Teaching Assistantships:

Voices in Culture (Dept. of Communications)	1997-1998
Introduction to Cognitive Psychology	1997
Introduction to Biopsychology	1997
American Sign Language and its Culture (Dept. of Linguistics)	1996-1999
Psychology of Language	1996
Cognitive Foundations of Psychology	1996
Introduction to Statistics	1995
Biological Foundations of Psychology	1995
Upward Bound Program	1995

Research Supervisory Experience

Faculty Mentorship Program	2006
Undergraduate honor students' research projects	2005-2006
Undergraduate research assistants	2005-2006
Fight for Sight Summer Intern	2003

PUBLICATIONS:

Bosworth, R.G. & Birch, E.E. (in submission). Nasal-temporal asymmetries in motion detection and motion VEP in normal infants and young patients with infantile esotropia. *Investigative Ophthalmology & Vision Science*.

Bosworth, R.G., Bartlett, M.S., Wright, C.E., & Dobkins, K.R. (in press). Image statistics of American Sign Language: comparison with faces and natural scenes. *Journal of Optical Society of America*.

Birch, E.E. & **Bosworth**, R.G. (2005). Visual evoked potentials in infants and children. Chapter in M. J Aminoff (Ed.). *Electrodiagnosis in Clinical Neurology, 5th Edition*. New York: Churchill-Livingstone, pp.439-450.

Bosworth, R.G. & Birch, E.E. (2005). Motion detection in normal infants and young patients with infantile esotropia. *Vision Research* 45(12). 1557-1567.

Birch E.E., Felius J., Stager Sr., D.R., Weakley Jr., D.R. & **Bosworth** R.G. (2004). Pre-operative stability of infantile esotropia and post-operative outcome. *American Journal of Ophthalmology*, 138, 1003-9.

Hoffman, D.R., Theuer, R.C., Castaneda, Y.S., Wheaton, D.H., **Bosworth**, R.G., O'Connor, A.R., Morale, S.E., Wiedemann, L.E. & Birch, E.E. (2004). Maturation of visual acuity is accelerated in breast-fed term infants fed baby food containing DHA-enriched egg yolk. *Journal of Nutrition*, 134 (9), 2307-2313.

Bosworth, R.G., Wright, C.E., Bartlett, M.S., Corina, D.P. & Dobkins, K.R. (2003). Characterization of the visual properties of signs in ASL. Chapter in A. E. Baker, B. van den Bogaerde & O. Crasborn (Eds.), *Cross-Linguistic Perspectives in Sign Language Research*. Hamburg: Signum Press.

Bosworth, R.G. & Dobkins, K.R. (2001). Visual field asymmetries for motion processing in deaf and hearing signers. *Brain & Cognition*, 49(1). 152-169.

Bosworth, R.G. & Dobkins, K.R. (2001). The effects of spatial selective attention on motion processing in deaf and hearing subjects. *Brain & Cognition*, 49(1). 170-181.

Dobkins, K.R. & **Bosworth, R.G. (2000).** Effects of set-size and spatial selective attention on motion processing. *Vision Research*, 41. 1501-1517.

Bosworth, R.G. & Dobkins, K.R. (1999). Left hemisphere dominance for motion processing in deaf signers. *Psychological Science*, 10(3), 256-262.

ABSTRACTS AND CONFERENCE PRESENTATIONS:

Bosworth, R.G., Hinga, B., Robbins, S.L. & Dobkins, K.R. (2006). Longitudinal study of chromatic and luminance contrast sensitivity in full-term and pre-term infants from 2 to 7 months of age. *Journal of Vision*, 6(6): 287a.

Bosworth, R.G., Wang, Y.Z. & Birch, E.E. (2006). Local and global motion sensitivity in infantile esotropia and normal subjects from 3 months to 5 years of age. *Investigative Ophthalmology & Vision Science*, 47: E-abstract 3151.

Bosworth, R.G. & Birch, E.E. (2004). Nasal-temporal asymmetry in motion detection and motion VEPs in normal infants and patients with infantile esotropia. *Investigative Ophthalmology & Vision Science*, 45: E-abstract 3425.

Hoffman, D.R., Garfield, S., Morale, S.E., **Bosworth, R.G.**, Castaneda, Y.S., Wheaton, D.K., Theuer, R.C. & Birch, E.E. (2004). Visual and neural development of breast-fed infants receiving docosahexaenoic acid (dha)-enriched baby food: A randomized clinical trial. *Investigative Ophthalmology & Vision Science*, 45: E-abstract 3510.

Bosworth, R.G., Borowy, C., Lapa, M. C., Salomão, S. & Birch, E.E. (2004). Stereoacuity and amblyopia in children with strabismus and anisometropia. *American Academy of Pediatric Ophthalmology and Strabismus*, Washington D.C.

Bosworth, R.G. & Birch, E.E. (2003). Binocular function and optotype-grating acuity discrepancies in amblyopic children. *Investigative Ophthalmology & Vision Science*, 44. E-abstract 3183.

Bosworth, R.G. & Birch, E.E. (2003). Nasal-temporal asymmetries in motion sensitivity and motion VEPs in normal infants and patients with infantile esotropia. *American Academy of Pediatric Ophthalmology & Strabismus*, Hawaii.

Bosworth, R.G., Fawcett, S.L., & Birch, E.E. (2002). Natural history of monofixation and amblyopia in infantile esotropia during the first 18 months of life. *Investigative Ophthalmology & Vision Science*, 43. E-abstract 4690.

Bosworth, R.G. & Dobkins, K.R. (2000). Left hemisphere advantage for motion processing in deaf subjects is not accounted for by attention. *Association for Research in Vision and Ophthalmology*, Fort Lauderdale, Florida.

Rezec, A.A., **Bosworth, R.G. & Dobkins, K.R. (2000).** Are visual field asymmetries for motion detection perceptual or attentional? *Cognitive Neuroscience Society, 7th annual conference*, San Francisco, California.

Bosworth, R.G. & Dobkins, K.R. (2000). Left hemisphere advantage for motion processing in deaf subjects. *Cognitive Neuroscience Society, 7th annual conference*, San Francisco, California.

Bosworth, R.G., Wright, C.E., Bartlett, M.S., Corina, D.P. & Dobkins, K.R. (2000). Characterization of the visual properties of signs in ASL. *Theoretical Issues in Sign Language Research, 7th biannual conference*, Amsterdam.

Bosworth, R.G. & Dobkins, K.R. (1999). Effects of spatial pre-cueing on motion detection: A test of time-to-orient, noise reduction and perceptual enhancement. *Association for Research in Vision and Ophthalmology*, Fort Lauderdale, Florida.

Bosworth, R.G. & Dobkins, K.R. (1998). Influence of spatial attention on direction-of-motion discrimination in hearing and deaf subjects. *Association for Research in Vision and Ophthalmology*, Fort Lauderdale, Florida.

INVITED LECTURES:

“Longitudinal study of chromatic and luminance contrast sensitivity in full-term and pre-term infants” 3rd Annual Residents, Fellows and Alumni Meeting, Shiley Eye Center, University of California, San Diego. May, 2006.

“Successful Research Collaborations in Academia.” Second International Deaf Academics and Researchers Conference; Washington D.C. February, 2004

“Visual Perception and Attention in Deaf and Hearing Subjects.” Rochester Institute of Technology; Rochester, NY. April, 2001.

“Differences between ASL Signers and English Speakers in Processing of Visual Moving Stimuli: Possible Implications for Brain Laterality of Perception and Language.” University of New Mexico; Albuquerque, NM. September, 2000.

“Left Hemisphere Dominance for Motion Processing in Deaf and Hearing Signers, but Not Hearing Nonsigners.” University of Texas; Austin, TX. October, 2000.