

CURRICULUM VITAE

Melanie Palomares

CONTACT INFORMATION

The University of South Carolina
1512 Pendleton Street
Barnwell College #351C
Columbia, SC 29208

Lab: 803.777.4399
Fax: 803.777.9558
E-mail: paloma@sc.edu
<http://people.cas.sc.edu/palomare>

EDUCATION

Johns Hopkins University Baltimore, Maryland
Ph. D. in Psychological and Brain Sciences (2007)
M. A. in Psychological and Brain Sciences (2002)

New York University New York, New York
B. S. in Neural Science (1998)
Minor in Education

AWARDS, HONORS & GRANTS

University of South Carolina Undergraduate Research Mentor Award Nominee (2011)
National Eye Institute Conference Grant: *R13-EY021087* (2010-2013)
University of South Carolina Promising Investigator Research Award (2010-2011)
University of South Carolina Research Consortium on Child and Family Grant (2010-2011)
National Eye Institute Individual Postdoctoral National Research Service Award: *F32-EY19223* (2008-2009)
National Eye Institute Institutional Postdoctoral National Research Service Award: *T32-EY014536* (2006-2008)
National Institute of Neurological Disorders and Stroke Individual Predoctoral National Research Service Award: *F31-NS047979* (2004-2006)
Dean's Intersession Teaching Award (2005)
Brien J. Keys Graduate Research Award (2002)
National Eye Institute Institutional Predoctoral National Research Service Award: *T32-EY07143* (2001-2003)

RESEARCH APPOINTMENTS

Research Assistant Professor: Psychology, The University of South Carolina (2009-present)

Post-Doctoral Fellow: The Smith-Kettlewell Institute (2006-2009)

Advisor: Anthony Norcia

Project: Neural correlates of spatiotemporal integration across development

Pre-Doctoral Fellow: Psychological and Brain Sciences, Johns Hopkins University (2000-2006)

Advisors: Howard Egeth and Barbara Landau

Dissertation: Visual integration in Williams Syndrome

Post-Baccalaureate Research Assistant: Psychology, New York University (1996-2000)

Advisor: Denis Pelli

Project: Characterizing visual crowding: a window to visual integration

RESEARCH INTERESTS

Visual perception and attentional selection, perceptual organization, subitizing, letter recognition, visual development in normal children and individuals with Williams Syndrome, visually-evoked potentials (VEPs)

CURRICULUM VITAE

Melanie Palomares

TEACHING EXPERIENCE

Instructor: Psychology, The University of South Carolina
Integration of Cognition, Development and Neuroscience Graduate Seminar (Spring, 2010)
Introduction to Human Development (Spring - Fall, 2011)

Instructor: Psychological and Brain Sciences, Johns Hopkins University
Science in Visual Art (Intersession, 2005)
Laboratory in Analysis of Psychological Data (Spring, 2001; Spring, 2002; Spring, 2003)

Teaching Assistant: Psychological and Brain Sciences, Johns Hopkins University
Foundations of Mind (Spring, 2005)
Psychological Statistics (Fall, 2004)
Psychopharmacology (Spring, 2004)
Neuropsychology (Fall, 2003)
Organizational Behavior (Fall, 2000)

Teaching Assistant: Psychology, New York University
Laboratory in Perception (Spring, 1998; Fall, 1999)

TEACHING INTERESTS

Cognitive Development, Developmental Psychology, Developmental Cognitive Neuroscience, Science in Visual Art, Sensation and Perception, Cognition, Psychological Research Methods, Psychological Statistics, Neuropsychology, Introduction to Psychology, Introduction to Neuroscience, Cognitive Neuroscience

PROFESSIONAL MEMBERSHIPS AND SERVICE

Association for Research in Vision and Ophthalmology (1998-2000)
Cognitive Neuroscience Society (2002-2003; 2007-present)
Psychonomics Society: Associate Member (2010-present)
Society for Neuroscience (2008-present)
Society for Research on Child Development (2010-present)
Vision Sciences Society (2001-present)

Reviewer: Cognitive Sciences Society (2011-2012)

Senior Mentor: Society for Research on Child Development Frances Degen Horowitz Millennium Scholar Program (2011-2012)

Judge: Graduate Student Day at the University of South Carolina (2010-2011)

Coordinator: Experimental Program talk series at the University of South Carolina's Psychology Department (2009-2011)

Co-organizer: Object Perception Attention and Memory Workshop, a satellite conference of the Psychonomic Society (2009-2011)

Session moderator for Vision Sciences Society (2008; 2011)

JHU Psychological and Brain Sciences steering committee representative (2004-2006)

Ad hoc reviews

Experimental Brain Research, Frontiers in Human Neuroscience, Journal of Experimental Psychology: Human Perception and Performance, Journal of Vision, Perception, PLoS One, Psychological Science, Psychonomic Bulletin and Review, Psychological Review, Psychophysiology, Seeing and Perceiving, Vision Research

CURRICULUM VITAE

Melanie Palomares

INVITED TALKS

Visual evoked potentials in texture segmentation: are boys and girls different?

*Vision Sciences Society Symposium: Nature vs. Nurture in Vision: Evidence from Typical and Atypical Development (May, 2010)

"Connecting the dots: development of visual integration"

*Northeastern University Boston, MA (November, 2009)

*University of California Davis, CA (September, 2009)

"Visual integration in Williams Syndrome"

*University of San Francisco San Francisco, CA (October, 2007)

*The 12th Annual International Conference on Williams Syndrome (July, 2006)

PUBLICATIONS

Pelli, D.G. & **Palomares, M.**, (2000). Close Encounters: Details veto depth from shadows. *Science*, 287, 2425.

Majaj NJ, Pelli DG, Kurshan P. & **Palomares M.** (2002). The role of spatial frequency channels in letter identification. *Vision Research*. 42(9):1165-84.

Pelli DG, **Palomares M.**, & Majaj NJ. (2004) Crowding is unlike ordinary masking: distinguishing feature integration from detection. *Journal of Vision.*, 4(12):1136-69.

Palomares, M., Landau, B. & Egeth, H. (2008). Visuospatial interpolation in typically developing children and in people with Williams Syndrome. *Vision Research*. 48(23-24):2439-2450.

Egeth, H. E., Leonard, C. & **Palomares, M.** (2009). The Role of Attention in Subitizing: Is the magical number 1?. *Visual Cognition*. 16(4): 463-473.

Palomares, M., Ogbonna, C., Landau B., & Egeth, H. (2009). Normal susceptibility to visual illusions in abnormal development: evidence from Williams Syndrome. *Perception*. 38(2):186-199.

Palomares, M., Landau, B. & Egeth, H. (2009). Orientation perception in Williams Syndrome: discrimination and integration. *Brain and Cognition*. 70(1):21-30.

Pelli, D.G., Majaj, N. J., Raizman, N., Christian, C.J., Kim, E., & **Palomares, M.** (2009). The role of Gestalt laws in letter identification. *Cognitive Neuropsychology*. 26(1): 36-49.

Palomares, M., Pettet, M., Vildavski, V., Hou, C. & Norcia, A.M. (2010). Connecting the dots: how local structure affects global integration in infants. *Journal of Cognitive Neuroscience*. 22(7):1557-69.

Palomares, M., & Egeth, H. E. (2010). How element visibility affects visual enumeration. *Vision Research*. 50(19): 2000-2007.

Palomares, M., Englund, J.A. & Ahlers, S. (2011). Patterns and trajectories in Williams Syndrome: the case of visual orientation discrimination. *Research in Developmental Disabilities*. 32: 1021-1029. 10.1016/j.ridd.2011.01.038

CURRICULUM VITAE

Melanie Palomares

AVAILABLE MANUSCRIPTS

Palomares, M., Smith, P.R., Pitts, C.H. & Carter, B.M. (under review). The effect of viewing eccentricity on enumeration.

Palomares, M., Smith, P.R. & Pitts, C.H. (under review). The effect of element visibility on precise and approximate enumeration.

Pitts, C.H. & **Palomares, M.,** (under review). The meaning of sets: information from a single glance.

Palomares, M., Ales, J.M., Wade, A.R., Cottureau, B. & Norcia, A.M. (under revision). The effect of attention on local and global processing of form and motion: a VEP source-imaging study.

Englund, J.A., Shannon, M. Mazzanna, A., Stevens, A. & **Palomares, M.** (under revision). The development of inversion and superiority in emotive faces.

Palomares, M., Pitts, C.H. & Ahlers, S. (under revision). Edges and blur: orientation discrimination of boundaries and surfaces.

Palomares, M., & Egeth, H. (In preparation). On detecting two targets at once: the effect of distance.

Palomares, M., Kim, D. & Egeth, H. (In preparation). The interaction of body and gaze in directing social attention.

CONFERENCE PRESENTATIONS

Norcia, A.M., Ales, J.M. & **Palomares, M.** (2011) Protracted Development of Texture-defined Figure/Ground Segmentation: A High-Density ssVEP Study. Talk to be given at the Vision Sciences Society in Naples, FL.

Farzin, F., Hou, C., **Palomares, M.,** Rosion, B., Norcia, A.M., (2011) Face- and object-selective cortical responses in 4- to 6-month-old infants and adults. Talk to be given at the Vision Sciences Society in Naples, FL.

Palomares, M., & Pitts, C.H. (2011). Size discrimination: On the relationship between statistical averaging and crowding. Poster to be given at the Vision Sciences Society in Naples, FL.

Carter, B.M., Smith, P.R., Pitts, C.H. & **Palomares, M.** (2011). The effect of viewing eccentricity on enumeration. Poster to be given at the Vision Sciences Society in Naples, FL.

Englund, J.A. & **Palomares, M.** (2011) The Relationship of Global Form and Coherent Motion Detection to Reading Fluency. Poster to be given at the Vision Sciences Society in Naples, FL.

Palomares, M., Pitts, C.H. (2011). Mean vs. Range in Statistical Summary Representation. Poster to be given at the Vision Sciences Society in Naples, FL.

Palomares, M., Pitts, C.H. & Morris, W.Z. (2010). The meaning of sets: information from a single glance. Poster presented at the Psychonomics Society Conference in St. Louis, MO.

CURRICULUM VITAE
Melanie Palomares

- Palomares, M.** & Norcia, A.M. (2010). The effect of temporal frequency on local and global processing in Glass patterns. Poster given at the Vision Sciences Society in Naples, FL.
- Hou, C., **Palomares, M.** & Norcia, A.M., (2010) Texture-defined Figure / Ground Segmentation In Human Visual Development: A High-Density Electrical Mapping Study. Talk given at the Vision Sciences Society in Naples, FL.
- Clements-Stephens, A.M., **Palomares, M.**, Landau, B., Marchette, S.A., Shelton, A.L., (2009) Tipping the balance of dorsal and ventral processing in visuospatial skills. Talk given at the Society for Neuroscience meeting in Chicago, IL
- Palomares, M.**, Ales, J.M., & Norcia, A.M. (2009). The effect of directed attention on form and motion sensitivity. Talk given at the Vision Sciences Society in Naples, FL.
- Palomares, M.**, Pettet, M. , Vildavski, V., Hou, C. & Norcia, A.M., (2009). Glass pattern sensitivity in 4-5 month old infants. Poster given at the Cognitive Neuroscience Society Conference in San Francisco, CA.
- Palomares, M.**, Pettet, M. , Vildavski, V., Hou, C. & Norcia, A.M., (2008). How local structure affects global integration in 4-5 month old infants. Poster given at the 16th Object Perception Attention and Memory Workshop in Chicago, IL.
- Palomares, M.**, Pettet, M., Vildavski, V., Hou, C. & Norcia, A.M., (2008). Are infants sensitive to dynamic Glass patterns? Talk given at the Vision Sciences Society in Naples, FL.
- Palomares, M.**, Wade, A., Pettet, M., Vildavski, V., Appelbaum, L.G., & Norcia, A.M., (2007) On the differences and similarities between real and implied motion: a high-density EEG study. Poster presented at the Fall Vision Meeting of the Optical Society of America in Berkeley, CA.
- Palomares, M.**, Landau, B. & Egeth, H. (2007). Orientation discrimination and integration in Williams Syndrome. Talk presented at the Vision Sciences Society Conference in Sarasota, FL.
- Palomares, M.**, Gupta, A., Landau, B. & Egeth, H. (2006). Visuospatial interpolation in Williams Syndrome and normal children: effect of distance and illusory contours. Poster presented at the Vision Sciences Society Conference in Sarasota, FL.
- Palomares, M.**, Torres, L., Leonard, C. & Egeth, H. (2006). Does subitizing need attention? Poster presented at the Vision Sciences Society Conference in Sarasota, FL.
- Leonard, C., Pierson, R., **Palomares, M.** & Egeth, H. (2006). Selection and enumeration of moving objects. Poster presented at the Vision Sciences Society Conference in Sarasota, FL.
- Palomares, M.**, Landau, B., & Egeth, H. (2005). Visuospatial integration in Williams Syndrome and normal children is distance dependent. Abstract published in *Journal of Vision*. Vision Sciences Society Conference in Sarasota, FL.

CURRICULUM VITAE
Melanie Palomares

- Liu, J., **Palomares, M.**, Leonard, C., Egeth, H. (2005). Are subitizing and working memory independent? Abstract published in *Journal of Vision*. Poster presented at the Vision Sciences Society Conference in Sarasota, FL.
- Kim, D., **Palomares, M.** & Egeth., H. (2005). The interaction of body and gaze in directing social attention. Abstract published in *Journal of Vision*. Poster presented at the Vision Sciences Society Conference in Sarasota, FL.
- Ogbonna, C., **Palomares, M.**, Landau, B., Hoffman, J., & Egeth, H. (2004). The perception of visual illusions in Williams Syndrome. Abstract published in *Journal of Vision*, 4(8), 768a. Poster presented at the Vision Sciences Society Conference in Sarasota, FL.
- Palomares, M.**, Landau, B., Egeth, H., & Hoffman, J. (2003). Collinear inhibition in Williams Syndrome?. Abstract published in *Journal of Vision*, 3(9), 667a. Poster presented at the Vision Sciences Society Conference in Sarasota, FL.
- Palomares M.**, Rampersad J., & Egeth, H., (2002) On detecting two targets at once: The role of stimulus configuration. Talk presented at the 10th Annual Workshop on Object Perception and Memory in Minneapolis, MN.
- Palomares, M.**, & Egeth, H. E. (2002). The independence of counting and contrast. Abstract published in *Journal of Vision*, 2(7), 476a. Poster presented at the Vision Sciences Society Conference in Sarasota, FL.
- Palomares, M.** & Egeth H. (2001). The Effect of distance on orientation judgment. Talk presented at the 9th Annual Workshop on Object Perception and Memory in Orlando, FL.
- Martelli, M., Majaj, N., **Palomares, M.**, Leigh, N., Ekman, P., & Pelli, D.G. (2001). Which features depend on which faces?. Abstract published in *Journal of Vision*, 1(3), 289a. Poster presented at the Vision Sciences Society Conference in Sarasota, FL.
- Majaj, N., Raizman, N., Kim, E., Christian, C., **Palomares, M.** & Pelli, D.G., (2000). Efficiency and Gestalt. Abstract published in *Perception Suppl. S*, 29: 122. Poster presented at the European Conference on Visual Perception.
- Pelli, D.G. & **Palomares, M.**, (2000). The role of feature detection in crowding. Abstract published in *Investigative Ophthalmology and Visual Science*. Poster presented at the Association for Research in Vision and Ophthalmology Conference.
- Palomares, M.**, LaPutt, M.C. & Pelli, D.G., (1999). Crowding is unlike ordinary masking. Abstract published in *Investigative Ophthalmology and Visual Science*, 40, 1864. Poster presented at the Association for Research in Vision and Ophthalmology Conference.
- Majaj, N.J., Raizman, N., Kim, E., **Palomares, M.**, & Pelli, D.G. (1999). The role of proximity in feature integration, Abstract published in *Investigative Ophthalmology and Visual Science*, 39, 1911. Poster presented at the Association for Research in Vision and Ophthalmology Conference.
- Palomares M**, Cardazone, G., Green J, LaPutt, M.C, Majaj, N.J., Pelli, D.G. & Levi, D. (1998). Letter identification is channel mediated, but crowding isn't. Abstract published in *Investigative Ophthalmology and Visual Science*, 39, 833. Poster presented at the Association for Research in Vision and Ophthalmology Conference.

CURRICULUM VITAE
Melanie Palomares

Majaj, N.J., **Palomares, M.**, Moucheraud, C., Kotlyarenko, D & Pelli, D.G. (1998). Identifying Letters -- Bottom Up. Abstract published in *Investigative Ophthalmology and Visual Science*, 40, 1914. Poster presented at the Association for Research in Vision and Ophthalmology Conference.

PROJECTS IN PROGRESS

Palomares, M., Richard, J.E. (in progress). Neural correlates of global integration in Williams Syndrome using high-density VEPs.

Palomares, M., Ales, J.M., Nicholas, S. & Norcia, A.M. (in progress). The development of basic object formation using high-density visual evoked potentials.

Palomares, M., Ales, J.M., & Norcia, A.M. (in progress). The effect of temporal frequency on local and global processing in Glass patterns.

Palomares, M. & Norcia, A.M. (in progress). Global form and motion integration in school-aged children and adults.

Englund, J. & **Palomares, M.** (in progress). How motion and form integration correlates with reading fluency.

Palomares, M. and Pitts, C.H., (in progress). Statistical processing in school-aged children: implicit encoding of mean size.

CURRICULUM VITAE
Melanie Palomares

REFERENCES

Howard Egeth, Ph.D.
Professor
Psychological and Brain Sciences
Johns Hopkins University
3400 North Charles Street, Ames Hall
Baltimore, MD 21215
egeth@jhu.edu

Barbara Landau, Ph.D.
Dick and Lydia Todd Professor
Cognitive Science
Johns Hopkins University
3400 North Charles Street, Kreiger Hall
Baltimore, MD 21215
landau@cogsci.jhu.edu

Suzanne McKee, Ph.D.
Senior Scientist
The Smith-Kettlewell Institute
2318 Fillmore Street
San Francisco, CA 94115
suzanne@ski.org

Anthony Norcia, Ph.D.
Professor
Psychology
Stanford University
450 Serra Mall, Jordan Hall
Stanford, CA 94305
amn@ski.org

Denis Pelli, Ph.D.
Professor
Psychology and Neural Science
New York University
6 Washington Place, #951
New York, NY 10003
denis.pelli@cns.nyu.edu

Alex Wade, Ph.D.
Associate Scientist
The Smith-Kettlewell Institute
2318 Fillmore Street
San Francisco, CA 94115
alexwade@gmail.com