

# Ari Rosenberg, Ph.D.

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School of Medicine and Public Health, Department of Neuroscience  
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## ACADEMIC POSITIONS

- ◇ University of Wisconsin – Madison  
2015–Present Assistant Professor, Department of Neuroscience
- ◇ Baylor College of Medicine  
2013–2015 Research Track Assistant Professor, Department of Neuroscience  
2012–2013 Postdoctoral Fellow, Department of Neuroscience; Advisor: D. Angelaki
- ◇ Washington University in St. Louis  
2009–2012 Postdoctoral Associate, Department of Anatomy and Neurobiology;  
Advisor: D. Angelaki

## EDUCATION

- Ph.D. 2009** Computational Neuroscience, University of Chicago  
Dissertation: Mechanisms of Visual Processing Underlying the Representation of  
Non-Fourier Image Features and Transparent Motion  
Advisor: N. P. Issa
- B.A. 2004** Liberal Arts and Sciences with an Honors Concentration in Cognitive Science,  
Wilkes Honors College of Florida Atlantic University  
Thesis: The Structure of Attitudes Towards Civil Rights, Civil Liberties, and Security in  
Post-9/11 America  
Advisor: K. Lanning  
Selected Honors: Summa Cum Laude, Class Valedictorian.

## RESEARCH INTERNSHIPS

- ◇ Los Alamos National Laboratory  
Summer 2006 Graduate Student Researcher; Advisors: K. Verspoor and M. Cai  
Summer 2004 Post-Baccalaureate Researcher; Advisor: M. Cai

## SCHOLARSHIPS, FELLOWSHIPS, AND TRAINING GRANTS

- 2016–2018 Alfred P. Sloan Research Fellowship
- 2009–2010 NIH Vision Science Training Grant T32 EY13360: **Neural mechanisms of 3D orientation tuning and orientation constancy.**
- 2007–2008 Department of Homeland Security Dissertation Grant
- 2005–2007 Department of Homeland Security Graduate School Fellowship
- 2003–2004 Department of Homeland Security Undergraduate Scholarship

## AWARDS AND HONORS

- ◇ **Rank Prize Funds Award for Best Contributed Paper** (2016)
- ◇ **Vice Chancellor for Research and Graduate Education (VCRGE) Travel Award** (2016)
- ◇ **Alfred P. Sloan Research Fellow in Neuroscience** (2016)
- ◇ **Travel Award to the Japan Neuroscience Society Meeting**, Society for Neuroscience  
(1 of 5 awarded across Canada, Mexico, and the United States; 2013)
- ◇ **Cosyne Meeting Travel Grant** (2013)
- ◇ **Best Postdoctoral Talk**, 23<sup>rd</sup> Annual Rush and Helen Record Neuroscience Forum (2013)
- ◇ **Selected Talk**, 7<sup>th</sup> Annual Postdoctoral Scientific Symposium, Washington Univ. in St. Louis (2011)

## AWARDS AND HONORS, CONTINUED

- ◇ **Harry Ginsburg Memorial Prize in Physiology**, University of Chicago (2010)
- ◇ **Best Poster Award**, University of Chicago Neuroscience Retreat (2008)
- ◇ **Best Poster Award**, 16<sup>th</sup> Annual Computational Neuroscience Meeting (2007)
- ◇ **8<sup>th</sup> Annual Neuroscience Day Poster Winner**, University of Chicago (2006)
- ◇ **7<sup>th</sup> Annual Neuroscience Day Poster Winner**, University of Chicago (2005)
- ◇ **Class Valedictorian**, Wilkes Honors College (2004)
- ◇ **Outstanding Thesis Award**, Wilkes Honors College (2004)
- ◇ **Phi Kappa Phi Scholars Award**, Florida Atlantic University (2004)
- ◇ **University Honors Scholar**, Florida Atlantic University (2002)
- ◇ **International Baccalaureate Diploma** (2000)

## RESEARCH GRANTS

- 2016–2019 Whitehall Foundation Research Grant 2016-08-18: **Elucidating the neural circuit of 3D visual perception**. These studies combine simultaneous electrophysiological recordings from multiple brain regions in the macaque monkey with computational modeling to investigate how monocular and binocular visual cues are integrated to achieve robust 3D visual perception. Role: P.I.
- 2016–2017 UW Institute for Clinical and Translational Research Pilot Grant UL1TR000427: **Computational predictors of learning and neurobiology in autism**. These studies investigate how alterations in neural circuitry affect learning in autism spectrum disorders by combining psychophysical experiments, neuroimaging, and computational modeling to test predictions of our theoretical work on autism. Role: P.I.
- 2014–2017 NIH-NIDCD Small Grant Program R03 DC014305: **Vestibular contribution to the encoding of object orientation relative to gravity**. These experiments investigate how gravitational signals detected by the vestibular and proprioceptive systems reshape visual information to create an earth-vertical representation of the world. Role: P.I.

## PROFESSIONAL SERVICES

- ◇ **Reviewer for:** *Behavioral Sciences of Terrorism and Political Aggression, Cerebral Cortex, Cosyne, Frontiers in Psychology, Journal of Neurophysiology, Journal of Neuroscience, Nature, Neural Plasticity, and Scientific Reports.*
- ◇ **Admissions Committee Member for the Physiology Graduate Training Program** (2016–Present)
- ◇ **Research Committee Member for the McPherson Eye Research Institute** (2016–Present)
- ◇ **Faculty Liaison for the Physiology Graduate Training Program Review**, UW–Madison (2016)
- ◇ **Grant Reviewer for the Computational and Integrative Biomedical Research Center**, Baylor College of Medicine (2013)
- ◇ **Neurobiology, Pharmacology, Physiology, and Computational Neuroscience Scientific Retreat Planning Committee**, University of Chicago (2005)

## PROFESSIONAL AFFILIATIONS

- ◇ **UW Institute for Clinical and Translational Research** (Member since 2016)
- ◇ **McPherson Eye Research Institute** (Member since 2015)
- ◇ **UW–Madison Neuroscience Training Program** (Trainer since 2015)
- ◇ **UW–Madison Physiology Graduate Training Program** (Trainer since 2015)
- ◇ **Faculty of 1000** (Associate Member since 2009)
- ◇ **Vision Sciences Society** (Member since 2007)
- ◇ **Society for Neuroscience** (Member since 2005)

## SCIENTIFIC CONSULTING

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- ◇ Gain Sight, Inc. Madison, WI.

## TEACHING

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- ◇ **Systems Neuroscience** (graduate), UW–Madison (2017).
- ◇ **Psychology of Perception** (undergraduate), UW–Madison (2016).
- ◇ **Computational Methods in Neuroscience I & II** – Course Director (graduate), Baylor College of Medicine (2014–2015)
- ◇ **Introduction to Systems Neuroscience** (graduate), Baylor College of Medicine (2014–2015)
- ◇ **Fundamental Neuroscience Systems** (undergraduate), Rice University (2013–2014)
- ◇ **Cellular Neurobiology** (undergraduate), University of Chicago (2005)
- ◇ **Computational Biology** (undergraduate), University of Chicago (2005)
- ◇ **College Algebra** (undergraduate), Florida Atlantic University (2004)

## COMMUNITY OUTREACH

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- ◇ **Neuroscience Workshop for Nursing Students**, Centro Hispano, Madison, WI. (2016)
- ◇ **Introduction to Neuroscience Short Course for the Juventud Summer STEM Program**, Centro Hispano, Madison, WI. (2016)
- ◇ **Can You Believe Your Eyes? Host for the MERI Visual Illusions Station at the Annual Science Expeditions Event**, Wisconsin Institutes for Discovery, Madison, WI. (2016)
- ◇ **Brain Awareness Week Lecturer on the Neuro-Computational Underpinnings of Autism**, UW–Madison, Madison, WI. (2016)
- ◇ **Workshop for Professors on “Teaching Students to Think Scientifically”**, Lingaya’s University, Haryana, India (2015)
- ◇ **“So You Want to Build a Cylon?” Neuroscience Panelist at Comicpalooza/Galacticon 3**, Houston, TX. (2013)
- ◇ **Brain Awareness Week Lecturer on 3D Vision**, Rice University (2013)

## RESEARCH ARTICLES

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**A. Rosenberg**, J.S. Patterson, and D.E. Angelaki. A computational perspective on autism. *Proceedings of the National Academy of Sciences*, 112(30): 9158-9165, 2015. • [Altmetric](#).

• [Medical Xpress Article](#), July 20<sup>th</sup>, 2015. • [ExtremeTech Article](#), July 25<sup>th</sup>, 2015.

• [Motherboard RSS Feed](#), July 26<sup>th</sup>, 2015. • [Singularity Hub](#), August 9<sup>th</sup>, 2015.

• [Simons Foundation Autism Research Initiative News and Opinion Article](#), August 13<sup>th</sup>, 2015.

• ‘A more precise look at context in autism’ by Lawson, Friston, & Rees, 112(38): E5226.

• [The New Economy Article](#), October 6<sup>th</sup>, 2015.

**A. Rosenberg** and D.E. Angelaki. Reliability-dependent contributions of visual orientation cues in parietal cortex. *Proceedings of the National Academy of Sciences*, 111(50): 18043-18048, 2014. • [Altmetric](#).

• [Biomedical Picture of the Day](#), Jan. 9<sup>th</sup>, 2015.

**A. Rosenberg** and D.E. Angelaki. Gravity influences the visual representation of object tilt in parietal cortex. *Journal of Neuroscience*, 34(43): 14170-14180, 2014.

**A. Rosenberg**, N.J. Cowan, and D.E. Angelaki. The visual representation of 3D object orientation in parietal cortex. *Journal of Neuroscience*, 33(49): 19352-19361, 2013.

**A. Rosenberg** and N.P. Issa. The Y cell visual pathway implements a demodulating nonlinearity. *Neuron*, 71(2): 348-361, 2011. • [F1000 Review by M. Jamali and K. Cullen](#)

**A. Rosenberg**, T.R. Husson, and N.P. Issa. Subcortical representation of non-Fourier image features. *Journal of Neuroscience*, 30(6): 1985-1993, 2010.

K. Lanning and **A. Rosenberg**. The dimensionality of American political attitudes: Tensions between equality and freedom in the wake of September 11. *Behavioral Sciences of Terrorism and Political Aggression*, 1(2): 84-100, 2009.

A.K. Mallik, T.R. Husson, J.X. Zhang, **A. Rosenberg**, and N.P. Issa. The organization of spatial frequency maps measured by cortical flavoprotein autofluorescence. *Vision Research*, 48(14): 1545-1553, 2008. • [Journal cover art](#).

**A. Rosenberg**, P. Wallisch, and D.C. Bradley. Responses to direction and transparent motion stimuli in area FST of the macaque. *Visual Neuroscience*, 25(2): 187-195, 2008.

J.X. Zhang, **A. Rosenberg**, A.K. Mallik, T.R. Husson, and N.P. Issa. The representation of complex images in spatial frequency domains of primary visual cortex. *Journal of Neuroscience*, 27(35): 9310-9318, 2007.

## BOOK CHAPTERS, COMMENTARIES, AND REVIEWS

C.J. Dakin and **A. Rosenberg**. Gravity and verticality. How the brain computes ‘uprightness,’ and its role in bipedalism. In: *Handbook in Clinical Neurology: Balance, Gait, and Falls*. Eds. Stephen Lord and Brian Day. Elsevier, 2018.

**A. Rosenberg**, J.S. Patterson, and D.E. Angelaki. A synergistic approach to mental health research. *Proceedings of the National Academy of Sciences*, 112(38): E5227, 2015. • [Altmetric](#).

R.L. Seilheimer<sup>†</sup>, **A. Rosenberg**<sup>†</sup>, and D.E. Angelaki. Models and processes of multisensory cue combination. *Current Opinion in Neurobiology*, 25: 38-46, 2014. <sup>†</sup>equal contribution.

C.J. Dakin, L.C. Elmore, and **A. Rosenberg**. One step closer to a functional vestibular prosthesis. *Journal of Neuroscience*, 33(38): 14978-14980, 2013.

N.P. Issa and **A. Rosenberg**. Tartini’s devil: Peripheral mechanisms that underlie sensory illusions. In: *A field guide to a new meta-field: Bridging the humanities-neurosciences divide*. Ed. Barbara Stafford. University of Chicago Press, 2011.

**A. Rosenberg** and V. Talebi. The primate retina contains distinct types of Y-like ganglion cells. *Journal of Neuroscience*, 29(16): 5048-5050, 2009.

N.P. Issa, **A. Rosenberg**, and T.R. Husson. Models and measurements of functional maps in V1. *Journal of Neurophysiology*, 99(6): 2745-2754, 2008.

## TALKS

If there were multiple authors, the speaker is underlined.

*Living in stereo: The neural basis of 3D visual perception*. David Mahoney Center for Brain and Behavior Research, Columbia University, New York, NY. March 24<sup>th</sup>, 2017.

*A computational perspective on altered visual cognition in autism*. McPherson Eye Research Institute. University of Wisconsin – Madison, Madison, WI. January 10<sup>th</sup>, 2017.

*Neural processing of contextual visual information in health and disease*. Brain and Bagels Seminar. University of Wisconsin – Madison, Madison, WI. September 30<sup>th</sup>, 2016.

*Living in stereo: The integration of perspective and disparity signals in 3D vision.* The Rank Prize Funds Symposium on Seeing the World from More than One Perspective, Wordsworth Hotel, Grasmere, United Kingdom. September 7<sup>th</sup>, 2016.

*The neural basis of 3D visual orientation perception.* Wilkes Honors College at Florida Atlantic University, Jupiter, FL. May 19<sup>th</sup>, 2016.

**A. Rosenberg** and D.E. Angelaki. *Integration of perspective and disparity cues in the neural representation of 3D object orientation.* Vision Sciences Society, St. Pete Beach, FL. May 14<sup>th</sup>, 2016.

*What neural network models can teach us about autism.* Brain Awareness Week Lecture Series, University of Wisconsin – Madison, Madison, WI. March 14<sup>th</sup>, 2016.

*Integration of visual and vestibular signals in the neural representation of 3D object orientation.* Primate Center Neuroscience Seminar, University of Wisconsin – Madison, Madison, WI. February 19<sup>th</sup>, 2016.

*Neural correlates of 3D visual perception.* Biology of Brain and Behavior Seminar, Department of Psychology, University of Wisconsin – Madison, Madison, WI. December 14<sup>th</sup>, 2015.

*A computational perspective on autism.* Waisman Center and Allen Institute for Brain Science Neuroscience Symposium, University of Wisconsin – Madison, Madison, WI. October 16<sup>th</sup>, 2015.

**A. Rosenberg** and A. Sunkara. *Teaching students to think scientifically.* Lingaya's University, Haryana, India. September, 21<sup>st</sup>, 2015.

*Living in stereo: The neural basis of 3D vision.* Montreal Neurological Institute and Hospital, McGill University, Montreal, Canada. April 23<sup>rd</sup>, 2015.

*Living in stereo: The neural basis of 3D vision.* Baylor College of Medicine, Houston, TX. April 17<sup>th</sup>, 2015.

*Living in stereo: The neural basis of 3D vision.* University of Wisconsin – Madison, Madison, WI. March 9<sup>th</sup>, 2015.

*Moving beyond 2D vision: Neural computation of 3D object representations.* The 4<sup>th</sup> Annual Symposium of the Gulf Coast Cluster for NeuroEngineering, Houston, TX. October 27<sup>th</sup>, 2014.

*The visual representation of 3D object pose in parietal cortex.* National Institute of Physiological Sciences, Okazaki, Japan, July 25<sup>th</sup>, 2014.

*The visual representation of 3D object pose in parietal cortex.* Kyoto University, Kyoto, Japan, July 23<sup>rd</sup>, 2014.

*Neural correlates of 3D spatial perception in parietal cortex.* The 10<sup>th</sup> Asia-Pacific Conference on Vision, Takamatsu, Japan, July 20<sup>th</sup>, 2014.

*The visual representation of 3D object pose in parietal cortex.* University of Texas at Austin, Austin, TX. February 21<sup>st</sup>, 2014.

*Cue-integration in the visual encoding of 3D object pose.* Osaka University, Osaka, Japan, June 24<sup>th</sup>, 2013.

**A. Rosenberg** and D.E. Angelaki. *Neural mechanisms of visual orientation constancy.* 36th Annual Japan Neuroscience Society Meeting, Kyoto, Japan, June 20<sup>th</sup>, 2013.

*Visual cue-integration in the neural encoding of 3D object orientation.* Juntendo University, Tokyo, Japan, June 18<sup>th</sup>, 2013.

*Multisensory integration in the visual encoding of 3D object orientation.* Brain Awareness Week Lecture Series, Rice University, Houston, TX. March 16<sup>th</sup>, 2013.

**A. Rosenberg** and D.E. Angelaki. *Neural correlates of visual orientation constancy.* Cosyne, Salt Lake City, UT. February, 2013.

**A. Rosenberg** and D.E. Angelaki. *Neural mechanisms of visual orientation constancy.* 23rd Annual Rush and Helen Record Neuroscience Forum, Galveston, TX. February, 2013.

*Multisensory cue-integration and the encoding of 3D object orientation in Macaque parietal cortex.* Baylor College of Medicine, Houston, TX. January 9<sup>th</sup>, 2013.

*Visual cue-integration and the encoding of 3D object orientation in Macaque parietal cortex.* Baylor College of Medicine, Houston, TX. January 4<sup>th</sup>, 2013.

*Neural loci of sensory illusions: How we interpret art and music.* Department of Biomedical Engineering, Georgia Institute of Technology, Atlanta, GA. April 11<sup>th</sup>, 2012. Neuro-Humanities Entanglement Conference, Georgia Institute of Technology, Atlanta, GA. April 12<sup>th</sup>, 2012.

*Nonlinear image analysis and 3D spatial processing in the mammalian visual system.* American University, Washington, DC. February 9<sup>th</sup>, 2012.

**A. Rosenberg**, D.E. Angelaki., and N.J. Cowan. *Model spaces and tuning functions for the visual encoding of 3D object orientation.* Johns Hopkins University, Baltimore, MD. October 26<sup>th</sup>, 2011.

**A. Rosenberg** and D.E. Angelaki. *Neural mechanisms of 3D orientation tuning and orientation constancy.* 7<sup>th</sup> Annual Postdoctoral Scientific Symposium, Washington University in St. Louis, St. Louis, MO. March 29<sup>th</sup>, 2011.

*A nonlinear coding scheme in the early visual system.* Los Alamos National Laboratory, Los Alamos, NM. August 25<sup>th</sup>, 2010.

*Two ways of seeing: The functional roles of two early parallel visual paths.* University of Chicago, Chicago, IL. May 29<sup>th</sup>, 2009.

*Subcortical representation of non-Fourier image features.* Washington University, St. Louis, MO. September 10<sup>th</sup>, 2008.

*Subcortical representation of non-Fourier image features.* Los Alamos National Laboratory, Los Alamos, NM. August 25<sup>th</sup>, 2008.

*Subcortical representation of non-Fourier image features.* McGill University, Montreal, Canada. August 7<sup>th</sup>, 2008.

*Subcortical encoding of second-order image features.* University of Chicago, Chicago, IL. June 9<sup>th</sup>, 2008.

*The encoding of spatial and temporal beats by frequency-doubling neurons in the cat dLGN.* Neurobiology seminar series, University of Chicago, Chicago, IL. April 23<sup>rd</sup>, 2008.

**A. Rosenberg**, T.R. Husson, A.K. Mallik, and N.P. Issa. *Frequency-doubling in the early visual system underlies sensitivity to second-order stimuli.* Lake Shore Visual Science Symposium, University of Chicago, Chicago IL. December 10<sup>th</sup>, 2007.

P. Wallisch, M. Goyal, M. Lusignan, **A. Rosenberg**, and D.C. Bradley. *Neural detection of object motion in frequency space.* Society for Neuroscience, San Diego, CA. November, 2007.

*Subcortical processing of second-order motion.* University of Chicago, Chicago IL. June 25<sup>th</sup>, 2007.

P. Wallisch, **A. Rosenberg**, M. Lusignan, and D.C. Bradley. *Mechanisms of pattern velocity computation in area MT of the macaque.* University of Chicago Neuroscience Cluster Scientific Retreat, New Buffalo, MI. September 14<sup>th</sup>, 2006.

**A. Rosenberg** and K. Lanning. *Civil rights orientation and civil liberties orientation: Two-factors underlying attitudes towards equality, privacy, and security in post-9/11 USA.* The Arrogance of Power: On Being American, Fredericksburg, VA. April, 2005.

K. Lanning and **A. Rosenberg**. *Equality, privacy, and security: Attitudes in post 9/11 USA.* 28<sup>th</sup> International Congress of Psychology, Beijing, China. August, 2004.

**A. Rosenberg** and M. Cai. *Towards inferring deception and intent.* Los Alamos National Laboratory, Los Alamos, NM. July, 2004.

A. Rosenberg and K. Lanning. *The structure of attitudes towards civil rights, civil liberties, and security in post-9/11 America*. 2<sup>nd</sup> annual Wilkes Honors College Symposium for Research and Creative Projects, Jupiter, FL. April, 2004.

## POSTERS

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Presenters underlined.

B.H. Kim, S.C. Kenchappa, T.Y. Chang, and A. Rosenberg. Real-time experimental control with graphical user interface (REC-GUI) for vision research. Vision Sciences Society, St. Pete Beach, FL. 2017.

T.Y. Chang, N. Kambi, E. Kastar, J. Phillips, Y.B. Saalman, and A. Rosenberg. Mapping the hierarchical neural network of 3D vision using diffusion tensor imaging. Vision Sciences Society, St. Pete Beach, FL. 2017.

M. Ji, L. Thompson, A. Rosenberg, and B. Rokers. The contributions of monocular and binocular signals to the perception of 3D motion. Vision Sciences Society, St. Pete Beach, FL. 2017.

M. Ji, L. Thompson, A. Rosenberg, and B. Rokers. *The neural basis of visual agnosia: Developing a model system for cortical blindness*. McPherson Eye Research Institute's Annual Vision Science Poster Session, Madison, WI. October 4<sup>th</sup>, 2016.

J.S. Patterson, A. Rosenberg, and D.E. Angelaki. *An altered divisive normalization model of autism*. Society for Neuroscience, Chicago, IL. October, 2015.

J.A. Fernandez-Leon, A. Rosenberg, A. Chen, A. Zaidel, G.C. DeAngelis, and D.E. Angelaki. *Dynamics of heading and choice-related signals in areas PIVC, VIP and MSTd*. Society for Neuroscience, Chicago, IL. October, 2015.

A. Rosenberg and D.E. Angelaki. *Reliability-dependent convergence of 3D visual cues in parietal cortex*. Society for Neuroscience, Washington, DC. November, 2014.

L.C. Elmore, R. Cassidy, A. Rosenberg, G.C. DeAngelis, and D.E. Angelaki. *Perception of planar surface orientation relative to earth vertical*. Society for Neuroscience, Washington, DC. November, 2014.

A. Rosenberg and D.E. Angelaki. *Neurons in macaque area CIP visually encode the 3D pose of objects*. Society for Neuroscience, San Diego, CA. November, 2013. 24<sup>th</sup> Annual Rush and Helen Record Neuroscience Forum, Galveston, TX. February, 2014.

L.C. Elmore, A. Rosenberg, G.C. DeAngelis, and D.E. Angelaki. *Choice-related activity in area CIP during slant discrimination*. Society for Neuroscience, San Diego, CA. November, 2013.

A. Rosenberg, N.J. Cowan, and D.E. Angelaki. *The representation of 3D surface orientation in areas V3A and CIP of the macaque monkey*. Society for Neuroscience, New Orleans, LA. October, 2012. UT Health Neuroscience Research Centers 19<sup>th</sup> Annual Poster Session, Houston, TX. December, 2012. 23<sup>rd</sup> Annual Rush and Helen Record Neuroscience Forum, Galveston, TX. February, 2013.

A. Rosenberg, N.J. Cowan, and D.E. Angelaki. *Neurons in macaque area CIP respect the geometric topology of 3D object orientation*. Cosyne, Salt Lake City, UT. February, 2012.

A. Rosenberg, N.J. Cowan, and D.E. Angelaki. *Neural encoding of three-dimensional object orientation*. Society for Neuroscience, Washington, DC. November, 2011.

N.J. Cowan, A. Rosenberg, and D.E. Angelaki. *A topological model for three-dimensional spatial orientation*. Society for Neuroscience, Washington, DC. November, 2011.

D.F. Nichols, A. Rosenberg, and N.P. Issa. *Rapid classification of TF for Fourier and non-Fourier gratings in cat LGN*. Society for Neuroscience, Washington, DC. November, 2011.

A. Rosenberg and D.E. Angelaki. *Neural mechanisms of 3D orientation tuning and orientation constancy*. Grand Challenges in Neural Computation 2: Synthetic Cognition and Neuromimetic Processing, Santa Fe, NM. February, 2011. Cosyne, Salt Lake City, UT. February, 2011.

P. Wallisch and **A. Rosenberg**. *The fall and rise of neural variability reveals the stimulus driven engagement and disengagement of neural networks*. Society for Neuroscience, San Diego, CA. November, 2010.

A. D'Antona, **A. Rosenberg**, and S.K. Shevell. *The neural locus underlying perception of the Craik-O'Brien-Cornsweet Effect*. Vision Sciences Society, Naples, FL. 2010.

**A. Rosenberg**, T.R. Husson, and N.P. Issa. *A subcortical representation of transparent motion*. Society for Neuroscience, Chicago, IL. October, 2009.

N.P. Issa and **A. Rosenberg**. *A role for X-cells and Y-cells in encoding first-order and second-order image features*. Society for Neuroscience, Chicago, IL. October, 2009.

P. Wallisch, **A. Rosenberg**, and D.C. Bradley. *Examining the temporal response profiles of neurons in area MT in relation to spatiotemporal stimulus properties*. Society for Neuroscience, Chicago, IL. October, 2009.

**A. Rosenberg**, Husson, T.R., and Issa, N. *The representation of transparent motion in the non-Fourier responses of LGN Y-cells*. Vision Sciences Society, Naples, FL. 2009.

**A. Rosenberg**, Husson, T.R., and Issa, N. *Subcortical encoding of second-order image features*. Society for Neuroscience, Washington, DC. November, 2008.

**A. Rosenberg**, Husson, T.R., Mallik, A.K., and Issa, N. *Frequency-doubling in the early visual system underlies sensitivity to second-order stimuli*. Vision Sciences Society, Naples, FL. May 10, 2008. Analyzing Neural Circuits with Optical Methods Symposium, University of Chicago, Chicago, IL. May 20, 2008. University of Chicago Neuroscience Cluster Scientific Retreat, New Buffalo, MI. September 13, 2008.

A.K. Mallik, T.R. Husson, J.X. Zhang, **A. Rosenberg**, and N.P. Issa. *Spatial frequency maps measured by cortical autofluorescence*. Society for Neuroscience, San Diego, CA. November, 2007.

**A. Rosenberg**, Wallisch, P., and Bradley, D. Opponent motion tuning of neurons in area FST of the macaque. The Sixteenth Annual Computational Neuroscience Meeting CNS 2007, Toronto, Canada. July, 2007. BMC Neuroscience, 8(2): 152, 2007.

J. Zhang, A.K. Mallik, **A. Rosenberg**, and N.P. Issa. *Spatial-frequency response properties in the primary visual cortex of monocularly deprived cats*. Society for Neuroscience, Atlanta, GA. October 18<sup>th</sup>, 2006. 8<sup>th</sup> Annual Brain Research Institute Neuroscience Day, University of Chicago, Chicago IL. November 17<sup>th</sup>, 2006.

P. Wallisch, **A. Rosenberg**, M. Lusignan, and D.C. Bradley. *Reverse correlation of MT responses in frequency space*. Society for Neuroscience, Atlanta, GA. October 17<sup>th</sup>, 2006. 8<sup>th</sup> Annual Brain Research Institute Neuroscience Day, University of Chicago, Chicago IL. November 17<sup>th</sup>, 2006.

• The first "Podster," *Science Magazine NEWSMAKER*.

**A. Rosenberg** and M. Cai. *Information processing in the context of a model of biological motion processing*. Neuroscience Day hosted by Los Alamos National Laboratory and the Mind Institute, Los Alamos National Laboratory, Los Alamos, NM. August 10<sup>th</sup>, 2006.

**A. Rosenberg** and P. Wallisch. *Comparing physiological properties of motion sensitive neurons in areas MT and FST of the macaque*. 7<sup>th</sup> Annual Brain Research Institute Neuroscience Day, University of Chicago, Chicago IL. October, 2005.

K. Lanning and **A. Rosenberg**. *The dimensionality of sociopolitical attitudes: Ipsative and normative approaches*. 6<sup>th</sup> annual meeting of the Association for Research in Personality, New Orleans, LA. January, 2005.

K. Lanning, J. Colucci, J. Holm, S. Kane, **A. Rosenberg**, and J. Edwards. *Does tragedy magnify differences in ego development?* 110<sup>th</sup> annual meeting of the American Psychological Association, Chicago, IL. August, 2002.