



Vision Sciences Society

*Fifth Annual Meeting
May 6 – 11, 2005
Sarasota, Florida*

Executive Committee

Randolph Blake
Marvin Chun
Eileen Kowler
David Knill
Ken Nakayama
Tatiana Pasternak
Michael Paradiso
Tom Sanocki

Executive Director

Shauney Wilson

Program Design

Cover design: Shinki Ando
Front image design: Dujé Tadin
Front image photo: János Perge
Back image: Baingio Pinna
Coordinator: Tom Sanocki
Program creation: Shauney Wilson

Review Committee

Tom Albright
Marlene Behrmann
Irv Biederman
Dave Brainard
Angela Brown
Heinrich Buelthoff
Marisa Carrasco
Patrick Cavanagh
Greg DeAngelis
James Elder
Jim Enns
Isabel Gauthier
Karl Gegenfurtner
Mel Goodale
John Henderson
Phil Kellman
Daniel Kersten
Zoe Kourtzi
Terri Lewis
Jack Loomis
Ennio Mingolla
Tony Movshon
Tony Norcia
Alice O'Toole
Mary Peterson
Anna Roe
Brian Rogers
Jeff Schall
Allison Sekuler
Daniel Simons
George Sperling
Mike Tarr
Christopher Tyler
Bill Warren
Michael Webster
Sophie Wuerger



Contents

- 3** Meeting Schedule
- 4** Keynote Speaker
- 5** Satellite Workshops
- 8** Demo Night
- 9** Educational Outreach Event
- 10** Exhibitors
- 12** Club Vision
- 13** Program Summary
- 32** Program-at-a-Glance
- 34** Program Summary (continued)
- 46** Attendee Resources
 - 46** ATM
 - 46** Baggage Check
 - 46** Business Office
 - 46** Message Center
 - 46** How to Contact Us
 - 46** Food Service at the Municipal Auditorium
 - 46** Food Service at the Hyatt
 - 47** Internet Access
 - 47** Lost and Found
 - 47** Poster Information
 - 47** Speaker Information
- 48** Topic Index
- 51** Author Index
- 60** Advertisements



Meeting Schedule

Friday, May 6

- Noon - 8:00 pm Onsite and Pre-Registration Check In
Hyatt Ballroom Foyer
- 3:00 - 5:00 pm Satellite Workshops *Hyatt Ballroom Salons*
- 5:30 - 8:30 pm Exhibits Open *Hyatt Lower Lobby*
- 5:30 - 8:30 pm Opening Night Reception
Hyatt Ballroom Foyer
- 5:30 - 8:30 pm Poster Session A *Hyatt South Hall*

Saturday, May 7

- 8:00 am - 4:00 pm Onsite and Pre-Registration Check In
Hyatt Ballroom Foyer
- 8:00 - 8:30 am Complimentary Coffee Service
Hyatt Ballroom Foyer
- 8:00 am - 5:30 pm Exhibits Open *Hyatt Lower Lobby*
- 8:30 am - Noon Morning Talk Sessions
Hyatt North and South Halls
- 8:30 am - 1:30 pm Poster Session B *Municipal Auditorium*
- 1:30 - 5:00 pm Afternoon Talk Sessions
Hyatt North and South Halls
- 2:00 - 7:00 pm Poster Session C *Municipal Auditorium*

Sunday, May 8

- 8:00 am - 4:00 pm Onsite and Pre-Registration Check In
Hyatt Ballroom Foyer
- 8:00 - 8:30 am Complimentary Coffee Service
Hyatt Ballroom Foyer
- 8:00 am - 5:30 pm Exhibits Open *Hyatt Lower Lobby*
- 8:30 - 11:45 am Morning Talk Sessions
Hyatt North and South Halls
- 8:30 am - 1:30 pm Poster Session D *Municipal Auditorium*
- 2:00 - 7:00 pm Poster Session E *Municipal Auditorium*
- 3:45 - 5:30 pm Afternoon Talk Sessions
Hyatt North and South Halls
- 7:15 - 8:15 pm Keynote Speaker: Dr. Irene Pepperberg
Hyatt North Hall

Monday, May 9

- 8:00 am - 2:00 pm Onsite and Pre-Registration Check In
Hyatt Ballroom Foyer
- 8:00 - 8:30 am Complimentary Coffee Service
Hyatt Ballroom Foyer
- 8:00 am - 2:30 pm Exhibits Open *Hyatt Lower Lobby*
- 8:30 am - 12:15 pm Morning Talk Sessions
Hyatt North and South Halls
- 8:30 am - 2:00 pm Poster Session F *Municipal Auditorium*
- 12:15 - 12:45 pm VSS Business Meeting
Hyatt South Hall (all are welcome)
- 2:00 - 7:00 pm Afternoon Free
- 7:00 - 9:30 pm Demo Night *G.WIZ Science Museum*

Tuesday, May 10

- 8:00 am - Noon Onsite and Pre-Registration Check In
Hyatt Ballroom Foyer
- 8:00 - 8:30 am Complimentary Coffee Service
Hyatt Ballroom Foyer
- 8:00 am - Noon Exhibits Open *Hyatt Lower Lobby*
- 8:30 am - 12:15 pm Morning Talk Sessions
Hyatt North and South Halls
- 8:30 am - 1:30 pm Poster Session G *Municipal Auditorium*
- 2:00 - 5:15 pm Afternoon Talk Sessions
Hyatt North and South Halls
- 2:00 - 7:00 pm Poster Session H *Municipal Auditorium*
- 9:00 pm - 3:00 am Club Vision *Hyatt South Hall*

Wednesday, May 11

- 8:00 - 8:30 am Complimentary Coffee Service
Hyatt Ballroom Foyer
- 8:30 am - Noon Morning Talk Sessions
Hyatt North and South Halls

Keynote Speaker

Irene Pepperberg

*Sunday, May 8, 2005, 7:15 pm
Hyatt North Hall*

Irene Pepperberg received her SB from MIT and her graduate degrees from Harvard. Beginning in September 1999, she became a visiting associate professor at the MIT Media Lab, and later accepted a research scientist position there, leaving a tenured professorship at the University of Arizona. She is now a Radcliffe Fellow and also an adjunct associate professor in the Dept of Psychology at Brandeis University.

She won a John Simon Guggenheim Foundation Fellowship for her 1997 sabbatical, was an alternate for the Cattell Award for Psychology, won the 2000 Selby Fellowship from the Australian Academy of Sciences, and was nominated for the 2000 Weizmann, L'Oreal, and Grawemeyer Awards. She has also received fellowships from the Harry Frank Guggenheim and Whitehall Foundations, and numerous grants from the National Science Foundation.

Her book, *The Alex Studies*, describing over 20 years of peer-reviewed studies on cognitive and communicative abilities of Grey parrots, received favorable mention from publications as diverse as the *New York Times* and *Science*. Her next book, on how social interaction affects communicative learning, will also be published by Harvard. She has presented her findings nationally and internationally at numerous universities and scientific congresses. She is a Fellow of the Animal Behavior Society, the American Psychological Association, the American Psychological Society, the American Ornithologists' Union, AAAS, and presently serves as consulting editor for four journals.



For almost 30 years, I have used a modeling (M/R) technique to train Grey parrots to use an allospecific code (English speech) referentially; I then use the code to test their cognitive abilities. My oldest bird, Alex, labels over 50 exemplars, 7 colors, 5 shapes, quantities to 6, 3 categories (color, shape, material) and uses "no", "come here", "wanna go X" and "want Y" (X and Y are appropriate location or item labels). He combines labels to identify, request, comment upon or refuse more than 100 items and alter his environment. He processes queries to judge category, relative size, quantity, presence or absence of similarity/difference in attributes, and show label and number comprehension. He semantically separates labeling from requesting. Recent studies have concentrated on concepts of number and acquisition of a zero-like concept. Alex thus exhibits capacities once presumed limited to humans or nonhuman primates.

Studies with this bird and other Greys also show that parrots given training that lacks some aspect of input present in M/R protocols (reference, functionality, social interaction) fail to acquire referential English speech. Other data suggest that the extent of learning also depends on the form of input. Studies on how parrots acquire an allospecific code may elucidate mechanisms of other forms of exceptional learning: learning unlikely in the normal course of development but that can occur under certain conditions.



Satellite Workshops

From Eye to Hand: The Role of Vision in Grasping

3:00 – 5:00 pm, Florida Room, Hyatt

Six international speakers will highlight recent research in the study of visually-guided actions from a wide variety of approaches in cognitive neuroscience, including neurophysiology (Patrizia Fattori, Akira Murata), behavioral measures (Roland Johansson), functional brain imaging (Jody Culham), neuropsychology (Laure Pisella), and brain stimulation (Eugene Tunik). The symposium will introduce students to the field of visuomotor control and will update researchers on recent progress and changing perspectives within the field.

Presenters

Patrizia Fattori (organizer), University of Bologna, Italy
The route from vision to grasping revealed by monkey single unit recording

Akira Murata, Kinki University, School of Medicine, Japan

Self generated action monitoring by mirror neurons in the inferior parietal cortex

Roland Johansson, Umea University, Sweden
Use of vision during learning of a novel manual skill

Jody Culham (organizer), University of Western Ontario, Canada

Grasp-related fMRI activation in the dorsal and ventral streams

Eugene Tunik, Dartmouth University, USA
The role of the anterior intraparietal area in goal-dependent control of grasp: a TMS study

Laure Pisella, INSERM Espace et Action, France
Refining the role of the parietal cortex in “vision for action”: highlights from optic ataxia.

New Concepts of Cortical Retinotopy

3:00 – 5:00 pm, The Keys, Hyatt

One of the most important principles of neural organization in occipital cortex is the spatial organization of the proliferation of retinotopic maps. The mapping in areas V1, V2 and V3 is well established, but details remain to be worked out for areas V3A-V7, and adjacent cortex showing retinotopic activation that is difficult to interpret. The four participants will describe recent advances in our understanding of the structural and functional organization of the occipital maps.

Presenters

Robert Dougherty Department of Psychology, Stanford University

Jack Gallant Department of Psychology, University of California, Berkeley

Alyssa Brewer Neurosciences Program Stanford University

Christopher W. Tyler, SK Brain Imaging Center Smith-Kettlewell Institute

Visual Physiology in the Alert State: The Infrastructure of Perception

3:00 – 5:00 pm, Salon D, Hyatt

This workshop will focus on recent physiological results from the geniculocortical pathway of alert macaque monkeys. Data from the lateral geniculate nucleus, the primary visual cortex, and the ventral pathway from V1 into the temporal lobe will be summarized. Implications for in vivo imaging and perceptual processing will be discussed.

Ample opportunities for discussion and for audience interaction with the speakers will be provided.

Presenters

Dr. Vivien Casagrande, Professor, Departments of Cell & Developmental Biology, Psychology and Ophthalmology & Visual Sciences, Vanderbilt University

After extensive study of lateral geniculate (LGN) organization in anesthetized animals, Dr. Casagrande has undertaken investigation of the LGN in alert, behaving macaques, and will speak on current understanding of LGN function.

Dr. Max Snodderly (organizer), Professor, Ophthalmology and Graduate Studies, Medical College of Georgia

Dr. Snodderly will summarize our understanding of V1 organization in alert macaques, how it differs from anesthetized animals, and the implications for in vivo imaging, neural modeling, and perception.

Dr. Moshe Gur, Associate Professor, Biomedical Engineering, Technion-Israel Institute of Technology

Dr. Gur will discuss the increased reliability of visual responses in alert macaques and the implications for neural modeling.

Dr. Jose-Manuel Alonso, Associate Professor, Dept. of Biological Sciences, SUNY College of Optometry, New York

Dr. Alonso will describe recent results using chronically implanted electrodes in V1 and effects of manipulating a simple behavioral task.

Dr. Nikos Logothetis, Professor, Max-Planck Institute for Biological Cybernetics, Tuebingen

Dr. Logothetis will discuss the combined physiology, imaging and in vivo tracer methods for the study of activity and connectivity in the ventral pathway leading from V1 into the temporal lobe.

How the Brain Sees: Fundamentals and Recent Progress in Modeling Vision

3:00 – 5:00 pm, Salon F, Hyatt

During the past twenty years significant progress has been made towards modeling how the brain sees. New perceptual principles, mechanisms, and system designs have led to models capable of quantitatively explaining and predicting the neurophysiologically recorded dynamics of identified neurons in anatomically supported networks, and the percepts that their interactions create in a variety of experimental conditions. This analysis has also disclosed unsuspected mechanistic links between several current experimental paradigms, and has suggested qualitatively new types of experiments to test model predictions. This two-part self-contained tutorial will cover both fundamentals and recent progress on these brain models of visual perception, with an emphasis on boundary and surface interactions, figure-ground segmentation, binocular vision, and perception of form in depth.

Presenters

Stephen Grossberg, Department of Cognitive and Neural Systems, Boston University

Ennio Mingolla, Department of Cognitive and Neural Systems, Boston University

Avian Visual Cognition

3:00 – 5:00 pm, Salon C, Hyatt

Birds have very well developed visual system equal to or sometimes superior than the primate vision, even though the brain of many birds is quite small. The extraordinary mixture of visual competence and brain size makes the study of birds' visual system a challenging and important addition to our general understanding of the mechanisms of visual cognition. The main aim of this symposium is to inform VSS community about important research in avian visual cognition that has been done over past years and continues to be conducted in present.

Presenters

Dr. Edward A. Wasserman, University of Iowa

Dr. Robert Cook, Tufts University

Dr. Toru Shimizu, University of South Florida

Dr. Brett Gibson, University of New Hampshire

Dr. Olga Lazareva, University of Iowa, (organizer)



Perception and Action in Immersive Virtual Environments

3:00 – 5:00 pm, Salon E, Hyatt

The use of virtual environments (VEs) in the study of spatial perception and cognition continues to advance, given increasing accessibility and the advantages of creating controlled yet ecologically valid environmental situations.

For such studies to be useful, it is important to examine the nature of perception and action in the VE itself and how perception in VEs relates to perception in the real world. This workshop will explore technology, methods, and measures, and theoretical/experimental questions relevant to interdisciplinary research in visual cognition.

Organizers

*Sarah H. Creem-Regehr, Department of Psychology,
University of Utah*

*William B. Thompson, School of Computing,
University of Utah*

Panel 1: Practical Issues

*Heinrich H. Buelthoff, Max Planck Institute for
Biological Cybernetics, Tuebingen, Germany*
“Novel simulators for perception research”

*William H. Warren, Co-Director of the Virtual
Environment Navigation Lab (VENLab), Department
of Cognitive & Linguistic Sciences, Brown University,
Providence, RI USA*

“Why use virtual environments? Breaking the laws of
physics and optics”

*John Wann, School of Psychology, The University of
Reading, Reading, United Kingdom*

“Moving through a virtual environment: What do you
gain and what do you lose?”

Panel 2: Research and Theory

*Frank H. Durgin, Department of Psychology,
Swarthmore College, Swarthmore, PA USA*

“Using VR to study locomotor space and self-motion perception: Power and precision”

*Mark Mon-Williams, School of Psychology, University
of Aberdeen, Aberdeen, United Kingdom*

“The role of size and binocular information in guiding reaching: Insights from virtual reality and visual form agnosia”

*William B. Thompson, School of Computing, University
of Utah, Salt Lake City, UT USA*

“Is distance perception really compressed in virtual environments?”

Demo Night

Monday, May 9, 7:00 -9:30 pm,
G.WIZ Science Museum

The third annual VSS Demo Night is a social event with a barbecue and refreshments to accompany the presentations of demos. There will be 20 demos presented in a variety of formats from laptop displays to room installations, organized by Richard Brown, San Francisco Exploratorium and Shinsuke Shimojo, California Institute of Technology. These presentations highlight the importance of demonstrations of visual phenomena in vision research and education, and provide a forum for sharing techniques and tips for developing effective demonstrations. In addition, G.WIZ features many interactive exhibits on optics and vision, including a traveling NEI exhibition and exhibits on loan from the Exploratorium, which will also be available to use during this event. There is no additional registration required, just come on over to G.WIZ, and enjoy!

BBQ and sodas are complimentary. Beer and wine: \$2.
Your first drink is on VSS – pick up your free drink ticket at the front door.

LITE Vision: An Atlas of Visual Phenomena

Kenneth Brecher

Over 200 visual phenomena, spanning color, motion, depth, lightness and form, are presented on an interactive educational website.

MT Illusory Motion After-Effect

Tuan Cao-Huu

A demonstration and analysis of optical imaging studies of illusory motion after-effects will be presented.

Mach Card With Isoluminant Targets

Alan Gilchrist

A folded Mach card with two apertures, whose perceived shape flips between monocular and binocular viewing, demonstrates 3-D context effects in lightness.

Staircase Gelb Effect

Alan Gilchrist

Black and grey squares suspended in midair and illuminated by a spotlight provide a compelling demonstration of the Gelb Effect in perceived lightness.

The Enigmatic Enigma and Related Phenomena

Kai Hamburger and Simone Gori

New, more impressive variations of Leviant's Enigma figure (traffic-illusion) and other related phenomena will be presented.

Transq

Thorsten Hansen

Color images resembling a natural spectral distribution of $1/(f^n)$ are temporally modulated by different noise processes to create appealing color landscapes.

Undefeatable Rock Paper Scissors

John Jacobson

A computer program learns to repeatedly defeat human opponents in Rock Paper Scissors, even though it is seen to move first.

Waving Illusion Produced By The Peripheral Drift Illusion

Akiyoshi Kitaoka

A novel static image provides a really waving appearance, based on the peripheral drift motion illusion.

Physics Education Courseware - Integrating Virtual-Reality-Simulations and Real Experiments

Maria Kozhevnikov

A VR interface is used in conjunction with real experiments in mechanics, in individual and collaborative tasks, to study new approaches in science education.

Change Blindness to Gradual Changes: A New Example

*Cedric Laloyaux, Christel Devue, Elodie David
and Axel Cleeremans*

This new example of change blindness extends previous findings to the psychologically important domain of emotional facial expressions.

Motion Induction by Walking

Songjoo Oh

Walking disambiguates flickering gratings positioned in ground locations such that the grating appears move opposite the walker's direction.

McGill Colour Calibrated Image Database

Adriana Olmos

The McGill Colour Calibrated Image Database will be presented, with some demos showing its use in analyzing the chromatic and luminance channels.

Illusions

Bainging Pinna

Presentation of visual illusions.

Head-mounted VR

Matthias Pusch

Users will walk through a variety of virtual environments and phenomena, among them a virtual city, using an interactive, immersive, high-resolution VR display.

Pitchroom

Adam Shavit, W. Li & L. Matin

A small pitchroom without a floor will be installed. Rotating it will induce large geometric illusions and errors in manual localization.

Posture-dependent Tilted Room

Shinsuke Shimojo, Noriyuki Tanaka, and Shana Mabari

A new and unique variation of the tilted room will be demonstrated in which the perceived tilt depends critically on the observer's posture.

Failure of Binocular Noise Cancellation

Bill Simpson

This demonstration shows that binocular combination of contrast does not use an algorithm anything like addition.

Pure First-, Second-, and Third-order Motion Displays

George Sperling

Examples of stimuli that excite only the first-, only the second-, and only the third-order motion systems will be displayed on a laptop computer screen.

The First Stereoscopic Stimulus Ever Seen

Hadley Tassinari

A point source of light and an aluminum disk recreate Wheatstone's observation of an illusory tilted line passing through the disk.

"Stereoscopic" Perspective

Christopher Tyler

High-resolution perspective images viewed from their center of projection give a sense of depth as vivid as that obtained from binocular stereopsis.

Educational Outreach Event

See What You're Missing: Failures of Perception and Awareness

Saturday, May 7, 2005, Noon, G.WIZ Science Museum

Presenter: Daniel J. Simons, Department of Psychology and Beckman Institute, University of Illinois

This year VSS is partnering with the G.WIZ Science Museum to co-sponsor an invited, public lecture held at the Museum. The event is aimed at members of the Sarasota community, but VSS attendees are invited also. We anticipate that this will develop into an annual event, the aim being to share highlights of vision science with the community that hosts our meetings.

This year's lecture will highlight a number of striking failures of perception, attention, and awareness. The presentation will include demonstrations that allow audience members to experience the effects for themselves. In addition to discussing the implications of these failures for our understanding of perception and memory, the talk will also consider the consequences of these perceptual failures for our daily lives. The presentation will not assume any background knowledge about visual perception.



Exhibitors

Exhibit Hours

Friday, May 6, 5:30 – 8:30 pm
Saturday, May 7, 8:00 am – 5:30 pm
Sunday, May 8, 8:00 am – 5:30 pm
Monday, May 9, 8:00 am – 2:30 pm
Tuesday, May 10, 8:00 am – Noon
Location: Hyatt Lower lobby

Exhibitors

We would like to recognize and extend our thanks to the following 2005 VSS exhibitors. Thank you for your participation and support.

Applied Science Laboratories

Applied Science Laboratories has been the leader in eye tracking technology for over 30 years. ASL was the first company to develop a head mounted eye tracker, Eye/Head integration, parallax free optics, head tracker assisted remote optics and many other features that are industry standard. This innovative spirit continues today with the world's broadest and most comprehensive line of video based eye trackers.

The MIT Press

The MIT Press is one of the largest university press publishers in the world publishes many books and journals dedicated to the vision sciences, visual neuroscience and cognitive science, perception and related fields. Please visit our table to receive a 20% discount on our newest and most relevant titles in the field. <http://mitpress.mit.edu>.

Cambridge Research Systems

Cambridge Research Systems is the only company dedicated to providing a complete range of tools for vision science, have had the pleasure of supporting the Vision Sciences Society since the very first meeting. This year we are launching our new Eye Movement research tools, as well as demonstrating our established range of Visual Stimulator systems that are MATLAB-compatible and offer unique features not available in any other device. The new, high-speed Video Eyetracker Toolbox offers unparalleled performance at an exceptional price point, and our existing entry-level solution is now fully integrated with the acclaimed GazeTracker software from Eye Response Technologies. GazeTracker requires no programming, yet offers many image presentation options and a wide variety of eye movement analysis tools. Come and talk to Steve Elliott during the meeting, or take a look at our website www.crs ltd.com to find out more.

Oxford University Press

Oxford University Press is the world's oldest publisher in the English language, Oxford University Press has stood for high-quality non-fiction books for centuries. OUP is the largest and one of the most commercially savvy university presses, our commitment to scholarly publishing is also unmatched. Oxford also has the advantage of being one the very few truly global publishing houses. We are a worldwide organization connected by over 45 branch offices, associated companies, and agents that are actively engaged in selling books of U.S. origin. Please visit our booth to see the latest titles in vision science and neuroscience and receive 20% off all our titles.

Neurometrics Institute

Neurometrics Institute is dedicated the study of human sensory systems with an emphasis on the development of software algorithms that facilitate vision research. Our research efforts include source localization using fMRI and VEP imaging, computational image quality metric development, improved estimation of cornea surface topography, lens motion and tear clearing characterization, promoting the Modelfest human vision modeling group and finally the creation of WinVis, a software platform for designing vision and visual neuroscience experiments. WinVis for Matlab (W4M) is a plugin for Matlab that turns a personal computer into a versatile testing platform.

W4M compliments our WEB based tools that provide a searchable database of stimulus classes to simplify experiment design. Users create new classes by combining and extending existing stimulus classes to generate new novel stimuli which in turn become part of the master database. The systems versatility expands the more users contribute their new stimulus classes. For details about WinVis visit www.neurometrics.com/winvis or visit our booth in the VSS exhibit area.

SensoMotoric Instruments

SensoMotoric Instruments designs advanced video eye tracking systems that combine ease of use and flexibility with advanced technology. SMI products offer the ability to measure gaze position, saccades, fixations, pupil size, torsion, etc. This includes fully remote systems, binocular high-speed/high-precision, and FMRI/MEG compatible systems.

Tucker-Davis Technologies

Tucker-Davis Technologies (TDT) provides hardware and software solutions for neurophysiology, evoked potentials, and psychophysics. OpenEx, TDT's latest acquisition software, includes an integrated video stimulus control system. Visual scientists can now create and present complex visual stimuli from a single flexible stimulus control and acquisition system.

Arrington Research, Inc.

Arrington Research is pleased to announce the release of a NEW light weight goggle mounted eye tracker. This ViewPoint EyeTracker® scene camera system is easy to use and can be worn for long periods without discomfort. For 10 years we have been supplying reliable, affordable eye trackers for the research market world wide. ViewPoint EyeTracker® systems are the easiest and best value 60Hz eye trackers available. Real-time inter-computer communication, built-in stimulus presentation, and experimental control make ViewPoint a complete eye movement measurement environment.

SR Research Ltd.

SR Research are makers of the Hi-Speed EyeLink II eye tracker have been developing advanced binocular eye tracking technologies since 1992. The EyeLink II is a video based, 500 Hz high-speed eye tracker with ultra low noise and extremely high spatial resolution. The EyeLink II Base System can also be used with an ever increasing number of add-on options like the Experiment Builder; Data Viewer, Scene Camera, Video Overlay; Analog Output Card; to create the complete eye tracking solution. Please visit our website at <http://www.sr-research.com> for details on our eye tracking hardware and software product range.

Worldviz

Worldviz provides powerful yet easy to use experiment control software, and hardware tools for rapid development of virtual reality environments. We build a complete virtual reality system tailored to your specific needs. Our custom solution will make it easy for you to quickly create interactive virtual worlds that fit the requirements of your particular application. Our experience and expertise enable us to choose the optimal hardware configuration for you by selecting from the wide range of vendors marketing complementary virtual environment peripherals.

Club Vision

Each year, the climax of the VSS social program takes place on the last night of the conference. Featuring a great sound system, special lighting effects, a cash bar, and a lineup of guest DJs, Club Vision should not be missed. This year attendees are encouraged to wear flashing decorations or clothing that glows in black light. Music genre will change every half hour as we attempt to please a wide range of tastes. Dance and party with us until 3 am.

9:00 pm – 3:00 am, Hyatt South Hall

Guest DJs

Here are our guest DJs and some of the kinds of music they plan to play.

Carl Gaspar Funky brown soul

Lindsay Lewis Industrial/Synthpop

Thomas McKeef Upbeat hip-hop, Latin, European

Paul Merritt Anything from house to 80's retro

Camille Morvan Techno, Raga, Trip-hop, Rock, Latin, and Arabic

Rolf Nelson Classic dance tunes, Newer independent stuff

Raj Shah Dance, house, and a few oldies/80s with some hip-hop sprinkled in



Program Summary

Poster Sessions for Friday, May 6

POSTER SESSION A

Friday, May 6, 5:30 - 8:30 pm, Hyatt South Hall

Authors present: 6:30 - 8:00 pm

Binocular Rivalry

A1 **1** Negative afterimages generated during binocular rivalry show signs of weakness and signs of strength *Lee A Gilroy, Randolph Blake*

A2 **2** When a Traveling Wave Meets a Gap on Its Way *Sang-il Kim, Randolph Blake, Sang-Hun Lee*

A3 **3** Contrast Effect of Spatial Context on Binocular Rivalry is Modulated by Eccentricity and Binocular Depth *Michit-eru Kitazaki, Kazuo Mase*

A4 **4** Binocular Rivalry Can Fully Gate the Formation of Visual Phantoms *Ming Meng, Frank Tong*

A5 **5** Binocular Rivalry Is Affected By Surface Boundary Contours *Teng Leng Ooi, Zijiang J He, Yong Su*

A6 **6** Surround inhibition affects perception of center motion in a manner similar to lowering the center's luminance contrast *Chris L.E. Paffen, Susan F. te Pas, Frans A.J. Verstraten*

A7 **7** Structure-From-Motion and Biological Motion Perception Influences on Binocular Rivalry *Jaap A Beintema, Anna Oleksiak, Richard JA van Wezel*

A8 **8** Metacontrast and Binocular Rivalry Suppression Reveal Hierarchies of Unconscious Visual Processing *Bruno G Breitmeyer, Haluk Ogmen, Alpay Koc*

A9 **9** Predicting the stream of human consciousness *Geraint Rees, John-Dylan Haynes*

A10 **10** Perceptual mis-binding of color and form during binocular rivalry *Sang Wook Hong, Steven K Shevell*

A11 **11** The Effect of Ocular Dominance and Interocular Rivalry on Monocular Reading Speed Under Near-Normal, Ganzfeld, and Complete Occlusion Conditions *Nathalie Duponsel, Olga Overbury*

A12 **12** Perceptual and neuronal dynamics of binocular rivalry flash suppression *Alexander Maier, Melanie Wilke, Nikos K. Logothetis, David A. Leopold*

A13 **13** Temporal dynamics of generalized flash suppression in V4 *Melanie Wilke, Nikos K Logothetis, David A Leopold*

A14 **14** Multistable motion rivalry - four co-localised motion directions compete with similar dynamics to binocular motion rivalry *David P Crewther, Anita Panayiotou*

A15 **15** Cortical responses to invisible objects in human dorsal and ventral pathways *Fang Fang, Sheng He*

Biological Motion 1

A16 **16** Perception of biological motion at varying eccentricity *Laura A Gibson, Javid Sadr, Nikolaus F Troje, Ken Nakayama*

A17 **17** Eccentricity dependency of the biological motion perception *Hanako Ikeda, Randolph Blake, Katsumi Watanabe*

A18 **18** Detection of biological motion in the visual periphery *Emily Zyborowicz, Jeannine Pinto*

A19 **19** The conspicuity of pedestrians at night: How much biological motion is enough? *Stacy A. Balk, Thomas L. Carpenter, Johnell O. Brooks, James S. Rubinstein, Richard A. Tyrrell*

A20 **20** The ups and downs of point-light displays: Sensitivity to upright and inverted biological motion *Alejo Freire, Daphne Maurer, Terri L Lewis, Randolph Blake*

A21 **21** Perception of point-light biological motion at isoluminance *Javier O. Garcia, Emily D. Grossman*

A22 **22** How Much Does Biological Motion Perception Depend on Motion? *Eric Hiris Christine Cramer*

A23 **23** Configural processing in biological motion detection: human versus ideal observers *Hongjing Lu, Alan Yuille, Zili Liu*

A24 **24** The Effect of Blurring on Action Recognition by Human Subjects *Anna Montesanto, Maria Pietronilla Penna, Vera Stara, Marco Boi*

A25 **25** Multistability of Point-Light Gait is Resolved by the Optical Flow of the Ground *Songjoo Oh, Maggie Shiffrar*

A26 **26** Learning Mid-level Motion Features for the Recognition of Body Movements *Rodrigo Sigala, Thomas Serre, Tomaso Poggio, Martin A Giese*

Attention, Motion, and Tracking

A27 **27** Multiple Visual Object Juggling *Skyler S Place, Jeremy M Wolfe*

A28 **28** Target Tracking During Interruption in the Multiple-Object Tracking Task *David E. Fencsik, Todd S. Horowitz, Skyler S. Place, Sarah B. Klieger, Jeremy M. Wolfe*

A29 **29** Rapid recovery of targets in multiple object tracking *Todd S Horowitz, Skyler S Place*

A30 **30** Attentive tracking of multiple objects by humans and monkeys *Jude F. Mitchell, Kristy A. Sundberg, John H. Reynolds*

A31 **31** Further evidence for inhibition of moving nontargets in Multiple Object Tracking *James E Reilly, Zenon W Pylyshyn, Charles E King*

A32 **32** Using multiple-object tracking (MOT) to test whether cerebral hemispheres share common visual attention resources *Jonathan Rein, Zenon W Pylyshyn, George Alvarez*

A33 **33** Object substitution masking during attentive tracking *Takako Yoshida, Satoshi Shioiri*

A34 **34** Cortical and Behavioral Manifestations of Dynamic Object Occlusion *Scott P Johnson, Clayton Curtis, Sarah Shuwairi*

A35 **35** The upper temporal limit of attention-based motion perception is increased by an in-phase auditory stimulus *Jeroen S Benjamins, Maarten J van der Smagt, Frans AJ Verstraten*

A36 **36** Attentional control of multi-stable aperture motion *Elliot D Freeman*

Faces 1

A37 **37** Separate Face and Body Selectivity on the Fusiform Gyrus *Rebecca Schwarzlose, Chris I Baker, Galit Yovel, Nancy Kanwisher*

A38 **38** Activation in lateral occipital and fusiform cortex predicts performance in threshold face identification tasks *Michael C. Mangini, Nancy Kanwisher*

A39 **39** Severe acquired impairment of face detection and recognition with normal object recognition *Bradley C Duchaine, Galit Yovel, Ken Nakayama*

A40 **40** A new test for face perception *Kerry J Dingle, Bradley C Duchaine, Ken Nakayama*

A41 **41** Priming identity in biracial observers affects speed of visual search for different race faces *Joan Y. Chiao, Hannah E. Kenser, Ken Nakayama, Nalini Ambady*

A42 **42** The face system is blind and inefficient to other-race faces *Roberto Caldara, Marie L. Smith, Jaehyun Han, Caroline Michel, Maxine McCotter, Chan-Sup Chung, Philippe G. Schyns*

A43 **43** Influence of facial expression on binocular rivalry between two faces *Lira Yoon, Sang Wook Hong*

A44 **44** The effect of sharpness constancy on the recognition of facial expression *Motoyasu Honma, Yoshihisa Osada*

A45 **45** 'Reading' Dynamic Facial Expression in Autistic Spectrum Disorder *Katie Irwin, Benedict C Jones, Lisa M DeBruine, Justin H Williams, Mark Mon-Williams*

A46 **46** Interpreting Facial Expression Following Alcohol Consumption *Peter J R McGinty, Lisa M DeBruine, Justin H Williams, Benedict C Jones, Mark Mon-Williams*

A47 **47** The Effect of Motion Information on Infants' Recognition of Unfamiliar Face *Yumiko Otsuka, So Kanazawa, Masami K Yamaguchi Alice J O'Toole, HerōE Abdi*

A48 **48** Patterns of Developmental Advancement in 'Reading' Dynamic Facial Expression *Sarah R White, Justin H Williams, Benedict C Jones, Lisa M DeBruine, Mark Mon-Williams*

A49 **49** Dogs, but not cats, can readily recognize the face of their handler *Stephen G Lomber, Paul Cornwell*

A50 **50** Prime-mask Interactions in Unconscious Priming and Conscious Perception of Emotional Faces *Chris Oriet, James T Enns*

Illusions

A51 **51** An Illusion of Misalignment *Marco Boi, Vera Stara, Massimiliano Dasara, Pietronilla Penna, Baingio Pinna*

A52 **52** Seeing More Than Meets the Eye - the Ghost Illusion *Sandy Y. Chuang, Ronald A. Rensink*

A53 **53** The chromatic Hermann grid illusion for stimuli equated in chroma *James P Comerford, Frank Thorn, Brad Bodkin*

A54 **54** The problem of the perception of holes and figure-ground segregation in the watercolor illusion *Stephen Grossberg, Massimiliano Dasara, Baingio Pinna*

A55 **55** The Pinna -Brelstaff Illusion is not optimal under self-motion conditions *Rick Gurnsey, Geneviève Pagè*

A56 **56** Magnocellular- and parvocellular-pathway processing in a novel visual illusion *J. Jason McAnany, Michael W Levine*

A57 **57** The Effect of Chromaticities and Shaft Occlusion on the Magnitude of the Mueller-Lyer Illusion *Eriko Miyahara, Andrew J. Klerer, Karen E. Muna, Patrick C. Hwang*

A58 **58** The Windmill Illusion *Baingio Pinna, Massimiliano Dasara*

A59 **59** The visual system does not take global snapshots of the visual field *Keith A Kline, Alex O Holcombe, David M Eagleman*

A60 **60** Undulation and Twist Illusions *Massimiliano Dasara, Baingio Pinna, Peter Wenderoth*

A61 **61** New insights into 'Enigma' *Kai Hamburger, Lothar Spillmann*

Scene and Layout Perception

A62 **63** Spatial Updating and Spatial Properties in Scene Recognition *George SW Chan, Louis FG Zavodni, Jennifer L Campos, Yeun Woon Kok, Hong Jin Sun*

- A63 **64** Viewpoint independent scene recognition through a-priori instruction? *Markus Huff, Baerbel Garsoffky, Stephan Schwan*
- A64 **65** The ground dominance effect depends both on the surface and its location in the visual field *Zheng Bian, Myron L Braunstein, George J Andersen*
- A65 **66** Priming of Scenic Layout Measured with an Accuracy Task *Thomas Sanocki*
- A66 **67** How Far Can You Go? The iExtendedi Utility of Scene Layout Priming *Carmela V. Gottesman*
- A67 **68** Consistency Effects in the Perception of Briefly Viewed Scenes *Jodi L Davenport*
- A68 **69** The Influence of Color on Perception of Scene Gist *Monica S. Castelhana, John M. Henderson*
- A69 **70** Global statistical features and early scene interpretation *Antonio Torralba, Aude Oliva*
- A70 **71** Better to run than to hide: the time course of naturalistic scene decisions *Michelle R Greene, Aude Oliva*
- A71 **72** Effects of Familiarity and Repetition on Memory for Real-Life Scenes with Emotional Content *Vera Maljkovic, Paolo Martini*
- A72 **73** Lack of Interference Between Unfamiliar Real-Life Scenes in RSVP Streams *Paolo Martini, Vera Maljkovic*
- A73 **74** Learning scenes while tracking disks: The effect of MOT load on picture recognition *Jennifer S DiMase, Marvin M Chun, Brian J Scholl, Jeremy M Wolfe, Todd S Horowitz*
- A74 **75** Picture Memory Demands Attention *Kristin O Michod, Todd S Horowitz, Jeremy M Wolfe*
- A75 **76** Repeated Masks are Less Effective *Trafton Drew, Edward K Vogel*
- A76 **77** The Mechanism of 3D Contour Perception *Masayuki Kikuchi, Ko Sakai, Yuzo Hirai*
- A77 **78** Exploring visual scenes: A cognitive ethology approach *Daniel Smilek, Tessa van Leeuwen, Elina Birmingham, Maryam Toufaniasl, Alan Kingstone*
- A78 **79** A Behavioral Handle on the Phenomenology of Scene Perception *Claudia M. Hunter, Shimon Edelman*

Poster and Talk Sessions for Saturday, May 7

TALK SESSION

Saturday, May 7, 8:30 - 10:15 am, Hyatt North Hall

Visual Cortex: Receptive Fields

Moderator: John Reynolds

- 8:30 **80** Contrast dependant center-surround interactions in macaque area V4 *Kristy A Sundberg, Jude F Mitchell, John H Reynolds*

- 8:45 **81** Habituation reveals cardinal chromatic mechanisms in striate cortex of macaque *Chris Tailby, Samuel G Solomon, Neel T Dhruv, Najib J Majaj, Peter Lennie*
- 9:00 **82** Adaptive motion integration and antagonism in visual area MT *Xin Huang, Thomas D. Albright, Gene R. Stoner*
- 9:15 **83** Principles of Neural Shape Coding in Area V2 *Ben Willmore, Ryan J Prenger, Jack L Gallant*
- 9:30 **84** Neurons in MT Compute Pattern Direction by Pooling Excitatory and Suppressive Inputs *Nicole C. Rust, Eero P. Simoncelli, J. Anthony Movshon*
- 9:45 **85** Imaging The Dynamics Of Orientation Tuning In Visual Cortex *Andrea Benucci, Robert A Frazor, Matteo Carandini*
- 10:00 **86** Modeling neuronal response dynamics and cross-correlation in V1: a comparison of architectures that use anti-phase feedforward inhibition and isotropic lateral inhibition *Wyeth Bair*

TALK SESSION

Saturday, May 7, 8:30 - 10:15 am, Hyatt South Hall

Object Recognition

Moderator: Moshe Bar

- 8:30 **87** Object and shape processing in the human Lateral Occipital Complex *Joakim K Vinberg, Kalanit Grill-Spector*
- 8:45 **88** Integrating information about real-world objects across eye movements *Daniel A. Gajewski, John M. Henderson*
- 9:00 **89** The Contribution of Context to Visual Object Recognition *Moshe Bar, Elissa Aminoff, Jasmine Boshyan, Mark Fenske, Nurit Gronauo, Karim Kassam*
- 9:15 **90** Cortical Interactions in Top-Down Facilitation of Visual Object Recognition Through Low Spatial Frequencies *Avniel S Ghuman, Karim S Kassam, Hasmik Boshyan, Moshe Bar*
- 9:30 **91** The representation of shape in individuals from a culture with limited contact with regular, simple artifacts *Marissa Nederhouser, Irving Biederman, Jules Davidoff, Xiaomin Yue, Greet Kayaert, Rufin Vogels*
- 9:45 **92** Transformation from position-specific to position-invariant coding of objects across the human visual pathway *Frank Tong, David J Kim*
- 10:00 **93** Behavioral and physiological effects of backward masking and microstimulation in inferior temporal cortex of the monkey *Keisuke Kawasaki, David L Sheinberg*

TALK SESSION

Saturday, May 7, 10:30 - 12:00 pm, Hyatt North Hall

Color Channels and Processes

Moderator: Steve Shevell

- 10:30 **94** Structure of Colour Space derived from Three Different Tasks *Valerie Bonnardel, Nichola J Pitchford*

10:45 **95** Chromatic Assimilation Measured by Temporal Nulling: Interaction Between the l and s Pathways *Steven K. Shevell, Dingcai Cao*

11:00 **96** A comparison of the BOLD fMRI response to achromatic, L/M opponent and S-cone opponent cardinal stimuli in human visual cortex: I. perceptually matched vs contrast matched stimuli *Kathy T. Mullen, Serge O. Dumoulin, Katie L. McMahon, Martina Bryant, Greig I. de Zubicaray, Robert F. Hess*

11:15 **97** First-order color vision is slow; second-order color vision is fast *Arthur G. Shapiro*

11:30 **98** More Evidence for Sensorimotor Adaptation in Color Perception, *Aline Bompas, John K O'Regan*

11:45 **99** Induction from a chromatic pattern that cannot be seen *Patrick Monnier, Steven K Shevell, Erica J Young*

TALK SESSION

Saturday, May 7, 10:30 - 12:00 pm, Hyatt South Hall

Eye Movements, Perception, and Action

Moderator: Mary Hayhoe

10:30 **100** Activity in Monkey Lateral Intraparietal Area Reflects Saccade Direction, Saccade Latency, and Target Identification During Free Visual Search *Angela L Gee, Anna E Ipata, James W Bisley, Michael E Goldberg*

10:45 **101** Neural Correlates of Subjective Spatial Bias in Macaque Posterior Cingulate Cortex *Michael L. Platt, Allison N. McCoy*

11:00 **102** Attentional Capture for Potential Collisions Gated by Task *Jelena Jovancevic, Brian Sullivan, Mary Hayhoe*

11:15 **103** SEF microstimulation reorders spatial memories in a convergent manner *Mark H Histed, Earl K Miller*

11:30 **104** Perceive the slow but pursue the fast - eye movement during shape-from-motion (SfM) with ambiguous stimuli *Mani Nezhad, Arash Motamed, Bosco S Tjan*

11:45 **105** Cognitive Saccadic Suppression: Number Comparison is Suppressed During Leftward Saccades *David E Irwin, Laura E Thomas*

POSTER SESSION B

Saturday, May 7, 8:30 - 1:30 pm, Municipal Auditorium

Authors present: 12:00 - 1:30 pm

Attentional Blink

B1 **106** Illusory Motion Attenuates the Attentional Blink *Isabel Arend, Stephen Johnston, Kimron Shapiro*

B2 **107** Working memory and the attentional blink *Stephen Johnston, Kimron Shapiro, Neil Roberts, Arshad Zhaman*

B3 **108** Information About a Spatial Cue Survives the Attentional Blink *Shahab Ghorashi, Daniel Smilek, Vincent Di Lollo*

B4 **109** Decision, awareness and false alarms in the attentional blink - a psychophysiological study *Sheila G Crewther, Jennifer L Meadows, David P Crewther*

B5 **110** Interactions between spatial and temporal attention: An attentional blink study *Daniel P Loach, Mike Tombu, John K Tsotsos*

B6 **111** Target Detection Triggers a Slow Attentional Response in the Attentional Blink *Mark R Nieuwenstein*

B7 **112** The Meaning of the Mask Matters: Evidence of Conceptual Interference in the Attentional Blink *Paul E. Dux, Veronika Coltheart*

B8 **113** Testing the two-stage competition model of the Attentional blink: competition or a cost in distractor rejection? *Jun Kawahara, Yuji Gabari, James T Enns*

B9 **114** The attentional blink and automatic orienting *Francois Richer, Sebastien Marti, Veronique Paradis, Marc Thibeault*

B10 **115** The Role of T1 Masking at Short Lags in The Attentional Blink *Elwyn W. Martin, Kimron L. Shapiro*

B11 **116** Subliminal task-irrelevant motion signals more severely disrupt RSVP task performance than supraliminal signals *Yoshiaki Tsushima, Takeo Watanabe*

B12 **117** The Attentional Blink Reflects the Time Course of Token Binding, Computational Modeling and Empirical Data *Bradley P Wyble, Howard Bowman*

Hand Movements 1

B13 **118** Fixating for Grasping *Anne-Marie Brouwer, Volker H Franz, Dirk Kerzel, Karl R Gegenfurtner*

B14 **119** Eccentric head and eye positions affect proprioceptive pointing *Masashi Yamaguchi, Hirohiko Kaneko*

B15 **120** Obligatory Attention To Action Goals *Martin H Fischer, Julia Prinz, Katharina Lotz*

B16 **121** Adaptation to Reversing Prisms: Pointing in Patients with Right-parietal Damage *Florin D. Feloiu, Jonathan J. Marotta, Sandra E. Black, J. Douglas Crawford*

B17 **122** Neural Activity in Monkey Parietal Area 7a During Reaching and the Effects of Prism Adaptation *Barbara Heider, Kurt F Ahrens, Ralph M Siegel*

B18 **123** Calibration of shape perception used to guide reaches-to-grasp *Young-lim Lee, Geoffrey P. Bingham, J. Farley Norman, Charles E. Crabtree*

B19 **124** Patterns of Developmental Advancement in Visually-Controlled Goal Directed Action *Amy Mulroue, Mark Mon-Williams, Justin H Williams*

B20 **125** Task constraints alter prehension movements qualitatively and quantitatively *Mark Mon-Williams, Geoffrey P Bingham*

B21 **126** Movement planning in a rapid "foraging" task: Maximization of expected gain in strategy selection? *Shih-Wei Wu, Laurence T Maloney, Maria F Dal Martello*

B22 **127** Combining priors and noisy visual cues in rapid pointing *Hadley Tassinari, Michael S Landy, Todd E Hudson*

B23 **128** Sensory-motor choices among configurations with variable expected gain *Julia Trommershauser*



B24 **129** Evidence for Differential Weighting of Egocentric and Allocentric Cues in Delayed and Real-Time Actions *Sukhvinder S Obhi, Melvyn A Goodale*

B25 **130** The role of the visual feedback on the pointing behavior *Yusuke Tani, Yutaka Nakajima, Kazushi Maruya, Takao Sato*

B26 **131** The Last Moment for a Change in Pointing Direction *Anna Ma-Wyatt, Suzanne P. McKee*

Motion 1

B27 **132** The effects of spatial-frequency and contrast ratio manipulations differ with dioptic and dichoptic viewing of Type 2 plaids *Shawn A Collier, Alan B Cobo-Lewis*

B28 **133** The timing of space constancy during smooth pursuit eye movements *Camille Morvan, Mark Wexler*

B29 **134** Anisotropic center-surround antagonism in visual motion perception *Reza Rajimehr*

B30 **135** Speed history effects of visual stimuli *Anja Schlack, Bart Krekelberg, Thomas D Albright*

B31 **136** Signal latencies in motion perception during sinusoidal smooth pursuit *Jan L. Souman, Tom C.A. Freeman*

B32 **137** Direction-of-Motion Discrimination is Facilitated by Visible Motion Smear *Jianliang Tong, Murat Aydin, Harold E. Bedell*

B33 **138** Motion Sensitivity and Fixation Variability along Individual Meridians *Harold E. Bedell, Thao C. Lien, Jianliang Tong, Patricia M. Cisarik, Saumil S. Patel*

B34 **139** A contribution of early motion systems on stream-bounce perception *Kazushi Maruya, Takao Sato*

B35 **140** Influence of Optic Flow Field Restrictions and Fog on Perception of Speed in a Virtual Driving Environment *Anurag Shrivastava, Mary M Hayhoe, Jeffrey B Pelz, Ryan Mruczek*

B36 **141** Thresholds for Detection of a Moving Object by a Moving Observer *Constance S. Royden, Erin M. Connors, Kathryn A. Mahoney*

B37 **142** Motion perception is differentially effected by the transient and sustained components of spatial attention *Yaffa Yeshurun*

B38 **143** Motion transparency in combined first and second order stimuli *Ross Goutcher, Gunter Loffler*

B39 **144** Speed differences increase the number of transparent motion signals that can be detected simultaneously *John A. Greenwood, Mark Edwards*

B40 **145** The contribution of low-level motion systems in multiple object tracking *Hidetoshi Kanaya, Kazushi Maruya, Takao Sato*

B41 **146** Second-order motion alone does not convey ordinal depth information *Kevin J MacKenzie, Laurie M Wilcox*

B42 **147** Perception and discrimination of global flow speed reveals motion coding *Shannon M Posey, Scott N J Watamaniuk*

B43 **148** Perceived direction of drifting Type 2 plaids is biased toward higher-reliability component *Alan B Cobo-Lewis, Shawn A Collier, Christina Khin, Ryan M Carlow*

B44 **149** The effect of luminance texture on MAEs *David Nguyen-Tri, Jocelyn Faubert*

B45 **150** The Dynamic Motion Aftereffect is Driven by Local Motion Adaptation *William Curran, Christopher P Benton*

B46 **151** Temporal Dynamics of the Motion Aftereffect *Lisa O'Kane, Pascal Mamassian*

B47 **152** Effects of Surface Depth Order on Motion Aftereffects *Wonyeong Sohn, Adriane E Seiffert*

B48 **153** Decoding motion direction from activity in human visual cortex *Yukiyasu Kamitani, Frank Tong*

B49 **154** Image generator resolution and motion quality *Julie M. Lindholm, Chi-Feng Tai*

Performance and Attention

B50 **155** Lasers as a warning signal to communicate with aircraft *Leon N McLin, Fred H Previc, Laura E Barnes, Stephen Dziuban, Gordon T Hengst*

B51 **156** The effects of exposure to a 532 nm (green) laser on the visibility of flight symbology *Thomas Kuyk, William Kosnik, Peter A. Smith, David Kee, Brenda Novar, Garrett Polhamus*

B52 **157** Vision Assessment of Older Drivers for Relicensure *Efty P Stavrou, Joanne M Wood, Diana Battistutta*

B53 **158** Dissociating attention from required processing time *Shih-Yu Lo, Su-Ling Yeh*

B54 **159** Sequential Effects and Stimulus-Response Dependencies In an Orientation Identification Task: Characterization of the Class 2 Oblique Effect *Andrew M Haun, Bruce C Hansen, Yeon-Jin Kim, Edward A Essock*

B55 **160** Feature Specificity of Global-Feature-Based-Attention *Arvin C Arman, Geoffrey M Boynton*

B56 **161** Both accuracy and response times vary depending on target location in a sustained attention task *Robin E Hauck, Scott J Gustas, Matthew A Leary, Elisabeth M Fine*

B57 **162** Acquiring visual information from central and peripheral fields *Joseph S Lappin, Jeffrey B Nyquist, Duje Tadin*

B58 **163** Relative Motion in the Periphery of the Visual Field is a Powerful Cue for Visuo-spatial Attention *Dorothe A. Poggel, Hans Strasburger, Manfred MacKeen*

B59 **164** Can Transient Attention Offset the Effects of Sustained Attention? *Joetta Gobell, Damian Stanley, Marisa Carrasco*

B60 **165** On the Flexibility of Covert Attention and Its Effects on a Texture Segmentation Task *Barbara Montagna, Yaffa Yeshurun, Marisa Carrasco*

B61 **166** Transient attention reduces the effect of adaptation *Franco Pestilli, Marisa Carrasco*

B62 **167** Covert transient attention affects motor response trajectories *Robert Faludi, Jane Avakov, Laurence T. Maloney, Carrasco Marisa*

B63 **168** Action Affordance Effects: Location and Grasp *Matthew A Paul, Steven P Tipper, Amy E Hayes*

B64 **169** Orthogonal Simon effect: A new interference effect with vertically arrayed stimuli and horizontally arrayed responses *Akio Nishimura, Kazuhiko Yokosawa*

B65 **170** Attentional modulation of orientation adaptation to resolvable and unresolvable patterns using brief orientation adaptation paradigm *Leila Montaser Kouhsari, Reza Rajimehr*

B66 **171** Can attention to auditory signals affect processing of simultaneous visual stimuli? *Ji Hong, Thomas Pappathomas, Zoltán Vidnyánszky*

B67 **172** Visual-Auditory spatial attention in human visual cortex *Vivian M Ciaramitaro, Geoffrey M Boynton*

B68 **173** Distorting visual space with sound *Stephen R Arnott, Melvyn A Goodale*

Spatial Vision 1

B69 **174** Comparing Estimated and Actual Visual Acuity at High and Low Luminance *Johnell O Brooks, Richard A Tyrrell, Joanne M Wood, Benjamin R Stephens, Efty P Stavrou*

B70 **175** The dependence of texture density judgments on texture element contrast *Donald F Slack, Charles Chubb*

B71 **176** Dynamics of collinear facilitation assessed using classification images *Isabelle Mareschal, Steven C Dakin, Peter J Bex*

B72 **177** Perceptual Inhomogeneities in the Upper Visual Field *E. Leslie Cameron*

B73 **178** More ups and downs of visual processing *Michael W. Levine, J. Jason McAnany*

B74 **179** Effect of phase on the detection of spatial patterns *Endel Poder*

B75 **180** Accessibility of spatial channels *Robert F Hess, Yi-Zhong Wang, Chang H Liu*

B76 **181** Contextual effects on orientation identification and contrast discrimination in the fovea *Joshua A Solomon, Michael J Morgan*

B77 **182** Detection of Gabor Patterns *John M Foley, Srinivassa L Varadharajan, Chin C Koh, Mylene C Q Farias*

B78 **183** Lateral spatial interactions for the detection of luminance-defined and contrast-defined blobs, at the fovea and in the periphery *Subash Sukumar, Sarah J Waugh*

B79 **184** Noise masking reveals channels for second-order letters *Ipek Oruc, Michael S Landy, Denis G Pelli*

B80 **185** Perceptual Size Distortion: Expansion of Left Hemisphere *Jennifer Leaper, Arash Sahraie, Peter McGeorge, David P Carey*

B81 **186** Labelled lines for phase? *Pi-Chun Huang, Robert F Hess, Frederick A A Kingdom*

B82 **187** Characterizing visual performance fields in children *Rishi Kothari, Kate Mahon, Marisa Carrasco*

B83 **188** Sensitivity to tilt in first-order and second-order gratings is immature in 5-year-olds *Terri L. Lewis, Andrea Kingdon, Dave Ellemberg, Daphne Maurer*

B84 **189** Scotopic Contrast Sensitivity: Cat versus Human *Joseph Malpeli, Incheol Kang, Rachel Reem, Amy Kaczmarowski*

B85 **190** Concentric and parallel textures differentially activate human visual cortex *Jane E Aspell, Oliver J Braddick, Janette Atkinson, John Wattam-Bell, Holly Bridge*

B86 **191** Measuring the activity of spatial frequency channels using fMRI-adaptation *Helen E Payne, Paul T Sowden, Andrew G Myers*

B87 **192** Normal variability of reversal- and onset-VEPs and their amplitude measurement *Susan M Menees, Michael Bach*

3D Space Perception

B88 **193** Perception of the Horizontal During Roll Rotation of Self or Scene *Ian P. Howard, Vincent A. Nguyen, Bob Cheung*

B89 **194** Cues that determine the perceptual upright: visual influences are dominated by high spatial frequencies *Richard T Dyde, Michael R Jenkin, Laurence R Harris*

B90 **195** Skating Down a Steeper Slope: The Effect of Fear on Geographical Slant Perception *Jeanine K Stefanucci, Dennis R Proffitt, Gerald Clore*

B91 **196** Seeing Beyond the Target: An Effect of Environmental Context on Distance Perception *Cedar R Riener, Jessica K Witt, Jeanine K Stefanucci, Dennis R Proffitt*

B92 **197** Perceiving distances to targets on the floor and ceiling: A comparison of walking and matching measures *Valentina Dilda, Sarah H. Creem-Regel, William B. Thompson*

B93 **198** The Representation of Visual Space in an Expanding Room *Andrew Glennerster, Stuart J Gilson, Lili Tcheang*

B94 **199** Invasion of Personal Space Influences Perception of Spatial Layout *Simone Schnall, Jessica K. Witt, Jason Augustyn, Jeanine Stefanucci, Dennis R. Proffitt, Gerald L. Clore*

B95 **200** The Idiosyncrasies Of Foreshortening And What They Reveal About Space Vision *Jun Wu, Zijiang J He, Teng Leng Ooi*

B96 **201** Spatial updating of locations after posture changes in the vertical dimension *Bing Wu, Roberta L. Klatzky*

Target Mislocalization

B97 **202** Distorting visual space without motion signal *Junghyun Park, Shinsuke Shimojo, John Schlag*

B98 **203** Sub-threshold motion influences apparent position *Derek H Arnold, Alan Johnston*

B99 **204** If we saw it, it must have been where we were looking! *Eli Brenner, Pascal Mamassian, Jeroen B.J. Smeets*

B100 **205** The flash-pulfrich effect *Christopher R.L. Cantor, Clifton M. Schor*

B101 **206** Internal and External Prediction in The Flash-Lag Effect *Joan Lopez-Moliner, Daniel Linares*

B102 **207** Distortion of Positional Representation of Visual Objects by Motion Signals *Kenji Yokoi, Katsumi Watanabe*

B103 **208** The coding of combined pointing movements and saccades in the Brentano illusion *Denise D.J. de Grave, Volker H Franz, Karl R Gegenfurtner*

Contours/Form Perception

B104 **209** Evaluating curvature aftereffects with radial frequency contours *Nicole D. Anderson, Claudine Habak, Frances Wilkinson, Hugh R. Wilson*

B105 **210** Properties of Shape Interaction in Temporal Masking *Claudine Habak, Frances Wilkinson, Hugh R Wilson*

B106 **211** The role of spatial phase in the detection of position-defined and orientation-defined linear and circular contour deformation *Yi-Zhong Wang, Joost Felius*

B107 **212** Aftereffect of Adaptation to Glass Patterns *Colin WG Clifford, Erin Weston*

B108 **213** Second-order Contour Discontinuities in Segmentation and Shape Representation *Donald J Kalar, Patrick Garrigan, Philip J Kellman*

B109 **214** Effect of dichoptically presented reference on systematic shape distortion during pursuit eye movement *Hyung-Chul O. Li*

B110 **215** Perceived orientation of complex shapes reflects graded part decomposition *Elias H Cohen, Manish Singh*

B111 **216** Systems Factorial Technology Analysis of Pomerantz's Configural Figures *Ami Eidels, James T. Townsend*

B112 **217** Rapid successive presentation improves symmetry perception *Ryosuke Niimi, Katsumi Watanabe, Kazuhiko Yokosawa*

B113 **218** Intermediate Level, Medium-Span, Configurations Can Trigger Past Experience Effects On Figure Assignment *Mary A. Peterson, Emily Skow*

B114 **219** Shape recognition with propagation fields *Christoph Rasche*

B115 **220** Character recognition and Ricco's law *Hans Strasburger*

B116 **221** Different Aspects of Form Perception Develop at Different Rates *Yasmine El-Shamayleh, Lynne Kiorpes, J. Anthony Movshon*

TALK SESSION

Saturday, May 7, 1:30 - 2:45 pm, Hyatt North Hall

Conscious Perception

Moderator: Peter Tse

1:30 **222** Predicting the Orientation of Invisible Stimuli from Activity in Human Primary Visual Cortex *John-Dylan Haynes, Geraint Rees*

1:45 **223** Brain Correlates of Conscious Perceptions *Philippe G Schyns, Marie L Smith, Frederic Gosselin*

2:00 **224** Learning to ignore: Practice can increase disappearance in motion induced blindness *Yoram S Bonneh, Dov Sagi, Alexander Cooperman*

2:15 **225** Neural correlates of conscious visibility found in ipsilateral retinotopic cortex *Po-Jang Hsieh, Gideon P Caplovitz, Peter U Tse*

2:30 **226** Visual motion shifts perceived position without awareness of the motion *David Whitney*

TALK SESSION

Saturday, May 7, 1:30 - 3:00 pm, Hyatt South Hall

Spatial Vision

Moderator: Lynn Olzak

1:30 **227** Surround Masking Comes After Cross-orientation Masking, and is Only Found in the Periphery *Yury Petrov, Matteo Carandini, Suzanne McKee*

1:45 **228** The spatial interaction zone of a shapeless noise flanker *Bosco S Tjan, Sabin Dang*

2:00 **229** Modeling Neural Tuning to Border Ownership of Figures through Intracortical Interactions in V2 *Li Zhaoping*

2:15 **230** Classification images for second-order patterns *Velitchko Manahilov, William A Simpson, Julie Calvert*

2:30 **231** Maximum differentiation competition: A methodology for comparing quantitative models of perceptual discriminability *Zhou Wang, Eero P. Simoncelli*

2:45 **232** Dynamics of centre-surround interactions in orientation perception *Szonya Durant, Colin W.G. Clifford*

TALK SESSION

Saturday, May 7, 3:15 - 5:00 pm, Hyatt North Hall

Attentional Mechanisms

Moderator: John Palmer

3:15 **233** Temporal dynamics of covert attention *Marisa Carrasco, Anna Marie Giordano, Brian McElree*

3:30 **234** The neural hemodynamics of a speed-accuracy tradeoff in decision making *Jason Ivanoff, Philip Branning, Renè Marois*

3:45 **235** Attention-based long-lasting sensitization and suppression of colors *Chia-huei Tseng, Zoltán Vidnyánszky, Thomas Papathomas, George Sperling*

4:00 **236** Effect of prior probability on choice and response time in a motion discrimination task *John Palmer, Maria K. McKinley, Mark Mazurek, Michael N. Shadlen*

4:15 **237** Temporal kernels of motion perception are sharpened by training and attention *Geoffrey M Ghose, Pamela Walsh*

4:30 **238** Attention-dependent discrete sampling of motion perception *Rufin VanRullen, Leila Reddy, Christof Koch*

4:45 **239** Single neuron correlates of change blindness in the human medial temporal lobe *Leila Reddy, Patrick Wilken, Rodrigo Quiñero, Christof Koch, Itzhak Fried*

TALK SESSION

Saturday, May 7, 3:15 - 5:00 pm, Hyatt South Hall

Lightness and Surfaces**Moderator: Branka Spehar**3:15 **240** Lightness computation in the simplest images *Alan L Gilchrist, Ana Radonjic*3:30 **241** Does Target Lightness Depend on Background Luminance or Background Lightness? *Ana Radonjic, Alan L Gilchrist, Vilayanur S Ramachandran*3:45 **242** Assimilation and Contrast in Complex Configurations *Branka Spehar, Monica Iglesias, Colin WG Clifford*4:00 **243** Temporal properties of brightness induction *Mark E. McCourt, Barbara Blakeslee, Wren Pasioka*4:15 **244** Deformation of perceived shape with multiple illumination sources *Michael J Tarr, Massimiliano Di Luca, Wendy D Zosh*4:30 **245** Voluntary attention modulates the brightness of overlapping transparent surfaces *Peter U Tse, Gideon P Caplovitz, Po-Jang Hsieh*4:45 **246** An fMRI Investigation of the Perception of Form, Texture, and Colour in Human Occipito-Temporal Cortical Pathways *Jonathan S. Cant, Melvyn A. Goodale***POSTER SESSION C**

Saturday, May 7, 2:00 - 7:00 pm, Municipal Auditorium

Authors present: 5:30 - 7:00 pm

AdaptationC1 **247** Adaptation to blur: normalization or repulsion? *Sarah L. Elliott, Michael A. Webster, Mark A. Georgeson*C2 **248** The influence of different surface segregation cues on temporary blindness *Li-Chuan Hsu, Su-Ling Yeh, Peter Kramer*C3 **249** Vision works by concatenating factors of change *Donald I.A. MacLeod, R. Dirk Beer*C4 **250** High Intensity Flash-Probe Measurements of Visual Adaptation *Peter A Smith, Bret Z Rogers*C5 **251** Simple Stimulus Metrics vs. Gestalt in High-Level Aftereffects *Kai-Markus Müller, Marc O. Ernst, David A. Leopold***Binocular Stereopsis**C6 **252** Scene layout and binocular distance perception: effects of angular separation *Julie M Harris, Vit F Drga*C7 **253** Drastic differences in binocular disparity tuning of V4 cells for random dots and solid figures: quantitative analysis and mechanisms *Takahiro Doi, Seiji Tanabe, Kazumasa Umeda, Ichiro Fujita*C8 **254** Explaining Depth Perception in Dynamic Noise with an Interocular Delay *Jenny Read, Bruce Cumming*C9 **255** Time course of local adaptation in the Pulfrich phenomenon *Frank E Visco, Scott B Stevenson*C10 **256** The Absolute Phase Effect in Energy Model *Li Zhao, Bart Farell*C11 **257** The visual system does not compensate for different image sizes in the two eyes that result from eccentric gaze *Robert G Meyerson, Martin S Banks*C12 **258** Adaptation to Interpolated Disparity *Dawn Vreven*C13 **259** Depth and size perception in stereo displays *Caitlin Akai, Reynald Hoskinson, Brian D Fisher, John C Dill*C14 **260** Vertical Size Disparity and Perceived Position Measured by Perceptual and Action Tasks *Kazuho Fukuda, Hirohiko Kaneko*C15 **261** Stereoscopic slant seen against monocular surroundings *Barbara J Gillam, Michael J Pianta, Tatjana Seizova-Cajic, Kevin R Brooks*C16 **262** Non-horizontal disparities enhance sensitivity of the human stereovision system *Saumil S Patel, Harold E Bedell*C17 **263** Incomplete integration of local and global information in stereopsis *H. A. Sedgwick, Barbara Gillam, Raj Shah*C18 **264** Partial occlusion influences the binocular matching solution *Zhi-Lei Zhang, Clifton M Schor***Color Vision 1**C19 **265** Spatial organization of L- and M-cone inputs to neurons in the macaque lateral geniculate nucleus *Samuel G Solomon, Neel T Dhruw, Peter Lennie*C20 **266** A comparison of the BOLD fMRI response to achromatic, L/M opponent and S-cone opponent cardinal stimuli in human visual cortex: II. chromatic vs achromatic stimuli *Serge O. Dumoulin, Kathy T. Mullen, Katie L. McMahon, Martina Bryant, Greig I. de Zubicaray, Robert F. Hess*C21 **267** Multiple-channel characteristics from chromatic notched-noise adaptation *Ichiro Kuriki*C22 **268** The effect of spectrally selective filters on perception *Leedjia A Svec, Sarah Elliot, Jenny Highsmith, Tyson Brunstetter, Mike Crognale*C23 **269** Cone Tuning Curves and Natural Color Statistics *Alex Lewis, Li Zhaoping*C24 **270** Effects of Learning and Language on Colour Categorical Perception as Measured by Simultaneous Presentation Threshold Estimates *Emre Ozgen, Ian R L Davies*C25 **271** Implications of variability in color constancy across different methods and individuals *James M Kraft*C26 **272** Color Constancy: the role of judgement *Adam J Reeves, Kinjiro Amano, David H Foster*C27 **273** Categorical color constancy for dichromats *Keiji Uchikawa, Chizuru Nakajima, Kaori Segawa*C28 **274** A probabilistic approach to color constancy using articulation, brightness, and gamut cues *Eric T Ortega, Bartlett W Mel*

C29 **275** Simultaneous contrast and color constancy in authentic environments: Impoverished vs. rich scenes *Yong Ouyang, James M Kraft*

C30 **276** Infants' spontaneous hue preferences are not due solely to variations in chromatic detection thresholds *Iris K Zemach, Davida Y Teller*

C31 **277** Color appearance in the peripheral retina as a function of stimulus size and intensity under rod-bleach conditions *Michael A Pitts, Vicki J Volbrecht, Lucy J Troup, Janice L Negerer, Melissa A Dakin*

C32 **278** Sensitivity to color and luminance transformations in real versus phase-scrambled natural scenes *Ali Yoonessi, Frederick A.A. Kingdom*

C33 **279** Spatial Arrangement of Irrelevant Color in Visual Search *Krystal A Cunningham, Bosco S Tjan*

C34 **280** Motion-Induced Colour Segregation *Shin'ya Nishida, Junji Watanabe, Ichiro Kuriki*

C35 **281** Variation in focal color choices across languages of the World Color Survey *Michael A. Webster, Paul Kay*

C36 **282** Missing links: Some examples from color vision on how binding theory may fill gaps in theoretical frameworks for perceptual phenomena *Vincent A. Billock*

C37 **283** Compensation of white for macular filtering *Dirk Beer, Joshua Wortman, Gregory Horowitz, Donald MacLeod*

Visual Disorders and Blindsight

C38 **284** Visual perceptual organization in adults with autism *Marlene Behrmann, Cibu Thomas, Rutie Kimchi, Nancy Minshew*

C39 **285** Does eye dominance predict fMRI signals in retinotopic cortex? *Janine D Mendola, Ian P Conner*

C40 **286** Unconscious orientation and color processing without primary visual cortex *Tony Ro, Stephenie Harrison, Jennifer Boyer, Kristen Greene*

C41 **287** Revisiting manual localisation in the cortically blind field *David P. Carey, Ceri T. Trevenhan, Arash Sahraie*

C42 **288** When Does a Boy Look Like a Gate? Form Discrimination in Blindsight? *Ceri T. Trevenhan, Arash Sahraie, Lawrence Weiskrantz*

C43 **289** Imaging Visual Deficits in Autistic Spectrum Disorder *Janine V Spencer, Justin M O'Brien*

C44 **290** Implicit Object Recognition in Visual Integrative Agnosia: Patient SE *Ayelet N Landau, Hillel Aviezer, Lynn C Robertson, Mary A Peterson, Nachum Soroker, Yaron Sacher, Yoram Bonneh, Shlomo Bentin*

C45 **291** How Would You Catch A Ball If You Had Visual Form Agnosia? *John P Wann, David T Field, Mark A Mon-Williams, David Milner*

C46 **292** Orientation Integration is Intact in Integrative Agnosia *Harriet A Allen, Glyn W Humphreys*

C47 **293** Low-level and high-level maximum motion displacement deficits in amblyopic children *Cindy S Ho, Deborah E Giaschi*

C48 **294** Temporal instability of amblyopic vision: Evidence for an involvement of the dorsal visual pathway *Ruxandra Sireteanu, Claudia Bäumer, Constantin Sârbu*

C49 **295** Assessment of contrast sensitivity in infants and children with neurological impairment: a novel test using steady-state visual evoked potentials (ssVEPs) *J Calvert, M S Bradnam, V Manahilov, R Hamilton, D L McCulloch, A Mackay, G N Dutton*

C50 **296** What does an amblyopic eye tell human visual cortex? *Ian P Conner, Janine D Mendola*

C51 **297** Visual Completion in Children with Pervasive Developmental Disorder: Effects of Shape Complexity *Tessa CJ de Wit, Wim AJM Schlooz, Wouter Hulstijn, Rob van Lier*

C52 **298** Procedure- and Stimulus-Dependent Differences in Perceptual Filling-In after Macular Hole Surgery *Walter Wittich, Olga Overbury, Michael A Kapusta, Jocelyn Faubert*

C53 **299** Abnormal spatial integration in Williams Syndrome is distance-dependent *Melanie Palomares, Barbara Landau, Howard Egeth*

C54 **300** Limited Retinotopic Reorganization in Age-related Macular Degeneration *Sing-Hang Cheung, Ronald A Schuchard, Sheng He, Yonghua Tai, Gordon E Legge, Xiaoping P Hu*

C55 **301** Low Vision Differences between Static and Moving Patterns in Central and Peripheral Fields *Jeffrey B. Nyquist, Kelly E. Lusk, Joseph S. Lappin, Anne L. Corn, Duje Tadin*

C56 **302** Psychophysical evidence for abnormal magnocellular processing in 6-month olds infants with autism in their family *Joseph P McCleery, Elizabeth A Allman, Karen Burner, Leslie J Carver, Karen R Dobkins*

C57 **303** In Vivo Characterization of laser Induced Photoreceptor Damage and Recovery in the High Numerical Aperture of the Snake Eye *Harry Zwick, Bruce Stuck, Peter Edsall, Ed Wood, Rachel Cheramie, Jim Sankovich*

Locomotion, Steering and Posture

C58 **304** The Roles of Spatial Knowledge and Visual Landmarks in Navigation *Huiying Zhong, Marianne C. Harrison, William H. Warren*

C59 **305** Investigating the effects of occlusion time on the visual guidance of blind-walking, veering, and distance perception *Jeffrey Andre, Katherine Losier, Rachel Heiser, Allison MeGehee, Cliff Campbell*

C60 **306** The Influence of Vision on the Estimation of Walked Distance *Jennifer L Campos, Celia Hsiao, George SW Chan, Hong Jin Sun*

C61 **307** Speed of Visual Flow Affects Comfortable Walking Speed *Betty J Mohler, Sarah H Creem-Regehr, William B Thompson*

C62 **308** Does the location of visual field loss change mobility and fixation behaviour when walking an unfamiliar environment? *Helle K Falkenberg, Peter J Bex*

C63 **309** Rapid recalibration of locomotion during non-visual walking *John W. Philbeck*

C64 **310** The effect of HMD mass and inertia on visually directed walking in virtual environments *Peter Willemsen, Sarah H Creem-Regehr, Mark B Colton, William B Thompson*

C65 **311** Intercepting moving targets on foot: Can people learn to anticipate target motion? *Justin M. Owens, William H. Warren*

C66 **312** Integrating Target Interception and Obstacle Avoidance *Hugo Bruggeman, William H. Warren*

C67 **313** Switching Behavior in Moving Obstacle Avoidance *Jonathan A. Cohen, William H. Warren*

C68 **314** Heading off the beaten path *Li Li, Barbara T Sweet, Leland S Stone*

C69 **315** In steering without visual feedback, subjects can properly initiate the return phase of a 'lane change' maneuver *Kristen L Macuga, Andrew C Beall, Jack M Loomis, Roy S Smith, Jonathan W Kelly*

C70 **316** A neural model of visually-guided steering and obstacle avoidance *David M Elder, Stephen Grossberg, Ennio Mingolla*

C71 **317** Covert orienting of attention and the perception of heading *AnnJudel Enriquez, Rui Ni, Jeffrey D Bower, George J Andersen*

C72 **318** Visual control of braking behind a moving lead vehicle *Gabriel J Diaz, Brett R Fajen*

C73 **319** Rapid recalibration in visually guided braking *Brett R Fajen*

C74 **320** The direction of vection is controlled by perceived motion, *Takeharu Seno, Takao Sato*

C75 **321** Effect of Visual Sway on Postural Balance in a Full Immersive Environment *Jocelyn Faubert, R emy Allard, Jean-Marie Hanssens*

C76 **322** Effects of motion and tilt of large-visual-stimulus on perception and postural control *Aki Tsuruhara, Hirohiko Kaneko*

C77 **323** Gaze Polling and Fixation Shifting of Cyclists Negotiating a Slalom *Richard M Wilkie, John P Wann*

C78 **324** Seeing into the Future: An interaction between perception and action *Jessica K Witt, Dennis R Proffitt, William Epstein*

Motion in Depth 1

C79 **325** Effects of Binocular Disparity and Optic Flow Noise on Visual Cue Integration for Motion-in-Depth *Hedy Amiri, Paul R. Schrater*

C80 **326** Effects of object and background spatial frequency on the perceived shape of a moving object *Nadejda B Bocheva, Myron L Braunstein*

C81 **327** Quadri-Stable Percepts For a Rotating Non-Transparent Object *Jintong Mao*

C82 **328** Early Development of Anisotropic Sensitivities for Expansion/contraction Detection *Nobu Shirai, So Kanazawa, Masami K Yamaguchi*

C83 **329** Metric estimation of visual-deformation motions *Jeff D Wurfel, M nica Padilla, Norberto M Grzywacz*

C84 **330** Perception of motion trajectory from the moving cast shadow in human infants *Tomoko Imura, Masami K Yamaguchi, Masaki Tomonaga, Akihiro Yagi*

C85 **331** Effective Information for TTC Judgments Varies During an Approach Event *Patricia R DeLucia*

C86 **332** Object velocity relative to the head and depth order from object-produced motion parallax *Hiroyuki Mitsudo, Hiroshi Ono*

C87 **333** Visual-Vestibular Dissociation: Differential Sensitivity to Acceleration and Velocity *Evan S Schaffer, Frank H Durgin*

C88 **334** The role of binocular cues in scaling the retinal velocities of objects moving in space *Andrew E Welchman, Simon J Maier, Heinrich H Buelthoff*

C89 **335** Adaptive sensory coding: Enhanced visual velocity discrimination during self-motion *Frank H Durgin*

C90 **336** Contrast Gradients Increase Apparent Egospeed While Moving Through Simulated Fog *Brian P Dyre, William A Schaudt, Roger T Lew*

C91 **337** Comparing the relative accuracy of perception and action in ball catching *Rob Gray, Brooke Castaneda, Randy Sieffert, David M Regan*

C92 **338** A Bayesian theory for intercepting objects moving in 3D *Peter W Battaglia, Paul R Schrater, Daniel J Kersten*

C93 **339** Bayesian Models of 3-D Motion Perception *Martin Lages*

Perceptual Organization 1

C94 **340** Relative Salience of Number, Shape, Color, and Surface Area in Rhesus Monkeys *Jessica F Cantlon, Elizabeth M Brannon*

C95 **341** When is preattentive grouping sensitive to contrast polarity? *Louis K H Chan, William G Hayward*

C96 **342** Surface interpolation and 3D relatability *Carlo Fantoni, James D Hilger, Walter Gerbino, Philip J Kellman*

C97 **343** Correct Grouping of Contours Is Required for Symmetry to Operate As a Configural Cue *Jee Hyun Kim, Mary A Peterson*

C98 **344** Activity in early visual areas reflects perceived surface layout in scene segmentation *Myriam W.g. Vandenbroucke, H. Steven Scholte, Chantal Kemmer, Victor A.f. Lamme*

C99 **345** Familiar configuration enables figure/ground assignment in natural scenes *Xiaofeng Ren, Charless Fowlkes, Jitendra Malik*

C100 **346** Role of non-targets in detection of a target in visual search *Michael R. Scheessele, David T. Guthrie, Dean R. Gottschalk*

C101 **347** Human Movement Coordination Implicates Relative Direction as the Information for Relative Phase *Andrew D Wilson, David R Collins, Geoffrey P Bingham*

C102 **348** The Effect of Synaesthetically Induced Colors on Perceptual Organization *Martin van den Berg, Kathleen A Spanos, Michael Kubovy*

C103 **349** A Higher-Order Mechanism Beyond Good Continuation in Contour Integration *James Tse, Peter Gerhardstein*

C104 **350** Perversible Figures: An Ironic Process in Perception *Clarissa R. Slesar, Arien Mack*

C105 **351** Evaluating grouping via emergent features: A systematic approach *Mary C Portillo, James R Pomerantz*

C106 **352** The perceptual organization of curvilinear contours in structurally ambiguous dot patterns *Lars Strother, Michael Kubovy*

C107 **353** Cues to object persistence in infancy: Tracking objects through occlusion vs. implosion *Erik W. Cheries, Lisa Feigenson, Brian J. Scholl, Susan Carey*

C108 **354** Visual De-fragmentation via High Spatial Frequencies *Ethan Meyers, Yuri Ostrovsky, Pawan Sinha*

Hand Movements 2

C109 **355** Perceptual Illusions Affect Visually-Guided Actions With The Non-Dominant But Not with the Dominant Hand *Claudia L. R Gonzalez, Tzvi Ganel, Melvyn A Goodale*

C110 **356** Inverted Vision-Action Dissociation With Induced Motion *Robert B. Post, Christopher Coker*

C111 **357** Metacontrast masking: Effects of barely visible stimuli on pointing movements *Volker H Franz*

C112 **358** Does Inattentive Blindness Potentiate Action? *Zisis Pappas, Arien Mack*

C113 **359** Efficacy of Image-Guided Action is Controlled by Perception *Roberta L. Klatzky, Bing Wu, Damion Shelton, George Stetten*

C114 **360** Disruption of binocular cues affects reaching and grasping to a greater extent than their absence *Shahina Pardhan, Carmen Gonzalez-Alvarez*

C115 **361** The Proximal/Distal Model Explains Hand-to-Body Distance-Dependent Accuracy of Visually-Guided Manual Behavior *Wenxun Li, Leonard Matin*

C116 **362** Dual-Task Interference is Greater in Memory-Guided Grasping Than in Visually Guided Grasping *Anthony B Singhal, Eris Chinellato, Jody C Culham, Melvyn A Goodale*

C117 **363** Dissociating the functions of visual pathways using equispatial stimuli *Alyssa Winkler, Charles E. Wright, Charles Chubb*

C118 **364** Implicit sensorimotor control: Rapid motor responses of arm and eye share the visual motion encoding *Hiroaki Gomi, Naotoshi Abekawa, Shinya Nishida*

C119 **365** The Visual Control of Goal Directed Action in Developmental Co-ordination Disorder *Lydia Henderson, Justin H Williams, Mark Mon-Williams*

Poster and Talk Sessions for Sunday, May 8

TALK SESSION

Sunday, May 8, 8:30 - 10:00 am, Hyatt North Hall

Brain Stimulation, Activity and Perception

Moderator: Ione Fine

8:30 **366** Occipital Activations and Deactivations Induced by Stimulation of the Right Human Frontal Eye Field *Christian C Ruff, Felix Blankenburg, Otto Bjoertomt, Sven Bestmann, John-Dylan Haynes, Geraint Rees, Oliver Josephs, Ralf Deichmann, Jon Driver*

8:45 **367** The Perceptual Effects of Retinal Electrical Stimulation *Ione Fine, Ricardo Freda, Scott H Greenwald, Alan Horsager, Maksy Pishoy, Williamson Richard, Cimmarusti D Valerie, Weiland J James, Greenberg S Robert, Humayun Mark*

9:00 **368** Microstimulation in LGN produces focal visual percepts: proof of concept for a visual prosthesis *John S. Pizaris, R. Clay Reid*

9:15 **369** TMS Induced Affective Blindsight Reverts to Affective Blindness When Stimulus Visibility is Increased *Jacob Jolij, Victor AF Lamme*

9:30 **370** Visually Modulated Endogenous Activity: A component of active visual processing, *Erich E. Sutter*

9:45 **371** The topography of the human lateral geniculate nucleus and superior colliculus as revealed by superresolved fMRI *Keith A Schneider, Sabine Kastner*

TALK SESSION

Sunday, May 8, 8:30 - 10:00 am, Hyatt South Hall

Natural Images

Moderator: Jochen Triesch

8:30 **372** Independence of gain control mechanisms in early visual system matches the statistics of natural images *Valerio Mante, Robert A Frazor, Vincent Bonin, Wilson S Geisler, Matteo Carandini*

8:45 **373** Learning Efficient Codes for Natural Images by Combining Intrinsic and Synaptic Plasticity *Jochen Triesch*

9:00 **374** Learning Visual Representations with Projection Pursuit *Dana H Ballard, Constantin Rothkopf*

9:15 **375** Fixational Instability and Natural Scene Representation *Michele Rucci, Antonino Casile*

9:30 **376** Image Statistics and Reflectance Estimation *Lavanya Sharan, Yuanzhen Li, Edward H Adelson*

9:45 **377** Rapid animal detection in natural scenes: critical features are local *Felix A Wichmann, Pedro Rosas, Karl R Gegenfurtner*

TALK SESSION

Sunday, May 8, 10:15 - 11:45 am, Hyatt North Hall

Face Recognition**Moderator: Isabel Gauthier**

10:30 **378** Temporal dissociation of spatial attention and competition effects between face representations *Corentin Jacques, Bruno Rossion*

10:45 **379** How holistic processing is affected by working memory load *Isabel Gauthier, Olivia S.-C. Cheung*

11:00 **380** Accuracy in face recognition: Better performance for face identification with changes in identity and caricature but not with changes in sex *Isabelle Buelthoff, Fiona N. Newell*

11:15 **381** Three-dimensional shape and surface reflectance contributions to opponent-based face identity adaptation *Alice J O'Toole, Fang Jiang, Volker Blanz*

11:30 **382** The Use of Afterimages in the Study of Categorization of Facial Expressions *M D Rutherford, Monica Chattha*

TALK SESSION

Sunday, May 8, 10:15 - 11:45 am, Hyatt South Hall

Perception and Action**Moderator: Jody Culham**

10:15 **383** Don't bite the hand that feeds you: A comparison of mouth and hand kinematics *Derek J Quinlan, Melvyn A Goodale, Jody C Culham*

10:30 **384** Sources of information for catching balls *Neil N Mennie, Mary M Hayhoe, Noah Stupak, Brian Sullivan*

10:45 **385** Selecting and pointing: Consecutive serial processing? *Joo-Hyun Song, Ken Nakayama*

11:00 **386** Heading toward distant targets: optic flow and the recalibration of visual direction *Brian J Rogers, Oliver E Spencer*

11:15 **387** Does Perceptual-Motor Recalibration of Locomotion Depend on Perceived Self Motion or the Magnitude of Optical Flow? *William B. Thompson, Betty J. Mohler, Sarah H. Creem-Regehr*

11:30 **388** MSTd Population Responses Account for the Eccentricity Dependence of Heading Discrimination Thresholds *Gregory C DeAngelis, Yong Gu, Dora E Angelaki*

POSTER SESSION DSunday, May 8, 8:30 - 1:30 pm, Municipal Auditorium
Authors present: 12:00 - 1:30 pm**Emotional and Social Influences on Attention**

D1 **389** Emotion in visual search: The selection of affective faces for awareness *Michael G Reynolds, Alexandra Frischen, Cory Gerritsen, Daniel Smilek, John D Eastwood*

D2 **390** Effects of anxiety on attention and visual memory *Michael Tuller, Jeannine Pinto*

D3 **391** Differential adaptation to face identity and emotional expression in the near absence of attention *Shinsuke Shimojo, Farshad Moradi, Christof Koch*

D4 **392** Spatial attentional cuing effects on emotional evaluation of faces *Helena J.V. Rutherford, Brian A. Goolsby, Jane E. Raymond, Raymond M. Klein*

D5 **393** How Persistent is Attentional Modulation of Affective Evaluation? *Nikki Westoby, Jane E Raymond*

D6 **394** Emotional Valence and the Attentional Blink: The Impact of Meaning on Detection *Michael E Silverman, Jon Lam, Michal Safier, Leslie D Delfiner, Emily Stern, David Silbersweig*

D7 **395** Social context influences gaze-following and neuronal activity in macaque area LIP *Robert O Deaner, Stephen V Shepherd, Michael L Platt*

D8 **396** The interaction of body and gaze cues in directing attention *Daniel Kim, Melanie Palomares, Howard Egeth*

D9 **397** Perception of other's action influences performance in Simon task *Sachiko Takahama, Takatsune Kumada, Jun Saiki*

D10 **398** Action Simulation influences Personality Judgments *Patric Bach, Steven P Tipper*

D11 **399** Conversation Limits Attention: The Impact of Conversation Complexity *Jeff Dressel, Paul Atchley*

3D Cue Integration

D12 **400** Irrelevant boundaries disrupt the short-term storage of visual information *Steven Kies, Charles Chubb*

D13 **401** Early Temporal Dynamics of Cue Combination for Slant from Stereo and Texture *Benjamin T Backus, James M Hillis, Jesse Frumkin, Jeffrey A Saunders*

D14 **402** Cue combination: compulsion and the effects of asynchrony *Christa M. van Mierlo, Eli Brenner, Jeroen B.J. Smeets*

D15 **403** Modeling dynamic re-weighting in visual cue integration *Bo Hu, David Knill, Christopher Brown*

D16 **404** Combining Slant Information from Disparity and Texture: Is Fusion Mandatory? *Ahna R Girshick, Martin S Banks*

D17 **405** Adaptation to the relation between visual cues affects perception of 3D shape *Corrado Caudek, Fulvio Domini*

D18 **406** Cue use under full cue conditions cannot be inferred from use under controlled conditions *Geoffrey P Bingham, Mark Mon-Williams, Behnez Jarrahi, Roy Vinner*

D19 **407** The effects of color segregation on the recovery of 3-D structure from motion *Eiji Kimura*

D20 **408** Depth from shading and disparity in humans and monkeys *Ying Zhang, Peter H. Schiller, Veronica S. Weiner, Warren M. Slocum*

Attention, Learning, and Memory

D21 **409** Short and Long Term Learning in Visual Search: An Unexpected Interference *Rachel S Sussman, Yuhong Jiang*

D22 **410** Long-term gaze cueing effects: Evidence for retrieval of prior attentional states from memory *Alexandra Frischen, Steven P Tipper*

D23 **411** Scene-Specific Memory Guides the Allocation of Attention in Natural Scenes *Mark W. Becker, Andrew Sims*



- D24 **412** Eye Movements in Episodic Memory, *Linus Holm, Timo Mäntylä*
- D25 **413** When We Use the Context in Contextual Cueing: Evidence From Multiple Target Locations *Melina A Kunar, Kristin O Michod, Jeremy M Wolfe*
- D26 **414** The repetition of object identities modulates attentional guidance in visual search *Masahiko Terao, Hirokazu Ogawa, Akihiro Yagi*
- D27 **415** Effects of scene-based contextual guidance on search *Mark B. Neider, Gregory J. Zelinsky*
- D28 **416** Implicit and Explicit Memory in Scene Based Contextual Cueing *Li-Wei King, Won-Mok Shim, Yuhong Jiang*
- D29 **417** Little is remembered about rejected distractors in visual search *Matthew S Peterson, Melissa R Beck, Walter R Boot, Miroslava Vomela, Arthur F Kramer*
- D30 **418** Memory Models of Visual Search - Searching in-the-head vs. in-the-world? *Hansjörg Neth, Wayne D. Gray, Christopher W. Myers*
- D31 **419** Competing attention vectors can produce the appearance of memory-free visual search *Emily Skow, Mary A. Peterson*
- D32 **420** Vision Leaves Its Fingerprints on Memory: Recognition and Identification Memory for Compound Gratings *Yuko Yotsumoto, Michael J Kahana, Robert Sekuler*
- D33 **421** Is long-term inhibition of return caused by perceptual mismatch processes? *Helen M Morgan, Steven P Tipper*
- D34 **422** Visual statistical learning through intervening noise *Justin A. Junge, Nicholas B. Turk-Browne, Brian J. Scholl*
- D35 **423** Interactions between long-term visual working memory and attention *Donald A Varakin, Daniel T Levin*
- D36 **424** The effects of familiarity on encoding efficiency in visual search *Robert Rauschenberger, Hengqing Chu*
- D37 **425** Brief stimuli that evoke false memories seem to last longer *Fuminori Ono, Jun Kawahara*
- D38 **426** Visual Working Memory as the Substrate for Mental Rotation *Joo-seok Hyun, Steven J. Luck*
- D39 **427** The Role of Attention in Binding Features in Visual Working Memory *Jeffrey S. Johnson, Andrew Hollingworth, Steven J. Luck*
- D40 **428** Attention and Memory in Air Traffic Control Tasks *Jing Xing, Lawrence L Bailey*

Visual Neurons: Properties

- D41 **429** Dynamics of Spatial Frequency Tuning in Lateral Geniculate Nucleus *Robert A Frazor, Valerio Mante, Vincent Bonin, Matteo Carandini*
- D42 **430** Characterizing V1 Population Responses to Superimposed Gratings *Sean P. MacEvoy, Thomas R. Tucker, David Fitzpatrick*

- D43 **431** Response-contrast functions for multifocal visual evoked potentials (mfVEP): A test of a model relating V1 activity to mfVEP activity *Donald C Hood, Quraish Ghadiali, Jeanie Zhang, Clara Lee, Xian Zhang*
- D44 **432** Delayed maturation of receptive-field center and surround in macaque V2 neurons *Bin Zhang, Jianghe Zheng, Ichiro Watanabe, Hua Bi, Earl L Smith, Yuzo M Chino*
- D45 **433** Disynaptic connections from the superior colliculus to cortical area MT revealed through transynaptic labeling with rabies virus *David C Lyon, Jonathan J Nassi, Edward M Callaway*
- D46 **434** Nonlinear Dynamical Characterization of Magnocellular Neural Population Response Variability *Elmar T Schmeisser, Robin R Vann, Adrienne J Williams*
- D47 **435** Multifocal VEP recordings can be used to identify the onset of cortical activity after visual stimulation for different parts of the visual field *Thomas Meigen, Mathias Krämer*

Eye Movements: Cognitive

- D48 **436** The influence of retinal smear on discrimination of single and surrounded moving letters *Nick Fogt, Troy D Bornhorst*
- D49 **437** Hand pointing is accurate following adaptation of saccadic gain *Teresa D Hernandez, Carmel A Levitan, Clifton M Schor, Martin S Banks*
- D50 **438** Center Blocks the Square: Eye Movements to Absent Objects Are Under Cognitive Control *Brendon B Hsieh, David E Irwin*
- D51 **439** Rapid goal-directed exploration of a scene: the choice between a Direct and a Pragmatic scan path *Naomi M Kenner, Aude Oliva*
- D52 **440** Do pursuit eye movements improve discrimination of object speed? *Carmel A Levitan, Paul R MacNeilage, Martin S Banks, Clifton M Schor*
- D53 **441** The Effect of Plaid Orientation on Pursuit of Partially-Predictable Motion *Jeffrey B Mulligan, Scott B Stevenson, Lawrence K Cormack*
- D54 **442** Version and vergence eye movements in mobile observers *Jeff B Pelz, Constantin A Rothkopf, Steven R Broskey*
- D55 **443** The effect of retinal jitter on referenced and un-referenced motion discrimination thresholds *Avesh Raghunandan, Jeremie Frazier, Siddharth Poonja, Austin Roorda, Scott B Stevenson*
- D56 **444** Attending to Original Object Location Facilitates Visual Memory Retrieval *David L Sacks, Andrew Hollingworth*
- D57 **445** Ocular Tracking Of Transiently Occluded Targets *PremNandhini Satgunam, Monica Chitkara, Nick Fogt*
- D58 **446** Do complex motor sets have the same effect on express saccades as simple ones? *David Shiu, Jay A Edelman*
- D59 **447** Orienting contributes to preference even in the absence of visual stimuli *Claudiu Simion, Shinsuke Shimojo*
- D60 **448** Visual persistence of saccade-induced image smear *Junji Watanabe, Susumu Tachi*

D61 **449** Is Gaze Selection Diagnostically Tuned for Spatial Frequency During Face Recognition? *Aaron M Pearson, John M Henderson*

D62 **450** Top-down and bottom-up influences on saccades in a visual search task *Brent R Beutter, Joseph Toscano, Leland S Stone*

D63 **451** Contrast dependence of smooth eye movements using superimposed transparent surfaces *Mazyar Fallah, John H. Reynolds*

D64 **452** Poor saccade control in a simple search task *Elisabeth M. Fine, Sergey Yurgenson, Cathleen M. Moore*

D65 **453** Infants' Motion Sensitivity Predicts Smooth Pursuit Performance but Fails to Predict Perceptual Completion *Cynthia Hall-Haro, Michael C. Frank, Scott P. Johnson*

Contrast

D66 **454** A New Psychophysical Test for the Rapid Measurement of Spatial Contrast Sensitivity in Infants and Young Children *Russell J Adams, Elyse S White, James R Drover, Avery E Earle, Mary L Courage*

D67 **455** Summation Processes in Contrast-Contrast *Pentti I Laurinen, Lynn A Olzak, Toni P Saarela*

D68 **456** Singularities in the inverse modeling of contrast discrimination and ways to avoid them *Mikhail Katkov, Tal Gan, Misha Tsodyks, Dov Sagi*

D69 **457** Spatial but no spectral limits on contrast conservation *Walter Makous, József Fiser, Peter J. Bex*

D70 **458** Neural Circuitry Revealed by Near-Threshold Transducer Nonlinearities *Leonid L Kontsevich, Christopher W Tyler*

D71 **459** Bayesian Adaptive Estimation of Threshold versus External Noise Contrast Functions *Luis A Lesmes, Simon Jeon, Zhong-Lin Lu, Barbara A Doshier*

D72 **460** Spatial and Temporal Determinants of Contrast Facilitation and Suppression *John R Cass, Branka Spehar, David Alais, Roberto Arrighi*

D73 **461** Characterizing contrast response functions measured with rapid event-related fMRI *Genevieve M Heckman, Kristen S Cardinal, Erin M Harley, Seth E Bouvier, Valerie A Carr, Stephen A Engel*

D74 **462** A Comparison of Behavioral Contrast Sensitivity with the Contrast Sensitivities of X and Y Geniculate Cells in the Awake Cat *Incheol Kang, Joseph Malpeli*

D75 **463** Laser Induced Fluorescence in the Human Lens *Peter A Smith, Leon N McLin, David E Kee, Brenda Novar, Paul Garcia*

Contour and shape

D76 **464** Different mechanisms encode the shapes of contours and contour-textures *Frederick A A Kingdom, Nicolaas Prins*

D77 **465** Detecting Curvature in First and Second-order Periodic Line Stimuli *Isabelle Legault, R my Allard, Jocelyn Faubert*

D78 **466** Neural Curvature Mechanisms for Shape Perception *Frederic JAM Poirier, Hugh R Wilson*

D79 **467** The Role of Local Position in the Detection of Contour Curvature *Nicolaas Prins, Frederick A.A. Kingdom*

D80 **468** Changes in orientation and position do not affect angle discrimination: shape does *Graeme J Kennedy, Harry S Orbach, Gunter Loffler*

D81 **469** Contour Shape Effects on Search Performance: Evidence for Constant Curvature Coding *Patrick Garrigan, Philip J. Kellman*

D82 **470** Manipulating contour smoothness: Evidence that the association-field model underlies contour integration in the periphery *Paul G Lovell*

D83 **471** Testing the limits of good continuation: does human vision extrapolate rate of change of curvature? *Manish Singh, Jacqueline M. Fulvio*

D84 **472** Closed-contour shapes encoded through deviations from circularity in lateral-occipital complex (LOC): an fMRI study *St phane J. Rainville, Grigori Yourganov, Hugh R. Wilson*

D85 **473** Contour Integration and Hyperacuity in Children with Dyslexia *Ann M. Skoczenski, Elizabeth F. Gramzow*

D86 **474** Can 6-Month-Old Infants Integrate Individual Elements to Discriminate Contours? *Thomas J Baker, Scott A Adler, James Tse, Peter Gerhardstein*

Spatial Vision 2

D87 **475** A theoretical framework for texture parameterization *Jonathan D Victor, Charles Chubb, Mary M Conte*

D88 **476** Modelling texture discrimination asymmetries using quadratic forms of random variables *Francois Xavier Sezikeye, Rick Gurnsey*

D89 **477** Modeling lateral interaction in fine spatial discriminations: The plot thickens *Lynn A. Olzak, Scott H. Gabree, Pentti I. Laurinen*

D90 **478** Noise does not shrink the summation region for grating detection *Yaniv Morgenstern, James Elder*

D91 **479** Paradoxical, Quasi-Ideal, Spatial Summation in the Modelfest Data *Stanley A. Klein, Christopher W. Tyler*

D92 **480** Psychophysical Inferences About the Interactions Within and Between Sub-Populations of Striate Neurons *Bruce C Hansen, Edward A Essock, Andrew M Haun*

D93 **481** A Statistics Toolbox for Classification Images *Fr d ric Gosselin, Alan Chauvin, Keith J Worsley, Philippe G Schyns, Martin Arguin*

D94 **482** Spatiotemporal templates for detecting 1st- and 2nd-order orientation- and luminance-defined targets *Masayoshi Nagai, Patrick J Bennett, Allison B Sekuler*

D95 **483** Noise detection: summation of high spatial frequency information *Christopher P Taylor, Patrick J Bennett, Allison B Sekuler*

D96 **484** Different Internal Noise but same Calculation Efficiency for Processing Luminance-modulated (LM) and Contrast-modulated (CM) Stimuli *R my Allard, Olivier Cr ach, Jocelyn Faubert*

D97 **485** Modeling the detection of blurred visual targets in non-homogeneous backgrounds *Albert J Ahumada, Bettina L Beard, Karen M Jones*

D98 **486** Modulation of the decision criterion by collinear lateral facilitation *Uri Polat, Dov Sagi*

D99 **487** Adaptation to astigmatic lens: effects on lateral interactions *Oren Yehezkel, Michael Belkin, Dov Sagi, Uri Polat*

D100 **488** Symmetry perception: a high-density ERP approach *Patrick J Bennett, Guillaume A Rousselet, Allison B Sekuler*

D101 **489** Identification of Luminance and Contrast Modulation Signatures in the Steady-State Visual Evoked Potential *Paul M Corballis, Nathan A Parks, Mary K Holder, Arthur G Shapiro*

TALK SESSION

Sunday, May 8, 3:45 - 5:30 pm, Hyatt North Hall

Motion: Cortical Mechanisms

Moderator: **J. Anthony Movshon**

3:45 **490** Retinotopic mapping of motion stimuli in human visual cortex *Hiroshi Ashida, Andrew T Smith*

4:00 **491** Global Form and Global Motion: Which Develops First in Infancy? VERP Evidence *Janette Atkinson, Deirdre Birtles, John Wattam-Bell, Oliver Braddick*

4:15 **492** Common mechanisms for processing of perceived, inferred, and imagined visual motion *Jonathan Winawer, Nathan Witthoft, Alex Huk, Lera Boroditsky*

4:30 **493** Retinotopy and its modulation by attention in higher cortical areas studied with structured motion stimuli *Ayse Pinar Saygin, Martin I Sereno*

4:45 **494** Relative timing of center and surround signals in motion revealed by temporal reverse correlation *Duje Tadin, Joseph S Lappin, Randolph Blake*

5:00 **495** Visual Motion Processing in a Direction Discrimination Task *Mehrdad Jazayeri, J. Anthony Movshon*

5:15 **496** Direction selective activity in prefrontal cortex during a working memory for motion task *Daniel Zaksas, Nicholas P LaMendola, Tatiana Pasternak*

TALK SESSION

Sunday, May 8, 3:45 - 5:30 pm, Hyatt South Hall

Perceptual Organization

Moderator: **Stephen Palmer**

3:45 **497** Non-bayesian contour synthesis *Barton L Anderson*

4:00 **498** Local and global features in Glass patterns are processed in different brain areas *Chien-Chung Chen, Gail H. Han*

4:15 **499** Perceptual Grouping Induces Real-Time Remapping of Retinotopy *Michael H Herzog, Haluk Ogmen*

4:30 **500** The hole paradox: Perceiving and remembering the shapes of intrinsic vs. accidental holes *Stephen E Palmer, Rolf Nelson*

4:45 **501** Dissociation of Color and Figure-Ground Effects in the Watercolor Illusion *Rudiger von der Heydt, Rachel Pierson*

5:00 **502** Combining Cues for Boundary Detection Using the "Mixture of Specialists" Model *Chunhong Zhou, Bartlett W Mel*

5:15 **503** Transporting Features *Thomas U. Otto, Michael H. Herzog*

POSTER SESSION E

Sunday, May 8, 2:00 - 7:00 pm, Municipal Auditorium

Authors present: 5:30 - 7:00 pm

Attentional Cuing and Capture

E1 **504** Attentional capture by color and onset singletons in search tasks *Satomi Amster, Allen L Nagy*

E2 **505** Attentional Capture by Unique Temporal Change *Adrian von Muhlenen, Mark I. Rempel, James T. Enns*

E3 **506** Attention capture alters motion discrimination *Lee P Lovejoy, Leanne Chukoskie, Richard J Krauzlis*

E4 **507** What kind of attention is controlled by irrelevant symbolic cues? *Bradley S. Gibson, Ted A. Bryant*

E5 **508** The modulation of attentional capture by behavioral relevance *Sherman S Chu, Jay A Edelman*

E6 **509** The Necessity of a Spatial Cue for the Capture of Attention by Abrupt Onsets *Michael S Ambinder, Daniel J Simons*

E7 **510** Active Suppression of Salient Visual Distractors for Uni-modal and Cross-modal Cues in Dual RSVP Tasks *Arash Sahraie, Maarten V Milders, Joanna K Murray, Michael Niedeggen*

E8 **511** It takes attention to capture attention *Doug Bemis, Steven Franconeri, George Alvarez*

E9 **512** Invisible interesting pictures can attract spatial attention *Yi Jiang, Fang Fang, Miner Huang, Sheng He*

E10 **513** What Drives Visual Saliency in Young Infants? *Zsuzsa Kaldy, Erik Blaser, Melissa Kibbe, Marc Pomplun*

E11 **514** Commonalities and differences between attentional cueing and iconic memory *Arni Kristjansson, Christian Ruff, Jon Driver*

E12 **515** An ideal observer approach to unifying set size and cueing effects for perceptual and saccadic decisions *Steven S Shimozaki, Wade Schoonveld, Miguel P Eckstein*

E13 **516** "Your first organization influences your second": Does attention stick to location, color, or both? Evidence from a priming paradigm *Michi Matsukura, Shaun P. Vecera*

3D Visual Processing

E14 **517** On the anisotropy in the perception of stereoscopic slant *Cornelia M Fermuller, Hui Ji*

E15 **518** Local surface slant determines perceived shape in pictures *Dhanraj Vishwanath, Ahna R Girshick, Martin S Banks*

E16 **519** Aging and the Perception of Surface Orientation *J. Farley Norman, Elizabeth Y Wiesemann*

E17 **520** The perception of symmetry in depth *Bart Farell*

E18 **521** Perceived size of stoplights: Further investigations into a failure of size constancy *Carl E. Granrud, Hillary R. Haynes, Ashley L. Juhl, Chris J. Miller, Christopher D. Sandbach*

E19 **522** Monocular and binocular perception of 3D shape: the role of a priori constraints *Yunfeng Li, Zygmunt Pizlo*

E20 **523** What can drawing tell us about our mental representation of shape? *Flip Phillips, Morgan W Casella, Brian M Gaudino*

E21 **524** Texture amplitude is a cue to perception of shape from shading *Andrew J Schofield, Gillian S Hesse, Mark A George-son*

E22 **525** Pictorial Relief in Equiluminant Images *Andrea J van Doorn, Huib de Ridder, Jan J Koenderink*

E23 **526** Orientation Fields in the Perception of 3D Shape *Roland W Fleming, Heinrich H Buelthoff*

E24 **527** Perception of Mirrored Objects *Ulrich Weiderbacher, Bayerl Pierre, Roland W Fleming, Heiko Neumann*

E25 **528** Lack of 'Presence' May be a Factor in the Underestimation of Egocentric Distances in Immersive Virtual Environments *Victoria L Interrante, Lee B Anderson, Brian Ries*

E26 **529** Discrimination of Possible and Impossible Objects in Early Infancy *Sarah M Shuwairi, Marc K Albert, Scott P Johnson*

Faces: Cognition and Brain

E27 **530** The Time-course of Basic- and Subordinate-level Categorization of Faces and Objects *Alan C.-N. Wong, Thomas J. Palmeri, Isabel Gauthier, James W. Tanaka*

E28 **531** How Holistic Processing is affected by Perceptual Load *Olivia S.C. Cheung, Isabel Gauthier*

E29 **532** Dissociating visual short-term memory and perceptual capacity for faces and objects *Kim M Curby, Isabel Gauthier*

E30 **533** Faces are processed holistically in the right middle fusiform gyrus *Christine Schiltz, Bruno Rossion*

E31 **534** Spatially restricted perceptual expertise for faces in a case of prosopagnosia *Cindy M Bukach, Daniel N Bub, Isabel Gauthier, Michael Tarr*

E32 **535** Own-race Face Effects in Processing of Configural and Component Information by Chinese observers *William G. Hayward, Gillian Rhodes, Chris Winkler, Adrian Schwaninger*

E33 **536** The temporal extent of holistic processing *Jedediah M Singer, David L Sheinberg*

E34 **537** A single recognition system for faces and objects in expertise-based experiments using synthetic stimuli *Jeounghoon Kim, Chobok Kim, Seong-Sill Moon, Hajung Jeon*

E35 **538** Neural bases of perceptual expertise in radiologists *Erin M Harley, Whitney B Pope, Pablo Villablanca, Stephen A Engel*

E36 **539** Face-selective "double-pulse" adaptation of the M170 response *Alison M Harris, Ken Nakayama*

E37 **540** Is holistic perception of faces specific to our own-race? *Caroline Michel, Roberto Caldara, Jaehyun Han, Chan-Sup Chung, Bruno Rossion*

E38 **541** Faces are "spatial"- Holistic perception of faces is subtended by low spatial frequencies *Valerie Goffaux, Bruno Rossion*

E39 **542** An "other-race" effect in perceptual expertise: The interaction between task and stimulus familiarity in bird experts *Chun-Chia Kung, Colin Ellis, Michael J Tarr*

E40 **543** Interaction of visual and auditory expertise in birders *Colin Ellis, Chun-Chia Kung, Michael J. Tarr*

E41 **544** Timecourse and Anatomy of Recognizing a Familiar Face *Thomas A Carlson, Mina Kim, Meike Grol, Dae-Shik Kim, Frans Verstraten*

E42 **545** The Influence of Holistic Information on Face Detection *Hyejean Suh, Kalanit Grill-Spector*

Inattentional Blindness

E43 **546** Visual short-term memory load induces inattentional blindness *Daryl Fougnie, James J. Todd, Renè Marois*

E44 **547** Perceptual Load Induces Inattentional Blindness *Ulla Cartwright-Finch, Nilli Lavie*

E45 **548** The effect of edge filtering on inattentional blindness *Henry L Apfelbaum, Doris H Apfelbaum, Russell L Woods, Eli Peli*

E46 **549** Why do we fail to perceive jump-cuts in motion pictures? *Ran Carmi, Laurent Itti*

E47 **550** Detecting Transient Changes in Dynamic Displays: The More You Look, The Less You See *Walter R Boot, Ensar Becic, Arthur F Kramer, Tate T Kubose, Douglas A Wiegmann*

E48 **551** Did you see that? Unexpected events and salience *John G. Jewell*

E49 **552** Failed change detection produces volatile short-term memory *Yankun Shen, Li-Wei King, Yuhong Jiang*

E50 **553** Change detection in normal, jumbled and inverted scenes *Daniel T Levin*

E51 **554** Implicit Change Detection: The Fat Lady Hasn't Sung Yet *Cédric Laloyaux, Axel Cleeremans*

E52 **555** Incidental Change Detection and Working Memory Load in a Dual-task Paradigm *Bonnie L. Angelone, Melissa R. Beck, Daniel T. Levin*

E53 **556** Method to Detect a Gist Change *Xandra van Montfort, Paul de Greef, Don Bouwhuis*

E54 **557** Threat Images Attenuate Change Blindness *January Massin, Arien Mack*

E55 **558** Distinguishing deficits in change detection from deficits in spatial attention in older adults *Harry S Orbach, Ross M Henderson, Gordon N Dutton, Daphne L McCulloch, Fiona Gilchrist, Alan Conway*

Lightness and Surfaces

E56 **559** The Perception of Light Fields in Empty Space *Jan J Koenderink, Andrea J van Doorn, Astrid M L Kappers, Sylvia C Pont, James T Todd*

E57 **560** Humans perform brightness task under glare condition using ratio matching *Luis A Issolio, Elisa M Colombo*

E58 **561** Exploring the Spatiotemporal Dynamics of Brightness Perception by Reverse Correlation *Ilmari Kurki, Aapo Hyvärinen, Pentti I Laurinen*

E59 **562** Edge integration and anchoring in lightness perception: Further evidence against the highest luminance rule *Michael E Rudd, Iris K Zemach, Amanda Heredia*

E60 **563** White's effect: removing the junctions but preserving the strength of the illusion *Margaret S Livingstone, Piers D Howe*

E61 **564** Effect of late visual information processing on simultaneous lightness contrast *Hae-Rim Son, Hyung-Chul O. Li*

E62 **565** Semi-Transparent Layers Enhance the Simultaneous Lightness Contrast *Alessandro Soranzo, Carlo Fantoni*

E63 **566** Elongations Near Intensity Maxima: A Cue For Shading? *Michael S Langer, Daria Gipsman*

E64 **567** Combining achromatic and chromatic cues to transparency *Jacqueline M. Fulvio, Manish Singh, Laurence T. Maloney*

E65 **568** Imperfect Scission in Achromatic Transparency *Simone Gori*

E66 **569** Change in illuminant direction alters perceived surface roughness *Yun-Xian Ho, Michael S Landy, Laurence T Maloney*

E67 **570** Image statistics as a determinant of reflectance perception *Isamu Motoyoshi, Shin'ya Nishida, Edward H Adelson*

Modal and Amodal Completion

E68 **571** Backward masking of illusory contours or their inducers depends on timing *Barbara Dillenburger, Christian Wehrhahn*

E69 **572** Tolerance for misalignment in contour interpolation: retinal or relational? *James D Hilger, Philip J Kellman*

E70 **573** Illusory shape pop out: Effects of perceptual learning *Shaul Hochstein, Anna Barlasov, Maya Weinstein*

E71 **574** Modes of Darkness Appearance: The Blacker-Than-Black Effect *John S. Werner, Baingio Pinna, Lothar Spillmann*

E72 **575** Amodal Completion Improves Perception of Illusory Contours Defined by Motion *Josè F Barraza, Vincent J Chen*

E74 **577** How Are Complex Stereograms That Define Partially Occluded Surfaces Amodally Completed In Depth? *Liang Fang, Stephen Grossberg*

E75 **578** The effect of occlusion on amodal completion and surface slant perception *Baoxia Liu, Clifton M. Schor*

Eye Movements: Physiology and Mechanisms

E76 **579** Saccadic modulation of activity in human LGN and V1 *Richard Sylvester, John-Dylan Haynes, Geraint Rees*

E77 **580** Activity of superior colliculus neurons during parafoveal pursuit *Ziad M Hafed, Richard J Krauzlis*

E78 **581** Interaction Between Visual and Prior Information on Superior Colliculus Neurons *Dorion B Liston, Richard J Krauzlis*

E79 **582** Vector Subtraction and Eye Position Gainfields in Macaque Frontal Eye Field *Carlos Cassanello, Vincent P Ferrera*

E80 **583** Incomplete suppression of distractor-related activity in frontal eye field results in curved saccades *Robert M McPeck*

E81 **584** Motivational Scaling of Visual Responses in Macaque Area LIP *Michael S Bendiksy, Michael L Platt*

E82 **585** Saccade direction information appears earlier in the caudate nucleus than the frontal eye fields and prefrontal cortex during conditional visuomotor learning *Anitha Pasupathy, Earl K Miller*

E83 **586** Two components of oculomotor pursuit isolated by covariance based methods *Jeremy B. Wilmer, Ken Nakayama*

E84 **587** Effects of Structured Backgrounds on the Latency of Saccadic Eye Movements *Brian J White, Karl R Gegenfurtner, Dirk Kerzel*

E85 **588** Signal Timing and Hemispheric Localization in the Human Saccadic System: Preparatory Processes and the Sensorimotor Transformation for Antisaccades *So Young Moon, Matthew S Cain, Frida E Polli, Jason J Barton, Dara S Manoach*

E86 **589** The structure of fixational eye movements during turning gaze path *Ilpo V Kojo, Mikko Berg, Jaana Simola, Jukka Häkkinen*

E87 **590** Radial-flow vergence eye movements depend critically on the local Fourier components of the motion stimulus *Yasushi Kodaka, Boris M. Sheliga, Edmond J. FitzGibbon, Frederick A. Miles*

E88 **591** The structure of fixational eye movements during straight gaze path *Mikko Berg, Ilpo Kojo, Jaana Simola, Jukka Häkkinen*

E89 **592** Miniature eye movements measured simultaneously with ophthalmic imaging and a dual-Purkinje image eye tracker *Scott B Stevenson, Austin Roorda*

E90 **593** A pulse-step mismatch model of dynamic ocular disaccommodation *Clifton M Schor, Shrikant R Bharadwaj*

E91 **594** Opposing motion aftereffects and storage in the eye movement system *Scott N J Watamaniuk, Stephen J Heinen*

E92 **595** Guidance of eye movements by vision and hand *Martin Stritzke, Julia Trommershauser*

E93 **596** A General Purpose System for Eye Movement Contingent Display Control *Fabrizio Santini, Gabriel Redner, Ramon Iovin, Michele Rucci*

Natural Images

E94 **597** Magnification Factors in a V1 Model of Natural-Image Discrimination *Caterina Ripamonti, David J Tollhurst, George Lovell, Tom Troscianko*

E95 **598** The Effects of Natural Scenes and Saccades on V1 Orientation Selectivity *Gideon Y. Shalev, Michael A. Paradiso*

E96 **599** Contrast Gain Control in Natural Images *Peter J Bex, Isabelle Mareschal, Steven C Dakin*

- E97 **600** Perceptually Based Range Compression for High Dynamic Range Images *Yuanzhen Li, Lavanya Sharan, Edward H Adelson*
- E98 **601** Natural images and the McCullough effect *Diana L Chang, Rebecca W Stone, Benjamin T Backus*
- E99 **602** A Method of Estimating the Information Content of Natural Scenes *David J Field, Damon M Chandler*
- E100 **603** Contrast statistics for foveated visual systems: Contrast constancy and fixation selection *Raghu Raj, Wilson S. Geisler, Robert A. Frazor, Alan C. Bovik*
- E101 **604** Classification of Natural Scenes Using Global Image Statistics *Jan Drewes, Felix Wichmann, Karl R Gegenfurtner*
- E102 **605** Spatial frequency streams in natural scene categorization *Alan Chauvin, Daniel Fiset, Catherine Ethier, Karine Tadros, Martin Arguin, Frederic Gosselin*
- E103 **606** Disparity statistics in the natural environment *Lawrence K. Cormack, Yang Liu, Alan C. Bovik*
- E104 **607** Processing of image statistics with and without segmentation cues *Mary M. Conte, Sela Han, Jonathan D. Victor*
- E105 **608** Distribution of Velocities in Movies from Natural Human Settings *Miguel O. Martínez Rach, Francisco M. Martínez Verdu, Norberto M. Grzywacz, Rosario M. Balboa*
- E106 **609** Perception of Temporally-filtered Moving Natural Images *Tatsuto Takeuchi, Karen K De Valois, Harumi Saito*

Visual Working Memory

- E107 **610** Posterior parietal cortex activity predicts individual differences in visual short-term memory capacity *James J Todd, Renè Marois*
- E108 **611** Representing objects in visual short-term memory: The roles of the human intra-parietal sulcus and the lateral occipital complex *Yaoda Xu, Marvin M. Chun*
- E109 **612** Involvement of the right inferior parietal lobule in shape retrieval is modulated by prior tactile experience with objects *Robyn T. Oliver, Emily J. Geiger, Brian C. Lewandowski, Sharon L. Thompson-Schill*
- E110 **613** Visual working memory for simple and complex visual stimuli *Hing Y Eng, Diyu Chen, Yuhong Jiang*
- E111 **614** Controlling the Contents of Visual Short-term Memory *Katherine Sledge, Ingrid R. Olson*
- E112 **615** Visual working memory for dynamic objects: Manipulations of motion and persistence in sequential change detection *Jonathan I. Flombaum, Brian J. Scholl*
- E113 **616** What's in an object file? Integral vs. separable features *Nicholaus S. Noles, Brian J. Scholl*
- E114 **617** The Binding of Features in Visual Short-term Memory *Brian R Levinthal, Michael S Ambinder, Laura E Thomas, Jessica Gosney, Brendon Hsieh, Gregory A Lipes, Ranxiao Frances Wang, James A Crowell, Daniel J Simons, David E Irwin, Arthur F Kramer, Alejandro Lleras*

- E115 **618** Similarity Does Not Produce Interference Between Visual Working Memory Representations *Po-Han Lin, Andrew Hollingworth, Steven J. Luck*
- E116 **619** Visual working memory consolidation is not slowed by concurrent maintenance *Geoffrey F Woodman, Edward K Vogel*
- E117 **620** Knowing When to Remember and When to Forget: Expected Task Relevance Controls Working Memory Use *Jason A Droll, Mary M Hayhoe*
- E118 **621** Relational information in visual short term memory: the structural gist *Helene L Gauchou, Juan R Vidal M., Catherine Tallon-Baudry, J. Kevin O'Regan*
- E119 **622** Capacity limits in visual short-term memory within and between hemifields for colors and spatial locations *Jean-Francois Delvenne*
- E120 **623** Visual Working Memory: Capacity is Dependent on Perceived, not Physical, Stimulus Complexity *Margaret C. Jackson, Jane E. Raymond*
- E121 **624** Interference between motion direction and color-shape in visual working memory capacity of multi-dimensional objects *Masahiro Kawasaki, Masataka Watanabe*
- E122 **625** Subitizing capacity is decreased when visual short-term memory capacity is exceeded *Jianyi Liu, Melanie Palomares, Carly Leonard, Howard Egeth*

Poster and Talk Sessions for Monday, May 9

TALK SESSION

Monday, May 9, 8:30 - 10:15 am, Hyatt North Hall

Goal-directed Hand Movements

Moderator: **Julia Trommershaeuser**

- 8:30 **626** Planning movements with partial knowledge of target location encoded as a spatial prior *Todd E Hudson, Michael S Landy, Laurence T Maloney*
- 8:45 **627** Detection and costs of force perturbations during visually-guided pointing movements *Knut Drewing, Julia Trommershaeuser*
- 9:00 **628** Visual feedback control of hand orientation in fast, goal-directed hand movements *David C Knill, Brian McCann*
- 9:15 **629** Optimal data fusion in the presence of sensorimotor transformation noise *Erik J Schlicht, Paul R Schrater*
- 9:30 **630** Human "parietal reach region" encodes visual stimulus coordinates, not movement direction, during reversing prism adaptation *J Doug Crawford, Juan Fernandez-Ruiz, Herb C Goltz, Joseph FX DeSouza, Tutis Vilis*
- 9:45 **631** Parietal cortex involvement in visually guided, non-visually guided, observed, and imagined reaching, compared to saccades *Flavia Filimon, Jonathan D Nelson, Martin I Sereno*

10:00 **632** Monkey Area V6A codes Reaching Movements in the Three Dimensional Peripersonal Space *Patrizia Fattori, Rossella Breveglieri, Nicoletta Marzocchi, Passarelli Laura, Claudio Galletti*

TALK SESSION

Monday, May 9, 8:30 - 10:00 am, Hyatt South Hall

Face Perception: Neural Mechanisms

Moderator: Galit Yovel

8:30 **633** Predicting Human Face Discrimination Performance and FFA Activation using a Computational Model of Face Neurons *Xiong Jiang, Tom Zeffiro, John VanMeter, Volker Blanz, Maximilian Riesenhuber*

8:45 **634** The FFA Shows a Face Inversion Effect That is Correlated With The Behavioral Face Inversion Effect *Galit Yovel, Nancy Kanwisher*

9:00 **635** Cortical Networks Mediating Face Familiarity and Identity in the Human Brain *Galia Avidan, Marlene Behrmann*

9:15 **636** Evidence for maturation of the fusiform face area (FFA) in 7 to 16 year old children *Golijeh Golarai, Dara G Ghahremani, Kalanit Grill-Spector, John D.E. Gabrieli*

9:30 **637** Behavioral and Electrophysiological Evidence for Configural Processing in Fingerprint Experts *Thomas A Busey, John R Vanderkolk*

9:45 **638** Preservation and impairment of featural and configural processing for faces as a result of prosopagnosia *Richard Le Grand, Cindy Bukach, Martha Kaiser, Daniel Bub, James Tanaka*

TALK SESSION

Monday, May 9, 10:30 - 12:15 pm, Hyatt North Hall

Attentional Selection and Tracking

Moderator: Alex Holcombe

10:30 **639** Top-down control over unconscious response priming through stimulus-specific gating *Edward Awh, Ulrich Mayr, Andrew Kohnen*

10:45 **640** Distinguishing pre-selection from post-selection processing limits using a moving window of selection *Patrick Cavanagh, Alex O. Holcombe*

11:00 **641** The neural site of attention matches the spatial scale of perception *Steven J Luck, Jens-Max Hopf, Kai Boelmans, Mircea A Schoenfeld, Nicolas Boehler, Jochem Rieger, Hans-Jochen Heinze*

11:15 **642** How does attention select and track spatially extended objects?: New effects of attentional concentration and amplification *Brian J. Scholl, George A. Alvarez*

11:30 **643** How Many Objects Can You Track?: Evidence for a Flexible Tracking Resource *George A Alvarez, Steven L Franconeri*

11:45 **644** Counting without individuals: Rapid parallel enumeration of sets implicates preattentive object files *Justin Halberda, Lisa Feigenson*

12:00 **645** Attentional tracking across display translations *Adriane E Seiffert*

TALK SESSION

Monday, May 9, 10:30 - 12:15 pm, Hyatt South Hall

Sensory Integration

Moderator: David Alais

10:30 **646** Motion parallax in movies: Background motion, eye movement signals, and depth *Mark Nawrot, Chad Stockert*

10:45 **647** Guiding The Eye With The Hand: Role Of Proprioception In Spatial Updating For Saccades *L Ren, A Z Khan, J D Crawford*

11:00 **648** Ames' Window, Vision, and Proprioception *Nicola Bruno, Alessandra Jacomuzzi, Raffaella Del Bello, Alessandro Dell'Anna*

11:15 **649** The ventriloquist illusion as an optimal percept *Ulrik R Beierholm, Steven R Quartz, Ladan Shams*

11:30 **650** Neural correlates of coherent audio-visual motion perception *Oliver Baumann, Mark W Greenlee*

11:45 **651** Seeing music, hearing gestures *Michael Schutz, Michael Kubovy*

12:00 **652** From Independence to Fusion: A Comprehensive Model for Multisensory Integration *Marc O. Ernst*

POSTER SESSION F

Monday, May 9, 8:30 - 2:00 pm, Municipal Auditorium

Authors present: 12:15 - 2:00 pm

Motion 2

F1 **653** Detection of motion-defined form in the presence of veiling noise *Robert S Allison, Todd Macuda, Sion Jennings, Paul Thomas, Pearl Guterman, Greg Craig*

F2 **654** Second-order motion shifts apparent position *David W Bressler, David Whitney*

F3 **655** Compression of Perceived Motion Trajectories *Rick H Cai*

F4 **656** The neural correlates of motion processing on the basis of trackable features *Gideon P Caplovitz, Po-Jang Hsieh, Peter U Tse*

F5 **657** Can the perception of causality be measured with representational momentum? *Hoon Choi, Brian J. Scholl*

F6 **658** The case of the misperceived saltire: oblique motion of two intersecting lines is biased *Gunter Loffler, Camilla McG Magnussen, Harry S Orbach, Gael E Gordon*

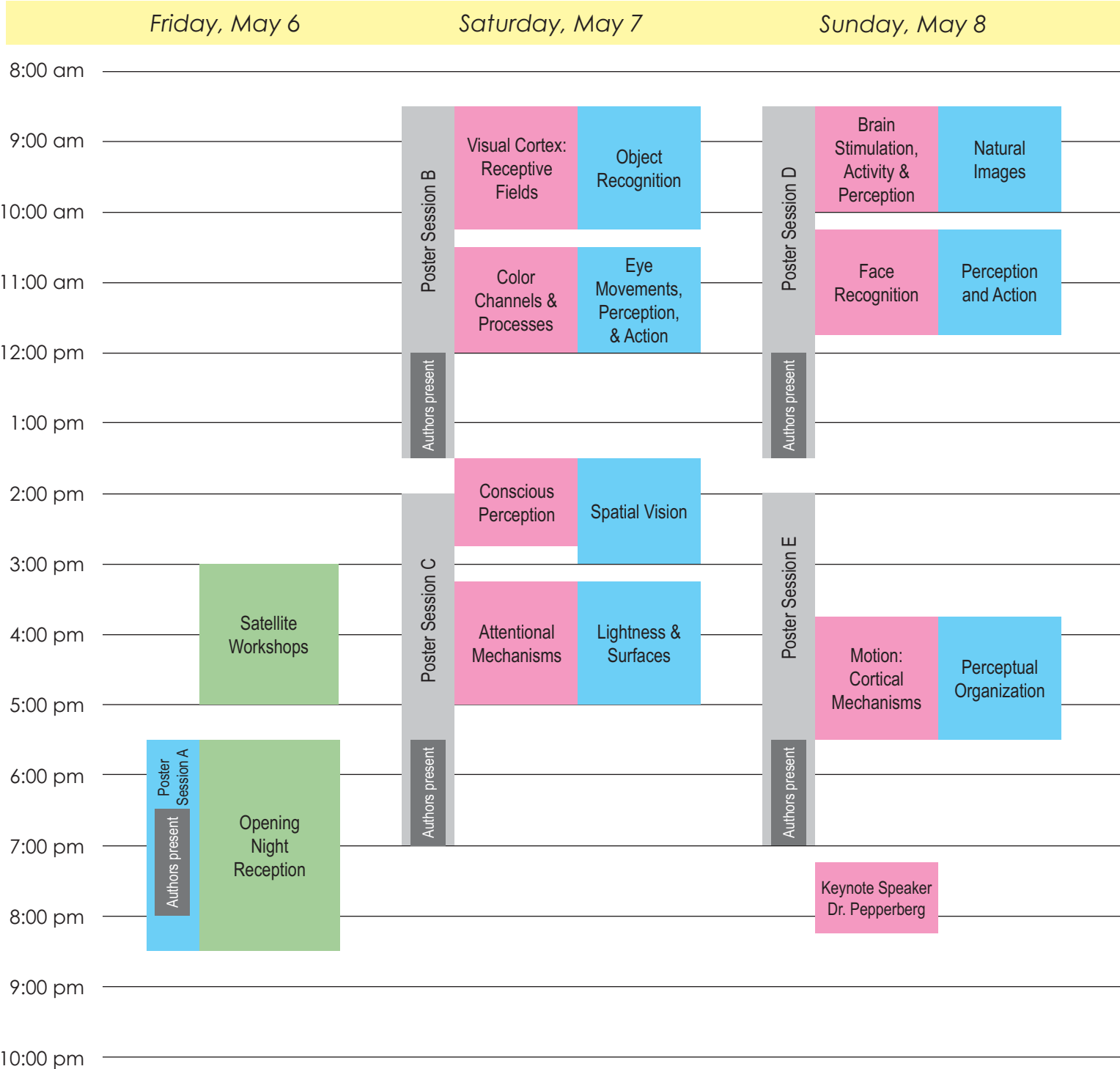
F7 **659** The Contributions of Edges and Surfaces to the Perception of Object Motion *David F Nichols, Howard S Hock*

F8 **660** Spin-orbit coupling in vision: Evidence from representational displacement *Yuki Yamada, Takahiro Kawabe, Kayo Miura*

F9 **661** Attention and Figure-Ground Segregation in a Model of Motion Perception *Pierre Bayerl, Heiko Neumann*

F10 **662** Neural Correlates of Illusory Motion Perception in the Pinna-Figure *Ursula Budnik, Oliver Speck, Christoph P Kaller, Kai Hamburger, Baingio Pinna, Juergen Hennig*

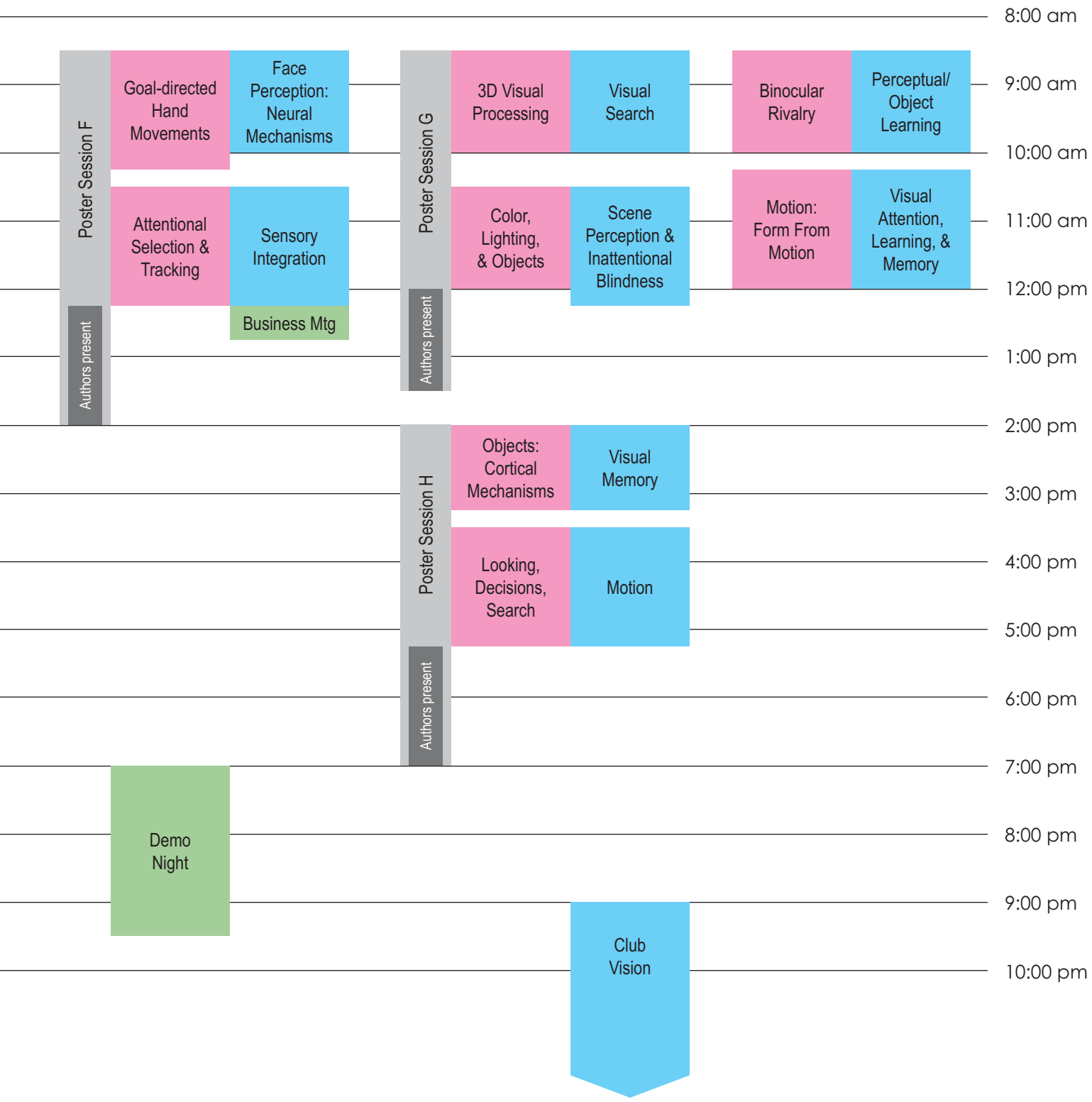
Schedule-at-a-Glance



Color Key: Hyatt North Hall Hyatt South Hall Municipal Auditorium Other (see program)



Monday, May 9 Tuesday, May 10 Wednesday, May 11



F11 **663** How the past gives way to the present: Evidence for Bayesian updating with repeated presentation of ambiguous motion quartets *Maria F. Dal Martello, Laurence T. Maloney, Cynthia Sahn, Lothar Spillmann*

F12 **664** Moving into adult vision: Five-year-olds' immaturities in detecting second-order motion versus discriminating its direction *Vickie L. Armstrong, Terri L. Lewis, Daphne Maurer*

F13 **665** Aging and the detection of motion direction in random-dot stimuli *Jeffrey D Bower, Rui Ni, George J Andersen*

F14 **666** Spatio-temporal Integration, Kinetic Occlusion and Aging *Rui Ni, George J. Andersen, Yingqiang Lin*

F15 **667** A differential origin-of-motion response in V1 for first-order, but not second-order stimuli as revealed by fMRI *Herbert C Goltz, David Whitney, Tuti Vilis*

F16 **668** Neural correlates of illusory motion perception: the influence of apparent motion on plaid motion aftereffects *Lajos R Kozak, Elia Formisano, Walter Backes, Joao Teixeira, Joao Xavier, Rainer Goebel, Miguel Castelo-Branco*

F17 **669** Direction Tuning Curves of Motion Adaptation in the Visual Cortex Revealed by an Event-Related fMRI Study *Hyun-Ah Lee, Jae-Myung Jang, Sang-Hun Lee*

F18 **670** Perception of Motion Induction for Naturalistic Images in the Human Visual Cortex *James S McDonald, Zoe Kourtzi*

Neural Coding

F19 **671** Redundant populations of simple cells represent wavelet coefficients in monkey V1 *Charles H Anderson, Gregory C DeAngelis*

F20 **672** The Neural Code for Luminance *Zhiyong Yang, Dale Purves*

F21 **673** Shape Representation in V4: Investigating Position-specific Tuning for Boundary Conformation with the Standard Model of Object Recognition *Charles Cadieu, Minjoon Kouh, Maximilian Riesenhuber, Tomaso Poggio*

F22 **674** The Costs of Ignoring High-Order Correlations in Populations of Model Neurons *Melchi M Michel, Robert A Jacobs*

F23 **675** A Vectorial Model of Sensory Perception *Marcus V C Baldo*

F24 **676** Nonlinear Overcomplete Coding in Visual Cortex *Christoph Zetzsche, Ulrich Nuding, Kerstin Schill*

F25 **677** Synchronous activity in cat visual cortex encodes collinear and cocircular contours *Zhiyi Zhou, Jason M Samonds, Melanie R Bernard, A B Bonds*

F26 **678** An integration model for detection and quantification of synchronous firing within cell groups *Melanie R Bernard, Jason M Samonds, Zhiyi Zhou, A B Bonds*

F27 **679** Latency Derived Receiver Operating Characteristics Support a Neural Integration Model of Decision Making *James L. Alford, Richard T. Marrocco*

Neural Mechanisms and Models of Attention

F28 **680** Persistent neuronal activity for remembered visual targets in macaque posterior cingulate cortex *Heather L Dean, Michael L Platt*

F29 **681** The time course of sensory amplification by feature-based attention: a direct measure on frequency-tagged evoked responses *Maximilien Chaumon, Juan R. Vidal, Laurent Hugueville, Catherine Tallon-Baudry*

F30 **682** Are photoreceptors in the attention spotlight? Efferent neuromodulators accelerate and/or retard the time course of photoreceptor responses evoked by light *Amanda R. Bolbecker, Corrinne C.M. Lim, Jia Li, Vincent Traverso, Ashley Orchard, Crisanka S. Christadoss, Jalpa Brahmabhatt, Kathryn E. Beck, Adrienne R. Lewis, Jennifer Fleet, Kenneth W. Carlson, Christopher Hoyt, Marcus D. Collins, Jr., Alicia Swan, Gerald S. Wasserman*

F31 **683** The effect of attention and contrast on the BOLD response in V1 and beyond *Xian Zhang, John Ferrera, Donald C Hood, Joy Hirsch*

F32 **684** Differential visual cortex activity associated with common-onset and delayed-onset masks *Sebastien Marti, Francois Richer*

F33 **685** Using Psilocybin to Investigate the Relationship Between Attention, Working Memory and the Serotonin 5-HT1A and 5-HT2A Receptors *Olivia L Carter, David C Burr, John D Pettigrew, Franz X Vollenweider*

F34 **686** Temporary bilateral deficit of transient visual attention after right inferior parietal lobe surgery. a single case study *Lorella Battelli, Patrick Cavanagh, Donald L Schomer, Jason JS Barton*

F35 **687** Attention and Competitive Decision Making *Timothy J. Vickery, Yuhong Jiang*

F36 **688** Contrast gain vs. response gain: Do sustained and transient covert attention exhibit different signature responses? *Sam Ling, Marisa Carrasco*

F37 **689** Is Stochastic Simulation a Suitable Geostatistical Method for the Study of Visual Attention? *Luiz Henrique M Canto-Pereira, Marcelo M Rocha, Ronald Ranvaud*

F38 **690** Characterizing Attention in terms of changes of Decision Criterion and Sensitivity *Andrei Gorea, Dov Sagi*

F39 **691** Multiplicative visual attention model can account for attentional modulation on STA power spectrum *Takahiko Koike, Jun Saiki*

Orienting and Eye Movements

F40 **692** Goal-directed Attentional Orienting in Patients with Dorsal Parietal Lesions *Sarah Shomstein, Marlene Behrmann*

F41 **693** A contrast polarity heterogeneity effect in infant visual orienting *James L Dannemiller*

F42 **694** Components of Bottom-Up Gaze Allocation in Natural Scenes, *Robert J Peters, Asha Iyer, Christof Koch, Laurent Itti*

F43 **695** Toward a method of objectively determining scan-path similarity *Christopher W. Myers*



F44 **696** Exogenous and Endogenous Attention Shifts during Smooth Pursuit Eye Movements *Nathalie E. Ziegler, Dirk Kerzel*

F45 **697** Can target selection for saccades use separate foci of attention in the two hemispheres? *Josh Wallman, Laurent Madelain, Rich Krauzlis*

F46 **698** Attention Modulates Saccade Latency but not Kinematics *Aarlenne Z Khan, J Douglas Crawford, Julio M Martinez-Trujillo*

F47 **699** Microsaccadic eye movements during ocular pursuit *Li Jie, James J Clark*

F48 **700** Eye movement statistics for optimal, sub-optimal and human visual searchers *Jiri Najemnik, Wilson S. Geisler*

F49 **701** Eye dominance effects in feature search *Einat Shneur, Shaul Hochstein*

F50 **702** Collaborative search using shared eye gaze *Gregory J. Zelinsky, Christopher A. Dickinson, Xin Chen, Mark B. Neider, Susan E. Brennan*

Bistable Perception

F51 **703** Temporal Dynamics of Bistability in Motion Transparency *Katherine McArthur, Pascal Mamassian*

F52 **704** Ambiguous Figures: Effects of ISIs in discontinuous stimulus presentation on EEG components *Kornmeier Juergen, Bigalke Heiko W, Bach Michael*

F53 **705** When your brain decides what you see: grouping across monocular, binocular and stimulus rivalry *Joel Pearson, Colin W.g. Clifford*

F54 **706** The role of eye movements in bistability from perceptual and binocular rivalry and the role of voluntary control *Loes CJ van Dam, Raymond van Ee*

F55 **707** Rapid plasticity determines the percept for a forthcoming bistable stimulus *Ryota Kanai, Frans A J Verstraten*

F56 **708** Mutual Information and Stochastic Resonance in Multistable Percepti *Keith D White*

F57 **709** Visual Awareness and Voluntary Control *Raymond van Ee*

Perceptual Learning 1

F58 **710** Training-Induced Improvements of Visual Motion Perception after V1 Cortical Damage in Humans *Krystel R. Huxlin, Jennifer Williams, Brian Sullivan, Mary Hayhoe*

F59 **711** Learned categorical perception specific to retinal location and orientation *Leslie A Notman, Paul T Sowden*

F60 **712** Identical Transfer of Perceptual Learning Following Easy and Difficult Task Training *Pamela E Jeter, Barbara A Doshier, Alexander A Petrov, Zhong-Lin Lu*

F61 **713** Perceptual learning of motion discrimination with suppressed and un-suppressed MT *Ben Thompson, Hongjing Lu, Zili Liu*

F62 **714** Learning to identify letters: Generalization in high-level perceptual learning *Jordan W. Suchow, Denis G. Pelli*

F63 **715** Subliminal Perceptual Learning of Motion Results in Improvements of Critical Flicker Fusion Thresholds *Jose E Nanez, Aaron R Seitz, Steven R Holloway, Takeo Watanabe*

F64 **716** Task specific disruption of perceptual learning *Noriko Yamagishi, Aaron R Seitz, Birgit Werner, Mitsuo Kawato, Takeo Watanabe*

Lateral Interactions and Filling-In

F65 **717** Filling-in of the blind spot: How much information is needed? *Tobias Otte, Lothar Spillmann, Kai Hamburger, Florian Br.ning, Andreas Mader, Svein Magnussen*

F66 **718** The primary visual cortex fills in color *Yuka Sasaki, Takeo Watanabe*

F67 **719** Facilitation of perceptual filling-in for spatio-temporal frequency of dynamic textures *Masae Yokota, Yasunari Yokota*

F68 **720** Ability of contours to block rapid color filling-in is dependent on global configuration *Daw-An Wu, Ryota Kanai, Shinsuke Shimojo*

F69 **721** Color assimilation: Dependence of watercolor spreading on contour luminance contrast and stimulus width *Frederic Devinck, Peter B Delahunt, Joseph L Hardy, Lothar Spillmann, John S Werner*

F70 **722** Texture Fading Correlates With Neuronal Response Strength *Lothar Spillmann, Catherine Hindi-Attar, Florian Leinenkugel, Kai Hamburger*

F71 **723** Collinear facilitation is largely due to uncertainty reduction *Preeti Verghese, Yury Petrov, Suzanne P. McKee*

F72 **724** Transfer of noise over long distances *Petar Mihaylov, Velitchko Manahilov, William A. Simpson, Niall C. Strang*

F73 **725** Assymetrical long-range interaction reversed with adaptation to upside-down reversed optical transformation *Tomoe Hayakawa, Yasuto Tanaka, Satoru Miyauchi, Masaya Misaki, Takara Tashiro*

F74 **726** Asymmetrical long-range interaction between upper and lower visual hemifields *Yasuto Tanaka, Satoru Miyauchi, Masaka Misaki, Tomoe Hayakawa, Takara Tashiro*

F75 **727** Contrast detection thresholds of Gabor strings: configuration dependency *Dov Sagi, Annat Judelman, Yoram Bonne*

Motion in Depth 2

F76 **728** The Contribution of Disparity to Motion Contrast Segmentation *Finnegan J Calabro, Scott A Beardsley, Lucia M Vaina*

F77 **729** Phenomena of the asymmetric process of visual perception for dilating and contracting size-changing objects in different time limited conditions *Sergey L. Artemenkov*

F78 **730** Multiphasic Impulse Response for 2D Longitudinal Motion *Joseph E Barton, Theodore E Cohn*

F79 **731** Depth perception from intermittent motion parallax stimuli *Kenchi Hosokawa, Satoko Ohtsuka, Takao Sato*

F80 **732** The effect of luminance contrast and stroboscopic presentation on the threshold for the discrimination of approach from withdrawal *Albert Yonas, Lee Zimmerman, Hweon Seo, Amelia J Alexander, Annie S Olinick, Sara Z Polley*

F81 **733** The Axis of an American Football Leads Observers to Misjudge Where it is Headed *Michael K McBeath, Igor N Dolgov, Thomas G Sugar*

F82 **734** Aftereffects of motion in depth based on binocular cues *Yuichi Sakano, Robert S Allison, Ian P Howard*

F83 **735** Perceiving Time to Collision Activates Sensorimotor Cortex *David T Field, John P Wann*

F84 **736** Walking and the Role of Speed in the Perception of Time to Contact *Paul H Thibodeau, Duncan J Gromko, Frank H Durgin*

Object Recognition

F85 **737** Numerical representation in four lemur species *Laurie R Santos, Jennifer Barnes, Neha Mahajan*

F86 **738** Evidence of kind representations in the absence of language from two monkey species *Webb Phillips, Maya Shankar, Laurie R Santos*

F87 **739** Project DYLAN: Modeling the development of visual object concepts *Pawan Sinha, Benjamin Balas, Yuri Ostrovsky*

F88 **740** Invariant Object Learning and Recognition Using Active Eye Movements and Attentional Control *Arash Fazl, Stephen Grossberg, Ennio Mingolla*

F89 **741** Against Image-Based Theories of Shape Recognition *Zili Liu, Hongjing Lu*

F90 **742** Differential fMRI activity produced by variation in parts and relations during object perception *Kenneth J Hayworth, Irving Biederman*

F91 **743** fMRIa to complementary, contour-deleted images of objects *Irving Biederman, Kenneth J Hayworth*

F92 **744** Standard Model v2.0: How Visual Cortex Might Learn a Universal Dictionary of Shape Components *Thomas Serre, Tomaso Poggio*

F93 **745** Mixture of view-invariant and view-dependent representations in human object-selective cortex *David R. Andresen, Kalanit Grill-Spector*

F94 **746** The emergence of object size invariance in the human visual cortex *Scott O Murray, Huseyin Boyaci, Daniel J Kersten*

F95 **747** The Role of Polar Features in Visual Object Constancy *E. Charles Leek, Stephen J. Johnston*

F96 **748** Paying Attention to Orientation: A Two-Stage Framework of Familiar Object Recognition *Irina M Harris, Paul E Dux*

Sensory Integration: Vision and Touch

F97 **749** Effects of effort and reduced visual cue information on perceived walking speed *Jonathan Z Bakdash, Jason S Augustyn, Dennis R Proffitt*

F98 **750** A hand in sight: How blindsight is improved by hand location *Liana E Brown, Grzegorz Kroliczak, Brooke A Halpert, Melvyn A Goodale*

F99 **751** Visuo-Spatial Alignment Produces an Instant Rubber Hand Illusion *Natalie Dunphy, Laurel Evans, Susan Klosternann, Frank H. Durgin*

F100 **752** Looking in the Mirror Does Not Prevent Multimodal Integration *Hannah B. Helbig, Marc O. Ernst*

F101 **753** Visual and Vestibular Factors in the Perception of Bodily Tilt *James G. May, Moira B. Flanagan, Gabrielle Foss, Philip Simoneaux, Thomas G. Dobie*

F102 **754** Effects of response type on visuotactile congruency effects *Sung Won Oh, Hyung-Chul O. Li*

F103 **755** Combining multi-modal information of a deformation of an object *Kohske Takahashi, Jun Saiki*

F104 **756** Touch-induced Visual Illusion *Artem Violentyev, Shinsuke Shimojo, Ladan Shams*

F105 **757** Aging and the Cross Modal Perception of Natural Object Shape *Hideko F Norman, J. Farley Norman, Molly Herrmann, Charles E Crabtree, Brandon K Moncreif, Noah W Kapley*

F106 **758** Blind Patients "See" Their Moving Hand In Darkness (Synesthesia) *Shai Azoulay, V.S. Ramachandran*

F107 **759** Gravitational signals contribute to visuospatial updating in humans *Eliana M Klier, Dora E Angelaki, Bernhard JM Hess*

Temporal Processing

F108 **760** Temporal resolution of the human visual system for processing color, orientation, and color/orientation conjunctions *Clara Bodelon, Mazyar Fallah, John H. Reynolds*

F109 **761** Nonlinear Neural Processing of Temporally Modulated Inducing Light *Anthony D D'Antona, Steven K Shevell*

F110 **762** Dynamics of contrast-gain controls in pattern vision *S. Sabina Wolfson, Norma Graham*

F111 **763** Feature Integration is Determined by the Temporal Order of Events *Frank Scharnowski, Michael H Herzog*

F112 **764** The role of temporal integration in backward masking *Gregory Francis*

F113 **765** The highs and lows of temporal integration in backward masking *Yang Seok Cho, Gregory Francis*

F114 **766** Visual Backward Masking: Feed-forward or Recurrent? *Frouke Hermens, Gediminas Luksys, Wulfram Gerstner, Michael H Herzog*

F115 **767** Spatially localised distortions of perceived duration *Alan Johnston, Derek H Arnold, Shin'ya Nishida*

F116 **768** Detection of dual flashing lights *Yoko Mizokami, Michael A Crognale*

F117 **769** How Do Motor Acts Change Time Perception? *David M Eagleman, Adnan N Lakhani, Chess Stetson*

F118 **770** Neural correlates of conscious flicker perception *David Carmel, Nilli Lavie, Geraint Rees*

F119 **771** Illusory reversal of action and sensation elicits neural conflict response *Chess Stetson, Xu Cui, P. Read Montague, David M. Eagleman*

Poster and Talk Sessions for Tuesday, May 10

TALK SESSION

Tuesday, May 10, 8:30 - 10:15 am, Hyatt North Hall

3D Visual Processing

Moderator: Laurie Wilcox

8:30 **772** D-max for stereopsis in human infants *Angela M Brown, Delwin T Lindsey, Jaime A Miracle, PremNandhini Satgunam*

8:45 **773** Random-dot stereopsis is highly immature in infants *Anthony M. M. Norcia, Chuan Hou*

9:00 **774** The contribution of binocular and monocular texture elements to depth ordering *Laurie M Wilcox, Richard P Wildes, Deepak Lakra, Rorrie A Spengler*

9:15 **775** Distance judgements based on Rayleigh Scattering: The detection of color changes with distance in blue-yellow opponent channels *Paul G. Lovell, Tom Troscianko, Carlos A. Parraga*

9:30 **776** Disparity and texture gradients are combined in a slant estimate and a homogeneity estimate *Martin S Banks, Johannes Burge, John E Schlerf*

9:45 **777** Functional Neuroanatomy for the Processing of 3D Shape from Shading and Texture in Humans *Svetlana S. Georgieva, James T. Todd, Ronald Peeters, Guy A. Orban*

TALK SESSION

Tuesday, May 10, 8:30 - 10:00 am, Hyatt South Hall

Visual Search

Moderator: Ruth Rosenholz

8:30 **779** A Surprise Theory of Early Attention *Laurent Itti, Pierre Baldi*

8:45 **780** A Computational Form of the Statistical Saliency Model for Visual Search, *Ruth Rosenholtz, Zhenlan Jin*

9:00 **781** Human and optimal eye movement strategies in visual search *Wilson S. Geisler, Jiri Najemnik*

9:15 **782** Visual search: The perils of rare targets *Jeremy M Wolfe, Naomi M Kenner, Todd S Horowitz*

9:30 **783** Features underlying visual search asymmetry revealed by classification images *Jun Saiki*

9:45 **784** Top-down Inhibition of the Response to an Irrelevant Popout Stimulus in Monkey Parietal Cortex *Anna E Ipatá, Angela L Gee, James W Bisley, Michael E Goldberg*

TALK SESSION

Tuesday, May 10, 10:30 - 12:00 pm, Hyatt North Hall

Color, Lighting, and Objects

Moderator: Anya Hurlbert

10:30 **785** Color appearance and the material properties of three-dimensional objects *Bei Xiao, Paul J Kanyuk, David H Brainard*

10:45 **786** Spatiochromatic statistics of natural scenes: First- and second-order information and their correlational structure *Aaron P. Johnson, Fredrick A.A. Kingdom, Adriana Olmos, Curtis L. Baker Jr.*

11:00 **787** Color Discrimination of Natural Objects *Thorsten Hansen, Karl R. Gegenfurtner*

11:15 **788** Representing Spatially and Chromatically Varying Illumination Using Spherical Harmonics in Human Vision *Katja Doerschner, Huseyin Boyaci, Laurence T Maloney*

11:30 **789** Representing the spatial and chromatic distribution of the illuminant in scenes with multiple punctate chromatic light sources *Laurence T Maloney, Huseyin Boyaci, Katja Doerschner*

11:45 **790** If it's a banana, it must be yellow: The role of memory colors in color constancy *Anya C Hurlbert, Yazhu Ling*

TALK SESSION

Tuesday, May 10, 10:30 - 12:15 pm, Hyatt South Hall

Scene Perception and Inattentional Blindness

Moderator: Dan Simons

10:30 **791** Attentional set as a contributing factor in virtual traffic accidents *Steven B. Most, Robert S. Astur*

10:45 **792** The roles of attention, memory, comparison failures, and decision making in top-down influences on change detection *Melissa R Beck, Matthew S Peterson, Bonnie L Angelone*

11:00 **793** Robust Inattentional Blindness *Ronald A Rensink*

11:15 **794** Undetected Transformation of One Scene Into Another of the Same Gist *Anthony C Sanpanes, Bruce Bridgeman*

11:30 **795** Induced Fading of Natural Scenes *Daniel J Simons, David P Slichter, Alejandro Lleras, Susana Martinez-Conde, Gabriel Nevarez, Eamon Caddigan*

11:45 **796** Forgetting visual versus conceptual information about pictures *Mary C Potter, Laura F Fox*

12:00 **797** The depth of distractor processing in search through clutter *Mary J Bravo, Hany Farid*

POSTER SESSION G

Tuesday, May 10, 8:30 - 1:30 pm, Municipal Auditorium
Authors present: 12:00 - 1:30 pm

Binocular Vision/Eye Movements

G1 **798** Binocular summation of color and luminance contrast gratings *Jason D Forte*

G2 **799** Empirical horizontal horopter determined by fusion time *Masahiro Ishii, Zheng Tang, Hiroki Tamura*

G3 **800** Binocular summation, dichoptic masking and contrast gain control *Mark A Georgeson, Tim S Meese, Daniel H Baker*

G4 **801** Two eyes: Twice as good as one? *William A. Simpson, Velitchko Manahilov*

G5 **802** Binocular interactions of spatial visual signals in children *Indu Vedamurthy, Catherine M Suttle, Jack A Alexander, Lisa Asper*

G6 **803** Binocular vision and the correspondence problem *Piers D Howe, Margaret S Livingstone*

G7 **804** The Role of Luminance Polarity in Vergence Control *Ramprasad Kanagaraj, Scott B Stevenson*

G8 **805** Vertical disparity vergence eye movements: Evidence for spatial filtering of the monocular visual inputs prior to binocular matching *Boris M. Sheliga, Edmond J. FitzGibbon, Yasushi Kodaka, Frederick A. Miles*

Reading and Print

G9 **806** Memory for Words From Fictional Text Read on Computer Screens and Paper, in Four Polarities *Faith L Florer, Veronique Salvano-Pardieu, Jemma A Lampkin*

G10 **807** Changes in the Visual Span May Explain the Effect of Letter Spacing on Reading Speed *Deyue Yu, Sing-Hang Cheung, Gordon E. Legge, Susana T.L. Chung*

G11 **808** Multi-word buffering during bilingual bidirectional reading as evidenced by saccade direction reversals *Avi Caspi, Ari Z Zivotofsky*

G12 **809** Crowding, shuffling, and capitalizing reveal three processes in reading *Denis G Pelli, Michael Su, Tracey D Berger, Najib J Majaj, Marialuisa Martelli, Shuang Guo, Katharine Tillman*

G13 **810** Developmental Changes in the Visual Span for Reading *MiYoung Kwon, Gordon E. Legge, Brock R. Dobbels*

G14 **811** Deficits in Forming Perceptual Templates May Underlie the Etiology of Developmental Dyslexia *Zhong-Lin Lu, Anne J Sperling, Franklin R Manis, Mark S Seidenberg*

G15 **812** Preventing Dyslexia? Early Enhanced Hand-Eye Coordination Activities Reduces Reading Difficulties *Gadi Geiger, Tomaso Poggio*

G16 **813** Isolating the Role of Visual Perception in Dyslexia *Mark M Shoolman, Merav Ahissar*

G17 **814** Use of spatial frequencies information in normal readers and a letter-by-letter dyslexic patient *Fiset Daniel, Chauvin Alan, Dupuis-Roy Nicolas, Blais Caroline, Arguin Martin, Gosselin Frederic*

G18 **815** Why is light text harder to read than dark text? *Lauren V. Scharff, Albert J. Ahumada*

G19 **816** The effective use of spatial frequencies through time in reading *Blais Caroline, Fiset Daniel, Chauvin Alan, Arguin, Martin, Gosselin Frederic*

G20 **817** Critical role of phonological encoding in midstream order deficit *Kazuhiko Yokosawa*

G21 **818** Recognition of Chinese Characters: The Effects of Stroke Frequency and Critical Band Masking *Cong Yu, Jun-yun Zhang, Shu-guang Kuai, Lei Liu*

G22 **819** Enhancing fonts *John E. Jacobson, Terrence J. Sejnowski*

G23 **820** What matters in the matter of variable message sign intelligibility *Theodore E Cohn, Lance Tammero*

Faces 2

G24 **821** The role of sleep in perceptual learning of face-identification *Zahra Hussain, Patrick J Bennett, Allison B Sekuler*

G25 **822** 200 ms of controversies: a high-density ERP study of face processing *Guillaume A Rousselet, Jesse S Husk, Patrick J Bennett, Allison B Sekuler*

G26 **823** Eccentricity effects on the N170 face ERP component can be eliminated by size scaling *Jesse S Husk, Guillaume A Rousselet, Patrick J Bennett, Allison B Sekuler*

G27 **824** Upright & inverted face recognition relies on the same, narrow band of spatial frequencies *Carl M Gaspar, Allison B Sekuler, Patrick J Bennett*

G28 **825** The Stickiness of Face Adaptation Aftereffects *Elinor McKone, Mark Edwards, Rachel Robbins, Reece Anderson*

G29 **826** Familiarity enhances invariance of face representations in human ventral visual cortex *Evelyn Eger, Stefan R Schweinberger, Raymond J Dolan, Richard N Henson*

G30 **827** Distributed representation of facial expression in the superior temporal sulcus: an fMRI study *M. Ida Gobbini, Claudio Gentili, Pietro Pietrini, Emiliano Ricciardi, Mario Guazzelli, James V Haxby*

G31 **828** Cortical Representation of Faces, Bodies and their Parts *Marius V Peelen, Paul E Downing*

G32 **829** Face adaptation contingent on orientation *Tamara L. Watson, Gillian Rhodes, Colin W.G. Clifford*

G33 **830** Combining Principal Component Techniques and Psychological Spaces to Find Perceptually Similar Faces *Alex D Holub, Mark Everingham, Andrew Zisserman, Pietro Perona*

G34 **831** Low Spatial Frequency Channels are More Useful than High Spatial Frequency Channels in Classifying Face Emotional Expressions, Simulation of fMRI Data *Martial Mermillod, David Alleysson, Lucie Bert, Nathalie Guyader, Christian Marendaz*

G35 **832** Effects of image background on spatial frequency thresholds for face recognition *Charles A. Collin, Byron O'Byrne, Luisa Wang*

G36 **833** The Dynamics of Visual Adaptation to Faces *David A Leopold, Gillian Rhodes, Kai-Markus Mueller, Linda Jeffery*

G37 **834** Middle spatial frequencies are needed for face recognition only when learned faces are unfiltered: More evidence from spatial frequency thresholds for matching *Megan E. Therien, Charles A. Collin*

G38 **835** Adaptation and individual differences in categorical judgments of faces *Maiko Yasuda, Kirstin Bedard, Yoko Mizokami, Daniel Kaping, Michael A. Webster*

G39 **836** Testing for translation invariance reveals two stages of facial adaptation *Gyula Kovács, Márta Zimmer, Irèn Harza, Eva Bankú, Andrea Antal, Zoltán Vidnyánszky*

Motion 3

G40 **837** Depth-tuning of occluded moving objects by boundary selection of motion signals *Julia Berzhanskaya, Stephen Grossberg, Ennio Mingolla*

G41 **838** Context Effects in the Perception of Collinear Motions: Spatial Anisotropy and Non-Local Effects of Attention *Lori Bukowski, Howard S Hock*

G42 **839** Form/Motion Binding with and without Eye-Movements *Anne Caclin, Jean Lorenceau*

G43 **840** Equivalent noise and reverse correlation analysis reveals inhibitory interactions between channels coding global direction *Steven C Dakin, Isabelle Mareschal, Peter J Bex*

G44 **841** Adaptive Strategies for Perception-Action Coupling *Jean Lorenceau, Christophe Lalanne*

G45 **842** Effect of directional noise on heading perception *Elif M Sikoglu, Lucia M Vaina*

G46 **843** Speed-tuned global motion mechanisms *Amy E Zwicker, Deborah E Giaschi*

G47 **844** Motion perception and temporal precision in a time-to-contact task *Edgard Morya, Geert Savelsbergh, Fabio Ferlazzo, Ronald Ranvaud*

G48 **845** A Probabilistic Network Model of the Influence of Local Figure-Ground Representations on the Perception of Motion *Kyungim Baek, Paul Sajda*

G49 **846** Sensory-motor integration during free-viewing natural time-varying images: A theory of dynamic processing in visual systems *Dawei W Dong*

G50 **847** Predicting Manual Reaction Time To Visual Motion By Temporal Integrator Model Of MEG Response *Kaoru Amano, Shin'ya Nishida, Yoshio Ohtani, Naokazu Goda, Yoshimichi Ejima, Tsunehiro Takeda*

G51 **848** Cortical Evaluation of a Rule-Based Trajectory Revealed by fMRI *Stephen J Heinen, Jess Rowland, Anca Velisar, Alex R Wade*

G52 **849** The initial ocular following response (OFR) to moving grating patterns: Evidence for winner-take-all mechanisms *Frederick A. Miles, Boris M. Sheliga, Edmond J. FitzGibbon*

G53 **850** Categorization of Complex Dynamic Patterns in the Human Brain *Pegah Sarkheil, Jan Jastorff, Martin Giese, Zoe Kourtzi*

G54 **851** Asymmetrical cortical activation by global motion in children with dyslexia *Deborah Giaschi, Veronica Edwards, Simon Au Young, Bruce Bjornson*

G55 **852** Perceptual Development of Motion Transparency in 3- to 5- month-old infants *So Kanazawa, Nobu Shirai, Yumiko Otsuka, Masami K Yamaguchi*

G56 **853** Form and Motion Processing in Dyslexia *Justin M O'Brien, Janine V Spencer, Stella Tsermentseli*

Object Recognition in Context

G57 **854** Can A Gun Prime A Hairbrush? The "Initial Guesses" that Drive Top-Down Contextual Facilitation of Object Recognition *Mark J. Fenske, Jasmine Boshyan, Moshe Bar*

G58 **855** Cortical Manifestations of Context-Related Facilitation of Visual Object Recognition *Jasmine Boshyan, Mark Fenske, Elissa Aminoff, Moshe Bar*

G59 **856** Combined and Dissociable Effects of Spatial and Semantic Contextual Information on Visual Object Recognition *Nurit Gronau, Maital Neta, Moshe Bar*

G60 **857** Temporal dynamics of object-repetition effects in the human visual cortex *Sven P Heinrich, Kalanit Grill-Spector*

G61 **858** Human ventral temporal areas contain flexible position-invariant information about subordinate-level objects *David J Kim, Frank Tong*

G62 **859** Viewpoint Representation in Object Recognition: Evidence From Repetition Blindness *Guomei Zhou, William G. Hayward, Irina M. Harris*

G63 **860** Repetition Blindness With Natural Images *Stéphane Buffat, Corinne Roumes, Jean Lorenceau*

G64 **861** Is Recognition of Visual Sequences better if Canonical Viewpoints are used? *Baerbel R Garsoffky, Stephan Schwan, Markus Huff*

G65 **862** The seductive effect of context on object recognition *James C Christensen, James T Todd*

Perceptual Learning 2

G66 **863** The effects of local context in visual search: a connectionist model and behavioral study of contextual cueing *Timothy F Brady, Marvoin M Chun*

G67 **864** Learning to Identify Contrast-Defined Letters in Peripheral Vision *Susana TL Chung, Dennis M Levi, Roger W Li*

G68 **865** Examining the Top-Down Component of Perceptual Learning *Nicolas Dupuis-Roy, Frédéric Gosselin*

G69 **866** Recruitment of New Perceptual Cues *Haijiang Qi, Benjamin T. Backus, Rebecca W. Stone, Jeffrey A. Saunders, David A. Marshall*

G70 **867** Seeing what isn't there; the costs of perceptual learning *Aaron R Seitz, Jose E Nanez, Steven R Holloway, Shinichi Koyama, Takeo Watanabe*

G71 **868** Categorical Perception: Categorisation Dependent Perceptual Learning *Paul T Sowden, Leslie A Notman*

G72 **869** Better Contextual Memory for Dense Displays *Miroslava Vomela, Matthew S Peterson*

G73 **870** Bias in an unbiased land? Criterion shifts in perceptual learning using two-interval two-alternative forced-choice staircase procedure *Michael J Wenger, Christoph Rasche*

G74 **871** Learning and recognition of textured objects *Rushi P Bhatt, Gail A Carpenter, Stephen Grossberg*

G75 **872** Visual learning and the selection of perceived shape from shading *Tadamasa Sawada, Hirohiko Kaneko*

G76 **873** Independent perceptual learning in monocular and binocular motion systems *Wilson Chu, Zhong-Lin Lu, Barbara A. Doshier, Sophia Lee*

G77 **874** Localization, not perturbation, affects visuomotor recalibration *Johannes Burge, Marc O. Ernst, Martin S. Banks*

Sensory Integration: Vision and Hearing

G78 **875** Plasticity in auditory-visual integration *Orna Rosenthal, Payum Abdarbashi, Ladan Shams*

G79 **876** Visual token individuation by sound in repetition blindness *Yi-Chuan Chen, Su-Ling Yeh*

G80 **877** Crossmodal binding of audio-visual correspondent features *Karla K Evans, Anne Treisman*

G81 **878** Auditory stimulation modifies the apparent motion *Makoto Ichikawa, Yuko Masakura*

G82 **879** Cross modal correlation search in the presence of visual distractors *Ansgar Koene, Waka Fujisaki, Derek Arnold, Alan Johnston, Shin'ya Nishida*

G83 **880** Auditory Tones Influence Perceived Speed in Apparent Motion *Pascal Mamassian*

G84 **881** Response Biases in the Illusory-Flash Effect *David McCormick, Pascal Mamassian*

G85 **882** Lights can reverse auditory localization *James Schirillo, Ashley Mays*

G86 **883** Pitch of Concurrent Pure Tone Influences Visual Gender Perception *Eric L Smith, Marcia Grabowecky, Satoru Suzuki*

G87 **884** Implicit Auditory Signal Can Scale Men's Egocentric Spatial Representation *Kathleen A. Turano, Sidhartha Chaudhury*

G88 **885** The Influences of Visual Pitch on Visually Perceived Eye Level, Visually Perceived Pitch, Felt Head Orientation, and Felt Hand Orientation *Jeremiah W. Bertz, Wenxun Li, Leonard Matin*

G89 **886** An ideal observer analysis of variability in visual-only speech *Brianna Conrey, Jason M Gold*

G90 **887** Sound-induced illusory flash perception modulates V1 activity *Susanne I Watkins, Ladan Shams, John-Dylan Haynes, Geraint Rees*

G91 **888** Attending to Visual or Auditory Motion Affects Perception within and across Modalities: An Event-related Potential Study *Anton L Beer, Brigitte Röder*

G92 **889** Neurophysiological changes in the visual cortex after cochlear implantation *Marie-Eve Doucet, François Bergeron, Franco Lepore*

G93 **890** Monkeys match the number of voices they hear to the number of faces they see *Kerry E. Jordan, Elizabeth M. Brannon, Nikos K. Logothetis, Asif A. Ghazanfar*

Visual Cortical Organization

G94 **891** The Role of the LGN on the Spatial Frequency Dependence of Surround Suppression in V1: Investigations Using a Computational Model *Jim Wielaard, Paul Sajda*

G95 **892** Multifocal 60 region fMRI mapping of human visual cortex *Andrew C James, Xin-Lin Goh, Linda Henriksson, Simo Vanni*

G96 **893** Multifocal 60 region fMRI derivation of the 3D structure and magnification factor of human primary visual cortex *Xin-Lin Goh, Andrew C James, Linda Henriksson, Simo Vanni*

G97 **894** The structure of cortical hypercolumns: receptive field scatter may enhance rather than degrade boundary contour representation in V1 *Neil A Bomberger, Eric L Schwartz*

G98 **895** Multifocal VEP signal dependence on stimulus area *Justin M Ales, Thom Carney, Stanley A Klein*

G99 **896** Cortical Folding as a Sparseness Criterion for Identifying VEP Sources *Sangita Dandekar, Justin M. Ales, Thom Carney, Stanley A. Klein*

G100 **897** Cortical representation of space around the blind spot *Holger Awater, Jess R Kerlin, Frank Tong*

G101 **898** Gibson, meet topography: the dipole structure of extra striate cortex facilitates navigation via optical flow *Robert E. Wagner, Jonathan R. Polimeni, Eric L. Schwartz*

G102 **899** Enhanced Concepts of Occipital Retinotopy *Christopher W. Tyler*

G103 **900** Geometric and metric properties of visual areas V1 and V2 in humans *Mark M Schira, Alex R Wade, Leonoid L Kontsevich, Christopher W Tyler*

G104 **901** Two-dimensional mathematical structure of the human visuotopic map complex in V1, V2, and V3 measured via fMRI at 3 and 7 Tesla *Jonathan R. Polimeni, Oliver P. Hinds, Mukund Balasubramanian, Andre J.W. van der Kouwe, Lawrence L. Wald, Anders M. Dale, Bruce Fischl, Eric L. Schwartz*

G105 **902** Dynamics of Line Motion Illusion Reflects the Anatomical and Functional Architecture of the Early Visual Cortex *Woo-young Lee, Sang-Hun Lee*

G106 **903** A self-organizing neural network model of the development of motion direction selectivity, orientation, and ocular dominance maps and receptive fields in V1 and MT *Alexander M Harner, Takeo Watanabe*

G107 **904** The El Greco Effect: Perceptual Distortion from Visual Cortical Reorganization *Daniel D Dilks, Michael McCloskey*

G108 **905** Cross-modal activation of visual cortex during depth perception using auditory substitution of vision *Laurent Renier, Olivier Collignon, Colline Poirier, Dai Tranduy, Annick Vanlinderde, Anne Bol, Claude Veraart, Anne G De Volder*

G109 **906** Rendering Visual Representations From Oscillatory Brain Activity *Marie L Smith, Frederic Gosselin, Philippe G Schyns*

G110 **907** Greater Sensitivity to Convexities than Concavities in Human Lateral Occipital Complex *Johannes Haushofer, Chris I. Baker, Nancy Kanwisher*

G111 **908** Topography of high-order human object areas measured with DTI and fMRI *Mina Kim, Mathieu Ducros, Kamil Ugurbil, Dae-Shik Kim*

G112 **909** Neural correlates of human creativity revealed using diffusion tensor imaging *Mark R Samco, Gideon P Caplovitz, Po-Jang Hsieh, Peter U Tse*

TALK SESSION

Tuesday, May 10, 2:00 - 3:15 pm, Hyatt North Hall

Objects: Cortical Mechanisms

Moderator: Brad Motter

2:00 **910** The Parahippocampal Cortex Mediates Both Spatial and Non-Spatial Associative Processing *Elissa M Aminoff, Nurit Gronau, Moshe Bar*

2:15 **911** Responses of V4 neurons to colored Glass patterns *Daniel C Kiper*

2:30 **912** Sensitivity of V4 neurons to sequences of letter-like stimuli, *Brad C Motter*

2:45 **913** Electrophysiological evidence for early access to object memories during figure assignment in humans *Logan T. Trujillo, Mary A. Peterson, John J.B. Allen*

3:00 **914** Functionally distinct sub-regions in the Lateral Occipital Complex revealed by fMRI responses to abstract 2-Dimensional shapes and familiar objects *Damian A Stanley, Nava Rubin*

TALK SESSION

Tuesday, May 10, 2:00 - 3:15 pm, Hyatt South Hall

Visual Memory

Moderator: Ingrid Olson

2:00 **915** The decay of perceptual representations in iconic memory *Barbara Doshier, Shiau-Hua Liu, Zhong-Lin Lu*

2:15 **916** Binding in Visual Short Term Memory is Impaired in Patients with Medial Temporal Lobe Amnesia *Ingrid R. Olson, Anjan Chatterjee, Katie Page, Mieke Verfaellie*

2:30 **917** Capacity limit of visual working memory in parietal cortex reflects capacity limit of spatial selection *Won Mok Shim, George A Alvarez, Yuhong Jiang*

2:45 **918** Voluntary Amnesia: Putting Sights Out Of Mind *Robert Sekuler, Yuko Yotsumoto*

3:00 **919** Preserved Memory for Scene Brightness Following an Undetected Change *Andrew Hollingworth*

TALK SESSION

Tuesday, May 10, 3:30 - 5:15 pm, Hyatt North Hall

Looking, Decisions, Search

Moderator: Miguel Eckstein

3:30 **920** Attentional cues in real scenes, saccadic targeting and bayesian priors, *Miguel P. Eckstein, Barbara A. Drescher, Steven S. Shimozaki*

3:45 **921** Saccadic eye-movements cause relativistic compression of time as well as space *David C Burr, Concetta Morrone, Ross John*

4:00 **922** A causal link between scene exploration, local saliency and scene context *Christian Marendaz, Alan Chauwin, Jeanny HÈrault*

4:15 **923** Bayesian modeling of task dependent visual attention strategy in a virtual reality environment *Constantin A Rothkopf, Dana H Ballard, Brian T Sullivan, Kaya de Barbaro*

4:30 **924** Modeling eye movements in a shape discrimination task *Laura W Renninger, Preeti Verghese, James Coughlan*

4:45 **925** Visual Sampling and Saccadic Decisions: A Reverse Correlation Approach *Casimir JH Ludwig, Iain D Gilchrist, Eugene McSorley, Roland J Baddeley*

5:00 **926** Functional imaging of categorical decision processes *Jack Grinband, Joy Hirsch, Vince P Ferrera*

TALK SESSION

Tuesday, May 10, 3:30 - 5:15 pm, Hyatt South Hall

Motion

Moderator: Peter Thompson

3:30 **927** The path of least persistence: Disrupting object continuity causes a release from motion deblurring *Cathleen M. Moore, James T. Enns*

3:45 **928** Dynamic, not Static, MAE Follows the Illusory Percept *Masataka Watanabe, Shinsuke Shimojo*

4:00 **929** Neuromagnetic Responses to First- and Second-Order Motion *Lawrence G. Appelbaum, Zhong-Lin Lu, George Sperling*

4:15 **930** The vector-average readout model of MT fails to account for contrast-induced changes in speed perception *Bart Krekelberg, Richard J.A. van Wezel, Thomas D. Albright*

4:30 **931** Constraining the prior and likelihood in a Bayesian model of, human visual speed perception *Alan A. Stocker, Eero P. Simoncelli*

4:45 **932** Retracing Our Footsteps: A Revised Theory of the Footsteps Illusion *Peter Thompson, Stuart Anstis*

5:00 **933** Local motion speed affects the perceived speed of motion-defined motion *Takao Sato, Kazushi Maruya*

POSTER SESSION H

Tuesday, May 10, 2:00 - 7:00 pm, Municipal Auditorium
Authors present: 5:15 - 7:00 pm

Biological Motion 2

H1 **934** The effect of perception of complex human movement on late event-related brain responses *Maria Hadjigeorgieva, Seon Hee Jang, Frank E. Pollick*

H2 **935** Neural Plasticity Mechanisms for Learning of Biological Motion *Jan Jastorff, Zoe Kourtzi, Martin M Giese*

- H3 **936** The Visual Analysis of Bodily Emotions *Arieta Chouchourelou, Toshihiko Matsuka, Michael Kozhevnikov, Catherine Hanson, Maggie Shiffrar*
- H4 **937** Biological motion versus coherent motion perception: The role of the cerebellum *Daniel Jokisch, Irene Daum, Benno Koch, Michael Schwarz, Nikolaus F Troje*
- H5 **938** Biological motion perception in deaf signers and hearing non-signers *Heather Knapp, David P. Corina*
- H6 **939** Towards Canonical Views of Animacy from Scenes of Human Action *Phil McAleer, Helena M. Paterson, Barbara Mazzarino, Frank E. Pollick*
- H7 **940** A Library of Human Movements for the Study of Identity, Gender and Emotion Perception from Biological Motion *Helena M Paterson, YingLiang Ma, Frank E Pollick*
- H8 **941** Attitudinal and biometric contributions to the recognition of identity from point-light walkers *Frank E Pollick, Yingliang Ma, Joyce Tsao, Mark S Nixon*
- H9 **942** Unintentional Movements during Action Observation: Copying or Compensating? *Natalie Sebanz, Mischa Kozhevnikov, Maggie Shiffrar*
- H10 **943** How Perceptions of Body Motion and Morphology Affect Complex Social Judgments *Kerri L. Johnson*
- H11 **944** Person recognition across multiple viewpoints *Sapna Prasad, Fani Loula, Maggie Shiffrar*
- H12 **945** Integration of Synergies in Visual Recognition of Emotional Human Walking *Claire L Roether, Martin A Giese*
- H13 **946** Attractiveness, averageness, and sexual dimorphism in biological motion *Javid Sadr, Nikolaus F Troje, Ken Nakayama*

Visual Search

- H14 **947** Distinguishing serial and parallel processing in visual search without depending on set size effect *Kyongje Sung*
- H15 **948** Coarse-to-fine encoding of contextual information in visual search *Hirokazu Ogawa, Takatsune Kumada*
- H16 **949** Why search for singletons when you know the target feature? *Andrew B Leber, Marvoin M Chun*
- H17 **950** Attentional capacity limit for visual search causes spatial neglect in normal observers *Michael J Morgan, Joshua A Solomon*
- H18 **951** In visual search, can the average features of a scene guide attention to a target? *Stephen Flusberg, Melina Kunar, Jeremy M Wolfe*
- H19 **952** Searching for Search Asymmetries With Simple and Complex Stimuli *Elizabeth T. Davis, Keith Main, Kenneth Hailston*
- H20 **953** Predictive metacognitive judgments in a visual search task *Jessica L. Gosney, Jason S. McCarley*
- H21 **954** Top-down interference in visual search *Nathalie Guyader, Keith A May, Li Zhaoping*
- H22 **955** Rapid Resumption Of Visual Search Is More Than Lucky Spatial Orienting *Alejandro Lleras, James T. Enns*

- H23 **956** Efficiency of Visual Search are closely related with several properties of oval shape *Jong-Ho Nam, Ji-Sun Cha*
- H24 **957** Optimal and Suboptimal Models of Oddity Search *Wade A Schoonveld, Miguel P Eckstein, Steven S Shimozaki*
- H25 **958** Using models of visual search to design optimal interfaces *Joshua Shive, Gregory Francis*
- H26 **959** Crowding degrades saccadic search performance *Björn NS Vlaskamp, Ignace TC Hooge*
- H27 **960** In search of segmentation *Arno Koning, Rob Van Lier*
- H28 **961** Feasibility of Feature-Based Contraband Detection in X-Ray Images *Natsuko Toyofuku, Thomas F Schatzki*
- H29 **962** Both cognitive factors and local inhibition mediate the effect of a surrounding frame in visual search for oriented bars *Keith A May, Li Zhaoping*

Perceptual Organization 2

- H30 **963** Spatio-temporal integration in grouping-based feature attribution *Haluk Ogmen, Michael H Herzog*
- H31 **964** The Perception of Order: Same-Different Paradigm Reveals a Relationship Between Goodness-of-Figure and Processing Efficiency *George E Newman, Justin A Junge*
- H32 **965** Adaptation to invisible gratings in Troxler filling-in *Farshad Moradi, Shinsuke Shimojo*
- H33 **966** Masking interrupts feedback processing *Johannes J. Fahrenfort, Steven H.S. Scholte, Victor A.F. Lamme*
- H34 **967** Within-field Advantage for Detecting Matched Motion Paths *Serena J Butcher, Patrick Cavanagh*
- H35 **968** Neuronal correlates of Common Fate (spatial and temporal correlation) in retinotopic cortex *Cuahtemoc Gomez, Gideon P. Caplovitz, Po-Jang Hsieh, Peter U Tse*
- H36 **969** Object binding through motion *Yuri Ostrovsky, Pawan Sinha*
- H37 **970** Temporal Information for Spatial Grouping: Structure or Synchrony? *Sharon E. Guttman, Lee A. Gilroy, Randolph Blake*
- H38 **971** Neural correlates of edge detection and scene segmentation during inattentive blindness *H.Steven Scholte, Ilja G Sligte, Victor AF Lamme*
- H39 **972** A regular grid imposes a city-block metric on visual space *Charles Chubb, Charles E. Wright*
- H40 **973** Surface convexity and extremal edges in depth and figure-ground perception *Tandra Ghose, Stephen E Palmer*
- H41 **974** The Effect of Skew Symmetry on Figure-Ground Assignment *Gregory A Lipes, Shaun P Vecera*
- H42 **975** Local and global systems revealed in image segmentation during bistable percepts of three ambiguous figures: "Schroeder's Staircase", the "Rubin Face-Vase figure", and the "Ebbecke Ring" *Grace Lai, Azra Akin, Ferdinand Chan, Arif Patel, Joy Hirsch*

H43 **976** The determination of visual figure and ground in dynamically transforming shapes *Elan B Barenholtz, Jacob Feldman*

H44 **977** Electrophysiological correlates of contour integration in human visual cortex *Ilona Kovács, Márta Zimmer, Gyula Kovács*

H45 **978** A Neural Network Model of Gestalt-like Visual Processing *Maria Pietronilla Penna, Anna Montesanto, Vera Stara, Massimiliano Dasara*

H46 **979** Neural signals in monkey primary visual cortex that predict direction and latency of saccades *Hans Supér, Victor A.F. Lamme*

H47 **980** Statistical Basis for the Perception of Contrast, Orientation, Spatial Frequency and Color *Dale Purves, Zhiyong Yang*

Faces 3

H48 **981** Image Warping Does Not Model Variation in Facial Masculinity *Philip M. Bronstad, Judith H. Langlois*

H49 **982** Sentitivity to the Spacing of Features in Novel Objects after Learning Individuals vs. Categories *Mayu Nishimura, Daphne Maurer, Catherine J Mondloch*

H50 **983** Matching Complementary Faces and Blobs in the Gabor Domain by Novices, Experts, and an Ideal Observer *Xiaomin Yue, Bosco Tjan, Irving Biederman*

H51 **984** The Distinctiveness Effect Reconsidered: Poorer Recognition of Distinctive Face Silhouettes *Nicolas Davidenko, Michael Ramscar*

H52 **985** The role of reflectance and shading in face recognition *Adriana Olmos, Frederick A. A Kingdom*

H53 **986** Face pigmentation and sex classification *Richard Russell*

H54 **987** Sensitivity to the Geometric Variability of Faces in Infants *Scott A Adler, Karen Zilberberg, Kalavathi Chockalingam*

H55 **988** Effect of contrast on face perception: application to ophthalmology (Amd Patients) *Jean-francois Dinon, Muriel Boucart*

H56 **989** The effects of external contour of face on gaze perception *Yuko Isogaya, Naoyuki Matsuzaki, Takao Sato*

H57 **990** A visual search advantage for faces learned in motion *Karin Pilz, Ian M Thornton, Heinrich H Buelthoff*

H59 **992** The use of spatial frequency through time in face identification *Eric McCabe, Alan Chauvin, Daniel Fiset, Martin Arguin, Frédéric Gosselin*

3D Processing: Motion and Texture

H60 **993** Interpolation of occluded surfaces in structure from motion *Massimiliano Di Luca, Carlo Fantoni*

H61 **994** Depth-order violation in structure from motion *Julian M Fernandez, Bart Farell*

H62 **995** Extra-retinal signals in motion parallax: Support from eye movement asymmetries in strabismus *Megan L. Frankl, Mark Nawrot*

H63 **996** Depth from stereo-motion: estimating the Intrinsic Constraint Line *Fulvio Domini, Massimiliano Di Luca, Corrado Caudek*

H64 **997** A Neural Model of 3D Shape-from-Texture: Multiple-Scale Filtering, Cooperative-Competitive Grouping, and 3D Surface Filling-In *Levin Kuhlmann, Stephen Grossberg, Ennio Mingolla*

H65 **998** Phase Dependent Local Energy mediates Effects of Phase Scrambling on Shape Perception from Texture *Lore Thaler, James T. Todd, Delwin T. Lindsey*

H66 **999** A Gradient Based Heuristic for the Perception of 3D Shape from Texture *James T. Todd, Lore Thaler*

H67 **1000** Perception of slant-from-texture for textures with oriented symmetry *Jeffrey A Saunders, Benjamin T Backus*

H68 **1001** Spatial Induction of Changes in Perceived Elevation and Verticality by Global and Local Orientations of Sets of Lines *Adam Y Shavit, Wenxun Li, Leonard Matin*

Attentional Selection

H69 **1002** Temporal Properties of the Polarity Effect in Crowding *Ramakrishna Chakravarthi, Patrick Cavanagh*

H70 **1003** Competition Between Stimuli in Opposite Visual Fields *Joy J Geng, Jon Driver*

H71 **1004** Gender differences in selective attention: Evidence from a spatial orienting task *Paul Merritt, Elliot Hirshman, Whitney Wharton, James Devlin, Bethany Stangl, Sarah Bennett, Laurie Hawkins*

H72 **1005** Hue-contrast is Invariant with Attention *Stuart G Fuller, Marisa Carrasco*

H73 **1006** Responding to the second of two events: The farther away, the better *Peggy Chen, J. Toby Mordkoff, Cathleen Moore*

H74 **1007** Effects of Color-based Selective Attention on Feed-forward Sensory Processing *Weiwei Zhang, Steven J Luck*

H75 **1008** Standing out in a crowd: Item discriminability increases attentional resolution *Lyndsey K. Lanagan, Elisabeth M. Fine, Peggy Chen, Cathleen M. Moore*

H76 **1009** Determining Saliency for Complex Objects *Erik Blaser, Zsuzsa Kaldy, Kemarah Eddy, Marc Pomplun*

H77 **1010** Does Response Type and Stimulus Duration Influence When Compatibility Interference Occurs? *Matthew D Wiediger, Lisa R Fournier*

H78 **1011** Attention can be guided to the relevant feature category *Vidhya Navalpakkam, Sachin Telang, Laurent Itti*

H79 **1012** How many locations can you select at once? *Steven L Franconeri, George A Alvarez, James T Enns*

H80 **1013** Temporally gradual modulation of attention in the RSVP *Atsunori Ariga, Kazuhiko Yokosawa*

H81 **1014** Spatially-mediated attentional interference degrades shape processing *Jason S McCarley, Jeffery R W Mounts, Matthew Hillimire*

H82 **1015** Inhibition of Novel Distractors *Hsuan-Fu Chao, Ting-Ying Yang*

H83 **1016** Object-substitution masking: The identity of the mask does matter! *Elizabeth S Olds, Angela M Weber*

H84 **1017** Attentional Inhibitory Surrounds in Orientation Space *Michael N Tombu, John K Tsotsos*

H85 **1018** Fruitful visual search: Inhibition of return in a virtual foraging task *Laura E Thomas, Michael S Ambinder, Brendon Hsieh, Brian Levinthal, James A Crowell, David E Irwin, Arthur F Kramer, Alejandro Lleras, Daniel J Simons, Ranxiao F Wang*

H86 **1019** Observer expectation as a determinant of inhibition of return: Some limiting factors *Lisa N. Jefferies, Vincent Di Lollo*

H87 **1020** Simulation of inhibition: Do I simulate your stopping? *Stefanie Schuch, Steven P. Tipper*

Color Vision 2

H88 **1021** Peripheral Chromatic Sensitivity for Rectified Stimuli in Each Cone-Opponent System *Masato Sakurai, Kathy T. Mullen*

H89 **1022** Mapping Cone Specific Activity in Primary Visual Cortex *Elizabeth N Johnson, Thomas R Tucker, David Fitzpatrick*

H90 **1023** Non-isometric Colour Similarity *Anna Montesanto, Maria Pietronilla Penna, Guido Tascini*

H92 **1025** Spatial summation of chromatic information *Yung-Chung Lin, Chien-Chung Chen*

H93 **1026** Neural Bases of Surface Perception from Color *Kristen S Cardinal, Stephen A Engel*

H94 **1027** Dichromatic judgments of surface color under different illuminants on natural scenes *Rigmor C Baraas, David H Foster, Kinjiro Amano, Sérgio MC Nascimento*

H95 **1028** Complex effects of test-surface color on surface-color judgments with natural scenes *Kinjiro Amano, David H. Foster, Sérgio M.C. Nascimento*

H96 **1029** Contrast perception and discrimination of chromatic temporal modulations *Junjie Liu, Brian A Wandell*

H97 **1030** A colour-specific deficit in visual working memory and imagery *Lorna S Jakobson, Pauline Pearson, Barbara Robertson*

H98 **1031** Chromatic induction and perspective distortion *Yiannis Aloimonos, Cornelia Fermuller*

H99 **1032** Expansive and contractive size perception with color patches *Miwa Nakano, Seiji Tanabe, Yoshiya Mori, Bungo Ikegami, Ichiro Fujita*

H100 **1033** Simultaneous color contrast in 4 months old infants is revealed by a temporal modulation paradigm *Maria Pereverzeva, Davida Y. Teller*

Object- and Space-Based Attention

H101 **1034** The different properties of object-based and spatial attention revealed by SSVEPs *Yee Joon Kim, Marcia Grabowecky, Ken A. Paller, Satoru Suzuki*

H102 **1035** Object-based curve tracing in the upper and lower visual fields *Lauren N. Hecht, Shaun P. Vecera*

H103 **1036** Conjunction Benefits Can Occur For Dimensions Within An Object But Not Between Objects *Lisa R. Fournier, Jennifer Nelson, Matthew Wiediger*

H104 **1037** Shifting Attention Into and Out of Objects: Evaluating the Processes Underlying the Object Advantage *Hope I. Denney, James M. Brown*

H105 **1038** Object-Based Attention: Interactions Between Stimulus Features *Georgina M. Blanc, Gene R. Stoner*

H106 **1039** Feature-based Attention Is Also Object-based *Jianwei Lu, Renat Yakupov, Carl Lozar, Linda Chang, Thomas Ernst, Laurent Itti*

H107 **1040** Contributions of feature-based attention to object perception *Matthias Niemeier, Bobby Stojanoski*

H108 **1041** Object-based attentional selection modulates the spatial gradient surrounding the object *Dwight J Kravitz, Marlene Behrmann*

H109 **1042** The Spatial Distribution of Object-based Attention *Ashleigh M Richard, Andrew Hollingworth, Shaun P Vecera*

H110 **1043** Modulation of object-based and space-based attention by cue validity *Wei-Lun Chou, Su-Ling Yeh*

H111 **1044** Attentional capture by new object sudden-onsets can be modulated by top-down control *Caleb J Owens, Branka Spehar*

H112 **1045** Structure-based modulation of inhibition of return: Implications for theories of object-based selection *Irene Reppa, Charles Leek*

H113 **1046** Modeling Feature Sharing between Object Detection and Top-down Attention *Dirk Walther, Thomas Serre, Tomaso Poggio, Christof Koch*

H114 **1047** What changes to objects disrupt object constancy? *Jason H. Wong, Anne P. Hillstrom, Yu-Chin Chai*

H115 **1048** Cohesion as a Principle of Object Persistence in Infants and Adults *Stephen R Mitroff, Erik W Cheries, Brian J Scholl, Karen Wynn*

H116 **1049** Implicit discrimination of visual arrays by number in rhesus macaques *Jamie D Roitman, Elizabeth M Brannon, Michael L Platt*

Talk Sessions for Wednesday, May 11

TALK SESSION

Wednesday, May 11, 8:30 - 10:00 am, Hyatt North Hall

Binocular Rivalry

Moderator: Marcia Grabowecky

8:30 **1050** Exogenous and endogenous attention influence initial dominance in binocular rivalry *Sang Chul Chong, Randolph Blake*

8:45 **1051** Laminar Cortical Dynamics of Binocular Rivalry *Arash Yazdanbakhsh, Stephen Grossberg*

9:00 **1052** Independent binocular rivalry processes for form and motion *David Alais, Amanda Parker*

9:15 **1053** Sources of long-term speeding in binocular rivalry *Marcia Grabowecky, Satoru Suzuki*

9:30 **1054** Interactions between binocular rivalry and depth in plaid patterns *Athena Buckthougt, Hugh R Wilson*

9:45 **1055** The third percept in bistable perception *Jan W Brascamp, Andre J Noest, Albert V van den Berg, Oral Presentation: Perceptual/Object Learning*

TALK SESSION

Wednesday, May 11, 8:30 - 10:00 am, Hyatt South Hall

Perceptual/Object Learning

Moderator: Jozsef Fiser

8:30 **1056** Contrast effects in rapid learning of a visual detection task *Craig K. Abbey, Binh T. Pham, Steven S. Shimozaki, Miguel P. Eckstein*

8:45 **1057** Motion-based orienting, segmenting and tracking in a model of object learning *Benjamin J. Balas, Pawan Sinha*

9:00 **1058** The neural correlates of perceptual learning and deterioration: a role for attention? *Sara C. Mednick, Sean P.A. Drummond, Arvin C Arman, Geoffrey M Boynton*

9:15 **1059** The Development of Visual Sensitivity to Words in Ventral Occipito-Temporal Sulcus *Michal Ben-Shachar, Robert F. Dougherty, Gayle K. Deutsch, Polina V. Potanina, Brian A. Wandell*

9:30 **1060** Right hemisphere processes dominate the initial phase of visual statistical feature-learning, *Júzsef Fiser, Matthew E. Roser, Richard N. Aslin, Michael S. Gazzaniga*

9:45 **1061** An Increased BOLD Response for Trained Objects in Object-selective Regions of Human Visual Cortex *Hans P Op de Beeck, Chris I Baker, Sandra Rindler, Nancy Kanwisher*

TALK SESSION

Wednesday, May 11, 10:15 - 12:00 pm, Hyatt North Hall

Motion: Form from Motion

Moderator: David Whitney

10:15 **1062** The efficiency of biological motion perception *Jason M Gold, Susan C Cook, Duje Tadin, Randolph Blake*

10:30 **1063** Detection of direction in scrambled motion: a simple "life detector"? *Nikolaus F Troje, Cord Westhoff*

10:45 **1064** Structure-from-Transients: hMT/MST Mediates Figure/Ground Segmentation *Lora T Likova, Christopher W Tyler*

11:00 **1065** Background stripes affect apparent speed of rotation *Stuart Anstis, Hiroyuki Ito*

11:15 **1066** Fractal Rotation Stimulus Activates Human MT/V5 *Christopher P Benton, Justin MD O'Brien*

11:30 **1067** Measuring motion capture with a Vernier task *Bettina Friedrich, Pascal Mamassian*

11:45 **1068** Global motion from form in the human visual cortex *Zoe Kourtzi, Argiro Vatakis, Bart Krekelberg*

TALK SESSION

Wednesday, May 11, 10:15 - 12:00 pm, Hyatt South Hall

Visual Attention, Learning and Memory

Moderator: Ed Vogel

10:15 **1069** Effects of video game playing on visual processing across space *C. Shawn Green, Daphne Bavelier*

10:30 **1070** Learning Blinks During the Attentional Blink *Christine Lefebvre, Aaron Seitz, Takeo Watanabe, Pierre Jolicoeur*

10:45 **1071** Maintaining visual short-term memory representations across new object onsets *Edward K Vogel, Andrew W McCollough, Jason A Fair, Geoffrey F Woodman*

11:00 **1072** Attention and automaticity in visual statistical learning *Nicholas B. Turk-Browne, Justin A. Junge, Brian J. Scholl*

11:15 **1073** Visual memory interference with preview search: VSTM and visual marking *Glyn W Humphreys, Derrick G Watson*

11:30 **1074** The Costs of Visual Working Memory *Alan Robinson, Alberto Manzi, Jochen Triesch*

11:45 **1075** The type of working memory load influences the magnitude of distractor interference in a selective attention task *Soo Jin Park, Min-Shik Kim, Marvin M Chun*

Attendee Resources

ATM

An ATM is located in the main lobby.

Baggage Check

Bags can be checked with the Bell hop in the main lobby.

Business Office

The Hyatt business office is open 24 hours a day. An internet-accessible terminal available for a charge; copies can be made at the front desk in the lobby.

Message Center

Messages for registrants can be left and retrieved at the Registration Desk. A bulletin board is also available in the Ballroom Foyer for announcements and job postings.

How to Contact Us

If you need to reach VSS or meeting personnel while at the meeting, call ext. 1422 from a house phone, or from outside the hotel, call 1-941-953-1234, ext. 1422.

Food Service at Municipal Auditorium

Café Tuscan

Café Tuscan serves breakfast, lunch, dinner and munchies from 8:00 am until 7:00 pm daily.

Food Service at the Hyatt

Complimentary coffee and tea will be available each day starting at 8:00 am in the Ballroom Foyer.

Café Vision

Café Vision is located in the Hyatt Ballroom Foyer, features breakfast items, lunch selections and snacks, coffee and cold beverages. Breakfast items will be available from 8:00 – 10:30 am Saturday through Wednesday; lunch selections 11:30 – 2:00 pm Saturday through Tuesday.

Café Vision Hours:

Saturday, May 7, 8:00 am – 5:15 pm

Sunday, May 8, 8:00 am – 7:30 pm

Monday, May 9, 8:00 am – 2:00 pm

Tuesday, May 10, 8:00 am – 5:15 pm

Wednesday, May 11, 8:00 am – 12:00 pm

Patio Grill

The Patio Grill features hamburgers, cheeseburgers and hot dogs grilled to perfection on an outdoor grill.

Patio Grill Hours:

Saturday and Sunday, 11:30 am – 2:00 pm, located on the pool deck

Monday and Tuesday, 11:30 am – 2:00 pm, located outside the boathouse entrance

Look for a coupon in your attendee packet – redeemable at Café Vision or the Patio Grill.

Internet Access

Cyber Vision

“Cyber Vision,” a complimentary wireless internet café is available upstairs in the Municipal Auditorium mezzanine. It offers a comfortable, relaxing setting to use your laptop to check email, and chat with friends. Snacks and drinks are allowed.

Cyber Vision Hours:

Saturday, May 7, 8:00 am to 7:00 pm
 Sunday, May 8, 8:00 am to 7:00 pm
 Monday, May 9, 8:00 am to 2:00 pm
 Tuesday, May 10, 8:00 am to 7:00 pm

T-Mobile HotSpot

The Hyatt is a T-mobile hotspot and wireless internet is available in guest rooms and public areas, including Scaliní's, Tropics, and the upper and lower lobbies. T-mobile subscribers will automatically have access; others can sign up. Rates are \$9.99 for a day pass, \$29.99 for the month, or \$6 for 60 minutes (pay as you go plan).

Internet Terminals

Two terminals will be available at Registration with free internet access. A printer is also available.

Lost and Found

Lost and found is located at the Meeting Registration desk.

Poster Information

Friday night posters are located in the Hyatt South Hall. All other poster sessions are located in the Municipal Auditorium. Posters should be put up at the beginning of a session and taken down at the end. Authors are expected to be present at their posters during the entire “Author Presents” time, but may be there longer.

If you are presenting in a morning poster session, please be courteous and take down your poster promptly at the end of the session, so that the board is empty when the afternoon presenter arrives to put up his poster.

Pins are available for your use and are located at the Registration Desk and the Municipal Auditorium lobby.

Speaker Information

South Hall and North Hall are equipped with a video projector and projection screen. Presentations can be made from your Mac or PC laptop, or Mac and PC computers that will be provided. When using the provided computers, please bring your presentation on a CD or USB flash device. PowerPoint and Adobe Acrobat are installed on the computers. A technician will be present in each room to handle any technical problems that may arise.

A Speaker-Ready room is available in the Palm room. Please be sure to test your presentation before your session. Please arrive at the Ballroom no less than 30 minutes before the start of your session.

Mark Your Calendar for the 6th Annual VSS Meeting

VSS 2006
 May 5 -10, 2006
 Hyatt Sarasota
 Sarasota, FL

Topic Index

Below is a list of talk and poster sessions. The numbers in parentheses indicate which abstracts are included in each session.

3D Cue Integration

Posters, (400-408) Sunday, May 8, 8:30 - 1:30 pm

3D Processing: Motion and Texture

Posters, (993-1001) Tuesday, May 10, 2:00 - 7:00 pm

3D Space Perception

Posters, (193-201) Saturday, May 7, 8:30 - 1:30 pm

3D Visual Processing

Talks, (772-778) Tuesday, May 10, 8:30 - 10:15 am

3D Visual Processing

Posters, (517-529) Sunday, May 8, 2:00 - 7:00 pm

Adaptation

Posters, (247-251) Saturday, May 7, 2:00 - 7:00 pm

Attention, Learning, and Memory

Posters, (409-428) Sunday, May 8, 8:30 - 1:30 pm

Attention, Motion, and Tracking

Posters, (27-36) Friday, May 6, 5:30 - 8:30 pm

Attentional Blink

Posters, (106-117) Saturday, May 7, 8:30 - 1:30 pm

Attentional Cuing and Capture

Posters, (504-516) Sunday, May 8, 2:00 - 7:00 pm

Attentional Mechanisms

Talks, (233-239) Saturday, May 7, 3:15 - 5:00 pm

Attentional Selection and Tracking

Talks, (639-645) Monday, May 9, 10:30 - 12:15 pm

Attentional Selection

Posters, (1002-1020) Tuesday, May 10, 2:00 - 7:00 pm

Binocular Rivalry

Talks, (1050-1055) Wednesday, May 11, 8:30 - 10:00 am

Binocular Rivalry

Posters, (1-15) Friday, May 6, 5:30 - 8:30 pm

Binocular Stereopsis

Posters, (252-264) Saturday, May 7, 2:00 - 7:00 pm

Binocular Vision/Eye Movements

Posters, (798-805) Tuesday, May 10, 8:30 - 1:30 pm

Biological Motion 1

Posters, (16-26) Friday, May 6, 5:30 - 8:30 pm

Biological Motion 2

Posters, (934-946) Tuesday, May 10, 2:00 - 7:00 pm

Bistable Perception

Posters, (703-709) Monday, May 9, 8:30 - 2:00 pm

Brain Stimulation, Activity and Perception

Talks, (366-371) Sunday, May 8, 8:30 - 10:00 am

Color Channels and Processes

Talks, (94-99) Saturday, May 7, 10:30 - 12:00 pm

Color Vision 1

Posters, (265-283) Saturday, May 7, 2:00 - 7:00 pm

Color Vision 2

Posters, (1021-1033) Tuesday, May 10, 2:00 - 7:00 pm

Color, Lighting, and Objects

Talks, (785-790) Tuesday, May 10, 10:30 - 12:00 pm

Conscious Perception

Talks, (222-226) Saturday, May 7, 1:30 - 2:45 pm

Contour and Shape

Posters, (464-474) Sunday, May 8, 8:30 - 1:30 pm

Contours/Form Perception

Posters, (209-221) Saturday, May 7, 8:30 - 1:30 pm

Contrast*Posters, (454-463) Sunday, May 8, 8:30 - 1:30 pm***Emotional and Social Influences on Attention***Posters, (389-399) Sunday, May 8, 8:30 - 1:30 pm***Eye Movements: Cognitive***Posters, (436-453) Sunday, May 8, 8:30 - 1:30 pm***Eye Movements, Perception, and Action***Talks, (100-105) Saturday, May 7, 10:30 - 12:00 pm***Eye Movements: Physiology and Mechanisms***Posters, (579-596) Sunday, May 8, 2:00 - 7:00 pm***Face Perception: Neural Mechanisms***Talks, (633-638) Monday, May 9, 8:30 - 10:00 am***Face Recognition***Talks, (378-382) Sunday, May 8, 10:15 - 11:45 am***Faces 1***Posters, (37-50) Friday, May 6, 5:30 - 8:30 pm***Faces 2***Posters, (821-836) Tuesday, May 10, 8:30 - 1:30 pm***Faces 3***Posters, (981-992) Tuesday, May 10, 2:00 - 7:00 pm***Faces: Cognition and Brain***Posters, (530-545) Sunday, May 8, 2:00 - 7:00 pm***Goal-Directed Hand Movements***Talks, (626-632) Monday, May 9, 8:30 - 10:15 am***Hand Movements 1***Posters, (118-131) Saturday, May 7, 8:30 - 1:30 pm***Hand Movements 2***Posters, (355-365) Saturday, May 7, 2:00 - 7:00 pm***Illusions***Posters, (51-61) Friday, May 6, 5:30 - 8:30 pm***Inattentive Blindness***Posters, (546-558) Sunday, May 8, 2:00 - 7:00 pm***Lateral Interactions and Filling-In***Posters, (717-727) Monday, May 9, 8:30 - 2:00 pm***Lightness and Surfaces***Posters, (559-570) Sunday, May 8, 2:00 - 7:00 pm***Lightness and Surfaces***Talks, (240-246) Saturday, May 7, 3:15 - 5:00 pm***Locomotion, Steering and Posture***Posters, (304-324) Saturday, May 7, 2:00 - 7:00 pm***Looking, Decisions, Search***Talks, (920-926) Tuesday, May 10, 3:30 - 5:15 pm***Modal and Amodal Completion***Posters, (571-578) Sunday, May 8, 2:00 - 7:00 pm***Motion 1***Posters, (132-154) Saturday, May 7, 8:30 - 1:30 pm***Motion 2***Posters, (653-670) Monday, May 9, 8:30 - 2:00 pm***Motion 3***Posters, (837-853) Tuesday, May 10, 8:30 - 1:30 pm***Motion In Depth 1***Posters, (325-339) Saturday, May 7, 2:00 - 7:00 pm***Motion In Depth 2***Posters, (728-736) Monday, May 9, 8:30 - 2:00 pm***Motion***Talks, (927-933) Tuesday, May 10, 3:30 - 5:15 pm***Motion: Cortical Mechanisms***Talks, (490-496) Sunday, May 8, 3:45 - 5:30 pm***Motion: Form From Motion***Talks, (1062-1068) Wednesday, May 11, 10:15 - 12:00 pm***Natural Images***Talks, (372-377) Sunday, May 8, 8:30 - 10:00 am***Natural Images***Posters, (597-609) Sunday, May 8, 2:00 - 7:00 pm***Neural Coding***Posters, (671-679) Monday, May 9, 8:30 - 2:00 pm***Neural Mechanisms and Models of Attention***Posters, (680-691) Monday, May 9, 8:30 - 2:00 pm***Object- and Space-Based Attention***Posters, (1034-1049) Tuesday, May 10, 2:00 - 7:00 pm***Object Recognition In Context***Posters, (854-862) Tuesday, May 10, 8:30 - 1:30 pm***Object Recognition***Talks, (87-93) Saturday, May 7, 8:30 - 10:15 am***Object Recognition***Posters, (737-748) Monday, May 9, 8:30 - 2:00 pm***Objects: Cortical Mechanisms***Talks, (910-914) Tuesday, May 10, 2:00 - 3:15 pm***Orienting and Eye Movements***Posters, (692-702) Monday, May 9, 8:30 - 2:00 pm*

Perception and Action*Talks*, (383-388) Sunday, May 8, 10:15 - 11:45 am**Perceptual Learning 1***Posters*, (710-716) Monday, May 9, 8:30 - 2:00 pm**Perceptual Learning 2***Posters*, (863-874) Tuesday, May 10, 8:30 - 1:30 pm**Perceptual Organization 1***Posters*, (340-354) Saturday, May 7, 2:00 - 7:00 pm**Perceptual Organization 2***Posters*, (963-980) Tuesday, May 10, 2:00 - 7:00 pm**Perceptual Organization***Talks*, (497-503) Sunday, May 8, 3:45 - 5:30 pm**Perceptual/Object Learning***Talks*, (1056-1061) Wednesday, May 11, 8:30 - 10:00 am**Performance and Attention***Posters*, (155-173) Saturday, May 7, 8:30 - 1:30 pm**Reading and Print***Posters*, (806-820) Tuesday, May 10, 8:30 - 1:30 pm**Scene and Layout Perception***Posters*, (63-79) Friday, May 6, 5:30 - 8:30 pm**Scene Perception and Inattentional Blindness***Talks*, (791-797) Tuesday, May 10, 10:30 - 12:15 pm**Sensory Integration***Talks*, (646-652) Monday, May 9, 10:30 - 12:15 pm**Sensory Integration: Vision and Hearing***Posters*, (875-890) Tuesday, May 10, 8:30 - 1:30 pm**Sensory Integration: Vision and Touch***Posters*, (749-759) Monday, May 9, 8:30 - 2:00 pm**Spatial Vision 1***Posters*, (174-192) Saturday, May 7, 8:30 - 1:30 pm**Spatial Vision 2***Posters*, (475-489) Sunday, May 8, 8:30 - 1:30 pm**Spatial Vision***Talks*, (227-232) Saturday, May 7, 1:30 - 3:00 pm**Target Mislocalization***Posters*, (202-208) Saturday, May 7, 8:30 - 1:30 pm**Temporal Processing***Posters*, (760-771) Monday, May 9, 8:30 - 2:00 pm**Visual Attention, Learning, and Memory***Talks*, (1069-1075) Wednesday, May 11, 10:15 - 12:00 pm**Visual Cortex: Receptive Fields***Talks*, (80-86) Saturday, May 7, 8:30 - 10:15 am**Visual Cortical Organization***Posters*, (891-909) Tuesday, May 10, 8:30 - 1:30 pm**Visual Disorders and Blindsight***Posters*, (284-303) Saturday, May 7, 2:00 - 7:00 pm**Visual Memory***Talks*, (915-919) Tuesday, May 10, 2:00 - 3:15 pm**Visual Neurons: Properties***Posters*, (429-435) Sunday, May 8, 8:30 - 1:30 pm**Visual Search***Talks*, (779-784) Tuesday, May 10, 8:30 - 10:00 am**Visual Search***Posters*, (947-962) Tuesday, May 10, 2:00 - 7:00 pm**Visual Working Memory***Posters*, (610-625) Sunday, May 8, 2:00 - 7:00 pm



Author Index

Entries are indexed by abstract number, *not* page number; **bold** entries indicate first author abstracts.

-
- A**
- Abbey, CK - **1056**
Abdarbashi, P - 875
Abdi, H - 47
Abekawa, N - 364
Adams, RJ - **454**
Adelson, EH - 376, 570, 600
Adler, SA - 474, **987**
Ahissar, M - 813
Ahrens, KF - 122
Ahumada, AJ - **485**, 815
Akai, C - **259**
Akin, A - 975
Alais, D - 460, **1052**
Alan, C - 814, 816
Albert, MK - 529
Albright, TD - 82, 135, 930
Ales, JM - **895**, 896
Alexander, AJ - 732
Alexander, JA - 802
Alford, JL - **679**
Allard, R - 321, 465, **484**
Allen, HA - **292**
Allen, JJ - 913
Alleysson, D - 831
Allison, RS - **653**, 734
Allman, EA - 302
Aloimonos, Y - **1031**
Alvarez, G - 32, 511
Alvarez, GA - 642, **643**, 917, 1012
Amano, K - 272, **847**, 1027, **1028**
Ambady, N - 41
Ambinder, MS - **509**, 617, 1018
Aminoff, E - 89, 855
Aminoff, EM - **910**
Amiri, H - **325**
Amster, S - **504**
Andersen, GJ - 65, 317, 665, 666
Anderson, BL - **497**
Anderson, CH - **671**
Anderson, LB - 528
Anderson, ND - **209**
Anderson, R - 825
Andre, J - **305**
- Andresen, DR - **745**
Angelaki, DE - 388, 759
Angelone, BL - **555**, 792
Anstis, S - 932, **1065**
Antal, A - 836
Apfelbaum, DH - 548
Apfelbaum, HL - **548**
Appelbaum, LG - **929**
Arend, I - **106**
Arguin, M - 481, 605, 992
Ariga, A - **1013**
Arman, AC - **160**, 1058
Armstrong, VL - **664**
Arnold, D - 879
Arnold, DH - **203**, 767
Arnott, SR - **173**
Arrighi, R - 460
Artemenkov, SL - **729**
Ashida, H - **490**
Aslin, RN - 1060
Aspell, JE - **190**
Asper, L - 802
Astur, RS - 791
Atchley, P - 399
Atkinson, J - 190, **491**
Au Young, S - 851
Augustyn, J - 199
Augustyn, JS - 749
Avakov, J - 167
Avidan, G - **635**
Aviezer, H - 290
Awater, H - **897**
Awh, E - **639**
Aydin, M - 137
Azoulai, S - **758**
-
- B**
- Bach, M - 192
Bach, P - **398**
Backes, W - 668
Backus, BT - **401**, 601, 866, 1000
Baddeley, RJ - 925
Baek, K - **845**
Bailey, LL - 428
- Bair, W - **86**
Bakdash, JZ - **749**
Baker Jr., CL - 786
Baker, CI - 37, 907, 1061
Baker, DH - 800
Baker, TJ - **474**
Balas, B - 739
Balas, BJ - **1057**
Balasubramanian, M - 901
Balboa, RM - 608
Baldi, P - 779
Baldo, MV - **675**
Balk, SA - **19**
Ballard, DH - **374**, 923
Bankó, É - 836
Banks, MS - 257, 404, 437, 440, 518, **776**, 874
Bar, M - **89**, 90, 854, 855, 856, 910
Baraas, RC - **1027**
Barenholtz, EB - **976**
Barlasov, A - 573
Barnes, J - 737
Barnes, LE - 155
Barraza, JF - **575**
Barton, JE - **730**
Barton, JJ - 588, 686
Battaglia, PW - **338**
Battelli, L - **686**
Battistutta, D - 157
Baumann, O - **650**
Bäumer, C - 294
Bavelier, D - 1069
Bayerl, P - **661**
Beall, AC - 315
Beard, BL - 485
Beardsley, SA - 728
Becic, E - 550
Beck, KE - 682
Beck, MR - 417, 555, **792**
Becker, MW - **411**
Bedard, K - 835
Bedell, HE - 137, **138**, 262
Beer, AL - **888**
Beer, D - **283**
- Beer, R - 249
Behrmann, M - **284**, 635, 692, 1041
Beierholm, UR - **649**
Beintema, JA - 7
Belkin, M - 487
Bemis, D - **511**
Bendiksbj, MS - **584**
Benjamins, JS - **35**
Bennett, PJ - 482, 483, **488**, 821, 822, 823, 824
Bennett, S - 1004
Ben-Shachar, M - **1059**
Bentin, S - 290
Benton, CP - 150, **1066**
Benucci, A - **85**
Berg, M - 589, **591**
Berger, TD - 809
Bergeron, F - 889
Bernard, MR - 677, **678**
Bert, L - 831
Bertz, JW - **885**
Berzhanskaya, J - **837**
Bestmann, S - 366
Beutter, BR - **450**
Bex, PJ - 176, 308, 457, **599**, 840
Bharadwaj, SR - 593
Bhatt, RP - **871**
Bi, H - 432
Bian, Z - **65**
Biederman, I - 91, 742, **743**, 983
Billock, VA - **282**
Bingham, GP - 123, 125, 347, **406**
Birmingham, E - 78
Birtles, D - 491
Bisley, JW - 100, 784
Bjoertomt, O - 366
Bjornson, B - 851
Black, S - 121
Blake, R - 1, 2, 17, 20, 494, 970, 1050, 1062
Blakeslee, B - 243
Blanc, GM - **1038**
Blankenburg, F - 366
Blanz, V - 381, 633

- Blaser, E - 513, **1009**
 Bocheva, NB - **326**
 Bodelon, C - **760**
 Bodkin, B - 53
 Boehler, N - 641
 Boelmans, K - 641
 Boi, M - 24, **51**
 Bol, A - 905
 Bolbecker, AR - **682**
 Bomberger, NA - **894**
 Bompas, A - **98**
 Bonds, AB - 677, 678
 Bonin, V - 372, 429
 Bonnardel, V - **94**
 Bonneh, Y - 290, 727
 Bonneh, YS - **224**
 Boot, WR - 417, **550**
 Bornhorst, TD - 436
 Boroditsky, L - 492
 Boshyan, H - 90
 Boshyan, J - 89, 854, **855**
 Boucart, M - 988
 Bouvier, SE - 461
 Bouwhuis, D - 556
 Bovik, AC - 603, 606
 Bower, JD - 317, **665**
 Bowman, H - 117
 Boyaci, H - 746, 788, 789
 Boyer, J - 286
 Boynton, GM - 160, 172, 1058
 Braddick, O - 491
 Braddick, OJ - 190
 Bradnam, MS - 295
 Brady, TF - **863**
 Brahmabhatt, J - 682
 Brainard, DH - 785
 Branning, P - 234
 Brannon, EM - 340, 890, 1049
 Brascamp, JW - **1055**
 Braunstein, ML - 65, 326
 Bravo, MJ - **797**
 Breitmeyer, BG - **8**
 Brennan, SE - 702
 Brenner, E - **204**, 402
 Bressler, DW - **654**
 Breveglieri, R - 632
 Bridge, H - 190
 Bridgeman, B - 794
 Bronstad, PM - **981**
 Brooks, JO - 19, **174**
 Brooks, KR - 261
 Broskey, SR - 442
 Brouwer, A - **118**
 Brown, AM - **772**
 Brown, C - 403
 Brown, JM - 1037
 Brown, LE - **750**
 Bruggeman, H - **312**
 Brüning, F - 717
 Bruno, N - **648**
 Brunstetter, T - 268
 Bryant, M - 96, 266
 Bryant, TA - 507
- Bub, D - 638
 Bub, DN - 534
 Buckthought, A - **1054**
 Budnik, U - **662**
 Buelthoff, HH - 334
 Buffat, S - **860**
 Bukach, C - 638
 Bukach, CM - **534**
 Bukowski, L - **838**
 Bülthoff, HH - 526, 990
 Bülthoff, I - **380**
 Burge, J - 776, **874**
 Burner, K - 302
 Burr, DC - 685, **921**
 Busey, TA - **637**
 Butcher, SJ - **967**
-
- C**
- Caclin, A - **839**
 Caddigan, E - 795
 Cadieu, C - **673**
 Cai, RH - **655**
 Cain, MS - 588
 Calabro, FJ - **728**
 Caldara, R - **42**, 540
 Callaway, EM - 433
 Calvert, J - 230, **295**
 Cameron, E - **177**
 Campbell, C - 305
 Campos, JL - 63, **306**
 Cant, JS - **246**
 Cantlon, JF - **340**
 Canto-Pereira, LM - **689**
 Cantor, CR - **205**
 Cao, D - 95
 Caplovitz, GP - 225, 245, **656**, 909, 968
 Carandini, M - 85, 227, 372, 429
 Cardinal, KS - 461, **1026**
 Carey, DP - 185, **287**
 Carey, S - 353
 Carlow, RM - 148
 Carlson, KW - 682
 Carlson, TA - **544**
 Carmel, D - **770**
 Carmi, R - **549**
 Carney, T - 895, 896
 Caroline, B - 814, **816**
 Carpenter, GA - 871
 Carpenter, TL - 19
 Carr, VA - 461
 Carrasco, M - 164, 165, 166, 187, 233, 688, 1005
 Carter, OL - **685**
 Cartwright-Finch, U - **547**
 Carver, LJ - 302
 Casella, MW - 523
 Casile, A - 375
 Caspi, A - **808**
 Cass, JR - **460**
 Cassanello, C - **582**
 Castaneda, B - 337
 Castelhana, MS - **69**
- Castelo-Branco, M - 668
 Caudek, C - **405**, 996
 Cavanagh, P - **640**, 686, 967, 1002
 Cha, J - 956
 Chai, Y - 1047
 Chakravarthi, R - **1002**
 Chan, F - 975
 Chan, GS - **63**, 306
 Chan, LK - **341**
 Chandler, DM - 602
 Chang, DL - **601**
 Chang, L - 1039
 Chao, H - **1015**
 Chatterjee, A - 916
 Chattha, M - 382
 Chaudhury, S - 884
 Chaumon, M - **681**
 Chauvin, A - 481, **605**, 922, 992
 Chen, C - **498**, 1025
 Chen, D - 613
 Chen, P - **1006**, 1008
 Chen, VJ - 575
 Chen, X - 702
 Chen, Y - **876**
 Cheramie, R - 303
 Cheries, EW - **353**, 1048
 Cheung, B - 193
 Cheung, O - 379
 Cheung, OS - **531**
 Cheung, S - **300**, 807
 Chiao, JY - **41**
 Chinellato, E - 362
 Chino, YM - 432
 Chitkara, M - 445
 Cho, Y - **765**
 Chockalingam, K - 987
 Choi, H - **657**
 Chong, S - **1050**
 Chou, W - **1043**
 Chouchourelou, A - **936**
 Christodoss, CS - 682
 Christensen, JC - **862**
 Chu, H - 424
 Chu, SS - **508**
 Chu, W - **873**
 Chuang, SY - **52**
 Chubb, C - 175, 363, 400, 475, **972**
 Chukoskie, L - 506
 Chun, MM - 74, 611, 863, 949, 1075
 Chung, C - 42, 540
 Chung, ST - 807, **864**
 Ciaramitaro, VM - **172**
 Cisarik, PM - 138
 Clark, JJ - 699
 Cleeremans, A - 554
 Clifford, CW - **212**, 232, 242, 705, 829
 Clore, G - 195
 Clore, GL - 199
 Cobo-Lewis, AB - 132, **148**
 Cohen, EH - **215**
 Cohen, JA - **313**
 Cohn, TE - 730, **820**
- Coker, C - 356
 Collier, SA - **132**, 148
 Collignon, O - 905
 Collin, CA - **832**, 834
 Collins, DR - 347
 Collins, Jr., MD - 682
 Colombo, EM - 560
 Coltheart, V - 112
 Colton, MB - 310
 Comerford, JP - **53**
 Conner, IP - 285, **296**
 Connors, EM - 141
 Conrey, B - **886**
 Conte, MM - 475, **607**
 Conway, A - 558
 Cook, SC - 1062
 Cooperman, A - 224
 Corballis, PM - **489**
 Corina, DP - 938
 Cormack, LK - 441, **606**
 Corn, AL - 301
 Cornwell, P - 49
 Coughlan, J - 924
 Courage, ML - 454
 Crabtree, CE - 123, 757
 Craig, G - 653
 Cramer, C - 22
 Crawford, J - 121, 698
 Crawford, JD - **630**, 647
 Créach, O - 484
 Creem-Regehr, SH - 197, 307, 310, 387
 Crewther, DP - **14**, 109
 Crewther, SG - **109**
 Crognale, M - 268
 Crognale, MA - 768
 Crowell, JA - 617, 1018
 Cui, X - 771
 Culham, JC - 362, 383
 Cumming, B - 254
 Cunningham, KA - **279**
 Curby, KM - **532**
 Curran, W - **150**
 Curtis, C - 34
-
- D**
- Dakin, MA - 277
 Dakin, SC - 176, 599, **840**
 Dal Martello, MF - 126, **663**
 Dale, AM - 901
 Dandekar, S - **896**
 Dang, S - 228
 Daniel, F - **814**, 816
 Dannemiller, JL - **693**
 D'Antona, AD - **761**
 Dasara, M - 51, 54, 58, **60**, 978
 Daum, I - 937
 Davenport, JL - **68**
 Davidenko, N - **984**
 Davidoff, J - 91
 Davies, IR - 270
 Davis, ET - **952**
 de Barbaro, K - 923

de Grave, DD - 208
 de Greef, P - 556
 de Ridder, H - 525
 De Valois, KK - 609
 De Volder, AG - 905
 de Wit, TC - 297
 de Zubicaray, GI - 96, 266
 Dean, HL - 680
 Deaner, RO - 395
 DeAngelis, GC - 388, 671
 DeBruine, LM - 45, 46, 48
 Deichmann, R - 366
 Del Bello, R - 648
 Delahunt, PB - 721
 Delfiner, LD - 394
 Dell' Anna, A - 648
 DeLucia, PR - 331
 Delvenne, J - 622
 Denney, HI - 1037
 DeSouza, JF - 630
 Deutsch, GK - 1059
 Devinck, F - 721
 Devlin, J - 1004
 Dhruv, NT - 81, 265
 Di Lollo, V - 108, 1019
 Di Luca, M - 244, 993, 996
 Diaz, GJ - 318
 Dickinson, CA - 702
 Dilda, V - 197
 Dilks, DD - 904
 Dill, JC - 259
 Dillenburger, B - 571
 DiMase, JS - 74
 Dingle, KJ - 40
 Dinon, J - 988
 Dobie, TG - 753
 Dobkins, KR - 302
 Doerschner, K - 788, 789
 Doi, T - 253
 Dolan, RJ - 826
 Dolgov, IN - 733
 Domini, F - 405, 996
 Dong, DW - 846
 Doshier, B - 915
 Doshier, BA - 459, 712, 873
 Doucet, M - 889
 Dougherty, RF - 1059
 Downing, PE - 828
 Drescher, BA - 920
 Dressel, J - 399
 Drew, T - 76
 Drewes, J - 604
 Drawing, K - 627
 Drga, VF - 252
 Driver, J - 366, 514, 1003
 Droll, JA - 620
 Drover, JR - 454
 Drummond, SP - 1058
 Dubbels, BR - 810
 Duchaine, BC - 39, 40
 Ducros, M - 908
 Dumoulin, SO - 96, 266
 Dunphy, N - 751

Duponsel, N - 11
 Dupuis-Roy, N - 865
 Durant, S - 232
 Durgin, FH - 333, 335, 736, 751
 Dutton, GN - 295, 558
 Dux, PE - 112, 748
 Dyde, RT - 194
 Dyre, BP - 336
 Dziuban, S - 155

E

Eagleman, DM - 59, 769, 771
 Earle, AE - 454
 Eastwood, JD - 389
 Eckstein, MP - 515, 920, 957, 1056
 Eddy, K - 1009
 Edelman, JA - 446, 508
 Edelman, S - 79
 Edsall, P - 303
 Edwards, M - 144, 825
 Edwards, V - 851
 Eger, E - 826
 Egeth, H - 299, 396, 625
 Eidels, A - 216
 Ejima, Y - 847
 Elder, DM - 316
 Elder, J - 478
 Ellemberg, D - 188
 Elliot, S - 268
 Elliott, SL - 247
 Ellis, C - 542, 543
 El-Shamayleh, Y - 221
 Eng, HY - 613
 Engel, SA - 461, 538, 1026
 Enns, JT - 50, 113, 505, 927, 955, 1012
 Enriquez, A - 317
 Epstein, W - 324
 Ernst, MO - 251, 652, 752, 874
 Ernst, T - 1039
 Essock, EA - 159, 480
 Ethier, C - 605
 Evans, KK - 877
 Evans, L - 751
 Everingham, M - 830

F

Fahrenfort, JJ - 966
 Fair, JA - 1071
 Fajen, BR - 318, 319
 Falkenberg, HK - 308
 Fallah, M - 451, 760
 Faludi, R - 167
 FANG, F - 15, 512
 Fang, L - 577
 Fantoni, C - 342, 565, 993
 Farell, B - 256, 520, 994
 Farias, MC - 182
 Farid, H - 797
 Fattori, P - 632
 Faubert, J - 149, 298, 321, 465, 484
 Fazl, A - 740

Feigenson, L - 353, 644
 Feldman, J - 976
 Feliuss, J - 211
 Feloiu, F - 121
 Fencsik, DE - 28
 Fenske, M - 89, 855
 Fenske, MJ - 854
 Ferlazzo, F - 844
 Fermuller, C - 1031
 Fermuller, CM - 517
 Fernandez, JM - 994
 Fernandez-Ruiz, J - 630
 Ferrera, J - 683
 Ferrera, VP - 582, 926
 Field, DJ - 602
 Field, DT - 291, 735
 Filimon, F - 631
 Fine, EM - 161, 452, 1008
 Fine, I - 367
 Fischer, MH - 120
 Fischl, B - 901
 Fiser, J - 457, 1060
 Fiset, D - 605, 992
 Fisher, BD - 259
 FitzGibbon, EJ - 590, 805, 849
 Fitzpatrick, D - 430, 1022
 Flanagan, MB - 753
 Fleet, J - 682
 Fleming, RW - 526, 527
 Flombaum, JI - 615
 Florer, FL - 806
 Flusberg, S - 951
 Fogt, N - 436, 445
 Foley, JM - 182
 Formisano, E - 668
 Forte, JD - 798
 Foss, G - 753
 Foster, DH - 272, 1027, 1028
 Fougny, D - 546
 Fournier, LR - 1010, 1036
 Fowlkes, C - 345
 Fox, LF - 796
 Francis, G - 764, 765, 958
 Franconeri, S - 511
 Franconeri, SL - 643, 1012
 Frank, MC - 453
 Frankl, ML - 995
 Franz, VH - 118, 208, 357
 Frazier, J - 443
 Frazor, RA - 85, 372, 429, 603
 Freda, R - 367
 Frederic, G - 814, 816
 Freeman, ED - 36
 Freeman, TC - 136
 Freire, A - 20
 Fried, I - 239
 Friedrich, B - 1067
 Frischen, A - 389, 410
 Frumkin, J - 401
 Fujisaki, W - 879
 Fujita, I - 253, 1032
 Fukuda, K - 260
 Fuller, SG - 1005

Fulvio, JM - 471, 567

G

Gabari, Y - 113
 Gabree, SH - 477
 Gabrieli, JD - 636
 Gajewski, DA - 88
 Gallant, JL - 83
 Galletti, C - 632
 Gan, T - 456
 Ganel, T - 355
 Garcia, JO - 21
 Garcia, P - 463
 Garrigan, P - 213, 469
 Garsoffky, B - 64
 Garsoffky, BR - 861
 Gaspar, CM - 824
 Gauthou, HL - 621
 Gaudino, BM - 523
 Gauthier, I - 379, 530, 531, 532, 534
 Gazzaniga, MS - 1060
 Gee, AL - 100, 784
 Gegenfurtner, KR - 118, 208, 377, 587, 604, 787
 Geiger, EJ - 612
 Geiger, G - 812
 Geisler, WS - 372, 603, 700, 781
 Geng, JJ - 1003
 Gentili, C - 827
 Georgeson, MA - 247, 524, 800
 Georgieva, SS - 777
 Gerbino, W - 342
 Gerhardstein, P - 349, 474
 Gerritsen, C - 389
 Gerstner, W - 766
 Ghadiali, Q - 431
 Ghahremani, DG - 636
 Ghazanfar, AA - 890
 Ghorashi, S - 108
 Ghose, GM - 237
 Ghose, T - 973
 Ghuman, AS - 90
 Giaschi, D - 851
 Giaschi, DE - 293, 843
 Gibson, BS - 507
 Gibson, LA - 16
 Giese, M - 850
 Giese, MA - 26, 945
 Giese, MM - 935
 Gilchrist, AL - 240, 241
 Gilchrist, F - 558
 Gilchrist, ID - 925
 Gillam, B - 263
 Gillam, BJ - 261
 Gilroy, LA - 1, 970
 Gilson, SJ - 198
 Giordano, A - 233
 Gipsman, D - 566
 Girshick, AR - 404, 518
 Glennerster, A - 198
 Gobbini, M - 827
 Gobell, J - 164
 Goda, N - 847

Goebel, R - 668
 Goffaux, V - **541**
 Goh, X - 892, **893**
 Golarai, G - **636**
 Gold, JM - 886, **1062**
 Goldberg, ME - 100, 784
 Goltz, HC - 630, **667**
 Gomez, C - **968**
 Gomi, H - **364**
 Gonzalez, CL - **355**
 Gonzalez-Alvarez, C - 360
 Goodale, MA - 129, 173, 246, 355, 362, 383, 750
 Goolsby, BA - 392
 Gordon, GE - 658
 Gorea, A - **690**
 Gori, S - **568**
 Gosney, J - 617
 Gosney, JL - **953**
 Gosselin, F - 223, **481**, 605, 865, 906, 992
 Gottesman, CV - **67**
 Gottschalk, DR - 346
 Goutcher, R - **143**
 Grabowecy, M - 883, 1034, **1053**
 Graham, N - 762
 Gramzow, EF - 473
 Granrud, CE - **521**
 Gray, R - **337**
 Gray, WD - 418
 Green, C - **1069**
 Greene, K - 286
 Greene, MR - **71**
 Greenlee, MW - 650
 Greenwald, SH - 367
 Greenwood, JA - **144**
 Grill-Spector, K - 87, 545, 636, 745, 857
 Grinband, J - **926**
 Grol, M - 544
 Gromko, DJ - 736
 Gronau, N - **856**, 910
 Gronauo, N - 89
 Grossberg, S - **54**, 316, 577, 740, 837, 871, 997, 1051
 Grossman, ED - 21
 Grzywacz, NM - 329, 608
 Gu, Y - 388
 Guazzelli, M - 827
 Guo, S - 809
 Gurnsey, R - 55, 476
 Gustas, SJ - 161
 Guterman, P - 653
 Guthrie, DT - 346
 Guttman, SE - **970**
 Guyader, N - 831, **954**

H

Habak, C - 209, **210**
 Hadjigeorgieva, M - **934**
 Hafed, ZM - **580**
 Hailston, K - 952
 Häkkinen, J - 589, 591

Halberda, J - **644**
 Hall-Haro, C - **453**
 Halpert, BA - 750
 Hamburger, K - **61**, 662, 717, 722
 Hamilton, R - 295
 Han, GH - 498
 Han, J - 42, 540
 Han, S - 607
 Hansen, BC - 159, **480**
 Hansen, T - **787**
 Hanson, C - 936
 Hanssens, J - 321
 Hardy, JL - 721
 Harley, EM - 461, **538**
 Harner, AM - **903**
 Harris, AM - **539**
 Harris, IM - **748**, 859
 Harris, JM - **252**
 Harris, LR - 194
 Harrison, MC - 304
 Harrison, S - 286
 Harza, I - 836
 Hauck, RE - **161**
 Haun, AM - **159**, 480
 Haushofer, J - **907**
 Hawkins, L - 1004
 Haxby, JV - 827
 Hayakawa, T - **725**, 726
 Hayes, AE - 168
 Hayhoe, M - 102, 710
 Hayhoe, MM - 140, 384, 620
 Haynes, HR - 521
 Haynes, J - 9, **222**, 366, 579, 887
 Hayward, WG - 341, **535**, 859
 Hayworth, KJ - **742**, 743
 He, S - 15, 300, 512
 He, ZJ - 5, 200
 Hecht, LN - **1035**
 Heckman, GM - **461**
 Heider, B - **122**
 Heiko W, B - 704
 Heinen, SJ - 594, **848**
 Heinrich, SP - **857**
 Heinze, H - 641
 Heiser, R - 305
 Helbig, HB - **752**
 Henderson, JM - 69, 88, 921
 Henderson, L - **365**
 Henderson, RM - 558
 Hengst, GT - 155
 Hennig, J - 662
 Henriksson, L - 892, 893
 Henson, RN - 826
 Hérault, J - 922
 Heredia, A - 562
 Hermens, F - **766**
 Hernandez, TD - **437**
 Herrmann, M - 757
 Herzog, MH - **499**, 503, 763, 766, 963
 Hess, BJ - 759
 Hess, RF - 96, **180**, 186, 266
 Hesse, GS - 524
 Highsmith, J - 268
 Hilger, JD - 342, **572**
 Hillimire, M - 1014
 Hillis, JM - 401
 Hillstrom, AP - 1047
 Hindi-Attar, C - 722
 Hinds, OP - 901
 Hirai, Y - 77
 Hiris, E - **22**
 Hirsch, J - 683, 926, 975
 Hirshman, E - 1004
 Histed, MH - **103**
 Ho, CS - **293**
 Ho, Y - **569**
 Hochstein, S - **573**, 701
 Hock, HS - 659, 838
 Holcombe, AO - 640
 Holcombe, AO - 59
 Holder, MK - 489
 Hollingworth, A - 427, 444, 618, **919**, 1042
 Holloway, SR - 715, 867
 Holm, L - **412**
 Holub, AD - **830**
 Hong, J - **171**
 Hong, S - **10**, 43
 Honma, M - **44**
 Hood, DC - **431**, 683
 Hooge, IT - 959
 Hopf, J - 641
 Horowitz, TS - 28, **29**, 74, 75, 782
 Horsager, A - 367
 Horwitz, G - 283
 Hoskinson, R - 259
 Hosokawa, K - **731**
 Hou, C - 773
 Howard, IP - **193**, 734
 Howe, PD - 563, **803**
 Hoyt, C - 682
 Hsiao, C - 306
 Hsieh, B - 617, 1018
 Hsieh, BB - **438**
 Hsieh, P - **225**, 245, 656, 909, 968
 Hsu, L - **248**
 Hu, B - **403**
 Hu, XP - 300
 Huang, M - 512
 Huang, P - **186**
 Huang, X - **82**
 Hudson, TE - 127, **626**
 Huff, M - **64**, 861
 Hugueville, L - 681
 Huk, A - 492
 Hulstijn, W - 297
 Humphreys, GW - 292, **1073**
 Hunter, CM - **79**
 Hurlbert, AC - **790**
 Husk, JS - 822, **823**
 Hussain, Z - **821**
 Huxlin, KR - **710**
 Hwang, PC - 57
 Hyun, J - **426**
 Hyvärinen, A - 561

I

Ichikawa, M - **878**
 Iglesias, M - 242
 Ikeda, H - 17
 Ikegami, B - 1032
 Imura, T - **330**
 Interrante, VL - **528**
 Iovin, R - 596
 Ipata, AE - 100, **784**
 Irwin, DE - **105**, 438, 617, 1018
 Irwin, K - **45**
 Ishii, M - **799**
 Isogaya, Y - **989**
 Issolio, LA - **560**
 Ito, H - 1065
 Itti, L - 549, 694, **779**, 1011, 1039
 Ivanoff, J - **234**
 Iyer, A - 694

J

Jackson, MC - **623**
 Jacobs, RA - 674
 Jacobson, JE - **819**
 Jacomuzzi, A - 648
 Jacques, C - **378**
 Jakobson, LS - **1030**
 James, AC - **892**, 893
 James, WJ - 367
 Jang, J - 669
 Jang, S - 934
 Jarrahi, B - 406
 Jastorff, J - 850, **935**
 Jazayeri, M - **495**
 Jefferies, LN - **1019**
 Jeffery, L - 833
 Jenkin, MR - 194
 Jennings, S - 653
 Jeon, H - 537
 Jeon, S - 459
 Jeter, PE - **712**
 Jewell, JG - **551**
 Ji, H - 517
 Jiang, F - 381
 Jiang, X - **633**
 Jiang, Y - 409, 416, **512**, 552, 613, 687, 917
 Jie, L - **699**
 Jin, Z - 780
 John, R - 449
 Johnson, AP - **786**
 Johnson, EN - **1022**
 Johnson, JS - **427**
 Johnson, KL - **943**
 Johnson, SP - **34**, 453, 529
 Johnston, A - 203, **767**, 879
 Johnston, S - 106, **107**
 Johnston, SJ - 747
 Jokisch, D - **937**
 Jolicoeur, P - 1070
 Jolij, J - **369**
 Jones, BC - 45, 46, 48
 Jones, KM - 485

Jordan, KE - **890**
 Josephs, O - 366
 Jovancevic, J - **102**
 Judelman, A - 727
 Juergen, K - **704**
 Juhl, AL - 521
 Junge, JA - **422**, 964, 1072

K

Kaczmarowski, A - 189
 Kahana, MJ - 420
 Kaiser, M - 638
 Kalar, DJ - **213**
 Kaldy, Z - **513**, 1009
 Kaller, CP - 662
 Kamitani, Y - **153**
 Kanagaraj, R - **804**
 Kanai, R - **707**, 720
 Kanaya, H - **145**
 Kanazawa, S - 47, 328, **852**
 Kaneko, H - 119, 260, 322, 872
 Kang, I - 189, **462**
 Kanwisher, N - 37, 38, 634, 907,
 1061
 Kanyuk, PJ - 785
 Kaping, D - 835
 Kapley, N - 757
 Kappers, AM - 559
 Kapusta, MA - 298
 Kassam, K - 89
 Kassam, KS - 90
 Kastner, S - 371
 Katkov, M - **456**
 Kawabe, T - 660
 Kawahara, J - **113**, 425
 Kawasaki, K - **93**
 Kawasaki, M - **624**
 Kawato, M - 716
 Kay, P - 281
 Kayaert, G - 91
 Kee, D - 156
 Kee, DE - 463
 Kellman, PJ - 213, 342, 469, 572
 Kelly, JW - 315
 Kemner, C - 344
 Kennedy, GJ - **468**
 Kenner, NM - **439**, 782
 Kenser, HE - 41
 Kerlin, JR - 897
 Kersten, DJ - 338, 746
 Kerzel, D - 118, 587, 696
 Khan, AZ - 647, **698**
 Khin, C - 148
 Kibbe, M - 513
 Kies, S - **400**
 Kikuchi, M - 77
 Kim, C - 537
 Kim, D - **396**, 544, 908
 Kim, DJ - 92, **858**
 Kim, J - **343**, 537
 Kim, M - 544, **908**, 1075
 Kim, S - 2
 Kim, Y - 159, **1034**

Kimchi, R - 284
 Kimura, E - **407**
 King, CE - 31
 King, L - **416**, 552
 Kingdom, FA - 186, 278, **464**, 467,
 786, 985
 Kingdon, A - 188
 Kingstone, A - 78
 Kiorpes, L - 221
 Kiper, DC - **911**
 Kitazaki, M - 3
 Klatzky, RL - 201, **359**
 Klein, RM - 392
 Klein, SA - **479**, 895, 896
 Klerer, AJ - 57
 Klieger, SB - 28
 Klier, EM - **759**
 Kline, KA - **59**
 Klostermann, S - 751
 Knapp, H - **938**
 Knill, D - 403
 Knill, DC - **628**
 Koc, A - 8
 Koch, B - 937
 Koch, C - 238, 239, 391, 694, 1046
 Kodaka, Y - **590**, 805
 Koenderink, JJ - 525, **559**
 Koene, A - **879**
 Koh, CC - 182
 Kohnen, A - 639
 Koike, T - **691**
 Kojo, I - 591
 Kojo, IV - **589**
 Kok, Y - 63
 Koning, A - **960**
 Kontsevich, LL - **458**, 900
 Kosnik, W - 156
 Kothari, R - **187**
 Kouh, M - 673
 Kourtzi, Z - 670, 850, 935, **1068**
 Kovács, G - **836**, 977
 Kovács, I - **977**
 Koyama, S - 867
 Kozak, LR - **668**
 Kozhevnikov, M - 936, 942
 Kraft, JM - **271**, 275
 Kramer, AF - 417, 550, 617, 1018
 Krämer, M - 435
 Kramer, P - 248
 Krauzlis, R - 697
 Krauzlis, RJ - 506, 580, 581
 Kravitz, DJ - **1041**
 Krekelberg, B - 135, **930**, 1068
 Kristjansson, A - **514**
 Kroliczak, G - 750
 Kuai, S - 818
 Kubose, TT - 550
 Kubovy, M - 348, 352, 651
 Kuhlmann, L - **997**
 Kumada, T - 397, 948
 Kunar, M - 951
 Kunar, MA - **413**
 Kung, C - **542**, 543

Kuriki, I - **267**, 280
 Kurki, I - **561**
 Kuyk, T - **156**
 Kwon, M - **810**

L

Lages, M - **339**
 Lai, G - **975**
 Lakhani, AN - 769
 Lakra, D - 774
 Lalanne, C - 841
 Laloyaux, C - **554**
 Lam, J - 394
 LaMendola, NP - 496
 Lamme, VA - 344, 369, 966, 971,
 979
 Lampkin, JA - 806
 Lanagan, LK - **1008**
 Landau, AN - **290**
 Landau, B - 299
 Landy, MS - 127, 184, 569, 626
 Langer, MS - **566**
 Langlois, JH - 981
 Lappin, JS - **162**, 301, 494
 Laura, P - 632
 Laurinen, PI - **455**, 477, 561
 Lavie, N - 547, 770
 Le Grand, R - **638**
 Leaper, J - **185**
 Leary, MA - 161
 Leber, AB - **949**
 Lee, C - 431
 Lee, H - **669**
 Lee, S - 2, 669, 873, 902
 Lee, W - **902**
 Lee, Y - **123**
 Leek, C - 1045
 Leek, E - **747**
 Lefebvre, C - **1070**
 Legault, I - **465**
 Legge, GE - 300, 807, 810
 Leinenkugel, F - 722
 Lennie, P - 81, 265
 Leonard, C - 625
 Leopold, DA - 12, 13, 251, **833**
 Lepore, F - 889
 Lesmes, LA - **459**
 Levi, DM - 864
 Levin, DT - 423, **553**, 555
 Levine, MW - 56, **178**
 Levinthal, B - 1018
 Levinthal, BR - **617**
 Levitan, CA - 437, **440**
 Lew, RT - 336
 Lewandowski, BC - 612
 Lewis, A - **269**
 Lewis, AR - 682
 Lewis, TL - 20, **188**, 664
 Li, HO - **214**, 564, 754
 Li, J - 682
 Li, L - **314**
 Li, RW - 864
 Li, W - **361**, 885, 1001

Li, Y - 376, **522**, **600**
 Lien, TC - 138
 Likova, LT - **1064**
 Lim, CC - 682
 Lin, P - **618**
 Lin, Y - 666, **1025**
 Linares, D - 206
 Lindholm, JM - **154**
 Lindsey, DT - 772, 998
 Ling, S - **688**
 Ling, Y - 790
 Lipes, GA - 617, **974**
 Liston, DB - **581**
 Liu, B - **578**
 Liu, CH - 180
 Liu, J - **625**, **1029**
 Liu, L - 818
 Liu, S - 915
 Liu, Y - 606
 Liu, Z - 23, 713, **741**
 Livingstone, MS - **563**, 803
 Lleras, A - 617, 795, **955**, 1018
 Lo, S - **158**
 Loach, DP - **110**
 Loffler, G - 143, 468, **658**
 Logothetis, NK - 12, 13, 890
 Lomber, SG - **49**
 Loomis, JM - 315
 Lopez-Moliner, J - **206**
 Lorenceau, J - 839, **841**, 860
 Losier, K - 305
 Lotz, K - 120
 Loula, F - 944
 Lovejoy, LP - **506**
 Lovell, G - 597
 Lovell, PG - **470**, **775**
 Lozar, C - 1039
 Lu, H - **23**, 713, 741
 Lu, J - **1039**
 Lu, Z - 459, 712, **811**, 873, 915, 929
 Luck, SJ - 426, 427, 618, **641**, 1007
 Ludwig, CJ - **925**
 Luksys, G - 766
 Lusk, KE - 301
 Lyon, DC - **433**

M

Ma, Y - 940, 941
 MacEvoy, SP - **430**
 Mack, A - 350, 358, 557
 Mackay, A - 295
 MacKeben, M - 163
 MacKenzie, KJ - **146**
 MacLeod, D - 283
 MacLeod, DI - **249**
 MacNeilage, PR - 440
 Macuda, T - 653
 Macuga, KL - **315**
 Madelain, L - 697
 Mader, A - 717
 Magnussen, CM - 658
 Magnussen, S - 717
 Mahajan, N - 737

- Mahon, K - 187
 Mahoney, KA - 141
 Maier, A - **12**
 Maier, SJ - 334
 Main, K - 952
 Majaj, NJ - 81, 809
 Makous, W - **457**
 Malik, J - 345
 Maljkovic, V - **72, 73**
 Maloney, LT - 126, 167, 567, 569,
 626, 663, 788, **789**
 Malpeli, J - **189, 462**
 Mamassian, P - 151, 204, 703, **880,**
 881, 1067
 Manahilov, V - **230, 295, 724, 801**
 Mangini, MC - **38**
 Manis, FR - 811
 Manoach, DS - 588
 Mante, V - **372, 429**
 Mäntylä, T - 412
 Manzi, A - 1074
 Mao, J - **327**
 Marendaz, C - 831, **922**
 Mareschal, I - **176, 599, 840**
 Marisa, C - 167
 Mark, H - 367
 Marois, R - 234, 546, 610
 Marotta, J - 121
 Marrocco, RT - 679
 Marshall, DA - 866
 Martelli, M - 809
 Marti, S - 114, **684**
 Martin, A - 814, 816
 Martin, EW - **115**
 Martínez Rach, MO - **608**
 Martínez Verdú, FM - 608
 Martínez-Conde, S - 795
 Martínez-Trujillo, JM - 698
 Martini, P - 72, **73**
 Maruya, K - 130, **139, 145, 933**
 Marzocchi, N - 632
 Masakura, Y - 878
 Mase, K - 3
 Massin, J - **557**
 Matin, L - 361, 885, 1001
 Matsuka, T - 936
 Matsukura, M - **516**
 Matsuzaki, N - 989
 Maurer, D - 20, 188, 664, 982
 Ma-Wyatt, A - **131**
 May, JG - **753**
 May, KA - 954, **962**
 Mayr, U - 639
 Mays, A - 882
 Mazurek, M - 236
 Mazzarino, B - 939
 McAleer, P - **939**
 McAnany, J - **56, 178**
 McArthur, K - **703**
 McBeath, MK - **733**
 McCabe, E - **992**
 McCann, B - 628
 McCarley, JS - 953, **1014**
 McCleery, JP - **302**
 McCloskey, M - 904
 McCollough, AW - 1071
 McCormick, D - **881**
 McCotter, M - 42
 McCourt, ME - **243**
 McCoy, AN - 101
 McCulloch, DL - 295, 558
 McDonald, JS - **670**
 McElree, B - 233
 McGeorge, P - 185
 McGinty, PJ - **46**
 McKee, S - 227
 McKee, SP - 131, 723
 McKinley, MK - 236
 McKone, E - **825**
 McLin, LN - **155, 463**
 McMahan, KL - 96, 266
 McPeck, RM - **583**
 McSorley, E - 925
 Meadows, JL - 109
 Mednick, SC - **1058**
 Meese, TS - 800
 McGehee, A - 305
 Meigen, T - **435**
 Mel, BW - 274, 502
 Mendola, JD - **285, 296**
 Menees, SM - **192**
 Meng, M - **4**
 Mennie, NN - **384**
 Mermillod, M - **831**
 Merritt, P - **1004**
 Meyers, E - **354**
 Meyerson, RG - **257**
 Michael, B - 704
 Michel, C - 42, **540**
 Michel, MM - **674**
 Michod, KO - **75, 413**
 Mihaylov, P - **724**
 Milders, MV - 510
 Miles, FA - 590, 805, **849**
 Miller, CJ - 521
 Miller, EK - 103, 585
 Milner, D - 291
 Mingolla, E - 316, 740, 837, 997
 Minshew, N - 284
 Miracle, JA - 772
 Misaki, M - 725, 726
 Mitchell, JF - **30, 80**
 Mitroff, SR - **1048**
 Mitsudo, H - **332**
 Miura, K - 660
 Miyahara, E - 57
 Miyauchi, S - 725, 726
 Mizokami, Y - **768, 835**
 Mohler, BJ - **307, 387**
 Moncreif, B - 757
 Mondloch, CJ - 982
 Monnier, P - **99**
 Montagna, B - **165**
 Montague, P - 771
 Montaser Kouhsari, L - **170**
 Montesanto, A - **24, 978, 1023**
 Mon-Williams, M - 45, 46, 48, 124,
125, 365, 406
 Mon-Williams, MA - 291
 Moon, S - 537, **588**
 Moore, C - 1006
 Moore, CM - 452, **927, 1008**
 Moradi, F - 391, **965**
 Mordkoff, J - 1006
 Morgan, HM - **421**
 Morgan, MJ - 181, **950**
 Morgenstern, Y - **478**
 Mori, Y - 1032
 Morrone, C - 449
 Morvan, C - **133**
 Morya, E - **844**
 Most, SB - **791**
 Motamed, A - 104
 Motoyoshi, I - **570**
 Motter, BC - **912**
 Mounts, JR - 1014
 Movshon, J - 84, 221, 495
 Mruczek, R - 140
 Mueller, K - 833
 Mullen, KT - **96, 266, 1021**
 Müller, K - **251**
 Mulligan, JB - **441**
 Mulroue, A - **124**
 Muna, KE - 57
 Murray, JK - 510
 Murray, SO - **746**
 Myers, AG - 191
 Myers, CW - 418, **695**

N
 Nagai, M - **482**
 Nagy, AL - 504
 Najemnik, J - **700, 781**
 Nakajima, C - 273
 Nakajima, Y - 130
 Nakano, M - **1032**
 Nakachi, S - 1024
 Nakayama, K - 16, 39, 40, 41, 385,
 539, 586, 946
 Nam, J - **956**
 Nanez, JE - **715, 867**
 Nascimento, SM - 1027, 1028
 Nassi, JJ - 433
 Navalpakkam, V - **1011**
 Nawrot, M - **646, 995**
 Nederhouser, M - **91**
 Neider, MB - **415, 702**
 Nelson, J - 1036
 Nelson, JD - 631
 Nelson, R - 500
 Nergler, JL - 277
 Neta, M - 856
 Neth, H - **418**
 Neumann, H - 527, 661
 Nevarez, G - 795
 Newell, FN - 380
 Newman, GE - **964**
 Nezhad, M - **104**
 Nguyen, VA - 193
 Nguyen-Tri, D - **149**
 Ni, R - 317, 665, **666**
 Nichols, DF - **659**
 Nicolas, D - 814
 Niedeggen, M - 510
 Niemeier, M - **1040**
 Nieuwenstein, MR - **111**
 Niimi, R - **217**
 Nishida, S - **280, 364, 570, 767, 847,**
 879
 Nishimura, A - **169**
 Nishimura, M - **982**
 Nixon, MS - 941
 Noest, AJ - 1055
 Noles, NS - **616**
 Norcia, AM - **773**
 Norman, HF - **757**
 Norman, J - 123, **519, 757**
 Notman, LA - **711, 868**
 Novar, B - 156, 463
 Nuding, U - 676
 Nyquist, JB - 162, **301**

O
 Obhi, SS - **129**
 O'Brien, JM - 289, **853, 1066**
 O'Byrne, B - 832
 Ogawa, H - 414, **948**
 Ogmen, H - 8, 499, **963**
 Oh, S - **25, 754**
 Ohtani, Y - 847
 Ohtsuka, S - 731
 O'Kane, L - **151**
 Olds, ES - **1016**
 Oleksiak, A - 7
 Olinick, AS - 732
 Oliva, A - 70, 71, 439
 Oliver, RT - **612**
 Olmos, A - 786, **985**
 Olson, IR - 614, **916**
 Olzak, LA - 455, **477**
 Ono, F - **425**
 Ono, H - 332
 Ooi, T - **5, 200**
 Op de Beeck, HP - **1061**
 Orbach, HS - 468, **558, 658**
 Orban, GA - 777
 Orchard, A - 682
 O'Regan, J - 621
 O'Regan, JK - 98
 Oriet, C - **50**
 Ortega, ET - **274**
 Oruc, I - **184**
 Osada, Y - 44
 Ostrovsky, Y - 354, 739, **969**
 O'Toole, AJ - 47, **381**
 Otsuka, Y - **47, 852**
 Otte, T - **717**
 Otto, TU - **503**
 Ouyang, Y - **275**
 Overbury, O - 11, 298
 Owens, CJ - **1044**
 Owens, JM - **311**

Ozgen, E - **270**

P

Padilla, M - 329
 Paffen, CL - **6**
 Pagé, G - 55
 Page, K - 916
 Paller, KA - 1034
 Palmer, J - **236**
 Palmer, SE - **500, 973**
 Palmeri, TJ - 530
 Palomares, M - **299, 396, 625**
 Panayiotou, A - 14
 Paphomatos, T - 171, 235
 Pappas, Z - **358**
 Paradis, V - 114
 Paradiso, MA - 598
 Pardhan, S - **360**
 Park, J - **202**
 Park, S - **1075**
 Parker, A - 1052
 Parks, NA - 489
 Parraga, CA - 775
 Pasička, W - 243
 Pasternak, T - 496
 Pasupathy, A - **585**
 Patel, A - 975
 Patel, SS - 138, **262**
 Paterson, HM - 939, **940**
 Paul, MA - **168**
 Payne, HE - **191**
 Pearson, AM - **449**
 Pearson, J - **705**
 Pearson, P - 1030
 Peelen, MV - **828**
 Peeters, R - 777
 Peli, E - 548
 Pelli, DG - 184, 714, **809**
 Pelz, JB - 140, **442**
 Penna, M - 24, **978, 1023**
 Penna, P - 51
 Pereverzeva, M - **1033**
 Perona, P - 830
 Pestilli, F - **166**
 Peters, RJ - **694**
 Peterson, MA - **218, 290, 343, 419, 913**
 Peterson, MS - **417, 792, 869**
 Petrov, AA - 712
 Petrov, Y - **227, 723**
 Pettigrew, JD - 685
 Pezaris, JS - **368**
 Pham, BT - 1056
 Philbeck, JW - **309**
 Phillips, F - **523**
 Phillips, W - **738**
 Pianta, MJ - 261
 Pierre, B - 527
 Pierson, R - 501
 Pietrini, P - 827
 Pilz, K - **990**
 Pinna, B - 51, 54, **58, 60, 574, 662**
 Pinto, J - 18, 390

Pishoy, M - 367
 Pitchford, NJ - 94
 Pitts, MA - **277**
 Pizlo, Z - 522
 Place, SS - **27, 28, 29**
 Platt, ML - **101, 395, 584, 680, 1049**
 Poder, E - **179**
 Poggel, DA - **163**
 Poggio, T - 26, 673, 744, 812, 1046
 Poirier, C - 905
 Poirier, FJ - **466**
 Polat, U - **486, 487**
 Polhamus, G - 156
 Polimeni, JR - 898, **901**
 Polley, SZ - 732
 Polli, FE - 588
 Pollick, FE - 934, 939, 940, **941**
 Pomerantz, JR - 351
 Pomplun, M - 513, 1009
 Pont, SC - 559
 Poonja, S - 443
 Pope, WB - 538
 Portillo, MC - **351**
 Posey, SM - **147**
 Post, RB - **356**
 Potanina, PV - 1059
 Potter, MC - **796**
 Prasad, S - **944**
 Prenger, RJ - 83
 Previc, FH - 155
 Prins, N - 464, **467**
 Prinz, J - 120
 Proffitt, DR - 195, 196, 199, 324, 749
 Purves, D - 672, **980**
 Pylyshyn, ZW - 31, 32

Q

Qi, H - **866**
 Quartz, SR - 649
 Quian-Quiroga, R - 239
 Quinlan, DJ - **383**

R

Radonjic, A - 240, **241**
 Raghunandan, A - **443**
 Rainville, SJ - **472**
 Raj, R - **603**
 Rajimehr, R - **134, 170**
 Ramachandran, V - 758
 Ramachandran, VS - 241
 Ramscar, M - 984
 Ranvaud, R - 689, 844
 Rasche, C - **219, 870**
 Rauschenberger, R - **424**
 Raymond, JE - 392, 393, 623
 Read, J - **254**
 Reddy, L - 238, **239**
 Redner, G - 596
 Reem, R - 189
 Rees, G - **9, 222, 366, 579, 770, 887**
 Reeves, AJ - **272**
 Regan, DM - 337

Reid, RC - 368
 Reilly, JE - **31**
 Rein, J - **32**
 Rempel, MI - 505
 Ren, L - **647**
 Ren, X - **345**
 Renier, L - **905**
 Renninger, LW - **924**
 Rensink, RA - 52, **793**
 Reppa, I - **1045**
 Reynolds, JH - 30, 80, 451, 760
 Reynolds, MG - **389**
 Rhodes, G - 535, 829, 833
 Ricciardi, E - 827
 Richard, AM - **1042**
 Richard, W - 367
 Richer, F - **114, 684**
 Rieger, J - 641
 Riener, CR - **196**
 Ries, B - 528
 Riesenhuber, M - 633, 673
 Rindler, S - 1061
 Ripamonti, C - **597**
 Ro, T - **286**
 Robbins, R - 825
 Robert, GS - 367
 Roberts, N - 107
 Robertson, B - 1030
 Robertson, LC - 290
 Robinson, A - **1074**
 Rocha, MM - 689
 Röder, B - 888
 Roether, CL - **945**
 Rogers, BJ - **386**
 Rogers, BZ - 250
 Roitman, JD - **1049**
 Roorda, A - 443, 592
 Rosas, P - 377
 Rosenholtz, R - **780**
 Rosenthal, O - **875**
 Roser, ME - 1060
 Rossion, B - 378, 533, 540, 541
 Rothkopf, C - 374
 Rothkopf, CA - 442, **923**
 Roumes, C - 860
 Rousselet, GA - 488, **822, 823**
 Rowland, J - 848
 Royden, CS - **141**
 Rubin, N - 914
 Rubinstein, JS - 19
 Rucci, M - **375, 596**
 Rudd, ME - **562**
 Ruff, C - 514
 Ruff, CC - **366**
 Russell, R - **986**
 Rust, NC - **84**
 Rutherford, HJ - **392**
 Rutherford, MD - **382**

S

Saarela, TP - 455
 Sacher, Y - 290
 Sacks, DL - **444**

Sadr, J - 16, **946**
 Safier, M - 394
 Sagi, D - 224, 456, 486, 487, 690, **727**
 Sahn, C - 663
 Sahraie, A - 185, 287, 288, **510**
 Saiki, J - 397, 691, 755, **783**
 Saito, H - 609
 Sajda, P - 845, 891
 Sakai, K - 77
 Sakano, Y - **734**
 Sakurai, M - **1021**
 Salvano-Pardieu, V - 806
 Samco, MR - **909**
 Samonds, JM - 677, 678
 Sampanes, AC - **794**
 Sandbach, CD - 521
 Sankovich, J - 303
 Sanocki, T - **66**
 Santini, F - **596**
 Santos, LR - **737, 738**
 Sârbu, C - 294
 Sarkheil, P - **850**
 Sasaki, Y - **718**
 Satgunam, P - **445, 772**
 Sato, T - 130, 139, 145, 320, 731, **933, 989**
 Saunders, JA - 401, 866, **1000**
 Savelsbergh, G - 844
 Sawada, T - **872**
 Saygin, A - **493**
 Schaffer, ES - **333**
 Scharff, LV - **815**
 Scharnowski, F - **763**
 Schatzki, TF - 961
 Schaudt, WA - 336
 Scheessele, MR - **346**
 Schiller, PH - 408
 Schiltz, C - **533**
 Schira, MM - **900**
 Schirillo, J - **882**
 Schlack, A - **135**
 Schlag, J - 202
 Schlerf, JE - 776
 Schlicht, EJ - **629**
 Schlooz, WA - 297
 Schmeisser, ET - **434**
 Schnall, S - **199**
 Schneider, KA - **371**
 Schoenfeld, MA - 641
 Schofield, AJ - **524**
 Scholl, BJ - 74, 353, 422, 615, 616, **642, 657, 1048, 1072**
 Scholte, H - 344, **971**
 Scholte, SH - 966
 Schomer, DL - 686
 Schoonveld, W - 515
 Schoonveld, WA - **957**
 Schor, CM - 205, 264, 437, 440, 578, **593**
 Schrater, PR - 325, 338, 629
 Schuch, S - **1020**
 Schuchard, RA - 300
 Schutz, M - **651**

- Schwan, S - 64, 861
 Schwaninger, A - 535
 Schwartz, EL - 894, 898, 901
 Schwarz, M - 937
 Schwarzlose, R - 37
 Schweinberger, SR - 826
 Schyns, PG - 42, 223, 481, 906
 Sebanz, N - 942
 Sedgwick, HA - 263
 Segawa, K - 273
 Seidenberg, MS - 811
 Seiffert, AE - 152, 645
 Seitz, A - 1070
 Seitz, AR - 715, 716, 867
 Seizova-Cajic, T - 261
 Sejnowski, TJ - 819
 Sekuler, AB - 482, 483, 488, 821, 822, 823, 824
 Sekuler, R - 420, 918
 Seno, T - 320
 Seo, H - 732
 Sereno, MI - 493, 631
 Serre, T - 26, 744, 1046
 Sezikeye, F - 476
 Shadlen, MN - 236
 Shah, R - 263
 Shalev, GY - 598
 Shams, L - 649, 756, 875, 887
 Shankar, M - 738
 Shapiro, AG - 97, 489
 Shapiro, K - 106, 107
 Shapiro, KL - 115
 Sharan, L - 376, 600
 Shavit, AY - 1001
 Sheinberg, DL - 93, 536
 Sheliga, BM - 590, 805, 849
 Shelton, D - 359
 Shen, Y - 552
 Shepherd, SV - 395
 Shevell, SK - 10, 95, 99, 761
 Shiffar, M - 25, 936, 942, 944
 Shim, W - 416, 917
 Shimoyo, S - 202, 391, 447, 720, 756, 928, 965
 Shimozaki, SS - 515, 920, 957, 1056
 Shioiri, S - 33
 Shirai, N - 328, 852
 Shiu, D - 446
 Shive, J - 958
 Shneur, E - 701
 Shomstein, S - 692
 Shovman, MM - 813
 Shrivastava, A - 140
 Shuwairi, S - 34
 Shuwairi, SM - 529
 Sieffert, R - 337
 Siegel, RM - 122
 Sigala, R - 26
 Sikoglu, EM - 842
 Silbersweig, D - 394
 Silverman, ME - 394
 Simion, C - 447
 Simola, J - 589, 591
 Simoncelli, EP - 84, 231, 931
 Simoneaux, P - 753
 Simons, DJ - 509, 617, 795, 1018
 Simpson, WA - 230, 724, 801
 Sims, A - 411
 Singer, JM - 536
 Singh, M - 215, 471, 567
 Singhal, AB - 362
 Sinha, P - 354, 739, 969, 1057
 Sireteanu, R - 294
 Skoczenski, AM - 473
 Skow, E - 218, 419
 Slack, DF - 175
 Sledge, K - 614
 Slesar, CR - 350
 Slichter, DP - 795
 Sligte, IG - 971
 Slocum, WM - 408
 Smeets, JB - 204, 402
 Smilek, D - 78, 108, 389
 Smith, AT - 490
 Smith, EL - 432, 883
 Smith, ML - 42, 223, 906
 Smith, PA - 156, 250, 463
 Smith, RS - 315
 Sohn, W - 152
 Solomon, JA - 181, 950
 Solomon, SG - 81, 265
 Son, H - 564
 Song, J - 385
 Soranzo, A - 565
 Soroker, N - 290
 Souman, JL - 136
 Sowden, PT - 191, 711, 868
 Spanos, KA - 348
 Speck, O - 662
 Spehar, B - 242, 460, 1044
 Spencer, JV - 289, 853
 Spencer, OE - 386
 Spengler, RA - 774
 Sperling, AJ - 811
 Sperling, G - 235, 929
 Spillmann, L - 61, 574, 663, 717, 721, 722
 Stangl, B - 1004
 Stanley, D - 164
 Stanley, DA - 914
 Stara, V - 24, 51, 978
 Stavrou, EP - 157, 174
 Stefanucci, J - 199
 Stefanucci, JK - 195, 196
 Stephens, BR - 174
 Stern, E - 394
 Stetson, C - 769, 771
 Stetten, G - 359
 Stevenson, SB - 255, 441, 443, 592, 804
 Stocker, AA - 931
 Stockert, C - 646
 Stojanoski, B - 1040
 Stone, LS - 314, 450
 Stone, RW - 601, 866
 Stoner, GR - 82, 1038
 Strang, NC - 724
 Strasburger, H - 163, 220
 Stritzke, M - 595
 Strother, L - 352
 Stuck, B - 303
 Stupak, N - 384
 Su, M - 809
 Su, Y - 5
 Suchow, JW - 714
 Sugar, TG - 733
 Suh, H - 545
 Sukumar, S - 183
 Sullivan, B - 102, 384, 710
 Sullivan, BT - 923
 Sun, H - 63, 306
 Sundberg, DP - 30, 80
 Sung, K - 947
 Supèr, H - 979
 Sussman, RS - 409
 Sutter, EE - 370
 Suttle, CM - 802
 Suzuki, S - 883, 1034, 1053
 Svec, LA - 268
 Swan, A - 682
 Sweet, BT - 314
 Sylvester, R - 579
-
- T**
 Tachi, S - 448
 Tadin, D - 162, 301, 494, 1062
 Tadros, K - 605
 Tai, C - 154
 Tai, Y - 300
 Tailby, C - 81
 Takahama, S - 397
 Takahashi, K - 755
 Takeda, T - 847
 Takeuchi, T - 609
 Tallon-Baudry, C - 621, 681
 Tammero, L - 820
 Tamura, H - 799
 Tanabe, S - 253, 1032
 Tanaka, J - 638
 Tanaka, JW - 530
 Tanaka, Y - 725, 726
 Tang, Z - 799
 Tani, Y - 130
 Tarr, M - 534
 Tarr, MJ - 244, 542, 543
 Tascini, G - 1023
 Tashiro, T - 725, 726
 Tassinari, H - 127
 Taylor, CP - 483
 Tcheang, L - 198
 te Pas, SF - 6
 Teixeira, J - 668
 Telang, S - 1011
 Teller, DY - 276, 1033
 Terao, M - 414
 Thaler, L - 998, 999
 Therrien, ME - 834
 Thibeault, M - 114
 Thibodeau, PH - 736
-
- Thomas, C - 284
 Thomas, LE - 105, 617, 1018
 Thomas, P - 653
 Thompson, B - 713
 Thompson, P - 932
 Thompson, WB - 197, 307, 310, 387
 Thompson-Schill, SL - 612
 Thorn, F - 53
 Thornton, IM - 990
 Tillman, K - 809
 Tipper, SP - 168, 398, 410, 421, 1020
 Tjan, B - 983
 Tjan, BS - 104, 228, 279
 Todd, JJ - 546, 610
 Todd, JT - 559, 777, 862, 998, 999
 Tolhurst, DJ - 599
 Tombu, M - 110
 Tombu, MN - 1017
 Tomonaga, M - 330
 Tong, F - 4, 92, 153, 858, 897
 Tong, J - 137, 138
 Torralba, A - 70
 Toscano, J - 450
 Toufaniasl, M - 78
 Townsend, JT - 216
 Toyofuku, N - 961
 Tranduy, D - 905
 Traverso, V - 682
 Treisman, A - 877
 Trevenhan, CT - 287
 Trevethan, CT - 288
 Triesch, J - 373, 1074
 Troje, NF - 16, 937, 946, 1063
 Trommershaeuser, J - 627
 Trommershauser, J - 128, 595
 Troscianko, T - 597, 775
 Troup, LJ - 277
 Trujillo, LT - 913
 Tsao, J - 941
 Tse, J - 349, 474
 Tse, PU - 225, 245, 656, 909, 968
 Tseng, C - 235
 Tsermentseli, S - 853
 Tsodyks, M - 456
 Tsotsos, JK - 110, 1017
 Tsuruhara, A - 322
 Tsushima, Y - 116
 Tucker, TR - 430, 1022
 Tuller, M - 390
 Turano, KA - 884
 Turk-Browne, NB - 422, 1072
 Tyler, CW - 458, 479, 899, 900, 1064
 Tyrrell, RA - 19, 174
-
- U**
 Uchikawa, K - 273
 Ugurbil, K - 908
 Umeda, K - 253
 Usui, S - 1024
-
- V**
 Vaina, LM - 728, 842

Valerie, CD - 367
 van Dam, LC - **706**
 van den Berg, AV - 1055
 van den Berg, M - **348**
 van der Kouwe, AJ - 901
 van der Smagt, MJ - 35
 van Doorn, AJ - **525**, 559
 van Ee, R - 706, **709**
 van Leeuwen, T - 78
 van Lier, R - 297
 Van Lier, R - 960
 van Mierlo, CM - **402**
 van Montfort, X - **556**
 van Wezel, RJ - 7, 930
 Vandenbroucke, MW - **344**
 Vanderkolk, JR - 637
 Vanlierde, A - 905
 VanMeter, J - 633
 Vann, RR - 434
 Vanni, S - 892, 893
 VanRullen, R - **238**
 Varadharajan, SL - 182
 Varakin, DA - **423**
 Vatakis, A - 1068
 Vecera, SP - 516, 974, 1035, 1042
 Vedamurthy, I - **802**
 Velisar, A - 848
 Veraart, C - 905
 Verfaellie, M - 916
 Verghese, P - **723**, 924
 Verstraten, F - 544
 Verstraten, FA - 6, 35, 707
 Vickery, TJ - **687**
 Victor, JD - **475**, 607
 Vidal M., JR - 621
 Vidal, JR - 681
 Vidnyánszky, Z - 171, 235, 836
 Vilis, T - 630, 667
 Villablanca, P - 538
 Vinberg, JK - **87**
 Vinner, R - 406
 Violentyev, A - **756**
 Visco, FE - **255**
 Vishwanath, D - **518**
 Vlaskamp, BN - **959**
 Vogel, EK - 76, 619, **1071**
 Vogels, R - 91
 Volbrecht, VJ - 277
 Vollenweider, FX - 685
 Vomela, M - 417, **869**
 von der Heydt, R - **501**
 von Mühlenen, A - **505**
 Vreven, D - **258**

W

Wade, AR - 848, 900
 Wagner, RE - **898**
 Wald, LL - 901
 Wallman, J - **697**
 Walsh, P - 237
 Walther, D - **1046**
 Wandell, BA - 1029, 1059
 Wang, L - 832

Wang, R - 617
 Wang, RF - 1018
 Wang, Y - 180, **211**
 Wang, Z - **231**
 Wann, JP - **291**, 323, 735
 Warren, WH - 304, 311, 312, 313
 Wasserman, GS - 682
 Watamaniuk, SN - 147, **594**
 Watanabe, I - 432
 Watanabe, J - 280, **448**
 Watanabe, K - 17, 207, 217
 Watanabe, M - 624, **928**
 Watanabe, T - 116, 715, 716, 718,
 867, 903, 1070
 Watkins, SI - **887**
 Watson, DG - 1073
 Watson, TL - **829**
 Wattam-Bell, J - 190, 491
 Waugh, SJ - 183
 Weber, AM - 1016
 Webster, MA - 247, **281**, 835
 Wehrhahn, C - 571
 Weiderbacher, U - **527**
 Weiner, VS - 408
 Weinstein, M - 573
 Weiskrantz, L - 288
 Welchman, AE - **334**
 Wenderoth, P - 60
 Wenger, MJ - **870**
 Werner, B - 716
 Werner, JS - **574**, 721
 Westhoff, C - 1063
 Westoby, N - **393**
 Weston, E - 212
 Wexler, M - 133
 Wharton, W - 1004
 White, BJ - **587**
 White, ES - 454
 White, KD - **708**
 White, SR - **48**
 Whitney, D - **226**, 654, 667
 Wichmann, F - 604
 Wichmann, FA - **377**
 Wiediger, M - 1036
 Wiediger, MD - **1010**
 Wiegmann, DA - 550
 Wielaard, J - **891**
 Wiesemann, EY - 519
 Wilcox, LM - 146, **774**
 Wildes, RP - 774
 Wilke, M - 12, **13**
 Wilken, P - 239
 Wilkie, RM - **323**
 Wilkinson, F - 209, 210
 Willemsen, P - **310**
 Williams, AJ - 434
 Williams, J - 710
 Williams, JH - 45, 46, 48, 124, 365
 Willmore, B - **83**
 Wilmer, JB - **586**
 Wilson, AD - **347**
 Wilson, HR - 209, 210, 466, 472,
 1054

Winawer, J - **492**
 Winkler, A - **363**
 Winkler, C - 535
 Witt, JK - 196, 199, **324**
 Witthoft, N - 492
 Wittich, W - **298**
 Wolfe, JM - 27, 28, 74, 75, 413, **782**,
 951
 Wolfson, S - **762**
 Wong, A - **530**
 Wong, JH - **1047**
 Wood, E - 303
 Wood, JM - 157, 174
 Woodman, GF - **619**, 1071
 Woods, RL - 548
 Worsley, KJ - 481
 Wortman, J - 283
 Wright, CE - 363, 972
 Wu, B - **201**, 359
 Wu, D - **720**
 Wu, J - **200**
 Wu, S - **126**
 Wurfel, JD - **329**
 Wyble, BP - **117**
 Wynn, K - 1048

X

Xavier, J - 668
 Xiao, B - **785**
 Xing, J - **428**
 Xu, Y - **611**

Y

YAGI, A - 330
 Yagi, A - 414
 Yakupov, R - 1039
 Yamada, Y - **660**
 Yamagishi, N - **716**
 Yamaguchi, M - **119**
 Yamaguchi, MK - 47, 328, 330, 852
 Yang, T - 1015
 Yang, Z - **672**, 980
 Yasuda, M - **835**
 Yazdanbakhsh, A - **1051**
 Yeh, S - 158, 248, 876, 1043
 Yehezkel, O - **487**
 Yeshurun, Y - **142**, 165
 Yokoi, K - **207**
 Yokosawa, K - 169, 217, **817**, 1013
 Yokota, M - **719**
 Yokota, Y - 719
 Yonas, A - **732**
 Yoon, L - **43**
 Yoonessi, A - **278**
 Yoshida, T - **33**
 Yotsumoto, Y - **420**, 918
 Young, EJ - 99
 Yourganov, G - 472
 Yovel, G - 37, 39, **634**
 Yu, C - **818**
 Yu, D - **807**
 Yue, X - 91, **983**

Yuille, A - 23
 Yurgenson, S - 452

Z

Zaksas, D - **496**
 Zavodni, LF - 63
 Zeffiro, T - 633
 Zelinsky, GJ - 415, **702**
 Zemach, IK - **276**, 562
 Zetzsche, C - **676**
 Zhaman, A - 107
 Zhang, B - **432**
 Zhang, J - 431, 818
 Zhang, W - **1007**
 Zhang, X - 431, **683**
 Zhang, Y - **408**
 Zhang, Z - **264**
 Zhao, L - **256**
 Zhaoping, L - **229**, 269, 954, 962
 Zheng, J - 432
 Zhong, H - **304**
 Zhou, C - **502**
 Zhou, G - **859**
 Zhou, Z - **677**, 678
 Ziegler, NE - **696**
 Zilberberg, K - 987
 Zimmer, M - 836, 977
 Zimmerman, L - 732
 Zisserman, A - 830
 Zivotofsky, AZ - 808
 Zosh, WD - 244
 Zwick, H - **303**
 Zwicker, AE - **843**
 Zyborowicz, E - **18**



November 10

•
Toronto, ON

•
Canada

KEYNOTE SPEAKER: Dr. Melvyn Goodale

CALL FOR PAPERS

Accepting submissions July 18 - August 1

For more information visit: www.opam.net

Kate Arrington
kate.arrington@lehigh.edu

Andrew Leber
andrew.leber@yale.edu

Stephen Mitroff
stephen.mitroff@yale.edu

Aude Oliva
oliva@mit.edu

EYE TRACKING

iView X™ Advanced Eye Tracking Systems for Vision Research

SensoMotoric Instruments designs advanced video eye tracking systems that combine ease of use and flexibility with advanced technology.

IView X™ Hi-Speed

SMI's iView X™ Hi-Speed is a high-precision, high-speed, eye tracking system for accurate and drift-free eye tracking analysis.

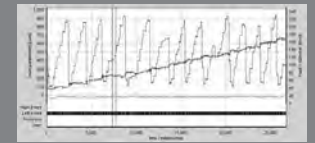
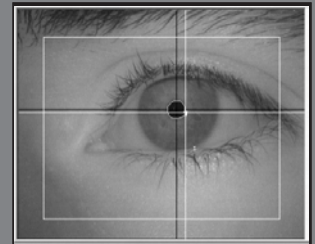
Some features of the Hi-Speed system are:

- Comfortable chin rest assembly with integrated optics
- Binocular version available
- Acquisition at 240 or 350 Hz
- Spatial resolution of <math><0.01\text{ deg}</math>, very high accuracy
- Low latency for gaze-contingent experiments
- Easy connectivity with stimulus presentation software
- Analog output for easy replacement of existing coil system
- Includes BeGaze, advanced eye movement analysis software
- New non-human primate configuration available

SensoMotoric Instruments, Inc.

In North America: 781-453-1377 / Info@smiusa.com / www.smiusa.com

In Europe and ROW: +49-33-283955-0 / Info@smi.de / www.smi.de



Fast
Accurate
Reliable



Email: info@sr-research.com
Visit: www.sr-research.com

SR Research

EyeLink

www.sr-research.com

Complete

Eye Tracking

Solutions

EyeLink II High Speed Eye Tracker

- **Versatile** - 500Hz Pupil Only / 250 Hz Pupil-CR Mode Available
- **Exceptional Resolution** - Noise Limited to $<0.01^\circ$ RMS (pupil) / $<0.025^\circ$ RMS (pupil-CR)
- **Accurate** - Gaze Position Calculation (Average $< 0.5^\circ$)
- **Head Free** - No Head Restraint Necessary
- **Low Latency** - Ideal for Gaze Contingent Paradigms
- **Scene Camera** - Real world eye tracking with head mounted scene camera
- **Online Parsing** - Automatic Parsing into Fixations, Saccades, and Blinks
- **Powerful** - Programmable API

Experiment Builder Release 1.1

- Visual Drag'n'Drop Interface, no programming required
- Flexible, many experiment paradigms possible
- Compatible, supports EyeLink I and EyeLink II systems
- Fully Integrated with the EyeLink Data Viewer
- Video playback support with accurate frame timing

Arrington Research, Inc.

Arrington Research, Inc. is a leading provider of eye tracking solutions, delivering reliable, affordable and easy to use systems across a wide variety of markets. Working closely with our valued customers we take pride in ensuring that their eye movement data is a significant contributor to their overall success.

ViewPoint EyeTracker®

Features Include:

- Real-Time Graphics
- Real-Time Program Interface
- Data Analysis tools
- Software Developers Kit (SDK)
- Fixation monitoring
- Pupillometry real-time with eye movement
- ASCII format data files
- Ocular Torsion Measurement
- Cursor Control
- Stimulus Presentation
- MATLAB® interface

New

EyeFrame Scene Camera System:
Light weight and comfortable.



Monocular Systems \$9498

Choose from Head Mounted or Desk Mounted Systems

Head Mounted:

- EyeFrame scene camera eye tracker systems from \$9498
- HMD modules from \$5698

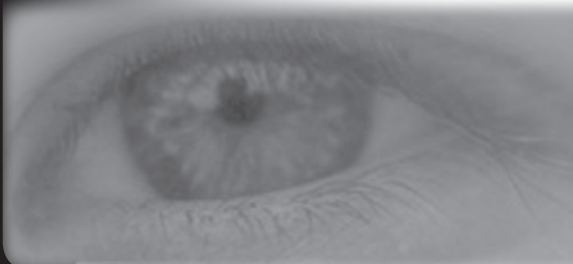
Head Fixed:

- Close focus QuickClamp system from \$6498
- Remote system from \$7198



ArringtonResearch

www.ArringtonResearch.com
Toll Free: 1-866-222-EYES
International: +1 480-985-5810
email: info@ArringtonResearch.com



Books on Vision from The MIT Press



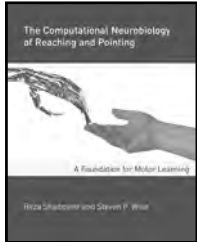
The Visual Neurosciences

edited by Leo M. Chalupa and John S. Werner

“Stop looking for THE book in visual neuroscience. This is it. Chalupa and Werner have organized the single greatest intellectual event in the visual sciences and this book will be the reference source for the next decade.”

— Michael S. Gazzaniga, Dartmouth College

A Bradford Book • 1808 pp. in two volumes, 842 illus., 32 in color \$195



The Computational Neurobiology of Reaching and Pointing

A Foundation for Motor Learning

Reza Shadmehr and Steven P. Wise

“This is a scholarly, comprehensive, and sophisticated view of motor learning.” — Emilio Bizzi, MIT

A Bradford Book • Computational Neuroscience series 544 pp., 165 illus. \$65

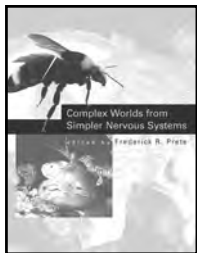


Binocular Rivalry

edited by David Alais and Randolph Blake

“This collection presents a valuable cross section of ideas on the subject and is a refreshing antidote to the tedium of humdrum ‘classical’ psychophysics that until recently have dominated the field.” — V.S. Ramachandran, University of California, San Diego, author of *A Brief Tour of Human Consciousness*

A Bradford Book • 392 pp., 101 illus., 6 in color \$65

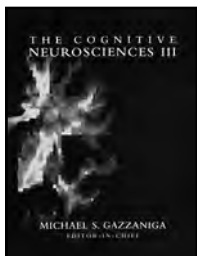


Complex Worlds from Simpler Nervous Systems

edited by Frederick R. Prete

This book examines how animals with small, often minuscule, nervous systems—jumping spiders, bees, praying mantids, toads, and others—are not the simple “reflex machines” they were once thought to be.

A Bradford Book 464 pp., 165 illus., 16 page color insert \$40 paper



The Cognitive Neurosciences III

edited by Michael S. Gazzaniga

“In my view, this already superb text has only gotten better.” — Steven E. Hyman, Provost, Harvard University, and Professor of Neurobiology, Harvard Medical School

A Bradford Book 1440 pp., 503 illus., 32 pp. in color \$145



Visual Agnosia

Second Edition

Martha J. Farah

The second edition of the classic book on visual agnosia, updated to include disorders of semantic knowledge and topographic recognition, and integrating perspectives from functional neuroimaging throughout.

A Bradford Book • 176 pp., 48 illus. \$25 paper

Seeing and Visualizing

It's Not What You Think

Zenon Pylyshyn

“Offers a radical critique of received views and dispels deeply entrenched misconceptions to which much theorizing about vision has fallen victim.” — Peter Slezak, University of New South Wales

Life and Mind: Philosophical Issues in Biology and Psychology series A Bradford Book • 592 pp., 116 illus. \$50

The Visual Mind II

edited by Michele Emmer

Explores mathematics and art as visual expression.

712 pp., 400 illus., 12-page color insert \$49.95

Thinking and Seeing

Visual Metacognition in Adults and Children

edited by Daniel T. Levin

Draws on diverse areas of cognitive science to examine the difference between actual and presumed visual cognition.

A Bradford Book • 320 pp., 26 illus. \$35 paper

Brain, Vision, Memory

Tales in the History of Neuroscience

Charles G. Gross

“Gross’s tales of the history of neuroscience can be warmly recommended to all students of the brain . . . Never less than fascinating.” — John C. Marshall, *Nature* 273 pp., 50 illus. \$27 paper

A Natural History of Vision

Nicholas J. Wade

“An invaluable collection representing the principal thinkers on the subject, from antiquity to the dawn of the present, illustrated with portraits of the writers. . . it is delightful to have all these ideas in one book.” — Richard Gregory, *Times Literary Supplement*

486 pp., 304 illus. \$40 paper

The Handbook of Multisensory Processes

edited by Gemma Calvert, Charles Spence, and Barry E. Stein

“This volume is a monumental achievement! Essential reading for anyone with an interest in this important field of the behavioral and neural sciences.” — Leo M. Chalupa, University of California, Davis

A Bradford Book • 950 pp., 334 illus. \$125

Action in Perception

Alva Noë

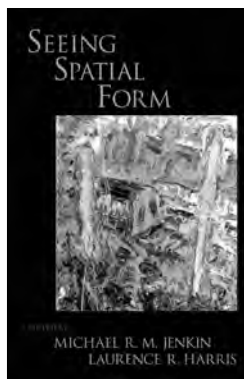
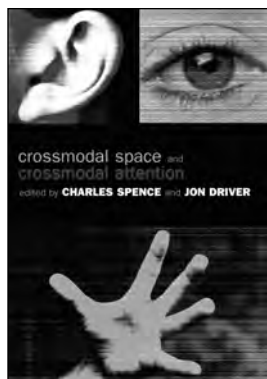
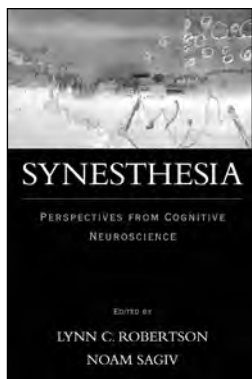
“The most lucid and persuasive defense of the enactive theory of perception that I have read.” — C. L. Hardin, Syracuse University

Representations and Mind series A Bradford Book • 392 pp., 10 illus. \$38

<http://mitpress.mit.edu>

To order call 800-405-1619.

Visit our booth for a 20% discount!



Special offer through author's website: \$80.00 for the two-volume set <http://hpl.cvr.yorku.ca/iporteous/book.html>

Seeing in Depth

Volume 1: Basic Mechanisms
IAN P. HOWARD
June 2002, 650 pp., 316 illustrations
0-97-308730-7

Depth Perception

IAN P. HOWARD and BRIAN J. ROGERS
June 2002, 625 pp., 529 figures
0-97-30873-1-5

Synesthesia

Perspectives from Cognitive Neuroscience
Edited by LYNN C. ROBERTSON and NOAM SAGIV

Owing to its bizarre nature and its implications for understanding how brains work, synesthesia has recently received a lot of attention in the popular press and motivated a great deal of research and discussion among scientists. The questions generated by these two communities are intriguing: Does the synesthetic phenomenon require awareness and attention? How does a feature that is not present become bound to one that is? Does synesthesia develop or is it hard wired? Should it change our way of thinking about perceptual experience in general? What is its value in understanding perceptual systems as a whole?

This volume brings together a distinguished group of investigators from diverse backgrounds—among them neuroscientists, novelists, and synesthetes themselves—who provide fascinating answers to these questions. Although each approaches synesthesia from a very different perspective, and each was curious about and investigated synesthesia for very different reasons, the similarities between their work cannot be ignored. The research presented in this volume demonstrates that it is no longer reasonable to ask whether or not synesthesia is real—we must now ask how we can account for it from cognitive, neurobiological, developmental, and evolutionary perspectives. This book will be important reading for any scientist interested in brain and mind, not to mention synesthetes themselves, and others who might be wondering what all the fuss is about.

2004 304 pp.; 4 halftones, 22 color & 11 line illus.
0-19-516623-X \$55.00

Active Vision

The Psychology of Looking and Seeing
JOHN M. FINDLAY and IAIN D. GILCHRIST
More than one third of the human brain is devoted to the processes of seeing—vision is after all the main way in which we gather information about the world. This book is unique in focusing on vision as an "active" process. It goes beyond most accounts of vision where the focus is on seeing, to provide an integrated account of seeing and looking. Written by two leading vision scientists, this book will be valuable for vision researchers and psychology students.

(Oxford Psychology Series)
2003 240 pp.; 65 halftones & line illus.
0-19-852479-X paper \$49.50

Sight Unseen

An Exploration of Conscious and Unconscious Vision
MELVYN A. GOODALE and A. DAVID MILNER

"The book illustrates the enormous amount of knowledge to be gained from analysis deficits of specific stroke patients."
—*Nature*.

"The virtue of Jacobson's book is that it reflects on a hidden dimension of everyone's right to health care. This makes it highly recommendable to all those who seek to understand more about the role the legal system plays in how health care is organized, financed and delivered." —*Nursing Ethics*.
2004 (paper June 2005) 160 pp.; 8 color plates, 38 halftones & line illus.

0-19-851052-7 cloth \$49.50
0-19-856807-X paper \$29.50

New!

Brain and Visual Perception

The Story of a 25-Year Collaboration
DAVID H. HUBEL, M.D. and TORSTEN N. WIESEL, M.D.

"For those who came of age admiring the scientific adventures of Hubel and Wiesel, this book is an opportunity to look back in wonder. For those who come after, it will be an inspiration. This is a marvel of a book, written in David Hubel's disarmingly engaging voice, a must have, a must read." —*A. Damasio*, neuroscientist and author of *Descartes' Error* and *Looking for Spinoza*.

2004 744 pp.; 379 halftones & line illus.
0-19-517618-9 \$49.50

New!

Seeing Spatial Form

Edited by MICHAEL R. M. JENKIN and LAURENCE R. HARRIS

This book, *Seeing Spatial Form*, is dedicated to David Martin Regan who has made so many contributions to our understanding of how we see objects. Its chapters bring together issues from some of the world's leading researchers in form vision to explain what we know about distinguishing form. The book includes a CD-ROM, which contains additional demonstrations and color images that considerably enhance the chapter contents.

April 2005 496 pp.; 96 halftones, 68 line illus.
0-19-517288-4 \$65.00

Forthcoming!

Human Body Perception from the Inside Out

Edited by GÜNTHER KNOBLICH, IAN THORNTON, MARC GROSJEAN, and MAGGIE SHIFFRAR
(Advances in Visual Cognition)

November 2005 528 pp.; 20 halftones, 23 color & 42 line illus.

0-19-517837-8 \$75.00

Crossmodal Space and Crossmodal Attention

Edited by CHARLES SPENCE and JON DRIVER

In recent years, there has been dramatic progress in understanding how information from different sensory modalities gets integrated in order to construct useful representations of external space; and in how such multimodal representations constrain spatial attention. Such progress has involved numerous different disciplines, including neurophysiology, experimental psychology, neurological work with brain-damaged patients, neuroimaging studies, and computational modelling. This volume brings together the leading researchers from all these approaches, to present the first integrative overview of this central topic in cognitive neuroscience.

2004 344 pp.; 83 figures
0-19-852486-2 paper \$44.50

Forthcoming!

Fitting the Mind to the World

Adaptation and After-effects in High-level Vision

Edited by COLIN CLIFFORD and GILLIAN RHODES

Fitting the Mind to the World explores the brain's remarkable capacity to adapt to its current visual environment. Leading vision researchers explore how visual experience alters the adult brain, fitting the mind to the world, and ensuring the efficient coding of sensory signals. They demonstrate how this plasticity affects every aspect of our visual experience, from the perception of movement and color, to the perception of subtle, social and emotional information in human faces.

(Advances in Visual Cognition 2)
July 2005 338 pp.; 74 figures, 35 photographs, 4 color plates
0-19-852969-4 \$89.50