



Welcome to
VSS 2006

The Sixth Annual Meeting of the
Vision Sciences Society

*May 5 – 10, 2006
Hyatt Sarasota
Sarasota, Florida*

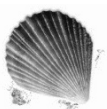
Contents

3	Welcome	18	Club Vision
4	Meeting Schedule	18	Educational Outreach Event
5	Poster Schedule	19	Program Summary
6	Satellite Workshops	36	Program-at-a-Glance
10	Keynote Speaker	38	Program Summary (continued)
11	Demo Night	54	Topic Index
14	Exhibitors	57	Author Index
15	Student Travel Fellowship Recipients for 2006	67	Area Map
16	Attendee Resources	68	Notes
	ATM	69	Advertisements
	Baggage Check		
	Business Office		
	Message Center		
	How to Contact Us		
	Lost and Found		
	Food Service at the Municipal Auditorium		
	Food Service at the Hyatt		
	Internet Access		
	Child Care		
	Poster Information		
	Speaker Information		

Mark Your Calendar for the 7th Annual VSS Meeting

May 11-16, 2007
Hyatt Sarasota
Sarasota, FL

Program cover image design by Sagit Ganel



2006 Committees

Vision Sciences Society

President

Tatiana Pasternak
University of Rochester

Vice President

Randolph Blake
Vanderbilt University

Founders

Ken Nakayama
Harvard University
Tom Sanocki
University of South Florida

Executive Committee

Marvin Chun
Yale University
David Knill
University of Rochester
Michael Paradiso
Brown University
Mary Peterson
University of Arizona
Allison Sekuler
McMaster University
Steven Shevell
University of Chicago

Administration

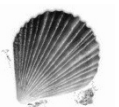
Shauney Wilson
Executive Director
Joan Carole
Exhibits Manager
Shawna Lampkin
Meeting Assistant
Shauney Wilson
Joan Carole
Jeff Wilson
Program Creation

Review Committee

Tom Albright
Marty Banks
Marlene Behrmann
Irv Biederman
Dave Brainard
Angela Brown
Heinrich Buelthoff
David Burr
Marisa Carrasco
Patrick Cavanagh
Frans Cornelissen
Jody Culham
Greg DeAngelis
James Elder

Jim Enns
Karl Gegenfurtner
Mel Goodale
Kalanit Grill-Spector
John Henderson
Phil Kellman
Daniel Kersten
Zoe Kourtzi
Terri Lewis
Steve Luck
Ennio Mingolla
Tony Movshon
Tony Norcia
Aude Oliva

Alice O'Toole
Anna Roe
Brian Rogers
Jeff Schall
David Sheinberg
Daniel Simons
Jeroen Smeets
George Sperling
Mike Tarr
Christopher Tyler
Bill Warren
Michael Webster
Steve Yantis



Meeting Schedule

Friday, May 5

11:00 am - 8:30 pm	Onsite and Pre-Registration Check In	Hyatt Ballroom Foyer
1:00 - 3:00 pm	Satellite Workshops	Hyatt, Various Rooms
3:00 - 3:15 am	Complimentary Coffee Service	Hyatt Ballroom Foyer
3:15 - 5:15 pm	Satellite Workshops	Hyatt, Various Rooms
5:30 - 8:30 pm	Exhibits Open	Municipal Auditorium
5:30 - 8:30 pm	Poster Session A	Municipal Auditorium
5:30 - 8:30 pm	Opening Night Reception	Municipal Auditorium

Saturday, May 6

7:00 am - 5:30 pm	Onsite and Pre-Registration Check In	Hyatt Ballroom Foyer
7:30 - 8:00 am	Complimentary Coffee Service	Hyatt Ballroom Foyer
8:00 am - 7:15 pm	Exhibits Open	Municipal Auditorium
8:00 - 9:30 am	Morning Talk Session 1	North and South Hyatt Ballrooms
8:00 - 11:00 am	Poster Session B	Municipal Auditorium
11:00 am - 12:30 pm	Morning Talk Session 2	North and South Hyatt Ballrooms
Noon - 3:00 pm	Poster Session C	Municipal Auditorium
12:30 - 1:00 pm	Lunch Break	
2:00 - 3:45 pm	Afternoon Talk Session 1	North and South Hyatt Ballrooms
3:45 - 4:15 pm	Complimentary Coffee & Beverages	Hyatt Ballroom Foyer
4:15 - 5:30 pm	Afternoon Talk Session 2	North and South Hyatt Ballrooms
4:15 - 7:15 pm	Poster Session D	Municipal Auditorium

Sunday, May 7

7:30 am - 5:30 pm	Onsite and Pre-Registration Check In	Hyatt Ballroom Foyer
7:30 - 8:00 am	Complimentary Coffee Service	Hyatt Ballroom Foyer
8:00 am - 7:15 pm	Exhibits Open	Municipal Auditorium
8:00 - 9:30 am	Morning Talk Session 1	North and South Hyatt Ballrooms
8:00 - 11:00 am	Poster Session E	Municipal Auditorium
11:00 am - 12:30 pm	Morning Talk Session 2	North and South Hyatt Ballrooms
Noon - 3:00 pm	Poster Session F	Municipal Auditorium
12:30 - 1:00 pm	Lunch Break	
2:00 - 3:45 pm	Afternoon Talk Session 1	North and South Hyatt Ballrooms
3:45 - 4:15 pm	Complimentary Coffee & Beverages	Hyatt Ballroom Foyer
4:15 - 5:30 pm	Afternoon Talk Session 2	North and South Hyatt Ballrooms
4:15 - 7:15 pm	Poster Session G	Municipal Auditorium
7:30 - 8:30 pm	Keynote Speaker, David R. Williams	Hyatt Ballroom



Monday, May 8

7:30 am - 1:00 pm	Onsite and Pre-Registration Check In	Hyatt Ballroom Foyer
7:30 - 8:00 am	Complimentary Coffee Service	Hyatt Ballroom Foyer
8:00 - 11:00 am	Exhibits Open	Municipal Auditorium
8:00 - 9:30 am	Morning Talk Session 1	North and South Hyatt Ballrooms
8:00 - 11:00 am	Poster Session H	Municipal Auditorium
11:00 am - 12:45 pm	Morning Talk Session 2	North and South Hyatt Ballrooms
6:30 - 9:30 pm	Demo Night	G.WIZ Science Museum

Tuesday, May 9

7:30 am - 6:00 pm	Onsite and Pre-Registration Check In	Hyatt Ballroom Foyer
7:30 - 8:00 am	Complimentary Coffee Service	Hyatt Ballroom Foyer
8:00 - 9:45 am	Morning Talk Session 1	North and South Hyatt Ballrooms
8:00 - 11:00 am	Poster Session I	Municipal Auditorium
11:00 am - 12:30 pm	Morning Talk Session 2	North and South Hyatt Ballrooms
Noon - 3:00 pm	Poster Session J	Municipal Auditorium
12:30 - 1:00 pm	Lunch Break	
2:00 - 3:30 pm	Afternoon Talk Session 1	North and South Hyatt Ballrooms
3:30 - 4:00 pm	Business Meeting	Hyatt Ballroom South
4:00 - 4:30 pm	Complimentary Coffee & Beverages	Hyatt Ballroom Foyer
4:30 - 6:00 pm	Afternoon Talk Session 2	North and South Hyatt Ballrooms
4:30 - 7:30 pm	Poster Session K	Municipal Auditorium
9:00 pm - 3:00 am	Club Vision	Hyatt Ballroom South

Wednesday, May 10

7:30 am - Noon	Onsite and Pre-Registration Check In	Hyatt Ballroom Foyer
7:30 - 8:00 am	Complimentary Coffee Service	Hyatt Ballroom Foyer
8:00 - 9:30 am	Morning Talk Session 1	North and South Hyatt Ballrooms
10:00 am - 11:45 pm	Morning Talk Session 2	North and South Hyatt Ballrooms

Poster Schedule

Poster Session	Date	Setup Begins	Session	Author Presents Time	Take-Down Complete
A	Friday, May 5	5:00 pm	5:30 - 8:30 pm	6:30 - 7:30 pm	9:00 pm
B	Saturday, May 6	7:45 am	8:00 - 11:00 am	9:30 - 10:30 am	11:30 am
C	Saturday, May 6	11:30 am	12:00 - 3:00 pm	1:00 - 2:00 pm	3:30 pm
D	Saturday, May 6	3:30 pm	4:15 - 7:15 pm	5:30 - 6:30 pm	7:30 pm
E	Sunday, May 7	7:45 am	8:00 - 11:00 am	9:30 - 10:30 am	11:30 am
F	Sunday, May 7	11:30 am	12:00 - 3:00 pm	1:00 - 2:00 pm	3:30 pm
G	Sunday, May 7	3:30 pm	4:15 - 7:15 pm	5:30 - 6:30 pm	7:30 pm
H	Monday, May 8	7:45 am	8:00 - 11:00 am	9:30 - 10:30 am	11:30 am
I	Tuesday, May 9	7:45 am	8:00 - 11:00 am	9:45 - 10:45 am	11:30 am
J	Tuesday, May 9	11:30 am	12:00 - 3:00 pm	1:00 - 2:00 pm	3:30 pm
K	Tuesday, May 9	3:30 pm	4:30 - 7:30 pm	6:00 - 7:00 pm	7:45 pm



Satellite Workshops



Summary of Satellite Workshops

Grounding Cognition in Perception and Action

Friday, May 5, 1:00 - 3:00 pm, Hyatt Salon C/D

Object Recognition – 20 Years Later

Friday, May 5, 1:00 - 3:00 pm, Hyatt Salon E

Fixational Eye Movements in Visual Perception, Physiology, and Oculomotor Control

Friday, May 5, 1:00 - 3:00 pm, Hyatt Keys Room

Twenty Years of Multiple Object Tracking: What Have We Learned?

Friday, May 5, 1:00 - 3:00 pm, Hyatt Salon F

Interfaces Between Vision and Language: The Problem and New Perspectives

Friday, May 5, 3:15 - 5:15 pm, Hyatt Salon C/D

Biological Motion: The State and Future of the Art

Friday, May 5, 3:15 - 5:15 pm, Hyatt Keys Room

Overcoming the Difficulties of Perceptual Learning

Friday, May 5, 3:15 - 5:15 pm, Hyatt Salon F

Integrating Top-down and Bottom-up Visual Attention

May 5, 3:15 - 5:15 pm, Hyatt Salon E

Grounding Cognition in Perception and Action

Friday, May 5, 1:00 - 3:00 pm, Hyatt Salon C/D

Organizer: Martin Fischer

Many researchers consider perception and action to be two distinct outcomes of visual processing. However, findings are accumulating that the two are, in fact, closely coupled. Theories of embodied cognition propose that this perception-action coupling provides the grounding for all higher-level cognition. On this view, our understanding of concepts requires re-instantiation of the neural activity that occurred when we first acquired these concepts through perception and action. This view correctly predicts surprising interactions between perceptual, cognitive, and motor systems and leads to a fuller awareness of the importance of cognition and action in vision science.

In the symposium on “Grounding Cognition in Perception and Action,” a panel of international experts will provide an up-to-date overview of “embodied cognition” with a

focus on the link between language and visual perception. Bridgeman begins with a review of some dissociations between perception and action. Kaschak then shows that motion perception has systematic effects on language comprehension, and Zwaan reports similar perceptual and motor resonance phenomena from other domains. Together, these reports lead to the idea of spontaneous action simulation as an obligatory part of conceptual cognition. Fischer reviews effects of semantic processing of numbers and words on perception and Pre-Conference Symposium “Grounding Cognition in Perception and Action” 2 action which support this simulation hypothesis. Bub then describes the parallel activation of two types of action representations and delineates their time courses in different contexts. Nazir also describes evidence of fast-emerging action biases from language processing and discusses possible cortical underpinnings. Finally, Gentilucci investigates the cross-talk between speech production and manual gestures in the context of the mirror neuron theory of perception and action. This closes the review of interactions between perception, cognition, and action and opens the floor for a discussion with the audience.

Presentations

Processing spatial layout by perception and sensorimotor interaction *Bruce Bridgeman, Santa Cruz, USA*

Perception of motion affects sentence comprehension *Mike Kaschak*

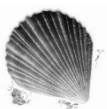
Visual and motor resonance in language processing *Rolf Zwaan*

Semantically induced biases in perception and action *Martin Fischer*

Thinking in Actions - The Dynamic Evocation of Gestural Knowledge by Written Sentences *Daniel Bub*

Evidence for cross-talk between language processes and overt motor behavior within the first 200 ms of processing *Tatjana Nazir with Veronique Boulenger*

Gesture Observation and Speech *Maurizio Gentilucci*



Object Recognition – 20 Years Later

Friday, May 5, 1:00 - 3:00 pm, Hyatt Salon E

Organizer: Michael J. Tarr

It has been 25 years since Marr and Nishihara's (1978) seminal paper on visual object recognition and 20 years since Biederman (1985) introduced his influential Recognition-By-Components theory. What have we learned? What have we accomplished? What do theories look like now?

Presentations

Object Recognition - 20 Years Later Michael Tarr

Partial Configurations: Less than an object, more than a part Mary Peterson

Ideal and Human Object Recognition Dan Kersten

Multimodal Recognition and Categorization Heinrich Bülthoff

The Neural Basis of Object Recognition Irv Biederman

Fixational Eye Movements in Visual Perception, Physiology, and Oculomotor Control

Time: May 5, 1:00 - 3:00 pm, Hyatt Keys Room

Organizer: Susana Martinez-Conde

Our visual system contains a built-in contradiction: when we fixate our gaze on an object of interest, our eyes are never still. Instead we produce, several times each second, small eye movements of which we are unaware, called "microsaccades", "drifts" and "tremor". Microsaccades are miniature saccades produced during fixation, drifts are slow curvy motions that occur between microsaccades, and tremor is a very fast, extremely small oscillation of the eye superimposed on drifts.

If we eliminate all these eye movements in the laboratory (using any number of retinal stabilization techniques), our visual perception of stationary objects fades, due to neural adaptation. Since we fixate our gaze about 70%-80% of the time during visual exploration, these fixational eye movements often are responsible for driving most of our visual experience. When our eyes move across the image once again, after having stabilized the retinas, visual perception reappears. Due to their role in counteracting adaptation, fixational eye movements are an important tool to understand how the brain makes our environment visible. Moreover, because we are not aware of these eye movements, they can also help us understand the underpinnings of visual awareness. Over the last decade, the participants in this symposium proposal have studied the neuronal and perceptual correlates of fixational eye movements. Among the topics covered by this symposium, we will review the type of neural activity generated by fixational eye movements at different levels in the visual system, the role of

attention in modulating fixational eye movements, and the role of fixational eye movements in oculomotor control, in neuronal synchronization, in the viewing of natural scenes, and in visual disease. We will also present striking visual illusions that arise when our visual system fails to compensate for these eye movements. Research in fixational eye movements is a topic that has gained a lot of interest over the last decade, with crucial implications for the fields of neural coding and visual perception in normal and pathological vision.

Presentations

The role of fixational microsaccades in visual physiology and perception Susana Martinez-Conde

Fixational eye movements in oculomotor control, attention and perception Ralf Engbert

Fixational eye movements and motion perception Ikuya Murakami

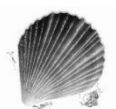
Fixational eye movements and the representation of natural scenes Michele Rucci

Twenty Years of Multiple Object Tracking: What Have We Learned?

Time: May 5, 1:00 - 3:00 pm, Hyatt Salon F

Organizer: Zenon Pylyshyn

The study of the ability to keep track of a set of identical visual targets that move unpredictably among identical nontargets began in the late 1980s (and first published in Pylyshyn & Storm, 1988). It has led to hundreds of different experiments published and reported at conferences, and has generated many counterintuitive findings as well as many theoretical debates. It has been reported that people (including children) can track successfully around 4 or 5 items even when they disappear from view (behind an occluding surface or behind one another), that observers are unable to use information about properties of the objects or of their trajectories in recovering disappeared objects, that they are unaware of object properties while tracking, that tracking can be improved with practice, including apparently unrelated tasks requiring visual attention, that nontargets are not entirely neglected since they appear to be inhibited and repeating their trajectories affects tracking behavior, that grouping targets helps tracking, that factors affecting tracking (e.g., increasing target speed) apply to targets perceived in 3D, that tracking can be carried out simultaneously with other tasks, such as monitoring or search, without impairing tracking performance, that tracking activates bilateral areas in parietal cortex as well as frontal cortex and MT complex, that patients with Williams syndrome have a specific deficit in tracking objects in MOT, and that resources for tracking appear to be specific to cor-



tical hemispheres. The list is large and continues to grow. But at the same time as the empirical data are accumulated, theoretical differences also multiply. There are theoretical differences regarding such fundamental questions as whether MOT is mediated by a single attentional mechanism, so that MOT is really about split attention, whether it involves tracking objects by their encoded properties, whether it reveals relatively fixed properties of the architecture of vision, or mutable strategic-cognitive factors. The seven panelists will discuss recent findings – both from their own and others' research – that help set the work on MOT in perspective.

Presentations

Attentional time-sharing in multiple object tracking *Todd S. Horowitz, Jeremy M. Wolfe, George A. Alvarez, & David E. Fencsik*

Expertise and MOT *Roy Allen & Peter McGeorge*

Using MOT to study object persistence and object-based attention *Brian Scholl*

Environmental representations in multiple object tracking *James T. Enns & Steve Franconeri*

Multifocal Attention: What's Fixed and What's Flexible in the Allocation of Tracking Resources?

George Alvarez and Patrick Cavanagh

The Temporal Dynamics of Sensory Memory during Multiple Object Tracking *Srimant P. Tripathy, Brendan T. Barrett, Sathyasri Narasimhan*

Tracking mechanisms cannot reliably utilize spatiotemporal information when operating in parallel *Brian P. Keane and Zenon W. Pylyshyn*

Interfaces Between Vision and Language: The Problem and New Perspectives

Time: May 5, 3:15 - 5:15 pm, Hyatt Salon C/D

Organizer: Barbara Landau

The human capacity to talk about what we see poses fundamental problems about the nature of the mapping between vision and language. How do two systems of such different representational format come to map onto and modulate each other? Studies in these two domains have historically proceeded separately and in parallel, leaving aside questions about the interface. The purpose of this symposium is to invite broad discussion of the vision-language interface problem, by framing some essential aspects of the problem and describing some current proposals and empirical findings that shed light on the format, nature, and direction of effects occurring at the interface.

Presentations

The language of vision, the original "Ur" language *Patrick Cavanagh*

Language and the binding problem in visual representation *Barbara Landau*

Two effects of language on perception of objects and surface layout *Elizabeth Spelke*

On the Real-Time Modulation of Visual Search by Linguistic Input *Michael Spivey*

Biological Motion: The State and Future of the Art

Time: May 5, 3:15 - 5:15 pm, Hyatt Keys Room

Organizer: Javid Sadr

This is a workshop/symposium as much for specialists in biological motion as for any vision scientist interested in topics related to high-level processing (e.g., face/object recognition), motion perception, neuroimaging, clinical deficits, perceptual learning, computational vision/ modeling, modularity, and even motor control and sensorimotor interaction. As a starting point, we intend to delve into current findings, techniques, theories, and controversies specific to the study of biological motion processing -- i.e., primarily, the perception of human movement. More generally, however, the structure and themes of this meeting are aimed at developing a productive and more extensive conversation, among the panelists as well as the attendees, on the overarching themes of this work in general, its connection to related fields and approaches, and a charting of essential and promising directions for future investigation.

Presentations

Aristotle's Dream: A Language for Action *Yiannis Aloimonos*

Deficits in the Perception of Biological Motion *Lorella Battelli*

Learning as Basis for the Recognition of Biological Motion *Martin A. Giese*

What Defines Visual Sensitivity to Human Movement? *Maggie Shiffrar, with A. Chouchourelou and S. Prasad*

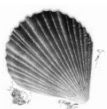
Levels of Biological Motion Processing *Nikolaus F. Troje*

Overcoming the Difficulties of Perceptual Learning

Time: May 5, 3:15 - 5:15 pm, Hyatt Salon F

Organizer: Aaron Seitz

The purpose of this symposium is to serve both as a forum by which to introduce important new advances in perceptual learning, but also as a tutorial of what researchers



should consider when designing new perceptual learning experiments. Each speaker will present research that highlights processes or phenomenon that give new perspectives on perceptual learning and has attracted much attention of vision scientists. Sara Mednick (Salk Institute) will present new findings on perceptual deterioration, which highlight the effects of conducting multiple experimental sessions in a given day. Takeo Watanabe (Boston University) will present research on task-irrelevant perceptual learning as a result of exposure to a subliminal feature. Aaron Seitz (Boston University) will present findings of the disruptive effects of new training on what has already been learned and research showing that task-irrelevant learning does not occur during the attentional blink. Merav Ahissar (Hebrew University) will discuss phenomena of perceptual plasticity and the difference between bottom-up and top-down driven processes, as explained by the Reversed Hierarchy Theory. Geoffrey Ghose (University of Minnesota) will present data from neurophysiological studies of perceptual learning in early visual cortex and discuss paradigms for exploring the physiological substrates of perceptual learning.

The goal of this forum is to share recent developments in the research of perceptual learning; a field that has attracted a high degree of attention due to breakthrough findings by researchers including the present speakers. It will also help provide guidelines by which at least some of the difficulties of perceptual learning can be overcome. Thus the forum will be an important opportunity for students and researchers of broad interest in vision to know recent progress of the rapidly developing area.

Presentations

Perceptual Deterioration: You really can have too much of a good thing *Sara Mednick*

Perceptual learning without attention *Takeo Watanabe*

Reinforcement and disruption of perceptual learning *Aaron Seitz*

Different roles and dynamics of bottom-up and top-down driven perceptual plasticity *Merav Ahissar*

Locating perceptual learning within the hierarchy of visual areas *Geoffrey Ghose*

Integrating Top-down and Bottom-up Visual Attention

Time: May 5, 3:15 - 5:15 pm, Hyatt Salon E

Organizer: Vidhya Navalpakkam

Although the last few decades have witnessed enormous progress in psychophysics, physiology, imaging, theory and modeling of either bottom-up or top-down visual attention, understanding their integration is the next main frontier. It poses several open challenges: Where do top-down and bottom-up signals meet and interact? At what time and spatial scale do they interact? What is the granularity of their interaction -- is it at the level of a single neuron, or a population of neurons? What computational principles underly the integration of these signals -- is it a linear summation, or multiplication or some other function? What are the behavioral correlates of such integration?

This symposium aims to shed light on the above questions by reviewing recent cutting edge research in integrating top-down and bottom-up visual attention. It will be a unique forum where experts from different faculties including theory, modeling, psychophysics, imaging and physiology will present diverse and potentially conflicting perspectives, leading to exciting discussions and debates.

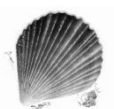
Presentations

Changing your mind: Psychophysical measurement of the top-down and bottom-up contributions to the guidance of visual attention *Jeremy Wolfe*

Computational principles underlying integration of top-down and bottom-up signals *Laurent Itti and Vidhya Navalpakkam*

Neural basis of spatial attention *Kirk Thompson*

Cortical Mechanisms of Voluntary and Stimulus-Driven Attentional Control *Steven Yantis*



Keynote Speaker

David R. Williams, Ph.D.

*William G. Allyn Professor of Medical Optics
Director, Center for Visual Science
University of Rochester*



David R. Williams received his Ph.D. from the University of California, San Diego in 1979 and completed a postdoctoral fellowship at Bell Laboratories, Murray Hill in 1980. He is currently William G. Allyn Professor of Medical Optics at the University of Rochester. Since 1991, Williams has served as Director of Rochester's Center for Visual Science, an interdisciplinary research program of 25 faculty interested in the mechanisms

of human vision. He is also an Associate Director of the Center for Adaptive Optics at UC, Santa Cruz.

Dr. Williams' research marshals optical technology to address questions about the fundamental limits of spatial and color vision. His research team demonstrated the first adaptive optics system for the eye, showing that vision can be improved beyond that provided by conventional spectacles. His team also showed that adaptive optics can provide microscopic images of the retina with unprecedented resolution.

Dr. Williams is a Fellow of the Optical Society of America and the American Association for the Advancement of Science, received the OSA Edgar G. Tillyer Award in 1998, and the Archie Mahan Prize in 2004. He is also the 2006 recipient of the Association for Research in Vision and Ophthalmology's Friedenwald Award.

The Limits of Human Vision

Sunday, May 7, 7:30 pm, Hyatt Ballroom

The eye's aberrations prevent us from seeing at the limits set by the retina and brain. They also limit the resolution of cameras that image the living retina. These aberrations can now be corrected with adaptive optics, a technology invented to compensate for the aberrations in the atmosphere above astronomical telescopes. Adaptive optics endows the eye with unprecedented optical quality, extending the limits of human vision while also allowing microscopic imaging of single cells in the living human retina. Imaging with adaptive optics reveals the mosaic of all three cone classes, and provides insight into the mechanisms of color blindness and color vision.

Supported by the NSF Science and Technology Center for Adaptive Optics, the National Eye Institute, and Bausch and Lomb, Inc.



Demo Night

Monday, May 8, 6:30 -9:30 pm,
G.WIZ Science Museum

Please join us Monday night at the G.WIZ Science Museum for the 4th Annual VSS Demo Night, with a barbecue and beverages to accompany the demonstrations.

Richard O. Brown and Shinsuke Shimojo have curated 20 demonstrations of visual phenomena by VSS members, in a variety of formats and scales, illustrating the important roles demonstrations play in vision research and education. These demonstrations will be distributed throughout G.WIZ, amongst the museum's existing interactive scientific exhibits, including 30 exhibits on physics and visual perception on loan from the Exploratorium.

No registration required. Wear your VSS badge for entry. Guests and family members of all ages welcome.

Schedule of Events

- 6:30 – 8:00 pm Complimentary BBQ served on the grass at the back of G.WIZ
- 6:30 – 8:00 pm Outside bar open - Beer and wine for \$3; sodas and water complimentary
- 7:00 – 9:30 pm Demos open inside G.WIZ
- 7:00 – 9:30 pm Inside bar open – Beer and wine \$3; sodas and water complimentary
- 8:00 – 9:30 pm Complimentary dessert and coffee served

Demonstration of Cue Recruitment

Benjamin Backus, Qi Haijiang, University of Pennsylvania

When a visual signal is paired with trusted visual cues, it can become a cue itself. This demo illustrates the effect by making the apparent 3D rotation of a Necker cube contingent on stimulus position.

Embodying Bottom-Up Visual Attention in a Robotic Monkey Head

David J. Berg, Lior Elazary, Laurent Itti, University of Southern California

A robotic monkey head with a mounted camera will compute salient/surprising locations in its environment and

make combined head/eye movements toward them. The monkey will look around the room at interesting things or people as they pass by. The robot has several controllable facial features which create a more natural and entertaining experience.

Demonstration of Curved Visual Space, and Project LITE Vision Interactive software

Kenneth Brecher, Boston University

Novel anamorphic demos combining art, physics and visual perception to explore the curvature of visual space will be presented. Also, Project LITE - Over 250 visual perception applets.

Strobe Room with Balls and Cell Phones

Richard O. Brown, The Exploratorium

A dark room will be illuminated only by slow (~5Hz) stroboscopic flashes. Experience how difficult it becomes to play a simple game of catch under these conditions. Also, bring your cell phone or other glowing objects for fun with the flash-lag effect.

The Touch of Light

Frank H. Durgin, Swarthmore College

Observer places hand into a box, only to see it replaced, via mirror, with a rubber hand. The rubber hand is "stroked" with a laser-pointer light. Most observers feel thermal or tingling sensations from the light. The sensations are localized to the corresponding surface of their own unseen hand.

The Bicycle Illusion: A True Story of Sidewalk Science

James T. Enns, Michael Dodd, Michael Masson, University of British Columbia

The apparent path of a moving object is influenced by the shape of stationary forms at low levels of acuity. This illusion is dissociated from more familiar illusions of induced motion.



Demo With White Disk and Spotlights

Alan Gilchrist, Rutgers University

A disk of white paper and a projected circle of light on a black background can be indistinguishable, with both appearing as white paper disks. But when the spotlight is moved so as to partially overlap the white paper disk, the percept changes dramatically. One of the two disks appears to be composed of illumination, while the other can continue to appear as white paper. But either disk can appear as the spotlight, and the display is reversible. The true state of affairs can be easily revealed, by various methods, such as waving a hand directly in front of the display, and this typically produces visual surprise in the observer

Breathing Light Illusion and Other New Motion Illusions

Simone Gori, Boston University

The Breathing Light Illusion is a challenge for the constant of size and for the constant of color. The Gori-Hamburger Illusion (Rotating Tilted Lines Illusion) is a static pattern that elicits illusory motion. Moreover, other variations of the previous illusions and different new illusions will be shown during the demo.

Enigmatic Variations of Illusory Streaming Motion

Kai Hamburger, Justus Liebig, University Giessen

Novel variations of streaming motion in static patterns (as observed in Leviant's Enigma figure) will be presented.

Why Images Look Right When Viewed From the Wrong Place

David Hoffman, Ahna R. Girshick, & Martin S. Banks, University of California Berkeley

When a picture is viewed from the center of projection, the retinal image is the same as that from the original scene. As the picture surface is rotated, the retinal image distorts. When one looks monocularly through a pinhole, objects appear to change shape as the picture-surface slant changes. However, when one views binocularly without an aperture, perceived object shape remains stable.

The Attentional Centrifuge

Alex Holcombe, Patrick Cavanagh, Harvard University

The "attentional centrifuge" separates the human visual computations that occur at a local retinotopic stage from those that occur at more global integration stages. Things that cannot be seen with an alternating non-spinning display suddenly become visible when the centrifuge is activated and global processing stages are activated.

Boolean Nature of Conscious Access

Liqiang Huang, Hal Pashler, Anne Treisman, Princeton University

These are the demos from a paper we are revising for Psychological review. (1) What visual contents can we consciously access at one moment? (2) How can we voluntarily select what to access? Boolean map theory offers a unified interpretation of a wide variety of visual-attention phenomena usually treated in separate literatures.

Luminance Re-Mapping for the Control of Apparent Material

Isamu Motoyoshi, Shin'ya Nishida, NTT Communication Science Labs, Japan

I will present a technique that can dramatically alter the apparent material of object surfaces from glossy opaque ones to translucent, metallic, or even skin-like ones. The method is based on a very simple manipulation of the image histogram.

Monochromacy in Photopic Vision

Ken Nakayama, Harvard University

This exercise in monochromatic vision is designed to stimulate thinking about our color experience which we otherwise take for granted in our usual multi-spectral environment. Method: Sodium lamps, perhaps one of the most common sources of highway and street lighting, is practically monochromatic. We will provide illumination from two street lamps, plus some colored objects, including appetizing foods. VSS members are encouraged to bring in their own colored objects.

Proper-/Reverse-spectives - "Paper-thin reality"

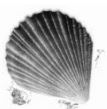
Thomas V. Papathomas, Rutgers University

Hughes's "reverspectives" are stationary stimuli that appear to move as observers move in front of them. I present an interesting variant: Rotating "proper-/reverse-spectives" are paper-thin non-planar objects that contain both protruding illusory reverspectives, and hollow veridical "perspectives". They appear to rotate in a direction opposite to the physical rotating direction.

Interactive, Immersive Virtual Reality System Demonstration

Matthias Pusch, Brian Rossini, WorldViz LLC

WorldViz will demonstrate an interactive, immersive virtual reality system that can be viewed through a high-resolution head-mounted display and will be navigated by walking and looking around in a large space, tracking the



user with a six degrees of freedom optical/inertial tracking system. Users will experience a variety of virtual environments and phenomena, among them several high-quality architectural models.

Artificial Vision Simulation

George Scarlatis, University of California, Los Angeles

A normal-sighted individual can wear a head-mounted display and have a visual experience similar to that of a blind patient implanted with an epiretinal prosthesis.

Swimmers, Eels and Other Gradient-Gradient Illusions

Arthur Shapiro, Emily Knight, Yehonatan Palmor, Daniel Mancusi, Bucknell University

I will present a number of interactive illusions that have been developed in my lab over the past year. Most of these illusions consist of stationary gradient objects placed in front of a moving gradient background, or moving gradient objects in front of a stationary gradient background. The gradient objects can appear to bob up and down ("swimmers") or contort in shape ("eels").

Synchronous and Asynchronous Audiovisual Perception

Yasuto Tanaka, Takeshi Nogai, Shinji Munetsuna, Natunai Institute of Information and Communications Technology

When brief auditory signals precede visual signals, both briefly presented, auditory signals are perceived to come ahead in time. However, when the visual signals precedes the auditory signals, they are perceived to occur simultaneously within a certain time window.

ViperLib – Visual Perception Library

Peter Thompson, University of York

Viperlib is a web-based resource library of images and presentation material illuminating the study of visual perception. All images are given freely by the vision research community and are available for educational, non-profit use only.



Exhibitors

VSS would like to recognize the following 2006 VSS exhibitors. Thank you for your participation and support.

Exhibit Hours

Friday, May 5, 5:30 – 8:30 pm

Saturday, May 6, 8:00 am – 7:15 pm

Sunday, May 7, 8:00 am – 7:15 pm

Monday, May 8, 8:00 – 11:00 am

All exhibits are located in the Municipal Auditorium.

SR Research Ltd.

SR Research, makers of the EyeLink Hi-Speed eye tracker line, have been developing advanced eye tracking technologies since 1992. The new EyeLink 1000 is a high resolution 1000 Hz video-based eye tracker available in either a remote or mirrored optics configuration. The EyeLink II is a head-mounted 500 Hz high-speed binocular eye tracker with ultra low noise and extremely high spatial resolution. Please visit our website at <http://www.sr-research.com> for details on our eye tracking hardware and software product range.

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.

ARVO

Established in 1928, ARVO is a membership organization of more than 11,300 eye and vision researchers from over 70 countries. The Association encourages and assists its members and others in research, training, publication, and dissemination of knowledge in vision and ophthalmology. ARVO's headquarters are located in Rockville, Md. For more information about ARVO, log on to the Association's Website, www.arvo.org.

Cambridge Research Systems

Stop Press... Adaptive Optics Visual Stimulator

This year we will be demonstrating an innovative prototype Adaptive Optics Visual Stimulator. Developed in collaboration with Imagine Eyes, the instrument is based upon proven CRS Visual Stimulator technology coupled with the award winning crx1. It incorporates an advanced Wavefront Aberrometer and a Deformable Membrane Mirror, and is able to compensate for aberrations in any eye.

We will also be demonstrating our established range of Visual Stimulator systems that are MATLAB-compatible and offer unique features not available in any other device, and our latest high-speed Video Eyetracker Toolbox system which offers unparalleled performance at an exceptional price point. Come and talk to Steve Elliott during the meeting, or take a look at our website www.crs Ltd.com to find out more.

Cambridge Research Systems, the only company dedicated to providing a complete range of tools for vision science.

Tucker-Davis Technologies

TDT provides data acquisition and stimulus control systems for sensory neurophysiology, evoked potentials, and psychophysics. TDT's System 3 hardware and OpenEx software provide a configurable, high performance signal processing workstation that allows visual scientists to create and present complex visual stimuli and acquire response data from a single integrated system.

Applied Science Laboratories

Applied Science Laboratories (ASL) continues to supply the largest selection of innovative eye tracking solutions for research and commercial applications. ASL was the first company to develop a head-mounted eye tracker, EYEHEAD integration, parallax free optics, long range optics for fMRI environment, remote tracking with head compensation and many other features that are now industry standards. This extensive experience and progressive attitude continues to provide easy-to-use, accurate and reliable systems.



The MIT Press

The MIT Press publishes many books and journals dedicated to the vision sciences, visual neuroscience and cognitive science, perception and related fields. Please visit our exhibit area to receive a 20% discount on our newest and most relevant titles in the field including: Cabeza/ *The Handbook of Functional Neuroimaging of Cognition*, Second Edition; Heckenlively/ *Principles and Practice of Clinical Electrophysiology of Vision*, Second Edition; Julesz/ *Foundations of Cyclopean Perception*; and Noe/ *Action in Perception*, new to paperback.

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 of the very few truly global publishing houses. We are a world-wide 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.

Arrington Research, Inc.

Arrington Research has been providing reliable affordable eye trackers for the research market worldwide for over 10 years. ViewPoint EyeTracker® systems are the easiest and best value available and include light-weight head mounted, HMD and head fixed systems. All systems include a Software Developers Kit (SDK), real-time Ethernet & serial communication, built-in stimulus presentation, post-hoc data analysis tools, a MATLAB toolbox, many other 3rd Party product interfaces and examples. Please see our web site www.ArringtonResearch.com and visit our booth in the VSS poster hall.

WorldViz

WorldViz is an industry leader in interactive virtual reality solutions. The company's flagship products are VIZ-ARD, the VR communities favored interactive 3D content creation software, and PPT X4, the most cost effective wide-area tracking system currently available. WorldViz provides high quality, low-cost immersive 3D products to researchers, educators, designers, manufacturers, and other professionals, integrating all common VR products on the market and delivering complete turnkey solutions.

Student Travel Fellowship Recipients for 2006

VSS congratulates this year's recipients of the Student Travel Fellowship award.

Melanie Bernard

Vanderbilt University
Advisor: Dr. A. B. Bonds, III

Yong Gu

Washington University School of Medicine
Advisor: Gregory C. DeAngelis

Vidhya Navalpakkam

University of Southern California
Advisor: Laurent Itti

Shani Offen

New York University
Advisor: David Heeger

Ashleigh Richard

The University of Iowa
Advisor: Andrew Hollingworth

Jason Samonds

Carnegie Mellon University
Advisor: Tai Sing Lee

Sarah Shuwairi

New York University
Advisors: Scott Johnson, Clay Curtis,
Karen Adolph

Philipp Sterzer

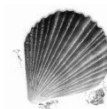
University College London
Advisor: Geraint Rees

Kristy Sundberg

The Salk Institute
Advisor: John Reynolds

Nicholas Turk-Browne

Yale University
Advisor: Brian Scholl



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. Bulletin boards will be available in the Ballroom Foyer and the Municipal Auditorium 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.

Lost and Found

Lost and found is located at the Meeting Registration desk in the Hyatt Ballroom Foyer.

Food Service at Municipal Auditorium

Tuscan Café

Tuscan Café 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 Hyatt Ballroom Foyer. Coffee, tea and sodas will also be served each afternoon between afternoon talk sessions, and on Tuesday afternoon immediately following the Business Meeting.

Café Vision

Café Vision is located in the Hyatt Ballroom Foyer, and features breakfast items, lunch selections and snacks, coffee and cold beverages. Breakfast items will be available from 7:30 – 11:00 am Saturday through Wednesday; lunch selections 11:30 am – 2:00 pm Saturday through Tuesday.

Café Vision Hours:

Friday, May 5, 11:00 am - 5:00 pm

Saturday, May 6, 7:30 am – 6:00 pm

Sunday, May 7, 7:30 am – 7:30 pm

Monday, May 8, 7:30 am – 2:00 pm

Tuesday, May 9, 7:30 am – 6:15 pm

Wednesday, May 10, 7:30 am – 12:00 noon

Patio Grill

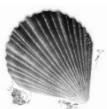
The Patio Grill features hamburgers, cheeseburgers and hot dogs grilled to perfection on an outdoor grill.

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 in the Municipal Auditorium mezzanine (upstairs). It offers a comfortable, relaxing setting to use your laptop to check email, and chat with friends. Snacks and drinks are allowed.

To connect to the Internet, you can select any of the wireless routers that your computer automatically detects in the Municipal Auditorium. To help distribute the connection load and improve performance, we ask that you select the wireless network indicated on signs at the location where you are seated. Wired connections will also be available in the Municipal Auditorium mezzanine.

Cyber Vision Hours:

Friday, May 5, 5:30 – 8:30 pm

Saturday, May 6, 8:00 am to 7:15 pm

Sunday, May 7, 8:00 am to 7:15 pm

Monday, May 8, 8:00 am to Noon

Tuesday, May 9, 8:00 am to 7:30 pm

T-Mobile HotSpot

The Hyatt is a T-mobile hotspot and wireless Internet is available in guest rooms and public areas, including Scalini'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). See http://hotspot.t-mobile.com/services_plans.htm for details.

Internet Terminals

Terminals will be available near the Meeting Registration desk in the Hyatt Ballroom Foyer with free Internet access. A printer is also available.

Child Care

Child care may be arranged through the Hyatt Hotel. The standard rate is \$12/hour for one child, availability is limited, and is on a first come first serve basis. See the Meeting Registrations desk for more details, or you may call, Melinda Garcia 941-953-1234 ex 1258. Parents and guardians are required to perform their own reference checks and arrange child care independently. VSS is not responsible for child care or for the quality of care given.

Poster Information

All 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. See Poster Schedule on page 5 for author presents times.

Please be courteous and take down your poster promptly at the end of the session, so the board is empty when the next presenter arrives to put up his or her poster.

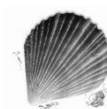
Push pins are available for your use and are located at the Meeting Registration desk and the Municipal Auditorium lobby.

Speaker Information

The Hyatt Ballrooms are equipped with a data/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. A/V technicians will be available all day in both the North and South Hyatt Ballrooms; presenters are welcome to test their presentations between talk sessions. Please give priority to presenters whose talk is scheduled for the subsequent session.



Club Vision

9:00 pm – 3:00 am, Hyatt Ballroom South

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.

The music genre will change every half hour as we attempt to please a wide range of tastes.

The wearing of glowing or flashing accessories has become a tradition for this event and we will again be distributing free glow-in-the-dark necklaces and bracelets at the event. We encourage you to also bring your own creative accessories.

Dance and party with us until 3:00 am.

Guest DJs

Here's our lineup of guest DJs.

Carl Gaspar

Rolf Nelson

Raj Shah

Katia Ripamonti

William Hayward

Nobu Shirai

Brian Goolsby

Second Annual Educational Outreach Event

Vision Sciences Society and the G.WIZ Science Museum are proud to present a public lecture held at the G.WIZ Science Museum. The event is for the Sarasota community, but VSS attendees are also invited to attend. Our goal is to share highlights of vision science with the community that hosts our meeting.

Learning to See

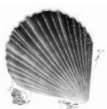
Saturday, May 6, 2006, 1:00 pm, G.WIZ Science Museum

Presenter: Ione Fine, Assistant Professor, Department of Ophthalmology, Zilkha Neurogenetic Institute, Keck School of Medicine, USC

Babies are born into a bright buzzing confusion of a visual world - What is this like for infants? How do they learn to make sense of all those shapes and colors? What happens to the brain if infants are deprived of sight? This lecture will discuss current research on the development of the infant visual system, and the effects of visual deprivation during infancy and early childhood.

Presenter Biography

Dr. Fine received her undergraduate degree for Oxford University, her Ph.D. from the University of Rochester and carried out postdoctoral research at the University of California, San Diego. Her research examines perceptual learning and plasticity with an emphasis on the effects of visual deprivation. Current work includes measuring performance in patients who have been implanted with electrode retinal prostheses, and examining the effects of long term visual deprivation. She is the chair of the vision section of OSA.



Program Summary

See the Meeting Schedule on pages 4 and 5 for the schedule of poster and talk sessions. Also see the Poster Schedule on page 5 for times that poster authors are required to set up, present, and take down.

Key: E79 indicates the poster number (poster will be presented in session E on board number 79). For talks, the poster number is replaced with the talk time. 608 indicates the sequential abstract number. The Topic Index and Author Index use this unique number to identify abstracts in the Program Summary.

Poster Sessions for Friday, May 5

POSTER SESSION A

Friday, May 5, 5:30 - 8:30 pm, Municipal Auditorium

Author presents: 6:30 - 7:30 pm

Eye Movements: Pursuit and Vergence

A1 101 Version and Vergence Eye Movements in Optokinetic Nystagmus Induced by Optic Flow *Dongsheng Yang, Mingxia Zhu, Richard W. Hertle*

102 Abstract 102 moved to poster I85.

A3 103 Pursuit eye movements to isoluminant targets *Doris I. Braun, Neil Mennie, Karl R. Gegenfurtner*

A4 104 Contributions of visual areas V2 and V3 to the analysis of depth and motion signals guiding smooth eye movements *Carlos R. Ponce, Stephen G. Lomber, Richard T. Born*

A5 105 Combining 1D visual motion and 2D predictive signals to control smooth pursuit eye movements *Anna Montagnini, Miriam Spering, Guillaume S. Masson*

A6 106 High spatial frequency superiority of motion aftereffect for smooth pursuit eye movements *Kazumichi Matsumiya, Satoshi Shioiri*

A7 107 A Novel Automated Method for Marking Catch-Up Saccades *Andrew J Toole, Nick Fogt*

Face Recognition

A8 108 Pigmentation is important for recognition of familiar faces *Richard Russell, Pawan Sinha*

A9 109 Where are kin recognition cues in the face? *Maria F Dal Martello, Laurence T Maloney*

A10 110 Voices, not arbitrary sounds, prime the recognition of familiar faces *Isabelle Bühlhoff, Fiona N Newell*

A11 111 Face recognition algorithms surpass humans matching faces in images that vary in illumination *Alice J. O'Toole, P. Jonathon Phillips, Fang Jiang, Janet Ayyad, Nils Pénard, Hervé ABDI*

A12 112 When does an unfamiliar face become familiar? The effect of image type and familiarity on recognition from novel viewing conditions *Dana A. Roark, Hervé Abdi, Alice J. O'Toole*

A13 113 Abstract withdrawn.

A14 114 The 3/4 view effect and the rotation information in infants' face recognition *Emi Nakato, So Kanazawa, Masami K Yamaguchi*

A15 115 Similarities and differences between humans' and Squirrel monkeys' (*Saimili sciureus*) facial recognition strategies *Ryuzaburo Nakata, Yoshihisa Osada*

Perceptual Organization: 2D Shape

A16 116 Early processes mediate Café Wall illusion *Yusuke Tani, Takao Sato*

A17 117 The Brain knows about the Oblique Effect *Tobias Borra, Ignace T.C. Hooge, Frans A.J. Verstraten*

A18 118 No Lateral-Vertical Asymmetry in the Processing of Mirror Images in the Monkey *Luke Woloszyn, David L. Sheinberg*

A19 119 A neural model of symmetry perception for curved shapes. *Frederic J.A.M. Poirier, Hugh R. Wilson*

A20 120 Sensitivity to geometry in male and female children and adults in the U.S. and in an Amazonian indigene group *Ariel D. Grace, Veronique Izard, Kristin Shutts, Stanislas Dehaene, Elizabeth S. Spelke*

A21 121 Estimation of Three-Body Center of Mass: Effects of Size Ratio and Lightness. *Jay Friedenberg, Bruce Liby*

A22 122 Apparent Motion, Phase Relations, and the Perception of Form *Thomas Malloy, Gary Jensen*

A23 123 Shape can bias angle perception: an angle illusion *Graeme J. Kennedy, Harry S. Orbach, Gunter Löffler*



A24 **124** Bayesian estimation of the shape skeleton *Jacob Feldman, Manish Singh*

Working Memory

A25 **125** Visual Short-Term Memory and Context Memory for Grating Contrast *Ling Lin, George Sperling*

A26 **126** The Updating of Object-Position Binding in Visual Short-Term Memory *Andrew Hollingworth, David L. Sacks*

A27 **127** The relationship between fMRI adaptation and repetition priming of visually presented objects *Tzvi Ganel, Claudia LR Gonzalez, Kenneth F Valyear, Jody C Culham, Melvyn A Goodale, Stefan Köhler*

A28 **128** Effects of decay and interference on visual working memory for color *Rachel S. Sussman, Yuhong Jiang*

A29 **129** A Dynamic Neural Field Approach to Multi-Item Visual Working Memory and Change Detection *Jeffrey S. Johnson, John P. Spencer*

A30 **130** Colour-Specific Deficits in Explicit Visual Working Memory: A Case Study *Pauline M Pearson, Lorna S Jakobson*

A31 **131** Neural dissociation of visual working memory consolidation and maintenance. *J. Jay Todd, Stephenie Harrison, René Marois*

A32 **132** Psychophysical Visual Memory Data and Their Neural Net Replications Indicate Sensory-Like Activity is Released from Storage *Thomy H. Nilsson*

A33 **133** Control Processes in Working Memory *Andrew McCollough, Edward Vogel*

A34 **134** A Neural Network Account of Binding Discrete Items Into Working Memory Using a Distributed Pool of Flexible Resources *Brad Wyble, Howard Bowman*

A35 **135** Do perceptually challenging objects consume more working memory capacity? *Edward K. Vogel, Akiko Ikka, Veronica Perez*

A36 **136** Short-Term Visual Memory for Motion Path *Yankun J. Shen, Tal Makovski, Yuhong Jiang*

A37 **137** Suboptimal allocation of visual short term memory resources *Thomas Carlson, George Alvarez*

A38 **138** The functional units of visual working memory: Objects or locations? *Verena Niederhoefer, Erik Blaser*

A39 **139** The Hippocampus and the Fidelity of Representations in Visual Working Memory *Youssef Ezzyat, Ingrid Olson*

A40 **140** The mechanism of priming of pop-out: Stored short-term memory representation or perceptual level weight changes? *Hyunkyoo Lee, Michael C. Mozer, Shaun P. Vecera*

A41 **141** Top-down attentional shift in object working memory task: A distinction between 'what' and 'where' in visual working memory still remains uncertain. *Jee-Won Ahn, Su Keun Jeong, Min-Shik Kim*

A42 **142** Visuospatial and object working memory in naturalistic scene change detection. *Bonnie L. Angelone, Melissa R. Beck, Kariann Amante, Kimberly E. Sikorski, Angela A. Materna*

Binocular Rivalry/Bistability/Awareness

A43 **143** Why do we see binocular rivalry? – Evidence from people who see it fused *Yoram S. Bonne, Uri Polat, Misha Tsodyks*

A44 **144** Psilocybin slows binocular rivalry switching through serotonin modulation *Olivia Carter, Jack Pettigrew, Felix Hasler, Guy Wallis, Franz Vollenweider*

A45 **145** Unseen Objects Influence Estimation of Average Size *Sang Chul Chong, Randolph Blake*

A46 **146** Interactions between binocular rivalry and perceptual filling-in of visual phantoms *Emma Ferneyhough, Ming Meng, Frank Tong*

A47 **147** How to enhance the incidence of stimulus rivalry *Min-Suk Kang, Randolph Blake*

A48 **148** Dynamical properties of second-order processing in binocular vision and rivalry *Jeounghoon Kim, Athena Buckthought, Hugh R. Wilson*

A49 **149** Visibility modulation of rivalrous color flashes in the flash-suppression paradigm: Stimulus-specific modulation dominates over a wide range of temporal parameters *Eiji Kimura, Satoru Abe, Ken Goryo*

A50 **150** Stimulus flicker alters interocular grouping during binocular rivalry. *Tomas Knapen, Chris Paffen, Ryota Kanai, Raymond van Ee*

A51 **151** A neural basis for perceptual memory during binocular rivalry in humans *Philipp Sterzer, Geraint Rees*

A52 **152** Visual choice dynamics: Explaining repetition and predicting alternation of bistable percepts driven by stimulus ON/OFF timing *Andre' J. Noest, Raymond van Ee, Richard J.A. van Wezel*

A53 **153** Reversing how to think about ambiguous figure reversals: Spontaneous alternating by uninformed observers *Stephen R Mitroff, David M Sobel, Alison Gopnik*

A54 **154** Perceptual Bistability Modulated By Priming *Rashmi Sundareswara, Christopher S Kallie, Paul R Schrater*

A55 **155** Effects of feature changes of faded objects on its reentry to our awareness *Daisuke Yoshino, Yutaka Sakaguchi*

A56 **156** The involvement of the superior colliculi in hemispherectomized subjects with blindsight. *Sandra E Leh, Kathy T Mullen, Alain Ptito*

Change Detection

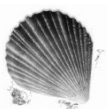
A57 **157** Examining the factors that influence change detection *Daniel J. Simons, Michael S. Ambinder, Xiaoang Irene Wan, Gabriel Nevarez, Eamon Caddigan*

A58 **158** No Evidence (So Far) of Accruing Representations of Change Over Time *Cathleen M. Moore, Lyndsey K. Lanagan*

159 Abstract withdrawn.

A59 **160** Capacity limits for the detection of changing visual features *Alex Burmester, Guy Wallis*

A60 **161** The role of attention in change blindness. *Fumihiko Taya, Ken Mogi*



162 Abstract 162 moved to poster G17.

A61 **163** Influence of Local Context in Change Detection *Steven Kies, Charles Chubb*

A62 **164** Change detection in patterns depends on pattern shape and element arrangement *Christian Kempgens, Gunter Löffler, Harry S Orbach*

Oscillations, Correlations, Synchrony

A63 **165** Stimulus-Dependent Response Correlations between Rabbit Retinal Ganglion Cells *Susmita Chatterjee, David K Merwine, Norberto M Grzywacz*

A64 **166** Abstract withdrawn.

A65 **167** Visual information coding by synchronized oscillations *Hiroshi Ishikane, Mie Gangi, Shoko Honda, Shiro Usui, Masao Tachibana*

A66 **168** Superior colliculus modulates oscillatory activity of neuronal responses in primary visual cortex *Boris Ebisch, William H. Barnes, Yvonne Egenolf, Stephen G. Lomber, Ralf A.W. Galuske*

A67 **169** Neuronal Synchrony and Visual Grouping: A Multi-electrode Study in Monkey IT *Britt Anderson, Matthew Harrison, David L. Sheinberg*

A68 **170** Does spike synchrony provide a better code of stimulus angle than average firing rate? *Walter J. Jermakowicz, Xin Chen, Ilya Khaytin, Zhiyi Zhou, Melanie Bernard, A.B. Bonds, Vivien A. Casagrande*

A69 **171** Synchronous Activity in Cat Visual Cortex Detects Structural Modifications in Natural Images *Melanie R. Bernard, Zhiyi Zhou, A. B. Bonds*

A70 **172** Synchrony Modulation in Cat Visual Cortex Reflects Structure from Coherent Motion of Random Dots *Zhiyi Zhou, Melanie R. Bernard, A. B. Bonds*

A71 **173** Watching the brain oscillating : A neural correlate of illusory jitter *Kaoru Amano, Derek Arnold, Alan Johnston, Tsunehiro Takeda*

Human Factors

A72 **174** High dynamic range displays and the "blue light hazard". *James A. Ferwerda, Aries Arditi*

A73 **175** Calibrated LCD stimulus presentation for visual psychophysics in fMRI *Hans Strasburger, Torsten Wüstenberg*

A74 **176** Navigating in a web site: label-following vs. layout-following strategies *Sara Rigutti, Walter Gerbino*

A75 **177** Viewing compromised visual stimuli causes dry eye symptoms: role of the orbicularis muscle *James E Sheedy, Sowjanya Gowrisankaran*

A76 **178** Station-point violations and their effect on size perception in minimal access surgery *Joerg W Huber, Ian RL Davies, Neil Stringer, Chris O'Neil*

A77 **179** Gabor discrimination and laser disability glare *Leon N McLin, Laura E Barnes, Brenda J Novar, Gary L Martinsen, Paul V Garcia*

A78 **180** Improvement in upper-extremity motor-function in hemiparetics using robot-assisted repetitive motion therapy with video games *Flavio DaSilva, Nanci E Wechsler, Michael McBeath, Thomas Sugar, Eric Amazeen, Clark Presson, James Koeneman*

Talk Sessions for Saturday, May 6

TALK SESSION

Saturday, May 6, 8:00 - 9:30 am, Hyatt Ballroom North

Motion and Eye Movements

Moderator: Concetta Morrone

8:00 **181** Phase lags and gain ratios in motion perception during smooth pursuit eye movements *Jan L. Souman, Tom C.A. Freeman*

8:15 **182** Pursuit Eye Movement, Motion Adaptation and Two Types of Velocity Aftereffect *Tom CA Freeman*

8:30 **183** Visual contextual effects on smooth pursuit eye movements *Miriam Spering, Karl R. Gegenfurtner*

8:45 **184** The initial ocular following responses (OFRs) to competing visual motions: Contrast-dependent nonlinear interactions and their dependence on spatial frequency and speed. *Boris M Sheliga, Edmond J FitzGibbon, Frederick A Miles*

9:00 **185** Localization of visual targets during optokinetic eye movements *Andre Kaminiarz, Marc Rohe, Bart Krekelberg, Frank Bremmer*

9:15 **186** Modulation of retinotopy of human MT complex by gaze position. *MC Morrone, G D'Avossa, M Tosetti, DC Burr*

TALK SESSION

Saturday, May 6, 8:00 - 9:30 am, Hyatt Ballroom South

Face Perception: Neural Mechanisms

Moderator: Michèle Fabre-Thorpe

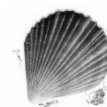
8:00 **187** Face-Selective Adaptation of the M170 Is Sensitive to Face Parts, Not Face Configuration *Alison Harris, Ken Nakayama*

8:15 **188** The Visual Aha! Insights into object and face perception using event related potentials *James Tanaka, Carley Piatt, Javid Sadr*

8:30 **189** Teasing apart meaningful from meaningless ERP differences in object categorization: a complicated story. *Michèle Fabre-Thorpe, Guillaume A. Rousselet, Marc J.-M. Macé, Simon J. Thorpe*

8:45 **190** The representation of mammalian faces in human cortex *James V Haxby, Ronald Bryan, M Ida Gobbini*

9:00 **191** Distributed representations of face expression and gaze perception in human temporal cortex. *Andrew D. Engell, M. Ida Gobbini, James V. Haxby*



9:15 **192** Disruption in structural connectivity in ventral cortex in congenital prosopagnosia *Cibu Thomas, Galia Avidan, Kwan-jin Jung, Marlene Behrmann*

TALK SESSION

Saturday, May 6, 11:00 - 12:30 pm, Hyatt Ballroom North

Eye Movements, Brain Activity, and Attention

Moderator: Eileen Kowler

11:00 **193** Attentional enhancement along the path of a sequence of saccades *Timothy M. Gersch, Brian S. Schnitzer, Priyesh S. Sanghvi, Barbara Doshier, Eileen Kowler*

11:15 **194** fixational eye movements do not predict attentional benefits *Todd S Horowitz, Elisabeth M Fine, David Fencsik, Sergey Yurgenson, Jeremy M Wolfe*

11:30 **195** Spatiotemporal properties of saccadic inhibition and potential neural correlates in the macaque *B Suresh Krishna, An-negret L Falkner, Michael E Goldberg*

11:45 **196** Facilitation of saccade latency with natural scene backgrounds *Brian J. White, Dirk Kerzel, Karl R. Gegenfurtner*

12:00 **197** On the spatio-temporal limits of retinal motion compensation, and why they are the undoing of temporal binding *Guy Wallis*

12:15 **198** A large gender difference in smooth pursuit precision *Jeremy B. Wilmer, Ken Nakayama*

TALK SESSION

Saturday, May 6, 11:00 - 12:30 pm, Hyatt Ballroom South

Perceptual Organization

Moderator: Mary Peterson

11:00 **199** Parsing Visual Scenes via Dynamic Cues *Pawan Sinha, Yuri Ostrovsky, Ethan Meyers*

11:15 **200** Extremal Edges Dominate Other Cues to Figure-Ground Organization *Stephen Palmer, Tandra Ghose*

11:30 **201** ERP Components Index Unconscious versus Conscious Perception of Familiar Shape With Figure-Ground Reversal *Logan T. Trujillo, Mary A. Peterson, John J.B. Allen*

11:45 **202** Illusory contours don't pass through the 'blind spot' *Marianne Maertens, Stefan Pollmann, Robert M Shapley*

12:00 **203** Amodal completion enhances the discrimination of Vernier offset *Walter Gerbino, Stefano Scomersi, Carlo Fantoni*

12:15 **204** The human visual spline: Interpolation contours between relatable inducers follow quintic polynomials. *Jacqueline M Fulvio, Manish Singh, Laurence T Maloney*

TALK SESSION

Saturday, May 6, 2:00 - 3:45 pm, Hyatt Ballroom North

Natural Images and Position Encoding

Moderator: Patrick Bennett

2:00 **205** Image Statistics for Surface Reflectance Estimation *Lavanya Sharan, Yuanzhen Li, Edward H. Adelson*

2:15 **206** Learning the statistics of illumination and reflectance *Edward H. Adelson, Mashall F. Tappen, William T. Freeman, Yuanzhen Li*

2:30 **207** Ribbon Analysis of Contours in Natural Images *A. David Ing, Wilson S. Geisler*

2:45 **208** Contributions of fixational eye movements to visual discrimination *Michele Rucci, Gaelle Desbordes, Ramon Iovin, Fabrizio Santini*

3:00 **209** The perisaccadic compression of visual space - what may it have to do with spatial attention? *Fred H Hamker, Marc Zirnsak, Dirk Calow, Markus Lappe*

3:15 **210** Preservation of position-encoding mechanisms across the life span *Patrick J. Bennett, Christopher P. Taylor, Allison B. Sekuler*

3:30 **211** The precision of position coding in the visual cortex *David Whitney, David Bressler*

TALK SESSION

Saturday, May 6, 2:00 - 3:45 pm, Hyatt Ballroom South

Motion: Cortical Mechanisms

Moderator: Andrew Smith

2:00 **212** Evidence for a motion-selective pathway from V1 to the ventral cortical stream for object recognition. *Max Snodderly, Moshe Gur*

2:15 **213** Remembered direction modulates responses to visual motion in MT and prefrontal neurons. *Daniel Zaksas, Nicholas P LaMendola, Tatiana Pasternak*

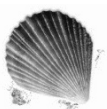
2:30 **214** Categorical Representation of Visual Motion Direction in Posterior Parietal Cortex Area LIP *David J Freedman, John A Assad*

2:45 **215** Self-motion is Represented in an Eye-Centered Coordinate Frame in MSTd *Brian Lee, Bijan Pesaran, Richard A. Andersen*

3:00 **216** Apparent motion speed dependence on contrast and orientation: evidence from MEG *Jean Lorenceau, Shasha Morel, Anne Caclin, Catherine Tallon-Baudry*

3:15 **217** Sensitivity to optic flow in human MT and MST measured with fMRI adaptation *Andrew T Smith, Matthew B Wall, Angelika Lingnau, Hiroshi Ashida*

3:30 **218** Motion discrimination with psychophysically suppressed MT: an fMRI study *Benjamin Thompson, Zili Liu*



TALK SESSION

Saturday, May 6, 4:15 - 5:30 pm, Hyatt Ballroom North

Spatial Vision I**Moderator: James Elder**

4:15 **219** Narrow-band channels optimally sum a broad band of spatial frequency information. *Christopher P. Taylor, Patrick J. Bennett, Allison B. Sekuler*

4:30 **220** Classification images of bandpass mechanisms across noise spectral density *Craig K Abbey, Miguel P Eckstein*

4:45 **221** Power spectrum classification image analysis reveals localized mechanisms underlying nonlinear detection of narrow-band stimuli *James H. Elder, Yaniv Morgenstern*

5:00 **222** Letter identification: Evidence for scale dependence but not for fixed channels *Ipek Oruc, Michael S. Landy*

5:15 **223** Gaussian basis functions for fitting the Gabor sector of the Modelfest data *Stanley A Klein, Christopher W. Tyler*

TALK SESSION

Saturday, May 6, 4:15 - 5:30 pm, Hyatt Ballroom South

Temporal Processing**Moderator: Bruno Breitmeyer**

4:15 **224** Second sight: vision sustained by a secondary activation of the phototransduction cascade *Andrew Stockman, Lindsay T. Sharpe, Michel Michaelides, Anthony T. Moore, Andrew R. Webster, Hannah E. Smithson*

4:30 **225** Distinct Temporal Dynamics of Cone-Opponent and -Nonopponent Macaque Primary Visual Cortical Neurons *Venkata R. Posina, Gregory D. Horwitz, Thomas D. Albright*

4:45 **226** Temporal Aspects of Contour and Brightness Processing in Meta- and Paracontrast *Haluk Ogmen, Bruno G. Breitmeyer, Hulusi Kafaligonul, Steven Todd, Lynn Mardon, Ralph Ziegler*

5:00 **227** Evidence for interacting temporal channels: spatial determinants *John R Cass, David Alais*

5:15 **228** Temporal freezing of surface properties *Isamu Motoyoshi*

Poster Sessions for Saturday, May 6

Poster Session B

Saturday, May 6, 8:00 - 11:00 am,

Municipal Auditorium

Author presents: 9:30 - 10:30 am

Attention and Working Memory

B1 **229** Concurrent working memory load can reduce distraction: An fMRI study *Min-Shik Kim, Soo-jung Min, Kamin Kim, Bo-Young Won*

B2 **230** Spatial working memory load impairs signal enhancement, not attentional orienting *Suk Won Han, Min-Shik Kim*

B3 **231** Working memory training reduces working memory load effect *Heejung Kim, Min-Shik Kim*

B4 **232** Predictive spatial working memory content guides visual search *Jang Jin Kim, Min-Shik Kim, Marvin M. Chun*

B5 **233** Effects of spatial and non-spatial working memory on location- and object-based attention *Wei-Lun Chou, Su-Ling Yeh*

B6 **234** Working memory capacity influences the top-down factors in visual search *Ken Sobel, Matthew Gerrie, Mike Kane, Bradley Poole*

B7 **235** Working memory load can impair neural processing of unattended information *Julie D. Golomb, Marvin M. Chun*

236 Abstract 236 moved to poster D74.

B8 **237** Colour-Specific Deficits in Implicit Colour Working Memory: A Visuomotor Case Study *Loni Rhode, Lee A Baugh, Pauline M Pearson, Lorna S Jakobson, Jonathan J Marotta*

B9 **238** Rehearsal in Visual Memory *Dawn A. Morales, Sharon L. Thompson-Schill*

B10 **239** Visual working memory matches do not always attract attention *D. Alexander Varakin, Daniel T. Levin*

Locomotion and Navigation

B11 **240** Combining Moving Targets and Moving Obstacles in a Locomotion Model *Jonathan A. Cohen, Hugo Bruggeman, William H. Warren*

B12 **241** Is obstacle avoidance controlled by perceived distance or time-to-contact? *Hugo Bruggeman, Daniel B. Rothman, William H. Warren*

B13 **242** Optic flow aids in the formation of cognitive maps *Kasey C. Soska, Rick O. Gilmore*

B14 **243** Flexible attunement to different optical variables in visually guided action *Gabriel J. Diaz, Brett R. Fajen*

B15 **244** Perceptual learning and the visual guidance of braking *Brett R Fajen*

B16 **245** Learning Virtual Building Layouts: The Effects of Age on the Usefulness of Geometric and Nongeometric Visual Information *Amy Kalia, Gordon E. Legge, Nicholas A. Giudice*

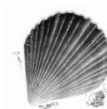
B17 **246** Collision detection and factors affecting "reality" of a virtual environment *Russell L Woods, Lee T Lichtenstein, Aaron J Mandel, Eli Peli*

B18 **247** The behavioral dynamics model of locomotor control: Integrating basic behaviors *William H. Warren*

B19 **248** Wormholes in Virtual Reality and the Geometry of Cognitive Maps *Daniel B. Rothman, William H. Warren*

B20 **249** The role of topological boundary relations in active navigation *Huiying Zhong, Marianne C. Harrison, William H. Warren*

B21 **250** Intercepting moving targets on foot: Can people learn to anticipate multiple trajectories? *Justin M. Owens, William H. Warren*



B22 **251** Estimating Distance and Duration of Travel: A Possible Shared Mechanism *Ling-Dan Wu, Huai-Yong Zhao, Qiang Liu, Jennifer L. Campos, Hong-Jin Sun*

B23 **252** Path Integration Precision is Increased Near Familiar Destinations *John W. Philbeck, Shannon O'Leary*

B24 **253** Temporonasal motion induces stronger vection. *Takeharu Seno, Takao Sato*

B25 **254** Effects of perspective jitter on vection and visual control of posture are dissociated *Michiteru Kitazaki, Taku Hashimoto*

B26 **255** Children's use of extended three-dimensional surfaces for reorientation *Sang Ah Lee, Elizabeth Spelke*

Perceptual Learning

B27 **256** Sound aids perceptual learning *Robyn S Kim, Aaron Seitz, Ladan Shams*

B28 **257** Audio-Visual Statistical Learning *Ladan Shams, Aaron Seitz, Virginie van Wassenhove*

B29 **258** Face-inversion effects flex with perceptual learning. *Zahra Hussain, Patrick J Bennett, Allison B Sekuler*

B30 **259** Perceptual learning of discriminating features for facial recognition *M.F. Peterson, M.P. Eckstein*

B31 **260** Effects of perceptual learning on the temporal dynamics of perceptual decision *Wilson Chu, Zhong-Lin Lu, Barbara A. Doshier*

B32 **261** Learning to discount noise *Miguel P. Eckstein, Binh N. Pham, Craig K. Abbey, Yani Zhang*

B33 **262** Hastening Orientation Sensitivity *Nestor Matthews, Kei Kurosawa, Kristen Strong*

B34 **263** Perceptual learning of motion leads to faster-flicker perception *Aaron R. Seitz, José E. Náñez Sr., Steven R. Holloway, Takeo Watanabe*

B35 **264** Practice-induced improvements for target detection in rapidly presented visual search displays is temporal-context-dependent *Angela Vavassiss, Michael W. von Grünau*

B36 **265** Perceptual learning of contrast detection is color selective *Genevieve M Heckman, Stephen A Engel*

B37 **266** Two cases of a requirement of feedback for perceptual learning. *Steven R. Holloway, Yoshiaki Tsushima, José E. Sr. Náñez, Takeo Watanabe, Aaron Seitz*

B38 **267** Specificity of Perceptual Learning for Difficult Tasks During Simultaneous Training *Pamela E. Jeter, Barbara A. Doshier, Zhong-Lin Lu*

B39 **268** Motion perceptual learning: only task-relevant stimulus information is learned *Zili Liu, Hongjing Lu, Xuan Huang, Yifeng Zhou*

B40 **269** Sleep-dependent perceptual learning with and without distractors. *Sara C. Mednick, John Serences, Geoffrey M. Boynton, Edward Awh*

B41 **270** The spatio-temporal window of task-irrelevant perceptual learning *Shigeaki Nishina, Aaron Seitz, Mitsuo Kawato, Takeo Watanabe*

B42 **271** Is Statistical Learning Theory Applicable to the Human Brain? *Monica Padilla, Norberto M. Grzywacz*

B43 **272** Bayesian Method for Repeated Threshold Estimation *Alexander Petrov*

B44 **273** The limits of perceptual learning in previously untreated amblyopia: an intensive case study *Roger W Li, Allison Provost, Jenny Sung, Jennie Nguyen, Karen G Young, Pia Hoenig, Dennis M Levi*

B45 **1120** Temporal aspects of cue recruitment in visual perception *Qi Haijiang, Benjamin T. Backus*

Multi-Sensory Processing

B46 **274** Ambient Sounds Can Enhance Visual Perception and Memory Performance in Virtual Environments *Elizabeth T. Davis, Kevin Scott, Kenneth W. Hailston, Jarrell Pair, Larry Hodges*

B47 **275** Temporal ventriloquism: Perceptual shifts in temporal position and improved audiovisual precision predicted by maximum likelihood estimation *David Alais, Erin Weston*

B48 **276** Audiovisual interactions in signal detection *Tobias S. Andersen, Pascal Mamassian*

B49 **277** Modulation of Visual Perceptual Learning by Sounds *Anton L. Beer, Takeo Watanabe*

B50 **278** Auditory-visual interactions in the judgment of a ball's speed *Laurie M. Heller, Suzanne Gilman, Karen Sripada, Elena Helman*

B51 **279** Effects of concurrent auditory stimulation on human visual cortex *Susanne Watkins, Ladan Shams, Geraint Rees*

B52 **280** Integration and segregation of visual-tactile-auditory information is Bayes-optimal *David R Wozny, Ladan Shams*

B53 **281** Haptic exploration of facemasks recruits left fusiform gyrus *Thomas W. James, Andrea R. Kilgour, Philip Servos, Ryo Kitada, Eunji Huh, Susan J. Lederman*

B54 **282** Orientation Specificity With Vision and Touch: Map Learning, Haptic Updating, and Functional Equivalence *Nicholas A. Giudice, Jack M. Loomis*

B55 **283** Integration of shape information from vision and touch: Optimal perception and neural correlates *Hannah B Helbig, Emiliano Ricciardi, Pietro Pietrini, Marc O Ernst*

B56 **284** Interaction of Visual and Haptic Cues in the Image-based Perception of Depth *Bing Wu, Roberta L. Klatzky, Damion Shelton, George Stetten*

B57 **285** Visual bias of perceived tactile location *Ilja Frissen, Marc Ernst*

B58 **286** Task-Irrelevant Perceptual Learning of Crossmodal Links in Exogenous Covert Orienting *Melissa A Batson, Anton L Beer, Takeo Watanabe*

B59 **287** The role of visual background orientation on the perceptual upright during microgravity *Richard T Dyde, Michael R Jenkin, Heather L Jenkin, Jim E Zacher, Laurence R Harris*

B60 **288** Behavioral assessment of unisensory and multisensory integration *Guy Gingras, Benjamin A. Rowland, Barry E. Stein*



B61 **289** Does the levitation illusion depend on the view seen or the scene viewed? *Heather L Jenkin, James E Zacher, Laurence R Harris*

B62 **290** Monkeys match sequentially presented sets with simultaneously presented arrays based on numerosity *Kerry E. Jordan, Evan L. MacLean, Elizabeth M. Brannon*

B63 **291** Effects of attention on face and voice processing. *Marianne Latinus, Margot J. Taylor*

B64 **292** Relative weights of static and dynamic visual cues in the perception of body roll *Paul R MacNeilage, Carmel A Levitan, Martin S Banks*

B65 **293** What Does the Illusory-Flash Look Like? *David McCormick, Pascal Mamassian*

B66 **294** Visual aftereffects of proprioceptive stimulation not due to proprioceptive adaptation *Tatjana Seizova-Cajic, Ben W. L. Sachtler*

Spatial Vision: Mechanisms and Texture

B67 **295** Bars & Edges: a multi-scale Gaussian derivative model for feature coding in human vision *Mark A Georgeson*

B68 **296** Extending Observer Models for More Difficult Identification and Discrimination *Seong-Taek Jeon, Zhong-Lin Lu, Barbara M. Doshier*

B69 **297** Signal detection analyses of an uncertainty discrimination paradigm. *Lynn A. Olzak, Jordan R. Wagge, Robin D. Thomas*

B70 **298** The pedestal effect is caused by off-frequency looking, not nonlinear transduction or contrast gain-control *Felix A Wichmann, G Bruce Henning*

B71 **299** Orientation discrimination threshold-as-a-function-of-size curves shift more dramatically with increased stimulus contrast at 0 than 10 degrees in the temporal visual field *Sharon L. Sally, Rick Gurnsey*

B72 **300** Orientation Tuning Channels in Old and Young Observers *Stanley W. Govenlock, Christopher P. Taylor, Allison B. Sekuler, Patrick J. Bennett*

B73 **301** Curvature perception in aging *Isabelle Legault, Remy Allard, Jocelyn Faubert*

B74 **302** Crowding Counting *Jake Baron, Denis G. Pelli*

B75 **303** Collinearity and Surround Size Effects on Spatial Discrimination Tasks *Michael L. Kramer, Lynn A. Olzak*

B76 **304** Cross-orientation suppression is proportional to the square-root of speed for flickering Gabor stimuli *Tim S Meese, David J Holmes*

B77 **305** Evidence for plaid-grabbers *Charles Chubb, Joshua A. Solomon, Michael J. Morgan*

B78 **306** The neural correlates of human surround suppression *Suzanne P. McKee, Alex R. Wade, Yury Petrov, Anthony M. Norcia*

B79 **307** Lateral interaction mechanisms in texture segregation can be studied with a two-frequency VEP method *Thomas Meigen, Patrick Hottenroth*

B80 **308** Changes in VEP indices of cortical lateral interactions with epilepsy treatment *Mary M. Conte, Anastasiya Ashurova, Laura J. Ponticello, Erik J. Kobylarz, Douglas R. Labar, Jonathan D. Victor*

B81 **309** Isodiscrimination contours in a three-parameter texture space *Jonathan D. Victor, Ana Ashurova, Charles Chubb, Mary M. Conte*

B82 **310** Multi-level isotricon textures *Ted Maddess, Yoshinori Nagai, Jonathan D Victor*

B83 **311** Processing time of second-order contour formation. *Kazushi Maruya, Yutaka Nakajima, Takao Sato*

B84 **312** Effects of variability and size on texture discrimination asymmetry *Francois Xavier Sezikeye, Rick Gurnsey*

B85 **313** Visual cortex responses to different texture-defined boundaries: An fMRI study *Curtis L Baker, Catherine L Mortin, Nicolaas Prins, Frederick A A Kingdom, Serge O Dumoulin*

B86 **314** How important is spatial phase in texture segmentation and contour integration? *Robert F Hess, Bruce C Hansen*

Poster Session C

Saturday, May 6, 12:00 - 3:00 pm,

Municipal Auditorium

Author presents: 1:00 - 2:00 pm

Attention: Selection and Modulation

C1 **315** Characterizing Surprise in Humans and Monkeys *David J Berg, Susan Boehnke, Robert Marino, Pierre Baldi, Doug Mu-noz, Laurent Itti*

C2 **316** Saliency effects on bilateral cuing *Anne L Brauer, James L Dannemiller*

C3 **317** Priming and Masking Interactions Shape the Transient Component of Focal Attention *Bruno Breitmeyer, Alpay Koç, Haluk Ödmen*

C4 **318** Negative priming in pure perceptual-based sequence learning *Soo-Jung Min, Min-Shik Kim*

C5 **319** Attention strikes back: Counteracting the effects of adaptation with attention *Hilda M. Fehd, Adriane E. Seiffert*

C6 **320** Does attention modulate chromatic vep responses? *Jennifer R. Highsmith, David Stoebling, Peter Gulla, Michael A. Cronale*

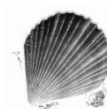
C7 **321** Cueing of the stimulus location in polarity correspondence effect *Akio Nishimura, Kazuhiko Yokosawa*

C8 **322** Measuring accommodation of visual attention: Titchener's "attention-wave" reconsidered? *Ekaterina Pechenkova*

C9 **323** Learning-induced sensitization for motion directions is modulated by attention *Chia-huei Tseng, Thomas Papathomas, Zoltan Vidnyanszky*

C10 **324** Exogenous attention distorts visual space and speeds up processing: Effects on apparent size *Michael von Grünau, Cesar Galera, Afroditi Panagopoulos, Mikael Cavallet*

C11 **325** Morphed Objects Do Not Capture the Eyes *Jason H. Wong, Anne P. Hillstrom, Matthew S. Peterson*



C12 **326** Attentional Filtering of Dot Intensities in Centroid Estimations *Stefanie A Wong-Drew, Charles F Chubb, George Sperling*

C13 **327** Transient attention and selective adaptation to high and low spatial frequencies. *Yaffa Yeshurun*

C14 **328** Transient covert attention increases the perceived rate of flicker *Barbara Montagna, Marisa Carrasco*

C15 **329** Apparent contrast differs across the vertical meridian of the visual field: visual and attentional factors. *Ruby Zoe Rodriguez, Joetta Gobell, Stuart Fuller, Marisa Carrasco*

Color

C16 **330** Measuring the Impact of Laser Eye Protection on Color Vision *Thomas Kuyk, Paul Garcia, William Brockmeier, Robert Gorsche, Gary Martinsen*

C17 **331** Utilization of the Crawford Transformation in Evaluation of Spectral Background Efficiency of Solid State Light Sources *Harry Zwick, Peter Edsall, Louis Hare, James Ness*

C18 **332** Characteristic variations in the color statistics of natural scenes *Yoko Mizokami, Shernaaz M. Webster, Michael A. Webster*

C19 **333** Flank Facilitation for Isoluminant Chromatic Stimuli *Pi-Chun Huang, Kathy T. Mullen, Robert F. Hess*

C20 **334** Loss of position perception and size constancy for equiluminant counterphase flickering color stimuli *Seiichiro Naito, Yoshihiro Hirano, Satoshi Kikuchi*

C21 **335** The "chromatic tilt" effect: hue changes induced by a chromatic surround *Thomas Wachtler, Susanne Klauke*

C22 **336** Cone weights for the cone opponent detection mechanisms in human peripheral vision *Masato Sakurai, Kathy T. Mullen*

C23 **337** Are color-selective neurons representing structure? *Ruixia Xu, Ione Fine*

C24 **338** Comparison between figure segregation and color discrimination thresholds for multi-colored texture stimuli *Takehiro Nagai, Keiji Uchikawa*

C25 **339** Misreading Patterns of Ishihara Plates by Normal Trichromats *Eriko Miyahara, Patrick C. Hwang*

C26 **340** Variability in symmetric and asymmetric colour matching *Eli Brenner, Jeroen J M Granzier, Jeroen B J Smeets*

C27 **341** Temporal luminance artifacts in chromatic motion are specific to L/M cone systems *Magda L Michna, Kathy T Mullen, Tatsuya Yoshizawa*

C28 **342** Distortion Products in Chromatic Induction: Nulling of Induced Temporal Frequencies Not Present in the Stimulus *Anthony D. D'Antona, Steven K. Shevell*

C29 **343** Illusory color mixing upon perceptual filling-in does not result in 'forbidden colors' and reveals cortical processing *Po-Jang Hsieh, Peter U. Tse*

C30 **344** Partial colour matching: a new method to measure unique hues *Alexander D Logvinenko*

C31 **345** Classical definitions of chromatic induction are inadequate for induction with S-cone patterned backgrounds *Patrick Monnier, Lucy, J. Troup*

C32 **346** Chromatic induction of moving dots in a motion-defined layer *Keiji Uchikawa, Takemi Kawahara, Kaori Segawa*

C33 **347** Hue scaling without hue naming *Lesley L Beattie, Alexander Logvinenko*

C34 **348** The Colored Flashing Spots Illusion *M. Boi, B. Pinna*

C35 **349** Reflectance identification of real colored objects across real illuminants *Marques Bostic, Rocco Robilotto, Qasim Zaidi*

C36 **350** The role of mutual illumination in gradient formation *Marina Bloj, Alexa I. Ruppertsberg*

C37 **351** Color constancy of chromatically textured surfaces *Anya C Hurlbert, Yazhu Ling*

C38 **352** The saliency of luminance and color (diagnostic and anti-diagnostic) in images *Thomas V. Papathomas, Xiaotao Su, Anshul Jain, Henry Uzochukwu*

C39 **353** Can semantic information prime surface color judgments? *Holly E. Gerhard, Laurence T. Maloney*

C40 **354** An extended model for color preference *Yazhu Ling, Anya C Hurlbert*

C41 **355** The association of colours with emotions: A systematic approach *David R. Simmons*

C42 **356** Color Name Evolution in the World Color Survey: a K-Means Analysis *Delwin T. Lindsey, Angela M. Brown*

Surfaces and Shape

C43 **357** Cortical Activation for 3D Shapes Constructed from Different Depth Cues *Kuei-Po Chen, Chien-Chung Chen*

C44 **358** Primate IPS areas involved in visual 3D shape processing *Jean-Baptiste Durand, Koen Nelissen, Wim Vanduffel, James T Todd, J Farley Norman, Guy A Orban*

C45 **359** 3D Surface Representations Derived From Texture Gradients: Filtering, Grouping and Filling-In *Levin Kuhlmann, Stephen Grossberg, Ennio Mingolla*

C46 **360** 3D curvature aftereffects from illusory orientation flows *Andrea Li, Belinda Tzen, Aleotina Yadgarova, Qasim Zaidi*

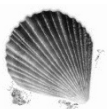
C47 **361** Perceived depth from linear perspective as a function of image size *Jeffrey A Saunders, Benjamin T Backus*

C48 **362** The role of texture amplitude in shape from shading *Andrew J Schofield, Paul B Rock, Gillian Hesse, Mark A Georgeson, Timothy A Yates*

C49 **363** Perception of illuminance flow in the case of anisotropic rough surfaces *Andrea J van Doorn, Jan J Koenderink, Sylvia C Pont*

C50 **364** A new twist to the "Shading Cue" *Jan J Koenderink, Sylvia C Pont, Andrea J van Doorn*

C51 **365** Polo Mint Shading *Peggy Gerardin, Marie de Montal-embert, Pascal Mamassian*



C52 **366** The effect of viewpoint on visually perceived surface roughness in binocularly viewed scenes *Yun-Xian Ho, Laurence T. Maloney, Michael S. Landy*

C53 **367** Local 3D shape and reflectance statistics of natural surfaces *Richard F. Murray*

C54 **368** How viewing distance and object size affect judgments of shape in pictures *Dhanraj Vishwanath, Martin S Banks*

C55 **369** Selection of specific subjective states via contextual disambiguation in structure-from-motion. *Elliot D Freeman, Jon Driver*

C56 **370** Partial Invariance for 3d Layout in Pictures *Martin S Banks, Ahna R Girshick*

C57 **371** Canonical representation: an examination of preferences for viewing and depicting 3-dimensional objects *Suzanne Khalil, Michael McBeath*

C58 **372** Is viewer-centered representation necessary for 3D shape perception? *Yunfeng Li, Zygmunt Pizlo*

C59 **373** Classification objects *William A. Simpson, Uma Shahani, Velitchko Manahilov*

C60 **374** Stereoscopic structure seen in flat patterns *Hiroyuki Mitsudo*

C61 **375** Failures of stereoscopic depth constancy: Fact or artefact? *Brian J Rogers*

Face Perception

C62 **376** Face inversion disproportionately impairs the perception of vertical but not horizontal relations between features *Valerie Goffaux, Bruno Rossion*

C63 **377** Effective Frequency Tuning of Three Face Categorization Tasks *Daniel Fiset, Caroline Blais, Frédéric Gosselin, Philippe Schyns*

C64 **378** Faces and Familiarity: Not all Fame is the Same *James Intriligator, Jennifer Kaltreider*

C65 **379** Categorizing blurred images *Peter N Steinmetz, Flavio DaSilva*

C66 **380** Orientation congruence judgments in faces & words *Carl M Gaspar, Patrick J Bennett, Allison B Sekuler*

C67 **381** Behavioural Tuning of Face-Selective Neural Populations *Nicole D. Anderson, Hugh R. Wilson*

C68 **382** The timecourse of expert and novice visual object encoding *Kim M. Curby, Isabel Gauthier*

C69 **383** Familiarity accentuates gaze-following in women but not men *Robert O Deaner, Stephen V Shepherd, Jelena Ristic, Michael L Platt*

C70 **384** The "Angry = Black" Effect Across the Lifespan *Yarrow C. Dunham, Mahzarin R. Banaji*

C71 **385** A Self-range Defined by Gaze Perception Affected by Characteristics of Personality *Yuko Isogaya, Kazushi Maruya, Yutaka Nakajima, Yusuke Tani, Takao Sato*

C72 **386** A systematic investigation of the gaze manipulation effect *Claudiu Simion, Shinsuke Shimojo*

C73 **387** Is the average face special? *Gillian Rhodes, Laurence T Maloney, Jenny Turner, Louise Ewing*

C74 **388** Attentional processes involved in facial attention capture *Karen Borrmann, Nadine Furtado, Avi Chaudhuri*

C75 **389** Perceived head orientation is affected by the dynamic rotation of neighboring faces *Claudine Habak, Nicole D. Anderson, Hugh R. Wilson*

C76 **390** An ambiguous-race illusion in children's face memory *Kristin Shutts, Katherine D. Kinzler, Elizabeth S. Spelke*

Visual Development

C77 **391** Longitudinal Study of Chromatic and Luminance Contrast Sensitivity in Full-term and Pre-term Infants *RG Bosworth, B Hinga, SL Robbins, KR Dobkins*

C78 **392** VEP measures of contrast sensitivity in infants and children from 2 months- 15 years of age. *Julie Calvert, Michael S Bradnam, Velitchko Manahilov, Daphne L McCulloch, Ruth Hamilton, Gordon N Dutton*

C79 **393** Infant vernier acuity improves at low luminance *Ann M. Skoczenski*

C80 **394** Early development of velocity sensitivity to rotational motion *Nobu Shirai, So Kanazawa, Masami Yamaguchi*

C81 **395** Temporal frequency matters: sensitivity to second-order stimuli in 5-year-olds and adults *Vickie L Armstrong, Terri L Lewis, Daphne Maurer*

C82 **396** Detection vs. Salience of color and motion-defined stimuli in 6-month-old infants *Zsuzsa Kaldy, Erik Blaser, Melissa Kibbe*

C83 **397** The Development of Depth from Motion Parallax in Infancy *Elizabeth S. Nawrot, Mark Nawrot*

C84 **398** Visuospatial interpolation within illusory contours: evidence from Williams Syndrome and normal children *Melanie Palomares, Abha Gupta, Barbara Landau, Howard Egeth*

C85 **399** Abstract withdrawn.

C86 **400** New Developments in The Evolution of an Efficient Psychophysical Test of Spatial Contrast Sensitivity for Pediatric Patients *Russell J Adams, James R Drover, Kaitlin J Penney, Avery Earle, Mary L Courage*

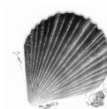
Poster Session D

Saturday, May 6, 4:15 - 7:15 pm, Municipal Auditorium
Author presents: 5:30 - 6:30 pm

Attention: Divided Attention and Inattention

D1 **401** The Effect of Perceived Depth on Object Substitution Masking *Mary KL Baldwin, Izabela Trolka, Amanda R Carson, Andrew F. Rossi*

D2 **402** Behavioral "baseline shift" effects of perceptual load *David Carmel, Geraint Rees, Nilli Lavie*



D3 **403** Interrupting infants' persisting object representations: An object-based limit? *Erik W. Cheries, Karen Wynn, Brian J. Scholl*

D4 **404** Blindness to swapping features in simple dynamic events *Hoon Choi, Brian J. Scholl*

D5 **405** Attention can operate independently of awareness *H. Steven Scholte, Manon Mulckhuyse, Judith Tankink, Victor A. Lamme*

D6 **406** Multi-level suppression during Motion-Induced Blindness *Camilo Libedinsky, Margaret Livingstone*

D7 **407** Neglected Stimuli Influence Perception *Sarah Shomstein, Marlene Behrmann, Rutie Kimchi*

D8 **408** Diminishing attentional capture by attentional set *Sherman Chu, Jay Edelman*

D9 **409** Attention Effects on Motion Processing are Larger in the Left vs. the Right Visual Field *Jennifer A. Feeney, Karen R. Dobkins*

D10 **410** Exogenous reconfiguration of the input filter: when it happens and when it does not. *S. M. Shahab Ghorashi, Lisa N. Jeffries, James T. Enns*

D11 **411** Face Identification in the Near-Absence of Spatial Attention *Leila Reddy, Lavanya Reddy, Pietro Perona, Christof Koch*

D12 **412** Effects of visual attention on depth discrimination in the peripheral visual field *Kaori Segawa, Daisuke Kobayashi, Keiji Uchikawa*

D13 **413** Components of feature-based attention for object perception *Bobby Stojanowski, Matthias Niemeier*

D14 **414** Sub-threshold task-irrelevant signals disrupt task performance more severely than supra-threshold signals *Yoshiaki Tsushima, Takeo Watanabe*

D15 **415** Measuring the cost of deploying top-down visual attention *Dirk Walther, Li Fei-Fei, Christof Koch*

D16 **416** Object substitution masking on the fly *Takako Yoshida, Patrick Cavanagh*

Object Recognition I

D17 **417** View Sensitivity of Object Representations in Human Object-Selective Visual Cortex *David R. Andresen, Kalanit O. Grill-Spector*

D18 **418** A stereo advantage in generalizing over changes in viewpoint on object recognition tasks. *David J. Bennett, Quoc C. Vuong*

D19 **419** Role of familiar object motion in recognising objects across viewpoints *Lewis Chuang, Quoc Vuong, Ian M. Thornton, Heinrich H. Buelthoff*

D20 **420** View-Invariant Object Category Learning: How Spatial and Object Attention are Coordinated using Surface-Based Attentional Shrouds *Arash Fazl, Stephen Grossberg, Ennio Mingolla*

D21 **421** Spatial Updating during Locomotion does not Eliminate Viewpoint-Dependent Visual Object Processing *Weimin Mou, William G. Hayward, Mintao Zhao, Guomei Zhou, Charles B. Owen*

D22 **422** Recognizing orientation of depth-rotated familiar objects *Ryosuke Niimi, Kazuhiko Yokosawa*

D23 **423** Learning about objects in motion: Better generalization and sensitivity through temporal association. *Benjamin Balas, Pawan Sinha*

D24 **424** Does Contrast Reversal Affect the Recognition of Common Objects? *Jessie J. Peissig, Quoc C. Vuong, Jean M. Vettel, Michael J. Tarr*

D25 **425** Predicting psychophysical similarity of complex shapes from measures of physical similarity. *Marissa Nederhouser, Xiaomin Yue, Irving Biederman*

D26 **426** What image measures are best correlated with the discriminability of 3D objects? *James C. Christensen, James T. Todd*

D27 **427** Attneave's Cat revisited: Points of high curvature are not important for shape recognition *Noah Z. Schwartz*

D28 **428** Curvature is encoded stronger than it is perceived *Promise McEntire, Noah Z. Schwartz*

D29 **429** Effects of right parietal TMS on object recognition *Irina M. Harris, Carlo Miniussi*

Perceptual Organization: Contours

D30 **430** The effects of task switching on age-related differences in shape perception *Eric D. Richards, Patrick J. Bennett, Allison B. Sekuler*

D31 **431** Development of 3D object completion in infancy *Scott P. Johnson, Kasey C. Soska*

D32 **432** Six-Month-Old Infants' Ability to Detect Contours *Thomas J. Baker, James Tse, Peter C. Gerhardstein, Scott A. Adler*

D33 **433** Contour Detection in Young Human Infants *James Tse, Peter Gerhardstein*

D34 **434** Element grouping with parabolic contours. *James L. Dannemiller, Melanie A. Lunsford*

435 Abstract 435 moved to poster H66.

D35 **436** Real line masks "close the gap" in abutting line type illusory contour processing *Barbara Dillenburger, Christian Wehrhahn*

D36 **437** A novel dynamically induced 'pure illusory contour' *Lillian Gu, Barbara Dillenburger, Anna W. Roe*

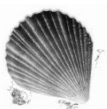
D37 **438** Illusory contours formed by temporal interocular unmatched features *Rui Ni, Lin Chen, George J. Andersen*

D38 **439** Spatiotemporal contour interpolation and shape discrimination *Hideyuki Unuma, Hisa Hasegawa, Philip J. Kellman*

D39 **440** Surface interpolation and slant anisotropy *James D. Hilger, Carlo Fantoni, Walter Gerbino, Philip J. Kellman*

D40 **441** Classification images reveal interpolation in dynamic displays *Brian P. Keane, Philip J. Kellman*

D41 **442** Efficiency of Contour Grouping Across Occlusions in Natural Images *Wilson S. Geisler, Jeffrey S. Perry*



D42 **443** Snakes are as fast as ladders: evidence against the hypothesis that contrast facilitation mediates contour detection
Keith A. May, Robert F. Hess

D43 **444** Luminance-contrast properties of contour-shape processing revealed through adaptation
Elena Gheorghiu, Frederick A. A. Kingdom

D44 **445** On the mechanisms for contour-shape after-effects
Frederick A A Kingdom, Elena Gheorghiu

3D Cue Integration

D45 **446** Depth cues do not specify a unique Affine or Euclidean shape representation
Massimiliano Di Luca, Fulvio Domini, Corrado Caudek

D46 **447** The Intrinsic Constraint model for Stereo-Motion integration
Fulvio Domini, Corrado Caudek

D47 **448** Learning a new cue to depth
Erika Scilipoti, Fulvio Domini, Corrado Caudek

D48 **449** How effective are disparity and motion parallax cues for depth perception in monkeys and humans?
Veronica S. Weiner, Peter H. Schiller, Ying Zhang

D49 **450** Near optimal depth cue combination from binocular disparity and motion parallax
Julian M. Fernandez, Bart Farell

D50 **451** Dependency of the manner to integrate depth cues on perceptual tasks.
Makoto Ichikawa, Yuko Masakura

D51 **452** Integration of motion and disparity in reconstructing 3D surface shape.
Kevin J. Mackenzie, Laurie M. Wilcox, Miloš Jovanović

D52 **453** Encoding perceived depth
Christopher W. Tyler, Lenny L. Kontsevich

D53 **454** Interactions of motion, distance and texture on perceive slant of planar surfaces
Nadejda Bocheva

Perception and Action

D54 **455** Getting Credit Assignment Right in Visuo-Motor Behaviors
Dana H Ballard, Constantin Rothkopf

D55 **456** Predictive eye movements in physically possible and impossible worlds: evidence for internal models
Constantin Rothkopf, Mary M. Hayhoe, Keith Parkins

D56 **457** Characteristic ontogenesis of vision-for-action and vision-for-perception revealed by two spatial tasks
Nicola Bruno, Lorena Giovannini, Alessandra Jacomuzzi, Luca Surian, Carlo Semenza

D57 **458** A negative test of the sensorimotor dissociation via a trial-by-trial analysis of Response Times and Temporal Order Judgments
Andrei Gorea, Pedro Cardoso-Leite, Pascal Mamassian, Florian Waszak

D58 **459** Perception and action at a distance
Flip Phillips, Brian Gaudio, Brian Prue, Martin G Voshell

D59 **460** Interpreting visual information in motor learning
Jennifer K. Dionne, Denise Y. P. Henriques

D60 **461** Is active drawing of line configurations resistant to visual illusions?
Uta Wolfe, Elizabeth Amis

D61 **462** Evolution of visually guided behavior in artificial agents
Dale Purves, Byron Boots

D62 **463** Performance of Basic Visual Tasks Using Retinal-Prosthetic Simulation
George N Scarlatis, Robert J Greenberg, Jack W Judy

Working Memory II

D63 **464** The Nature of Space-Invariant Object-Based Attention II
Michi Matsukura, Steven Luck, Shaun Vecera

D64 **465** Effects of familiarity on visual working memory of upright and inverted faces
Hing Y Eng, Diyu Chen, Yuhong Jiang

D65 **466** Episodic Representation of Object Identity and Form
Robert D. Gordon, Megan L. Frankl, Sarah D. Vollmer

D66 **467** Enhanced Visual Working Memory for Angry Faces
Margaret C Jackson, Chia-Yun Wu, Sandra JE Langeslag, David EJ Linden, Jane E Raymond

D67 **468** Binding in Visual Working Memory is Impaired in Patients with Medial Temporal Lobe Amnesia
Katherine S Moore, Anjan Chatterjee, Katie Page, Mieke Verfaellie, Ingrid R Olson

D68 **469** How is Eye Gaze Affected by Cognitive Load and Visual Complexity?
Joseph C. Schmidt, Gregory Zelinsky

D69 **470** Effects of stimulus identity and distance on the interaction between perceptual representations: An encoding-related lateralization study
Eunsam Shin, Monica Fabiani, Gabriele Gratton

D70 **471** Functional connectivity within the neural system during maintenance period in visual working memory task
Sachiko Takahama, Masaya Misaki, Satoru Miyauchi, Jun Saiki

D71 **472** But you're staring right at it! Rapid resumption is not predicted by eye position alone
Wieske van Zoest, Alejandro Lleras, Alan Kingstone, James T. Enns

D72 **473** Relational information in visual short term memory and context induced change perception.
Helene L Gauchou, Juan R Vidal, Catherine Tallon-Baudry, Kevin O'Regan

D73 **474** Keeping an eye on the spider in the corner: Biased visual working memory in phobic anxiety – a change detection paradigm
Andrea Reinecke, Mike Rinck, Eni S. Becker

D74 **236** Distractor Interference Stays Constant Despite Variation in Working Memory Load
Zhe Chen, Celestien C. Chan

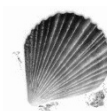
Shape and Depth from Motion

D75 **475** Shearing and compressive motions work cooperatively to reconstruct structure from motion
Kenchi Hosokawa, Takao Sato

D76 **476** Size scaling equates the perception of 3D shape-from-texture and shape-from-motion across the visual field.
Rick Gurnsey, Frédéric J.A.M. Poirier, Laurie Leibov, Patricia Bluett

D77 **477** Perceived velocity gradients and the rigidity of 3-D shape percepts
Xin Meng, Qasim Zaidi

D78 **478** Eye Movement Suppression of Optokinetic After-Nystagmus Disambiguates Depth from Motion Parallax
Chad Stockert, Lindsey Joyce, Mark Nawrot



D79 **479** Eye movements, not head translations, determine of perceived depth sign in motion parallax. *Lindsey B. Joyce, Chad Stockert, Mark Nawrot*

D80 **480** The stability zone of motion parallax with head movements for different velocity gradients *Haruki Mizushima, Hiroshi Ono*

D81 **481** Perception of 3-D shape from moving cast shadow in human infants *Tomoko Imura, Masami K Yamaguchi, So Kanazawa, Nobu Shirai, Yumiko Otsuka, Masaki Tomonaga, Akihiro Yagi*

482 Abstract withdrawn.

Talk Sessions for Sunday, May 7

TALK SESSION

Sunday, May 7, 8:00 - 9:30 am, Hyatt Ballroom North

Spatial Vision II

Moderator: Jocelyn Faubert

8:00 **1084** Abnormal contour filling-in process in patients with depression *Uri Polat, Ativ Levi, Anna Sterkin, Revital Amiaz*

8:15 **483** Contrast-modulated stimuli detection is unaffected by luminance-modulated noise *Remy Allard, Jocelyn Faubert*

8:30 **484** New insights into amblyopia from classification images *Uma Shahani, Velitchko Manahilov, William A. Simpson*

8:45 **485** Orientation discrimination in noise: 7-year-olds are noisier than adults *Terri L. Lewis, Dorita H.F. Chang, Kathryn M. Murphy, Daphne Maurer, David G. Jones*

9:00 **486** Visual and visuo-cognitive development in children born very prematurely: 'dorsal vulnerability' extended. *Janette Atkinson, Oliver J Braddick, Marko Nardini, Shirley Anker, Frances M Cowan, A David Edwards, Mary A Rutherford*

9:15 **487** Stimulating "impossible" visual space with TMS. *Daw-An Wu, Junghyun Park, Shinsuke Shimojo*

TALK SESSION

Sunday, May 7, 8:00 - 9:30 am, Hyatt Ballroom South

Multi-Sensory Processing

Chair: David Burr

8:00 **488** Changing and Steady Vection Effects on Simulator Sickness *Frederick Bonato, Andrea Bubka, Stephen Palmisano*

8:15 **489** Multi-sensory comparison improves signal discrimination *Ansgar Koene, Derek Arnold, Alan Johnston*

8:30 **490** Moving ventriloquism: forward drifts and sharp resets in perceived audio-visual simultaneity *Shinsuke Shimojo, Ryota Kanai, Bhavin Sheth*

8:45 **491** Auditory-motor delay adaptation modulates subjective simultaneity of visually observed other's action and auditory stimuli *Masataka Watanabe, Shion Shinohara, Shinsuke Shimojo*

9:00 **492** Auditory capture of visual stimuli in time is statistically optimal *David C. Burr, M. Concetta Morrone, Martin Banks*

9:15 **493** Role of Attention in Visual-Auditory Crossmodal Interactions *Karla K Evans, Anne Treisman*

TALK SESSION

Sunday, May 7, 11:00 - 12:30 pm, Hyatt Ballroom North

Color Constancy, Lightness and Transparency

Moderator: Frans W Cornelissen

11:00 **494** fMRI of relational color constancy in human visual cortex *Frans W Cornelissen, Just J. van Es, Tony Vladusich*

11:15 **495** Colour constancy is not based on estimating the colour of the illumination *Jeroen JM Granzier, Jeroen BJ Smeets, Eli Brenner*

11:30 **496** Sensitivity to gradients in complex scenes *Alexa I Ruppertsberg, Anya Hurlbert, Marina Bloj*

11:45 **497** Scission and the Perception of Lightness *Barton L Anderson, Jonathan Winawer*

12:00 **498** Computing lightness at a slant: Taking light source direction into account versus a relaxed coplanar ratio model. *Alan L Gilchrist, Ana Radonjic*

12:15 **499** Multidimensional scaling (MDS) analysis of achromatic transparency *Karin petrini, Alexander Logvinenko*

TALK SESSION

Sunday, May 7, 11:00 - 12:30 pm, Hyatt Ballroom South

Goal-Directed Hand Movements

Moderator: Pascal Mamassian

11:00 **500** Visuo-Motor Synchrony *Pascal Mamassian*

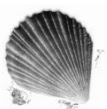
11:15 **501** Grasping trapezoidal objects *Urs J Kleinhodermann, Eli Brenner, Volker H Franz, Jeroen B J Smeets*

11:30 **502** The Contribution of Visual and Proprioceptive Information to the Precision of Reaching Movements *Simona Monaco, Patrizia Fattori, Claudio Galletti, Melvyn A. Goodale, Grzegorz Kroliczak, Derek Quinlan, Jody C. Culham*

11:45 **503** Automatic adjustment of visuo-motor readiness *Joo-Hyun Song, Ken Nakayama*

12:00 **504** Practice makes perfect, but only with the right hand: Sensitivity to perceptual illusions with awkward grasps decreases with practice in the right but not the left hand *Claudia L. R. Gonzalez, Tzvi Ganel, Robert L. Whitwell, Brendan Morrissey, Melvyn A. Goodale*

12:15 **505** Attentional modulation of neural responses to action observation: implications for models of the human 'mirror' system *Trevor Chong, Mark A Williams, Ross Cunnington, Jason B Mattingley*



TALK SESSION

Sunday, May 7, 2:00 - 3:45 pm, Hyatt Ballroom North

Receptive Fields, Organization, Plasticity**Moderator: Anna Roe**2:00 **506** Functional stealing: reorganization of the retinotopic map after occipital lobe infarct. *Lucia M Vaina, Sergei Soloviev*2:15 **507** Ocular Dominance Plasticity Maintained by Cyclic AMP-dependent Protein Kinase Activation: A General Mechanism in Visual Cortex *Takuji Kasamatsu, Kazuyuki Imamura*2:30 **508** Cortical states determine the polarity of orientation plasticity in primary visual cortex *Ralf A.W. Galuske, Wolf Singer, Matthias M.H.J. Munk*2:45 **509** Preliminary studies examining the feasibility of a visual prosthetic device: 2. The laminar specificity of electrical stimulation in monkey area V1 and the visual percepts created. *Peter H. Schiller, Edward J. Tehovnik, Veronica S. Weiner*3:00 **510** Functional organization of color domains in V1 and V2 of Macaque monkey revealed by optical imaging *Anna W. Roe, Haidong D. Lu*3:15 **511** Receptive Field Shifts in Area MT during Smooth and Rapid Eye Movements *Till S Hartmann, Frank Bremmer, Thomas D Albright, Bart Krekelberg*3:30 **512** Timing aftereffects in alert monkey V1 *Alan B Saul, Yamei Tang, Elsie Wong***TALK SESSION**

Sunday, May 7, 2:00 - 3:45 pm, Hyatt Ballroom South

Cue Integration**Moderator: Greg DeAngelis**2:00 **513** Role of area MSTd in cue integration for heading discrimination: II. Analysis of correlations between neural responses and perceptual decisions. *Gregory C. DeAngelis, Yong Gu, Dora E. Angelaki*2:15 **514** Role of area MSTd in cue integration for heading discrimination: I. Comparison of neuronal and psychophysical sensitivity to visual and vestibular cues. *Yong Gu, Dora E. Angelaki, Gregory C. DeAngelis*2:30 **515** Bias in three-dimensional motion estimation reflects the combination of information to which the brain is differentially sensitive *Andrew E Welchman, Judith M Lam, Heinrich H Buelthoff*2:45 **516** Combining Slant Information from Disparity and Texture: When is it Optimal? *Alina R. Girshick, Martin S. Banks*3:00 **517** Learning Bayesian priors for depth perception *David C Knill*3:15 **518** Statistical Robustness in a Three-cue Environment *Carmel A Levitan, Martin S Banks*3:30 **519** Nonlinear Integration of Texture and Shading Cues on a Slant Discrimination Task *Volodymyr V. Ivanchenko, Robert A. Jacobs***TALK SESSION**

Sunday, May 7, 4:15 - 5:30 pm, Hyatt Ballroom North

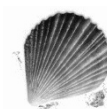
Color: Appearance and Context**Moderator: Michael Webster**4:15 **520** Nonlinearities in color appearance – compensating for the eye's spectral sensitivity *Michael A. Webster, Yoko Mizokami, John S. Werner, Michael A. Crognale*4:30 **521** The span of cone ratios and color naming *David Philippona, J. Kevin O'Regan*4:45 **522** Ideal white can be yellowish or bluish, but not reddish or greenish. *R. Dirk Beer, Ana Dinca, Donald I. A. MacLeod*5:00 **523** Contrast gain control accounts for both contrast and assimilation effects in simple achromatic color displays *Michael E. Rudd*5:15 **524** Color without consciousness: Dynamics of the McCollough effect *Edward Vul, Donald I A MacLeod***TALK SESSION**

Sunday, May 7, 4:15 - 5:30 pm, Hyatt Ballroom South

3D Visual Processing: Space**Moderator: Caspar Erkelens**4:15 **525** Angle of Elevation Influences Distance Perception to Targets on the Ceiling *Valentina Dilda, Sarah H. Creem-Regehr, William B. Thompson*4:30 **526** Background surface and horizon effects in the perception of relative size *Kerem Ozkan, Myron L. Braunstein*4:45 **527** Localizing suspended objects in the intermediate distance range (>2 meters) by observers with normal and abnormal binocular vision *Teng Leng Ooi, Zijiang J He*5:00 **528** Perceptual-Motor Recalibration of Imagined Walking *Benjamin Kunz, Sarah H. Creem-Regehr, William B. Thompson*5:15 **529** Metric of binocular visual direction in stereopsis *Casper J. Erkelens, Raymond van Ee***Poster Sessions for Sunday, May 7****Poster Session E**

Sunday, May 7, 8:00 - 11:00 am, Municipal Auditorium

Author presents: 9:30 - 10:30 am

Visual Evoked PotentialsE1 **530** Comparison of Contrast-Response functions from multifocal visual evoked potentials (mfVEPs) and functional MRI signals *Jason C Park, Xian Zhang, John Ferrera, Diana Dakhilallah, Minha Popalzai, Joy Hirsch, Donald C Hood*

E2 **531** Brain responses to global perceptual coherence *Oliver J Braddick, Dee Birtles, Susanna Mills, Julien Warshafsky, John Wat-tam-Bell, Janette Atkinson*

E3 **532** Extending the multi-focal VEP method to complex stimuli *Thom Carney, Justin Ales, Stanley A Klein*

E4 **533** Inter-subject Variability of the Visual Evoked Poten-tial *Sangita Dandekar, Justin Ales, Thom Carney, Stanley Klein*

Face Perception: Configural, Holistic Processing

E5 **534** A whole-to-part advantage for processing faces in the occipito-temporal cortex *Bruno Rossion, Christian Namèche, Bet-tina Sorger, Rainer Goebel*

E6 **535** Ultrarapid extraction of configural information from biologically salient visual stimuli: magnetoencephalographic evidence *Hanneke K Meeren, Nouchine Hadjikhani, Seppo P Ahlfors, Matti S Hämäläinen, Beatrice de Gelder*

E7 **536** Configural Integration in Face Perception: Evidence from EEG Oscillations in the Gamma Band *Elana Zion Golumbic, Shlomo Bentin*

E8 **537** Holistic and subordinate-level face processing in monkeys *Christoph D. Dahl, Nikos K. Logothetis, Kari L. Hoffman*

E9 **538** Reduced configural processing abilities in congeni-tal prosopagnosia *Claus C. Carbon, Helmut Leder, Thomas Grueter, Martina Grueter, Joachim E. Weber, Andreas Lueschow*

E10 **539** Normal configural processing of non-face stimuli in prosopagnosia *Bradley Duchaine, Galit Yovel*

E11 **540** Categorization of face race modulates holistic face processing *C. Michel, O. Corneille, B. Rossion*

E12 **541** The configurational and featural information in the age perception of face *Soojin Park, Jung Woo Hyun*

E13 **542** Configural and Featural Processing of Human and Animal Faces: Thatcherization, Spatial Distortion and Inversion. *Lawrence A. Symons, Brian W. Roberts*

E14 **543** Uncovering the Perceptual Representation in Holistic Face Processing *Brandon M. Wagar, Danial Bub, James W. Tanaka*

E15 **544** Contextually evoked interference on the holistic processing of faces *Olivia S. Cheung, Isabel Gauthier*

E16 **545** Infants' Sensitivity to Variability in Face Configura-tion *Scott A. Adler, Thomas J. Baker*

Search I

E17 **546** What happens during search for rare targets? Eye movements in low prevalence visual search *Anina N. Rich, Barbara Hidalgo-Sotelo, Melina A. Kunar, Michael J. Van Wert, Jeremy M. Wolfe*

E18 **547** Crossing Over: Different visual search tasks use dif-ferent decision rules *Stephen J. Flusberg, Evan M. Palmer, Jeremy M. Wolfe*

E19 **548** Measuring the Timecourse of Guidance in Visual Search *Evan M. Palmer, Michael J. Van Wert, Todd S. Horowitz, Jeremy M. Wolfe*

E20 **549** Errors in low prevalence visual search: Easy to pro-duce, hard to cure *Michael J. Van Wert, Todd S. Horowitz, Skyler S. Place, Jeremy M. Wolfe*

E21 **550** The preview benefit is active ignoring *Harriet A Allen, Glyn W Humphreys*

E22 **551** Differentiating cross- from within-domain binding: Neuropsychological evidence from reversed search asymmetries *Glyn W Humphreys, John Hodsoll*

E23 **552** Is Visual Search a Top-down or Bottom-up process? *Xin Chen, Gregory J. Zelinsky*

E24 **553** Exploring Set Size Effects in Realistic Scenes *Mark B. Neider, Gregory J. Zelinsky*

E25 **554** Evidence for Guidance in Categorical Visual Search *Hyejin Yang, Gregory J. Zelinsky*

E26 **555** Noise unveils spatial frequency and orientation selec-tivity during visual search *Abtine Tavassoli, Ian van der Linde, Alan C Bovik, Lawrence K Cormack*

E27 **556** Classification images reveal observer templates underlying the direct tilt illusion *Ian van der Linde, Abtine Tavassoli, Alan C Bovik, Lawrence K Cormack*

E28 **557** Search Asymmetry and Eye Movements in Infancy *Pamela K. Gallego, Scott A. Adler*

E29 **558** Latency and accuracy of search eye movements across the macaque visual field *Bernard Gee, William Merigan*

E30 **559** Optimal feature gain modulation during visual search *Vidhya Navalpakkam, Laurent Itti*

E31 **560** Models of Eye Movement Strategies: Optimal Search-er vs. Optimal Saccadic Targeting *Wade A. Schoonveld, Miguel P. Eckstein*

E32 **561** A robot with active vision *Tom Troscianko, Ben Vin-cent, Iain D Gilchrist, Rob Knight, Owen Holland*

Scene Perception

E33 **562** Differential Encoding of Environmental Features in Spatial Representation *George S. W. Chan, Patrick Byrne, Suzanna Becker, Hong-jin Sun*

E34 **563** Representing Layout: What is the time course of Boundary Extension? *Christopher A. Dickinson, Daniel Bensonoff, Helene Intraub*

E35 **564** Assessment of Images Fused using False Colouring *Timothy D Dixon, Eduardo F Canga, Tom Troscianko, Jan M Noyes, Stavri G Nikolov, Dave R Bull, C Nishan Canagarajah*

E36 **565** Interaction of scene background, size change, direc-tion and velocity in determining perceived motion in depth *Shaw Gillespie, Myron L. Braunstein, George J. Andersen*

E37 **566** The Role of the Periphery in Directed Search for Natural Objects *Scott Gorlin, Chetan Nandakumar, Pawan Sinha*

E38 **567** Seeing the {closed+camouflage+natural=forest} for the trees: Rapid scene categorization can be mediated by conjunc-tions of global scene properties *Michelle R. Greene, Aude Oliva*



E39 **568** Seeing the forest but not the trees: spared categorization and functional activation for scenes in patients with object agnosia *Jennifer K Steeves, Jonathan S Cant, Kenneth F Valyear, Jean-François Démonet, Robert W Kentridge, Charles A Heywood, Melvyn A Goodale*

E40 **569** Not all scene categories are created equal: the role of object and layout diagnosticity in scene gist understanding *Aude Oliva, Talia Konkle, Michelle R Greene, Antonio Torralba*

E41 **570** Why are natural scenes easy to remember, but artificial ones hard? *Claudia M. Hunter, Shimon Edelman*

E42 **571** Constructing Depth Information in Briefly Presented Scenes *Talia Konkle, Elisa McDaniel, Michelle R. Greene, Aude Oliva*

E43 **572** Amodal completion when perceiving and remembering RSVP pictures *Ming Meng, Mary C. Potter*

E44 **573** Effects of Set-Size on Scene Recognition Following Locomotion *Michael A Motes, Cory Finlay, Maria Kozhevnikov*

E45 **574** Illumination discrimination under varying complexity of shape and light sources *Susan F. te Pas, Sylvia C. Pont*

E46 **575** Direct comparison of preferences for dramatically different stimulus types reveals higher observer agreement for images with semantic content *Edward A. Vessel, Nava Rubin*

E47 **576** The Role of Motion in Natural Scene Processing Revealed by Visual Search *Quoc C Vuong, Ian M Thornton*

E48 **577** Examining Spatial Properties From Multiple Views *Ying-Hua Wang, Qi Wang, Qiang Liu, George S. W. Chan, Hong-Jin Sun*

E49 **578** Dichoptic difference thresholds for familiar and unfamiliar transformations of real scenes *Ali Yoonessi, Frederick A.A. Kingdom*

E50 **579** The neural basis of preference for natural scenes *Xiaomin Yue, Edward A Vessel, Irving Biederman*

E51 **580** Cortical Networks Underlying Scene Segmentation *Greg Appelbaum, Vladimir Vildavski, Mark W. Pettet, Alex R. Wade, Anthony M. Norcia*

E52 **581** Illusions of Space, Field Dependence and the Efficiency of Working Memory *Paul Dassonville, Elizabeth Walter, Katy A. Lunger*

E53 **582** Framing Aesthetic Judgments *Jonathan S. Gardner, Stephen E. Palmer*

E54 **583** Knowing where it goes: Different saccadic responses to dynamic versus static targets. *Holle Kirchner, Quoc Vuong, Simon J. Thorpe, Ian M. Thornton*

Eye Movements and Cognition

E55 **584** Saccades in ambiguous figures *Kai Hamburger, Brian J. White, Denise D.J. de Grave*

E56 **585** Learning gaze allocation priorities in complex environments *Jelena Jovancevic, Brian Sullivan, Mary Hayhoe*

E57 **586** Predictive Eye Movements in Squash *Kelly Chajka, Mary Hayhoe, Brian Sullivan, Jeff Pelz, Neil Mennie, Jason Droll*

E58 **587** Eye Movements Incorporate Knowledge of Part Structure *Laura W. Renninger, Preeti Verghese, James Coughlan*

E59 **588** Instructing express saccades to shift in the face of large distractors *David Shiu, Jay Edelman*

E60 **589** "Blind" search --- successful saccades to the unknown target location up to 1000 ms after removal of visual search stimulus *Li Zhaoping, N. Guyader*

E61 **590** The Gap Effect revisited seven wrong explanations and two possibly right ones *Adam J Reeves, Zhenlan Jin*

E62 **591** Testing an Object File Theory of Object Correspondence across Saccades *Ashleigh M. Richard, Andrew Hollingworth, Steven J. Luck*

E63 **592** Psychophysical evidence that top-down input effects error directions in a choice-response saccade task *Paul D. Thiem, Edward L. Keller, Kyoung-Min Lee*

E64 **593** Looking away from death: The influence of subliminal priming on eye movement decisions *Avi Caspi, Gilad Hirschberger, Tsachi Ein-Dor, Ari Z. Zivotofsky*

E65 **594** An optimal experimental design model of information acquisition on a classic concept learning task *Jonathan D Nelson, Garrison W Cottrell*

E66 **595** Modeling Eye-Hand Movement Sequences in Natural Tasks *Weilie Yi, Dana Ballard, Mary Hayhoe*

E67 **596** Motor control of eye movements in humans: A Brain Imaging and Behaviour Study *Melanie R Burke, Graham R Barnes*

Eye Movements: Saccades and Fixations

E68 **597** Storing visual object features and locations across saccades *Steven L Prime, J. Douglas Crawford*

E69 **598** From Eye-tracking Data to Information: Lessons from Dynamic Scenes *Ran Carmi, Laurent Itti*

E70 **599** Path length and number of saccades affect saccade accuracy *Elisabeth M. Fine, Sergey Yurgenson, Cathleen M. Moore*

E71 **600** Saccadic Targeting Variability revealed by High Magnification Retinal Imaging *Girish Kumar, Scott B. Stevenson, Austin Roorda*

E72 **601** Statistical Analysis and Selection of Visual Fixations *Umesh Rajashekar, Ian van der Linde, Alan C. Bovik, Lawrence K. Cormack*

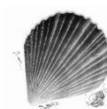
E73 **602** A model of supplementary eye field (SEF) involvement in saccade generation *Shun-nan Yang, Stephen Heinen*

E74 **603** Saccade-related direction-selective activation in visual cortex *Joy J. Geng, Christian C. Ruff, Jon Driver*

E75 **604** Cortical Activation during Triple-Step Memory-guided Saccadic Eye Movements as measured by fMRI *Mark W. Greenlee, Gabriele Frank, Oliver Baumann*

E76 **605** A recurrent neural network for trans-saccadic spatial updating produces receptive field remapping and suppressed moving hills *Gerald P Keith, Gunnar Blohm, J Douglas Crawford*

E77 **606** Perisaccadic mislocalization of spatial locations and saccade initiation *Antonella Kis, Matthias Niemeier*



E78 **607** The effect of presaccadic and postsaccadic visual information on saccade endpoint error and velocity *Paul K Mitchell, Jay A Edelman*

E79 **608** Stimulation of human intraparietal cortex disrupts spatial updating of visual locations across saccades *Adam P Morris, Christopher D Chambers, Jason B Mattingley*

E80 **609** Differences in presaccadic retinotopic and spatiotopic localization in the parietal and occipital cortices in the absence of visual input. *Jochem W Rieger, Ivan Bodis-Wollner, Mircea Ariel Schoenfeld, Hans-Jochen Heinze*

E81 **610** Patients with tunnel vision frequently saccade to outside their visual fields in visual search *Gang Luo, Eli Peli*

E82 **611** Asymmetric responses to temporal versus nasal hemifield stimulation in the human superior colliculus. *Richard Sylvester, John Dylan Haynes, Jon Driver, Geraint Rees*

Poster Session F

Sunday, May 7, 12:00 - 3:00 pm, Municipal Auditorium
Author presents: 1:00 - 2:00 pm

Attention: Neural Mechanisms and Models

F1 **612** A Computational Model for the Distribution of Spatial Attention *Arvin Hsu, Ian Scofield, George Sperling*

F2 **613** Complex Spatial Distributions of Attention *Ian Scofield, Arvin Hsu, George Sperling*

614 Abstract withdrawn.

F3 **615** Transcranial magnetic stimulation of striate cortex induces illusory percepts of past and future events *Jacob Jolij, Victor A.F. Lamme*

F4 **616** Pushing to and pulling away from salience: Evidence from rTMS for opposite biases in selection for the left and right posterior parietal cortex *Carmel Mevorach, Glyn W. Humphreys, Lilach Shalev*

F5 **617** Non-invasive induction and cancellation of visuo-spatial neglect by repetitive Transcranial Magnetic Stimulation (rTMS) *A. Valero-Cabre, A. Pascual-Leone, BR Payne*

F6 **618** A computational model of task-dependent influences on eye position *Robert J Peters, Laurent Itti*

F7 **619** Feature attention in motion perception - a computational account *Pierre Bayerl, Heiko Neumann*

F8 **620** Beyond the Spotlight: An Attentional Landscape Model of Visuospatial Attention *Ritabrato Datta, Edgar A. DeYoe*

F9 **621** Flicker Elicits EEG Responses in Two Distinct Cortical Networks Depending on Attention and Flicker Frequency *Jian Ding, Ramesh Srinivasan, George Sperling*

F10 **622** Adaptive cortical plasticity underlying recovery from cerebral damage induced visual neglect *Stephen G. Lomber, Bertram R. Payne, Amee J. Hall, Shveta Malhotra, Jeffrey G. Mellott*

F11 **623** Effects of Dorsal and Ventral Visual Pathway Lesions on Visual Vigilance *Carissa L Philippi, JonDavid Sparks, Maureen A Marron, Matthew Rizzo*

F12 **624** Effects of spatial and non-spatial attentional load on posterior parietal cortex *Won Mok Shim, George A Alvarez, Timothy J Vickery, Yuhong Jiang*

F13 **625** The Influence of Attention on Motion Selective Channels: An Equivalent Noise Approach *Sam Ling, Taosheng Liu, Marisa Carrasco*

Search II

F14 **626** When is search for a static target efficient? *Yair Pinto, Christian N. L. Olivers, Jan Theeuwes*

F15 **627** Spatial partitioning during visual search of a dyad *Astros Chatziastros, Heinrich H. Bülthoff*

F16 **628** Performance on a structured visual search task depends much more on perceptual span than fixation duration *Matthew H Phillips, Jay A Edelman*

F17 **629** What makes search for negative faces efficient? Distinguishing between pre-attentive and post-attentive processes *Daniel Smilek, Alexandra Frischen, Michael G. Reynolds, Cory C. Gerritsen, John D. Eastwood*

F18 **630** Can parafoveal processing explain skipping behaviour in interactive menu search? *Mariana M Silva, Anna L Cox*

F19 **631** Right hemisphere dominance in attentional processing and spatiotopic representation of visual stimuli during serial search tasks *Reza Rajimehr, Seyed-Reza Afraz*

F20 **632** Configural superiority: RT, accuracy, and an ideal observer approach *Ami Eidels, James T. Townsend*

F21 **633** Visual search in familiar contexts – effects of learning or adaptation? *Kyle C McDermott, Jeffrey B Mulligan, George Bebis, Michael A Webster*

F22 **634** Effects of priming visual relatedness and expectancy on visual search performance *Kenneth Hailston, Elizabeth T. Davis*

F23 **635** Examining the influence of saliency during visual search. *Yi-Fang D. Tsai, Matthew S. Peterson*

F24 **636** Stimulus-driven mechanism of search asymmetry revealed by classification image analysis of singleton search *Jun Saiki*

F25 **637** Features and suppression: what perceptual features afford suppression in the distractor previewing effect? *Xiaoang Irene Wan, Alejandro Lleras*

F26 **638** Aging and inhibitory tagging during visual search *Nora D Gayzur, Alyson Saville, Linda K Langley*

Cortical Organization

F27 **639** Distinguishing visual field map clusters: a new paradigm *Serge O Dumoulin, Alyssa A Brewer, Michal Ben-Shachar, Robert F Dougherty, Brian A Wandell*

F28 **640** Neuronal resources for perceptual judgment localized in the human brain *Joong Nam Yang, Daniel Ts'o, Nikolaus Szeverenyi*

F29 **641** Harmonic components of SSVEPs simultaneously generate both broad bilateral and focal contralateral responses. *Yee Joon Kim, Marcia Grabowecky, Ken A. Paller, Satoru Suzuki*



F30 **642** A possible human homologue of the macaque V6A
Sabrina Pitzalis, Martin I. Sereno, Giorgia Committeri, Gaspard Galati, Patrizia Fattori, Claudio Galletti

F31 **643** Mapping of posterior parietal areas in fMRI using task relevance and response modalities
Dorothe A. Poggel, Dae-Shik Kim, Louis J. Toth

F32 **644** Representation of observed hand actions in macaque Superior Temporal Sulcus.
Koen Nelissen, Giuseppe Luppino, Wim Vanduffel, Giacomo Rizzolatti, Guy Orban

F33 **645** Visual field representation in the lateral occipital complex.
Mary-Ellen Large, Anil Kuchinad, Adrian Aldcroft, Jody Culham, Tutis Vilis

F34 **646** Laterality Effects in the LOC
Mark D Lescroart, Xiaomin Yue, Kenneth Hayworth, Irving Biederman

F35 **647** Contrast responses and retinotopic organization in Blindsight: an fMRI study
Petya D. Radoeva, David H. Brainard, Geoffrey K. Aguirre

F36 **648** The fidelity of the retinotopic cortical map in amblyopia measured with BOLD-fMRI
Xingfeng Li, Serge Dumoulin, Behzad Mansouri, Robert Hess

F37 **649** A disrupted retinotopic map in amblyopia
Behzad mansouri, Robert Hess

F38 **650** Cortical visual field representations in patients with albinism and female carriers of ocular albinism assessed with multifocal visual evoked potentials
Michael B. Hoffmann, Birgit Lorenz, Markus Preising, Petra Seufert

Motion: Aftereffects, Ambiguity and Illusions

F39 **651** Geometric Context Influences Ambiguous Apparent Motion.
Allan C. Dobbins, Alexander Zotov

F40 **652** The Bicycle Illusion: A new look at acuity, form, and motion interactions in conscious experience
Michael D. Dodd, Michael E. J. Masson, James T. Enns

F41 **653** The Freezing Rotation Illusion
Max R Dürsteler

F42 **654** Opposite biases for the perceived direction of first- and second-order lines
Ross Goutcher, Gunter Löffler

F43 **655** Motion after-effects from two-stroke apparent motion
George Mather

F44 **656** Independent coding of object motion and position revealed by distinct perceptual time courses
Paul F. Bulakowski, Kami Koldewyn, David Whitney

F45 **657** Artificial image oscillation enhances the rotating snakes illusion
Ikuya Murakami, Akiyoshi Kitaoka, Hiroshi Ashida

F46 **658** The Rotating Circle Illusion
B. Pinna, M. Boi

F47 **659** An arrow allows illusory line motion to get together
Yuki Yamada, Takahiro Kawabe, Kayo Miura

F48 **660** Mutually contradictory percepts in motion processing
Dylan R Nieman, Bhavin R Sheth, Shinsuke Shimojo

F49 **661** Controlled processes in apparent motion
Nicolaas Prins

F50 **662** Spinning Ellipses: Dotted contours reveal the spatial resolution for the tracking of unambiguously moving features
Gideon P. Caplovitz, Peter U. Tse

F51 **663** Illusory conjunction between continuous and discrete changes in the absence of motion
Rick H Cai

F52 **664** Speed Adaptation as Kalman filtering
Jose F Barraza, Norberto M Grzywacz

Spatial Vision: Natural Image Statistics

F53 **665** Chromatic Differences within Surfaces and Across Surface Boundaries
J. Anthony Wilson, A. David Ing, Wilson S. Geisler

F54 **666** Ideal Observer Analysis of Detection in Natural Scenes
Jiri Najemnik, Wilson S. Geisler

F55 **667** Classification of natural scenes: critical features revisited
Jan Drewe, Felix A. Wichmann, Karl R. Gegenfurtner

F56 **668** What makes two images look different from each other?
P. George Lovell, David J Tolhurst, Caterina Ripamonti, Michelle To, Tom Troscianko

F57 **669** Visual features and information theory
Giovanni Punzi, Maria Michela Del Viva

F58 **670** Contour sparseness and the interactions in the visual processing of local phase alignment of natural scene contours
Bruce C. Hansen, Robert F. Hess

F59 **671** Predicting perturbation of object contours by background in natural images
Mark J. Brady

F60 **672** Learning the selectivity of V4 neurons using a nonlinear multi-stage network
Christoph Zetsche, Ulrich Nuding, Kerstin Schill

F61 **673** The Effect of the Static Nonlinearity on the Efficient Coding of the Visual Input.
Mohammad S. Dastjerdi, Dawei W. Dong

F62 **674** Ecological validity determines the impact of second-order information on perceptual performance.
Aaron P. Johnson, Nicolaas Prins, Frederick A.A. Kingdom, Curtis L. Jr. Baker

F63 **675** Multifocal fMRI shows spatial interactions in human primary visual cortex
Simo Vanni, Miika Pihlaja, Andrew James, Linda Henriksson

F64 **676** Why masses are hard to detect in mammograms
Arthur E Burgess

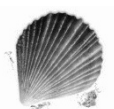
F65 **677** Abstract withdrawn.

Motion Perception: 2D

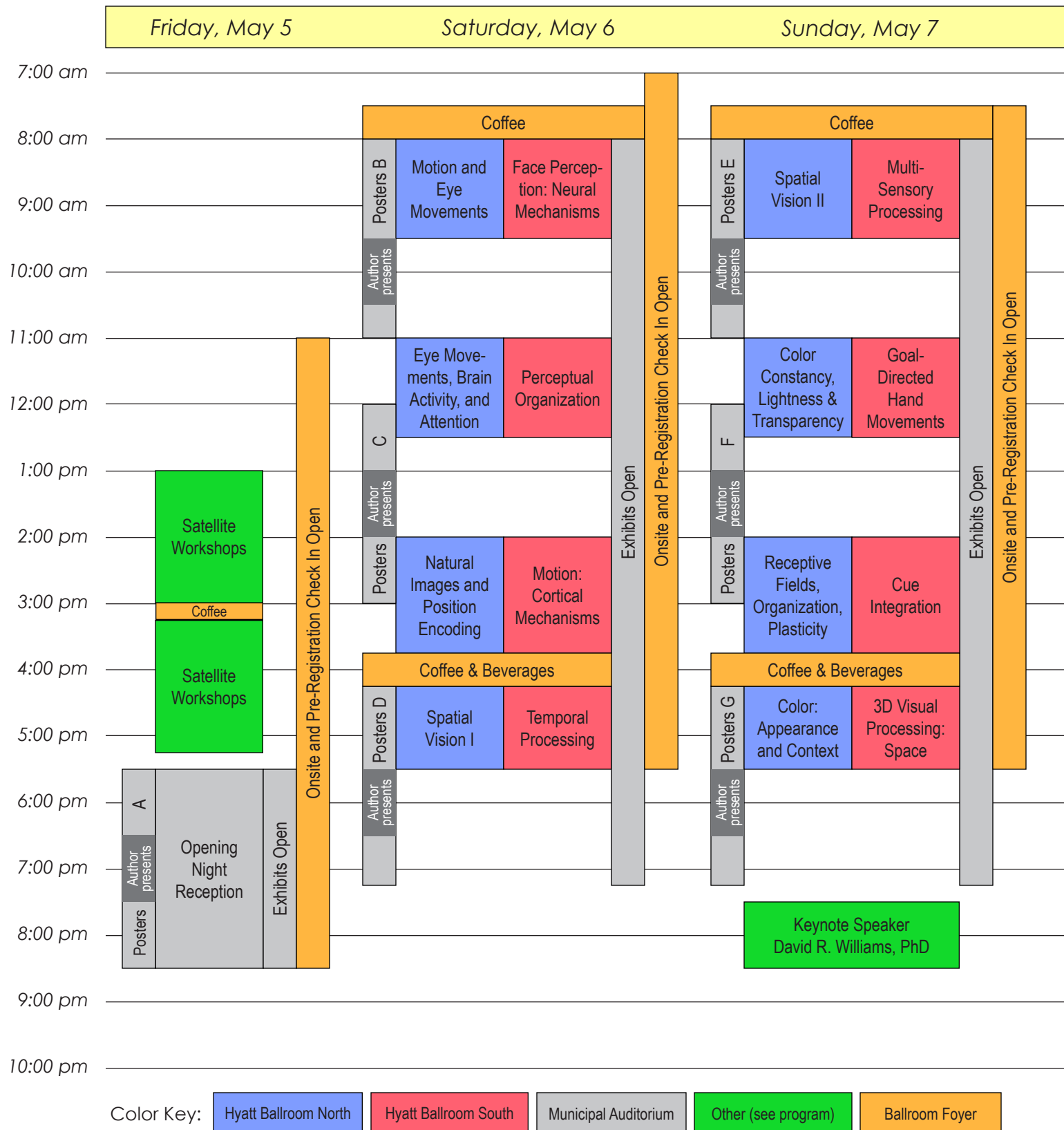
F66 **678** Evidence for an early, direct visual input to V5/MT
Sheila Crewther, Robin Laycock, Paul Fitzgerald, David Crewther

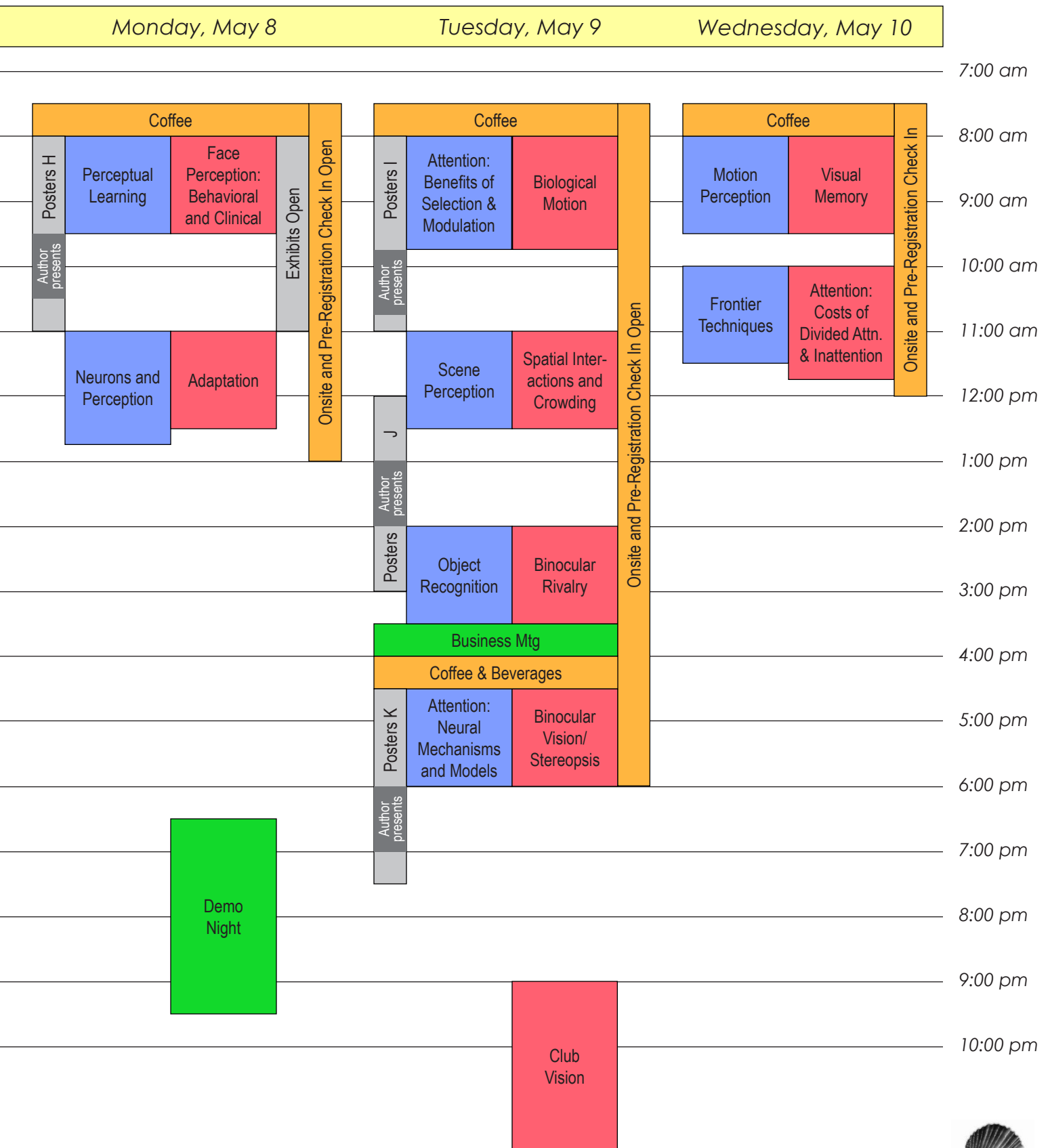
F67 **679** Hemodynamic changes in visual motion detection measured by near infrared spectroscopy
Masamitsu Harasawa, Akiko Obata, Toshiya Morita, Takayuki Ito, Takahiro Saito, Takao Sato, Kiyoharu Aizawa

F68 **680** Motion streaks lower global-motion thresholds.
Mark Edwards, Monique Crane



Schedule-at-a-Glance





F69 **681** Reciprocal interaction between high and low frequencies in the perception of motion *Frank H. Durgin, Jeremy Freeman, Alex Huk*

F70 **682** The Relationship between Motion Sensitivity and Fixation Variability in Eccentric Gaze. *Thao C. Lien, Jianliang Tong, Harold E. Bedell, Patricia M. Cisarik, Saumil S. Patel*

F71 **683** Eye movement correlograms reveal first-order interocular motion processes. *Avesh Raghunandan, Scott B Stevenson*

F72 **684** A Pareto-optimality theory of motion perception *Sergei Gepshtein, Ivan Tyukin, Michael Kubovy, Cees van Leeuwen*

F73 **685** V3A processes contour curvature as a trackable feature for the perception of rotational motion *Peter U. Tse, Gideon P. Caplovitz*

F74 **686** Dynamic evolution of motion perception *Bhavin Sheth, Ryota Kanai, Shinsuke Shimojo*

F75 **687** Apparent speed increases at low luminance *Maryam Vaziri Pashkam, Patrick Cavanagh*

F76 **688** Perceived speed of intermittently occluded motion *Scott N J Watamaniuk, Emily L Blaser*

F77 **689** Saliency from orthogonal velocity component in texture segregation *Clara Casco, Alba Grieco, Enrico Giora*

F78 **690** The effect of contrast variations on the perception of Glass patterns *Charles C.-F. Or, Sieu K. Khuu, Anthony Hayes*

F79 **691** Anti-Glass Patterns and real motion: same or different mechanisms? *Maria Michela Del Viva, Monica Gori*

F80 **692** The effect of eccentricity on detection of a moving object by a moving observer. *Constance S. Royden, Erin M. Connors*

F81 **693** The effects of age on attention on the perception of motion *Maureen J. Reed, Lauren Weingarten, Todd Cunningham*

F82 **694** The spatial resolution of visual attention in a motion direction discrimination task. *Ryo Sasaki, Takanori Uka*

F83 **695** Modulation of local and global motion responses by sustained visual attention *Anthony M. Norcia, Ying Han, Mark W. Pettet, Vladimir Y. Vildavski, Alexander R. Wade, L. Gregory Appelbaum*

Poster Session G

Sunday, May 7, 4:15 - 7:15 pm, Municipal Auditorium
Author presents: 5:30 - 6:30 pm

Attention: Spatial, Object, and Feature Selection

G1 **696** Individual Differences in Attention Capture *Michael S. Ambinder, Daniel J. Simons*

G2 **697** Effects of Attention on the Spatial Extent of Crowding *Devin K Brady, Jascha D Swisher, David C Somers*

G3 **698** Is there a "spotlight reflection" during covert attention? *Luiz Henrique M. Canto Pereira, Ronald D. Ranvaud*

G4 **699** Exploring how Object-based Attention Interacts with Uniform Connectedness and Self-Splitting Figures *Hope I. Denney, James M. Brown*

G5 **700** The distribution of visual attention: evidence based on temporal order judgment (TOJ) task. *Cesar Galera, Mikael Cavallet, Michael von Grünau, Guilherme Caserta, Afroditi Panagopoulos*

G6 **701** Object-Based Attention Does Not Automatically Spread Throughout An Object *Adam S. Greenberg, John T. Serences, Steven Yantis*

G7 **702** Selecting Multipart Objects: Is Uniformity Necessary? *Lauren N. Hecht, Shaun P. Vecera*

G8 **703** On-line updating of object representation: Same-object effect obtained from last-minute amodal completed objects *San-Yuan Lin, Su-Ling Yeh*

G9 **704** The spatial distribution of subjective time dilation *Joshua J. New, Brian J. Scholl*

G10 **705** Does the strength of the attentional focus depend on the size of the cued area? *Afroditi Panagopoulos, Michael von Grünau, Cesar Galera, Laura Ivan, Mikael Cavallet*

G11 **706** Combined Effects of Spatial and Feature-Based Attention in Human Visual Cortex *Melissa Saenz, Geoffrey M Boynton, Christof Koch*

G12 **707** The joint influence of space- and feature-based attention on visual perception *John Serences, Geoffrey Boynton*

G13 **708** The role of selective visual attention in the formation of visual afterimages: Experimental data and model simulations *Joshua L Wede, Gregory Francis*

G14 **709** Contingent Attentional Capture Occurs Only For Irrelevant Stimuli That Can Be Consciously Perceived *Chien-te Wu, Daniel H. Weissman, Marty G. Woldorff*

G15 **710** Comparing the effectiveness of spatial and feature-based attention *Taosheng Liu, Sean T. Stevens, Marisa Carrasco*

G16 **711** On the interaction between covert attention and contrast adaptation *Franco Pestilli, Jerry Viera, Marisa Carrasco*

G17 **162** Change detection in pigeons: Stimulus attributes and binding *Edward A. Wasserman, Olga F. Lazareva, Steven J. Luck*

Object Recognition II

712 Abstract 712 moved to Attention: Benefits of Selection and Modulation talk session, May 9, 8:00 am.

G18 **713** Shape-shifters: Visual judgment of similarity across shape transformations *Elan Barenholtz, Michael, J. Tarr*

G19 **714** The Dynamics of Pattern Identification and Categorization *Martin Wiesmann, Paul F.M.J. Verschure, Daniel C. Kiper*

G20 **715** The time course of visual object detection and categorization *Michael L. Mack, Alan C.-N. Wong, Isabel Gauthier, Thomas J. Palmeri*

G21 **716** Behavioral sensitivity to novel object features can be modulated by high-level knowledge of function. *David A Remus, Kalanit Grill-Spector*

G22 **717** The structure of three-dimensional object representations for regular and irregular shapes: Evidence from whole-part matching and repetition priming. *Irene Reppa, Charles, E. Leek*



G23 **718** Infants' Indexing of Objects vs. Non-Cohesive Substances *Rebecca D. Rosenberg, Susan Carey*

G24 **719** Independent processing of object form and surface properties *Jonathan S. Cant, Mary-Ellen Large, Lindsay McCall, Melvyn A. Goodale*

G25 **720** Stimulus Control in Categorization: An Application of the Bubbles Procedure *Daniel I. Brooks, Olga F. Lazareva, Frédéric Gosselin, Philippe G. Schyns, Edward A. Wasserman*

G26 **721** Hierarchical feature learning using nested self-organizing maps *Albert C. Lai, Bartlett W. Mel*

G27 **722** Feedforward theories of visual cortex predict human performance in rapid categorization *Thomas Serre, Aude Oliva, Tomaso Poggio*

G28 **723** The contributions of category experience and learning to perceptual expertise: A behavioral and neurophysiological study *Lisa Scott, James Tanaka, David Sheinberg, Tim Curran*

G29 **724** Effects of Long Term Image Familiarity in Monkey Temporal Cortex *David L. Sheinberg, Ryan EB Mruczek, Britt Anderson, Keisuke Kawasaki*

G30 **725** Abstract withdrawn.

G31 **726** Temporal integration of visually and electrically evoked activity in monkey inferior temporal cortex during visual discrimination learning *Keisuke Kawasaki, David L. Sheinberg*

G32 **727** Categorization training leads to sharpening tuning of shape-specific tuning in the lateral occipital cortex and learning of category-selective representations in the prefrontal cortex *Xiong Jiang, Evan Bradley, Leo Rini, Thomas Zeffiro, John VanMeter, Maximilian Riesenhuber*

G33 **728** A lateral occipital complex (LOC) localizer with precisely matched local feature composition in intact and scrambled images *Kenneth J. Hayworth, Xiaomin Yue, Irving Biederman*

G34 **729** The psychological reality and neural basis of intermediate complexity features in perceptual categorization *Assaf Harel, Shimon Ullman, Boris Epshtein, Shlomo Bentin*

G35 **730** The influence of perceived size/distance on object and place ROIs. *Anthony D. Cate, Melvyn A. Goodale, Stefan Kohler*

Motion and Depth

G36 **731** Perception of stereomotion coherence in the presence of planar or volumetric dynamic noise *Finnegan J. Calabro, Lucia M. Vaina*

G37 **732** Frontal Cortical Activation by Stereoscopic Motion-in-Depth *Lora T. Likova, Christopher W. Tyler, Paul D. Gamlin*

G38 **733** Aftereffect of motion-in-depth based on binocular cues: no effect of relative disparity between adaptation and test surfaces *Yuichi Sakano, Robert S. Allison, Ian P. Howard, Sabnam Sadr*

G39 **734** The effect of edge polarity on the Pulfrich stereophenomenon *Frank E. Visco, Scott B. Stevenson*

G40 **735** Modeling Perceptual Bias in 3-D Motion *Martin Lages*

G41 **736** An Aubert-Fleischl-like illusion in depth *Harold T. Nefs, Julie M. Harris*

G42 **737** Masking effect in visual perception of simultaneously presented dilating and contracting size-changing objects *Sergey L. Artemenkov*

G43 **738** Human perception of image speed derived from the simultaneous extraction and analysis of visual information in two- and three-dimensional space. *Sieu K. Khuu, Terence CP Lee, Anthony Hayes*

G44 **739** Comparison of 2D and 3D Ideal Observers to Characterize Heading Perception with Directional Range Noise *Elif M. Sikoglu, Scott A. Beardsley, Finnegan J. Calabro, Lucia M. Vaina*

G45 **740** Unconfounding the Time to Passage, Direction of Motion and Rotation Rate of an Approaching Object: Different Early Visual Processing in Expert Baseball Players and Nonplayers. *Rob Gray, David M. Regan*

G46 **741** The Rubber Pencil Illusion *Lore Thaler, James T. Todd*

G47 **742** The discrimination of elasticity in bending motion *Elizabeth Y. Wiesemann, J. Farley Norman, Hideko F. Norman, Warren D. Craft*

Motion Integration

G48 **743** The effect of age on the detection of coherent motion and radial flow *Jutta Billino, Frank Bremmer, Karl R. Gegenfurtner*

G49 **744** Age-related decrements in the discrimination of global coherent motion *Jeffrey D. Bower, Rui Ni, George J. Andersen*

G50 **745** Complex visual information processing in children after Mild Traumatic Brain Injury. *Odile Brosseau-Lachaine, Isabelle Gagnon, Robert Forget, Jocelyn Faubert*

G51 **746** Adults, but not Infants, Use Color as a Segmentation Cue for Motion Processing *Karen R. Dobkins, Vanitha Sampath, Tina Chen*

G52 **747** Perceptual development of directional transparent motion in infancy *So Kanazawa, Nobu Shirai, Yumiko Otsuka, Masami K. Yamaguchi*

G53 **748** Simultaneous Flash-Lag Effects in Two Directions Reveal a Slow Stage of Multi-directional Motion Integration *Haci H. Kafaligonul, Saumil S. Patel, Haluk Ogmen, Harold E. Bedell, Gopathy Purushothaman*

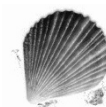
G54 **749** Dual Pathways for Object Motion and Motion Energy *Howard S. Hock, David F. Nichols*

G55 **750** The effect of occlusion on motion integration in infants *Yumiko Otsuka, So Kanazawa, Masami K. Yamaguchi*

Stereopsis

G56 **751** Perceived stereo depth depends on relative disparity of similarly oriented components in test and reference stimuli *Yu-Chin Chai, Bart Farell*

G57 **752** 3D surface orientation based on orientation disparity alone *Carlo Fantoni, Walter Gerbino*



- G58 **753** Aging preserves sensitivity to smooth stereoscopic surfaces *J. Farley Norman, Hideko F. Norman, Crystal L. Walton, Elizabeth Y. Wiesemann*
- G59 **754** Stereoscopic surface slant adaptation occurs before slant awareness: multiple slant signals adapt independently *Raymond van Ee, Tomas Knapen*
- G60 **755** Stereoscopic depth in anticorrelated stereograms and the sensitivity to interocular delay *Satoko Yasuoka, Seiji Tanabe, Ichiro Fujita*
- G61 **756** The Accuracy of Observers' Estimates of Their Own Stereoacuity *Richard A. Tyrrell, Christine E. Beck, Johnell O. Brooks, D. Alfred Owens*
- G62 **757** What is retinal disparity? *Kai M Schreiber, Clifton M Schor*
- G63 **758** Disparities in non-vertical spatial frequency components extend the range of accurate depth perception in humans. *Saumil S. Patel, Harold E. Bedell*
- G64 **759** "Stereoscopic Depth and the Occlusion Illusion" *Karen B. Schloss, Stephen E. Palmer*
- G65 **760** Effects of Spatial Frequency, Contrast, and Stimulus Size on the Magnitude of Perceived Depth and Speed *Jin Qian, Saumil S. Patel, Harold E. Bedell*
- G66 **761** Stereograms that consist of veridical image for one eye and lightness afterimage for the other eye *Masahiro Ishii, Zheng Tang, Hiroki Tamura*
- G67 **762** Computations underlying fine and coarse stereopsis *Takahiro Doi, Seiji Tanabe, Ichiro Fujita*
- G68 **763** Combination of horizontal and vertical disparity gradient with concentric pattern *Céline Devisme, Björn Drobe, Annie Monot, Jacques Droulez*

Face Perception: Neural Mechanisms

- G69 **764** Characterization of subjects with congenital prosopagnosia by combined electrophysiological and behavioural data *Joachim E. Weber, Tilmann Sander, Claus C. Carbon, Thomas Grueter, Martina Grueter, Gabriel Curio, Lutz Trahms, Andreas Lueschow*
- G70 **765** Voice Recognition in a Prosopagnosic Patient: an fMRI Study *Stephen R. Arnott, Robert W. Kentridge, Charles A. Heywood, Jennifer K. E. Steeves, Melvyn A. Goodale*
- G71 **766** Motion-Defined Face and Object Recognition: Evidence from Psychophysics, Neuropsychology, and Functional Imaging *Reza Farivar, Jürgen Germann, Michael Petrides, Olaf Blanke, Avi Chaudhuri*
- G72 **767** A Normal N170 Response in Acquired Prosopagnosia with Damage to Right Anterior Temporal Lobe *Cindy M. Bukach, Jessie Peissig, Michael J. Tarr*
- G73 **768** Face detection in normal subjects and prosopagnosics *Bradley Duchaine, Lucia Garrido, Ken Nakayama*
- 769** Abstract withdrawn.

- G74 **770** Cortical responses to invisible facial information *Sheng He, Yi Jiang*
- G75 **771** An exploration of face selectivity in human inferior frontal cortex *Annie W-Y Chan, Marius V Peelen, Paul E Downing*
- G76 **772** House Training: Neural correlates of object learning *Jesse S Husk, Lisa R Betts, Kathleen M O'Craven, Patrick J Bennett, Allison B Sekuler*
- G77 **773** The effect of picture-plane rotation on early face categorization processes *Corentin Jacques, Bruno Rossion*
- G78 **774** On the nature of privileged visual stimuli: Partial immunity from within-class inhibition *Bethany L. Schneider, Jordan E. DeLong, Thomas A. Busey*
- G79 **775** Distributed representation of facial identity studied with fMRI *Amy L. Thomas, Geoffrey K. Aguirre*
- G80 **776** Symmetry is in the eye of the Fusiform Face Area *Roberto Caldara, Mohamed Seghier*
- G81 **777** View-specific coding of face shape *Linda Jeffery, Gillian Rhodes, Tom Busey*
- G82 **778** Recognizing a person by face: dissociating brain regions involved in perceptual and conceptual components of person identification *Nikolaus Kriegeskorte, Marieke Mur, Douglas Ruff, Jerzy Bodurka, Peter Bandettini*
- G83 **779** I can't recognize your face but I can recognize its movement *Leslie L. Steede, Jeremy J. Tree, Graham J. Hole*
- G84 **780** Visual competition during early face processing is driven towards stimuli at the fovea *Guillaume A Rousselet, Olivier D'Arripe, Bruno Rossion, Corentin Jacques*
- G85 **781** A Contralateral Preference in Face and Object Selective Cortex *Christopher C. Hemond, Hans P. Op de Beeck, Nancy G. Kanwisher*

Talk Sessions for Monday, May 8

TALK SESSION

Monday, May 8, 8:00 - 9:30 am, Hyatt Ballroom North

Perceptual Learning

Moderator: Michael J. Wenger

- 8:00 **782** Learning to parse images through dynamic experience *Yuri Ostrovsky, Pawan Sinha*
- 8:15 **783** Parts to wholes: Configural learning fundamentally changes the visual information processing system *Leslie M Blaha, James T Townsend*
- 8:30 **784** The space-time continuum: Spatial visual statistical learning produces temporal processing advantages *Nicholas B. Turk-Browne, Brian J. Scholl*



8:45 **785** Psychophysical and fMRI Studies of the Role of Prior Knowledge in Visual Perception. *Jay Hegdé, Serena K. Thompson, Daniel Kersten*

9:00 **786** Cue Acquisition Based on Visual-Auditory but not Visual-Visual Correlations *Melchi M. Michel, Robert A. Jacobs*

9:15 **787** Distinguishing sensory from perceptual bias in perceptual learning for contrast detection: What is and is not learned *Michael J. Wenger, Jennifer L. Bittner, Rebecca J. Von Der Heide*

TALK SESSION

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

Face Perception: Behavioral and Clinical

Moderator: Isabel Gauthier

8:00 **788** Holistic crowding: selective interference between configural representations of faces in crowded scenes. *David Bressler, David Whitney*

8:15 **789** A new type of prosopagnosia? A brain-damaged patient who can recognize faces but cannot discriminate races. *Shinichi Koyama, Akira Midorikawa, Atsunobu Suzuki, Haruo Hibino, Mitsuru Kawamura*

8:30 **790** Holistic processing of faces in adolescents with autism spectrum disorder *Isabel Gauthier, Cheryl Klaiman, Robert T. Schultz*

8:45 **791** Discrimination of facial feature displacement in individuals with autism *Allison B. Sekuler, M. D. Rutherford, Kathleen A. Clements*

9:00 **792** What is adapted in face adaptation? A study of the representation of expression in the human visual system. *Christopher J. Fox, Jason J.S. Barton*

9:15 **793** On Holistic Processing of Facial Expressions *Martha D. Kaiser, Richard Le Grand, Jim W. Tanaka*

TALK SESSION

Monday, May 8, 11:00 - 12:45 pm, Hyatt Ballroom North

Neurons and Perception

Moderator: David Sheinberg

11:00 **794** A fresh look at receptive-field size and illusory contour detection *Margaret Livingstone, Arash Yazdanbakhsh*

11:15 **795** Contrast-sign selectivity of End-stopping and Length-summation *Arash Yazdanbakhsh, Margaret Livingstone*

11:30 **796** Contextual Influences on the Chromatic Properties of Macaque V4 Neurons *Sherry X. Xian, Tirin Moore*

11:45 **797** Suppressive lateral interactions in the lateral intraparietal area (LIP) of the monkey may have a role in the "line-motion" illusion *Annegret L. Falkner, B. Suresh Krishna, Michael E. Goldberg*

12:00 **798** Representation of numerical magnitude in posterior parietal cortex *Jamie D. Roitman, Elizabeth M. Brannon, Michael L. Platt*

12:15 **799** Recognition choice behavior is predicted by activity in inferior temporal cortex *Ryan E.B. Mruczek, David L. Sheinberg*

12:30 **800** Supplementary eye field (SEF) neurons encode rules, but don't make the decision *Stephen Heinen, Jeremy Badler, Shun-nan Yang*

TALK SESSION

Monday, May 8, 11:00 - 12:30 pm, Hyatt Ballroom South

Adaptation

Moderator: Benjamin Backus

11:00 **801** Positive and negative contingent aftereffects *Benjamin T. Backus, Patrick Garrigan, Qi Haijiang, Vijay Balasubramanian*

11:15 **802** Complex channels become more complex: Modeling a contrast adaptation process *Norma V. Graham, S. Sabina Wolfson*

11:30 **803** Orientation-selective adaptation to illusory contours in human visual cortex *Leila Montaser Kouhsari, Jonas Larsson, Michael S. Landy, David J. Heeger*

11:45 **804** Dissociating microgenesis of retinal and non-retinal adaptation *Naotsugu Tsuchiya, Lee A. Gilroy, Randolph Blake, Christof Koch*

12:00 **805** Perceptual regularization after adaptation *Ryota Kanai, Chris L. E. Paffen, Frans A. J. Verstraten*

12:15 **806** Strength of early visual adaptation depends on visual awareness *Duje Tadin, Randolph Blake, Sang Chul Chong*

Poster Sessions for Monday, May 8

Poster Session H

Monday, May 8, 8:00 - 11:00 am, Municipal Auditorium
Author presents: 9:30 - 10:30 am

Lightness, Brightness, Luminance and Transparency

H1 **807** The dependence of laser-induced lens fluorescence on laser irradiance *Peter A. Smith, Gary L. Martinsen, David E. Kee, Paul V. Garcia*

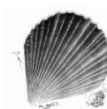
H2 **808** Measurement of luminance contrast sensitivity of chimpanzees (Pan troglodytes) *Toyomi Matsuno, Masaki Tomonaga*

H3 **809** Interaction between brightness and contrast of complex stimuli *Wei-Chung Cheng, Chain-Fu Chao*

H4 **810** Luminance equilibrium of chromatic pairs at different eccentricities *Justin Plantier, Jean Philippe Aubry, Françoise Vienot, Gérard Ossard, Corinne Roumes*

H5 **811** Psychophysical evidence for long-range influence on foveal adaptation *Tobias Otte*

H6 **812** A simple context-dependent and luminance-driven model of lightness perception *Piers Howe, Margaret Livingstone*



H7 **813** Spatiotemporal dependencies of brightness induction
Mark E McCourt, Barbara Blakeslee

H8 **814** Human cortical responses to illusory and actual luminance variations
Huseyin Boyaci, Fang Fang, Scott O. Murray, Daniel J. Kersten

H9 **815** Simultaneous Contrast and White's Effect as a Consequence of a Biologically Plausible Model of Brightness Filling-in
Alex Ioannides, Alan J Johnston, Lewis Griffin

H10 **816** Probe disks reveal lightness computation in sunlight and in shadow
Ana Radonjic, Simone Whyte, Jennifer Faasse, Alan Gilchrist

H11 **817** Lightness constancy in shadows: Evidence for high level inference.
James M Hillis, David H Brainard

H12 **818** Lightness Judgments Made in Shadow and Highlight
James A. Schirillo, Alexander D. Logvinenko

H13 **819** Lightness perception in scenes with motion-based shading cues to the spatial distribution of illumination
Katja Doerschner, Laurence T. Maloney

H14 **820** Change in perceived lightness in a cue recruitment experiment
Julia Boltianski, Benjamin T Backus

H15 **821** A multiscale filtering model can explain brightness motion in single-field contrast asynchronies
Alice R. Shapiro, Arthur G. Shapiro

H16 **822** The role of Michelson contrast in perceptual transparency
Marc K. Albert

H17 **823** Perceptual Transparency Determines Illusory Motion
Caterina Ripamonti, Stephen Westland

H18 **824** Can the probability of occurrence of imperfect scission predict the extent of perceived transparency?
Simone Gori

H19 **825** Corner salience varies parametrically with corner angle during flicker-augmented contrast
Xoana G Troncoso, Stephen L Macknik, Susana Martinez-Conde

H20 **826** Surface reflectance properties and feel of object surface
Kazuhiko Yokosawa, Ataru Era

H21 **827** Adding a veiling luminance is not sufficient to explain the effects of glare on simple reaction times
Rolando C Aguirre, Jose F Barraza, Elisa M Colombo

Action and Space Perception

H22 **828** An influence of "warming up" on distance perception
Cedar Riener, Dennis Proffitt

H23 **829** Effects of Effort and Intention on Perception: The Locus of the Effect
Jessica K. Witt, Dennis R. Proffitt

H24 **830** Effort Affects Perceived Distance to Objects Within Reach
Jonathan R Zadra, Sally A Linkegauger, Dennis R Proffitt

H25 **831** The Roles of Altitude and Fear in the Perception of Height
Jeanine K Stefanucci, Dennis R Proffitt

H26 **832** Ease to Grasp an Object Affects Perceived Distance
Sally A Linkenauger, Jessica Witt, Jeanine Stephanucci, Dennis Proffitt

H27 **833** Absolute egocentric distance judgments are improved after motor and cognitive adaptation within HMD
Betty J Mohler, William B Thompson, Sarah H Creem-Regehr

H28 **834** Individual differences in accuracy of blind walking to targets on the floor
Scott A. Kuhl, Sarah H. Creem-Regehr, William B. Thompson

H29 **835** The Effects of Optical Compression and Magnification on Distance Estimation
Jennifer L Campos, Adrian S Brucker, Zeljka Vucetic, Hong-Jin Sun

H30 **836** Effects of context on a 3D pointing task
Michelle J.A. Doumen, Astrid M.L. Kappers, Jan J. Koenderink

3D Space

H31 **837** On the computational elements of visual surface perception
Hiroshige Takeichi

H32 **838** The slant of the visual system's intrinsic bias in space perception and its contribution to ground surface representation
Jun Wu, Zijiang J He, Teng Leng Ooi

H33 **839** Where's the floor?
Laurence R. Harris, Richard T. Dyde, Michael R.M. Jenkin

H34 **840** Change detection and primacy of the ground surface in scene organization
Zheng Bian, George, J Andersen

H35 **841** Size-distance perception based on ocular convergence angle in 3- to 5-year-old children
Albert Yonas, Carl E. Granrud, John Grittnr

H36 **842** Egocentric distance estimation requires eye-head position signals
Gunnar Blohm, J. Douglas Crawford

H37 **843** The contribution of binocular disparity to depth perception in natural scenes
Samira Bouzit, Paul B. Hibbard

H38 **844** Elucidating the Factors Influencing Judgments of Egocentric Distance in Immersive Virtual Environments
Victoria Interrante, Lee Anderson, Brian Ries

H39 **845** Spatial compression produced by a stationary telescope
H A Sedgwick, Grace Tran

H40 **846** The Use of Radial Outflow for the Perception of Depth In Remote Environments
Christopher C. Pagano, Megan P. Smart, Thandi B. Blanding, Vilas K. Chitrakaran

H41 **847** Manipulating prior assumptions about 3D stability
Andrew Glennerster, David McKean, Stuart J Gilson

H42 **848** The hidden scale of natural forms: a new cue to depth?
Erik Blaser

Attention and Reward: Cortical Physiology

H43 **849** Posterior Cingulate Neurons Encode Visually and Motivationally Salient Events
Arwen B Long, Allison N McCoy, Michael L Platt

H44 **850** Microstimulation in Macaque Posterior Cingulate Cortex Biases Target Choice
Benjamin Hayden, Heather Dean, Michael Platt

H45 **851** LIP neurons encode both social and fluid value for visual orienting.
Jeff T. Klein, Robert O. Deaner, Michael L. Platt



H46 **852** Segregating the Effects of Motivation and Reflexive Visual Attention on Neuronal Activity in Area LIP *Michael S. Bendiksy, Michael L. Platt*

H47 **853** Modulation of cortical feedforward dynamics by endogenous and exogenous attention *Thomas Schmidt, Anna Seydell*

H48 **854** Attentional modulation of center-surround interactions in macaque area V4 *Kristy A Sundberg, Jude F Mitchell, John H Reynolds*

H49 **855** Neural activity in areas LIP and MT during rapid covert shifts of attention *Todd M. Herrington, John A. Assad*

H50 **856** Effects of Frontal Eye Field Microstimulation on the Discriminability of Visual Responses in Area V4 *Katherine M Armstrong, Tirin Moore*

Perceptual Organization: Grouping & Segmentation

H51 **857** Activity in late visual areas correlates with surface perception *Seth E Bouvier, Kristen S Cardinal, Stephen A Engel*

H52 **858** Figure-ground effects in V1 measured with functional MRI *Erin M. Harley, Seth E. Bouvier, Genevieve M. Heckman, Stephen A. Engel*

H53 **859** An Effect of Figure-Ground Assignment: Perceptual Enhancement *Joshua D. Cosman, Lauren N. Hecht, Shaun P. Vecera*

H54 **860** Figure-ground assignment in pigeons: Smaller area and longer pre-exposure enhance figural advantage *Olga F. Lazareva, Leyre Castro, Shaun P. Vecera, Edward A. Wasserman*

H55 **861** Reference Frames in Figure-Ground Organization *Jessica S. Thierman, Shaun P. Vecera, Stephen E. Palmer*

H56 **862** A dynamic cue for figure ground assignment: Advancing vs. receding *Jean M. Vettel, Elan Barenholtz, Michael J. Tarr*

H57 **863** Simultaneous acceleration is key in grouping by visual synchrony *Stéphane J. Rainville*

H58 **864** Binocular disparity facilitates correct binding of color and motion *Hae-Rim Son, Hyung-Chul O. Li*

H59 **865** Binocular composition of monocular signals in perceptual grouping *Oren Yehezkel, Michael Belkin, Dov Sagi, Uri Polat*

H60 **866** Grouping in random-dot patterns *Michael Kubovy, Martin van den Berg*

H61 **867** Local Grouping in Glass Patterns: Chromatic and Luminance Tuning *Chien-Chung Chen*

H62 **868** Modulation of contrast detection threshold by the configuration and contrast of the context *L. Jingling, L. Zhaoping*

H63 **869** The influence of perceptual segmentation on the perceived orientation of dot clusters *Manish Singh, Elias H. Cohen, Laurence T. Maloney*

H64 **870** Is perception of a degraded figure resistant to spatial context at short exposure? *Michael R. Scheesele*

H65 **871** Perceptual singularities in Smooth Orientation-Defined Textures: Segregation without feature contrast *Ohad Ben-Shahar*

H66 **435** Prior experience affects amodal completion in pigeons *Yasuo Nagasaka, Olga F. Lazareva, Edward A. Wasserman*

Object Tracking, Enumeration, and Individuation

H67 **872** "Attentional high-beams" in tracking through occlusion *Jonathan I Flombaum, Brian J Scholl, Zenon W Pylyshyn*

H68 **873** The distribution of attention within moving objects is affected by spatial probabilities *Cary S. Fera, Maureen Doyle*

H69 **874** Which way did it go? Measuring trajectory information in multiple object tracking *Skyler S Place, Todd S Horowitz*

H70 **875** The 'Effective' Number of Trajectories Tracked in Amblyopic Vision *Srimant P Tripathy, Dennis M Levi*

H71 **876** Multiple Object Tracking and Attentional Capture *Jeffrey R.W. Mounts, Brian S. Amos, Monica A. Moschetta, Eric C. Page*

H72 **877** Exploring the effects of crowding in multiple object tracking using a dual-task paradigm *Michael N Tombu, Adriane E Seiffert*

H73 **878** An Electrophysiological Measure of Multiple Object Tracking *Trafton Drew, Edward K. Vogel*

H74 **879** Attentive tracking of multiple objects modulates neuronal responses in area V4 of the macaque. *Jude F Mitchell, Kristy A Sundberg, John H Reynolds*

H75 **880** Implicit Multiple Object tracking without an explicit tracking task *Harry H Haladjian, Zenon W Pylyshyn*

H76 **881** Are items encoded into VSTM when they are selected for tracking in MOT? Explorations with simultaneous and sequential cue presentations *Carlos Montemayor, Zenon W Pylyshyn*

H77 **882** Selection and enumeration of moving objects *Carly J. Leonard, Rachel Pierson, Melanie Palomares, Howard E. Egeth*

H78 **883** The role of object properties in item individuation: The effects of item heterogeneity and change *Lana M. Trick, Elizabeth Orr*

H79 **884** Area and Element Size Bias Numerosity Perception *Miles Shuman, Elizabeth Spelke*

H80 **885** Numerical processing of visual arrays in the brains of adults and four-year-old children *Jessica F Cantlon, Elizabeth M Brannon, Kevin A Pelphrey*

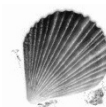
H81 **886** Adults' and children's assessments of discrete and continuous quantity with nonsolid substances *Hilary C. Barth, Lacey Beckmann, Elizabeth S. Spelke*

H82 **887** Children's amodal addition and subtraction of large sets *Lacey Beckmann, Hilary Barth, Elizabeth Spelke*

H83 **888** Enumeration of Objects and Substances in Non-Human Primates: Experiments with Brown Lemurs (*Eulemur fulvus*) *Jennifer L Barnes, Neha Mahajan, Marissa C Blanco, Laurie R Santos*

H84 **889** Does subitizing require attention? *Melanie Palomares, Loandra Torres, Carly Leonard, Howard Egeth*

H85 **890** Decreasing visual subitizing performance with age *Mridhula Kumar, Roger W Li, Dennis M Levi, Sandy W Chat, Manfred MacKeben*



H86 **891** Staying in bounds: A critical role of closure for object files *Jason T Arita, Stephen R Mitroff*

Talk Sessions for Tuesday, May 9

TALK SESSION

Tuesday, May 9, 8:00 - 9:45 am, Hyatt Ballroom North

Attention: Benefits of Selection and Modulation

Moderator: Alex Holcombe

8:00 **892** Progressively poorer perceptual precision and progressively greater perceptual lag: Tracking the changing features of one, two and four objects. *Christina Howard, Alex O Holcombe*

8:15 **893** Feature-based attention is not object-based *Jianwei Lu, Laurent Itti*

8:30 **894** Interactions between space- and object-based attention revealed through ERP studies *Dwight Kravitz, Marlene Behrmann, Nick Yeung*

8:45 **895** Visual search has no foresight *Jeremy M Wolfe, Todd S Horowitz, David E Fencsik, Stephen J Flusberg*

9:00 **896** Change detection has no foresight: Measuring advanced knowledge of changes across displays *David E Fencsik, Todd S Horowitz, Stephen J Flusberg, Jeremy M Wolfe*

9:15 **897** Attention alters the appearance of motion coherence *Stuart Fuller, Taosheng Liu, Marisa Carrasco*

9:30 **712** Greater response conflict from weaker visual signals *Yuko Yotsumoto, Aaron Seitz, Yuka Sasaki, Shinsuke Shimojo, Toshimasa Yamamoto, Masao Kogure, Masamichi Sakagami, Takeo Watanabe*

TALK SESSION

Tuesday, May 9, 8:00 - 9:45 am, Hyatt Ballroom South

Biological Motion

Moderator: Maggie Shiffrar

8:00 **898** From point-lights to virtual skeleton: biological-motion representations revealed by dynamic classification images *Hongjing Lu, Zili Liu*

8:15 **899** Predicting point-light actions in real-time *Markus Graf, Bianca Reitzner, Martin Giese, Antonino Casile, Wolfgang Prinz*

8:30 **900** Brain activity evoked by perception of novel 'biological motion' *John A. Pyles, Javier O. Garcia, Donald D. Hoffman, Emily D. Grossman*

8:45 **901** Learning and perceiving informative spatio-temporal components from emotional body expressions *Martin Giese, Lars Omlor, Claire Roether*

9:00 **902** Identity perception with and without a body. *Sapna Prasad, Michael Kozhevnikov, Maggie Shiffrar*

9:15 **903** A Pedestrian Courtship: Attractiveness and Symmetry of Humans Walking *Javid Sadr, Nikolaus F. Troje, Ken Nakayama*

9:30 **1147** Does the Perception of Speed Influence the Perception of Animacy? *Paul A. Szego, M.D. Rutherford*

TALK SESSION

Tuesday, May 9, 11:00 - 12:30 pm, Hyatt Ballroom North

Scene Perception

Moderator: Russel A. Epstein

11:00 **904** Talk withdrawn.

11:15 **905** The Roles of Amplitude and Local Phase Information in Scene Gist Recognition and Masking *Lester C. Loschky, Amit Sethi, Daniel J. Simons, Tejaswi N. Pydimarri, Nicholas Forristal, Jeremy Corbeille, Katie Gibb*

11:30 **906** Effect of adaptation suggests role of low-level processes in rapid scene categorization *Daniel Kaping, Tzvetomir Tzvetanov, Stefan Treue*

11:45 **907** Looking at scenes while searching for numbers: Dividing attention multiplies space *Helene Intraub, Karen K. Daniels, Todd S. Horowitz, Jeremy M. Wolfe*

12:00 **908** Boundary Extension: Filling-out scene layout information in human parahippocampal cortex *Soo Jin Park, Helene Intraub, David Widders, Do-Joon Yi, Marvin M. Chun*

12:15 **909** Parahippocampal and retrosplenial involvement in two kinds of scene recognition *Russell A. Epstein, J. Stephen Higgins*

TALK SESSION

Tuesday, May 9, 11:00 - 12:30 pm, Hyatt Ballroom South

Spatial Interactions and Crowding

Moderator: Susana Chung

11:00 **910** Neural correlates of letter crowding in the periphery *A. Cyrus Arman, Susana T. L. Chung, Bosco S. Tjan*

11:15 **911** Feature Integration Maps during crowding as revealed from covariance analysis of classification images *Anirvan S. Nandy, Bosco S. Tjan*

11:30 **912** Crowding between first- and second-order letter stimuli *Susana T.L. Chung, Roger W. Li, Dennis M. Levi*

11:45 **913** Target-Flanker Binding Releases Crowding *Sing-Hang Cheung, Gordon E. Legge, Susana T. L. Chung, Bosco S. Tjan*

12:00 **914** The time course of contrast masking reveals two distinct mechanisms of human surround suppression *Yury Petrov, Matteo Carandini, Suzanne P. McKee*

12:15 **915** Segmentation counteracts masking *Preeti Verghese, Elliot Freeman*

TALK SESSION

Tuesday, May 9, 2:00 - 3:30 pm, Hyatt Ballroom North

Object Recognition

Moderator: Mary Bravo

2:00 **916** Representation of possible and impossible objects in infancy. *Sarah M. Shuwairi, Scott P. Johnson*



- 2:15 **917** Using an interest point detector to find potential fragments for recognition *Mary J Bravo, Hany Farid*
- 2:30 **918** Dissociating viewpoint costs in mental rotation and object recognition *William G Hayward, Guomei Zhou, Isabel Gauthier, Irina Harris*
- 2:45 **919** Magnocellular contributions to top-down-facilitation of object recognition *Kestas Kveraga, Jasmine Boshyan, Moshe Bar*
- 3:00 **920** A tale of two agnosias: functional differences between integrative and visual form agnosia. *M. Jane Riddoch, Glyn W. Humphreys, Martyn Bracewell*
- 3:15 **921** Effects of spatiotemporal object continuity on repetition attenuation in human fusiform gyrus *Do-Joon Yi, Nicholas B. Turk-Browne, Jonathan I. Flombaum, Brian J. Scholl, Marvin M. Chun*

TALK SESSION

Tuesday, May 9, 2:00 - 3:30 pm, Hyatt Ballroom South

Binocular Rivalry

Moderator: Sheng He

- 2:00 **922** Binocular rivalry between two induced colors *sang wook hong, steven k. Shevell*
- 2:15 **923** Stereoscopic depth during binocular rivalry *Timothy J. Andrews*
- 2:30 **924** Successive rivalry does not occur without attention *Patrick Cavanagh, Alex O. Holcombe*
- 2:45 **925** Invisible images can influence saccadic eye movements *Chengzhi Feng, Yi Jiang, Sheng He*
- 3:00 **926** Minimal Physiological Conditions for Binocular Rivalry *Hugh R. Wilson*
- 3:15 **927** Cross-orientation suppression occurs before binocular summation: Evidence from masking and adaptation. *Daniel H Baker, Tim S Meese*

TALK SESSION

Tuesday, May 9, 4:30 - 6:00 pm, Hyatt Ballroom North

Attention: Neural Mechanisms and Models

Moderator: Andrew Rossi

- 4:30 **928** The role of mt and the parietal lobe in visual tracking studied with transcranial magnetic stimulation *Lorella Battelli, George Alvarez, Thomas Carlson, Alvaro Pascual-Leone*
- 4:45 **929** Deficits in Covert Attention After Temporary Inactivation of Macaque Frontal Eye Field *Robert M. McPeck, Naomi Takahashi*
- 5:00 **930** Bridging the Gap Between Monkey and Man: Macaque Event-Related Potentials Reveal Similarities to Human Indices of Visual Attention *Geoffrey F. Woodman, Min-Suk Kang, Andrew F. Rossi, Jeffrey D. Schall*
- 5:15 **931** Neural decoding of seen and attended motion directions from human cortical activity *Frank Tong, Yukiyasu Kamitani*
- 5:30 **932** Bottom-up visual attention to salient proto-object regions *Christof Koch, Dirk Walther*

- 5:45 **933** Feature congestion: A measure of visual clutter *Ruth Rosenholtz, Yuanzhen Li, Zhenlan Jin, Jonathan Mansfield*

TALK SESSION

Tuesday, May 9, 4:30 - 6:00 pm, Hyatt Ballroom South

Binocular Vision/Stereopsis

Moderator: Paul Hibbard

- 4:30 **934** Is the Disparity-gradient Limit a Byproduct of Local Cross Correlation? *Heather R Filippini, Martin S Banks*
- 4:45 **935** A New Slant on Orientation Disparity: Evaluating Orientation Disparity as a Cue for 3D Surface Slant Perception *Hal S. Greenwald, David C. Knill*
- 5:00 **936** On seeing transparent surfaces in stereoscopic displays *Inna Tsirlin, Robert S. Allison, Laurie M. Wilcox*
- 5:15 **937** Cooperative processing of spatially distributed disparity signals in macaque V1 *Jason M. Samonds, Brian Potetz, Tai Sing Lee*
- 5:30 **938** An Early Gain-Control Mechanism in Binocular Combination *George Sperling, Jian Ding*
- 5:45 **939** Binocular energy responses to natural images *Paul B Hibbard, Samira Bouzit*

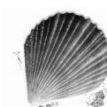
Poster Sessions for Tuesday, May 9

Poster Session I

Tuesday, May 9, 8:00 - 11:00 am, Municipal Auditorium
Author presents: 9:30 - 10:30 am

Contextual, Associative, Statistical Learning Effects

- 940** Abstract withdrawn.
- I1 **941** Learning predictive cues to optimize visual search *Jason A Droll, Binh T Pham, Craig K Abbey, Miguel P Eckstein*
- I2 **942** Decomposing the effect of contextual priors in visual search: Where does the time go? *Barbara Hidalgo-Sotelo, Aude Oliva*
- I3 **943** Gaze Patterns in Search Reflect Learnt Environmental Probabilities and Rewards *Krista M Gigone, Jason A Droll, Mary M Hayhoe*
- I4 **944** Implicit learning of base rate information in change detection occurs for location but not identity *Melissa R Beck, Bonnie L Angelone, Daniel T Levin, Matthew S Peterson, D. Alexander Varakin*
- I5 **945** When the unconscious shows the way: the neural basis of contextual cueing revealed in MEG *Maximilien Chaumon, Valérie Drouet, Catherine Tallon-Baudry*
- I6 **946** What is learned in ignored visual context? *Kamin Kim, Min-Shik Kim*



- I7 **947** The time course of contextual modulation in visual search *Hirokazu Ogawa, Katsumi Watanabe*
- I8 **948** Incidental Memory for Relevant Locations in Real World Scenes *Ian P. Rasmussen, Mark W. Becker, Alec Scharff, Alex Hickok*
- I9 **949** Target location probability effects in visual search are an effect of sequential dependencies. *Carol E Walthew, Iain D Gilchrist*
- I10 **950** Learning of arbitrary visual associations by trial-and-error *Catherine Matthews, Hing Eng, Timothy Vickery, Won Mok Shim, Yuhong Jiang*
- I11 **951** Selective attention and general attentional resources in the learning of spatial context *Timothy J. Vickery, Rachel S. Sussman, Yuhong Jiang*

Binocular Rivalry

- I12 **952** Transition phases show the importance of noise in binocular rivalry *Jan W Brascamp, Andre J Noest, Raymond Van Ee, Albert V Van den Berg*
- I13 **953** Hysteresis effects in stereopsis and binocular rivalry *Athena Buckthought, Jeounghoon Kim, Hugh R. Wilson*
- I14 **954** Race to gain dominance in binocular rivalry: faster for familiar and recognizable stimuli *Yi Jiang, Patricia Costello, Sheng He*
- I15 **955** Learning affects binocular rivalry *Chris L.E. Paffen, Frans A.J. Verstraten, Zoltan Vidnyánszky*
- I16 **956** Brain stimulation can make you change your mind *Joel Pearson, Duje Tadin, Randolph Blake*
- I17 **957** The occurrence of binocular rivalry and dichoptic masking depends on temporal aspects of stimulation *Jeroen J.A. van Boxtel, Allard P. Kamphuisen, Raymond van Ee, Casper J. Erkelens*
- I18 **958** On the contribution of second-order boundary contour strength to binocular rivalry *Jingping Xu, Zijiang J He, Teng Leng Ooi*
- I19 **959** Hierarchical processes of motion perception in binocular rivalry *Takashi Shinozaki, Yoichi Miyawaki, Tsunehiro Takeda*
- I20 **960** The critical role of boundary contours in the early temporal processing of binocular rivalry *Yong Su, Zijiang J He, Teng Leng Ooi*
- I21 **961** Motion aftereffects under complete binocular rivalry suppression *Hiroki Watanabe, Kazushi Maruya, Masataka Watanabe*
- I22 **962** Auditory modulation of binocular rivalry *Amanda. L. Parker, David. M. Alais*
- I23 **963** The effect of crowding on orientation-specific adaptation using binocular rivalry *Sarah Hancock, David Whitney, Timothy J Andrews*
- I24 **964** Predicting conscious perception under rivalry from activity in LGN and V1 *John-Dylan Haynes, Ralf Deichmann, Geraint Rees*

Action Effects on Perception

- I25 **965** Within striking distance: Task efficacy influences perceived size and distance *John M. Franchak, Jeanine K. Stefanucci, Dennis R. Proffitt*
- I26 **966** Does energy expenditure affect the perception of egocentric distance? A failure to replicate Experiment 1 of Proffitt, Stefanucci, Banton, and Epstein (2003) *Jeffrey J Hutchison, Jack M Loomis*
- I27 **967** Motor force learning influences visual perception of acceleration *Liana E. Brown, Elizabeth T. Wilson, Melvyn A. Goodale, Paul L. Gribble*
- I28 **968** Size-weight illusion dissociates from grip forces when objects lifted from other hand *Erik C. Chang, Melvyn A. Goodale*
- I29 **969** Size-manipulation of the Body-Schema Using the Rubber Hand Illusion *Edward A G Cooke, J. Kevin O'Regan*
- I30 **970** Writing facilitates the learning of abstract visual representations of letter-like symbols *Karin H James*
- I31 **971** Active Visualization Methods Enable Perception of Structure and Motion in Higher Dimensional Spaces: Comparing Active Vs. Passive Perception of the Rigidity of 3D and 4D Objects *Sidharth Thakur, Andrew J Hanson, Geoffrey P Bingham*
- I32 **972** Effect of Load and Landmark Distance on Mental Self-rotation *Bruce Bridgeman, Steven Macramalla*

Eye Movement Effects on Perception and Action

- I33 **973** Asymmetrical modulation of the temporal impulse response during smooth pursuit *Jianliang Tong, Saumil S. Patel, Harold E. Bedell*
- I34 **974** Perisaccadic localization of TMS-induced phosphene *Junghyun Park, Daw-An Wu, Shinsuke Shimojo*
- I35 **975** The perceived location of one flash or two successive flashes at the time of a saccade involves an extraretinal signal that begins changing at the onset of or following the saccade *Jordan Pola*
- I36 **976** Microsaccades counteract visual fading during fixation *Susana Martinez-Conde, Stephen L Macknik, Xoana G Troncoso, Thomas A Dyar*
- I37 **977** Systematic distortion of perceived 3D path of a moving object during disconjugate eye movement *Hyung-Chul O. Li*
- I38 **978** Moving eyes and moving thought: The spatial compatibility between eye movements and cognition *Laura E. Thomas, Alejandro Lleras*
- I39 **979** Mobile Phone Use in a Driving Simulation Task: Differences in Eye Movements *Stacy A Balk, Kristin S Moore, Jay E Steele, William J Spearman, Andrew T Duchowski*

Face Perception: Adaptation and Aftereffects

- I40 **980** Improved facial identity recognition following adaptation *Tamara L Watson, Gillian Rhodes, Colin WG Clifford*
- I41 **981** An Objective Measure of the Effect of Adaptation on Recognition of Famous Faces *Nathan Witthoft, Jonathan Winawer*



- I42 **982** Face adaptation depends on gaze (overt attention) to the face. *Farshad Moradi, Shinsuke Shimojo*
- I43 **983** Effects of Synthetic Face Adaptation: An fMRI study *Grigori Yourganov, Nicole D. Anderson, Hugh R. Wilson*
- I44 **984** Gender Adaptation Effects Across Age-based Categories of Faces *Susan E. Barrett, Alice J. O'Toole, Fang Jiang, Laura B. Chomiak, Alison L. Gray, David S. Highhill*
- I45 **985** The role of familiarity in view transferability of face identity adaptation *Fang Jiang, Volker Blanz, Alice J. O'Toole*
- I46 **986** An inversion effect in face adaptation? *Maiko Yasuda, Yoko Mizokami, Tamara L. Watson, Michael A. Webster*
- I47 **987** Partial transfer of face viewpoint aftereffect across different individuals *Fang Fang, Kumiko Ijichi, Sheng He*
- I48 **988** Does familiarity play a role in producing viewpoint aftereffects with faces? *Jae-Jin Ryu, Avi Chaudhuri*
- I49 **989** Is the "Face Aftereffect" Retinotopic or Spatiotopic? *Seyed-Reza Afraz, Patrick Cavanagh*
- I50 **990** Face aftereffects and unattended faces *Janice E Murray, Chen Yan*
- I51 **991** Figural aftereffects transfer, but are also contingent on, race categories. *Emma Jaquet, Gillian Rhodes, William G. Hayward*

Neural Coding, Cortical Receptive Fields

- I52 **992** From Spikes to Objects: How Multiple Levels of Thalamic and Cortical Interactions Control Visual Learning, Attention, and Recognition *Massimiliano Versace, Stephen Grossberg*
- I53 **993** Brain without Bayes: Temporal dynamics of decision-making during form and motion perception by the laminar circuits of visual cortex *Praveen K Pilly, Stephen Grossberg*
- I54 **994** A discrete-time feedback model can account for spike timing data in LGN *Janneke FM Jehee, Dana H Ballard*
- I55 **995** Visual segmentation in a biomorphic neural network *Stefan Roth, Daniel Kiper, Paul F. M. J Verschure*
- I56 **996** Ruling out and ruling in neural codes *Sheila Nirenberg, Adam Jacobs, Gene Fridman, Peter Latham, Robert Douglas, Nazia Alam, Glen Prusky*
- I57 **997** The representation of visual features in the extrastriate cortex of the nocturnal New World monkey *Aotus* *Peter M. Kaskan, Haidong Lu, Anna W. Roe, Jon H. Kaas*
- I58 **998** Spatiotemporal dynamics of surround suppression in cat V1: stimulus-size and orientation-contrast *Satoshi Shimegi, Hiroyuki Kida, Ayako Ishikawa, Hiromichi Sato*
- I59 **999** Spatiotemporal dynamics of surround suppression in cat V1: spatial-frequency dependency *Ayako Ishikawa, Satoshi Shimegi, Hiroyuki Kida, Hiromichi Sato*
- I60 **1000** Does map adjacency contribute to neuronal response construction in V2? *Benjamin M Ramsden, Clinton G Cooper*
- I61 **1001** Comparison of color and luminance contrast response in V2 thin stripes *Haidong D. Lu, Gang Chen, Peter Kaskan, Anna W. Roe*

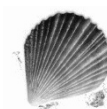
- I62 **1002** Spatial frequency integration for stereo processing in macaque visual area V4 *Hironori Kumano, Seiji Tanabe, Ichiro Fujita*
- I63 **1003** Motion coherence has little effect on surround suppression in area mt of the alert monkey. *J. Nicholas Hunter, Richard T. Born*
- I64 **1004** Impact of interhemispheric connections on orientation preference maps of the ferret *Kerstin E Schmidt, Stephen Lomber, Giorgio M Innocenti*
- I65 **1005** Interhemispheric suppression: The case of the missing vertical meridian *Keith A. Schneider*

Spatial Vision: Adaptation and Illusions

- I66 **1006** Orientation Tuning of Visual Afterimages *Daniel R. VanHorn, Gregory Francis*
- I67 **1007** Time-course of recovery for the tilt after-effect *Michael J. Pianta, Josephine Battista, Colin W.G. Clifford*
- I68 **1008** Grating adaptation influences the perceived length of an object. *Aurelio Bruno, Alan Johnston*
- I69 **1009** A new twist to grid illusions *Michael W Levine, J. Jason McAnany*
- I70 **1010** Age-related changes in the blur aftereffect *Sarah L. Elliott, Karin Schindler, Joseph L. Hardy, Michael A. Webster, John S. Werner*
- I71 **1011** Chromatic Hermann Grid illusions occur with isoluminant stimuli *James Comerford, Frank Thorn, Elizabeth Garland*
- I72 **1012** Dichoptic transfer of a two-stimulus afterimage *Justin Ericson, Greg Francis*

Gaze/Reference Frames

- I73 **1013** Post-perceptual locus for visual context effects: ERP evidence from the Rod and Frame Illusion. *Jennifer E. Corbett, Todd C. Handy, James T. Enns*
- I74 **1014** Bigger is better: Large visual displays improve spatial knowledge of a virtual environment *Jonathan Z Bakdash, Jason S Augustyn, Dennis R Proffitt*
- I75 **1015** Coordinating saccades and smooth pursuit eye movements during visual tracking and perception of objects moving with variable speeds *Krishna Srihasam, Daniel Bullock, Steven Grossberg*
- I76 **1016** Initial hand position and movement direction affect reaching in a unilateral optic ataxia patient *Aarlenne Z Khan, Laure Pisella, Yves Rossetti, J Douglas Crawford*
- I77 **1017** Infants emerging ability to perceive gaze direction: Investigations with eye-tracking technology *Gustaf Gredebäck, Carolin Theuring, Petra Hauf*
- I78 **1018** Evoked Brain Activity Distinguishes Looming From Other Optic Flow Patterns *Rick O. Gilmore, Chuan Hou, Anthony M. Norcia, Mark Pettet*
- I79 **1019** Microstimulation of the Frontal Eye Field Evokes Kinetically Normal Gaze Shifts *J.A. Monteon, Hongying Wang, J.C. Martinez-Trujillo, J.D. Crawford*



I80 **1020** Single-Pulse TMS Over Dorsal Posterior Parietal Cortex Disrupts Memory-Guided Pointing in Humans *Michael Vesia, Jachin A. Monteon, Lauren E. Sergio, J.D. Crawford*

I81 **1021** Frames of reference for gaze shifts in lateral intraparietal cortex (LIP) *A.G. Constantin, Hongying Wang, Julio Martinez-Trujillo, J.D. Crawford*

I82 **1022** Visuospatial Contextual Processing in the Intraparietal Sulcus *Elizabeth Walter, Paul Dassonville*

I83 **1023** The radial orientation effect in human and non-human primates *Yuka Sasaki, Reza Rajimehr, Byoung Woo Kim, Tamara Knutsen, Leeland Ekstrom, Anders Dale, Wim Vanduffel, Roger Tootell*

I84 **1024** Gaze position effects and position-dependent motor tuning from primate superior colliculus (SC) neurons during head-unrestrained visually guided movements *Joseph F.X. DeSouza, Xiaogang Yan, Gunnar Blohm, Gerald P. Keith, HongYing Wang, J. Douglas Crawford*

I85 **102** Following the feeling: proprioceptive smooth pursuit revisited *Marian E. Berryhill, Tanya Chiu, Howard C. Hughes*

Poster Session J

Tuesday, May 9, 12:00 - 3:00 pm, Municipal Auditorium
Author presents: 1:00 - 2:00 pm

Goal-Directed Hand Movements

J1 **1025** Task-specific constraints shape the visual feedback control law used to control hand movements *Manu Chhabra, David C Knill*

J2 **1026** Visually based movement corrections: Evidence for a lower visual field specialization *Matthew Heath, Olav Krigolson*

J3 **1027** Feedback can be used to alter eye-hand coordination for rapid pointing *Anna Ma-Wyatt, Martin Stritzke, Julia Trommershäuser*

J4 **1028** Online action control and the influence of scene-based visual cues *Kristina Neely, Matthew Heath*

J5 **1029** Optimality of eye-hand coordination for different types of feedback about saccadic accuracy *Martin Stritzke, Anna Ma-Wyatt, Julia Trommershäuser*

J6 **1030** Sensori-motor choices based on a rapid judgment of expected gain *Julia Trommershäuser, Michael S. Landy, Laurence T. Maloney*

J7 **1031** Do humans generate a representation of their pointing variability? *Marc O. Ernst, Julia Trommershäuser*

J8 **1032** Optimality of reach timing under risk *Todd E Hudson, Michael S Landy, Laurence T Maloney*

J9 **1033** Suboptimal movements under risk due to experimentally imposed anisotropic variability *Hadley Tassinari, Todd E. Hudson, Michael S. Landy*

J10 **1034** Humans trade off speed and accuracy to maximize expected gain in planning movements to targets that rapidly decrease in reward across time *Shih-Wei Wu, Mark Dean, Laurence T Maloney*

J11 **1035** Movement planning under risk differs from decision making under risk in how subjects make use of probability information *Laurence T Maloney, Shih-Wei Wu, Maria F Dal Martello*

J12 **1036** Humans store the relationship between their eye position and the visual reliability of familiar targets *Erik J Schlicht, Paul R Schrater*

J13 **1037** The Kalman Filter as a model of visuo-motor adaptation behavior *Johannes Burge, Marc O Ernst, Martin S Banks*

J14 **1038** Effect of visual adaptation on arm kinaesthesia *Teser Wong, Denise Y.P. Henriques*

J15 **1039** Can subjects with visual impairment scale object size and distance accurately when reaching and grasping under different viewing conditions? *Carmen Gonzalez-Alvarez, Ahalya Subramanian, Shahina Pardhan*

J16 **1040** Reference frame conversions for visually-guided arm movements *Gianluca U Sorrento, Denise Y.P. Henriques*

J17 **1041** Depth information is integrated across multiple objects for reaching and grasping. *Peter Scarfe, Simon J Watt, Paul B Hibbard*

J18 **1042** Structured Perceptual Displays Produce Exceptions to Fitts's Law *Jay Pratt, Jos J Adam, Martin H Fischer*

J19 **1043** Multi-resolution model of human motor control *Oh-Sang Kwon, Zygmunt Pizlo, Howard N Zelaznik, George Chiu*

J20 **1044** Forks vs. Fingers: A Comparison Hand and Mouth Kinematics During Feeding *Derek J Quinlan, Melvyn A Goodale, Jody C Culham*

J21 **1045** Left handedness does not extend to visually guided grasping *Robert L. Whitwell, Brendan Morrissey, Claudia, L.R. Gonzalez, Tzvi Ganel, Melvynn A. Goodale*

J22 **1046** Reaching to grasp isoluminant and isochromatic objects. *Gord Binsted, Andrei Georgescu, Deb Saucier*

J23 **1047** What does the brain do when you fake it? An fMRI study of pantomimed and real grasping *Grzegorz Kroliczak, Cris-tiana Cavina Pratesi, David Goodman, Jody C Culham*

Attention: Other

J24 **1048** Ability to task-switch in action video game players *C.S. Green, Daphne Bavelier*

J25 **1049** The Effects of Video Game Playing on Perceptual and Cognitive Abilities *Walter R. Boot, Arthur F. Kramer, Monica Fabiani, Gabriele Gratton, Daniel J. Simons, Xiaogang Irene Wan, Michael S. Ambinder, Laura E. Thomas, Stan J. Colcombe, Jason Agran, Kathy Low, Yukie Lee*

J26 **1050** Hemifield Independence is a Signature of Location-based Attentional Filtering *George A. Alvarez, Patrick Cavanagh*

J27 **1051** Rate threshold for phase discrimination of flickering dots is low and decreases with eccentricity despite cortical scaling *S. Mehdi Aghdaee, Patrick Cavanagh*

J28 **1052** The correlation between motion aftereffect and fMRI measures of visual and auditory attention *Vivian, M. Ciaramitaro, Geoffrey, M. Boynton*



- J29 **1053** The Role of Simulated Motion on Visual Attention
Miranda Deller, Jim McAuliffe, Michel Johnson, Bruce Weaver, Tim Wilson
- J30 **1054** Attentional Deployment Prior to the Execution of Hand and Eye Movement Sequences
Daniel Baldauf, Heiner Deubel
- J31 **1055** Perceptual learning and exogenous attention
Anna Marie Giordano, Marisa Carrasco
- J32 **1056** An investigation of relationships among visual-attention processes.
Marcia Grabowecky, Lucica Iordanescu, KatieAnn Skogsberg, Sarah Novis, Michael Rock, Satoru Suzuki
- J33 **1057** Do Patients with Alzheimer's Disease Compensate for Impaired Visual Attention When Driving?
Lindsay M Vaux, Maureen A Marron, Matthew Rizzo
- J34 **1058** Response Inhibition Has Negative Consequences for Subsequent Emotional Evaluation of Faces and Places
Nikki Westoby, Jane E. Raymond
- J35 **1059** Position invariant motion contrast effects are mediated by attention
Xiaohua Zhuang, Thomas V. Papathomas, Zoltan Vidnyanszky

Knowledge, Affect, Preference

- J36 **1060** Measuring implicit emotional reactions: A picture's worth is found inwards.
Felicity Greenwell, James Intriligator
- J37 **1061** Can affective priming be object-based?
Carys K Ball, Jane E Raymond, Mark J Fenske
- J38 **1062** The modulation of social-emotional judgments in a directed forgetting paradigm
Brian A. Goolsby, Jane E. Raymond, Kimron Shapiro
- J39 **1063** Affective Responses to Stimuli viewed from Ego-centric vs. Allocentric Perspectives
Amy E Hayes, Matthew A Paul, Boukje Beuger, Steven P Tipper
- J40 **1064** IOR for aversive stimuli is magnified when emotionally congruent responses are required
Helena J. V. Rutherford, Jane E. Raymond
- J41 **1065** Goal bias in non-linguistic Motion event representations: The role of intentionality
Laura Lakusta, Allison Wessel, Barbara Landau
- J42 **1066** Is Contingency Sufficient For Detecting Intentionality?
Jonathan S. Beier, Susan Carey
- J43 **1067** Arithmetic in symbolic and non-symbolic numerical domains
Camilla K. Gilmore, Elizabeth S. Spelke
- J44 **1068** Action understanding in infants: New evidence by means of eye-tracking technology
Petra Hauf
- J45 **1069** Previously Unknown Illusion Predicted by Evolved Navigation Theory.
Russell E Jackson, Lawrence K Cormack
- J46 **1070** Collaboration during visual search
Kelly A. Malcolmson, Michael G. Reynolds, Daniel Smilek
- J47 **1071** Visual Solution to the Traveling Salesman Problem
Zygmunt Pizlo, John Saalweachter, Emil Stefanov

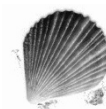
- J48 **1072** What is the domain of causal perception? Investigating causal perception of motion and non-motion state change events in infancy
Paul Muentener, Susan Carey
- J49 **1073** Reflexive social attention elicited by biological motion
Yoshiya Mori, Mikio Inagaki, Lisa Wu, Taijiro Doi, Eishi Hirasaki, Hiroo Kumakura, Ichiro Fujita
- J50 **1074** Relative rates of visual and cognitive decline in Alzheimer's Disease
Matthew Rizzo, Jeffrey D. Dawson, Ergun Y. Uc, Steven Anderson, Carissa L. Philippi, JonDavid Sparks

Spatial Vision: Context and Space

- J51 **1075** Aesthetics, Mondrians, and the Horizontal Effect
Andrew M. Haun, Bruce C. Hansen, Edward A. Essock
- J52 **1076** Target visibility determines the extent of visual field inhomogeneities
E. Leslie Cameron, Andrew D. Rathje
- J53 **1077** Advantage of the upper visual field for lateral interaction of high-spatial frequency
Yasuto Tanaka, Satoru Miyauchi, Masaya Misaki, Takara Tashiro
- J54 **1078** The role of magnocellular and parvocellular visual pathways in altitudinal visual hemifield anisotropies
J. Jason McAnany, Michael W. Levine
- J55 **1079** Influence of Roll-Tilt, Interpoint Separation, and Length of Linear Points-Arrays on a Frontoparallel Plane on Visually Perceived Eye Level (VPEL)
Leonard Matin, Wenxun Li, Linda Li, Adam Y. Shavit
- J56 **1080** The relationship between physical tilt, apparent tilt and acuity
Joshua A Solomon
- J57 **1081** Attraction of flashes to moving dots
ozgur yilmaz, saumil s. Patel, srinanth tripathy, haluk ogmen
- J58 **1082** Dynamic Distortion of Visual Space around a Moving Object
Kenji Yokoi, Katsumi Watanabe
- J59 **1083** What Determines the Perceptual Distance between Low Contrast Letter-Like Patterns
Lei Liu, Hillary Gauthier
- 1084** Abstract 1084 moved to Spatial Vision II talk session, May 7, 8:00 am.
- contour filling-in process in patients with depression
Uri Polat, Ativ Levi, Anna Sterkin, Revital Amiaz
- J60 **1085** Eccentric Fixation and Perceptual Filling-In in Patients with Macular Hole
Walter Wittich, Olga Overbury, Michael A. Kapusta, Donald H. Watanabe, Jocelyn Faubert
- J61 **1086** Adult age difference of ignoring offset distractors at fixation
Kazuma Ishimatsu, Takatsune Kumada
- J62 **1087** Egocentric and allocentric reference frames for eye movements - an fMRI study.
Flavia Filimon, Jonathan D. Nelson, Martin I. Sereno

Visual Representations in Memory

- J63 **1088** Increasing perceptual difficulty reveals implicit spatial memory
Jongsoo Baek, Do-Joon Yi, Min-Shik Kim



J64 **1089** The units of visual statistical learning: Features or objects? *Phillip J. Isola, Nicholas B. Turk-Browne, Brian J. Scholl, Teresa A. Treat*

J65 **1090** You compare the apple, but do you remember orange? Failure to compare features in memory research *X.A.N.D.R.A. van Montfort*

J66 **1091** The Invariance of Visual Long-term Memory to Geometric Transformation *Heidi Lam, Tamara M Munzner, Ronald A Rensink*

J67 **1092** Preferential representation of interobject spatial relations that are aligned with employed reference directions *Björn Rump, Timothy P. McNamara*

J68 **1093** How Change-Detection is Related to Visual Search: A Change in a Remembered Object is Like a Simple Feature *Joo-Seok Hyun, Andrew Hollingworth, Steven J. Luck*

J69 **1094** Change blindness during multiple interactions with a single object *Alan E Robinson, Jochen Triesch, Mary M Hayhoe, Jason A Droll, Brian T Sullivan*

J70 **1095** Dual Visual Systems and Working Memory for Object and Spatial Properties *Thomas Sanocki, Jennifer Kaltreider*

J71 **1096** The role of topological change in object persistence *Maya U. Shankar, Jonathan I. Flombaum, Brian J. Scholl*

J72 **1097** Iconic memory revisited: a plea for a distinction between a retinal and cortical icon *Ilja G. Sligte, Victor A.F. Lamme, H. Steven Scholte*

J73 **1098** On the Nature of Perceptual Representations That Are Transformed Into VSTM Representations *Adam T Niese, Steven J Luck*

Reading

J74 **1099** Potent features for letter identification *Caroline Blais, Daniel Fiset, Catherine Ethier-Majcher, Karine Tadros, Martin Arguin, Frédéric Gosselin*

J75 **1100** Effects of Polarity, Time, and Memory Processes on Reading *Faith L. Florer, E. Corey Lawrence, Jemma Lampkin, Veronique Salvano-Pardieu*

J76 **1101** Crowding limits reading *Denis G Pelli, Katharine A Tillman*

J77 **1102** Effect of Letter Spacing on Legibility, Eye movements, and Reading Speed *Yu-Chi Tai, James Sheedy, John Hayes*

J78 **1103** Is reading serial? *Katharine A Tillman, Denis G Pelli, Marialuisa Martelli, Jeffrey Stott, Jason Rosenblatt*

J79 **1104** Character Size Affects Reading Comprehension, Not Reading Rate, in Children *jenie kurian, Jemma Lampkin, E. Corey Lawrence, Faith Florer*

J80 **1105** Developmental changes in the size of the visual span for reading: Effects of Crowding *M.Y. Kwon, G.E. Legge*

J81 **1106** Flicker Fusion as a Correlate of Word Decoding Ability *José E. Sr. Nández, Steven R. Holloway, Caitlin Donahoe, Aaron Seitz*

J82 **1107** How The Word Length Effect Develops With Age *Cayla B Bergman, Denis Pelli, Cristina Burani, Pierluigi Zoccolotti, Marialuisa Martelli*

J83 **1108** A difference of moments (DoM) model for small Chinese and English letter recognition *Cong Yu, Jun-yun Zhang, Shu-guang Kuai, Feng Xue, Stanley A Klein, Lei Liu*

J84 **1109** Age Effects on Reading Speed and Visual Span in Peripheral Vision *Deyue Yu, Sing-Hang Cheung, Susana T.L. Chung, Gordon E. Legge*

J85 **1110** Magno- and Parvocellular Psychophysiology in Normal Children and those with Dyslexia and Asperger Syndrome. *David P Crewther, Sheila G Crewther*

Poster Session K

Tuesday, May 9, 4:30 - 7:30 pm, Municipal Auditorium
Author presents: 6:00 - 7:00 pm

Temporal Processing

K1 **1111** Linking Impulse Response Functions to Reaction Time: Rod and Cone RT Data and a Neural Model *Dingcai Cao, Andrew J. Zele, Joel Pokorny*

K2 **1112** Apparent asynchrony between the perception of color and motion: An issue of different latencies or of attention? *AO Holcombe, P Cavanagh*

K3 **1113** Detection and prediction to changes in color and direction of motion *Tadayuki Tayama*

K4 **1114** A Comparison of the Pulfrich and Flash-Pulfrich Effects *Christopher R.L. Cantor, Clifton M. Schor*

K5 **1115** Temporal contrast sensitivity during smooth pursuit eye movements *Karl R. Gegenfurtner, Elias Delipetkos, Doris I. Braun*

K6 **1116** Temporal resolution of visual processing in action video game players *Renjie Li, Uri Polat, Walt Makous, Daphne Bavelier*

K7 **1117** Duration estimation is affected by stimulus magnitude information in non-temporal dimensions *Xiangchuan Chen, Bin Xuan, Daren Zhang, Sheng He*

K8 **1118** Masking can Improve Temporal Integration *Dan J. Swift*

K9 **1119** The effect of feature-based attention on time perception *Fuminori Ono, Jun Kawahara*

1120 Abstract 1120 moved to poster B45.

K10 **1121** Parallel processing is much harder for temporal duration than for spatial length. *Michael J Morgan, Enrico Giora, Joshua A Solomon*

Attention: Temporal Selection

K11 **1122** Attention can alter the temporal capacity of object processing in high-level visual areas *Thomas J McKeef, Frank Tong*

K12 **1123** Activation of primary visual cortex during the Attentional Blink *Mark A Williams, Troy A. W. Visser, Ross Cunningham, Jason B. Mattingley*



K13 **1124** Electrophysiological Evidence for Modulation of Semantic Processing During the Attentional Blink *Barry Giesbrecht, Jocelyn Sy*

K14 **1125** An EEG study of masking effects in RSVP *Patrick Craston, Brad Wyble, Howard Bowman*

K15 **1126** Spatial selection either improves or impairs temporal selection in a RSVP task. *Hee-Young Choo, Min-Shik Kim*

K16 **1127** Masking modulates (and may even eliminate) the attentional blink *Fook K Chua, Jason W M Ng*

K17 **1128** Missing T1 and missing T2 in an RSVP stream: does T2's presence help T1 identification? *Alejandro Lleras, Micheal S. Ambinder*

K18 **1129** Distractor word meaning the target-defining color elicits the attentional blink *Atsunori Ariga, Kazuhiko Yokosawa*

K19 **1130** Interference during the attentional blink is feature-based rather than object-based. *Edward Awh, Harpreet Dhaliwal*

K20 **1131** Examining the interaction between WM and the attentional blink *Werner Vogels, Stephen Johnston, Kimron Shapiro, David Linden*

K21 **1132** Can task irrelevant distraction attenuate an auditory attentional blink? *Stephen Johnston, Kimron Shapiro*

K22 **1133** Perception of three targets in dual RSVP streams: resource depletion or a temporary loss of control? *Jun Kawahara, Takatsune Kumada*

K23 **1134** Why Are Faces Resistant to the Attentional Blink? *Ayelet N. Landau, Cassandra LaBouff, Lynn C. Robertson*

K24 **1135** Randomized Temporal Stimulus Onset Attenuates the Attentional Blink *Elwyn W. Martin, Kimron L. Shapiro*

K25 **1136** Modulation of the Attentional Blink by Task Relevance and Target Relationship *Jocelyn L. Sy, Barry Giesbrecht*

K26 **1137** Repetition Advantage: Effects of inter-target and target-distractor discriminability *Yetta K. Wong, William G. Hayward*

K27 **1138** Repetition Blindness is Immune to the Central Bottleneck *Paul E. Dux, René Marois*

Biological Motion and Animacy

K28 **1139** Body form and position influence the perceived speed of human gait *Maggie Shiffrar, John Franchak*

K29 **1140** Pattern analysis of biological motion selectivity *Alison J Wiggett, Marius V Peelen, Paul E Downing*

K30 **1141** Sensitivity to motion features in upright and inverted point-light displays *Sandhitsu R Das, Maciej T Lazarewicz, Robert C Wilson, Leif H Finkel*

K31 **1142** Masking biological motion compared to masking structured and unstructured non-biological motion. *Eric J Hiris*

K32 **1143** Why is the average walker male? *Nikolaus F Troje, Sandra Szabo*

K33 **1144** Intention Recognition in Autistic Spectrum Condition (ASC) using Video Recordings and their corresponding Animacy Displays *Phil McAleer, Lawrie McKay, Judith Piggot, David R. Simmons, Frank E. Pollick*

K34 **1145** Biological Motion Processing in Autistic Spectrum Conditions: Perceptual and Social Factors *Lawrie McKay, Jennifer Mackie, Judith Piggott, David R Simmons, Frank E Pollick*

K35 **1146** Neural correlates of degraded complex motion perception *Javier O. Garcia, John A. Pyles, Emily D. Grossman*

1147 Abstract 1147 moved to Biological Motion talk session, May 9, 8:00 am.

K36 **1148** Backscroll illusion in far peripheral vision *Kiyoshi Fujimoto, Akihiro Yagi*

K37 **1149** Ground Cues Influence the Visual Perception of Rolling *Songjoo Oh, Maggie Shiffrar*

K38 **1150** Optimal Bayesian integration of components during the visual recognition of emotional body expressions *Claire L. Roether, Lars Omlor, Martin A. Giese*

Complex Motion

K39 **1151** Independent fMRI adaptation for first-order and second-order motion *Hiroshi Ashida, Angelika Lingnau, Matthew B Wall, Andrew T Smith*

K40 **1152** Separable temporal stages for motion integration within and between hemifields revealed by TMS *Bahador Bahrami, Nilli Lavie, Vincent Walsh*

K41 **1153** Perceived direction of plaid motion is not predicted by component speeds *Rebecca A Champion, Stephen T Hammett, Peter G Thompson*

K42 **1154** Contrast gain control moderates bias of perceived motion in Type 2 plaids *SA Collier, AB Cobo-Lewis*

K43 **1155** An oblique effect for transparent-motion detection: Implications for population encoding *John A Greenwood, Mark Edwards*

K44 **1156** Motion Strength is Not What is Summed in the Vector Summation Computation of Plaid Motion *Danting Liu, George Sperling*

K45 **1157** Velocity constancy in natural images *Andres Martin, Jose F Barraza, Luis A Issolio*

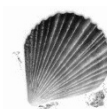
K46 **1158** Spatial selectivity of local motion affects global motion after-effect *Yutaka Nakajima, Takao Sato*

K47 **1159** Perception of motion transparency after depth contouring motion aftereffect *Lisa O'Kane, Pascal Mamassian*

K48 **1160** Perceived trajectory direction of an approaching object *Simon K. Rushton, Philip A. Duke*

K49 **1161** Optimal Aperture Size of Local Motion Estimators Depends on Velocity *Tal Tversky, Wilson Geisler*

K50 **1162** Is Motion Perception Completely Determined by Experience with Moving Objects? *William T. Wojtach, Kyongje Sung, Dale Purves*



K51 **1163** Dot polarity in dynamic Glass patterns *Dawn Vreven, Timothy Petersik, Jim Dannemiller, Jamie Schrauth*

K52 **1164** Perceived speed and center-surround organization *Maarten J. van der Smagt, Chris L.E. Paffen, Frans A.J. Verstraten*

K53 **1165** Spatial characteristics of center-surround antagonism in motion discrimination *Lisa R Betts, Allison B Sekuler, Patrick J Bennett*

K54 **1166** Abstract withdrawn.

Facial Expression Perception

K55 **1167** I like the way you move: Personality perception in animated talking heads *Lisa N. Jefferies, Ali Arya, James T. Enns*

K56 **1169** Facial Expression of Emotion Mediates Gaze Cuing *Chelsea M. Heveran, Mark W. Becker, Ian P. Rasmussen, Brian Detweiler-Bedell*

K57 **1170** Negatively Valenced Facial Expressions Elicit Panicked Scanning *Mark W. Becker, Brian Detweiler-Bedell, Ian P. Rasmussen, Laura Koch*

K58 **1171** Do facial expressions help face recognition in prosopagnosia? *Jason JS Barton, Rebecca Hefter*

K59 **1172** Facial expressions can be perceived from second-order motion. *Naoyuki Matsuzaki, Takao Sato*

K60 **1173** Expressions as Dynamic Events: Using Action Unit Trajectories to Differentiate Positive Emotional Facial Expressions *Jesse B. Spencer-Smith*

K61 **1174** The effect of the facial motion on the recognition of facial expressions. -Analysis of observer's eye movement - *Motoyasu Honma, Yoshihisa Osada*

K62 **1175** Inter-hemispheric cooperation for facial and bodily emotional expressions is independent of visual similarities between stimuli *Marco Tamietto, Giuliano Geminiani, Beatrice de Gelder*

K63 **1176** Body language influences perception of facial expression and voice prosody. *Jan Van den Stock, Beatrice de Gelder*

Face Perception: Models

K64 **1177** Region-based representations of faces *Adrian Nestor, Michael J. Tarr*

K65 **1178** Holistic Processing of Faces: Bridging Paradigms *Jennifer J. Richler, Isabel Gauthier, Michael J. Wenger, Thomas J. Palmeri*

K66 **1179** Feminine-looking Faces belong to Friendly and Helpful People - Stereotyping with a Parametric Image Model *Mirella Walker, Thomas Vetter*

K67 **1180** Gender aftereffects in the perception of silhouetted face profiles *Nicolas Davidenko, Jonathan Winawer, Nathan Witthoft*

K68 **1181** Generation of Sketch-like Feature Encodings in Oriented Faces - A Neural Model *Ulrich Weidenbacher, Pierre Bayerl, Heiko Neumann*

K69 **1182** Explaining human facial attractiveness judgements *Philip Bronstad, Judith H. Langlois*

K70 **1183** Can low level image differences account for face discrimination performance? *Aleix M. Martinez, Danelle Wilbraham, James T. Todd, James Christensen*

K71 **1184** The effects of illumination and expression changes on the recognition of human faces *Danelle A. Wilbraham, Aleix M. Martinez, James T. Todd*

Synesthesia

K72 **1185** Are real and synesthetic colors mediated by shared neural mechanisms? *Chai-Youn Kim, Randolph Blake*

K73 **1186** The influence of grapheme-color synaesthesia on eye movements *Jonathan S. A. Carriere, Daniel Smilek, Michael A. Reynolds, Mike J. Dixon, Philip M. Merikle*

K74 **1187** Do Synesthetes Excel Under Object-Substitution Masking? Type of Attention Matters. *Abrie Schroeder, Mary A. Peterson*

Attention: Interactions with Memory

K75 **1188** Further Adventures with the Magical Number One *Ronald A Rensink*

K76 **1189** Memory Modulates Visual Search - Interactions of External and Internal Representations *Hansjoerg Neth, Christopher W. Myers, Wayne D. Gray*

K77 **1190** Reactivation of attentional set after 1-day and 1-week delays *Andrew B. Leber, Yuji Gabari, Jun Kawahara*

K78 **1191** Local and Global Influences on Hypothesis Testing During Rapid Resumption of Visual Search *Timothy F. Brady, Justin A. Junge, Marvin M. Chun*

K79 **1192** Visual memory for colors of tracked objects. *Philip C. Ko, Adriane E. Seiffert*

K80 **1193** Familiarity modulates the within-field advantage for detecting repeated elements *Serena J Butcher*

Talk Sessions for Wednesday, May 10

TALK SESSION

Wednesday, May 10, 8:00 - 9:30 am, Hyatt Ballroom North

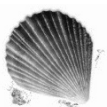
Motion Perception

Moderator: Duje Tadin

8:00 **1194** Temporal summation in trajectory perception *Jeffrey B. Mulligan, Maite T. Trujillo*

8:15 **1195** A computational theory for the perception of coherent motion: From ideal observer to generic models *Alan Yuille, Hongjing Lu*

8:30 **1196** Global motion with multiple Gabors - A tool to investigate motion integration across orientation and space *Shin'ya Nishida, Kaoru Amano, Mark Edwards, David R. Badcock*



8:45 **1197** Spatial Interactions in Fast and Slow Motion Mechanisms *Joseph S Lappin, Jeffrey B Nyquist, Duje Tadin*

9:00 **1198** High spatial frequency superiority of motion aftereffect *Satoshi Shioiri, Kazumichi Matsumiya*

9:15 **1199** The transition from monocular to binocular vision: An eye-opening illusion of speed. *Peter Thompson*

TALK SESSION

Wednesday, May 10, 8:00 - 9:30 am, Hyatt Ballroom South

Visual Memory

Moderator: Yaoda Xu

8:00 **1200** Is attention drawn to changes in familiar scenes? *Hacer Uke, Mary Hayhoe*

8:15 **1201** Primacy Effects in Contextual Cueing *Justin A. Junge, Marvin M. Chun, Brian J. Scholl*

8:30 **1202** Does Contextual Cueing Guide the Deployment of Attention? *Melina A. Kunar, Stephen, J. Flusberg, Todd, S. Horowitz, Jeremy, M. Wolfe*

8:45 **1203** Visual working memory and attention in early visual cortex *Shani Offen, Denis Schluppeck, David J Heeger*

9:00 **1204** Brain mechanisms supporting visual short-term memory for multi-feature objects *Yaoda Xu, Marvin M. Chun*

9:15 **1205** SFS for feature selective maintenance, IPS for simple maintenance in visual working memory *Masahiro Kawasaki, Masataka Watanabe, Jiro Okuda, Masamichi Sakagami*

TALK SESSION

Wednesday, May 10, 10:00 - 11:30 am, Hyatt Ballroom North

Frontier Techniques

Moderator: Stanley Klein

10:00 **1206** Using multifocal VEPs to extract retinotopic sources of activity *Justin Ales, Sangita Dandekar, Thom Carney, Stanley A. Klein*

10:15 **1207** Identification of the Cortical Sources of the Steady-State Visual Evoked Potential: A VEP-fMRI Co-registration study *Francesco Di Russo, Sabrina Pitzalis, Alessandra Stella, Donatella Spinelli, Steven A. Hillyard*

10:30 **1208** Spatial Localization with 3T GE BOLD: Dependence on Experiment Design and Resolution *Cheryl A Olman, Souheil Inati, David J Heeger*

10:45 **1209** An Adaptive Method for Estimating Criterion Sensitivity (d') Levels in Yes/No Tasks *Luis A Lesmes, Zhong-Lin Lu, Nina T Tran, Barbara A Doshier, Thomas D Albright*

11:00 **1210** Hold it there and let's have a look: extracting shift-invariance templates and sub-template features from signal-clamped classification images *Bosco S. Tjan, Anirvan S. Nandy*

11:15 **1211** Imaging Fast Intrinsic Optical Signals for Studies of Retinal Function *John S. George, Xin-cheng Yao*

TALK SESSION

Wednesday, May 10, 10:00 - 11:45 am, Hyatt Ballroom South

Attention: Costs of Divided Attention and Inattention

Moderator: Brian Scholl

10:00 **1212** When Sustained Attention Impairs Contrast Sensitivity *Marisa Carrasco, Sam Ling*

10:15 **1213** Can we select two colors simultaneously? *Liqiang Huang, Hal Pashler, Anne Treisman*

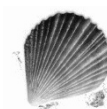
10:30 **1214** Spatiotemporal cues for tracking objects through occlusion *Steven L. Franconeri, Zenon W. Pylyshyn, Brian J. Scholl*

10:45 **1215** Is the ability to track multiple objects compromised by amblyopia? *Dennis M. Levi, Srimant P. Tripathy*

11:00 **1216** Hemifield Independence in Visual Crowding *Ramakrishna Chakravarthi, Patrick Cavanagh*

11:15 **1217** Whole versus partial report: When attention does not blink *Mark R. Nieuwenstein, Mary C. Potter*

11:30 **1218** Effects of Executive Functioning on Visual Search *Matthew S. Peterson, Melissa R. Beck, Jason H. Wong*



Topic Index

Below is a list of talk and poster sessions by topic. Parentheses indicate which abstracts are included in each session.

3D Cue Integration

Posters (446-454) Saturday, May 6, 4:15 - 7:15 pm

3D Space

Posters (837-848) Monday, May 8, 8:00 - 11:00 am

3D Visual Processing: Space

Talks (525-529) Sunday, May 7, 4:15 - 5:30 pm

Action and Space Perception

Posters (828-836) Monday, May 8, 8:00 - 11:00 am

Action Effects on Perception

Posters (965-972) Tuesday, May 9, 8:00 - 11:00 am

Adaptation

Talks (801-806) Monday, May 8, 11:00 - 12:30 pm

Attention and Reward: Cortical Physiology

Posters (849-856) Monday, May 8, 8:00 - 11:00 am

Attention and Working Memory

Posters (229-239) Saturday, May 6, 8:00 - 11:00 am

Attention: Benefits of Selection and Modulation

Talks (892-897, 712) Tuesday, May 9, 8:00 - 9:45 am

Attention: Costs of Divided Attention and Inattention

Talks (1212-1218) Wednesday, May 10, 10:00 - 11:45 am

Attention: Divided Attention and Inattention

Posters (401-416) Saturday, May 6, 4:15 - 7:15 pm

Attention: Interactions with Memory

Posters (1188-1193) Tuesday, May 9, 4:30 - 7:30 pm

Attention: Neural Mechanisms and Models

Talks (928-933) Tuesday, May 9, 4:30 - 6:00 pm

Attention: Neural Mechanisms and Models

Posters (612-625) Sunday, May 7, 12:00 - 3:00 pm

Attention: Other

Posters (1048-1059) Tuesday, May 9, 12:00 - 3:00 pm

Attention: Selection and Modulation

Posters (315-329) Saturday, May 6, 12:00 - 3:00 pm

Attention: Spatial, Object, and Feature Selection

Posters (696-711, 162) Sunday, May 7, 4:15 - 7:15 pm

Attention: Temporal Selection

Posters (1122-1138) Tuesday, May 9, 4:30 - 7:30 pm

Binocular Rivalry

Talks (922-927) Tuesday, May 9, 2:00 - 3:30 pm

Binocular Rivalry

Posters (952-964) Tuesday, May 9, 8:00 - 11:00 am

Binocular Rivalry/Bistability/Awareness

Posters (143-156) Friday, May 5, 5:30 - 8:30 pm

Binocular Vision/Stereopsis

Talks (934-939) Tuesday, May 9, 4:30 - 6:00 pm

Biological Motion

Talks (898-903, 1147) Tuesday, May 9, 8:00 - 9:45 am

Biological Motion and Animacy

Posters (1139-1150) Tuesday, May 9, 4:30 - 7:30 pm

Change Detection

Posters (157-164) Friday, May 5, 5:30 - 8:30 pm

Color

Posters (330-356) Monday, May 8, 2:45 - 5:45 pm

Color Constancy, Lightness and Transparency

Talks (494-499) Sunday, May 7, 11:00 - 12:30 pm

Color: Appearance and Context

Talks (520-524) Sunday, May 7, 4:15 - 5:30 pm

Complex Motion

Posters (1151-1166) Tuesday, May 9, 4:30 - 7:30 pm

Contextual, Associative, Statistical Learning Effects

Posters (941-951) Tuesday, May 9, 8:00 - 11:00 am

Cortical Organization

Posters (639-650) Sunday, May 7, 12:00 - 3:00 pm

Cue Integration

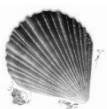
Talks (513-519) Sunday, May 7, 2:00 - 3:45 pm

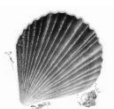
Eye Movement Effects on Perception and Action

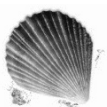
Posters (973-979) Tuesday, May 9, 8:00 - 11:00 am

Eye Movements and Cognition

Posters (584-596) Sunday, May 7, 8:00 - 11:00 am



Eye Movements, Brain Activity, and Attention*Talks* (193-198) Saturday, May 6, 11:00 - 12:30 pm**Eye Movements: Pursuit and Vergence***Posters* (101-107) Friday, May 5, 5:30 - 8:30 pm**Eye Movements: Saccades and Fixations***Posters* (597-611) Sunday, May 7, 8:00 - 11:00 am**Face Perception***Posters* (376-390) Saturday, May 6, 12:00 - 3:00 pm**Face Perception: Adaptation and Aftereffects***Posters* (980-991) Tuesday, May 9, 8:00 - 11:00 am**Face Perception: Behavioral and Clinical***Talks* (788-793) Monday, May 8, 8:00 - 9:30 am**Face Perception: Configural, Holistic Processing***Posters* (534-545) Sunday, May 7, 8:00 - 11:00 am**Face Perception: Models***Posters* (1177-1184) Tuesday, May 9, 4:30 - 7:30 pm**Face Perception: Neural Mechanisms***Talks* (187-192) Saturday, May 6, 8:00 - 9:30 am**Face Perception: Neural Mechanisms***Posters* (764-781) Sunday, May 7, 4:15 - 7:15 pm**Face Recognition***Posters* (108-115) Friday, May 5, 5:30 - 8:30 pm**Facial Expression Perception***Posters* (1167-1176) Tuesday, May 9, 4:30 - 7:30 pm**Frontier Techniques***Talks* (1206-1211) Wednesday, May 10, 10:00 - 11:30 am**Gaze/Reference Frames***Posters* (1013-1024) Tuesday, May 9, 8:00 - 11:00 am**Goal-Directed Hand Movements***Talks* (500-505) Sunday, May 7, 11:00 - 12:30 pm**Goal-Directed Hand Movements***Posters* (1025-1047) Tuesday, May 9, 12:00 - 3:00 pm**Human Factors***Posters* (174-180) Friday, May 5, 5:30 - 8:30 pm**Knowledge, Affect, Preference***Posters* (1060-1074) Tuesday, May 9, 12:00 - 3:00 pm**Lightness, Brightness, Luminance and Transparency***Posters* (807-827) Monday, May 8, 8:00 - 11:00 am**Locomotion and Navigation***Posters* (240-255) Saturday, May 6, 8:00 - 11:00 am**Motion and Depth***Posters* (731-742) Sunday, May 7, 4:15 - 7:15 pm**Motion and Eye Movements***Talks* (181-186) Saturday, May 6, 8:00 - 9:30 am**Motion Integration***Posters* (743-750) Sunday, May 7, 4:15 - 7:15 pm**Motion Perception***Talks* (1194-1199) Wednesday, May 10, 8:00 - 9:30 am**Motion Perception: 2D***Posters* (678-695) Sunday, May 7, 12:00 - 3:00 pm**Motion: Aftereffects, Ambiguity and Illusions***Posters* (651-664) Sunday, May 7, 12:00 - 3:00 pm**Motion: Cortical Mechanisms***Talks* (212-218) Saturday, May 6, 2:00 - 3:45 pm**Multi-Sensory Processing***Talks* (488-493) Sunday, May 7, 8:00 - 9:30 am**Multi-Sensory Processing***Posters* (274-294) Saturday, May 6, 8:00 - 11:00 am**Natural Images and Position Encoding***Talks* (205-211) Saturday, May 6, 2:00 - 3:45 pm**Neural Coding, Cortical Receptive Fields***Posters* (992-1005) Tuesday, May 9, 8:00 - 11:00 am**Neurons and Perception***Talks* (794-800) Monday, May 8, 11:00 - 12:45 pm**Object Recognition***Talks* (916-921) Tuesday, May 9, 2:00 - 3:30 pm**Object Recognition I***Posters* (417-429) Saturday, May 6, 4:15 - 7:15 pm**Object Recognition II***Posters* (713-730) Sunday, May 7, 4:15 - 7:15 pm**Object Tracking, Enumeration, and Individuation***Posters* (872-891) Monday, May 8, 8:00 - 11:00 am**Oscillations, Correlations, Synchrony***Posters* (165-173) Friday, May 5, 5:30 - 8:30 pm**Perception and Action***Posters* (455-463) Saturday, May 6, 4:15 - 7:15 pm**Perceptual Learning***Talks* (782-787) Monday, May 8, 8:00 - 9:30 am**Perceptual Learning***Posters* (256-273, 1120) Saturday, May 6, 8:00 - 11:00 am**Perceptual Organization***Talks* (199-204) Saturday, May 6, 11:00 - 12:30 pm**Perceptual Organization: 2D Shape***Posters* (116-124) Friday, May 5, 5:30 - 8:30 pm**Perceptual Organization: Contours***Posters* (430-445) Saturday, May 6, 4:15 - 7:15 pm**Perceptual Organization: Grouping & Segmentation***Posters* (857-871, 435) Monday, May 8, 8:00 - 11:00 am

Reading*Posters* (1099-1110) Tuesday, May 9, 12:00 - 3:00 pm**Receptive fields, organization, plasticity***Talks* (506-512) Sunday, May 7, 2:00 - 3:45 pm**Scene Perception***Posters* (562-583) Sunday, May 7, 8:00 - 11:00 am**Scene Perception***Talks* (904-909) Tuesday, May 9, 11:00 - 12:30 pm**Search I***Posters* (546-561) Sunday, May 7, 8:00 - 11:00 am**Search II***Posters* (626-638) Sunday, May 7, 12:00 - 3:00 pm**Shape and Depth from Motion***Posters* (475-481) Saturday, May 6, 4:15 - 7:15 pm**Spatial Interactions and Crowding***Talks* (910-915) Tuesday, May 9, 11:00 - 12:30 pm**Spatial Vision I***Talks* (219-223) Saturday, May 6, 4:15 - 5:30 pm**Spatial Vision II***Talks* (1084, 483-487) Sunday, May 7, 8:00 - 9:30 am**Spatial Vision: Adaptation and Illusions***Posters* (1006-1012) Tuesday, May 9, 8:00 - 11:00 am**Spatial Vision: Context and Space***Posters* (1075-1087) Tuesday, May 9, 12:00 - 3:00 pm**Spatial Vision: Mechanisms and Texture***Posters* (295-314) Saturday, May 6, 8:00 - 11:00 am**Spatial Vision: Natural Image Statistics***Posters* (665-677) Sunday, May 7, 12:00 - 3:00 pm**Stereopsis***Posters* (751-763) Sunday, May 7, 4:15 - 7:15 pm**Surfaces and Shape***Posters* (357-375) Saturday, May 6, 12:00 - 3:00 pm**Synesthesia***Posters* (1185-1187) Tuesday, May 9, 4:30 - 7:30 pm**Temporal Processing***Talks* (224-228) Saturday, May 6, 4:15 - 5:30 pm**Temporal Processing***Posters* (1111-1121) Tuesday, May 9, 4:30 - 7:30 pm**Visual Development***Posters* (391-400) Saturday, May 6, 12:00 - 3:00 pm**Visual Evoked Potentials***Posters* (530-533) Sunday, May 7, 8:00 - 11:00 am**Visual Memory***Talks* (1200-1205) Wednesday, May 10, 8:00 - 9:30 am**Visual Representations in Memory***Posters* (1088-1098) Tuesday, May 9, 12:00 - 3:00 pm**Working Memory***Posters* (125-142) Friday, May 5, 5:30 - 8:30 pm**Working Memory II***Posters* (464-474, 236) Saturday, May 6, 4:15 - 7:15 pm

Author Index

Entries are indexed by abstract number, not page number; **bold** entries indicate first author abstracts.

A

Abbey, CK - **220**, 261, 941
 ABDI, H - 111
 Abdi, H - 112
 Abe, S - 149
 Adam, JJ - 1042
 Adams, RJ - **400**
 Adelson, EH - 205, **206**
 Adler, SA - 432, **545**, 557
 Afraz, S - 631, **989**
 Aghdaee, SM - **1051**
 Agran, J - 1049
 Aguirre, GK - 647, 775
 Aguirre, RC - **827**
 Ahlfors, SP - 535
 Ahn, J - **141**
 Aizawa, K - 679
 Alais, D - 227, **275**
 Alais, DM - 962
 Alam, N - 996
 Albert, MK - **822**
 Albright, TD - 225, 511, 1209
 Aldcroft, A - 645
 Ales, J - 532, 533, **1206**
 Allard, R - 301, **483**
 Allen, HA - **550**
 Allen, JJ - 201
 Allison, RS - 733, 936
 Alvarez, G - 137, 928
 Alvarez, GA - 624, **1050**
 Amano, K - **173**, 1196
 Amante, K - 142
 Amazeen, E - 180
 Ambinder, MS - 157, **696**, 1049, 1128
 Amiaz, R - 1084
 Amis, E - 461
 Amos, BS - 876
 Andersen, GJ - 438, 565, 744, 840
 Andersen, RA - 215
 Andersen, TS - **276**
 Anderson, B - **169**, 724
 Anderson, BL - **497**
 Anderson, L - 844
 Anderson, ND - **381**, 389, 983
 Anderson, S - 1074

Andresen, DR - **417**
 Andrews, TJ - **923**, 963
 Angelaki, DE - 513, 514
 Angelone, BL - **142**, 944
 Anker, S - 486
 Appelbaum, G - **580**
 Appelbaum, LG - 695
 Ardit, A - 174
 Arguin, M - 1099
 Ariga, A - **1129**
 Arita, JT - **891**
 Arman, AC - **910**
 Armstrong, KM - **856**
 Armstrong, VL - **395**
 Arnold, D - 173, 489
 Arnott, SR - **765**
 Artemenkov, SL - **737**
 Arya, A - 1167
 Ashida, H - 217, 657, **1151**
 Ashurova, A - 308, 309
 Assad, JA - 214, 855
 Atkinson, J - **486**, 531
 AUBRY, JP - 810
 Augustyn, JS - 1014
 Avidan, G - 192
 Awh, E - 269, **1130**
 Ayyad, J - 111

B

Backus, BT - 361, **801**, 820, 1120
 Badcock, DR - 1196
 Badler, J - 800
 Baek, J - **1088**
 Bahrami, B - **1152**
 Bakdash, JZ - **1014**
 Baker, CL - **313**, 674
 Baker, DH - **927**
 Baker, TJ - **432**, 545
 Balas, B - **423**
 Balasubramanian, V - 801
 Baldauf, D - **1054**
 Baldi, P - 315
 Baldwin, MK - **401**
 Balk, SA - **979**
 Ball, CK - **1061**
 Ballard, D - 595
 Ballard, DH - **455**, 994

Banaji, MR - 384
 Bandettini, P - 778
 Banks, M - 492
 Banks, MS - 292, 368, **370**, 516, 518, 934, 1037
 Bar, M - 919
 Barenholtz, E - **713**, 862
 Barnes, GR - 596
 Barnes, JL - **888**
 Barnes, LE - 179
 Barnes, WH - 168
 Baron, J - **302**
 Barraza, JF - **664**, 827, 1157
 Barrett, SE - **984**
 Barth, H - 887
 Barth, HC - **886**
 Barton, JJ - 792, **1171**
 Batson, MA - **286**
 Battelli, L - **928**
 Battista, J - 1007
 Baugh, LA - 237
 Baumann, O - 604
 Bavelier, D - 1048, 1116
 Bayerl, P - **619**, 1181
 Beardsley, SA - 739
 Beattie, LL - **347**
 Bebis, G - 633
 Beck, CE - 756
 Beck, MR - 142, **944**, 1218
 Becker, ES - 474
 Becker, MW - 948, 1169, **1170**
 Becker, S - 562
 Beckmann, L - 886, **887**
 Bedell, HE - 682, 748, 758, 760, 973
 Beer, AL - **277**, 286
 Beer, RD - **522**
 Behrmann, M - 192, 407, 894
 Beier, JS - **1066**
 Belkin, M - 865
 Bendiksbj, MS - **852**
 Bennett, DJ - **418**
 Bennett, PJ - **210**, 219, 258, 300, 380, 430, 772, 1165
 Ben-Shachar, M - 639
 Ben-Shahar, O - **871**
 Bensonoff, D - 563
 Bentin, S - 536, 729

Berg, DJ - **315**
 Bergman, CB - **1107**
 Bernard, M - 170
 Bernard, MR - **171**, 172
 Berryhill, ME - **102**
 Betts, LR - 772, **1165**
 Beuger, B - 1063
 Bian, Z - **840**
 Biederman, I - 425, 579, 646, 728
 Billino, J - **743**
 Bingham, GP - 971
 Binsted, G - **1046**
 Birtles, D - 531
 Bittner, JL - 787
 Blaha, LM - **783**
 Blais, C - 377, **1099**
 Blake, R - 145, 147, 804, 806, 956, 1185
 Blakeslee, B - 813
 Blanco, MC - 888
 Blanding, TB - 846
 Blanke, O - 766
 Blanz, V - 985
 Blaser, E - 138, 396, **848**
 Blaser, EL - 688
 Blohm, G - 605, **842**, 1024
 Bloj, M - **350**, 496
 Bluett, P - 476
 Bocheva, N - **454**
 Bodis-Wollner, I - 609
 Bodurka, J - 778
 Boehnke, S - 315
 Boi, M - **348**, 658
 Boltianski, J - **820**
 Bonato, F - **488**
 Bonds, A - 170
 Bonds, AB - 171, 172
 Bonne, YS - **143**
 Boot, WR - **1049**
 Boots, B - 462
 Born, RT - 104, 1003
 Borra, T - **117**
 Borrmann, K - **388**
 Boshyan, J - 919
 Bostic, M - **349**
 Bosworth, R - **391**
 Bouvier, SE - **857**, 858



Bouzit, S - **843**, 939
 Bovik, AC - 555, 556, 601
 Bower, JD - **744**
 Bowman, H - 134, 1125
 Boyaci, H - **814**
 Boynton, G - 707
 Boynton, GM - 269, 706, 1052
 Bracewell, M - 920
 Braddick, OJ - 486, **531**
 Bradley, E - 727
 Bradnam, MS - 392
 Brady, DK - **697**
 Brady, MJ - **671**
 Brady, TF - **1191**
 Brainard, DH - 647, 817
 Brannon, EM - 290, 798, 885
 Brascamp, JW - **952**
 Brauer, AL - **316**
 Braun, DI - **103**, 1115
 Braunstein, ML - 526, 565
 Bravo, MJ - **917**
 Breitmeyer, B - **317**
 Breitmeyer, BG - 226
 Bremmer, F - 185, 511, 743
 Brenner, E - **340**, 495, 501
 Bressler, D - 211, **788**
 Brewer, AA - 639
 Bridgeman, B - **972**
 Brockmeier, W - 330
 Bronstad, P - **1182**
 Brooks, DI - **720**
 Brooks, JO - 756
 Brosseau-Lachaine, O - **745**
 Brown, AM - 356
 Brown, JM - 699
 Brown, LE - **967**
 Brucker, AS - 835
 Bruggeman, H - 240, **241**
 Bruno, A - **1008**
 Bruno, N - **457**
 Bryan, R - 190
 Bub, D - 543
 Bubka, A - 488
 Buckthought, A - 148, **953**
 Buelthoff, HH - 419, 515
 Bukach, CM - **767**
 Bulakowski, PF - **656**
 Bull, DR - 564
 Bullock, D - 1015
 Bülthoff, HH - 627
 Bülthoff, I - **110**
 Burani, C - 1107
 Burge, J - **1037**
 Burgess, AE - **676**
 Burke, MR - **596**
 Burmester, A - **160**
 Burr, D - 186
 Burr, DC - **492**
 Busey, T - 777
 Busey, TA - 774
 Butcher, SJ - **1193**
 Byrne, P - 562

C

Caclin, A - 216
 Caddigan, E - 157
 Cai, RH - **663**
 Calabro, FJ - **731**, 739
 Caldara, R - **776**
 Calow, D - 209
 Calvert, J - **392**
 Cameron, EL - **1076**
 Campos, JL - 251, **835**
 Canagarajah, CN - 564
 Canga, EF - 564
 Cant, JS - 568, **719**
 Cantlon, JF - **885**
 Canto Pereira, LH - **698**
 Cantor, CR - **1114**
 Cao, D - **1111**
 Caplovitz, GP - **662**, 685
 Carandini, M - 914
 Carbon, CC - **538**, 764
 Cardinal, KS - 857
 Cardoso-Leite, P - 458
 Carey, S - 718, 1066, 1072
 Carlson, T - **137**, 928
 Carmel, D - **402**
 Carmi, R - **598**
 Carney, T - **532**, 533, 1206
 Carrasco, M - 328, 329, 625, 710, 711, 897, 1055, **1212**
 Carriere, JS - **1186**
 Carson, AR - 401
 Carter, O - **144**
 Casagrande, VA - 170
 Casco, C - **689**
 Caserta, G - 700
 Casile, A - 899
 Caspi, A - **593**
 Cass, JR - **227**
 Castro, L - 860
 Cate, AD - **730**
 Caudek, C - 446, 447, 448
 Cavallet, M - 324, 700, 705
 Cavanagh, P - 416, 687, **924**, 989, 1050, 1051, 1112, 1216
 Cavina Pratesi, C - 1047
 Chai, Y - **751**
 Chajka, K - **586**
 Chakravarthi, R - **1216**
 Chambers, CD - 608
 Champion, RA - **1153**
 Chan, AW - **771**
 Chan, CC - 236
 Chan, GS - **562**, 577
 Chang, DH - 485
 Chang, EC - **968**
 Chao, C - 809
 Chat, SW - 890
 Chatterjee, A - 468
 Chatterjee, S - **165**
 Chatziastros, A - **627**
 Chaudhuri, A - 388, 766, 988
 Chaumon, M - **945**

Chen, C - 357, **867**
 Chen, D - 465
 Chen, G - 1001
 Chen, K - **357**
 Chen, L - 438
 Chen, T - 746
 Chen, X - 170, **552**, **1117**
 Chen, Z - **236**
 Cheng, W - **809**
 Cheries, EW - **403**
 Cheung, OS - **544**
 Cheung, S - **913**, 1109
 Chhabra, M - **1025**
 Chitrakaran, VK - 846
 Chiu, G - 1043
 Chiu, T - 102
 Choi, H - **404**
 Chomiak, LB - 984
 Chong, SC - **145**, 806
 Chong, T - **505**
 Choo, H - **1126**
 Chou, W - **233**
 Christensen, J - 1183
 Christensen, JC - **426**
 Chu, S - **408**
 Chu, W - **260**
 Chua, FK - **1127**
 Chuang, L - **419**
 Chubb, C - 163, **305**, 309
 Chubb, CF - 326
 Chun, MM - 232, 235, 908, 921, 1191, 1201, 1204
 Chung, ST - 910, **912**, 913, 1109
 Ciaramitaro, VM - **1052**
 Cisarik, PM - 682
 Clements, KA - 791
 Clifford, CW - 980, 1007
 Cobo-Lewis, A - 1154
 Cohen, EH - 869
 Cohen, JA - **240**
 Colcombe, SJ - 1049
 Collier, S - **1154**
 Colombo, EM - 827
 Comerford, J - **1011**
 Committeri, G - 642
 Connors, EM - 692
 Constantin, A - **1021**
 Conte, MM - **308**, 309
 Cooke, EA - **969**
 Cooper, C - 1000
 Corbeille, J - 905
 Corbett, JE - **1013**
 Cormack, LK - 555, 556, 601, 1069
 Corneille, O - 540
 Cornelissen, FW - **494**
 Cosman, JD - **859**
 Costello, P - 954
 Cottrell, GW - 594
 Coughlan, J - 587
 Courage, ML - 400
 Cowan, FM - 486
 Cox, AL - 630
 Craft, WD - 742

Crane, M - 680
 Craston, P - **1125**
 Crawford, J - 1019, 1020, 1021
 Crawford, JD - 597, 605, 842, 1016, 1024
 Creem-Regehr, SH - 525, 528, 833, 834
 Crewther, D - 678
 Crewther, DP - **1110**
 Crewther, S - **678**
 Crewther, SG - 1110
 Crognale, MA - 320, 520
 Culham, J - 645
 Culham, JC - 127, 502, 1044, 1047
 Cunningham, T - 693
 Cunningham, R - 505, 1123
 Curby, KM - **382**
 Curio, G - 764
 Curran, T - 723

D

Dahl, CD - **537**
 Dakhallallah, D - 530
 Dal Martello, MF - **109**, 1035
 Dale, A - 1023
 Dandekar, S - **533**, 1206
 Daniels, KK - 907
 Dannemiller, J - 1163
 Dannemiller, JL - 316, **434**
 D'Antona, AD - **342**
 D'Arripe, O - 780
 Das, SR - **1141**
 DaSilva, F - **180**, 379
 Dassonville, P - **581**, 1022
 Dastjerdi, MS - **673**
 Datta, R - **620**
 Davidenko, N - **1180**
 Davies, IR - 178
 Davis, ET - **274**, 634
 D'Avossa, G - 186
 Dawson, JD - 1074
 de Gelder, B - 535, 1175, 1176
 de Grave, DD - 584
 de Montalembert, M - 365
 Dean, H - 850
 Dean, M - 1034
 Deaner, RO - **383**, 851
 DeAngelis, GC - **513**, 514
 Dehaene, S - 120
 Deichmann, R - 964
 Del Viva, MM - 669, **691**
 Delipetkos, E - 1115
 Deller, M - **1053**
 DeLong, JE - 774
 Démonet, J - 568
 Denney, HI - **699**
 Desbordes, G - 208
 DeSouza, JF - **1024**
 Detweiler-Bedell, B - 1169, 1170
 Deubel, H - 1054
 Devisme, C - **763**
 DeYoe, EA - 620



Dhaliwal, H - 1130
 Di Luca, M - **446**
 Di Russo, F - **1207**
 Diaz, GJ - **243**
 Dickinson, CA - **563**
 Dilda, V - **525**
 Dillenburg, B - **436**, 437
 Dinca, A - 522
 Ding, J - **621**, 938
 Dionne, JK - **460**
 Dixon, MJ - 1186
 Dixon, TD - **564**
 Dobbins, AC - **651**
 Dobkins, K - 391
 Dobkins, KR - 409, **746**
 Dodd, MD - **652**
 Doerschner, K - **819**
 Doi, T - **762**, 1073
 Domini, F - 446, **447**, 448
 Donahoe, C - 1106
 Dong, DW - 673
 Doshier, B - 193
 Doshier, BA - 260, 267, 1209
 Doshier, BM - 296
 Dougherty, RF - 639
 Douglas, R - 996
 Doumen, MJ - **836**
 Downing, PE - 771, 1140
 Doyle, M - 873
 Drew, T - **878**
 Drewes, J - **667**
 Driver, J - 369, 603, 611
 Drobe, B - 763
 Droll, J - 586
 Droll, JA - **941**, 943, 1094
 Drouet, V - 945
 Droulez, J - 763
 Drover, JR - 400
 Duchaine, B - **539**, **768**
 Duchowski, AT - 979
 Duke, PA - 1160
 Dumoulin, S - 648
 Dumoulin, SO - 313, **639**
 Dunham, YC - **384**
 Durand, J - **358**
 Durgin, FH - **681**
 Dürsteler, MR - **653**
 Dutton, GN - 392
 Dux, PE - **1138**
 Dyar, TA - 976
 Dyde, RT - **287**, 839

E

Earle, A - 400
 Eastwood, JD - 629
 Ebisch, B - **168**
 Eckstein, M - 259
 Eckstein, MP - 220, **261**, 560, 941
 Edelman, J - 408, 588
 Edelman, JA - 607, 628
 Edelman, S - 570
 Edsall, P - 331

Edwards, AD - 486
 Edwards, M - **680**, 1155, 1196
 Egenolf, Y - 168
 Egeth, H - 398, 889
 Egeth, HE - 882
 Eidels, A - **632**
 Ein-Dor, T - 593
 Ekstrom, L - 1023
 Elder, JH - **221**
 Elliott, SL - **1010**
 Eng, H - 950
 Eng, HY - **465**
 Engel, SA - 265, 857, 858
 Engell, AD - **191**
 Enns, JT - 410, 472, 652, 1013, 1167
 Epshtein, B - 729
 Epstein, RA - **909**
 Era, A - 826
 Ericson, J - **1012**
 Erkelens, CJ - **529**, 957
 Ernst, M - 285
 Ernst, MO - 283, **1031**, 1037
 Essock, EA - 1075
 Ethier-Majcher, C - 1099
 Evans, KK - **493**
 Ewing, L - 387
 Ezzyat, Y - **139**

F

Faasse, J - 816
 Fabiani, M - 470, 1049
 Fabre-Thorpe, M - **189**
 Fajen, BR - 243, **244**
 Falkner, AL - 195, **797**
 Fang, F - 814, **987**
 Fantoni, C - 203, 440, **752**
 Farell, B - 450, 751
 Farid, H - 917
 Farivar, R - **766**
 Fattori, P - 502, 642
 Faubert, J - 301, 483, 745, 1085
 Fazl, A - **420**
 Feeney, JA - **409**
 Fehd, HM - **319**
 Fei-Fei, L - 415
 Feldman, J - **124**
 Fencsik, D - 194
 Fencsik, DE - 895, **896**
 Feng, C - **925**
 Fenske, MJ - 1061
 Fera, CS - **873**
 Fernandez, JM - **450**
 Ferneyhough, E - **146**
 Ferrera, J - 530
 Ferwerda, JA - **174**
 Filimon, F - **1087**
 Filippini, HR - **934**
 Fine, EM - 194, **599**
 Fine, I - 337
 Finkel, LH - 1141
 Finlay, C - 573
 Fischer, MH - 1042

Fiset, D - **377**, 1099
 Fitzgerald, P - 678
 FitzGibbon, EJ - 184
 Flombaum, JI - **872**, 921, 1096
 Florer, F - 1104
 Florer, FL - **1100**
 Flusberg, SJ - **547**, 895, 896, 1202
 Fogt, N - 107
 Forget, R - 745
 Forristal, N - 905
 Fox, CJ - **792**
 Franchak, J - 1139
 Franchak, JM - **965**
 Francis, G - 708, 1006, 1012
 Franconeri, SL - **1214**
 Frank, G - 604
 Frankl, ML - 466
 Franz, VH - 501
 Freedman, DJ - **214**
 Freeman, E - 915
 Freeman, ED - **369**
 Freeman, J - 681
 Freeman, TC - 181, **182**
 Freeman, WT - 206
 Fridman, G - 996
 Friedenber, J - **121**
 Frischen, A - 629
 Frissen, I - **285**
 Fujimoto, K - **1148**
 Fujita, I - 755, 762, 1002, 1073
 Fuller, S - 329, **897**
 Fulvio, JM - **204**
 Furtado, N - 388

G

Gabari, Y - 1190
 Gagnon, I - 745
 Galati, G - 642
 Galera, C - 324, **700**, 705
 Gallego, PK - **557**
 Galletti, C - 502, 642
 Galuske, RA - 168, **508**
 Gamlin, PD - 732
 Ganel, T - **127**, 504, 1045
 Gangi, M - 167
 Garcia, JO - 900, **1146**
 Garcia, P - 330
 Garcia, PV - 179, 807
 Gardner, JS - **582**
 Garland, E - 1011
 Garrido, L - 768
 Garrigan, P - 801
 Gaspar, CM - **380**
 Gauchou, HL - **473**
 Gaudino, B - 459
 Gauthier, H - 1083
 Gauthier, I - 382, 544, 715, **790**, 918, 1178
 Gayzur, ND - **638**
 Gee, B - **558**
 Gegenfurtner, KR - 103, 183, 196, 667, 743, **1115**
 Geisler, W - 1161
 Geisler, WS - 207, **442**, 665, 666
 Geminiani, G - 1175
 Geng, JJ - **603**
 George, JS - **1211**
 Georgescu, A - 1046
 Georgeson, MA - **295**, 362
 Gepshtein, S - **684**
 Gerardin, P - **365**
 Gerbino, W - 176, **203**, 440, 752
 Gerhard, HE - **353**
 Gerhardstein, P - 433
 Gerhardstein, PC - 432
 Germann, J - 766
 Gerrie, M - 234
 Gerritsen, CC - 629
 Gersch, TM - **193**
 Gheorghiu, E - **444**, 445
 Ghorashi, SM - **410**
 Ghose, T - 200
 Gibb, K - 905
 Giesbrecht, B - **1124**, 1136
 Giese, M - 899, **901**
 Giese, MA - 1150
 Gigone, KM - **943**
 Gilchrist, A - 816
 Gilchrist, AL - **498**
 Gilchrist, ID - 561, 949
 Gillespie, S - **565**
 Gilman, S - 278
 Gilmore, CK - **1067**
 Gilmore, RO - 242, **1018**
 Gilroy, L - 804
 Gilson, SJ - 847
 Gingras, G - **288**
 Giora, E - 689, 1121
 Giordano, AM - **1055**
 Giovannini, L - 457
 Girshick, AR - 370, **516**
 Giudice, NA - 245, **282**
 Glennerster, A - **847**
 Gobbini, MI - 190, 191
 Gobell, J - 329
 Goebel, R - 534
 Goffaux, V - **376**
 Goldberg, ME - 195, 797
 Golomb, JD - **235**
 Gonzalez, CL - 127, **504**, 1045
 Gonzalez-Alvarez, C - **1039**
 Goodale, MA - 127, 502, 504, 568, 719, 730, 765, 967, 968, 1044, 1045
 Goodman, D - 1047
 Goolsby, BA - **1062**
 Gopnik, A - 153
 Gordon, RD - **466**
 Gorea, A - **458**
 Gori, M - 691
 Gori, S - **824**
 Gorlin, S - **566**
 Gorsche, R - 330
 Goryo, K - 149
 Gosselin, F - 377, 720, 1099



Goutcher, R - **654**
 Govenlock, SW - **300**
 Gowrisankaran, S - 177
 Grabowecy, M - 641, **1056**
 Grace, AD - **120**
 Graf, M - **899**
 Graham, NV - **802**
 Granrud, CE - 841
 Granzier, JJ - 340, **495**
 Gratton, G - 470, 1049
 Gray, AL - 984
 Gray, R - **740**
 Gray, WD - 1189
 Gredebäck, G - **1017**
 Green, C - **1048**
 Greenberg, AS - **701**
 Greenberg, RJ - 463
 Greene, MR - **567**, 569, 571
 Greenlee, MW - **604**
 Greenwald, HS - **935**
 Greenwell, F - **1060**
 Greenwood, JA - **1155**
 Gribble, PL - 967
 Grieco, A - 689
 Griffin, L - 815
 Grill-Spector, K - 716
 Grill-Spector, KO - 417
 Grittner, J - 841
 Grossberg, S - 359, 420, 992, 993, 1015
 Grossman, ED - 900, 1146
 Grueter, M - 538, 764
 Grueter, T - 538, 764
 Grzywacz, N - 165
 Grzywacz, NM - 271, 664
 Gu, L - **437**
 Gu, Y - 513, **514**
 Gulla, P - 320
 Gupta, A - 398
 Gur, M - 212
 Gurnsey, R - 299, 312, **476**
 Guyader, N - 589

H

Habak, C - **389**
 Hadjikhani, N - 535
 Haijiang, Q - 801, **1120**
 Hailston, K - **634**
 Hailston, KW - 274
 Haladjian, HH - **880**
 Hall, AJ - 622
 Hämäläinen, MS - 535
 Hamburger, K - **584**
 Hamilton, R - 392
 Hamker, FH - **209**
 Hammett, ST - 1153
 Han, SW - **230**
 Han, Y - 695
 Hancock, S - **963**
 Handy, TC - 1013
 Hansen, BC - 314, **670**, 1075
 Hanson, AJ - 971

Harasawa, M - **679**
 Hardy, JL - 1010
 Hare, L - 331
 Harel, A - **729**
 Harley, EM - **858**
 Harris, A - **187**
 Harris, I - 918
 Harris, IM - **429**
 Harris, JM - 736
 Harris, LR - 287, 289, **839**
 Harrison, M - 169
 Harrison, MC - 249
 Harrison, S - 131
 Hartmann, TS - **511**
 Hasegawa, H - 439
 Hashimoto, T - 254
 Hasler, F - 144
 Hauf, P - 1017, **1068**
 Haun, AM - **1075**
 Haxby, JV - **190**, 191
 Hayden, B - **850**
 Hayes, A - 690, 738
 Hayes, AE - **1063**
 Hayes, J - 1102
 Hayhoe, M - 585, 586, 595, 1200
 Hayhoe, MM - 456, 943, 1094
 Haynes, J - **964**
 Haynes, JD - 611
 Hayward, WG - 421, **918**, 991, 1137
 Hayworth, K - 646
 Hayworth, KJ - **728**
 He, S - **770**, 925, 954, 987, 1117
 He, ZJ - 527, 838, 958, 960
 Heath, M - **1026**, 1028
 Hecht, LN - **702**, 859
 Heckman, GM - **265**, 858
 Heeger, DJ - 803, 1203, 1208
 Hefter, R - 1171
 Hegdé, J - **785**
 Heinen, S - 602, **800**
 Heinze, H - 609
 Helbig, HB - **283**
 Heller, LM - **278**
 Helman, E - 278
 Hemond, CC - **781**
 Henning, GB - 298
 Henriksson, L - 675
 Henriques, DY - 460, 1038
 Herniques, DY - 1040
 Herrington, TM - **855**
 Hertle, RW - 101
 Hess, R - 648, 649
 Hess, RF - **314**, 333, 443, 670
 Hesse, G - 362
 Heveran, CM - **1169**
 Heywood, CA - 568, 765
 Hibbard, PB - 843, **939**, 1041
 Hibino, H - 789
 Hickok, A - 948
 Hidalgo-Sotelo, B - 546, **942**
 Higgins, JS - 909
 Highhill, DS - 984
 Highsmith, JR - **320**

Hilger, JD - **440**
 Hillis, JM - **817**
 Hillstrom, AP - 325
 Hillyard, SA - 1207
 Hinga, B - 391
 Hirano, Y - 334
 Hirasaki, E - 1073
 Hiris, EJ - **1142**
 Hirsch, J - 530
 Hirschberger, G - 593
 Ho, Y - **366**
 Hock, HS - **749**
 Hodges, L - 274
 Hodsoll, J - 551
 Hoenig, P - 273
 Hoffman, DD - 900
 Hoffman, KL - 537
 Hoffmann, MB - **650**
 Holcombe, A - **1112**
 Holcombe, AO - 892, 924
 Hole, GJ - 779
 Holland, O - 561
 Hollingworth, A - **126**, 591, 1093
 Holloway, SR - 263, **266**, 1106
 Holmes, DJ - 304
 Honda, S - 167
 HONG, SW - **922**
 Honma, M - **1174**
 Hood, DC - 530
 Hooge, IT - 117
 Horowitz, TS - **194**, 548, 549, 874, 895, 896, 907, 1202
 Horwitz, GD - 225
 Hosokawa, K - **475**
 Hottenroth, P - 307
 Hou, C - 1018
 Howard, C - **892**
 Howard, IP - 733
 Howe, P - **812**
 Hsieh, P - **343**
 Hsu, A - **612**, 613
 Huang, L - **1213**
 Huang, P - **333**
 Huang, X - 268
 Huber, JW - **178**
 Hudson, TE - **1032**, 1033
 Hughes, HC - 102
 Huh, E - 281
 Huk, A - 681
 Humphreys, GW - 550, **551**, 616, 920
 Hunter, CM - **570**
 Hunter, JN - **1003**
 Hurlbert, A - 496
 Hurlbert, AC - **351**, 354
 Husk, JS - **772**
 Hussain, Z - **258**
 Hutchison, JJ - **966**
 Hwang, PC - 339
 Hyun, J - **1093**

I

Ichikawa, M - **451**
 Ijichi, K - 987
 Ikkai, A - 135
 Imamura, K - 507
 Imura, T - **481**
 Inagaki, M - 1073
 Inati, S - 1208
 Ing, AD - **207**, 665
 Innocenti, GM - 1004
 Interrante, V - **844**
 Intraub, H - 563, **907**, 908
 Intriligator, J - **378**, 1060
 Ioannides, A - **815**
 Iordanescu, L - 1056
 Iovin, R - 208
 Ishii, M - **761**
 Ishikane, H - **167**
 Ishikawa, A - 998, **999**
 Ishimatsu, K - **1086**
 Isogaya, Y - **385**
 Isola, PJ - **1089**
 Issolio, LA - 1157
 Ito, T - 679
 Itti, L - 315, 559, 598, 618, 893
 Ivan, L - 705
 Ivanchenko, VV - **519**
 Izard, V - 120

J

Jackson, MC - **467**
 Jackson, RE - **1069**
 Jacobs, A - 996
 Jacobs, RA - 519, 786
 Jacomuzzi, A - 457
 Jacques, C - **773**, 780
 Jain, A - 352
 Jakobson, LS - 130, 237
 James, A - 675
 James, KH - **970**
 James, TW - **281**
 Jaquet, E - **991**
 Jefferies, LN - 410, **1167**
 Jeffery, L - **777**
 Jehee, JF - **994**
 Jenkin, HL - 287, **289**
 Jenkin, MR - 287, 839
 Jensen, G - 122
 Jeon, S - **296**
 Jeong, SK - 141
 Jermakowicz, WJ - **170**
 Jeter, PE - **267**
 Jiang, F - 111, 984, **985**
 Jiang, X - **727**
 Jiang, Y - 128, 136, 465, 624, 770, 925, 950, 951, **954**
 Jin, Z - 590, 933
 Jingling, L - **868**
 Johnson, AP - **674**
 Johnson, JS - **129**
 Johnson, M - 1053
 Johnson, SP - **431**, 916



Johnston, A - 173, 489, 1008
 Johnston, AJ - 815
 Johnston, S - 1131, **1132**
 Jolij, J - **615**
 Jones, DG - 485
 Jordan, KE - **290**
 Jovancevic, J - **585**
 Jovanovica, M - 452
 Joyce, L - 478
 Joyce, LB - **479**
 Judy, JW - 463
 Jung, K - 192
 Junge, JA - 1191, **1201**

K

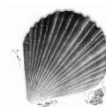
Kaas, JH - 997
 Kafaligonul, H - 226
 Kafaligonul, HH - **748**
 Kaiser, MD - **793**
 Kaldy, Z - **396**
 Kalia, A - **245**
 Kallie, CS - 154
 Kaltreider, J - 378, 1095
 Kaminiaz, A - **185**
 Kamitani, Y - 931
 Kamphuisen, AP - 957
 Kanai, R - 150, 490, 686, **805**
 Kanazawa, S - 114, 394, 481, **747**,
 750
 Kane, M - 234
 Kang, M - **147**, 930
 Kanwisher, NG - 781
 Kaping, D - **906**
 Kappers, AM - 836
 Kapusta, MA - 1085
 Kasamatsu, T - **507**
 Kaskan, P - 1001
 Kaskan, PM - **997**
 Kawabe, T - 659
 Kawahara, J - 1119, **1133**, 1190
 Kawahara, T - 346
 Kawamura, M - 789
 Kawasaki, K - 724, **726**
 Kawasaki, M - **1205**
 Kawato, M - 270
 Keane, BP - **441**
 Kee, DE - 807
 Keith, GP - **605**, 1024
 Keller, EL - 592
 Kellman, PJ - 439, 440, 441
 Kempgens, C - **164**
 Kennedy, GJ - **123**
 Kentridge, RW - 568, 765
 Kersten, D - 785
 Kersten, DJ - 814
 Kerzel, D - 196
 Khalil, S - **371**
 Khan, AZ - **1016**
 Khaytin, I - 170
 Khuu, SK - 690, **738**
 Kibbe, M - 396
 Kida, H - 998, 999

Kies, S - **163**
 Kikuchi, S - 334
 Kilgour, AR - 281
 Kim, BW - 1023
 Kim, C - **1185**
 Kim, D - 643
 Kim, H - **231**
 Kim, J - **148**, 953
 Kim, JJ - **232**
 Kim, K - 229, **946**
 Kim, M - 141, **229**, 230, 231, 232,
 318, 946, 1088, 1126
 Kim, RS - **256**
 Kim, YJ - **641**
 Kimchi, R - 407
 Kimura, E - **149**
 Kingdom, F - 444
 Kingdom, FA - 313, **445**, 578, 674
 Kingstone, A - 472
 Kinzler, KD - 390
 Kiper, D - 995
 Kiper, DC - 714
 Kirchner, H - **583**
 Kis, A - **606**
 Kitada, R - 281
 Kitaoka, A - 657
 Kitazaki, M - **254**
 Klaiman, C - 790
 Klatzky, RL - 284
 Klauke, S - 335
 Klein, JT - **851**
 Klein, S - 533
 Klein, SA - **223**, 532, 1108, 1206
 Kleinhoddermann, UJ - **501**
 Knapen, T - **150**, 754
 Knight, R - 561
 Knill, DC - **517**, 935, 1025
 Knutsen, T - 1023
 Ko, PC - **1192**
 Kobayashi, D - 412
 Kobylarz, EJ - 308
 Koç, A - 317
 Koch, C - 411, 415, 706, 804, **932**
 Koch, L - 1170
 Koenderink, JJ - 363, **364**, 836
 Koene, A - **489**
 Koenenman, J - 180
 Kogure, M - 712
 Köhler, S - 127
 Kohler, S - 730
 Koldewyn, K - 656
 Konkle, T - 569, **571**
 Kontsevich, LL - 453
 Kowler, E - 193
 Koyama, S - **789**
 Kozhevnikov, M - 573, 902
 Kramer, AF - 1049
 Kramer, ML - **303**
 Kravitz, D - **894**
 Krekelberg, B - 185, 511
 Kriegeskorte, N - **778**
 Krigolson, O - 1026
 Krishna, BS - **195**, 797

Kroliczak, G - 502, **1047**
 Kuai, S - 1108
 Kubovy, M - 684, **866**
 Kuchinad, A - 645
 Kuhl, SA - **834**
 Kuhlmann, L - **359**
 Kumada, T - 1086, 1133
 Kumakura, H - 1073
 Kumano, H - **1002**
 Kumar, G - **600**
 Kumar, M - **890**
 Kunar, MA - 546, **1202**
 Kunz, B - **528**
 kurian, j - **1104**
 Kurosawa, K - 262
 Kuyk, T - **330**
 Kveraga, K - **919**
 Kwon, M - **1105**
 Kwon, O - **1043**

L

Labar, DR - 308
 LaBouff, C - 1134
 Lages, M - **735**
 Lai, AC - **721**
 Lakusta, L - **1065**
 Lam, H - **1091**
 Lam, JM - 515
 LaMendola, NP - 213
 Lamme, VA - 405, 615, 1097
 Lampkin, J - 1100, 1104
 Lanagan, LK - 158
 Landau, AN - **1134**
 Landau, B - 398, 1065
 Landy, MS - 222, 366, 803, 1030,
 1032, 1033
 Langeslag, SJ - 467
 Langley, LK - 638
 Langlois, JH - 1182
 Lappe, M - 209
 Lappin, JS - **1197**
 Large, M - **645**, 719
 Larsson, J - 803
 Latham, P - 996
 Latinus, M - **291**
 Lavie, N - 402, 1152
 Lawrence, EC - 1100, 1104
 Laycock, R - 678
 Lazareva, OF - 162, 435, 720, **860**
 Lazarewicz, MT - 1141
 Le Grand, R - 793
 Leber, AB - **1190**
 Leder, H - 538
 Lederman, SJ - 281
 Lee, B - **215**
 Lee, H - **140**
 Lee, K - 592
 Lee, SA - **255**
 Lee, TC - 738
 Lee, TS - 937
 Lee, Y - 1049
 Leek, CE - 717
 Legault, I - **301**
 Legge, G - 1105
 Legge, GE - 245, 913, 1109
 Leh, SE - **156**
 Leibov, L - 476
 Leonard, C - 889
 Leonard, CJ - **882**
 Lescroart, MD - **646**
 Lesmes, LA - **1209**
 Levi, A - 1084
 Levi, DM - 273, 875, 890, 912, **1215**
 Levin, DT - 239, 944
 Levine, MW - **1009**, 1078
 Levitan, CA - 292, **518**
 Lewis, TL - 395, **485**
 Li, A - **360**
 Li, HO - 864, **977**
 Li, L - 1079
 Li, R - **1116**
 Li, RW - **273**, 890, 912
 Li, W - 1079
 Li, X - **648**
 Li, Y - 205, 206, **372**, 933
 Libedinsky, C - **406**
 Liby, B - 121
 Lichtenstein, LT - 246
 Lien, TC - **682**
 Likova, LT - **732**
 Lin, L - **125**
 Lin, S - **703**
 Linde, Iv - 601
 Linden, D - 1131
 Linden, DE - 467
 Lindsey, DT - **356**
 Ling, S - **625**, 1212
 Ling, Y - 351, **354**
 Lingnau, A - 217, 1151
 Linkegauger, SA - 830
 Linkenauger, SA - **832**
 Liu, D - **1156**
 Liu, L - **1083**, 1108
 Liu, Q - 251, 577
 Liu, T - 625, **710**, 897
 Liu, Z - 218, **268**, 898
 Livingstone, M - 406, **794**, 795, 812
 Lleras, A - 472, 637, 978, **1128**
 Löffler, G - 123, 164, 654
 Logothetis, NK - 537
 Logvinenko, A - 347, 499
 logvinenko, ad - **344**
 Logvinenko, AD - 818
 Lomber, S - 1004
 Lomber, SG - 104, 168, **622**
 Long, AB - **849**
 Loomis, JM - 282, 966
 Lorenceau, J - **216**
 Lorenz, B - 650
 Loschky, LC - **905**
 Lovell, PG - **668**
 Low, K - 1049
 Lu, H - 268, **898**, 997, 1195
 Lu, HD - 510, **1001**
 Lu, J - **893**



Lu, Z - 260, 267, 296, 1209
 Luck, S - 464
 Luck, SJ - 162, 591, 1093, 1098
 Lueschow, A - 538, 764
 Lunger, KA - 581
 Lunsford, MA - 434
 Luo, G - 610
 Luppino, G - 644

M

Macé, MJ - 189
 Mack, ML - 715
 MacKeben, M - 890
 Mackenzie, KJ - 452
 Mackie, J - 1145
 Macknik, SL - 825, 976
 MacLean, EL - 290
 MacLeod, DI - 522, 524
 MacNeilage, PR - 292
 Macramalla, S - 972
 Maddess, T - 310
 Maertens, M - 202
 Mahajan, N - 888
 Makous, W - 1116
 Makovski, T - 136
 Malcolmson, KA - 1070
 Malhotra, S - 622
 Malloy, T - 122
 Maloney, LT - 109, 204, 353, 366,
 387, 819, 869, 1030, 1032, 1034,
 1035
 Mamassian, P - 276, 293, 365, 458,
 500, 1159
 Manahilov, V - 373, 392, 484
 Mandel, AJ - 246
 Mansfield, J - 933
 Mansouri, B - 648
 mansouri, B - 649
 Mardon, L - 226
 Marino, R - 315
 Marois, R - 131, 1138
 Marotta, JJ - 237
 Marron, MA - 623, 1057
 Martelli, M - 1103, 1107
 Martin, A - 1157
 Martin, EW - 1135
 Martinez, AM - 1183, 1184
 Martinez-Conde, S - 825, 976
 Martinez-Trujillo, J - 1019, 1021
 Martinsen, G - 330
 Martinsen, GL - 179, 807
 Maruya, K - 311, 385, 961
 Masakura, Y - 451
 Masson, GS - 105
 Masson, ME - 652
 Materna, AA - 142
 Mather, G - 655
 Matin, L - 1079
 Matsukura, M - 464
 Matsumiya, K - 106, 1198
 Matsuno, T - 808
 Matsuzaki, N - 1172
 Matthews, C - 950

Matthews, N - 262
 Mattingley, JB - 505, 608, 1123
 Maurer, D - 395, 485
 Ma-Wyatt, A - 1027, 1029
 May, KA - 443
 McAleer, P - 1144
 McAnany, JJ - 1009, 1078
 McAuliffe, J - 1053
 McBeath, M - 180, 371
 McCall, L - 719
 McCollough, A - 133
 McCormick, D - 293
 McCourt, ME - 813
 McCoy, AN - 849
 McCulloch, DL - 392
 McDaniel, E - 571
 McDermott, KC - 633
 McEntire, P - 428
 McKay, L - 1144, 1145
 McKean, D - 847
 McKee, SP - 306, 914
 McKeef, TJ - 1122
 McLin, LN - 179
 McNamara, TP - 1092
 McPeck, RM - 929
 Mednick, SC - 269
 Meeren, HK - 535
 Meese, TS - 304, 927
 Meigen, T - 307
 Mel, BW - 721
 Mellott, JG - 622
 Meng, M - 146, 572
 Meng, X - 477
 Mennie, N - 103, 586
 Merigan, W - 558
 Merikle, PM - 1186
 Merwine, D - 165
 Mevorach, C - 616
 Meyers, E - 199
 Michaelides, M - 224
 Michel, C - 540
 Michel, MM - 786
 Michna, ML - 341
 Midorikawa, A - 789
 Miles, FA - 184
 Mills, S - 531
 Min, S - 229, 318
 Mingolla, E - 359, 420
 Miniussi, C - 429
 Misaki, M - 471, 1077
 Mitchell, JF - 854, 879
 Mitchell, PK - 607
 Mitroff, SR - 153, 891
 Mitsudo, H - 374
 Miura, K - 659
 Miyahara, E - 339
 Miyauchi, S - 471, 1077
 Miyawaki, Y - 959
 Mizokami, Y - 332, 520, 986
 Mizushima, H - 480
 Mogi, K - 161
 Mohler, BJ - 833
 Monaco, S - 502

Monnier, P - 345
 Monot, A - 763
 Montagna, B - 328
 Montagnini, A - 105
 Montaser Kouhsari, L - 803
 Montemayor, C - 881
 Monteon, J - 1019
 Monteon, JA - 1020
 Moore, AT - 224
 Moore, CM - 158, 599
 Moore, KS - 468, 979
 Moore, T - 796, 856
 Moradi, F - 982
 Morales, DA - 238
 Morel, S - 216
 Morgan, MJ - 305, 1121
 Morgenstern, Y - 221
 Mori, Y - 1073
 Morita, T - 679
 Morris, AP - 608
 Morrissey, B - 504, 1045
 Morrone, M - 186
 Morrone, MC - 492
 Mortin, CL - 313
 Moschetta, MA - 876
 Motes, MA - 573
 Motoyoshi, I - 228
 Mou, W - 421
 Mounts, JR - 876
 Mozer, MC - 140
 Mruczek, RE - 724, 799
 Muentener, P - 1072
 Mulckhuysen, M - 405
 Mullen, KT - 156, 333, 336, 341
 Mulligan, JB - 633, 1194
 Munk, MM - 508
 Munoz, D - 315
 Munzner, TM - 1091
 Mur, M - 778
 Murakami, I - 657
 Murphy, KM - 485
 Murray, JE - 990
 Murray, RF - 367
 Murray, SO - 814
 Myers, CW - 1189

N

Nagai, T - 338
 Nagai, Y - 310
 Nagasaka, Y - 435
 Naito, S - 334
 Najemnik, J - 666
 Nakajima, Y - 311, 385, 1158
 Nakata, R - 115
 Nakato, E - 114
 Nakayama, K - 187, 198, 503, 768,
 903
 Namèche, C - 534
 Nandakumar, C - 566
 Nandy, AS - 911, 1210
 Nández Sr., JE - 263
 Nández, JE - 266, 1106

Nardini, M - 486
 Navalpakkam, V - 559
 Nawrot, ES - 397
 Nawrot, M - 397, 478, 479
 Nederhouser, M - 425
 Neely, K - 1028
 Nefs, HT - 736
 Neider, MB - 553
 Nelissen, K - 358, 644
 Nelson, JD - 594, 1087
 Ness, J - 331
 Nestor, A - 1177
 Neth, H - 1189
 Neumann, H - 619, 1181
 Nevarez, G - 157
 New, JJ - 704
 Newell, FN - 110
 Ng, JW - 1127
 Nguyen, J - 273
 Ni, R - 438, 744
 Nichols, DF - 749
 Niederhoefer, V - 138
 Nieman, DR - 660
 Niemeier, M - 413, 606
 Niese, AT - 1098
 Nieuwenstein, MR - 1217
 Niimi, R - 422
 Nikolov, SG - 564
 Nilsson, T - 132
 Nirenberg, S - 996
 Nishida, S - 1196
 Nishimura, A - 321
 Nishina, S - 270
 Noest, AJ - 152, 952
 Norcia, AM - 306, 580, 695, 1018
 Norman, HF - 742, 753
 Norman, JF - 358, 742, 753
 Novar, BJ - 179
 Novis, S - 1056
 Noyes, JM - 564
 Nuding, U - 672
 Nyquist, JB - 1197

O

Obata, A - 679
 O'Craven, KM - 772
 Offen, S - 1203
 Ogawa, H - 947
 OGMEN, H - 1081
 Ogmen, H - 226, 748
 Ödmen, H - 317
 Oh, S - 1149
 O'Kane, L - 1159
 Okuda, J - 1205
 O'Leary, S - 252
 Oliva, A - 567, 569, 571, 722, 942
 Olivers, CN - 626
 Oltman, CA - 1208
 Olson, I - 139
 Olson, IR - 468
 Olzak, LA - 297, 303
 Omlor, L - 901, 1150



O'Neil, C - 178
 Ono, F - **1119**
 Ono, H - 480
 Ooi, TL - **527**, 838, 958, 960
 Op de Beeck, HP - 781
 Or, CC - **690**
 Orbach, HS - 123, 164
 Orban, G - 644
 Orban, GA - 358
 O'Regan, J - 969
 O'Regan, JK - 521
 O'Regan, K - 473
 Orr, E - 883
 Oruc, I - **222**
 Osada, Y - 115, 1174
 OSSARD, G - 810
 Ostrovsky, Y - 199, **782**
 O'Toole, AJ - **111**, 112, 984, 985
 Otsuka, Y - 481, 747, **750**
 Otte, T - **811**
 Overbury, O - 1085
 Owen, CB - 421
 Owens, DA - 756
 Owens, JM - **250**
 Ozkan, K - **526**

P

Padilla, M - **271**
 Paffen, C - 150
 Paffen, CL - 805, **955**, 1164
 Pagano, CC - **846**
 Page, EC - 876
 Page, K - 468
 Pair, J - 274
 Paller, KA - 641
 Palmer, EM - 547, **548**
 Palmer, S - **200**
 Palmer, SE - 582, 759, 861
 Palmeri, TJ - 715, 1178
 Palmisano, S - 488
 Palomares, M - **398**, 882, **889**
 Panagopoulos, A - 324, 700, **705**
 Papathomas, T - 323
 Papathomas, TV - **352**, 1059
 Pardhan, S - 1039
 Park, J - 487, **974**
 Park, JC - **530**
 Park, S - **541**
 Park, SJ - **908**
 Parker, AL - **962**
 Parkins, K - 456
 Pascual-Leone, A - 617, 928
 Pashler, H - 1213
 Pasternak, T - 213
 PATEL, SS - 1081
 Patel, SS - 682, 748, **758**, 760, 973
 Paul, MA - 1063
 Payne, B - 617
 Payne, BR - 622
 Pearson, J - **956**
 Pearson, PM - **130**, 237
 Pechenkova, E - **322**

Peelen, MV - 771, 1140
 Peissig, J - 767
 Peissig, JJ - **424**
 Peli, E - 246, 610
 Pelli, D - 1107
 Pelli, DG - 302, **1101**, 1103
 Pelphrey, KA - 885
 Pelz, J - 586
 Pénard, N - 111
 Penney, K - 400
 Perez, V - 135
 Perona, P - 411
 Perry, JS - 442
 Pesaran, B - 215
 Pestilli, F - **711**
 Peters, RJ - **618**
 Petersik, T - 1163
 Peterson, M - **259**
 Peterson, MA - 201, 1187
 Peterson, MS - 325, 635, 944, **1218**
 Petrides, M - 766
 petrini, K - **499**
 Petrov, A - **272**
 Petrov, Y - 306, **914**
 Pettet, M - 1018
 Pettet, MW - 580, 695
 Pettigrew, J - 144
 Pham, BN - 261
 Pham, BT - 941
 Philbeck, JW - **252**
 Philipona, D - **521**
 Philippi, CL - **623**, 1074
 Phillips, F - **459**
 Phillips, MH - **628**
 Phillips, PJ - 111
 Pianta, MJ - **1007**
 Piatt, C - 188
 Pierson, R - 882
 Pietrini, P - 283
 Piggot, J - 1144
 Piggott, J - 1145
 Pihlaja, M - 675
 Pilly, PK - **993**
 Pinna, B - 348, **658**
 Pinto, Y - **626**
 Pisella, L - 1016
 Pitzalis, S - **642**, 1207
 Pizlo, Z - 372, 1043, **1071**
 Place, SS - 549, **874**
 PLANTIER, J - **810**
 Platt, M - 850
 Platt, ML - 383, 798, 849, 851, 852
 Poggel, DA - **643**
 Poggio, T - 722
 Poirier, FJ - **119**, 476
 Pokorny, J - 1111
 Pola, J - **975**
 Polat, U - 143, 865, **1084**, 1116
 Pollick, FE - 1144, 1145
 Pollmann, S - 202
 Ponce, CR - **104**
 Pont, SC - 363, 364, 574
 Ponticello, LJ - 308

Poole, B - 234
 Popalzai, M - 530
 Posina, VR - **225**
 Potetz, B - 937
 Potter, MC - 572, 1217
 Prasad, S - **902**
 Pratt, J - **1042**
 Preising, M - 650
 Presson, C - 180
 Prime, SL - **597**
 Prins, N - 313, **661**, 674
 Prinz, W - 899
 Proffitt, D - 828, 832
 Proffitt, DR - 829, 830, 831, 965, 1014
 Provost, A - 273
 Prue, B - 459
 Prusky, G - 996
 Ptito, A - 156
 Punzi, G - **669**
 Purushothaman, G - 748
 Purves, D - **462**, 1162
 Pydimarri, TN - 905
 Pyles, JA - **900**, 1146
 Pylyshyn, ZW - 872, 880, 881, 1214

Q

Qian, J - **760**
 Quinlan, D - 502
 Quinlan, DJ - **1044**

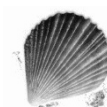
R

Radoeva, PD - **647**
 Radonjic, A - 498, **816**
 RAGHUNANDAN, A - **683**
 Rainville, SJ - **863**
 Rajashekar, U - **601**
 Rajimehr, R - **631**, 1023
 Ramsden, BM - **1000**
 Ranvaud, RD - 698
 Rasmussen, IP - **948**, 1169, 1170
 Rathje, AD - 1076
 Raymond, JE - 467, 1058, 1061, 1062, 1064
 Reddy, L - **411**, 411
 Reed, MJ - **693**
 Rees, G - 151, 279, 402, 611, 964
 Reeves, AJ - **590**
 Regan, DM - 740
 Reinecke, A - **474**
 Reitzner, B - 899
 Remus, DA - **716**
 Renninger, LW - **587**
 Rensink, RA - 1091, **1188**
 Reppa, I - **717**
 Reynolds, JH - 854, 879
 Reynolds, MG - 629, 1070, 1186
 Rhode, L - **237**
 Rhodes, G - **387**, 777, 980, 991
 Ricciardi, E - 283
 Rich, AN - **546**
 Richard, AM - **591**

Richards, ED - **430**
 Richler, JJ - **1178**
 Riddoch, MJ - **920**
 Rieger, JW - **609**
 Riener, C - **828**
 Ries, B - 844
 Riesenhuber, M - 727
 Rigutti, S - **176**
 Rinck, M - 474
 Rini, L - 727
 Ripamonti, C - 668, **823**
 Ristic, J - 383
 Rizzo, M - 623, 1057, **1074**
 Rizzolatti, G - 644
 Roark, DA - **112**
 Robbins, S - 391
 Roberts, BW - 542
 Robertson, LC - 1134
 Robilotto, R - 349
 Robinson, AE - **1094**
 Rock, M - 1056
 Rock, PB - 362
 Rodriguez, RZ - **329**
 Roe, AW - 437, **510**, 997, 1001
 Roether, C - 901
 Roether, CL - **1150**
 Rogers, BJ - **375**
 Rohe, M - 185
 Roitman, JD - **798**
 Roorda, A - 600
 Rosenberg, RD - **718**
 Rosenblatt, J - 1103
 Rosenholtz, R - **933**
 Rossetti, Y - 1016
 Rossi, AF - 401, 930
 Rossion, B - 376, **534**, 540, 773, 780
 Roth, S - **995**
 Rothkopf, C - 455, **456**
 Rothman, DB - 241, **248**
 ROUMES, C - 810
 Rousselet, GA - 189, **780**
 Rowland, BA - 288
 Royden, CS - **692**
 Rubin, N - 575
 Rucci, M - **208**
 Rudd, ME - **523**
 Ruff, CC - 603
 Ruff, D - 778
 Rump, B - **1092**
 Ruppertsberg, AI - 350, **496**
 Rushton, SK - **1160**
 Russell, R - **108**
 Rutherford, HJ - **1064**
 Rutherford, M - 1147
 Rutherford, MA - 486
 Rutherford, MD - 791
 Ryu, J - **988**

S

Saalweachter, J - 1071
 Sachtler, BW - 294
 Sacks, DL - 126



- Sadr, J - 188, **903**
 Sadr, S - 733
 Saenz, M - **706**
 Sagi, D - 865
 Saiki, J - 471, **636**
 Saito, T - 679
 Sakagami, M - 712, 1205
 Sakaguchi, Y - 155
 Sakano, Y - **733**
 Sakurai, M - **336**
 Sally, SL - **299**
 Salvano-Pardieu, V - 1100
 Samonds, JM - **937**
 Sampath, V - 746
 Sander, T - 764
 Sanghvi, PS - 193
 Sanocki, T - **1095**
 Santini, F - 208
 Santos, LR - 888
 Sasaki, R - **694**
 Sasaki, Y - 712, **1023**
 Sato, H - 998, 999
 Sato, T - 116, 253, 311, 385, 475, 679, 1158, 1172
 Saucier, D - 1046
 Saul, AB - **512**
 Saunders, JA - **361**
 Saville, A - 638
 Scarfe, P - **1041**
 Scarlatis, GN - **463**
 Schall, JD - 930
 Scharff, A - 948
 Scheessele, MR - **870**
 Schill, K - 672
 Schiller, PH - 449, **509**
 Schindler, K - 1010
 Schirillo, JA - **818**
 Schlicht, EJ - **1036**
 Schloss, KB - **759**
 Schluppeck, D - 1203
 Schmidt, JC - **469**
 Schmidt, KE - **1004**
 Schmidt, T - **853**
 Schneider, BL - **774**
 Schneider, KA - **1005**
 Schnitzer, BS - 193
 Schoenfeld, MA - 609
 Schofield, AJ - **362**
 Scholl, BJ - 403, 404, 704, 784, 872, 921, 1089, 1096, 1201, 1214
 Scholte, H - **405**
 Scholte, HS - 1097
 Schoonveld, WA - **560**
 Schor, CM - 757, 1114
 Schrater, PR - 154, 1036
 Schrauth, J - 1163
 Schreiber, KM - **757**
 Schroeder, A - **1187**
 Schultz, RT - 790
 Schwartz, NZ - **427**, 428
 Schyns, P - 377
 Schyns, PG - 720
 Scilipoti, E - **448**
 Scofield, I - 612, **613**
 Scomersi, S - 203
 Scott, K - 274
 Scott, L - **723**
 Sedgwick, HA - **845**
 Segawa, K - 346, **412**
 Seghier, M - 776
 Seiffert, AE - 319, 877, 1192
 Seitz, A - 256, 257, 266, 270, 712, 1106
 Seitz, AR - **263**
 Seizova-Cajic, T - **294**
 Sekuler, AB - 210, 219, 258, 300, 380, 430, 772, **791**, 1165
 Semenza, C - 457
 Seno, T - **253**
 Serences, J - 269, **707**
 Serences, JT - 701
 Sereno, MI - 642, 1087
 Sergio, LE - 1020
 Serre, T - **722**
 Servos, P - 281
 Sethi, A - 905
 Seufert, P - 650
 Seydell, A - 853
 Sezikeye, FX - **312**
 Shahani, U - 373, **484**
 Shalev, L - 616
 Shams, L - 256, **257**, 279, 280
 Shankar, MU - **1096**
 Shapiro, AG - 821
 Shapiro, AR - **821**
 Shapiro, K - 1062, 1131, 1132
 Shapiro, KL - 1135
 Shapley, RM - 202
 Sharan, L - **205**
 Sharpe, LT - 224
 Shavit, A - 1079
 Sheedy, J - 1102
 Sheedy, JE - **177**
 Sheinberg, D - 723
 Sheinberg, DL - 118, 169, **724**, 726, 799
 Sheliga, BM - **184**
 Shelton, D - 284
 Shen, YJ - **136**
 Shepherd, SV - 383
 Sheth, B - 490, **686**
 Sheth, BR - 660
 Shevell, SK - 342
 SHEVELL, SK - 922
 Shiffrar, M - 902, **1139**, 1149
 Shim, WM - **624**, 950
 Shimegi, S - **998**, 999
 Shimojo, S - 386, 487, **490**, 491, 660, 686, 712, 974, 982
 Shin, E - **470**
 Shinohara, S - 491
 Shinozaki, T - **959**
 Shioiri, S - 106, **1198**
 Shirai, N - **394**, 481, 747
 Shiu, D - **588**
 Shomstein, S - **407**
 Shuman, M - **884**
 Shutts, K - 120, **390**
 Shuwairi, SM - **916**
 Sikoglu, EM - **739**
 Sikorski, KE - 142
 Silva, MM - **630**
 Simion, C - **386**
 Simmons, DR - **355**, 1144, 1145
 Simons, DJ - **157**, 696, 905, 1049
 Simpson, WA - **373**, 484
 Singer, W - 508
 Singh, M - 124, 204, **869**
 Sinha, P - 108, **199**, 423, 566, 782
 Skoczenski, AM - **393**
 Skogsberg, K - 1056
 Sligte, IG - **1097**
 Smart, MP - 846
 Smeets, JB - 340, 495, 501
 Smilek, D - **629**, 1070, 1186
 Smith, AT - **217**, 1151
 Smith, PA - **807**
 Smithson, HE - 224
 Snodderly, M - **212**
 Sobel, DM - 153
 Sobel, K - **234**
 Solomon, JA - 305, **1080**, 1121
 Soloviev, S - 506
 Somers, DC - 697
 Son, H - **864**
 Song, J - **503**
 Sorger, B - 534
 Sorrento, GU - **1040**
 Soska, KC - **242**, 431
 Souman, JL - **181**
 Sparks, J - 623, 1074
 Spearman, WJ - 979
 Spelke, E - 255, 884, 887
 Spelke, ES - 120, 390, 886, 1067
 Spencer, JP - 129
 Spencer-Smith, JB - **1173**
 Sperring, M - 105, **183**
 Sperling, G - 125, 326, 612, 613, 621, **938**, 1156
 Spinelli, D - 1207
 Srihasam, K - **1015**
 Srinivasan, R - 621
 Sripada, K - 278
 Steede, LL - **779**
 Steele, JE - 979
 Steeves, JK - **568**, 765
 Stefanov, E - 1071
 Stefanucci, JK - **831**, 965
 Stein, BE - 288
 Steinmetz, PN - **379**
 Stella, A - 1207
 Stephanucci, J - 832
 Sterkin, A - 1084
 Sterzer, P - **151**
 Stetten, G - 284
 Stevens, ST - 710
 Stevenson, SB - 600, 734
 Stevenson, SB - 683
 Stockert, C - **478**, 479
 Stockman, A - **224**
 Stoebling, D - 320
 Stojanoski, B - **413**
 Stott, J - 1103
 Strasburger, H - **175**
 Stringer, N - 178
 Stritzke, M - 1027, **1029**
 Strong, K - 262
 Su, X - 352
 Su, Y - **960**
 Subramanian, A - 1039
 Sugar, T - 180
 Sullivan, B - 585, 586
 Sullivan, BT - 1094
 Sun, H - 251, 562, 577, 835
 Sundareswara, R - **154**
 Sundberg, KA - **854**, 879
 Sung, J - 273
 Sung, K - 1162
 Surian, L - 457
 Sussman, RS - **128**, 951
 Suzuki, A - 789
 Suzuki, S - 641, 1056
 Swift, DJ - **1118**
 Swisher, JD - 697
 Sy, J - 1124
 Sy, JL - **1136**
 Sylvester, R - **611**
 Symons, LA - **542**
 Szabo, S - 1143
 Szego, PA - **1147**
 Szeverenyi, N - 640

T
 Tachibana, M - 167
 Tadin, D - **806**, 956, 1197
 Tadros, K - 1099
 Tai, Y - **1102**
 Takahama, S - **471**
 Takahashi, N - 929
 Takeda, T - 173, 959
 Takeichi, H - **837**
 Tallon-Baudry, C - 216, 473, 945
 Tamietto, M - **1175**
 Tamura, H - 761
 Tanabe, S - 755, 762, 1002
 Tanaka, J - **188**, 723
 Tanaka, JW - **543**, 793
 Tanaka, Y - **1077**
 Tang, Y - 512
 Tang, Z - 761
 Tani, Y - **116**, 385
 Tankink, J - 405
 Tappen, MF - 206
 Tarr, MJ - 424, 713, 767, 862, 1177
 Tashiro, T - 1077
 Tassinari, H - **1033**
 Tavassoli, A - **555**, 556
 Taya, F - **161**
 Tayama, T - **1113**
 Taylor, CP - 210, **219**, 300
 Taylor, MJ - 291



- te Pas, SF - **574**
 Tehovnik, EJ - 509
 Thakur, S - **971**
 Thaler, L - **741**
 Theeuwes, J - 626
 Theuring, C - 1017
 Thiem, PD - **592**
 Thierman, JS - **861**
 Thomas, AL - **775**
 Thomas, C - **192**
 Thomas, LE - **978**, 1049
 Thomas, RD - 297
 Thompson, B - **218**
 Thompson, P - **1199**
 Thompson, PG - 1153
 Thompson, SK - 785
 Thompson, WB - 525, 528, 833, 834
 Thompson-Schill, SL - 238
 Thorn, F - 1011
 Thornton, IM - 419, 576, 583
 Thorpe, SJ - 189, 583
 Tillman, KA - 1101, **1103**
 Tipper, SP - 1063
 Tjan, BS - 910, 911, 913, **1210**
 To, M - 668
 Todd, JJ - **131**
 Todd, JT - 358, 426, 741, 1183, 1184
 Todd, S - 226
 Tolhurst, DJ - 668
 Tombu, MN - **877**
 Tomonaga, M - 481, 808
 Tong, F - 146, **931**, 1122
 Tong, J - 682, **973**
 Toole, AJ - **107**
 Tootell, R - 1023
 Torralba, A - 569
 Torres, L - 889
 Tosetti, M - 186
 Toth, LJ - 643
 Townsend, JT - 632, 783
 Trahms, L - 764
 Tran, G - 845
 Tran, NT - 1209
 Treat, TA - 1089
 Tree, JJ - 779
 Treisman, A - 493, 1213
 Treue, S - 906
 Trick, L - **883**
 Triesch, J - 1094
 TRIPATHY, S - 1081
 Tripathy, S - 1215
 Tripathy, SP - **875**
 Troje, NF - 903, **1143**
 Trolka, I - 401
 Trommershaeuser, J - 1031
 Trommershäuser, J - 1027, 1029, **1030**
 Troncoso, XG - **825**, 976
 Troscianko, T - **561**, 564, 668
 Troup, LJ - 345
 Trujillo, LT - **201**
 Trujillo, MT - 1194
 Tsai, YD - **635**
 Tse, J - 432, **433**
 Tse, PU - 343, 662, **685**
 Tseng, C - **323**
 Tsirlin, I - **936**
 Ts'o, D - 640
 Tsodyks, M - 143
 Tsuchiya, N - **804**
 Tsushima, Y - 266, **414**
 Turk-Browne, NB - **784**, 921, 1089
 Turner, J - 387
 Tversky, T - **1161**
 Tyler, CW - 223, **453**, 732
 Tyrrell, RA - **756**
 Tyukin, I - 684
 Tzen, B - 360
 Tzvetanov, T - 906
-
- U**
 Uc, EY - 1074
 Uchikawa, K - 338, **346**, 412
 Uka, T - 694
 Uke, H - **1200**
 Ullman, S - 729
 Unuma, H - **439**
 Usui, S - 167
 Uzochukwu, H - 352
-
- V**
 Vaina, LM - **506**, 731, 739
 Valero-Cabre, A - **617**
 Valyear, KF - 127, 568
 van Boxtel, JJ - **957**
 Van den Berg, AV - 952
 van den Berg, M - 866
 Van den Stock, J - **1176**
 van der Linde, I - 555, **556**
 van der Smagt, MJ - **1164**
 van Doorn, AJ - **363**, 364
 van Ee, R - 150, 152, 529, **754**, 957
 Van Ee, R - 952
 van Es, JJ - 494
 van Leeuwen, C - 684
 van Montfort, X - **1090**
 van Wassenhove, V - 257
 Van Wert, MJ - 546, 548, **549**
 van Wezel, RJ - 152
 van Zoest, W - **472**
 Vanduffel, W - 358, 644, 1023
 VanHorn, DR - **1006**
 VanMeter, J - 727
 Vanni, S - **675**
 Varakin, DA - **239**, 944
 Vaux, LM - **1057**
 Vavassis, A - **264**
 Vaziri Pashkam, M - **687**
 Vecera, S - 464
 Vecera, SP - 140, 702, 859, 860, 861
 Verfaellie, M - 468
 Verghese, P - 587, **915**
 Versace, M - **992**
 Verschure, PF - 714, 995
 Verstraten, FA - 117, 805, 955, 1164
-
- Vesia, M - **1020**
 Vessel, EA - **575**, 579
 Vettel, JM - 424, **862**
 Vetter, T - 1179
 Vickery, T - 950
 Vickery, TJ - 624, **951**
 Victor, JD - 308, **309**, 310
 Vidal, JR - 473
 Vidnyanszky, Z - 323, 1059
 Vidnyánszky, Z - 955
 VIENOT, F - 810
 Viera, J - 711
 Vildavski, V - 580
 Vildavski, VY - 695
 Vilis, T - 645
 Vincent, B - 561
 Visco, FE - **734**
 Vishwanath, D - **368**
 Visser, TA - 1123
 Vladusich, T - 494
 Vogel, E - 133
 Vogel, EK - **135**, 878
 Vogels, W - **1131**
 Vollenweider, F - 144
 Vollmer, SD - 466
 Von Der Heide, RJ - 787
 von Grünau, M - **324**, 700, 705
 von Grünau, MW - 264
 Voshell, MG - 459
 Vreven, D - **1163**
 Vucetic, Z - 835
 Vul, E - **524**
 Vuong, Q - 419, 583
 Vuong, QC - 418, 424, **576**
-
- W**
 Wachtler, T - **335**
 Wade, AR - 306, 580, 695
 Wagar, BM - **543**
 Wagge, JR - 297
 Walker, M - **1179**
 Wall, MB - 217, 1151
 Wallis, G - 144, 160, **197**
 Walsh, V - 1152
 Walter, E - 581, **1022**
 Walther, D - **415**, 932
 Walthew, CE - **949**
 Walton, CL - 753
 Wan, XI - 157, **637**, 1049
 Wandell, BA - 639
 Wang, H - 1019, 1021, 1024
 Wang, Q - 577
 Wang, Y - **577**
 Warren, WH - 240, 241, **247**, 248, 249, 250
 Warshafsky, J - 531
 Wasserman, EA - **162**, 435, 720, 860
 Waszak, F - 458
 Watamaniuk, SN - **688**
 Watanabe, DH - 1085
 Watanabe, H - **961**
 Watanabe, K - 947, 1082
-
- Watanabe, M - **491**, 961, 1205
 Watanabe, T - 263, 266, 270, 277, 286, 414, 712
 Watkins, S - **279**
 Watson, TL - **980**, 986
 Watt, SJ - 1041
 Wattam-Bell, J - 531
 Weaver, B - 1053
 Weber, JE - 538, **764**
 Webster, AR - 224
 Webster, MA - 332, **520**, 633, 986, 1010
 Webster, SM - 332
 Wechsler, NE - 180
 Wede, JL - **708**
 Wehrhahn, C - 436
 Weidenbacher, U - **1181**
 Weiner, VS - **449**, 509
 Weingarten, L - 693
 Weissman, DH - 709
 Welchman, AE - **515**
 Wenger, MJ - **787**, 1178
 Werner, JS - 520, 1010
 Wessel, A - 1065
 Westland, S - 823
 Westoby, N - **1058**
 Weston, E - 275
 White, BJ - **196**, 584
 Whitney, D - **211**, 656, 788, 963
 Whitwell, RL - 504, **1045**
 Whyte, S - 816
 Wichmann, FA - **298**, 667
 Widders, D - 908
 Wiesemann, EY - **742**, 753
 Wiesmann, M - **714**
 Wiggett, AJ - **1140**
 Wilbraham, D - 1183
 Wilbraham, DA - **1184**
 Wilcox, LM - 452, 936
 Williams, MA - 505, **1123**
 Wilmer, JB - **198**
 Wilson, ET - 967
 Wilson, HR - 119, 148, 381, 389, **926**, 953, 983
 Wilson, JA - **665**
 Wilson, RC - 1141
 Wilson, T - 1053
 Winawer, J - 497, 981, 1180
 Witt, J - 832
 Witt, JK - **829**
 Witthoft, N - **981**, 1180
 Wittich, W - **1085**
 Wojtach, WT - **1162**
 Woldorff, MG - 709
 Wolfe, JM - 194, 546, 547, 548, 549, **895**, 896, 907, 1202
 Wolfe, U - **461**
 Wolfson, SS - 802
 Woloszyn, L - **118**
 Won, B - 229
 Wong, AC - 715
 Wong, E - 512
 Wong, JH - **325**, 1218



Wong, T - **1038**
 Wong, YK - **1137**
 Wong-Drew, SA - **326**
 Woo Hyun, J - 541
 Woodman, GF - **930**
 Woods, RL - **246**
 Wozny, DR - **280**
 Wu, B - **284**
 Wu, C - 467, **709**
 Wu, D - **487**, 974
 Wu, J - **838**
 Wu, L - **251**, 1073
 Wu, S - **1034**, 1035
 Wüstenberg, T - 175
 Wyble, B - **134**, 1125
 Wynn, K - 403

X

Xian, SX - **796**
 Xu, J - **958**
 Xu, R - **337**
 Xu, Y - **1204**
 Xuan, B - 1117
 Xue, F - 1108

Y

Yadgarova, A - 360
 Yagi, A - 481, 1148
 Yamada, Y - **659**
 Yamaguchi, M - 394
 Yamaguchi, MK - 114, 481, 747, 750
 Yamamoto, T - 712
 Yan, C - 990
 Yan, X - 1024
 Yang, D - **101**
 Yang, H - **554**
 Yang, JN - **640**
 Yang, S - **602**, 800
 Yantis, S - 701
 Yao, X - 1211
 Yasuda, M - **986**
 Yasuoka, S - **755**
 Yates, TA - 362
 Yazdanbakhsh, A - 794, **795**
 Yeh, S - 233, 703
 Yehezkel, O - **865**
 Yeshurun, Y - **327**
 Yeung, N - 894
 Yi, D - 908, **921**, 1088
 Yi, W - **595**

YILMAZ, O - **1081**
 Yokoi, K - **1082**
 Yokosawa, K - 321, 422, **826**, 1129
 Yonas, A - **841**
 Yoonessi, A - **578**
 Yoshida, T - **416**
 Yoshino, D - **155**
 Yoshizawa, T - 341
 Yotsumoto, Y - **712**
 Young, KG - 273
 Yourganov, G - **983**
 Yovel, G - 539
 Yu, C - **1108**
 Yu, D - **1109**
 Yue, X - 425, **579**, 646, 728
 Yuille, A - **1195**
 Yurgenson, S - 194, 599

Z

Zacher, J - 287
 Zacher, JE - 289
 Zadra, JR - **830**
 Zaidi, Q - 349, 360, 477
 Zaksas, D - **213**
 Zeffiro, T - 727

Zelaznik, HN - 1043
 Zele, AJ - 1111
 Zelinsky, G - 469
 Zelinsky, GJ - 552, 553, 554
 Zetzsche, C - **672**
 Zhang, D - 1117
 Zhang, J - 1108
 Zhang, X - 530
 Zhang, Y - 261, 449
 Zhao, H - 251
 Zhao, M - 421
 Zhaoping, L - **589**, 868
 Zhong, H - **249**
 Zhou, G - 421, 918
 Zhou, Y - 268
 Zhou, Z - 170, 171, **172**
 Zhu, M - 101
 Zhuang, X - **1059**
 Ziegler, R - 226
 Zion Golumbic, E - **536**
 Zirnsak, M - 209
 Zivotofsky, AZ - 593
 Zoccolotti, P - 1107
 Zotov, A - 651
 Zwick, H - **331**



Area Map

