Vision Sciences Society

15th Annual Meeting, May 15-20, 2015
TradeWinds Island Resorts, St. Pete Beach, Florida

Program

Contents

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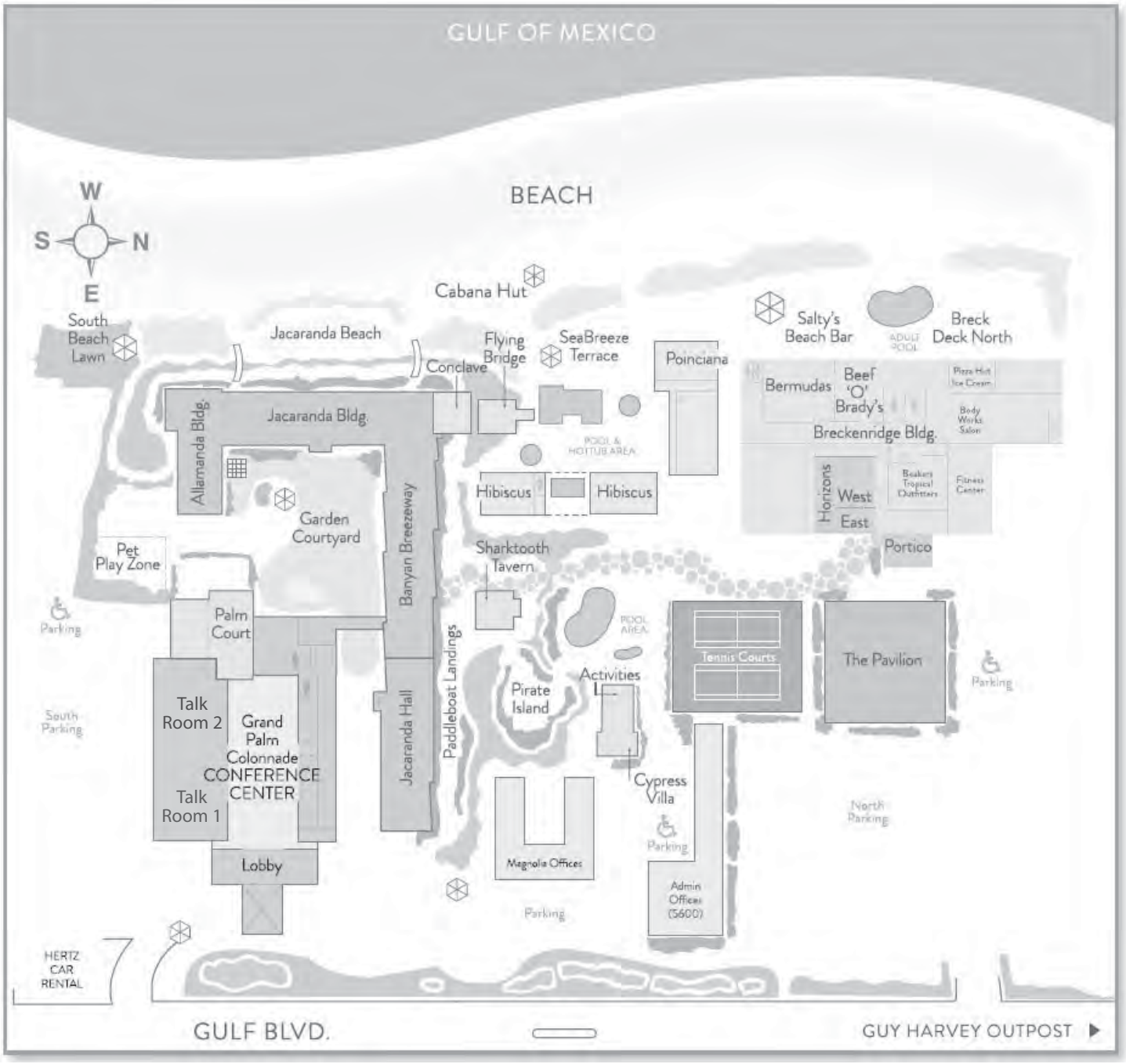
TradeWinds Island Grand Hotel



President's Welcome

Welcome to the 15th Annual Vision Sciences Society Meeting and welcome to the second year at the TradeWinds, our venue on St. Pete's beach. The members of the VSS Board of Directors are delighted that you are happy with our new venue, and we hope you enjoy this meeting as much as the last.

Our truly amazing organizers Shauney and Shawna have once again worked miracles in making the conference work smoothly. Like last year, we now have close to 2,000 participants! As usual, we've tried to address some of the concerns raised in the feedback you gave us last year. We've introduced reusable coffee mugs to cut down on waste, added more umbrellas, and have worked with the hotel to improve parking. We have introduced a new method for selecting the best posters for the Student Poster Awards (details are in the Program). In addition, we have set aside the first half hour of the poster sessions for Presenters Only. This will allow poster presenters to see other posters in their session before it starts.

As always, there will be ways that we can improve, and we ask for your patience as we fine-tune the organization in our new venue. If you feel there are things we can improve, please let us know. We want our conference to be a rewarding and memorable experience.

As well as the great science, one of the best parts of coming to VSS is meeting your colleagues. There are many locations around the hotel for informal chats in addition to more formal interactions at the talks and posters. The patio outside the meeting rooms, where coffee, breakfast, and lunch are served, is a great place to meet. This year we have added more seating around the property, as well as an indoor location in Jacaranda Hall – the VSS Social Lounge - if you prefer to meet indoors.

As many of you know, this year was marked by the tragic and unexpected death of David Knill. David was one of the founding members of the VSS Board, at its inception in 2002, and continued until 2007. He was a remarkable scientist and one of the leaders in developing Bayesian approaches to Perception. We will miss him. There will be a special symposium on Friday morning honoring his extraordinary scientific contributions. I strongly encourage you to attend.

We would like to invite everyone to come to the Keynote Address on Saturday evening and also to the Awards Ceremony on Monday afternoon. This year's Keynote Speaker is Bruno Olshausen, one of the main figures responsible for ushering in computational approaches to visual neuroscience. The winner of the Elsevier/ VSS Young Investigator Award this year is John Serences, who is a leader in the field of visual attention and an innovator in neuroimaging techniques. The recipient of the Davida Teller Award is Suzanne McKee, who is one of a small group who laid the foundations of modern visual psychophysics. This year we have a new Award, called the Ken Nakayama Medal for Excellence in Vision Sciences - named in Ken's honor - to acknowledge his contributions to the Vision Sciences Society, as well as to the field of Vision Science. This will also be announced at the Awards Ceremony.

Enjoy the meeting and learn lots of new and exciting vision research!

Mary Hayhoe
President, Vision Sciences Society 2015

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Meeting Schedule

Wednesday, May 13

9:00 am - 6:00 pm	Mathematical and Computational Models in Vision (MODVIS) (VSS Satellite)	Long/Bird/Indian

Thursday, May 14

8:00 am - 5:00 pm	Perceptual Expertise Network Reunion (VSS Satellite)	Horizons
9:00 am - 7:00 pm	Mathematical and Computational Models in Vision (MODVIS) (VSS Satellite)	Long/Bird/Indian
4:00 - 7:00 pm	Registration Open	Grand Palm Colonnade

Friday, May 15

7:00 am - 6:00 pm	Registration Open	Grand Palm Colonnade
8:30 – 9:00 am	Continental Breakfast	Grand Palm Colonnade and Courtyard
9:00 - 11:30 am	David Knill Memorial Symposium (VSS Satellite)	Talk Room 1-2
9:00 - 11:30 am	Mathematical and Computational Models in Vision (MODVIS) (VSS Satellite)	Horizons
12:00 - 2:00 pm	Symposium Session 1	Talk Room 1-2 and Pavilion
2:00 - 2:30 pm	Coffee Break	Grand Palm Colonnade, Courtyard and Pavilion
2:30 - 4:30 pm	Symposium Session 2	Talk Room 1-2 and Pavilion
4:30 - 5:00 pm	Coffee Break	Grand Palm Colonnade, Courtyard and Pavilion
5:00 - 7:00 pm	Symposium Session 3	Talk Room 1-2 and Pavilion
7:00 - 9:30 pm	Opening Night Reception	Beachside Sun Decks

Saturday, May 16

7:30 am - 6:45 pm	Registration Open	Grand Palm Colonnade
7:45 – 8:15 am	Continental Breakfast	Grand Palm Colonnade and Courtyard
8:00 am – 12:30 pm	Morning Poster Session	Banyan Breezeway and Pavilion
8:00 am – 6:45 pm	Exhibits Open	Banyan Breezeway
8:15 – 9:45 am	Morning Talk Session 1	Talk Room 1 and Talk Room 2
9:45 – 10:30 am	Coffee Break	Grand Palm Colonnade, Courtyard, and Pavilion
10:45 am - 12:30 pm	Morning Talk Session 2	Talk Room 1 and Talk Room 2
12:30 - 2:30 pm	Lunch Break (on your own)	
12:45 am - 2:00 pm	Future of Psychophysical Toolbox and other Psychophysics software (VSS Satellite)	Snowy Egret
12:45 - 2:15 pm	Cambridge Research Systems Technical Short Course (VSS Satellite)	Horizons East
2:15 – 6:45 pm	Afternoon Poster Session	Banyan Breezeway and Pavilion
2:30 - 4:15 pm	Afternoon Talk Session 1	Talk Room 1 and Talk Room 2
4:00 - 5:00 pm	VSS Public Lecture	The Dali Museum, St. Petersburg
4:15 – 5:00 pm	Coffee Break	Grand Palm Colonnade, Courtyard and Pavilion
5:15 - 6:45 pm	Afternoon Talk Session 2	Talk Room 1 and Talk Room 2
7:15 - 8:15 pm	Keynote Address - Bruno Olshausen, Ph.D	Talk Room 1-2

Sunday, May 17

7:30 am – 6:45 pm	Registration Open	Grand Palm Colonnade
7:45 – 8:15 am	Continental Breakfast	Grand Palm Colonnade and Courtyard
8:00 am – 12:30 pm	Morning Poster Session	Banyan Breezeway and Pavilion
8:00 am – 6:45 pm	Exhibits Open	Banyan Breezeway
8:15 am – 9:45 am	Morning Talk Session 1	Talk Room 1 and Talk Room 2

9:45 – 10:30 am	Coffee Break	Grand Palm Colonnade, Courtyard and Pavilion
10:45 am - 12:30 pm	Morning Talk Session 2	Talk Room 1 and Talk Room 2
12:30 - 2:30 pm	Lunch Break (on your own)	
12:45 - 2:15 pm	Cambridge Research Systems Technical Short Course (VSS Satellite)	Horizons East
12:45 - 2:15 pm	WorldViz Vizard Virtual Reality User Meeting (VSS Satellite)	Snowy Egret
1:00 - 2:00 pm	VSS Workshop for PhD Students and Postdocs: Is there a strategy behind successful grant writing	Glades/Jasmine (Jacaranda Hall)
1:00 - 2:00 pm	VSS Workshop for PhD Students and Postdocs: Finding your path in graduate school	Sabal/Sawgrass (Jacaranda Hall)
2:15 - 6:45 pm	Afternoon Poster Session	Banyan Breezeway and Pavilion
2:30 - 4:15 pm	Afternoon Talk Session 1	Talk Room 1 and Talk Room 2
4:15 – 5:00 pm	Coffee Break	Grand Palm Colonnade, Courtyard and Pavilion
5:15 - 7:15 pm	Afternoon Talk Session 2	Tallk Room 1 and Talk Room 2

Monday, May 18

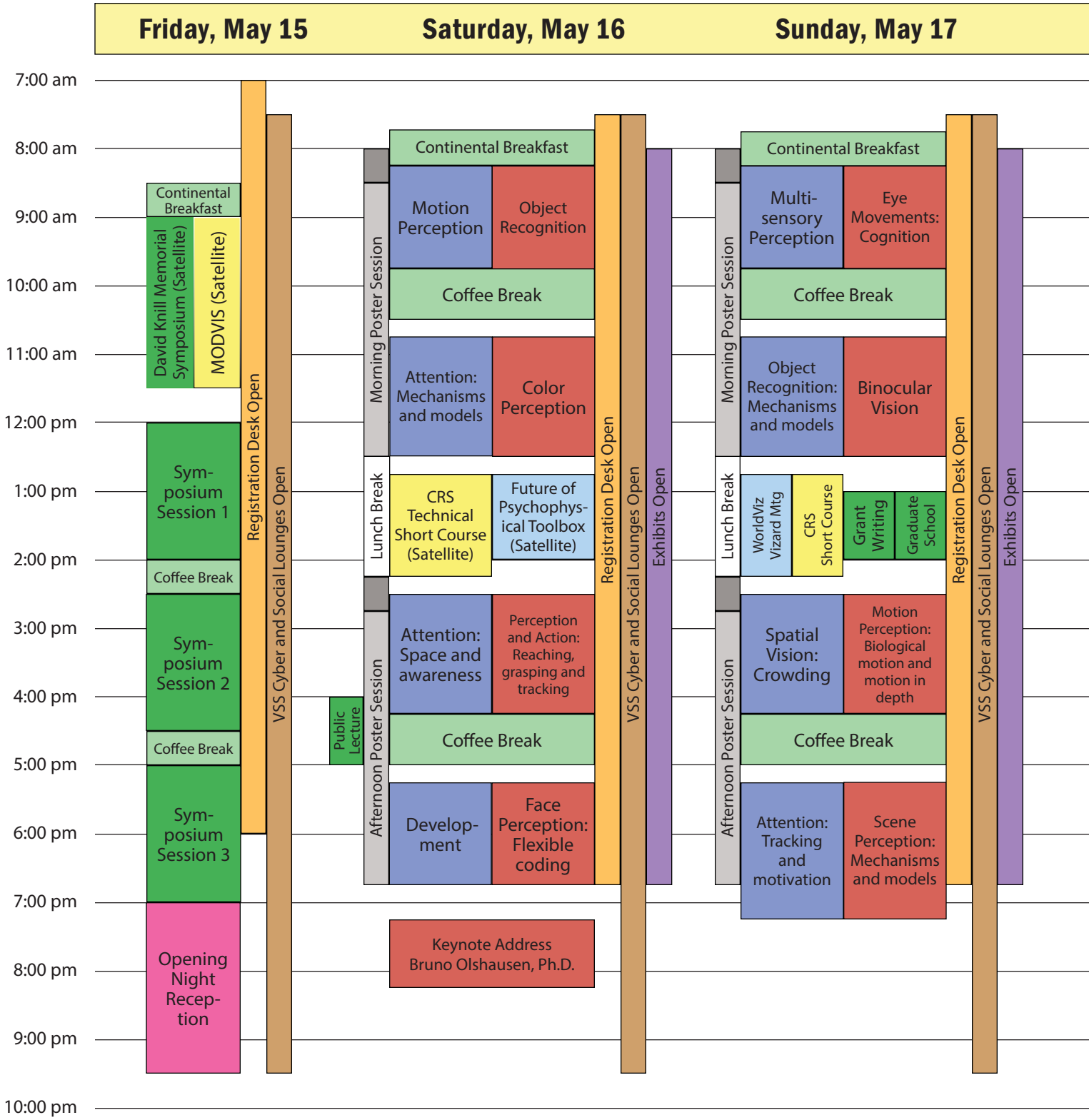
7:45 am - 1:30 pm	Registration Open	Grand Palm Colonnade
7:45 – 8:15 am	Continental Breakfast	Grand Palm Colonnade and Courtyard
8:00 am – 12:30 pm	Morning Poster Session	Banyan Breezeway and Pavilion
8:00 am – 12:30 pm	Exhibits Open	Banyan Breezeway
8:15 am – 9:45 am	Morning Talk Session 1	Talk Room 1 and Talk Room 2
9:45 – 10:30 am	Coffee Break	Grand Palm Colonnade, Courtyard and Pavilion
10:45 am - 12:15 pm	Morning Talk Session 2	Talk Room 1 and Talk Room 2
12:30 - 1:30 pm	VSS Awards and YIA Lecture	
1:30 - 6:00 pm	Afternoon Off	Go have fun!
6:00 - 8:00 pm	Demo Night Beach BBQ	Beachside Sun Decks
7:00 - 10:00 pm	Demo Night Demos	Talk Room 1-2, Royal Tern, Snowy Egret, Compass, Spotted Curlew, and Jacaranda Hall

Tuesday, May 19

7:45 am – 6:45 pm	Registration Open	Grand Palm Colonnade
7:45 – 8:15 am	Continental Breakfast	Grand Palm Colonnade and Courtyard
8:00 am – 12:30 pm	Morning Poster Session	Banyan Breezeway and Pavilion
8:00 am - 6:45 pm	Exhibits Open	Banyan Breezeway
8:15 am - 9:45 am	Morning Talk Session 1	Talk Room 1 and Talk Room 2
9:45 - 10:30 am	Coffee Break	Grand Palm Colonnade, Courtyard and Pavilion
10:45 am - 12:30 pm	Morning Talk Session 2	Talk Room 1 and Talk Room 2
12:30 - 1:45 pm	Lunch Break (on your own)	
12:30 - 1:45 pm	VSS Committees Lunch	Horizons Royal
1:45 - 2:15 pm	VSS Business Meeting	Talk Room 2
2:15– 6:45 pm	Afternoon Poster Session	Banyan Breezeway and Pavilion
2:30 - 4:15 pm	Afternoon Talk Session 1	Talk Room 1 and Talk Room 2
4:15 – 5:00 pm	Coffee Break	Grand Palm Colonnade, Courtyard and Pavilion
5:15 – 7:15 pm	Afternoon Talk Session 2	Talk Room 1 and Talk Room 2
10:00 pm – 2:00 am	Club Vision	Talk Room 1

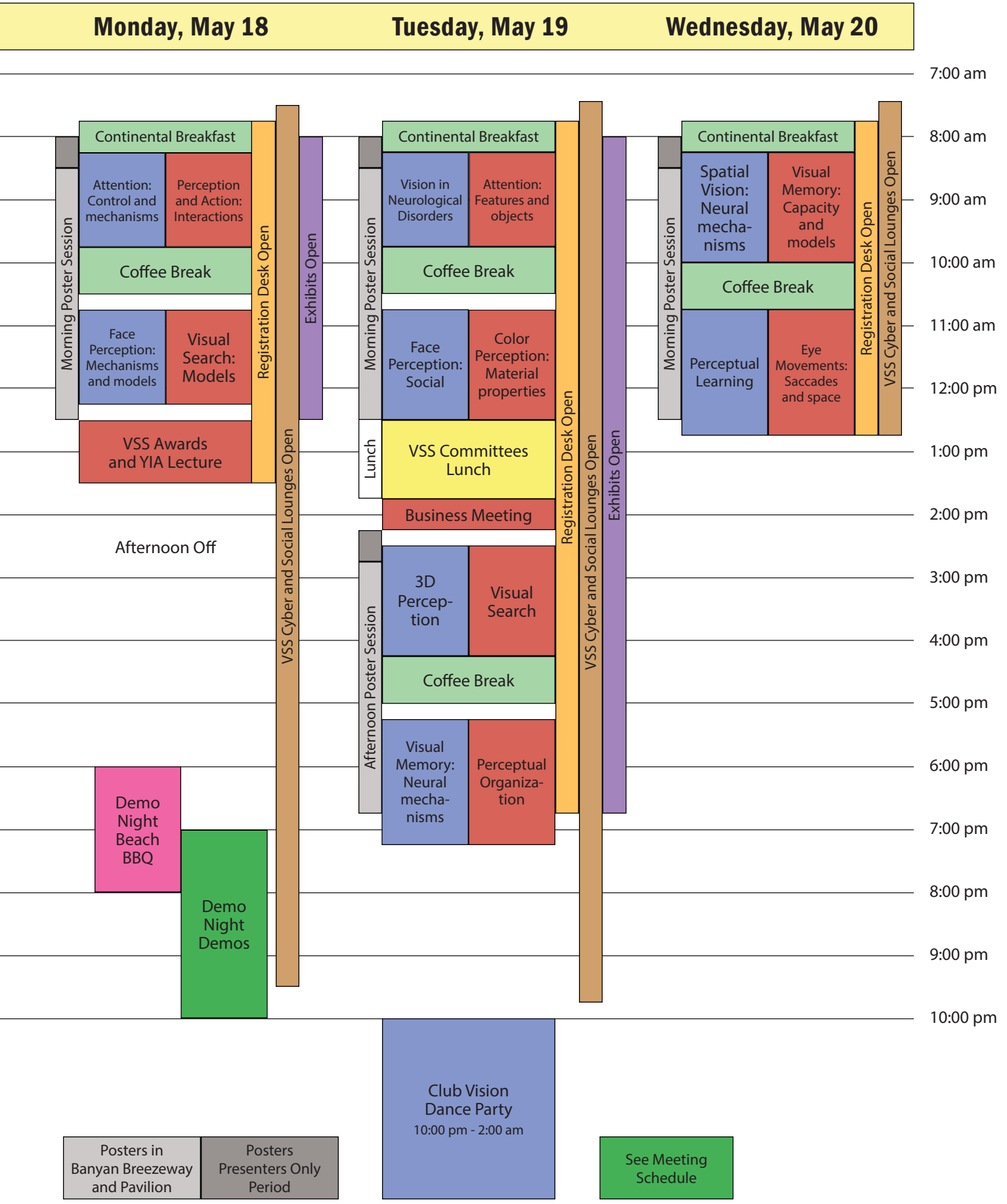
Wednesday, May 20

7:45 am – 8:15 am	Continental Breakfast	Grand Palm Colonnade and Courtyard
7:45 – 12:45 pm	Registration Open	Grand Palm Colonnade
8:00 – 12:30 pm	Morning Poster Session	Pavilion
8:15 - 10:00 am	Morning Talk Session 1	Talk Room 1 and Talk Room 2
10:00 – 10:45 am	Coffee Break	Grand Palm Colonnade, Courtyard and Pavilion
11:00 am - 12:45 pm	Morning Talk Session 2	Talk Room 1 and Talk Room 2



Color Key:

Talk Room 1	Talk Room 2	Grand Palm Colonnade	Banyan Breezeway	Snowy Egret	Garden Courtyard	Horizons	Blue Heron, Jacaranda Hall	Beachside Decks


Monday, May 18
Tuesday, May 19
Wednesday, May 20
7:00 am
8:00 am
9:00 am
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3:00 pm
4:00 pm
5:00 pm
6:00 pm
7:00 pm
8:00 pm
9:00 pm
10:00 pm
Continental Breakfast
Attention: Control and mechanisms
Perception and Action: Interactions
Coffee Break
Face Perception: Mechanisms and models
Visual Search: Models
VSS Awards and YIA Lecture
Morning Poster Session
Registration Desk Open
Exhibits Open
VSS Cyber and Social Lounges Open
Afternoon Off
Demo Night Beach BBQ
Demo Night Demos
Continental Breakfast
Vision in Neurological Disorders
Attention: Features and objects
Coffee Break
Face Perception: Social
Color Perception: Material properties
Lunch
VSS Committees Lunch
Business Meeting
Morning Poster Session
3D Percep-tion
Visual Search
Coffee Break
Visual Memory: Neural mecha-nisms
Perceptual Organiza-tion
Afternoon Poster Session
Registration Desk Open
VSS Cyber and Social Lounges Open
Exhibits Open
Club Vision Dance Party
10:00 pm - 2:00 am
Continental Breakfast
Spatial Vision: Neural mecha-nisms
Visual Memory: Capacity and models
Coffee Break
Perceptual Learning
Eye Movements: Saccades and space
Morning Poster Session
Registration Desk Open
VSS Cyber and Social Lounges Open
Posters in Banyan Breezeway and Pavilion
Posters Presenters Only Period
See Meeting Schedule

Poster Schedule

Poster Setup and Takedown

All poster sessions are held in Banyan Breezeway and the Pavilion. The last three digits of your poster number indicate the number of your poster board.

Posters should be put up at the beginning of a session and taken down at the end. Authors of even numbered posters are expected to be present at their posters during the entire "Even Authors Present" time; and authors of odd numbered posters during the entire "Odd Authors Present" time. Authors may be present longer if desired.

This year we have set aside the first half hour of each poster session (8:00 – 8:30 am and 2:15 – 2:.45 pm) for Presenters Only. This allows poster presenters to see other posters in their session before the start of the session.

Please be courteous and take down your poster promptly at the end of the session so that 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 in the Grand Palm Colonnade.

Saturday Morning, May 16

Setup: 7:30 - 8:00 am
Presenters Only: 8:00 - 8:30 am
Session: 8:00 am – 12:30 pm
Even Authors Present: 9:30 – 10:30 am
Odd Authors Present: 10:30 – 11:30 am

Banyan Breezeway
- Perceptual Learning: Lower-level processes and mechanisms
- Perception and Action: Complex interactions
- Visual Search: Eye movements and memory
- Eye Movements: Consequences

Pavilion
- Visual Memory: Individual differences and models
- Spatial Vision: Crowding and eccentricity
- Scene Perception: Coding and dynamics
- Multisensory Perception: Neural substrates and synesthesia
- Face Perception: Emotion 1
- Face Perception: Wholes, parts, and configuration
- Face Perception: Individual differences

Take down: 12:30 – 1:00 pm

Saturday Afternoon, May 16

Setup: 1:45 – 2:15 pm
Presenters Only: 2:15 – 2:45 pm
Session: 2:15 – 6:45 pm
Even Authors Present: 3:45 – 4:45 pm
Odd Authors Present: 4:45 – 5:45 pm

Banyan Breezeway
- Eye Movements: Perception and neural mechanisms
- Attention: Neural mechanisms
- Object Recognition: Parts and features

Pavilion
- Color and light: Neural mechanisms
- Binocular Vision: Mechanisms of binocular interaction
- Motion Perception: Experience
- Visual Memory: Neural mechanisms
- Attention: Capture
- Perceptual Organization: Contours and surfaces
- Perceptual Organization: Segmentation
- Scene Perception: Categorization and memory

Take down: 6:45– 7:00 pm

Sunday Morning, May 17

Setup: 7:30 - 8:00 am
Presenters Only: 8:00 - 8:30 am
Session: 8:00 am – 12:30 pm
Even Authors Present: 9:30 – 10:30 am
Odd Authors Present: 10:30 – 11:30 am

Banyan Breezeway
- Perceptual Learning: History effects
- Color and light: Adaptation and constancy
- Perception and Action: Driving and navigating
- Face Perception: Mechanisms and models
- Face Perception: Neural mechanisms

Pavilion
- Attention: Cueing and inattention
- Attention: Reward
- Attention: Tracking
- Spatial Vision: Models and mechanisms
- Motion Perception: Neural mechanisms and models
- Motion Perception: Biological motion
- Scene Perception: Neural mechanisms
- Perceptual Organization: Shapes and objects 1
- Visual Memory: Objects and features

Take down: 12:30 – 1:00 pm

Sunday Afternoon, May 17

Setup: 1:45 – 2:15 pm
Presenters Only: 2:15 – 2:45 pm
Session: 2:15 – 6:45 pm
Even Authors Present: 3:45 – 4:45 pm
Odd Authors Present: 4:45 – 5:45 pm

Banyan Breezeway
- Perceptual Organization: Models and neural mechanisms
- Perception and Action: Pointing, tracking and catching
- Eye Movements: Saccades and perception
- Object Recognition: Mechanisms

Pavilion
- Lightness and Brightness
- Development: Disorders
- Visual Memory: Capacity and resolution
- Face Perception: Neural dynamics
- Face Perception: Behavioral characteristics
- Multisensory Perception: Visuo-auditory interactions 1
- 3D Perception: Slant, curvature, and shape

Take down: 6:45– 7:00 pm

Monday Morning, May 18

Setup: 7:30 - 8:00 am
Presenters Only: 8:00 - 8:30 am
Session: 8:00 am – 12:30 pm
Even Authors Present: 9:30 – 10:30 am
Odd Authors Present: 10:30 – 11:30 am

Banyan Breezeway
- Spatial Vision: Texture and image statistics
- Eye Movements: Cognition and models
- Development: Typical develoment and aging

Pavilion
- Temporal Processing
- Color and Light: Surfaces, textures, and materials
- Binocular Vision: Stereopsis and depth
- Perceptual Organization: Grouping
- Multisensory Perception: Visuo-auditory interactions 2
- Multisensory Perception: Visuo-haptic and visuo-vestibular interactions
- Attention: Divided attention and capture
- Attention: Features and objects
- Objects: Numbers
- Objects: Reading

Take down: 12:30 – 1:00 pm

Tuesday Morning, May 19

Setup: 7:30 - 8:00 am
Presenters Only: 8:00 - 8:30 am
Session: 8:00 am – 12:30 pm
Even Authors Present: 9:30 – 10:30 am
Odd Authors Present: 10:30 – 11:30 am

Banyan Breezeway
- Visual Memory: Encoding and retrieval
- Visual Search: Models and learning
- 3D Perception: Shading
- Perception and Action: Methods and models
- Perception and Action: Interactions

Pavilion
- Spatial Vision: Neural mechanisms
- Motion Perception: Optic flow and heading
- Eye Movements: Pursuit
- Perceptual Organization: Shapes and objects 2
- Binocular Vision: Rivalry and awareness
- Attention: Selection and modulation
- Attention: Search and features
- 3D Perception: Space
- Object Recognition: Mechanisms and models

Take down: 12:30 – 1:00 pm

Tuesday Afternoon, May 19

Setup: 1:45 – 2:15 pm
Presenters Only: 2:15 – 2:45 pm
Session: 2:15 – 6:45 pm
Even Authors Present: 3:45 – 4:45 pm
Odd Authors Present: 4:45 – 5:45 pm

Banyan Breezeway
- Perceptual Learning: Higher-level processes and mechanisms
- Perception and Action: Reaching and grasping
- Object Recognition: Categories

Pavilion
- Motion Perception: Local and higher order
- Face Perception: Development, adaptation, and learning
- Face Perception: Disorders
- Face Perception: Social
- Attention: Temporal
- Attention: Mechanisms and models
- Attention: Eye movements
- Eye Movements: Statistics
- Eye Movements: Learning and adaptation

Take down: 6:45– 7:00 pm

Wednesday Morning, May 20

Setup: 7:30 - 8:00 am
Presenters Only: 8:00 - 8:30 am
Session: 8:00 am – 12:30 pm
Even Authors Present: 9:30 – 10:30 am
Odd Authors Present: 10:30 – 11:30 am

Pavilion
- Color Perception: Models, methods, and meaning
- Perception and Action: Walking
- Attention: Individual differences
- Attention: Reward and affective influences
- Visual Search
- Face Perception: Emotion 2
- 3D Perception: Neural mechanisms

Take down: 12:30 – 1:00 pm

Save the Date...

VSS 2016
May 13-18, 2016

TradeWinds Island Resorts
St. Pete Beach, Florida

Talk Schedule

Saturday, May 16

Time	Talk Room 1	Talk Room 2
8:15 – 9:45 am	Motion Perception	Object Recognition
10:45 am – 12:30 pm	Attention: Mechanisms and models	Color Perception
2:30 – 4:15 pm	Attention: Space and awareness	Perception and Action: Reaching, grasping and tracking
5:15 – 6:45 pm	Development	Face Perception: Flexible coding

Sunday, May 17

Time	Talk Room 1	Talk Room 2
8:15 – 9:45 am	Multisensory Perception	Eye Movements: Cognition
10:45 am – 12:30 pm	Object Recognition: Mechanisms and models	Binocular Vision
2:30 – 4:15 pm	Spatial Vision: Crowding	Motion Perception: Biological motion and motion in depth
5:15 – 7:15 pm	Attention: Tracking and motivation	Scene Perception: Mechanisms and models

Monday, May 18

Time	Talk Room 1	Talk Room 2
8:15 – 9:45 am	Attention: Control and mechanisms	Perception and Action: Interactions
10:45 am – 12:15 pm	Face Perception: Mechanisms and models	Visual Search: Models

Tuesday, May 19

Time	Talk Room 1	Talk Room 2
8:15 – 9:45 am	Vision in Neurological Disorders	Attention: Features and objects
10:45 am – 12:30 pm	Face Perception: Social	Color Perception: Material properties
2:30 – 4:15 pm	3D Perception	Visual Search
5:15 – 7:15 pm	Visual Memory: Neural mechanisms	Perceptual Organization

Wednesday, May 20

Time	Talk Room 1	Talk Room 2
8:15 – 10:00 am	Spatial Vision: Neural mechanisms	Visual Memory: Capacity and models
11:00 am – 12:45 pm	Perceptual Learning	Eye Movements: Saccades and space

Speaker Information

Please arrive at the Ballroom no less than 30 minutes before the start of your session. Presenters are welcome to test their presentations between talk sessions. Please give priority to presenters whose talk is scheduled for the subsequent session.

The meeting rooms are equipped with a data/video projector and a projection screen. Presentations can be made from your Mac or PC laptop. A technician will be present in each room to handle any technical problems that may arise.

Keynote Address

Bruno Olshausen, Ph.D.

Professor, Helen Wills Neuroscience Institute and School of Optometry, UC Berkeley; Director, Redwood Center for Theoretical Neuroscience

Bruno Olshausen received B.S. and M.S. degrees in electrical engineering from Stanford University, and a Ph.D. in Computation and Neural Systems from the California Institute of Technology. From 1996-2005 he was Assistant and subsequently Associate Professor in the Departments of Psychology and Neurobiology, Physiology and Behavior at UC Davis. Since 2005 he has been at UC Berkeley where he is currently Professor in the Helen Wills Neuroscience Institute and School of Optometry.

He also serves as Director of the Redwood Center for Theoretical Neuroscience, an interdisciplinary research group focusing on mathematical and computational models of brain function. Olshausen's research aims to understand the information processing strategies employed by the brain for doing tasks such as object recognition and scene analysis.

Vision in brains and machines

Saturday, May 16, 7:15 pm, Talk Room 1-2

The past twenty years have seen important advances in both our understanding of visual representation in brains and in the development of algorithms that enable machines to 'see.' What is perhaps most remarkable about these advances is how they emerged from the confluence of ideas from different disciplines: Findings from signal analysis and statistics shed new light on the possible coding principles underlying image representations in visual cortex, and cortical models in turn inspired the development of multilayer neural network architectures which are now achieving breakthrough performance at object recognition tasks (deep learning). Here I shall review these developments, and I shall discuss what further insights stand to be gained from this cross-fertilization of ideas.

CAMBRIDGE RESEARCH SYSTEMS

Keynote Address is sponsored by Cambridge Research Systems
Visit www.crstltd.com to listen again.

Opening Night Reception

Friday, May 15, 7:00 - 9:30 pm

Save Friday evening for the spectacular VSS Opening Night Reception! The reception will take place on the beach and beachside sundecks from 7:00 – 9:30 pm. Featuring live Calypso music.

Don't forget your drink tickets, which can be found in the back of your badge! Your drink tickets are also good at Demo Night and Club Vision.

Prepare to sink your toes into the sand and enjoy this fantastic event! Please remember to wear your badge.

Davida Teller Award

Suzanne McKee

The Smith-Kettlewell Eye Research Institute

Suzanne began her scientific career at UC Berkeley, and has spent much of her research career at Smith-Kettlewell Eye Research Institute.

Suzanne has been a hugely influential figure in vision science, and is one of a small group of researchers who laid the foundations of modern visual psychophysics. She has worked on many aspects of vision, and is responsible for a remarkably varied array of important scientific contributions in the fields of motion perception, binocular vision, color perception, amblyopia, and visual search. She has made a series of seminal and thought provoking discoveries in these areas that have challenged existing theories. Her early work on spatial vision centered on the visual hyperacuities, where the challenge was to explain how resolution limits for vernier and stereo offsets could dramatically exceed the sampling limits imposed by the retina. Suzanne has made many fundamental contributions to understanding the stereo matching problem as well as insight into the role of binocular vision in amblyopia. Her work is notable for its clear and innovative conception, quality of execution, and care of interpretation.

Suzanne's impact on the field has been profound, both directly through her work, but also indirectly through her mentorship. Like Davida Teller, she was a trail-blazer at a time when few women worked in vision science, overcoming many of the obstacles common in that era. Along the way, Suzanne inspired generations of both men and women to follow in her footsteps. In the course of her career, Suzanne has worked with a variety of students, post-docs, and colleagues, and those who have worked with her are extraordinarily grateful for her generosity, guidance, wisdom, and encouragement. VSS would like to thank Suzanne for her contributions to vision science.

The Best Student Poster Awards

Sponsored by Cambridge Research Systems

CAMBRIDGE RESEARCH SYSTEMS

The first author of one poster from each poster session will be awarded the Best Student Poster Award. These awards recognize the most outstanding student poster presented during each of the eight poster sessions. All student presenting posters at VSS 2015 in an undergraduate or graduate program are eligible.

The Best Student Poster will be selected by representatives of the VSS Abstract Review Committee in each session. Winning posters will be displayed near the Banyan Breezeway for the duration of the meeting. After the meeting, electronic versions of the winning posters will be posted on the Cambridge Research Systems Ltd website (www.crsltd.com). The award comes with a cash prize of $100.

Elsevier/VSS Young Investigator Award

John Serences

Associate Professor, Department of Psychology, University of California, San Diego

Trained at Johns Hopkins University, John Serences was awarded the PhD in Psychological and Brain Sciences in 2005 under the supervision of Steven Yantis. After one year of post-doctoral training at the Salk with Geoffrey Boynton, he took up a faculty position at University of California, Irvine in 2007 before moving to University of California, San Diego in 2008, where he was promoted to Associate Professor in 2011.

Dr. Serences is an internationally recognized leader in the field of visual attention and a pioneer of cutting edge quantitative and neuroimaging techniques. He has adopted an interdisciplinary approach that combines psychophysics, cognitive behavioral modeling, functional MRI, and EEG to make significant contributions in the fields of visual attention, working memory, perceptual decision making, and perceptual learning. Dr. Serences has developed cutting edge data analyses that open up new possibilities for the types of questions that can be addressed with human neuroimaging tools.

In his early work, Dr. Serences demonstrated that transient neural signals – emanating from either inferior or superior parietal cortex – play a key role in reinitializing the visual system so that relevant sensory stimuli can guide future acts of stimulus selection. His work on feature-based attention demonstrated that feature-specific attentional modulations spread across the visual field – even to regions of the scene that do not contain a stimulus. In this recent work, Dr. Serences developed a method for quantifying feature-selective responses in human visual cortex, which offers profound opportunities to build on our existing knowledge of sensory processing derived from single-unit recordings and provide novel insight into population-level representations of simple stimulus properties. He also used an encoding model to reconstruct the spatial representations of a stimulus under different task demands from fMRI activation patterns across cortical regions of interest. He showed that spatial attention enhances stimulus representations in higher-order visual areas but not in earlier visual areas, consistent with the spatial priority map framework.

Dr. Serences is not only prolific, but he exhibits an unwavering commitment to mentorship - resulting in a team of highly motivated and proficient students - and fosters long-lasting collaborations across universities and disciplines. With his development and application of cutting-edge quantitative methods in human neuroimaging, Dr. Serences is changing the face of vision research.

Selective attention and visual information processing

Monday, May 18, 12:30 pm, Talk Room 2

Selective information processing – or selective attention – is supported by changes in neural gain, changes in neural variability, and changes in the shape of tuning functions. Traditionally, these effects have been examined in isolation and researchers have tried to infer how each type of modulation impacts the information content of sensory codes. However, examining each modulatory effect in isolation can obscure our understanding of how attention dynamically shapes the quality of perceptual representations. Fortunately, new techniques can more precisely characterize large-scale neural activity patterns, and I will discuss how several such approaches can reveal insights about the joint impact of attentional modulations on information processing in visual cortex.

Student and Postdoc Workshops

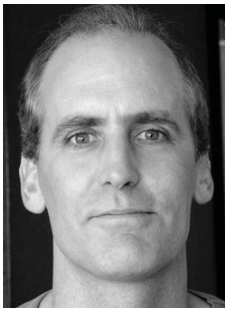
VSS Workshop for PhD Students and Postdocs: Is there a strategy behind successful grant writing?

No registration required. First come, first served, until full.

Sunday, May 17, 1:00 - 2:00 pm, Glades/Jasmine (Jacaranda Hall)

Moderator: Frans Verstraten
Discussants: Bart Anderson, Peter Bex, Allison Sekuler, Simon Thorpe

Research grant$ are difficult to get. For some parts of the world that is a clear understatement: your chance of going getting some money is probably higher in Las Vegas than in most national research funding agencies. For some of us it is crucial to get research funding, especially if you are in a soft money institute. Clearly, some colleagues are more successful than others. It is not just simply a random process. What are the secrets? In this workshop some colleagues will discuss their strategies, some successful, others not, and also give some insight in how review committees work. Moreover, they might answer all the questions you always wanted to ask (about funding that is…)…



Bart Anderson

Bart is a Professorial Research Fellow in the psychology department at the University of Sydney. After completing postdoctoral training at Rutgers and Harvard, he received multiple grants from the NIH after joining the faculty at MIT. He has had continuous funding from the Australian Research Council since moving to Australia in 2003, including two senior research fellowships.

Peter Bex

Pete is a Professor of Psychology at Northeastern University in Boston Massachusetts and has worked in academic university departments, soft money research institutes and industry. He has been writing grants for nearly 20 years and reviews grants for organizations across 4 continents. His grant applications have been funded and rejected by government agencies, charities and corporations in the US and Europe.

Allison Sekuler

Allison is a Professor in Psychology, Neuroscience & Behaviour and Associate Vice-President and Dean of Graduate Studies at McMaster University. Previously, she served as McMaster's Associate Vice-President Research and Interim Vice-President Research and International Affairs; and she served on the VSS Board from 2005-2009. She has been funded continuously by Federal Granting Agencies since 1991, and also received funding from Provincial Agencies, Non-Profit Organizations, and most recently through an industry-related research project. Since VSS was founded 15 years ago, Allison received $5.5M in funding for research projects as a Principal Investigator, and has been a co-investigator on large collaborative grants funding more than $30M. She has served on grant review committees for Canadian and US Federal agencies as well as for Ontario agencies, and has led numerous sessions on successful grantsmanship for graduate students, postdoctoral fellows, and faculty. When her grant funding runs out, she plans to become a professional Hearthstone player.

Simon Thorpe

Simon is director of the CerCo (Brain and Cognition Research Center) in Toulouse, France. He has spent 12 years as a member of the Brain, Behaviour and Cognition Committee of the CNRS that evaluates and recruits French scientists, and a further 10 years as a member of an Interdisciplinary commission. He has also been involved in several evaluation committees for the European Commission, and recently obtained a highly competitive ERC Advanced grant.

Frans Verstraten

Frans (now University of Sydney) funded most of his post-doc time by successfully applying for several competitive grants. Soon after he was appointed at Utrecht University in 2000, the Netherlands Organisation for Scientific Research awarded him a 1.65 million Euro Pioneer grant. Later, he collected a number of grants to support his research and his many PhD students. He was also a member of several grant review committees in different countries. He is the past-president of VSS and this is the fourth (and last) VSS-workshop he has organized.

VSS Workshop for PhD Students and Postdocs: Finding your path in graduate school

No registration required. First come, first served, until full.

Sunday, May 17, 1:00 - 2:00 pm, Sabal/Sawgrass (Jacaranda Hall)

Moderator: Frank Tong
Discussants: Jody Culham, John Serences, Geoffrey Woodman, Yaoda Xu

Charting your path through graduate school may seem like a straightforward task with clearly marked sign posts: learn important scientific skills, work hard in the lab, run experiments and gather lots of data, write papers and get them published, then put together a hefty thesis. Really though, grad school consists of both well-defined and ill-defined problems to be solved, and the possible paths to doing well are diverse and many.

In this workshop, you will have the opportunity to hear from expert panelists who will describe their own personal adventures at navigating this exciting but sometimes mysterious and challenging terrain. We will learn how they honed in on particular research questions to pursue, the scientific tools they sought to acquire and master, cool experiments they tried that failed as well as those that worked, and the valuable "life lessons" they learned from their advisor, professors, labmates, or from their own experience. We will discuss the joys and challenges of scientific writing, the ups and downs of the review process, and how to scale the apparently daunting wall of the thesis by setting concrete goals for writing. Finally, we will discuss how successful navigation of the PhD will prepare you for embarking on the next stage of your career.

Jody Culham

Jody Culham is a Professor in the Department of Psychology at the University of Western Ontario. Her research relies on functional neuroimaging and psychophysical methods to address how vision is used to support perception and to guide actions. Jody received her PhD from Harvard University in 1997, and pursued postdoctoral work at Western University before starting her faculty position in 2001. Jody has received multiple awards for her research, including the CIHR New Investigator Award (2003), Western Faculty Scholar Award, (2008), and the NSERC E. W. R. Steacie Memorial Fellowship (2010).

John Serences

John is an Associate Professor in the Department of Psychology at UC San Diego. His research relies on psychophysics, computational modeling, EEG, and fMRI to investigate how behavioral goals and other attentional factors influence perception, memory and decision making. He received his PhD from Johns Hopkins University in 2005, and pursued postdoctoral research at the Salk Institute before beginning his position as assistant professor in 2007. He is the 2015 recipient of the VSS Young Investigator Award.

Geoffrey Woodman

Geoff is an Associate Professor in the Department of Psychology at Vanderbilt University. His research uses behavioral methods, electrophysiological recordings, imaging, and causal manipulations of the primate brain to understand visual attention, working memory, and cognitive control. He received his PhD in 2002 from the University of Iowa, and then pursued postdoctoral research at Vanderbilt before beginning his faculty position in 2007. He is an Associate Editor at JEP:HPP, supported by grants from the National Eye Institute, and the 2012 recipient of the Young Investigator Award from VSS.

Yaoda Xu

Yaoda is an Associate Professor in the Department of Psychology at Harvard University. Her research focuses on how the human brain extracts visual object information from multiple levels of processing and how task-relevant information is represented in higher brain areas. She received her PhD from MIT in 2000, and pursued postdoctoral research at Harvard, MIT and Yale before beginning her faculty position at Harvard in 2008. Her research is supported by the National Eye Institute.

Frank Tong

Frank Tong is a Professor of Psychology at Vanderbilt University. He is interested in understanding the fundamental mechanisms underlying visual perception, attentional selection, object processing, and visual working memory. He has received multiple awards for his research advances (including the VSS YIA award), for his work on fMRI decoding of visual and cognitive states. He particularly enjoys working with students and postdocs as they carve their path towards scientific discovery and independence, and currently serves as a VSS board member.

Elsevier/*Vision Research* Travel Awards

VSS congratulates this year's recipients of the 2015 Elsevier/ *Vision Research* Travel Awards.

Ji Won Bang

Brown University, Cognitive, Linguistic & Psychological Sciences (CLPS dept.)

Advisor: Takeo Watanabe

Zhimin Chen

Peking University
Advisors: Gerrit Maus and David Whitney

Benedikt Ehinger

Institute of Cognitive Science, Osnabrück University
Advisor: Peter König

Alon Hafri

University of Pennsylvania
Advisors: Russell Epstein and John Trueswell

Seha Kim

Rutgers University
Advisor: Prof. Jacob Feldman

Tina Liu

Carnegie Mellon University
Advisor: Marlene Behrmann

Guido Maiello

University College London
Advisor: Peter J. Bex

Sara Rafique

Centre for Vision Research, York University
Advisor: Jennifer Steeves

Thomas Sprague

University of California, San Diego
Advisor: John Serences

Jan Jaap van Assen

Department of Psychology,
Justus-Liebig-University Giesen
Advisor: Roland W. Fleming

Chaona Chen

School of Psychology, University of Glasgow, Scotland, UK
Advisor: Rachael Jack

Kacie Dougherty

Department of Psychology, Vanderbilt University
Advisor: Alexander Maier

Davood Gozli

Department of Psychology, University of Toronto
Advisor: Jay Pratt

Alex Kell

MIT
Advisor: Josh McDermott

Kathryn Koehler

University of California, Santa Barbara
Advisor: Miguel Eckstein

Andrew Mackenzie

School of Psychology and Neuroscience,
University of St Andrews
Advisor: Prof. Julie Harris

Elyse Norton

New York University
Advisor: Michael Landy

Robert Reinhart

Vanderbilt University
Advisor: Geoffrey F. Woodman

Matthew Tang

School of Psychology, The University of Western Australia
Advisors: David R. Badcock and Troy A.W. Visser

Xuexin Wei

University of Pennsylvania
Advisor: Alan Stocker

Satellite Events

Mathematical and Computational Models in Vision (MODVIS)

Wednesday, May 13, 9:00 am - 6:00 pm, Long/Bird/Indian
Thursday, May 14, 9:00 am - 7:00 pm, Long/Bird/Indian
Friday, May 15, 9:00 - 11:30 am, Horizons

Organizers: Jeff Mulligan, NASA Ames Research Center; Zyg Pizlo, Purdue University; Qasim Zaidi, SUNY College of Optometry

Registration rates are the same as last year: $80 regular, $40 student on or before April 1st, and $100/$50 after. More information can be found on the workshop's website: http://www.conf.purdue.edu/modvis/

Perceptual Expertise Network Reunion

Thursday, May 14, 8:00 am - 5:00 pm, Horizons

Organizer: Isabel Gauthier, Thomas Palmeri, and Magen Speegle, Vanderbilt University and members of the Perceptual Expertise Network

The Perceptual Expertise Network will be celebrating its 30th workshop by inviting present PEN members, past PEN members, and PEN friends to a day of talks as well as a reunion dinner following the talks. If you want to attend the dinner at 6pm, you will need to register here by April 24th.

David Knill Memorial Symposium

Friday, May 15, 9:00 - 11:30 am, Talk Room 1-2

Organizer: Wei Ji Ma, New York University

Speakers: Dan Kersten, Paul Schrater, Robert Jacobs, Chris Sims, Krystel Huxlin, Wei Ji Ma

Dave Knill was a beloved scientist, teacher, and VSS regular who suddenly passed away in 2014. Dave also served on the VSS Board of Directors from 2002 to 2007. Dave got his Ph.D. from Brown University in 1990 with a thesis about the perception of surface shape and reflectance. He did a postdoc at the University of Minnesota, after which he held faculty positions at the University of Pennsylvania and the University of Rochester, where he was since 1999. Dave left a towering legacy in many areas of vision science and decision-making, from Bayesian modeling to spatial vision to active sensing to multisensory perception to bounded rationality. In this symposium, a few of Dave's many trainees and collaborators will commemorate his life and work.

To find out more, please visit: http://www.visionsciences.org/dave_knill_symposium.htm

The future of Psychophysical Toolbox and other Psychophysics software (a lunchtime discussion)

Saturday, May 16, 12:45 - 2:00 pm, Snowy Egret

Organizers: Michael Tarr, Carnegie Mellon University

This meeting is to discuss financial and structural mechanisms to discuss continued support for PsychToolbox, including possible methods for directly support Mario Kleiner's full-time work on PTB. We can also discuss alternatives to PTB and any other issues related to software development for experimental control and data acquisition.

The application of the SID Information Display Measurements Standard in vision research

Saturday, May, 16, 12:45 - 2:15 pm, Horizons East
Sunday, May 17, 12:45 - 2:15 pm, Horizons East

Organizer: Cambridge Research Systems

The theoretical session will run on Saturday lunchtime from 12:45 - 2:15 pm. This will include an introduction to the complete IDMS, followed by an in-depth discussion of the fundamental measurements that vision scientists should consider making in their own laboratories. The practical session will follow on Sunday lunchtime from 12:45 - 2:15 pm. This will show attendees how to apply aspects of the IDMS by making measurements of their own laptop screen using a new free software Toolbox for MATLAB and instrumentation provided by CRS. The practical session will require attendees to bring a laptop with MATLAB and the latest release of the Psychophysics Toolbox installed (Psychtoolbox-3 - http://psychtoolbox.org). Both sessions are free and open to all registered VSS attendees. Advance registration is not compulsory but highly recommended as space is limited; note that those attending the theoretical session on Saturday will be given preference if they want to attend the practical session on Sunday. To register and find out more, please visit: http://www.crsltd.com/IDMS.

WorldViz Vizard Virtual Reality User Meeting

Sunday, May 17, 12:45 - 2:15 pm, Snowy Egret

Organizers: Matthias Pusch, Charlotte Li

New Tools and Methods for Virtual Reality as a Research Tool

Discuss and try the latest hardware and applications in the fast moving Virtual Reality scene.

We will show info about Oculus Rift Crescent Bay, Valve/HTC Vive, and the latest developments in consumer VR components like Wearality and Samsung GearVR.

You will learn how to use those devices with the Vizard VR Toolkit for creating research applications. With WorldViz Vizard, users can build applications that provide the best experiences across virtual reality immersive technologies such as displays and sensors.

To register for this event, please fill out the application form at http://www.worldviz.com/events under the VSS section.

Seats will be assigned on a first-come first-serve basis.

Attendee Resources

Abstract Book

A printed Abstract book is no longer provided to each attendee. Printed Abstract books are available for purchase for $12, or you can download an electronic copy in PDF format from the VSS website. See the Registration Desk.

ATM

An ATM is located in the main lobby of the hotel. A second ATM can be found in the lobby of the Breckenridge Building.

Audiovisual Equipment for Talks

LCD projectors (e.g., for PowerPoint presentations) will be provided in the talk rooms; however, computers will NOT be provided. Presenters must bring their own computers and set them up BEFORE the start of the session in which they are presenting. We recommend that you test your presentation before your session.

A loaner PC is available for speakers. Please see the Registration Desk to make arrangements.

Baggage Check

Bags can be checked with the Bell Hop in the main lobby.

Business Center

The Business Center is located in the lobby. Computer terminals and a printer are available in the VSS Cyber Lounge, located in the Blue Heron meeting room on the second floor.

Business Meeting

The VSS Business Meeting is Tuesday, May 19, at 1:45 pm in Talk Room 2. All VSS members are encouranged to attend. This is your opportunity to hear about VSS, ask questions, and give feedback.

Certificates of Attendance

To receive a Certificate of Attendance, please visit the Registration Desk. If you require any changes, we will be happy to email/mail a copy after the meeting.

Children's Programs/Childcare

Both the TradeWinds Island Grand and Guy Harvey hotels feature an extensive array of programs and activities for children and families. From special events, games, and crafts designed for families, to childcare and camps just for kids, the resort has a program to fit every family's needs. For more information on the wide variety of kids programs, call the Adventure Center at (727) 363-2294 or check the TradeWinds Island Resorts website www.tradewindsresort.com.

Activities Overview:
www.tradewindsresort.com/recreation/kids

Daily Kid's Activities Calendar:
www.tradewindsresort.com/kids-activities

Code of Conduct

The Vision Sciences Society is committed to providing a safe and professional environment during our annual meeting. All VSS members are expected to conduct themselves in a business-like and professional manner. It is unlawful to harass a person or employee because of that person's sex or race. Harassment is prohibited when it creates a hostile or offensive work environment.

Contact Us

If you need to reach VSS meeting personnel while at the meeting, call ext. 7814 from a house phone, or from outside the hotel, call 727.367.6461, ext. 7814.

Copying and Printing

Copy and fax services, as well as general use of printers, is available at the Business Center for a fee. Boarding passes may be printed free of charge. Language translation and general secretarial services are also available for a fee.

A printer will be available in the VSS Cyber Lounge, located in the Blue Heron meeting room.

Disclaimer

The Program Committee reserves the right to change the meeting program at any time without notice. Please note that this program was correct at time of printing.

Drink Tickets

Each attendee will receive two "free drink" tickets which may be redeemed at the Opening Night Reception (May 15), Demo Night (May 18) and/or Club Vision (May 19).

Exhibits

All exhibits are located in the Banyan Breezeway.

Exhibit Hours

Saturday, May 16, 8:00 am – 6:45 pm
Sunday, May 17, 8:00 am – 6:45 pm
Monday, May 18, 8:00 am – 12:30 pm
Tuesday, May 19, 8:00 am – 6:45 pm

Exhibitor Setup and Teardown

Setup: Friday, May 15, 4:00 – 7:00 pm and Saturday, May 16, 7:00 - 8:00 am
Teardown: Tuesday, May 19, 6:45 - 8:30 pm

Fitness Center

The Fitness Center is open Monday through Friday from 6:00 am – 8:00 pm, and on weekends from 6:00 am – 5:00 pm. The Center is available to attendees staying at either of the TradeWinds hotels.

Food Service/Catering

Complimentary coffee and tea, and a light continental breakfast is available each morning in the Grand Palm Colonnade and Garden Courtyard. Coffee, tea, and refreshments will also be served each afternoon between afternoon talk sessions.

Your VSS registration includes a reception and a dinner. The Opening Night Reception is held Friday night and the Demo Night dinner is held Monday night. Both events are held on the beach Each attendee will be given two free drink tickets, good on either night or at Club Vision.

The VSS schedule gives a generous two-hour lunch period to take advantage of the beautiful surroundings and amenities of the TradeWinds Island Grand Hotel and the Guy Harvey Outpost.

Note: All VSS meeting attendees will receive a 20% discount on all food and beverage purchases in ALL TradeWinds Islands Resorts restaurants and bars. You must present your VSS badge to receive a discount.

The 20% discount does not apply to food or drink at VSS events, such as the Opening Night Reception, Demo Night, and Club Vision, as discounted pricing has already been applied.

Guests

Guests are allowed complimentary entry into one VSS session to see the poster or talk of the person they are guests of at the meeting.

Guests must register at the VSS Registration Desk upon arrival and must be accompanied by a VSS attendee. Guests must wear their guest badge for entrance into the session they attend, and for social events as well.

Guests are welcome at all social functions (Club Vision, Opening Night Reception, and Demo Night). Fees for guests to eat at Demo Night Beach Barbeque: Adults $25; Youth 6-12 $10; Children under 6 free.

Internet Access

VSS provides free wireless Internet access in the meeting areas and in all guest rooms. In the meeting areas, connect to **twgroup**; password is **group5500**.

If you did not bring your own computer, a limited number of laptop computers with free Internet access are available for your use in the VSS Lounge, located in the Blue Heron room. A printer is also available in the Blue Heron room.

Lost and Found

Lost and found is located at the Registration Desk in the Grand Palm Colonnade.

Message Center

Messages for registrants can be left and retrieved at the Registration Desk. A bulletin board will be available in the Grand Palm Colonnade for announcements and job postings.

Moderators

Please arrive at the meeting room 30 minutes prior to the start of your session to allow time for setup and to check in with your speakers. Please see the Moderator instructions given to you when you checked in. Copies are available at the Registration desk.

Parking

Complimentary self-parking is available to all meeting attendees. Valet parking is available at the TradeWinds Island Grand lobby for an additional fee.

In addition to the original parking at the Island Grand Resort, the property directly to the north of the Island Grand has been purchased by the TradeWinds and will be utilized for additional parking. The project is still under construction (but nearing completion), but it will add at least 150 additional parking spaces. Access will be through the Island Grand guard gate.

Phone Charging Station

A phone charging station is located at the Registration Desk.

Photographing/Videotaping Presentations

Unless otherwise noted, photographing and videotaping of posters and talks is permitted at VSS. Presenters who do NOT wish to be photographed or videotaped should indicate this by displaying our "No videos and photos" image on their poster or on their title slide at the beginning of their talk. The image can be downloaded from the VSS website or you can pick up a printed version at the Registration desk.

Public Transportation

Suncoast Beach Trolley

The Suncoast Beach Trolley connects St. Pete Beach with Pass-a-Grill, Treasure Island, Clearwater and other beach communities along the coast. The trolley runs every 20 minutes from 5:00 am to 10:00 pm Monday through Thursday and 5:00 am to midnight Friday and Saturday. A bus stop is located directly outside the TradeWinds Resort.

Fare: $2.00/ride

Central Avenue Trolley

The Central Avenue Trolley serves Central Avenue from The Pier in downtown St. Petersburg to Pass-A-Grille on St. Pete Beach.

Fare: $2.00/ride

The Downtown Looper

Hop aboard the St. Petersburg Trolley Downtown Looper route to connect you to all the city's major museums and attractions. Runs every 15 minutes. Look for the bright red and yellow trolleys.

Fare: $0.50/ride, Seniors & disabled: $0.25/ride

Registration

The Registration desk is located in the Grand Palm Colonnade. The Registration desk will be open at the following times:

Thursday, May 14, 4:00 - 7:00 pm
Friday, May 15, 7:00 am - 6:00 pm
Saturday, May 16, 7:30 am - 6:45 pm
Sunday, May 17, 7:30 am - 6:45 pm
Monday, May 18, 7:45 am - 1:30 pm
Tuesday, May 19, 7:45 am - 6:45 pm
Wednesday, May 20, 7:45 am - 12:45 pm

Restaurants and Bars at TradeWinds Island Grand

Cash and Go Lunches

The TradeWinds will offer a selection of reasonably-priced lunch items just for VSS attendees, Saturday through Tuesday, 12:00 – 2:30 pm. Located in the Courtyard.

Palm Court Italian Grill

Located in the Courtyard area, the Palm Court features a fine dining experience with an extensive collection of wines, including many by the glass. Guests may eat indoors or under the stars on the courtyard patio. Dinner reservations are suggested.

Lunch: Monday – Saturday, 11:30 am – 2:00 pm
Brunch: Sunday, 10:00 am – 2:00 pm
Dinner: Monday – Saturday, 5:30 – 10:00 pm (closed Sunday)

Bermudas Steak & Seafood

Bermudas offers a casual setting with a beach view for dinner. Enjoy aged beef, fresh seafood, and regional specialties. Open every day. Kids eat dinner FREE with a dining adult Sunday-Thursday between 5-7 pm.

Breakfast: 7:00 – 11:00 am
Dinner: 5:00 – 10:00 pm

Beef 'O' Brady's

A casual restaurant and poolside sports pub, Beef 'O' Brady's has a fun atmosphere with salads, burgers, and wraps, as well as tasty desserts and frosty island concoctions. Open every day.

Sunday – Thursday, 11:00 am – 11:00 pm
Friday and Saturday, 11:00 am – midnight
Bar Hours: 11:00 – 2:00 am

Flying Bridge

This authentic floating Florida cracker cottage is permanently docked over the meandering Island Grand waterway and features a beachfront deck with a full bar. Dress is casual and many guests dine in beach attire. The fare includes nachos, wings, salads, burgers, wraps, sandwiches, and grilled entrees. Open daily from 11:00 am – 10:00 pm.

RedBeard's Sharktooth Tavern

Enjoy nightly live entertainment along with a nice selection of imported bottled beer, full bar, and specialty drinks. Monday is karaoke night. Open afternoons and evenings until 11:00 pm (closed Tuesdays).

Salty's

Located beside the adult pool, Salty's is a beachfront tiki bar, which features quick sandwiches and burgers, as well as frozen drinks. Open every day.

Food: 11:00 am – 11:00 pm
Cocktails: 11:00 – 2:00 am

Room Service at the TradeWinds Island Grand

Available daily from 6:00 am to 11:00 pm.

Awakenings Lobby Bar

An elegant lobby bar in the afternoon and evenings, Awakenings also offers morning coffee by Starbucks. Open from 7:00 am – closing varies daily.

Pizza Hut Express

Located onsite at the TradeWinds, Pizza Hut Express offers small, medium, and personal pan pizzas, as well as spicy chicken wings. Room delivery is available at the TradeWinds. Open daily from 11:00 am to 10:00 pm.

Working Cow Ice Cream Shoppe

Featuring gourmet ice cream and decadent sundaes, the Ice Cream Shoppe is open daily from 11:00 am to 10:00 pm.

Deli

Located just off the Grand Palm Colonnade, the Deli offers Grab and Go breakfasts, made-to-order sandwiches, salads, snacks and other foods to go. The Deli also features a selection of beverages, including wines. The Deli is open daily from 7:00 am. Closing times vary.

Restaurants at Guy Harvey Outpost

Guy Harvey RumFish Grill

Guy Harvey RumFish Grill showcases a 33,500 gallon aquarium featured on Animal Planet's hit series, "Tanked." Dine on cutting edge seafood, explore the tanks and enjoy nightly live entertainment with indoor and outdoor bars. Serving breakfast, lunch, dinner, a late night menu and Sunday brunch buffet. Reservations are recommended.

Perks Up

Perks Up offers morning pastries, on-the-go breakfast items, and Starbucks coffee. In the afternoon, guests can stop by for ice cream or enjoy a cocktail. Open daily from 7:00 am to 6:00 pm.

Guys Grill

Enjoy casual all-day dining with outdoor beachfront seating for breakfasts, casual lunches and dinners. Open daily 7:00 am – 10:00 pm.

Sand Bar

The Sand Bar is a beachfront oasis where guests can indulge in tall, cool drinks. Light snacks, appetizers and sandwiches are also served. Open daily from 11:00 am – 10:00 pm.

Room Service at the Guy Harvey Outpost

Available daily from 7:00 am to 10:00 pm.

Shipping

To ship your poster or other items home from the meeting, ask for the Concierge at the front desk of the TradeWinds Island Grand.

VSS Lounges

VSS provides two rooms where attendees can relax, visit, and get online. The VSS Cyber Lounge is located in the Blue Heron room, upstairs from the VSS Registration Desk in the Grand Palm Colonnade. This room provides tables and chairs, plus computers and a printer for your use. The VSS Social Lounge (new this year) provides comfortable seating for relaxing and visiting with your colleagues.

Both lounges have wireless Internet access. Connect to **twgroup** and enter password **group5500**.

13th Annual Dinner and Demo Night

Monday, May 18, 6:00 – 10:00 pm

Beach BBQ: 6:00 – 8:00 pm, Beachside Sun Decks

Demos: 7:00 – 10:00 pm, Talk Room 1-2, Royal Tern, Snowy Egret, Compass, Spotted Curlew and Jacaranda Hall

Please join us Monday evening for the 13th Annual VSS Demo Night, a spectacular night of imaginative demos solicited from VSS members. The demos highlight the important role of visual displays in vision research and education. This year's Demo Night will be organized and curated by Gideon Caplovitz, University of Nevada Reno; Arthur Shapiro, American University; Dejan Todorovic, University of Belgrade and Karen Schloss, Brown University.

A Beach BBQ is served on the Beachside Sun Decks. Demos are located in Talk Room 1-2, Royal Tern, Snowy Egret, Compass, & Spotted Curlew.

Demos are free for all registered VSS attendees and their families and guests. The Beach BBQ is free for attendees, but **YOU MUST WEAR YOUR BADGE** to receive dinner. Guests and family members must purchase a ticket for the Beach BBQ. You can register your guests at any time at the VSS Registration Desk, located in the Grand Palm Colonnade. A desk will also be set up on the Seabreeze Terrace at 6:30 pm.

Guest prices
Adults: $25
Youth (6-12 years old): $10
Children under 6: free

#theDress: An explanation based on simple spatial filter

Arthur Shapiro, Oliver Flynn, Erica Dixon, American University

Individual differences in the perception of #theDress have generated numerous hypotheses regarding color constancy. Here we demonstrate that the effects of simulated illumination on #theDress can be negated with a simple spatial filter (See Shapiro & Lu 2011). Could the #theDress phenomena indicate variation in a spatial gain control?

#theDress: A Color Constancy Color Controversy

Rosa Lafer-Sousa, Department of Brain and Cognitive Science, MIT, Bevil Conway, Wellesley College, MIT

A photograph of a dress that drives two distinct color-percepts recently went viral. We believe the two percepts arise because the brain is guessing about the ambiguous illuminant (blueish-or-yellowish?). We show that the identical dress in two unambiguous contexts can yield the two distinct percepts that divided the Internet.

A Rotating Square Becomes Both Non-Rigid and Non-Uniform

Harald Ruda, Guillaume Riesen, Northeastern University

A simple white square, rotating around its center has edges that become non-rigid for a range of speeds. In addition, a pattern of luminance variation in the shape of a darker cross also becomes apparent with rotation.

Adaptive and Gaze Contingent Contrast Sensitivity Testing

Edward Ryklin, Ryklin Software, Inc.

Quickly obtain your Contrast Sensitivity Function Curve by simply gazing at a series of dynamically presented Gabor patches. Generate a complete CSF curve in about 2 minutes.

Afterimages Foil Visual Search

Guillaume Riesen, Harald Ruda, Northeastern University

Visual search performance can be impacted by afterimages from previously fixated stimuli. Can you find the brightest target after looking at the adaptation stimulus, or will you be fooled by its afterimages?

Ambiguous Garage Roof

Kokichi Sugihara, Meiji University

A roof of a garage appears to be quite different when it is seen from two special viewpoints. The two viewpoints are realized simultaneously by a mirror. Even though we know that we are seeing the same object, our brains do not correct our inconsistent perception.

Assassin's Creed Rogue - Player Immersion with Tobii Eye Tracking

Ken Gregory, Joanna Fiedler, Tobii Technology, Inc.

With Tobii eye tracking integration into Assassin's Creed Rogue™, characters behavior is influenced by eye contact like in real life. Aim your weapon where you look while running in another direction. Make your games become deeply immersive, faster and more intense by adding eye tracking to traditional controls and game play.

Attention Beyond Pixels - Bridging Machines and Humans

Qi Zhao, Chengyao Shen, Xun Huang, National University of Singapore

We will present an interactive demo to show human-like gaze prediction in natural scenes that effectively bridges the semantic gap. Users can input new images from the Internet or taken using mobile devices on the spot, and see how it predicts where humans look.

Biological Motion: is that really me?

Andre Gouws, Peter Thompson, Rob Stone, University of York

A real-time demonstration of point-light biological motion. Walk, jump, dance in front of the sensor and see your point-light display. Using an Xbox Kinect sensor (approx $50), watch how we tweak some simple settings that can make apparent changes to your physical build, gender and even mood!

Blur photographs by light projection

Takahiro Kawabe, Shin'ya Nishida, NTT Communication Science Laboratories, Nippon Telegraph and Telephone Corporation, Japan

We demonstrate that it is possible to make real photographs printed on a paper apparently blurred by means of the projection of luminance patterns.

Can you read without your macula? A 1440Hz gaze-contingent paradigm

Peter April, Jean-Francois Hamelin, Danny Michaud, Stephanie-Ann Seguin, VPixx Technologies

How well could you read if you developed macular degeneration? VPixx Technologies will be demonstrating a 1440Hz gaze contingent display, using our PROPixx DLP projector refreshing at 1440Hz, and our TRACKPixx high speed binocular eye tracker. The gaze contingent paradigm will simulate a scotoma in your central visual field. Can you still read?

DPI precision eye drawings

Warren Ward, Ward Technical Consulting

Showing, by accurate eye tracking data, that we don't really know our eye position. Chart recorder drawings will be demonstrated using real-time eye position.

Glow Toggled by Shape

Minjung Kim, New York University and York University, Laurie Wilcox, Dr. Richard Murray, York University

We rendered a blobby, Lambertian disc under purely diffuse light. From the front, the disc looks like an ordinary, solid, white object. However, as the disc rotates, revealing its underside, the disc takes a translucent appearance, and appears to glow.

Modulation of line length judgment of Vertical Horizontal illusion by mathematical observation

Ayane Murai, Masahiro Ishii, Sapporo City University

A stimulus that consists of two lines forming an inverted-T shape creates an illusion. One can mentally divide the linked lines into two disconnected lines, then rotate and translate one of them to compare. Our demo shows that the observers underestimate the length of a vertical line with this observation.

Motion parallax: Putting a Wii bit of depth in your world

Andre Gouws, Peter Thompson, University of York

Using just $20 worth of hardware (a Nintendo Wii remote and infrared LEDs), we will demonstrate that a simple spatial transformation of multiple 2D objects on a screen, relative to the tracked movements of an observer, can produce a striking sensation of scene depth and 3D virtual reality.

Reflections of the environment distort perceived 3D shape

Steven A. Cholewiak, Department of Psychology, Justus-Liebig-University Giessen, Germany, Gizem Küçükoğlu, Department of Psychology, New York University

We will showcase how a specular object's image is dependent upon the way the reflected environment interacts with the the object's geometry and how its perceived shape depends upon motion and the frequency content of the environment. Demos include perceived non-rigid deformation of shape and changes in material percept.

Reverse Stroop Battle

Caterina Ripamonti, Jakob Thomassen, Cambridge Research Systems Ltd.

Compete against your colleagues in the Reverse Stroop Battle. Two players will compete at the same time to determine who responds quickest to an identical set of stimuli presented simultaneously on two synchronised touchscreen monitors.

Robust Size Illusion Produced by Expanding and Contracting Flow Fields

Xue Dong, The Institute of Psychology, Chinese Academy of Sciences

We observe a new illusion that the positions of radially moving dots, which moved within an imaginary annular window, appear shifted in the opposite direction of motion. The apparent size of the inner annular boundary shrank during the dotsâ€™ expanding phase and dilated during the contracting phase.

Selective stimulation of penumbral cones to visualize retinal blood vessels

Manuel Spitschan, Geoffrey K. Aguirre, David H. Brainard, Department of Psychology, University of Pennsylvania

In 1819, Johann Purkinje described how a moving light source that displaces the shadow of the retinal blood vessels to adjacent cones can produce the entopic percept of a branching tree. We demostrate a novel method for producing a similar percept. We use a device that mixes 56 narrowband primaries under computer control, in conjunction with the method of silent substitution, to present observers with a spectral modulation that selectively targets penumbral cones in the shadow of the retinal blood vessels. Such a modulation elicits a clear Purkinje-tree percept.

Star Wars Scroll Illusion

Arthur Shapiro, Oliver Flynn, American University

The seventh episode of the Star Wars saga will be released later this year. It might be of interest to note that Kingdom's ''Leaning Tower Illusion'' can also be created with the scrolling text shown at the beginning of the Star Wars movies.

stimBOLD, Simulation from Visual Stimulus to BOLD

Mark Schira, School of Psychology, University of Wollongong

We have developed a stimBOLD toolbox that allows generating a prediction of measured BOLD responses from and arbitrary video input within 5-10 minutes. I is aimed for experimental planning and teaching such as providing a hands on experience of retinotopic mapping.

Stroboscopic Ping-Pong

Brought to you by VSS and the Demo Night Committee

The title speaks for itself. Come test your skills against the vision-community's finest in the ultimate ping-pong challenge!

Thatcherise Your Face

Andre Gouws, Peter Thompson, Mladen Sormaz, University of York

Come and see a real-time demonstration of this ever-popular perceptual phenomenon. Have your own face "thatcherised" in real time, take away a still version of your thatcherised face as a souvenir, and enter the prize competition for the "most-thatcherise-able" face of VSS 2015.

The amazing ever popular Beuchet chair

Peter Thompson, Rob Stone, Tim Andrews, University of York

Once again we are bringing the Beuchet chair, an old favourite at Demo night. This year's chair is a new and improved design! The Beuchet chair is a thought-provoking demonstration of one of the problems our visual system has to solve – the interpretation of our eyes' 2-D images of a 3-D world. The images of distant objects must be small but we still see them as their real size thanks to 'size constancy'. The chair breaks size constancy by providing cues that two people at very different distances are actually at the same distance. Get your photo taken with a friend....

The Blue/Black and Gold/White Dress Pavillion

Michael Rudd, University of Washington; Maria Olkkonen, University of Pennsylvania; Bei Xiao, American University; Annette Werner, University of Tubingen; Anya Hurlbert, Newcastle University

The infamous color-switching dress will be viewed in person under a variety of spectral illumination conditions to test some hypotheses that have been proposed to explain the phenomena. The dress demo will be supplemented by additional demos of materials seen under different illuminants, and by photos illustrating color constancy phenomena.

The jumping pen illusion

Rachel Denison, Center for Neural Science and Department of Psychology, New York University, Zhimin Chen, Department of Psychology, Peking University; Gerrit Maus, Department of Psychology, University of California, Berkeley

In our new "jumping pen" illusion, an object (such as a pen) appears to jump in front of an occluder when the two cross in the blind spot, due to perceptual competition between the two filled-in percepts. The perceptual consequences of this illusory depth ordering can include surprising size illusions.

The mind-writing pupil

Sebastiaan Mathot, Jean-Baptiste Melmi, Lotje van der Linden, Aix-Marseille University, France, Stefan Van der Stigchel, Helmholtz Institute, Utrecht University, The Netherlands

Are you ready to write with your mind? In this demo, we show how you can decode the focus of covert visual attention through pupillometry. Using this technique, you can select letters from a virtual keyboard by covertly attending to them.

The Pulfrich Solidity Illusion

Brent Strickland, CNRS Institut Jean Nicod; LPP

I will present a modified version of the double Pulfrich pendulum illusion (Wilson & Robinson, 1986). A pendulum appears to swing on an (illusory) elliptical path through a solid wooden beam! This demonstrates that object solidity has a relatively low priority relative to spatiotemporal motion cues in visual processing.

The shrunken finger illusion: Unseen sights can make your finger feel shorter

Vebjørn Ekroll, Bilge Sayim, Ruth van der Hallen, Johan Wagemans, Laboratory of Experimental Psychology, University of Leuven

When you put a semi-spherical shell on your finger and view it directly from above, the shell is perceived as a complete ball due to amodal volume completion and you can experience how your finger feels shorter than normal, as if to make space for the illusory ball.

The Watercolor Effect Colors Non-flat Two Dimensional Manifolds and Three Dimensional Volumes, Neon Color Does Not

Eric L Altschuler,MD, PhD, Temple University School of Medicine, Xintong Li, Alice Hon, Rutgers New Jersey Medical School, Abigail Huang, Elizabeth Seckel, VS Ramachandran, UCSD

We have noticed a dramatic difference between two color spreading effects: the watercolor effect will color non-flat two dimensional manifolds and three dimensional volumes while neon color will not and only colors a flat surface.

Vision Scientists Love Drifting Gabors that Move

Gennady Erlikhman, Gideon Caplovitz, University of Nevada, Reno

Several demonstrations of form-motion illusions using drifting Gabor patches that have been used over the last few years. We include a novel version in which a figure appears to rotate even though the Gabors that form its outline are not changing in position or orientation, only phase.

Wide Area Walking with HMD based Virtual Reality System

Matthias Pusch, Charlotte Li, WorldViz Virtual Reality

Wide area walking in Virtual Reality: Participants experience Virtual Reality with the currently highest end head mounted displays in a large walking space with allows for natural locomotion. This creates a very high level of 'presence' which can be experienced with a chilling 'fear of heights' demo.

Exhibitors

VSS recognizes the following companies who are exhibiting at VSS 2015 and we thank them for their participation and support.

Exhibit Hours
Saturday, May 16, 8:00 am – 6:45 pm
Sunday, May 17, 8:00 am – 6:45 pm
Monday, May 18, 8:00 am – 12:30 pm
Tuesday, May 19, 8:00 am – 6:45 pm

Arrington Research, Inc.

Booth 11

400 Hz ViewPoint EyeTracker(R) systems from Arrington Research available with Torsion and 3D Vergence All systems include a Software Developers Kit (SDK), real-time Ethernet communication, built-in stimulus presentation, post-hoc data analysis tools, a MATLAB toolbox, Python, and many other 3rd Party product interfaces and exam¬ples Great for both humans and animals and is available with Analog and TTL communication to ensure seamless communication ViewPoint EyeTracker(R) systems are the easiest and best value available and include a variety of light-weight head mounted EyeFrame(tm), HMD, head fixed, and remote systems. Arrington Research has been providing reliable affordable eye trackers worldwide for over 17 years. Please visit www.ArringtonResearch.com for more details.

ARVO

Booth 15

ARVO is a community of 12,000 vision researchers from 80 countries; we are the largest, most respected vision research organization in the world. Our aim to advance research worldwide into understanding the visual system and into preventing, treating and curing its disorders.

ARVO furthers the progress of vision research by encouraging professional development through practical and informative educational activities, including the ARVO Annual Meeting, publishing the highly regarded, peer-reviewed journals Investigative Ophthalmology & Visual Science, Journal of Vision and Translational Vision Science & Technology, funding research, grant and award programs directly and through the ARVO Foundation for Eye Research.

Brain Vision, LLC

Booth 16

Brain Vision is the leader for EEG in Vision Science. We offer a full integration of EEG with many leading eye tracking devices. We provide flexible and robust solutions for high density, active EEG, wireless EEG, dry EEG and a wide range of bio-sensors like GSR, EKG, Respiration, and EMG. We integrated eye tracking and EEG with fMRI, TMS, fNIRS, tDCS/HDtDCS and MEG. If you want to know how EEG improves Vision Science and how eye-tracking improves EEG, please talk to us. Let us help you to pushing the edge of what is possible.

Cambridge Research Systems Ltd.

Booth 4

What's HOT in Vision Science? Tom, Jakob and Katia invite you to 'Chill & Chat' with us outside at the bar. Join us there!

This year, we're offering a new two-part workshop covering the SID Information Display Measurements Standard (IDMS) and its application for vision research. Saturday and Sunday lunchtimes, free to all, subject to available space.

On demo night, form an orderly queue to beat your colleagues in the Reverse Stroop Battle. Two players will compete using synchronised Display++ touchscreen monitors for a place on our leader board.

Display++ is our LCD display that makes it simple to display calibrated visual stimuli with precision timing, and provides robust and reliable synchronization of the stimulus presentation with external data collection equipment, at an affordable price.

The MR-Safe version of our LCD display is BOLDscreen32. It offers the same features as Display++, for fMRI at up to 7T. We also provide MR-Safe eye tracking, a range of response devices (e.g. button boxes and joysticks), plus accessories like MR-Safe spectacles.

If a CRT display is more suitable for your application, we have stock available. We recommend driving it with Bits# (Bits Sharp), which unites trusted CRS hardware features for high resolution calibrated stimulus display and synchronous data collection with software tools like Psychtoolbox- 3, PsychoPy and Psykinematix.

If you have a ViSaGe of any vintage talk to us about how you can add the Bits# functionality to your existing equipment, and make it compatible with Display++.

AudioFile is an ideal companion to Display++, it makes it easy to present synchronous auditory stimuli with low latency, deterministic timing on any computer. We also provide spectroradiometric display calibration equipment, cost-effective eye tracking, response boxes and laboratory furniture like chinrests and motorized tables.

Cambridge Research Systems is also proud to continue as sponsor of the VSS Keynote Address, and Best Poster Prizes.

Cortech Solutions, Inc.

Booth 5

Evoked-potential and event-related potential systems for research are our specialty We provide US sales and support for the most advanced brand names, including Biosemi ActiveTwo and g tec's g HIamp, both high-bandwidth digital systems with active electrodes All of our EP / ERP systems can be offered with leading off-line analysis software like EMSE Suite and BESA, but we also offer a variety of real-time analysis options for use in brain-computer interface and other applications We are pleased to be the US sales and support representative for Cambridge Research Instruments, allowing us to configure vision science solutions with EP / ERP or for use in fMRI studies.

Oxford University Press

Booth 2

Visit the Oxford University Press booth for discounts on all new and backlist titles including: Pizlo Making a Machine That Sees Like Us, Shimamura, Experiencing Art, Goodale, Sight Unseen, 2nd edition, and much more!

The MIT Press

Booth 1

The MIT Press publishes books in vision science and related fields. Please come by our booth to receive a 30% discount on new and classic titles.

Psychonomic Society

Booth 14

Founded in 1959, the Psychonomic Society is the home for scientists who study how the mind works. Members of the Society are experimental psychologists, among whose numbers are some of the most distinguished researchers in the field. The Society and its members perform and promote the basic science of behavior in areas such as memory, learning, problem solving, action planning, language, and perception that connect with other fields of research. To learn more, visit www.psychonomic.org.

Rogue Research, Inc.

Booth 13

Rogue Resolutions provides you with fully integrated solutions for neuroscience. A comprehensive and flexible range of products for brain stimulation and brain imaging including: Brainsight TMS Navigation; DuoMAG TMS; TMS / tDCS compatible EEG; neuroConn tDCS; Brainsight NIRS and Smarteye eye tracking.

Rogue Research develops the Brainsight family of products including Brainsight TMS and NIRS for human neuroscience as well as Brainsight Vet, a complete neuronavigation system and suite of neurosurgical tools for a variety of applications. We also offer design and manufacturing services for custom surgical tool or implants.

Ryklin Software Inc.

Booth 7

We are a relatively new exhibitor at VSS, offering a simple but powerful gaze contingent vision testing system to the community. Last year at demo night, many attendees were impressed by our automatic threshold contrast sensitivity system. This year we have a new low cost product for static para-fovea and perimetry vision research as well.

Our software is compatible with the very best peripherals already offered by the other VSS exhibitors such as VPixx, Cambridge Research, Tobii, LC Technologies, SR Research, Arrington, SMI, Tobii, and more! Our systems have been used for many years in preclinical research and now we hope to see it grow to be a teaching and investigative tool for any vision science lab. The system is adaptable to meet the needs of many different customers. So, when you stop by our booth or demo night exhibit to take it for a test drive, feel free to ask how we can individualize your experience!

SensoMotoric Instruments, Inc.

Booth 10

SMI designs advanced 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, etc. This includes fully remote systems, high-speed/high precision, glasses-based, and fMRI/MEG compatible systems Experiment Center 360° continues to serve researchers worldwide by offering a powerful solution to stimulus presentation, data acquisi¬tion, and analysis.

Sinauer Associates, Inc.

Booth 3

Sinauer Associates, Inc. publishes college-level textbooks and educational multimedia in biology, psychology, neuroscience, and allied disciplines. On display in our booth will be new titles by Jeremy Wolfe et al. (Sensation and Perception, Fourth Edition); Ahmad Hariri (Looking Inside the Disordered Brain); Scott A Huettel, Allen W. Song, and Gregory McCarthy (Functional Magnetic Resonance Imaging, Third Edition); and Julie Sedivy (Language in Mind: An Introduction to Psycholinguistics).

SR Research Ltd.

Booth 6

SR Research welcomes you to VSS 2015 and thanks all of you who have contributed to over 4,000 peer-reviewed publications that have been generated using our hardware and software! The EyeLink 1000 Plus continues to outperform other video-based eye-trackers, whilst being the only system that can operate both as a Binocular Remote, head free-to-move tracker (at a true and consistent 500 Hz) and as a high-precision, high-speed head-stabilized system (up to 2000 Hz) for all ages and multiple species. Add fiber optic extensions and the same hardware seamlessly becomes the world's leading MRI eye-tracker.

The EyeLink 1000 Plus provides a uniform, cutting-edge solution for the behavioral lab, MRI/MEG, or EEG. With the world's best technical specifications, most flexible experiment delivery software, and outstanding customer support, we enable academics to achieve their goals. Drop by and discuss our latest hardware and software additions.

Tobii Technology, Inc.

Booth 17

Welcome to VSS 2015! Tobii Pro helps business and science professionals gain valuable insights into human behavior. Our high-quality eye tracking solutions capture human behavior in a natural way, ultimately affording users access to valuable, objective data about real responses to stimuli. Our technology helps leading vision science institutions broaden scientific understanding of eye movements and eye movement disorders. The results are used to develop means of diagnosing problems in areas such as nystagmus and strabismus (squint). Stop by our booth and ask us about our special VSS pricing.

Tucker-Davis Technologies

New Frontiers in Neuroscience

Booth 12

Tucker-Davis Technologies (TDT) provides products for basic and applied research in the neurophysiology, hearing, and speech sciences as well as for general data acquisition applications. We offer a complete line of modular DSP-based data acquisition and stimulus generation systems.

VPixx Technologies Inc.

Booths 8 and 9

VPixx Technologies welcomes the vision community to VSS 2015, and is excited to demonstrate our TRACKPixx 2000Hz binocular eye tracker, alongside the PROPixx DLP LED video projector, now supporting refresh rates up to 1440Hz. The TRACKPixx uses dual cameras to support 3D remote operation. The PROPixx has been designed specifically for the generation of precise high refresh rate stimuli for gaze-contingent, stereoscopic, and other dynamic applications. The PROPixx is the most flexible display possible for vision research, featuring resolutions up to 1920x1080, and a perfectly linear gamma. The solid state LED light engine has 30x the lifetime of halogen projectors, a wider colour gamut, and zero image ghosting for stereo vision applications. Our high speed circular polarizer can project 400Hz stereoscopic stimuli for passive polarizing glasses into MRI and MEG environments.

Come and see the SHIELDPixx Faraday cage for installing the PROPixx inside an MRI/MEG room. In addition, the PROPixx includes an embedded data acquisition system, permitting micro-second synchronization between visual stimulation and other types of I/O including eye tracking, audio stimulation, button box input, TTL trigger output, analog acquisition, and more! VPixx Technologies will be demonstrating an exciting gaze-contingent combination of the TRACKPixx and PROPixx, showing you how well you can read without your fovea!

WorldViz

Booth 18

WorldViz is an industry leader in interactive virtual reality solutions. The company's flagship products are Vizard, the VR community's favorite content creation software and VizMove, a fully integrated wide area walking system. WorldViz provides cost-effective, turnkey virtual reality solutions to researchers, educators, designers, and manufacturers all over the world.

Club Vision Dance Party

Tuesday, May 19, 10:00 pm – 2:00 am, Talk Room 1

Club Vision, held on the last night of the meeting, is the final social event of VSS. The dance party will feature DJ Randy, one of the area's most talented and requested DJs.

The wearing of glowing or flashing accessories is a tradition for the party and we will again be distributing free glow-in-the-dark necklaces and bracelets. Feel free to also bring your own creative accessories.

Don't miss the highlight of the VSS social calendar. We'll see you at Club Vision!

Member-Initiated Symposia

Schedule Overview

Friday, May 15, 12:00 - 2:00 pm

S1, Talk Room 1-2: **Attention! Features? Objects? How features, objects, and categories control visual selective attention.**

S2, Pavilion: **Measuring and Interpreting Oscillations in Perception and Behavior**

Friday, May 15, 2:30 - 4:30 pm

S3, Talk Room 1-2: **Neurally informed theories on visual working memory**

S4, Pavilion: **How to break the cortical face perception network**

Friday, May 15, 5:00 - 7:00 pm

S5, Talk Room 1-2: **Linking behavior to different measures of cortical activity**

S6, Pavilion: **How learning changes the brain**

S1 - Attention! Features? Objects? How features, objects, and categories control visual selective attention.

Friday, May 15, 2015, 12:00 - 2:00 pm, Talk Room 1-2

Organizer(s): Rebecca Nako; Birkbeck, University of London

Presenters: Kia Nobre, Stefan Treue, Martin Eimer, Daniel Baldauf, Greg Zelinsky, Johannes Fahrenfort

Attentional selectivity in vision is not purely space-based. Feature-based, object-based, and category-based attention all play a critical role in the selection of visual input, but the mechanisms of these types of attentional control and the interactions between them are not yet fully understood. This symposium brings together leading researchers who made recent important contributions to this area, using a variety of different converging methods (single-unit electrophysiology, fMRI, EEG, MEG, and computational modelling). Its aim is to provide a new and integrated perspective on the roles of features, objects and categories in the control of visual attention.

Multiple sources of attentional biases on visual processing

Speaker: Kia Nobre; University of Oxford

Features and objects in the physiology of attention

Speaker: Stefan Treue; University of Göttingen

The time course of feature-based and object-based control of visual attention

Speaker: Martin Eimer; Birkbeck, University of London

Top-down biasing signals of non-spatial, object-based attention

Speaker: Daniel Baldauf; Massachusetts Institute of Technology

Combining behavioral and computational tools to study mid-level vision in a complex world

Speaker: Greg Zelinsky; Stony Brook University

Neural markers of perceptual integration without attention

Speaker: Johannes Fahrenfort; Vrije Universiteit, Amsterdam

S2 - Measuring and Interpreting Oscillations in Perception and Behavior

Friday, May 15, 2015, 12:00 - 2:00 pm, Pavilion

Organizer(s): Jan Drewes and David Melcher; Center for Mind/Brain Sciences (CIMeC), University of Trento, Rovereto, Italy

Presenters: Huan Luo, Ian C. Fiebelkorn, Ayelet N. Landau, Jan Drewes, Rufin VanRullen

Oscillations in attention and other brain mechanisms may lead to regular oscillations in perceptual and behavioral performance. Novel results and methods aimed at the measurement, undestanding and interpretation of these effects will be presented.

Behavioral oscillations: hidden temporal dynamics in visual attention

Speaker: Huan Luo; Institute of Biophysics, Chinese Academy of Sciences

Rhythmic sampling at both cued and uncued locations

Speaker: Ian C. Fiebelkorn; Neurophysiology of Attention and Perception Laboratory, Princeton University

Distributed attention is implemented through theta-rhythmic gamma modulation

Speaker: Ayelet N. Landau; Ernst Strüngmann Institute (ESI) for Neuroscience in Cooperation with Max Planck Society and Hebrew University, Jerusalem

Oscillations in behavioral performance for rapidly presented natural scenes

Speaker: Jan Drewes; Center for Mind/Brain Sciences (CIMeC), University of Trento, Rovereto, Italy

Authors: Weina Zhu[1], David Melcher[2]; [1]Kunming Institute of Zoology, Chinese Academy of Sciences, Kunming, China, [2]Center for Mind/Brain Sciences (CIMeC), University of Trento, Rovereto, Italy

Perceptual cycles

Speaker: Rufin VanRullen; Université de Toulouse; UPS; Centre de Recherche Cerveau et Cognition; Toulouse, France and CNRS; CerCo; France

S3 - Neurally informed theories on visual working memory

Friday, May 15, 2015, 2:30 - 4:30 pm, Talk Room 1-2

Organizer(s): Ilja G. Sligte; University of Amsterdam

Presenters: Christian N.L. Olivers, Mark G. Stokes, Ilja G. Sligte, Fiona McNab, Pieter R. Roelfsema, Thomas B. Christophel

Our ability to represent information that is longer in present in our direct environment, or our so-called working memory, is of utmost importance to most goal-directed behavior. But how does our brain coordinate what to do now and in a few seconds or minutes time? In this symposium, we will discuss theories on how the brain enables working memory and how the contents of our working minds are stored in different brain regions.

On the role of working memory in visual attention

Speaker: Christian N.L. Olivers; VU University Amsterdam

Dynamic Coding for Working Memory in Prefrontal Cortex
Speaker: Mark G. Stokes; University of Oxford

Multiple levels in visual short-term memory
Speaker: Ilja G. Sligte; University of Amsterdam
Authors: Dirk van Moorselaar[1], Christian Olivers[1], Victor A.F. Lamme[2], Kimron L. Shapiro[3]; [1]VU University Amsterdam; [2]University of Amsterdam, [3]University of Birmingham

Competitive interactions affect working memory precision
Speaker: Fiona McNab; University of Birmingham
Authors: Jumana Ahmad[1], Anna C. Nobre[2], Kimron L. Shapiro[1]; [1]University of Birmingham, [2]University of Oxford

The role of the different layers of primary visual cortex in working memory
Speaker: Pieter R. Roelfsema; Netherlands Institute for Neuroscience
Authors: Matthew W. Self, Timo van Kerkoerle; Netherlands Institute for Neuroscience

Distributed Visual Working Memory Stores Revealed by Multivariate Pattern Analyses
Speaker: Thomas B. Christophel; Charité Universitätsmedizin
Authors: Chang Yan[1], Carsten Allefeld[1], John-Dylan Haynes[1,2]; [1]Charité Universitätsmedizin, [2]Humboldt Universität zu Berlin

S4 - How to break the cortical face perception network

Friday, May 15, 2015, 2:30 - 4:30 pm, Pavilion

Organizer(s): David Pitcher; NIMH
Presenters: Marlene Behrmann, Arash Afraz, Kevin Weiner, David Pitcher,

The speakers in this symposium use novel combinations of experimental techniques to study the behavioral effects of damage and disruption in the cortical face perception network in both human and non-human primates. Our aims are to update the fundamental understanding of how faces are cortically represented and to establish common theoretical ground amongst researchers who use different experimental techniques. To achieve this we will present studies using a range of subject populations (healthy-humans, brain-damaged patients, pre-operative epileptic patients and macaques) and experimental methods (optogenetics, fMRI, microstimulation, physiology, TMS, diffusion weighted imaging and neuropsychology).

Reverse engineering the face perception system: insights from congenital prosopagnosia
Speaker: Marlene Behrmann; Department of Psychology, Carnegie Mellon University, USA

The causal role of face-selective neurons in face perception
Speaker: Arash Afraz; Massachusetts Institute of Technology

The human face processing network is resilient after resection of specialized cortical inputs
Speaker: Kevin Weiner; Department of Psychology, Stanford University

Transient disruption in the face perception network: combining TMS and fMRI
Speaker: David Pitcher; NIMH

S5 - Linking behavior to different measures of cortical activity

Friday, May 15, 2015, 5:00 - 7:00 pm, Talk Room 1-2

Organizer(s): Justin Gardner[1], John Serences[2], Franco Pestilli[3]; 1Stanford University, [2]UC San Diego, [3]Indiana University
Presenters: Justin Gardner, John Serences, Eyal Seidemann, Aniruddha Das, Farran Briggs, Geoffrey Boynton

Several methods are available to study brain activity across spatiotemporal scales. Electrodes measure fast, microscopic activity of single-units. Multi-electrodes, voltage-sensitive dyes and intrinsic-imaging measure mesoscale population-activity. Cortical-activity can be mapped using fMRI, ECoG and EEG. Leveraging knowledge across measurements is essential for understanding brain and behavior. Attention provides an excellent case. Behavioral work established that reaction times and discrimination improve with attention. Unfortunately, attentional effects on visual response differ across measurements, suggesting different models relating brain and behavior. This symposium invites investigators measuring at different scales to synthesize knowledge about cortical mechanisms of attention and their role for behavior.

Linking brain activity to visual attentional behavior considering multiple spatial-scales of measurement
Speaker: Justin Gardner; Department of Psychology, Stanford University
Authors: Franco Pestilli; Department of Psychological and Brain Sciences, Program in Neuroscience, Indiana University

EEG and fMRI provide different insights into the link between attention and behavior in human visual cortex
Speaker: John Serences; Neurosciences Graduate Program and Psychology Department, University of California, San Diego
Authors: Sirawaj Itthipuripat[1], Thomas Sprague1, Edward F. Ester[2], Sean Deering[2]; [1]Neurosciences Graduate Program [2]Psychology Department, University of California, San Diego

Attentional modulations of sub- and supra-threshold neural population responses in primate V1
Speaker: Eyal Seidemann; Department of Psychology and Center for Perceptual Systems The University of Texas at Austin

Task-related Responses in Intrinsic-Signal Optical Imaging
Speaker: Aniruddha Das; Department of Neuroscience, Psychiatry, and Biomedical Engineering, Columbia University
Authors: Cardoso, M.[1,2], Lima, B.[2], Sirotin, Y.[2]; [1]Champalimaud Neuroscience Program (CNP), Lisbon, Portugal; [2]Department of Neuroscience, Columbia University, New York, NY

Attention and neuronal circuits
Speaker: Farran Briggs; Geisel School of Medicine at Dartmouth College

A comparison of electrophysiology and fMRI signals in area V1
Speaker: Geoffrey Boynton; University of Washington, Seattle, WA

S6 - How learning changes the brain

Friday, May 15, 2015, 5:00 - 7:00 pm, Pavilion

Organizer(s): Chris Baker and Hans Op de Beeck; NIMH, USA; University of Leuven, Belgium

Presenters: Krishna Srihasam, Rufin Vogels, David J. Freedman, Andrew E. Welchman, Aaron Seitz

It is well established that learning is associated with changes in visual representations and the underlying neural substrate. However, the brain regions implicated vary from experiment to experiment, ranging from primary visual cortex to all higher levels of the visual system. Further, the nature of the changes are often inconsistent between studies. In this symposium, speakers will present multidisciplinary data from human and non-human primates that collectively highlight that to understand how learning changes the brain, it is critical to consider the underlying complexity and distributed nature of the visual system.

Novel module formation reveals underlying shape bias in primate infero-temporal cortex

Speaker: Krishna Srihasam; Department of Neurobiology, Harvard Medical School, Boston, MA

Authors: Margaret S. Livingstone; Department of Neurobiology, Harvard Medical School, Boston, MA

Learning to discriminate simple stimuli modifies the response properties of early and late visual cortical areas

Speaker: Rufin Vogels; Laboratorium voor Neuro- en Psychofysiologie, Dpt. Neurowetenschappen, KU Leuven Campus Gasthuisberg, Belgium

Authors: Hamed Zivari Adab; Laboratorium voor Neuro- en Psychofysiologie, Dpt. Neurowetenschappen, KU Leuven Campus Gasthuisberg, Belgium

Learning-dependent plasticity of visual encoding in inferior temporal cortex

Speaker: David J. Freedman; Department of Neurobiology, The University of Chicago

Authors: Jillian L. McKee; Department of Neurobiology, The University of Chicago

Training transfer: from functional mechanisms to cortical circuits

Speaker: Andrew E Welchman; University of Cambridge, UK

Authors: Dorita F Chang; University of Cambridge, UK

Moving beyond a binary view of specificity in perceptual learning

Speaker: Aaron Seitz; Department of Psychology University of California, Riverside

Abstract Numbering System

Each abstract is assigned a unique 4 or 6 digit number based on when and where it is to be presented. The format of the abstract numbering is DT.RN (where D is the Day, T is the Time, R is the Room and N is the presentation Number).

First Digit - Day	Second Digit - Time	Third Digit - Room	Fourth-Sixth Digits - Number
2 Saturday	1 Early AM talk session	1 Talk Room 1	1, 2, 3... For talks
3 Sunday	2 Late AM talk session	2 Talk Room 2	001, 002... For posters
4 Monday	3 AM poster session	3 Banyan Breezeway	
5 Tuesday	4 Early PM talk session	4 Pavilion	
6 Wednesday	5 Late PM talk session		
	6 PM poster session		

Examples:
21.16 Saturday, early AM talk in Talk Room 1, 6th talk
36.3013 Sunday, PM poster in Banyan Breezeway, poster board 13
53.4106 Tuesday, AM poster in the Pavilion, poster board 106

Note: Two digits after the period indicates a talk, four digits indicates a poster (the last three digits are the board number).

Saturday Morning Talks

Motion Perception

Saturday, May 16, 8:15 - 9:45 am
Talk Session, Talk Room 1
Moderator: Pascal Mamassian

21.11, *8:15 am* **The orientation dependence of the motion streak aftereffect reveals interactions between form and motion neurons** Matthew Tang, James Dickinson, Troy Visser, David Badcock

21.12, *8:30 am* **Optimal speed estimation in natural image movies predicts human performance** Johannes Burge, Wilson Geisler

21.13, *8:45 am* **Motion pareidolia: illusory perception of coherent apparent motion in random noise** Nicolas Davidenko, Yeram Cheong, Jacob Smith

21.14, *9:00 am* **Temporal evolution of motion direction judgments** Oh-Sang Kwon, Ruyuan Zhang, Duje Tadin

21.15, *9:15 am* **The temporal efficiency function of the energy-based and feature tracking motion systems** Remy Allard, Angelo Arleo

21.16, *9:30 am* **Early, local motion signals generate directional preferences in depth ordering of transparent motion** Alexander Schütz, Pascal Mamassian

Object Recognition

Saturday, May 16, 8:15 - 9:45 am
Talk Session, Talk Room 2
Moderator: Martin Lages

21.21, *8:15 am* **Real-world object size is automatically activated by mid-level shape features** Bria Long, Talia Konkle, George Alvarez

21.22, *8:30 am* **Category Boundaries and Typicality Warp the Neural Representation Space of Real-World Object Categories** Marius Cătălin Iordan, Michelle Greene, Diane Beck, Li Fei-Fei

21.23, *8:45 am* **Searching through the hierarchy: Modeling categorical search using class-consistent features** Justin Maxfield, Chen-Ping Yu, Zelinsky Gregory

21.24, *9:00 am* **Visual interference disrupts visual and only visual knowledge** Pierce Edmiston, Gary Lupyan

21.25, *9:15 am* **Words jump-start vision: a label advantage in object recognition** Bastien Boutonnet, Gary Lupyan

21.26, *9:30 am* **Illusory Expansion Improves Visual Acuity** Martin Lages, Stephanie Boyle, Rob Jenkins

Attention: Mechanisms and models

Saturday, May 16, 10:45 am - 12:30 pm
Talk Session, Talk Room 1
Moderator: Kristina Visscher

22.11, *10:45 am* **Visual spiking responses in V1 couple to alpha fluctuations in deep layers** Kacie Dougherty, Michele Cox, David Leopold, Alexander Maier

22.12, *11:00 am* **Neural correlates of time-resolved behavioral responses reveal theta-band oscillations in the fusiform face area and parahippocampal place area** Bingbing Guo, Jessica Goold, Huan Luo, Ming Meng

22.13, *11:15 am* **Central vs. peripheral primary visual cortex differ in cortical thickness and functional connectivity** Kristina Visscher, Joseph Griffis, Wesley Burge

22.14, *11:30 am* **Refining The Resource Model: Cortical Competition Could Explain Hemifield Independence** John Clevenger, Diane Beck

22.15, *11:45 am* **EEG alpha rhythms track the deployment of spatial attention** Joshua Foster, David Anderson, John Serences, Edward Vogel, Edward Awh

22.16, *12:00 pm* **Attentional gain control during decision-making with multiple alternatives** Sirawaj Itthipuripat, Kexin Cha, Sean Deering, John Serences

22.17, *12:15 pm* **Neuronal signatures of covert visual attention prior to microsaccades** Chih-Yang Chen, Alla Ignashchenkova, Ziad Hafed

Color Perception

Saturday, May 16, 10:45 am - 12:30 pm
Talk Session, Talk Room 2
Moderator: Won Mok Shim

22.21, *10:45 am* **A spectral estimation method for predicting between-eye color matches in unilateral dichromats** Haomiao Jiang, Joyce Farrell, Brian Wandell

22.22, *11:00 am* **Color representation in lateral geniculate nucleus: a human fMRI study** Sang Wook Hong, Qing Yu, Won Mok Shim

22.23, *11:15 am* **Responses of macaque V1 neurons to color images of natural scenes** Max Snodderly, Hee-kyoung Ko, Christopher Carter, Baoyu Zhou

22.24, *11:30 am* **Area VO in human visual cortex is color selective as revealed by fMRI adaptation** Dorita Chang, Robert Hess, Kathy Mullen

22.25, *11:45 am* **Spectral sensitivity measurements reveal partial success in restoring missing rod function with gene therapy** Andrew Stockman, Bruce Henning, Caterina Ripamonti

22.26, *12:00 pm* **Contourless Color Field Induction** Christopher Tyler

22.27, *12:15 pm* **The color communication game** Delwin Lindsey, Angela Brown, David Brainard, Coren Apicella

See page 31 for Abstract Numbering System

Saturday Morning Posters

Perceptual Learning: Lower-level processes and mechanisms

Saturday, May 16, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

23.3001 **Dynamics of blur adaptation** Alissa Winkler, Susana Marcos, Stephen Engel, Michael Webster

23.3002 **Dichoptic de-masking learning in adult amblyopes and its mechanisms** Jun-Yun Zhang, Cong Yu

23.3003 **Binocular suppression learning reveals inhibitory plasticity in early vision** Mark Vergeer, Johan Wagemans, Raymond van Ee

23.3004 **Regulation of the expression of the cholinergic receptors in the visual cortex following long-term enhancement of visual cortical activity by cholinergic stimulation** Marianne Groleau, Mira Chamoun, Menakshi Bhat, Frédéric Huppé-Gourgues, Réjean Couture, Elvire Vaucher

23.3005 **Explaining anterograde and retrograde interference in visual perceptual learning by a limited plasticity resource model** Qingleng Tan, Kazuhisa Shibata, Yuka Sasaki, Takeo Watanabe

23.3006 **The neural mechanism of stabilization of perceptual learning revealed by the concentration of excitatory and inhibitory neurotrasmitter** Kazuhisa Shibata, Maro Machizawa, Edward Walsh, Ji-Won Bang, Li-Hung Chang, Aaron Berard, Qingleng Tan, Yuka Sasaki, Takeo Watanabe

23.3007 **Seeing to see: How templates enhance visual perception** Zhicheng Lin, Barbara Dosher, Zhong-Lin Lu

23.3008 **An integrated reweighting theory accounts for the role of task precision in transfer of perceptual learning for similar orientation tasks** Jiajuan Liu, Barbara Dosher, Zhong-Lin Lu

23.3009 **Exploring timescales of adaptation mechanisms along the visual-processing hierarchy** Gaoxing Mei, Xue Dong, Min Bao

23.3010 **Repeatedly adapting to orientation ensembles does not change contrast adaptation dynamics** Juraj Mesik, Akshay Patke, Stephen Engel

23.3011 **The psychophysical mechanisms underlying the transfer of perceptual learning enabled by double training** Xin-Yu Xie, Jun-Yun Zhang, Cong Yu

23.3012 **Under-stimulation at untrained orientation may explain orientation specificity in perceptual learning** Ying-Zi Xiong, Jun-Yun Zhang, Cong Yu

23.3013 **Expectation and the tilt aftereffect** Noga Pinchuk-Yacobi, Ron Dekel, Dov Sagi

23.3014 **Transcranial Random Noise Stimulation Enhances Visual Learning In Healthy Adults** Florian Herpich, Michael Melnick, Krystel Huxlin, Duje Tadin, Sara Agosta, Lorella Battelli

23.3015 **Criterion Learning in an Orientation-discrimination Task** Elyse Norton, Stephen Fleming, Nathaniel Daw, Michael Landy

Perception and Action: Complex interactions

Saturday, May 16, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

23.3016 **Action Videogame Play Improves Visual Motor Control** Rongrong Chen, Jing Chen, Li Li

23.3017 **Unconscious perception of an opponent's goal** Sarah Cormiea, Maryam Vaziri-Pashkam, Ken Nakayama

23.3018 **How drawing shapes object representations** Judith Fan, Daniel Yamins, Nicholas Turk-Browne

23.3019 **Motor action can make natural scenes pleasant: It's just a matter of comfort** Carlo Fantoni, David Pearson, Luca Ianza, Walter Gerbino

23.3020 **Nonconscious Emotional Information Boosts Categorically Unrelated Concurrent Visual Decisions** Galang Lufityanto, Joel Pearson

23.3021 **Perceptual Distortions of Distances on a Hill Depend on Interoceptive Awareness** Nathan Tenhundfeld, Jessica Witt

23.3022 **Metacognitive ability of confidence sharing modulates optimization of collective perceptual decision** Peiyuan Zhang, Chang-Bing Huang

23.3023 **Motor-evoked potentials reveal a motor-cortical readout of evidence accumulation for sensorimotor decisions** Kielan Yarrow, Aviad Hadar, Paula Rowe, Steven Di Costa, Alex Jones

23.3024 **Encoding attentional-states during visuomotor adaptation** Joo-Hyun Song, Hee Yeon Im, Patrick Bédard

23.3025 **Canonical Viewpoints for Videos of Assembly Tasks** Tandra Ghose, Katharina Mura, Markus Huff

23.3026 **Motor planning and control: Humans interact faster with a human than a robot avatar** Stephan de la Rosa, Maiken Lubkull, Streuber Stephan, Aurelie Saulton, Tobias Meilinger, Heinrich Bülthoff, Rouwen Cañal-Bruland

Visual Search: Eye movements and memory

Saturday, May 16, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

23.3027 **Feedback about gaze position improves saccade efficiency** Saeideh Ghahghaei, Preeti Verghese

23.3028 **Visual Search for Transparent Overlapping Objects in Depth: Overlap Impairs Performance, but Depth does not benefit Performance** Hayward Godwin, Tamaryn Menneer, Simon Liversedge, Kyle Cave, Nick Holliman, Nick Donnelly

23.3029 **Scene context reduces distractor set-size effects during search** Arturo Deza, Emre Akbas, Miguel Eckstein

23.3030 **Memory in visual search is task-dependent in both 2D and 3D environments** Chia-Ling Li, M Pilar Aivar, Matthew Tong, Mary Hayhoe

23.3031 **Modeling search guidance: Three parameters for characterizing performance in different types of visual search.** Tamaryn Menneer, Kyle Cave, Michael Stroud, Elina Kaplan, Nick Donnelly

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23.3032 **Dual-Target Cost in Visual Search for Multiple Unfamiliar Faces** Natalie Mestry, Tamaryn Menneer, Hayward Godwin, Kyle Cave, Nick Donnelly

23.3033 **Eye movements reveal two search modes for the detection of targets in novel dynamically changing visual displays** Alex Muhl-Richardson, Hayward Godwin, Matthew Garner, Julie Hadwin, Simon Liversedge, Donnelly Nick

23.3034 **Visual search for targets in predictable routes and matched randomized scenes** Oliver Tew, Hayward Godwin, Matthew Garner, Julie Hadwin, Simon Liversedge, Nick Donnelly

23.3035 **Saliency-guided eye movement during free-viewing in schizophrenic patients** Masatoshi Yoshida, Kenichiro Miura, Ryota Hashimoto, Michiko Fujimoto, Hidenaga Yamamori, Yuka Yasuda, Kazutaka Ohi, Masaki Fukunaga, Masatoshi Takeda, Tadashi Isa

23.3036 **Active working memory tasks interfere with inefficient search but NOT with efficient search, guided by bottom-up salience.** Beatriz Gil-Gómez de Liaño, Trafton Drew, Daniel Rin, Jeremy Wolfe

23.3037 **Priority of items in working memory affects attentional capture in visual search** Anna Schubö, Tobias Feldmann-Wüstefeld

23.3038 **Contextual cuing for targets in the rear** Satoshi Shioiri, Masayuki Kobayashi, Kazumichi Matsumiya, Ichiro Kuriki

23.3039 **Phonological Interference in Visual Search: Object Names are Automatically Activated in Non-Linguistic Tasks** Stephen Walenchok, Michael Hout, Stephen Goldinger

23.3040 **Synesthesia induced colors do not bias attention in the same manner as physical colors do** Thomas Sørensen, Árni Ásgeirsson

23.3041 **Is visual working memory modulated by prior knowledge about probability? An ERP study** Tomoya Kawashima, Eriko Matsumoto

Eye Movements: Consequences

Saturday, May 16, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

23.3042 **Illusory reversal of temporal order around the time of visual disruptions** Douglas McLelland, Louisa Lavergne, Eckart Zimmermann, Patrick Cavanagh, Rufin VanRullen

23.3043 **A computational model of the perisaccadic updating of spatial attention** Michael Teichmann, Julia Schuster, Fred Hamker

23.3044 **Testing for inhibition of return with purely vertical cues: implications for models of covert visual attention** Xiaoguang Tian, Ziad Hafed

23.3045 **Distribution of attention and parallel saccade programming in antisaccades** Anna Klapetek, Heiner Deubel

23.3046 **Functional Consequences of Slow Drift Fixational Eye Movements in Patients with Central Vision Loss** Girish Kumar, Susana Chung

23.3047 **From small to large, all saccades follow the same timeline** Shrinivas Pundlik, Russell Woods, Gang Luo

Visual Memory: Individual differences and models

Saturday, May 16, 8:30 am - 12:30 pm
Poster Session, Pavilion

23.4001 **Individual differences in representation precision predict adaptation bias** Geoffrey Aguirre, Marcelo Mattar, Marie Carter, Sharon Thompson-Schill

23.4002 **Filtering ability in visual working memory cannot be improved by temporal and spatial task cues** Ayala Allon, Roy Luria

23.4003 **Visual Motor Memory: A developing construct** Mark Mon-Williams, Amanda Waterman, Peter Culmer, Liam Hill

23.4004 **A guess today may be a strategic error tomorrow: Predicting intra-individual differences in visual working memory** Kristin Wilson, April Au, Jenny Shen, Julie Ardron, Justin Ruppel, Gillian Einstein, Susanne Ferber

23.4005 **Testing the role of filtering efficiency in determining individual differences in working-memory capacity** Anna Vaskevich, Roy Luria

23.4006 **EEG markers of reduced visual short-term memory capacity in adult attention deficit/hyperactivity disorder** Iris Wiegand, Beate Kilian, Kristina Hennig-Fast, Hermann Müller, Thomas Töllner, Kathrin Finke

23.4007 **Episodically defined organization of visual memory** Karla Antonelli, Carrick Williams

23.4008 **How Automatic is Visual Recognition Memory?** Karla Evans, Alan Baddeley

23.4009 **Quantifying Context Effects on Image Memorability** Zoya Bylinskii, Phillip Isola, Antonio Torralba, Aude Oliva

23.4010 **A new model for the contents of visual working memory.** Sarah Allred, Gi-Yeul Bae, Maria Olkkonen, Jonathon Flombaum

23.4011 **Dual-trace Iconic Memory** weiwei zhang, Marcus Cappiello

23.4012 **Visual Metamemory: Metacognitive Control and Monitoring of Long-Term Visual Memory for Objects and People** Joshua New, Caleb LoSchiavo, Lisa Son

23.4013 **Sensory Memory is Allocated Exclusively to the Current Event Segment** Srimant Tripathy, Haluk Ogmen

23.4014 **"We remember what we like?": Aesthetic value and memorability for photos and artworks - a combined behavioral and computational study** Christian Wallraven, Joern Freese

23.4015 **Emotional Context and Visual Long-Term Memory** Weizhen Xie, Weiwei Zhang

23.4016 **A hippocampal temporal gating mechanism for episodic visual memories** Simon Thorpe

23.4017 **Modeling information integration in sequential visual decision-making** Jozsef Fiser, Adam Koblinger, Mate Lengyel

23.4018 **The Loss of Information from Visual Working Memory depends on Retro-Cue Reliability** Eren Gunseli, Johannes Fahrenfort, Konstantinos Daoultzis, Martijn Meeter, Christian Olivers

23.4019 **Visual long term memory is spatially specific, but only after a brief consolidation period** Yoolim Hong, Andrew Leber

23.4020 **Waking up buried memories** Christelle Larzabal, Nadège Bacon-Macé, Simon Thorpe

23.4021 **Representations of retrieved face information in visual cortex** Sue-Hyun Lee, Brandon Levy, Chris Baker

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Spatial Vision: Crowding and eccentricity

Saturday, May 16, 8:30 am - 12:30 pm
Poster Session, Pavilion

23.4022 **Peripheral Contrast Sensitivity in Human Adults: Measurements with Gabor Sinusoids Over a Broad Range of Eccentricities** Russell Adams, James Drover, Michele Mercer, Stephanie Scott, Avery Earle

23.4023 **Temporal dynamics of feature integration in peripheral vision and saccadic eye movement** Masahiko Terao, Ikuya Murakami

23.4024 **Effects of Flankers Within the Crowding Zone** Susana Chung

23.4025 **Similarity effects in crowding of Chinese characters** Yuk Ting Leo Cheung, Sing-Hang Cheung

23.4026 **Effect of spatial complexity on resolution, mislocations and crowding** Deyue Yu

23.4027 **The Role of Peripheral Position Uncertainty in Overt Search** Yelda Semizer, Melchi Michel

23.4028 **Crowding suppresses cortical responses to the target in human early visual cortex** Ziyun Zhu, Dongjun He, Fang Fang

23.4029 **Rapid reduction of crowding by training** Amit Yashar, Jiageng Chen, Marisa Carrasco

23.4030 **The effects of precueing the target location on temporal crowding** Shira Tkacz-Domb, Yaffa Yeshurun

23.4031 **How to measure the spatial interaction zone of crowding?** Kilho Shin, Bosco Tjan

23.4032 **Onset transients recover target discriminability during crowding by directing attention to its salient features** Jeffrey Nador, Adam Reeves

23.4033 **Reaction time as a predictive marker for crowding** Maria Lev, Uri Polat

23.4034 **Perceptual learning reduces crowding effect and the size of population receptive field in V2** Dongjun He, Fang Fang

23.4035 **Interocular differences in crowding and their variation across the visual field** John Greenwood, Samuel Solomon, Steven Dakin

23.4036 **Electrophysiological correlates of suppressive lateral interactions** Dave Ellemberg, Olivier Brault, Myriame Masson

23.4037 **Exploring the vertical meridian asymmetry: Is poor performance restricted to the vertical meridian?** Leslie Cameron, Michael Levine, Jennifer Anderson

23.4038 **Perceptual Consequences of Elongated Eyes** Guido Maiello, William Harrison, Fuensanta Vera-Diaz, Peter Bex

Scene Perception: Coding and dynamics

Saturday, May 16, 8:30 am - 12:30 pm
Poster Session, Pavilion

23.4039 **The artistic Turing test: An exploration of perceptions of computer-generated and man-made art** Rebecca Chamberlain, Caitlin Mullin, Johan Wagemans

23.4040 **Connecting Time** Jason Hays, Donald Varakin

23.4041 **Object motion impacts false memory for the space depicted in scene views (at least locally): A conceptual effect of motion on boundary extension?** Christopher Dickinson, Sarah Hinnant, Odessa-Nanette Fields, Kimberly Fiorentino, Robert Gucwa, Hailey Kerr, Marco Alcivar Perez, Emily Philipps, Chase Simonet, Bridget Wasowski, Alannah Marie Wray

23.4042 **Impaired behavioral and neural sensitivity to boundary cues in Williams syndrome** Soojin Park, Katrina Ferrara, Barbara Landau

23.4043 **Eye Movements While Watching Narrative Film: A Dissociation of Eye Movements and Comprehension** John Hutson, Tim Smith, Joseph Magliano, Grace Heidebrecht, Thomas Hinkel, Jia Li Tang, Lester Loschky

23.4044 **Generating bridging inferences while viewing visual narratives** Joseph Magliano, Adam Larson, Karyn Higgs, Lester Loschky

23.4045 **Effects of Recent Exposure to Atypical Environmental Statistics on Orientation Perception: Analyzing the Plasticity of the Horizontal Effect** April Schweinhart, Patrick Shafto, Edward Essock

23.4046 **When Does Scene Categorization Inform Action Recognition?** Adam Larson, Melinda Lee

23.4047 **Scene themes, natural scene structures, and spatial statistics for scene vision** Zhiyong Yang, Jinhua Xu

23.4048 **Effects of Image Size on Clutter Perception: More Evidence for Proto-Object Segmentation** Chen-Ping Yu, Gregory Zelinsky

23.4049 **How we look tells us what we do: Action recognition using human gaze** Kiwon Yun, Gary Ge, Dimitris Samaras, Gregory Zelinsky

23.4050 **The principles of object continuity and solidity in adult vision: Some discrepancies in performance** Brent Strickland, Annie Wertz, Ghislaine Labouret, Frank Keil, Veronique Izard

23.4051 **There is beauty in gist: An investigation of aesthetic perception in rapidly presented scenes** Caitlin Mullin, Gregor Hayn-Leichsenring, Johan Wagemans

23.4052 **Domain-General Representation of Visual Aesthetic Appreciation in the Medial Prefrontal Cortex** Edward Vessel, Jonathan Stahl, Isaac Purton, Gabrielle Starr

Multisensory Perception: Neural substrates and synesthesia

Saturday, May 16, 8:30 am - 12:30 pm
Poster Session, Pavilion

23.4053 **Spatiotopic maps in calcarine sulcus of the congenitally blind** Petra Vetter, Lior Reich, Amir Amedi

23.4054 **The neural dynamics of letter perception in blind and sighted readers** Santani Teng, Radoslaw Cichy, Dimitrios Pantazis, Aude Oliva

23.4055 **Audiovisual integration in amblyopia** Michael Richards, Herbert Goltz, Agnes Wong

23.4056 **Frequency-tuned auditory motion responses within hMT+ as a result of early blindness** Fang Jiang, Elizabeth Huber, Jessica Thomas , G. Christopher Stecker, Geoffrey Boynton, Ione Fine

23.4057 **Audiovisual reaction time enhancement is achieved through auditory-magnocellular interaction** Philip Jaekl, Duje Tadin

23.4058 **Non-random association between vowel sounds and colors** Hyun-Woong Kim, Ho-Sung Nam, Chai-Youn Kim

23.4059 **Texture-Color Associations in Non-synesthetes** Jose Hatem, Joshua Peterson, Thomas Langlois, Stephen Palmer

23.4060 **Relation between synesthetic grapheme-color associations and the sub-types of synesthesia** Kazuhiko Yokosawa, Michiko Asano

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Face Perception: Emotion 1

Saturday, May 16, 8:30 am - 12:30 pm
Poster Session, Pavilion

23.4061 **Similarity in Older and Younger Adults' Emotional Enhancement of Visually-Evoked N170 to Facial Stimuli** Andrew Mienaltowski, Nicole Chambers, Brandy Tiernan

23.4062 **Emotion categorization of facial expressions: Age differences in the utilization of diagnostic features** Marie Smith, Daniel Grühn, Ann Bevitt, Mark Ellis, Oana Ciripan, Louise Ewing

23.4063 **Orientation biases for facial emotion recognition in early childhood and adulthood** Jamie Schmidt, Benjamin Balas

23.4064 **Tracking Emotional Expressions in Dynamically Changing Crowds** Kelly Chang, Allison Yamanashi Leib, David Whitney

23.4065 **Synchrony enhances ensemble perception of dynamic emotional crowds** Elric Elias, Michael Dyer, Timothy Sweeny

23.4066 **Angry expression detriment recognition decision of face memory: a diffusion model analysis** Wenfeng Chen, Ke Tong, Wei Tang, Huiyun Li, Naixin Ren, Xiaolan Fu

23.4067 **Effect of spatial frequency on facial expression adaptation and awareness of emotion** Hong Xu, Pan Liu, Yuan Yuan, Weisi Lin

23.4068 **Time Spent Fixated at Mouth is Related to More Positve Interpretations of Ambiguity in Surprised Faces** Monica Rosen, Tien Tong, Alex Enerson, Maital Neta, Michael Dodd

23.4069 **Subdermal Blood Flow Reveals Differential Responses to Emotional Stimuli** Larissa Vingilis-Jaremko, Pu Zheng, Kang Lee

23.4070 **Impact of task demands on the neural processing of facial emotions** Karly Neath, Roxane Itier

23.4071 **Increased attention orienting by fearful faces varies with Stimulus-Onset Asynchrony** Sarah McCrackin, Roxane Itier

23.4072 **Image properties from the internal and external features of the face differentially predict patterns of neural response to expression and identity in human visual cortex** Mladen Sormaz, Andrew Young, David Watson, Timothy Andrews

Face Perception: Wholes, parts, and configuration

Saturday, May 16, 8:30 am - 12:30 pm
Poster Session, Pavilion

23.4073 **Auditory attentional entrainment modulates the holistic perception of faces** Arnaud Leleu, Jean-Yves Baudouin, Daniel Zagar, Renaud Brochard

23.4074 **What Type of Facial Information Underlies Holistic Face Processing?** Isabelle Bülthoff , Mintao Zhao

23.4075 **Interactions between dynamic facial features** Ben Brown, Alan Johnston

23.4076 **Is the Flashed Face Distortion Effect expertise-based? - a systematic experimental investigation** Sandra Utz, Claus-Christian Carbon

23.4077 **Speeded Breakthrough of Faces in Interocular Suppression Requires Configural Information** Katherine Wood, Anna Kosovicheva, Benjamin Wolfe, David Whitney

23.4078 **The nose-size illusion: Testing the role of visual context** Pu Zheng, Yan Dong, Yi Le, Yuhao Sun, Guoliang Yu, Paul C. Quinn, Kang Lee

23.4079 **The eye-size illusion in the face composite task: Evidence for a direct role of holistic processing** Yan Dong, Yan-Fei Jia, Pu Zheng, Naiqi Xiao, Guo-Liang Yu, Paul Quinn, Kang Lee

23.4080 **When the fat face illusion meets the Thatcher illusion** Yu-Hao Sun, Zhe Wang, Paul Quinn, Kang Lee

23.4081 **The Use of Eyebrows as a Visual Feature** Jacqueline Castro, Jessie Peissig, Cindy Bukach

23.4082 **Framing of faces: Similarly impaired holistic perception from disruption of grouping- and configural- cues** Kim Curby, Robert Entenman

23.4083 **Testing Asymmetric Holistic Processing within a Face: No evidence from the Complete composite Task.** Chao-Chih Wang, Gary C.-W. Shyi

23.4084 **Global and Local Priming Evoke Different Face Processing Strategies: Evidence From An Eye Movement Study** Zhijie Cheng, Tim Chuk, William Hayward, Antoni Chan, Janet Hsiao

23.4085 **Face inversion does not affect the information content coded during the N170** Fei Yi, Katarzyna Jaworska, Robin Ince, Philippe Schyns, Guillaume Rousselet

23.4086 **The role of interattribute distances in face recognition and their relation to holistic processing** Nicolas Dupuis-Roy, Véronique McDuff, Frédéric Gosselin

23.4087 **Testing additivity of kinship information in complementary facial regions** Laurence Maloney, Maria Dal Martello

23.4088 **A holistic advantage in face drawing: higher accuracy when drawing upright faces** Jennifer Day, Nicolas Davidenko

23.4089 **The importance of the natural contour for visual feature integration in face processing.** Sandra Lafortune, Caroline Blais, Justin Duncan, Amanda Estephan, Daniel Fiset

23.4090 **The impact of face size and natural contour on spatial frequency tuning: still no difference between upright and inverted faces!** Jessica Royer, Verena Willenbockel, Caroline Blais, Frédéric Gosselin, Sandra Lafortune, Daniel Fiset

23.4091 **Holistic Processing Supports Familiarity-Based Associative Recognition for Faces** Mitchell Meltzer, Gowtham Ganesan, Michelle Min, James Bartlett

23.4092 **Changing camera-to-subject distance changes face matching performance** Eilidh Noyes, Rob Jenkins

Face Perception: Individual differences

Saturday, May 16, 8:30 am - 12:30 pm
Poster Session, Pavilion

23.4093 **Magnocellular and parvocellular pathway contributions to face processing in adolescents** Jill Grose-Fifer, Danielle Mascarelli, Elvira Kirilko, Kevin Constante, Amy Medina, Danielle diFilipo

23.4094 **Relating orientation tuning and feature utilization during facial expression recognition** Justin Duncan, Charlène Cobarro, Frédéric Gosselin, Caroline Blais, Daniel Fiset

23.4095 **Dominance of reflectance over shape in facial identity processing is related to individual abilities** Marlena Itz, Jessika Golle, Stefanie Luttmann, Stefan Schweinberger, Jürgen Kaufmann

23.4096 **Over-Connectivity in the Face-Processing Network is Related to Weaker Face Recognition Ability** Daniel Elbich, Suzy Scherf

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23.4097 **Individual differences in the activation of mental representations of famous faces by lookalikes** Jürgen Kaufmann, Albert End, Stefan Schweinberger

23.4098 **The Vanderbilt Face Matching Test (VFMT 1.0)** Mackenzie Sunday, Jennifer Richler, Isabel Gauthier

23.4099 **Westerners and Easterners use different spatial frequencies for face recognition** Jessica Tardif, Ye Zhang, Daniel Fiset, Qiuju Cai, Canhuang Luo, Dan Sun, Sophie Tanguay, Amanda Estéphan, Frédéric Gosselin, Caroline Blais

23.4100 **The Vanderbilt Holistic Face Processing Test (VHPT-F): A Short and Reliable Measure of Holistic Processing** Jennifer Richler, R. Jackie Floyd, Chao-Chih Wang, David Ross, Isabel Gauthier

23.4101 **Holistic Processing of Faces May Underlie Age Differences in Performance on Taiwanese Face Memory Test (TFMT)** Gary Shyi, Kuan-Hao Cheng, Ya-Hsin Cheng, Vicky Chen

23.4102 **Reciprocating the gaze of others: how we look and how long we like to be looked at.** Nicola Binetti, Charlotte Harrison, Antoine Coutrot, Isabelle Mareschal, Alan Johnston

23.4103 **Individual differences in preference for mutual gaze duration.** Charlotte Harrison, Nicola Binetti, Antoine Coutrot, Isabelle Mareschal, Alan Johnston

23.4104 **Intact priors for gaze direction in autism spectrum conditions** Philip Pell, Isabelle Mareschal, Michael Ewbank, Simon Baron-Cohen, Andrew Calder

23.4105 **Extraversion predicts superior face-specific recognition ability, but through experience, not positive affect** Karen Arnell, Blaire Dube

Saturday Afternoon Talks

Attention: Space and awareness

Saturday, May 16, 2:30 - 4:15 pm
Talk Session, Talk Room 1
Moderator: James Herman

24.11, *2:30 pm* **The mind-writing pupil: near-perfect decoding of visual attention with pupillometry** Sebastiaan Mathôt, Jean-Baptiste Melmi, Lotje Van der Linden, Stefan Van der Stigchel

24.12, *2:45 pm* **Selective attention within the foveola** Martina Poletti, Marisa Carrasco, Michele Rucci

24.13, *3:00 pm* **Control of Spatial Attention by the Primate Superior Colliculus** James Herman, Richard Krauzlis

24.14, *3:15 pm* **Egocentric and allocentric neglect after right and left hemisphere lesions in a large scale neglect study of acute stroke patients: Prevalence and recovery.** Nele Demeyere, Celine Gillebert, Liam Loftus, Glyn Humphreys

24.15, *3:30 pm* **Barack Obama Blindness (BOB): Absence of visual awareness to a single object** Marjan Persuh, Robert Melara

24.16, *3:45 pm* **Bayesian ideal observer predicts weak forms of blindsight in normal observers** Megan Peters, Hakwan Lau

24.17, *4:00 pm* **Inattentional blindness reflects limitations on perception, not memory: Evidence from repeated failures of awareness** Emily Ward, Brian Scholl

Development

Saturday, May 16, 5:15 - 6:45 pm
Talk Session, Talk Room 1
Moderator: Rowan Candy

25.11, *5:15 pm* **Vergence Sensitivity in 5-10 Week-Old Infants** Eric Seemiller, T. Candy

25.12, *5:30 pm* **Characterizing Perceptual Alternations During Binocular Rivalry in Children** Amanda Beers, Michael Slugocki, Terri Lewis, Allison Sekuler, Patrick Bennett

25.13, *5:45 pm* **A short period of visual deprivation at birth triggers long-lasting crossmodal reorganization of the occipital cortex in humans** Olivier Collignon, Giulia Dormal, Adelaide de Heering, Franco Lepore, Terri Lewis, Daphne Maurer

25.14, *6:00 pm* **Deficits in integration of global motion and form in noise is associated with the severity and type of amblyopia.** Mahesh Joshi, Anita Simmers, Seong Jeon

25.15, *6:15 pm* **Visual cortex of congenitally blind individuals responds to symbolic number** Shipra Kanjlia, Connor Lane, Lisa Feigenson, Marina Bedny

25.16, *6:30 pm* **The causal link between magnocellular-dorsal pathway functioning and dyslexia** Simone Gori, Aaron Seitz, Luca Ronconi, Sandro Franceschini, Andrea Facoetti

Perception and Action: Reaching, grasping and tracking

Saturday, May 16, 2:30 - 4:15 pm
Talk Session, Talk Room 2
Moderator: Joan Lopez-Moliner

24.21, *2:30 pm* **Continuous Psychophysics: measuring visual sensitivity by dynamic target tracking** Lawrence Cormack, Kathryn Bonnen, Johannes Burge, Jacob Yates, Pillow Jonathan, Alexander Huk

24.22, *2:45 pm* **Sensory-motor adaptation is (mostly) linear** Todd Hudson, Jay Lee, Michael Landy

24.23, *3:00 pm* **Online vision of the hand supports accurate grasp performance in illusory contexts** Evan Cesanek, Carlo Campagnoli, Claire Walker, Fulvio Domini

24.24, *3:15 pm* **Automatic adjustments to grasping movements from unconscious visual information** Zhongting Chen, Jeffrey Saunders

24.25, *3:30 pm* **Evidence for a functional and anatomical dissociation in the use of size constancy for perceptual report and goal-directed grasping** Robert Whitwell, Irene Sperandio, Gavin Buckingham, Philippe Chouinard, Melvyn Goodale

24.26, *3:45 pm* **Humans maintain probabilistic belief states when tracking occluded objects** Matjaz Jogan, Alan He, Alexander Tank, Alan Stocker

24.27, *4:00 pm* **Depth modulations for reaching across superior parietal lobule** Patrizia Fattori, Kostas Hadjidimitrakis, Giulia Dal Bo', Annalisa Bosco, Rossella Breveglieri, Claudio Galletti

Face Perception: Flexible coding

Saturday, May 16, 5:15 - 6:45 pm
Talk Session, Talk Room 2
Moderator: Tamara Watson

25.21, *5:15 pm* **Face-selective areas sensitive to motion are also selective to human voice** Jonathan Oron, Galit Yovel

25.22, *5:30 pm* **Seeing faces with your ears activates the left fusiform face area, especially when you're blind** Paula Plaza, Laurent Renier, Anne De Volder, Josef Rauschecker

25.23, *5:45 pm* **The resilience of face recognition to early life stress** Laura Germine, Erin Dunn, Katie McLaughlin, Jeremy Wilmer, Jordan Smoller

25.24, *6:00 pm* **Investigating the face inversion effect in adults with Autism Spectrum Disorder using the fast periodic visual stimulation paradigm** Buyun Xu, James Tanaka

25.25, *6:15 pm* **Uncertainty and bias in estimation of the sex and age of faces** Tamara Watson, Yumiko Otsuka, Colin Clifford

25.26, *6:30 pm* **Visualizing the Spatiotemporal Dynamics of Neural Representations of Individual Face Identities** Mark Vida, Marlene Behrmann

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Saturday Afternoon Posters

Eye Movements: Perception and neural mechanisms

Saturday, May 16, 2:45 - 6:45 pm
Poster Session, Banyan Breezeway

26.3001 **The long and short of it: Size influences saccadic and pursuit behavior for objects moving in depth.** Helen Clark, John Perrone

26.3002 **Sensorimotor adaptation of size perception.** Cécile Eymond, Céline Paeye, Marianne Duyck, Patrick Cavanagh, Thérèse Collins

26.3003 **Perisaccadic changes in perceived heading and their neural correlates** Jan Churan, Dirk Hofmann, Philipp Hesse, Markus Lappe, Frank Bremmer

26.3004 **Time course of the P300 Eye-Fixation Related Potential during the visual search for a target embedded in natural scenes** Hélène Devillez, Emmanuelle Kristensen, Nathalie Guyader, Bertrand Rivet, Anne Guérin Dugué

26.3005 **Eye Gaze Position before, during and after Percept Switching of Bistable Visual Stimului** Celia Gagliardi, Arash Yazdanbakhsh

26.3006 **How transsaccadic predictions shape the perception of shape** Arvid Herwig, Katharina Weiß, Werner Schneider

26.3007 **Effects of Simulated Scotomas on Pre-saccadic Fixation Durations** Harold Greene, James Brown

26.3008 **Saccade adaptation and saccadic suppression of displacement** David Souto, Karl Gegenfurtner, Alexander Schütz

26.3009 **Saccadic compression in natural scenes** Maria Matziridi, Karl Gegenfurtner

26.3010 **Contributions of Eye Movement Transients to Spatial Vision** Michele Rucci, Martina Poletti, Jonathan Victor, Marco Boi

26.3011 **Contrast sensitivity of microsaccade rate signature** Chris Scholes, Neil Roach, Marcus Nyström, Paul McGraw

26.3012 **A unified network model for microsaccade and macrosaccade generation** Ruobing Xia

26.3013 **Characterizing ocular drift and tremor: contributions to the retinal input** Hee-kyoung Ko, Donald Snodderly, Murat Aytekin, Martina Poletti

26.3014 **Signal-Detection Analysis of Neural Impairment using Oculomotor Assessment** Dorion Liston, Leland Stone

26.3015 **Spatial phase dependence in motion mechanisms serving Ocular Following Responses** Andrew Isaac Meso, Guillaume S Masson

26.3016 **A Computational Model to Study the Dynamics of Updating of Remembered Visual Targets During Rapid and Slow Eye Movements** Yalda Mohsenzadeh, J. Crawford

26.3017 **A common cortical detection mechanism for perception and movement** Alex White, Martin Rolfs

26.3018 **Lights, camera, action – CUT! How film cuts influence eye movements** Esther Wu, Fook-Kee Chua, Shih-Cheng Yen

Attention: Neural mechanisms

Saturday, May 16, 2:45 - 6:45 pm
Poster Session, Banyan Breezeway

26.3019 **Attentional modulation interacts with orientation anisotropies in contrast sensitivity.** Ilona Bloem, Taryn Janati, Sam Ling

26.3020 **Mouse Saliency - a New Method for Low-Cost Large-Scale Attentional Data Collection** Ming Jiang, Shengsheng Huang, Juanyong Duan, Qi Zhao

26.3021 **Contrasting Bottom-up Saliency and Top-Down Attention in the Early Visual Pathway** Sonia Poltoratski, Sam Ling, Frank Tong

26.3022 **Structural and functional connectivity of visual and auditory attentional networks: insights from the Human Connectome Project** David Osher, Sean Tobyne, Keith Congden, Samantha Michalka, David Somers

26.3023 **Cortical circuit for tracking dynamic object locations and identities** Lauri Oksama, Lauri Nummenmaa, Jukka Hyönä

26.3024 **Post-stimulus alpha oscillations influence visual discrimination performance** Stephanie Nelli, Sarah Fraley, John Serences

26.3025 **The footprint of spatial attention in V4 receptive fields** Alexandria Marino, James Mazer

26.3026 **Rapid and Parallel Allocation of Attention to Shapes** Michael Jenkins, Anna Grubert, Martin Eimer

26.3027 **Single trial decoding of visual attention from local field potentials in the primate lateral prefrontal cortex** Guillaume Doucet, Sebastien Tremblay, Roberto Gulli, Florian Pieper, Adam Sachs, Julio Martinez-Trujillo

26.3028 **Attentional switching of connectivity between visual and memory systems** Natalia Córdova, Alexa Tompary, Nicholas Turk-Browne

26.3029 **Controlled Attentional Suppression** Nancy Carlisle, Aleksander Nitka

26.3030 **Using the N2pc to compare the timing of attentional shifts to categorical and featural targets.** Chloe Callahan-Flintoft, Brad Wyble

26.3031 **Cerebellar Contributions to Visual Attention and Visual Working Memory Revealed by Functional MRI and Intrinsic Functional Connectivity** James Brissenden, Emily Levin, David Osher, Maya Rosen, Mark Halko, David Somers

26.3032 **Whole-brain, sub-second data collection for task-evoked fMRI studies using simultaneous multi-slice/multiband acquisition** Stephanie McMains, R. Matthew Hutchison, Ross Mair

Object Recognition: Parts and features

Saturday, May 16, 2:45 - 6:45 pm
Poster Session, Banyan Breezeway

26.3033 **The Role of Color and Spatial Frequency in Perceptual Expertise Training** Tim Curran, Matthew Mollison, James Tanaka, Lisa Scott

26.3034 **The roles of structure-based and function-based action knowledge in object recognition** Ye Liu, Long Ni, Xiaolan Fu

26.3035 **The effect of familiar and unfamiliar context in peripheral object recognition** Derrick Schlangen, Elan Barenholtz

26.3036 **Object-based perception of orientation in the Ternus-Pikler display** Andreas Wutz, David Melcher

26.3037 **The canonical upright in the representation of object orientation** Miles Hatfield, Emma Gregory, Michael McCloskey

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26.3038 **Invariant object recognition enhanced by object persistence** Mark Schurgin, Jonathan Flombaum

26.3039 **Object dissimilarities in visual search: the whole is equal to the sum of parts** RT Pramod, Sripati Arun

26.3040 **Faster than the speed of rejection: Object identification processes during visual search for multiple targets** Michael Hout, Hayward Godwin, Steven Walenchok, Joseph Houpt, Stephen Goldinger

26.3041 **Shape recognition: convexities, concavities and things in between** Gunnar Schmidtmann, Ben Jennings, Frederick Kingdom

26.3042 **Mapping eye movements in 3D: Preferential fixation of surface curvature minima during object recognition in stereo viewing.** Charles Leek, Stephen Johnston, Filipe Cristino

26.3043 **Structural, not spectral, representation of shape in lateral occipital complex** Haluk Tokgozoglu, Anthony Sali, Brian Anderson, Steven Yantis, Charles Connor

26.3044 **Feature fragments and evidence accumulation in object and face perception** Maxim Bushmakin, Thomas James

26.3045 **Correlating Beauty and Two Measures of Pleasure** Lauren Vale, Gernot Gerger, Helmut Leder, Denis Pelli

26.3046 **Is the Visual System Tuned to Perceive Ratios in Bodies?** Sara Barth, Kathryn Scherf

26.3047 **Holistic Processing of Body Postures** Catherine Reed, Daivik Vyas, Alison Harris

26.3048 **Relationships between eating disorder tendency and body imaged-related size perception** Moe Nagahata, Miki Onoda, Eiichi Mito, Masamitsu Harasawa, Hiroshi Ishikane

26.3049 **Gun-Embodiment Biases on Object Perception are Unaffected by Prior Experience** Jessica Witt, Bradley Connor, Nathan Tenhundfeld, Jamie Parnes

Color and light: Neural mechanisms

Saturday, May 16, 2:45 - 6:45 pm
Poster Session, Pavilion

26.4001 **Hyperspectral Evolution of Trichromatic Response Filters** Boaz Arad, Ohad Ben-Shahar

26.4002 **How does the neural retina process optical blur? Insights from emmetropization.** Timothy Gawne, John Siegwart Jr., Alex Ward, Thomas Norton

26.4003 **Cortical Responses to Real and Illusory Surface Colors** Andrew Coia, Michael Crognale

26.4004 **fMRI activation of LGN and visual cortex under photopic, mesopic and scotopic luminance levels** Mark Greenlee, Markus Siebertz, Katharina Rosengarth, Maka Malania, Tina Plank

26.4005 **Chromatic visual evoked potentials using customized color space** John Erik Vanston, Michael Crognale

26.4006 **The psychophysicist's microscope: weak stimuli reveal neuron-like response properties** Alan Freeman, Gloria Luo-Li, David Alais

26.4007 **Comparison of fMRI measurements in LGN and Primary Visual cortex with visual deficits in Glaucoma** Sophie Wuerger, Joanne Powell, Anshoo Chaudhoury , Laura Parkes

26.4008 **Binocularly matched luminance contrast reduces sensitivity to between-eye but not within-eye differences in hue and saturation** Ben Jennings, Frederick Kingdom

26.4009 **Independence of color and shape processing in the ventral visual pathway of humans and macaques** Rosa Lafer-Sousa, Nancy Kanwisher, Bevil Conway

26.4010 **Selective noise masking of L and M cone stimuli: unipolar tests reveal theoretically significant asymmetries** Timothy Shepard, Rhea Eskew Jr., Comfrey McCarthy, Nicole Ochandarena

26.4011 **Treating Color Vision as a Sensory Integration Problem: Application of Nonlinear Integration and Amplification Mechanisms to Chromatic Brightness and Yellowness** Vincent Billock

26.4012 **Correlation between chromatic sensitivity and higher order color vision functions in Asperger Syndrome but not in high functioning autism** Elaine Zachi, Thiago Costa, Mirella Barboni, Dora Ventura

Binocular Vision: Mechanisms of binocular interaction

Saturday, May 16, 2:45 - 6:45 pm
Poster Session, Pavilion

26.4013 **Interocular contrast gain control plus monocular luminance gain control can explain binocular luminance summation** Jian Ding, Dennis Levi

26.4014 **Luminance contrast thresholds in patients with amblyopia under monocular and dichoptic viewing** Goro Maehara, Benjamin Thompson, Behzad Mansouri, Reza Farivar, Robert Hess

26.4015 **Patterns of suppression mapping for strabismic and micro-strabismic observers.** Akash Chima, Sarah Waugh, Monika Formankiewicz

26.4016 **The effects of eccentricity and separation on interocular positional judgements in amblyopia** Zahra Hussain, Ben Webb, Paul McGraw

26.4017 **Age-related changes in accommodation predict perceptual tolerance to vergence-accommodation conflicts in stereo displays** Simon Watt, Louise Ryan

26.4018 **Sensory eye dominance varies within the visual field** Kevin Dieter, Randolph Blake

26.4019 **Using the symmetry of false matches to solve the correspondence problem** Cherlyn Ng, Bart Farell

26.4020 **Interactions among contrast, spatial displacement, and dichoptic viewing during binocular combination in global motion perception** Lanya Tianhao Cai, Alexander Yuan, Benjamin Backus

26.4021 **Grouping of optic flow stimuli is driven by monocular information** Vivian Holten, Sjoerd Stuit, Frans Verstraten, Maarten van der Smagt

26.4023 **Ambiguous filling-in at the blind spot resolved through perceptual rivalry** Zhimin Chen, Rachel Denison, David Whitney, Gerrit Maus

26.4024 **Common and shared mechanisms underlying the temporal dynamics of bi-stable perception** Teng Cao, Lan Wang, Sheng He

26.4025 **Adapting the mechanism that initiates binocular rivalry** Sucharit Katyal, Sheng He, Stephen Engel

26.4026 **Traveling waves of dominance in motion-induced blindness** Dustin Cox, Sang Hong

26.4027 **Object-level grouping contributes to chromatic interocular-switch rivalry** Wei Wang, Steven Shevell

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Motion Perception: Experience

Saturday, May 16, 2:45 - 6:45 pm
Poster Session, Pavilion

26.4028 **The automaticity and timecourse of motion processing** Katherine Burnett, Isabel Arend, Avishai Henik

26.4029 **Location of the interaction between motion and form signals in motion-streak facilitation** Mark Edwards, Deborah Apthorp

26.4030 **Prediction of illusory motion direction from eye tracking data** Oliver Flynn, Arthur Shapiro

26.4031 **Sharing Displays and Data from Vision Science Research with Databrary** Rick Gilmore, Karen Adolph, David Millman, Lisa Steiger, Dylan Simon

26.4032 **Measuring the effect of internal motion of a moving Gabor on speed perception and smooth pursuit** Anna Hughes, Martha Fawcett, David Tolhurst

26.4033 **Illusory rotation and motion capture depend upon assignment of complex motion signals.** Makoto Ichikawa, Yuko Masakura

26.4034 **Age-related changes in motion direction discrimination in the horizontal plane** Louisa Miller, Hannah Agnew, Karin Pilz

26.4035 **Reference-Frame Selection in Motion Perception** Haluk Ogmen, Mehmet Agaoglu, Michael Herzog

26.4036 **Temporal subsampling counteracts motion-related visual acuity loss in the near periphery** Jonathan Patrick, Neil Roach, Paul McGraw

26.4037 **How fast can a baseball spin before an observer can't tell the direction of rotation?** Arthur Shapiro, Jonathan Newport, Bree DeVries

26.4038 **Human contrast normalization process operates on a local scale** Boris Sheliga, Christian Quaia, Edmond FitzGibbon, Bruce Cumming

26.4039 **Similarities and differences in forward and reverse motion extrapolation** Kevin Smith, Joshua Davis, Benjamin Bergen, Edward Vul

26.4040 **Confidence in the mind's eye** Morgan Spence, Paul Dux, Derek Arnold

26.4041 **Contribution of the ventral visual pathway to Perception of Wriggling Motion Trajectory Illusion: an fMRI study** Ryosuke Tanaka, Yuko Yotsumoto

Visual Memory: Neural mechanisms

Saturday, May 16, 2:45 - 6:45 pm
Poster Session, Pavilion

26.4042 **Dissociation of Memorability and Memory Encoding in the Brain** Wilma Bainbridge, Daniel Dilks, Aude Oliva

26.4043 **Understanding the nature of visual short-term memory representation in human parietal cortex** Katherine Bettencourt, Yaoda Xu

26.4044 **Using MVPA to decipher neural correlates of visual sequence learning in the brain.** Melanie Burke, Graham Barnes, Jacqueline Billington, Claudia Gonzalez

26.4045 **Temporal Dynamics of Memory and Maintenance of Faces in Visual Cortex: An On-line TMS Study** Kelsey Holiday, David Pitcher, Leslie Ungerleider

26.4046 **Reconstructing the population dynamics of spatial priority in early visual cortex during working memory** Masih Rahmati, Golbarg Saber, Clayton Curtis

26.4047 **Involvement of visual cortex in a visual working memory task: Evidence from steady-state visual potential frequency tagging** Nina Thigpen, Klaus Oberauer, Andreas Keil

26.4048 **Load-Dependent Increases in Alpha-Band Power: Relevance to Sensory Cortex Excitability and Distractor Interference** Andrew Heinz, Jeffrey Johnson

26.4049 **Encoding-related neural correlates of set-size limitations of working memory** Gennadiy Gurariy, Dwight Peterson, Marian Berryhill, Gideon Caplovitz

26.4050 **Non-linear neural interactions at the time of encoding underlie grouping benefits in working memory** Kyle Killebrew, Marian Berryhill, Gnnadiy Gurairy, Dwight Peterson, Gideon Caplovitz

26.4051 **Storing and updating non-visual features in visual long-term memory** Ghootae Kim, Kenneth A. Norman, Nicholas B. Turk-Browne

26.4052 **Reconstructing perceived and retrieved face images from activity patterns in posterior parietal cortex** Hongmi Lee, Alan Cowen, Brice Kuhl

26.4053 **The decision, not the decision task, causes perceptual biases away from the decision boundary** Long Luu, Alan Stocker

26.4054 **Topographically specific effects of TMS over early visual cortex during visual working memory** Rosanne Rademaker, Vincent van de Ven, Frank Tong, Alexander Sack

26.4055 **Task-modulated, feature-selective responses in early visual, parietal and frontal cortices during visual working memory maintenance** Qing Yu, Won Mok Shim

Attention: Capture

Saturday, May 16, 2:45 - 6:45 pm
Poster Session, Pavilion

26.4056 **The effects of saliency on manual reach trajectories and reach target selection** Dirk Kerzel, Wieske van Zoest

26.4057 **The impact of long-term memory based attentional control settings on spatial and non-spatial components of attention** Maria Giammarco, Kate Turner, Emma Guild, Naseem Al-Aidroos

26.4058 **Bottom-up capture is a top-down phenomenon** Yehoshua Tsal, Ricardo Max, Hanna Benoni

26.4059 **Attentional and oculomotor capture by stimuli that signal the availability of reward** Jan Theeuwes, Michel F. Failing

26.4060 **Forget Me if You Can: Attentional capture by to-be-remembered and to-be-forgotten visual stimuli** Edyta Sasin, Mark Nieuwenstein

26.4061 **Oculomotor capture by the unexpected: exploring the temporal profile of surprise in visual search.** James Retell, Dustin Venini, Stefanie Becker

26.4062 **Set-specific contingent attentional capture costs are modulated by color similarity** Katherine Moore, Greg Ramos, Kathleen Trencheny

26.4063 **Context-driven suppression of attentional capture** Jeff Moher

26.4064 **Feature-driven attentional capture is modulated by the distribution of spatial attention** Carly Leonard, Steve Luck

26.4065 **Inter-Trial Contingencies in Contingent-Capture Experiments** Florian Goller, Ulrich Ansorge

26.4066 **Behavioral Evidence of Top-Down Suppression of Attention Capture with the Letter-Probe Technique** Nicholas Gaspelin, Steven Luck

26.4067 **The Influence of Salience on Attentional Capture by Set-Consistent and Set-Inconsistent Stimuli** Charles Folk, Charles Folk

26.4068 **Recapturing captured attention** Fook Chua

26.4069 **ERP correlates of contingent attentional capture and suppression** Caroline Barras, Dirk Kerzel

26.4070 **Electrophysiological indices of learned distractor suppression** Joshua Cosman, Geoffrey Woodman

26.4071 **Loosening the Snare: Top-down goals overcome singleton driven attentional capture** Corbin Cunningham, Howard Egeth

Perceptual Organization: Contours and surfaces

Saturday, May 16, 2:45 - 6:45 pm
Poster Session, Pavilion

26.4072 **Modal and amodal shape completion** Vicky Froyen, Naoki Kogo, Manish Singh, Jacob Feldman

26.4073 **Spatially-global integration of closed, fragmented contours** Tae Kwon, Kunal Agrawal, Yunfeng Li, Zygmunt Pizlo

26.4074 **It is more difficult to judge global properties of shapes described by vertices than shapes described by curvature extrema.** Letizia Palumbo, Nicole Ruta, Marco Bertamini

26.4075 **Visual acuity differences within the normal range strongly alter visual perception: A cautionary tale for studies of special populations** Matthew Roche, Brian Keane, Sabine Kastner, Thomas Papathomas, Steven Silverstein

26.4076 **The integration of edge and region cues: the effect of a compressive nonlinearty in search tasks** Alexander Coningham, Geoff Stuart, Ken McAnally, Mark Edwards

26.4077 **Attentional Effects in Contour Integration in Dynamic Scenes** Axel Grzymisch, Cathleen Grimsen, Udo Ernst

26.4078 **The spatial range of peripheral collinear facilitation** Marcello Maniglia, Andrea Pavan, Yves Trotter

26.4079 **Figure Ground and Perception: Gelb and Granit Revisited** Rolf Nelson, NIcholas Hebda

26.4080 **The Lemon-Illusion: Seeing curvature where there is none** Lars Strother, Kyle Killebrew, Gideon Caplovitz

26.4081 **Is the Ebbinghaus illusion a size contrast illusion** Dejan Todorovic, Ljubica Jovanovic

26.4082 **Global pair-wise statistics of edge luminance polarities reflect object boundaries in natural images** Bart Machilsen, Maarten Demeyer, Naoki Kogo

Perceptual Organization: Segmentation

Saturday, May 16, 2:45 - 6:45 pm
Poster Session, Pavilion

26.4083 **Gains and Losses: Is Figure Ground Perception Influenced by Motivation or Learned Value?** Michelle Burrola, Danielle Mathieson, Jane Raymond, Mary Peterson

26.4084 **Detecting structure in visual sequences** Matthias Hofer, Laurence Maloney, Jozsef Fiser

26.4085 **Background subtraction as a mechanism for efficient motion segregation** Woon Ju Park, Duje Tadin

26.4086 **Bridging the gap between standard Accretion/Deletion and Rotating Columns** Ö. Tanrıkulu, Vicky Froyen, Jacob Feldman, Manish Singh

26.4087 **The Leuven Embedded Figures Test (L-EFT): Re-embedding the EFT into vision sciences** Ruth Van der Hallen, Rebecca Chamberlain, Lee de-Wit, Johan Wagemans

26.4088 **Human Perception of Statistical Significance and Effect Size** Bhavin Sheth, Jasmine Patel

26.4089 **Is prior experience necessary for 5.5 month-old infants to use the statistical regularity of an unchanging object on an changing background for segmentation?** Elizabeth Salvagio, Rebecca Gomez, Mary Peterson

26.4090 **The effects of motion cues on figure-ground perception across the lifespan** Jordan Lass, Patrick Bennett, Mary Peterson, Allison Sekuler

26.4091 **Contour integration in chronic schizophrenia and first-episode psychosis** Brian Keane, Sabine Kastner, Danielle Paterno, Steven Silverstein

Scene Perception: Categorization and memory

Saturday, May 16, 2:45 - 6:45 pm
Poster Session, Pavilion

26.4092 **Independent processing of statistical regularities in different hierarchical levels** Jihyang Jun, Sang Chul Chong

26.4093 **Tell me how you look and I will tell you what you are looking at** Antoine Coutrot, Nathalie Guyader

26.4094 **Gaze patterns are predictive of scene category across line drawings and photographs** Claudia Damiano, Jay Schmidt, Dirk Walther

26.4095 **Can the gist of a natural scene be extracted in crowding?** Mingliang Gong, Lynn Olzak

26.4096 **Is Boundary Extension effected by the position and orientation of people in scenes?** Carmela Gottesman, William Dodson

26.4097 **Selective increase in recurrent processing during object detection in complex natural scenes** Iris Groen, Sara Jahfari, Victor Lamme, H Steven Scholte

26.4098 **Distinguishing the roles of color and other surface properties in rapid natural scene categorization: Evidence from ERPs** Qiufang Fu, Xiaoyan Zhou, Zoltan Dienes, Yongjin Liu, Xiaolan Fu

26.4099 **Evidence for iconic memory of natural scenes before change blindness** Jason Clarke, Arien Mack

26.4100 **Is a scene's 'gist' processed automatically in the absence of attention? The role of color, local-global factors and task relevance in unattended scene categorization.** Nurit Gronau, Rotem Amar, Anna Izoutcheev, Tsafnat Nave , Inbal Ravravi

26.4101 **Does segmentation influence rapid scene categorization?** Jonas Kubilius, Lee de-Wit, Hans Op de Beeck, Johan Wagemans, Caitlin Mullin

26.4102 **A rapid whole-brain neural portrait of scene category inference** Pavan Ramkumar, Bruce Hansen, Sebastian Pannasch, Lester Loschky

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26.4103 **Using object color diagnosticity to influence access to semantic information in a boundary extension paradigm** Ralph Hale, Benjamin McDunn, James Brown

26.4104 **The tree in the bathroom: The role of inconsistent information in understanding the gist of a scene** Preeti Sareen, Jeremy Wolfe

26.4105 **The Role of Gist Processing in Boundary Extension** Aisha Siddiqui, James Brown

26.4106 **Do high-level perceptual schemata influence the encoding of novel everyday scenes?** Thomas Sanocki, Steve Schultz

26.4107 **Temporal Yoking in Target Detection** Mary Potter, Carl Hagmann, Quan Wan

26.4108 **The effect of scene category distinctiveness on memory performance** Jiri Lukavsky, Filip Dechterenko

26.4109 **Vision for action: saccadic and manual responses to clear threat and ambiguous negative scenes** Kestas Kveraga, Jasmine Boshyan, Noreen Ward, Nouchine Hadjikhani, Reginald Adams Jr.

Sunday Morning Talks

Multisensory Perception

Sunday, May 17, 8:15 - 9:45 am
Talk Session, Talk Room 1
Moderator: Marc Ernst

31.11, *8:15 am* **Tactile-Evoked V1 responses in Argus II Retinal Prosthesis Patients assessed with fMRI: A Case Study** Samantha Cunningham, Bosco Tjan, Pinglei Bao, Paulo Falabella, James Weiland

31.12, *8:30 am* **Representational changes in retinotopic cortex during the development of depth cue combination in childhood.** Tessa Dekker, Hirhoshi Ban, Martin Sereno, Andrew Welchman, Bauke Van der Velde, Marko Nardini

31.13, *8:45 am* **Neuroanatomical correlates of cross-modal transfer performance in object categorization: from vision to touch** Haemy Lee, Christian Wallraven

31.14, *9:00 am* **Vision during tool use is both necessary and sufficient for recalibration of tactile perception of body size** Luke Miller, Matthew Longo, Ayse Saygin

31.15, *9:15 am* **Multisensory Integration is based on Information, not Efficacy** Benjamin Rowland, Thomas Perrault, John Vaughan, Barry Stein

31.16, *9:30 am* **Correlation detection as a general mechanism for multisensory integration** Cesare Parise, Marc Ernst

Object Recognition: Mechanisms and models

Sunday, May 17, 10:45 am - 12:30 pm
Talk Session, Talk Room 1
Moderator: Kendrick Kay

32.11, *10:45 am* **Convolutional Neural Networks in the Brain: an fMRI study** Kandan Ramakrishnan, Steven Scholte, Victor Lamme, Arnold Smeulders, Sennay Ghebreab

32.12, *11:00 am* **Psychophysically disrupting the delayed feedback signal to foveal retinotopic cortex selectively impairs extra-foveal object perception** Xiaoxu Fan, Lan Wang, Hanyu Shao, Daniel Kersten, Sheng He

32.13, *11:15 am* **Neural tuning changes underlying visual shape learning** Sach Sokol, Charles Connor

32.14, *11:30 am* **Object Representations In Human Parietal And Occipito-Temporal Cortices: Similarities And Differences** Maryam Vaziri-Pashkam, Yaoda Xu

32.15, *11:45 am* **Convergence and divergence in the neural organization of object responses to pictures and words** Talia Konkle, Xiaoying Wang, Marius Peelen, Alfonso Caramazza, Yanchao Bi

32.16, *12:00 pm* **Mapping human visual representations in space and time by neural networks** Radoslaw Cichy, Aditya Khosla, Dimitrios Pantazis, Antonio Torralba, Aude Oliva

32.17, *12:15 pm* **How bottom-up and top-down factors shape representation in word- and face-selective cortex** Kendrick Kay, Jason Yeatman

Eye Movements: Cognition

Sunday, May 17, 8:15 - 9:45 am
Talk Session, Talk Room 2
Moderator: Alexander Schütz

31.21, *8:15 am* **A model of saccade programming during scene viewing based on population averaging in the superior colliculus** Hossein Adeli, Françoise Vitu, Gregory Zelinsky

31.22, *8:30 am* **Embodied salience for gaze analysis in ecologically valid environments** William Abbott, Andreas Thomik, Aldo Faisal

31.23, *8:45 am* **Using Experts' Eye Movements to Influence Scanning Behaviour in Novice Drivers** Andrew Mackenzie, Julie Harris

31.24, *9:00 am* **Evidence for the Common Coding of Location in Auditory and Visual Space** Hannah Krüger, Therese Collins, Daniel Pressnitzer, HiJee Kang, Sundeep Teki, Cavanagh Patrick

31.25, *9:15 am* **A computational account on the development of a preferred retinal locus** Helga Mazyar, Bosco Tjan

31.26, *9:30 am* **Does time stop when we blink?** Marianne Duyck, Thérèse Collins, Mark Wexler

Binocular Vision

Sunday, May 17, 10:45 am - 12:30 pm
Talk Session, Talk Room 2
Moderator: Laurie Wilcox

32.21, *10:45 am* **Short-term ocular dominance changes in human V1.** Eva Chadnova, Alexandre Reynaud, Simon Clavagnier, Sylvain Baillet, Robert Hess

32.22, *11:00 am* **Short-term monocular deprivation reduces inter ocular surround suppression** Ignacio Serrano-Pedraza, Sandra Arranz-Paraíso, Verónica Romero-Ferreiro, Jenny Read, Holly Bridge

32.23, *11:15 am* **Stereoacuity for physically moving targets is unaffected by retinal motion** Matthew Cutone, Robert Allison, Laurie Wilcox

32.24, *11:30 am* **Attention modulation and divisive normalization in interocular suppression** Hsin-Hung Li, Marisa Carrasco, David Heeger

32.25, *11:45 am* **Attending away makes semantic information available during rivalry** Kang Yong Eo, Oakyoon Cha, Min-Suk Kang, Sang Chul Chong

32.26, *12:00 pm* **Identity-specific adaptation to invisible faces depends on the depth of interocular suppression** Runnan Cao, Sheng He, Peng Zhang

32.27, *12:15 pm* **Fear conditioned visual information is prioritized for visual awareness** Surya Gayet, Chris Paffen, Artem Belopolsky, Jan Theeuwes, Stefan Van der Stigchel

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Sunday Morning Posters

Perceptual Learning: History effects

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

33.3001 **Information integration in sequential visual decision-making** József Arató, József Fiser

33.3002 **Does reward influence visual statistical learning?** Kyle Friedman, Timothy Vickery

33.3003 **Classifying EEG patterns of visual statistical learning** Brett Bays, Aaron Seitz

33.3004 **Perceptual adaptation: Getting ready for the future** Xue-Xin Wei, Pedro Ortega, Alan Stocker

33.3005 **Neural sources of prediction in visual cortex** Nicholas C. Hindy, Felicia Y. Ng, Nicholas B. Turk-Browne

33.3006 **Statistical regularities compress numerical representations** Jiaying Zhao, Ru Yu

33.3007 **Stimulus-specific regularities as a basis for perceptual induction** Yu Luo, Jiaying Zhao

33.3008 **History effects in perception after manipulating the statistics of the environment** Kyle McDermott, Adrien Chopin, Anna Ptuha, Pascal Mamassian

33.3009 **Rapid effect of high-frequency tRNS over the parietal lobe during a temporal perceptual learning task** Sarah Tyler, Federica Contò, Lorella Battelli

33.3010 **Human brain circuits for learning hierarchical temporal structures** Rui Wang, Yuan Shen, Peter Tino, Zoe Kourtzi

Color and light: Adaptation and constancy

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

33.3011 **Monocular and binocular mechanisms mediating flicker adaptation** Xiaohua Zhuang, Steven Shevell

33.3012 **Color constancy revisited: A better approach** David Weiß, Marina Bloj, Karl Gegenfurtner

33.3013 **Brightness induction reveals changes in neural response time to changes in stimulus contrast** Karen Gunther, Jacob Owens

33.3014 **Asymmetries and spatial gradients in color and brightness induction** Romain Bachy, Qasim Zaidi

33.3015 **Adapting to an "aged" lens** Katherine Tregillus, John Werner, Michael Webster

33.3016 **Perceiving the average color** Siddhart Srivatsav, Jacquelyn Webster, Michael Webster

33.3017 **Effect of achromatic afterimage on spatial chromatic induction** Guillaume Riesen, Gennady Livitiz, Rhea Eskew, Ennio Mingolla

33.3018 **Canceling a Hue of a Negative Afterimage in Solid and Perceptually-Filled Color Images** Gennady Livitz, Guillaume Riesen, Ennio Mingolla, Rhea Eskew

33.3019 **Illumination discrimination depends on scene surface ensemble** Avery Krieger, Hilary Dubin, Bradley Pearce, Stacey Aston, Anya Hurlbert, David Brainard, Ana Radonjić

33.3020 **Spatial ratios of cone excitations from natural scenes over the course of the day** David Foster, Kinjiro Amano, Sérgio Nascimento

33.3021 **Adaptation and compensation in anomalous trichromacy** Jawshan Ara, Solena Mednicoff, Michael Webster

33.3022 **Robust color constancy with natural scenes in red-green dichromacy** Leticia Álvaro, Julio Lillo, Humberto Moreira, João Linhares, Sérgio Nascimento

33.3023 **Lightness filling-in as a mechanism for achieving lightness constancy** Michael Rudd

Perception and Action: Driving and navigating

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

33.3024 **Easter Egg Hunt Winners use Competition-Density Minimizing Foraging Strategy to "Bring Home the Bacon" (and Eggs)** Steven Holloway, Michael McBeath, Kathryn Van Etten

33.3025 **Neighbor influence on evacuation behavior in virtual and real environments** Max Kinateder, William Warren

33.3026 **The surprising utility of target drift in natural heading judgements** Li Li, Simon Rushton, RongRong Chen, Diederick Niehorster

33.3027 **Distinct spatial and temporal discounting during decision making in humans** James Thompson, Martin Wiener, Kelly Michaelis

33.3028 **Anchoring the internal compass: The role of geometry and egocentric experience** Nicole Paul, Steven Marchette, Russell Epstein

33.3029 **Predicting Steering Control Performance from Coherent Motion Performance** Bobby Nguyen, Rui Ni, John Plummer

33.3030 **Prospective steering control is influenced by retinal flow** Richard Wilkie, Callum Mole, George Kountouriotis, Jac Billington

33.3031 **Steering control using feedback from near road edges does not rely upon retinal flow.** Callum Mole, Georgios Kountouriotis, Jac Billington, Richard Wilkie

33.3032 **Steering along curved paths is influenced by global flow speed not speed asymmetry** Georgios Kountouriotis, Callum Mole, Natasha Merat, Peter Gardner, Richard Wilkie

33.3033 **Visual Perception and Illusions in a Driving Simulator - Little Cars, Big Signs** Stacy Balk, Vaughan Inman, William Perez

Face Perception: Mechanisms and models

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

33.3034 **Object constancy from view-based models of the face.** Jevgenija Beridze, Shin'ya Nishida, Alan Johnston

33.3035 **A neurocomputational account of the magnitude of face composite effects** Sarah Herald, Manan Shah, Xiaokun Xu, Irving Biederman, Jordan Juarez

33.3036 **Bubble-Warp: a New Approach to the Depiction of High-Level Mental Representation** Daniel Gill, Lisa DeBruine, Benedict Jones, Philippe Schyns

33.3037 **Predicting face dissimilarity judgements from Basel Face Space** Jonathan O'Keeffe*, Kamila Jozwik*, Stephen Engel, Nikolaus Kriegeskorte *Contributed equally

33.3038 **Using structural and semantic voxel-wise encoding models to investigate face representation in human cortex** Alan Cowen, Samy Abdel-Ghaffar, Sonia Bishop

Face Perception: Neural mechanisms

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

33.3039 **Comparing the functional profile of face-selective regions with the amygdala at 7 Tesla** David Pitcher, Leslie Ungerleider

33.3040 **The FFA can process a non-face category of objects as robustly as faces.** Valentinos Zachariou, Zaid Safiullah, Leslie Ungerleider

33.3041 **Neural correlates of processing elastic moving faces: A functional near-infrared spectroscopy (fNIRS) study** Naiqi Xiao, Qiandong Wang, Guowei Chen, Genyue Fu, Kang Lee

33.3042 **An image-invariant representation of familiar faces in the human medial temporal lobe** Katja Weibert, Richard Harris, Alexandra Mitchell, Hollie Byrne, Timothy Andrews

33.3043 **Classifying neural responses to familiar and unfamiliar people over viewing distances in face and body selective areas** Carina Hahn, Alice O'Toole, P. Jonathon Phillips

33.3044 **Cortical Thickness in Fusiform Face Area Predicts Face and Object Recognition Performance** Rankin McGugin, Ana Van Gulick, Isabel Gauthier

33.3045 **Rubin-vase illusion perception is predicted by prestimulus activity and connectivity** Nicholas Peatfield, Nadia Mueller, Phillipp Ruhnau, Nathan Weisz

33.3046 **A gradual increase of face-selectivity along the human ventral visual pathway: evidence from intracerebral recordings with fast periodic visual stimulation** Bruno Rossion, Jacques Jonas, Joan Liu-Shuang, Corentin Jacques, Louis Maillard

33.3047 **Neural correlates of own- and other-race face processing in infants: A near-infrared spectroscopic study** Megumi Kobayashi, So Kanazawa, Masami Yamaguchi, Ryusuke Kakigi, Kang Lee

33.3048 **Effects of TMS to occipital face area on the perception of face viewpoint cued only by shape changes in the external contour of the face** Samuel Lawrence, Bruce Keefe, Richard Vernon, André Gouws, Holly Brown, Alex Wade, Declan McKeefry, Antony Morland

33.3049 **Neural Representations of Expression and Viewpoint Information in the Temporal Cortex** Tessa Flack, Andrew Young, Timothy Andrews

33.3050 **The reorganization of extrastriate cortex in patients with lobectomy** Tina Liu, Adrian Nestor, Christina Patterson, Marlene Behrmann

Attention: Cueing and inattention

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Pavilion

33.4001 **fMRI-based Functional Localization of the Ventral Attention Network in Individual Subjects** Kathryn Devaney, Emily Levin, Maya Rosen, Samantha Michalka, David Somers

33.4002 **Additivity of prioritizing selection for new objects by onset capture and visual marking** Takayuki Osugi, Daisuke Hayashi, Ikuya Murakami

33.4003 **Examining the Relative Strength of Attentional Cues and the Time Course of Exogenous Orienting** Gerald McDonnell, Michael Dodd

33.4004 **Title: Drop the beat & miss T2: How various dimensions of music influence attentional failures** Jessica Madrid, Arryn Robbins, Michael Hout

33.4005 **A dissociation between conscious perception and stimulus processing: the effects of prior exposure to high-visibility stimuli** Dominique Lamy, Ziv Peremen

33.4006 **Not So Moving: Irrelevance blindness with moving irrelevant stimuli** Adam Kimbler, Jason Hays, Amanda Renfro, D. Alexander Varakin

33.4007 **Action video game playing does not reduce inattentional blindness** Lindsey Holder, Muge Erol, Arien Mack, John Bert, Jason Clarke

33.4008 **It's all relative: Attentional set for target distractor relations in inattentional blindness** Rebecca Goldstein, Melissa Beck

33.4009 **Searching for Feature-Based Surround Suppression in Inattentional Blindness** Trafton Drew

33.4010 **Relating sustained attention to visual long-term memory** Megan deBettencourt, Kenneth Norman, Nicholas Turk-Browne

33.4011 **Previewing Distractors Improves Change Detection in a Change Blindness Paradigm** Monique Daignault, Mark Becker, Devin McAuley

33.4012 **Target template precision is unaffected by target-distractor similarity** Hannah Wyland, Shaun Vecera

33.4013 **Looking for neural correlates of sustained inattentional blindness with single trial per subject design in fMRI** Ekaterina Pechenkova, Maria Kuvaldina, Liudmila Litvinova, Alena Rumshiskaya, Polina Iamshchinina, Valentin Sinitsyn

Attention: Reward

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Pavilion

33.4014 **Reward modulates orienting and reorienting in exogenous cueing.** Berno Bucker, Jan Theeuwes

33.4015 **Reward Alters Perception of Time** Michel Failing, Jan Theeuwes

33.4016 **Positive affect reduces visual crowding** Ariana Familiar, Stefan Uddenberg, Won Mok Shim

33.4017 **Reward vs. Emotion in Visual Selective Attention** Takemasa Yokoyama, Srikanth Padmala, Luiz Pessoa

33.4018 **Exploring Value-Driven Attention: Evidence for a Domain-General Mechanism of Selection** Brian Anderson

33.4019 **Distractor inhibition in visual search can be facilitated by value salience** Mengyuan Gong, Sheng Li

33.4020 **What's that smile worth? Social reward influences spatial orienting** Dana Hayward, Effie Pereira, Todd Vogel, Kathleen Stewart, Jelena Ristic

33.4021 **The role of sensory cortex and cortical "hubs" in category-specific executive function** Thomas James, Lindsay Arcurio, Anastasia Nikoulina

33.4022 **Estimates of human subjective utility from early visual responses** Franco Pestilli, Nayema Khan, Sam Ling, Vincent Ferrera

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33.4023 **Relating BOLD and ssVEPs during visual aversive conditioning using concurrent EEG-fMRI recordings** Nathan Petro, L. Forest Gruss, Siyang Yin, Haiqing Huang, Mingzhou Ding, Andreas Keil

33.4024 **Exogenous cueing modulates preference formation** Giulia Rampone, Alexis Makin, Marco Bertamini

33.4025 **Coping with Conflicts Improves Under Threat: Evidence from a Simon and a Visuo-Auditory Stroop Tasks** Asi Schupak, Avner Caspi, Eran Chajut

Attention: Tracking

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Pavilion

33.4026 **An Eye for Detail: Attentive States Modulate the Social Gaze-Cue Effect in Multiple Object Tracking** Alisa Brockhoff, Markus Huff

33.4027 **Influence of Negative Emotion over Attention Allocation in Multiple Objects Tracking** Huanyu Lei, Dongyuan Duan, Xuemin Zhang, Xiaoqian Yan

33.4028 **Multiple object tracking explained with neither fixed nor flexible resources** Zheng Ma, Sheng-hua Zhong, Colin Wilson, Jonathan Flombaum

33.4029 **The limitations of attentional resources across developmental groups: A three-dimensional multiple object tracking study** Domenico Tullo, Jocelyn Faubert, Armando Bertone

33.4030 **MOT Capacity is Compromised in Ecological 3D Environments** Brad Weber, Rui Ni

33.4031 **Simulating multiple object tracking performance using a Kalman filter model** Gregory Zelinsky, Ashley Sherman, Tomás Yago

33.4032 **Four theoretical dichotomies in the motion extrapolation literature** Alexis Makin, Marco Bertamini, Tushar Chauhan

Spatial Vision: Models and mechanisms

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Pavilion

33.4033 **Diagonal Stretch Illusion: the distance between dots appearing longer when surrounded by circles** Daisuke Hayashi, Masahiko Terao, Lin Cai, Takayuki Osugi, Ikuya Murakami

33.4034 **Greater benefits of collective integration in visual search** Mordechai Juni, Miguel Eckstein

33.4035 **Dipper functions for second-order modulation of contrast, orientation, and motion** Yi Gao, Alex Baldwin, Robert Hess

33.4036 **Detection of blur gradients: its relationship with blur discrimination.** Shohei Kawashimo, Masumi Watanabe, Takao Sato

33.4037 **Estimating cortical reorganization and neural fill-in using fMRI population receptive field (pRF) mapping.** Jessica Thomas, Erik Runeson, Ione Fine, Geoffrey Boynton

33.4038 **Modeling Strategic Optimization Criteria in Spatial Combinatorial Optimization Problems** Brandon Perelman, Shane Mueller

33.4039 **Modelling probability summation for the detection of multiple stimuli under the assumptions of signal detection theory** Frederick Kingdom, Alex Baldwin, Gunnar Schmidtmann

33.4040 **Psignifit 4: Pain-free Bayesian Inference for Psychometric Functions** Heiko Schütt, Stefan Harmeling, Jakob Macke, Felix Wichmann

33.4041 **Psychophysical Calibration of Mobile Touch-Screens for Vision Testing in the Field** Jeffrey Mulligan

33.4042 **The FechDeck: a hand-tool for exploring psychophysics** James Ferwerda

33.4043 **Efficient implementations of the adaptive PSI procedure for estimating multi-dimensional psychometric functions** Christopher DiMattina, Kechen Zhang

33.4044 **Autistic and neurotypical subjects extract spatial frequencies differently** Laurent Caplette, Philippe Desroches, Bruno Wicker, Frédéric Gosselin

Motion Perception: Neural mechanisms and models

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Pavilion

33.4045 **Anticipation of an approaching bar by neuronal populations in awake monkey V1** Giacomo Benvenuti, Sandrine Chemla, Arjan Boonman, Guillaume Masson, Frédéric Chavane

33.4046 **V1 population activity represents global motion velocity of long-range apparent motion in the awake monkey** Sandrine Chemla, Alexandre Reynaud, Guillaume Masson, Frederic Chavane

33.4047 **Illusory Motion Perception Is Impaired in individuals with DCDC2 Intron 2 Deletion showing the Selective Role of Magnocellular-Dorsal Stream in Dyslexia** Sara Mascheretti, Simone Gori , Enrico Giora, Luca Ronconi, Milena Ruffino , Ermanno Quadrelli, Andrea Facoetti, Cecilia Marino

33.4048 **Prefrontal neurons represent comparisons of motion directions in the contralateral and the ipsilateral visual fields** Kostas Michalopoulos, Philip Spinelli, Tatiana Pasternak

33.4049 **Motion encoding in human being and praying mantis investigated with a masking paradigm** Jenny Read, Natalie Busby, William Herbert, Sandra Arranz-Paraíso, Lisa Jones, Vivek Nityananda, Ghaith Tarawneh, Ignacio Serrano-Pedraza

33.4050 **A dynamic model for decoding direction and orientation in macaque primary visual cortex** Wahiba Taouali, Giacomo Benvenuti, Frédéric Chavane, Laurent Perrinet

33.4051 **Compound stimuli reveal velocity separability of spatiotemporal receptive fields in macaque area MT** Andrew Zaharia, Robbe Goris, J. Movshon, Eero Simoncelli

33.4052 **Differences in primary visual cortex predict performance in local motion detection in deaf and hearing adults** Alexandra Levine, Charlotte Codina, David Buckley, Gabriela De Sousa, Heidi Baseler

33.4053 **Functional interactions of feature-selective responses in MT+ and LOC and primary visual cortex in dynamic feature interpolation during apparent motion** Feilong Ma, Won Mok Shim

33.4054 **Asymmetric inhibition: Psychophysical evidence for redundancy reduction of velocity signals along moving edges.** John Perrone

33.4055 **Two Mechanisms Determine the Barber-Pole Illusion** George Sperling, Peng Sun, Charles Chubb

33.4056 **Boundary information is insufficient for direction and shape perception in short-range motion** Chad Carlson, Howard Hock

33.4057 **The use of graphical user interfaces (GUIs) to analyze motion and temperature** Ushma Majmudar, Jillian Nguyen, Elizabeth Torres

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Motion Perception: Biological motion

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Pavilion

33.4058 **Biological motion: At what age do we recognize boys and girls?** Michael Bach, Vanessa Frommherz, Wolf Lagrèze, Nikolaus Troje

33.4059 **How different is Action Recognition across Cultures? Visual Adaptation to Social Actions in Germany vs. Korea** Dong-Seon Chang, Uijong Ju, Heinrich Buelthoff, Stephan de la Rosa

33.4060 **Recognition of static and dynamic social actions in the visual periphery** Laura Fademrecht, Isabelle Bülthoff, Stephan de la Rosa

33.4061 **Neural representations of human interactions** Alon Hafri, John Trueswell, Russell Epstein

33.4062 **Lighting-from-above prior in the perception of biological motion: new illusion and a neural model.** Leonid Fedorov, Martin Giese

33.4063 **Computational Model of Biological Motion Detection: a path toward view-invariant action understanding** Giulio Sandini, Nicoletta Noceti, Alessandra Sciutti, Francesco Rea, Alessandro Verri, Francesca Odone

33.4064 **Biological motion processing under interocular suppression** Akila Kadambi, Angela Pham, Luke Miller, Ayse Saygin

33.4066 **Visual Tuning for Perceptual Animacy and its Influence on Multiple Object Tracking** Hongjing Lu, Aaron Seitz, Steven Thurman

33.4067 **Influence of Form and Motion on Biological Motion Prediction** Wednesday Bushong, Burcu Urgen, Luke Miller, Ayse Saygin

33.4068 **Action prediction and the flash-lag effect** Junzhu Su, Hongjing Lu

33.4069 **Motion-based Attention Underlies the Rehearsal of Biological Motion in Working Memory** Zaifeng Gao, Yangfan Zhao, Xiqian Lu, Mowei Shen, Feng Zhang

33.4070 **Representational similarity analysis of fMRI responses in brain areas involved in visual action processing** Burcu Urgen, Ayse Saygin

33.4071 **Assessment of sport specific and non-specific biological motion perception in soccer athletes shows a fundamental perceptual ability advantage over non-athletes for recognising body kinematics** Thomas Romeas, Jocelyn Faubert

33.4072 **Dependence of the perception of emotional body movements on concurrent social motor behavior** Nick Taubert, Junru Li, Dominik Endres, Martin Giese

33.4073 **Structural and dynamic factors of female physical attractiveness** Slobodan Markovic, Tara Bulut

Scene Perception: Neural mechanisms

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Pavilion

33.4074 **Scene-Space Encoding within the Functional Scene-Selective Network** Elissa Aminoff, Mariya Toneva, Abhinav Gupta, Michael Tarr

33.4075 **Using voxel-wise encoding models to study occipito-temporal representations of the animacy, semantic and affective content of natural images.** Samy Abdel-Ghaffar, Jack Gallant, Alex Huth, Dustin Stansbury, Alan Cowen, Sonia Bishop

33.4076 **Neural coding of navigational affordances in the local visual environment** Michael Bonner, Jack Ryan, Russell Epstein

33.4077 **Rectilinearity is insufficient to explain category selectivity of the parahippocampal place area** Peter Bryan, Joshua Julian, Russell Epstein

33.4078 **The representation of texture information in the parahippocampal place area** Jeongho Park, Soojin Park

33.4079 **The Occipital Place Area is causally involved in representing environmental boundaries during navigation** Joshua Julian, Jack Ryan, Roy Hamilton, Russell Epstein

33.4080 **Cortical predictions interact with post-saccadic input to primary visual cortex** Grace Edwards, Luca Vizioli, Lars Muckli

33.4081 **The occipital place area represents the local elements of scenes** Frederik Kamps, Joshua Julian, Jonas Kubilius, Nancy Kanwisher, Daniel Dilks

33.4082 **Texture and Spatial Layout Converge in Human Scene-Selective Cortex** Matthew Lowe, Susanne Ferber, Jonathan Cant

33.4083 **Retinotopically occluded subsections of early visual cortex contain contextual information about individual scenes, category and depth.** Andrew Morgan, Lucy Petro, Luca Vizioli, Lars Muckli

33.4084 **Measuring the precision of feedback fields in V1 using 3T and 7T fMRI** Lucy Petro, Fraser Smith , Jan Zimmermann, Federico De Martino, Lars Muckli

33.4085 **The neural basis of intuitive physical reasoning** Jason Fischer, Nancy Kanwisher

33.4086 **Differential representation of length and angle information across scene-selective cortex** Andrew Persichetti, Moira Dillon, Elizabeth Spelke, Daniel Dilks

33.4087 **Neural decoding of architectural styles from scene-specific brain regions** Heeyoung Choo, Bardia Nikrahei, Jack Nasar, Dirk Walther

Perceptual Organization: Shapes and objects 1

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Pavilion

33.4088 **Mechanisms of Spatiotemporal Boundary Formation** Gennady Erlikhman, Philip Kellman

33.4089 **Psychophysical evaluation of planar shape representations for object recognition** Ingo Fründ, James Elder

33.4090 **The role of color in mirror-symmetry perception** Elena Gheorghiu, Frederick Kingdom, Aaron Remkes, Hyung-Chul Li, Stéphane Rainville

33.4091 **Apparent Motion of Negative Parts** E.J. Green, Manish Singh, Jacob Feldman

33.4092 **Understanding and Modeling Spatiotemporal Boundary Formation** Philip Kellman, Gennady Erlikhman

33.4093 **Dynamic recalibration of perceived space across the visual hemifields** Anna Kosovicheva, Benjamin Wolfe, Patrick Cavanagh, Andrei Gorea, David Whitney

33.4094 **Position of light sources affects the perceived shape from shading under the hollow face illusion** Tatsuya Yoshizawa, Chiemi Nakashima

33.4095 **Shape distortion illusion of flashed circles can be induced by dichoptic stimulation** Kenzo Sakurai, William Beaudot

33.4096 **Ellipses look like polygons with fast repeated presentation** Cheng Qiu, Shikha Saggi, Cheryl Olman, Daniel Kersten

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33.4097 **Ventral and dorsal stream contributions to a size-contrast illusion: A TMS-induced phosphene study.** Ramisha Knight, Chiara Mazzi, Diane Beck, Silvia Savazzi

33.4098 **Visual Distortions Induced by Simple and Complex Shapes** Galina Goren, James Elder

33.4099 **Filling-in of Kanizsa-style illusory figures is under top-down control** A.J Ayeni, William Harrison, Peter Bex

33.4100 **3-D computer graphics to obtain psychometric function for hollow-mask illusion** Attila Farkas, Thomas Papathomas, Steven Silverstein, Hristiyan Kourtev, Yannis Papayanopoulos

Visual Memory: Objects and features

Sunday, May 17, 8:30 am - 12:30 pm
Poster Session, Pavilion

33.4101 **Investigating the relation between representations of feature- and object-level in visual working memory** Jiajie Cai, Yongna Li, Guixia Ma, Xiaotong Wen

33.4102 **Relational information decays faster than object features in visual working memory.** Kyeongyong Kang, Oakyoon Cha, Sang Chul Chong

33.4103 **Parallel maintenance of type and token representations in visual working memory** Jun Saiki

33.4104 **Feature binding in Working Memory Requires Object-based Attention** Mowei Shen, Xiqian Lu, Xiang Huang, Shulin Chen, Jifan Zhou, Zaifeng Gao

33.4105 **Real-world objects are recalled better than photographs of objects** Michael Compton, Jacqueline Snow

33.4106 **Maintenance of saccade goals boosts working-memory** Nina Hanning, Saurabh Dhawan, Donatas Jonikaitis, Heiner Deubel, Martin Szinte

33.4107 **How feature information affects the retrieval of object location** Michael Patterson, Hong Yuen Sor

33.4108 **Visual working memory of irrelevant features in multi-feature objects** Hongsup Shin, Wei Ji Ma

33.4109 **Grouping in visual working memory is determined by the task context** Halely Balaban, Roy Luria

33.4110 **Inhibition has negative affective consequences for task-irrelevant stimuli that are similar to the active contents of visual working memory** David De Vito, Mark Fenske

33.4111 **Working memory representations produce inhibition of similar (but not identical) stimuli in visual attention** Anastasia Kiyonaga, Tobias Egner

33.4112 **Visual working memory for multiple moving objects in occlusion** Melissa Kibbe

33.4113 **The Geometric Invariance in Representing Multiple Objects in Visual Working Memory** Rende Shui, Qiangzhong Sun, Wenjun Yu, Shulin Chen, Tao Gao

33.4114 **Retroactive Attention can Trigger all-or-none Conscious Access to Past Sensory Stimulus** Louis Thibault, Patrick Cavanagh, Claire Sergent

Sunday Afternoon Talks

Spatial Vision: Crowding

Sunday, May 17, 2:30 - 4:15 pm
Talk Session, Talk Room 1
Moderator: Peter Bex

34.11, *2:30 pm* **Compression of space as a default for localizing degraded targets in the context of highly visible stimuli** Sabine Born, Eckart Zimmermann, Patrick Cavanagh

34.12, *2:45 pm* **Attentional resolution is not the exclusive limit on visual awareness** William Harrison, Mark Johnson, Peter Bex

34.13, *3:00 pm* **Crowding, Patterns, and Recurrent Processing** Michael Herzog, Mauro Manassi, Frouke Hermens, Greg Francis

34.14, *3:15 pm* **Crowding Is Not Holistic for Faces: Low-Level Similarity Matters** Alexandra Kalpadakis-Smith, Valérie Goffaux, John Greenwood

34.15, *3:30 pm* **Uncorking the bottleneck of crowding** Mauro Manassi, Aaron Clarke, Michael Herzog

34.16, *3:45 pm* **Reduced Contextual Effects on Contrast Perception in Schizophrenia and Bipolar Affective Disorder** Michael-Paul Schallmo, Cheryl Olman, Scott Sponheim

34.17, *4:00 pm* **Metamers of the ventral stream revisited** Thomas Wallis, Matthias Bethge, Felix Wichmann

Attention: Tracking and motivation

Sunday, May 17, 5:15 - 7:15 pm
Talk Session, Talk Room 1
Moderator: Michael Esterman

35.11, *5:15 pm* **Neural mechanisms of incentive salience in naturalistic human vision** Clayton Hickey, Marius Peelen

35.12, *5:30 pm* **Money on my mind: reward induces differential neurocognitive strategies during a sustained attention task** Michael Esterman, Kathryn Russo, Guanyu Liu, Francesca Fortenbaugh, Joseph DeGutis

35.13, *5:45 pm* **Voluntary attention is selective in time: perceptual tradeoffs** Rachel Denison, David Heeger, Marisa Carrasco

35.14, *6:00 pm* **Mental tracking of dynamic features** Julian De Freitas, Nicholas Myers, Anna Nobre

35.15, *6:15 pm* **Modelling the dynamics of visual attention under uncertainty** David Hoppe, Constantin Rothkopf

35.16, *6:30 pm* **Human visual response gain increases with arousal** Dongho Kim, Savannah Lokey, Jianfei Guo, Franco Pestilli, Sam Ling

35.17, *6:45 pm* **The Identity-Location Binding Problem** Piers Howe, Adam Ferguson

35.18, *7:00 pm* **Who wins the race for consciousness? Ask the phase of ongoing ~7Hz oscillations.** Marina Inyutina, Hsin-Mei Sun, Chien-Te Wu, Rufin VanRullen

Motion Perception: Biological motion and motion in depth

Sunday, May 17, 2:30 - 4:15 pm
Talk Session, Talk Room 2
Moderator: Alexander Huk

34.21, *2:30 pm* **Independent processing of disparity-based and velocity-based 3D motion in human visual cortex** Sung Jun Joo, Lawrence Cormack, Alexander Huk

34.22, *2:45 pm* **Neural correlates of action aftereffects triggered by adaptation to biological motion** Steven Thurman, Jeroen van Boxtel, Martin Monti, Hongjing Lu

34.23, *3:00 pm* **Interaction between adaptation and perceptual multi-stability in body motion recognition** Martin Giese, Leonid Fedoriv, Rufin Vogels

34.24, *3:15 pm* **Invariant representations for action recognition in the visual system** Andrea Tacchetti, Leyla Isik, Tomaso Poggio

34.25, *3:30 pm* **Motor simulation does not underlie action perception: evidence from upper limb dysmelia** Gilles Vannuscorps, Alfonso Caramazza

34.26, *3:45 pm* **Robust Size Illusion Produced by Expanding and Contracting Flow Fields** Xue Dong, Min Bao

34.27, *4:00 pm* **Psychometric curves describe action discrimination in humans** Guy Orban, Artem Platonov

Scene Perception: Mechanisms and models

Sunday, May 17, 5:15 - 7:15 pm
Talk Session, Talk Room 2
Moderator: Melissa Vo

35.21, *5:15 pm* **The contributions of central and peripheral vision to scene gist recognition with a 180° visual field** Lester Loschky, Muriel Boucart, Sebastien Szaffarczyk, Clement Beugnet, Alicia Johnson, Jia Li Tang

35.22, *5:30 pm* **Two distinct scene processing networks connecting vision and memory** Christopher Baldassano, Andre Esteva, Diane Beck, Li Fei-Fei

35.23, *5:45 pm* **Functions Provide a Fundamental Categorization Principle for Scenes** Michelle Greene, Christopher Baldassano, Andre Esteva, Diane Beck, Li Fei-Fei

35.24, *6:00 pm* **A model of surface depth and orientation predicts BOLD responses in human scene-selective cortex** Mark Lescroart, Jack Gallant

35.25, *6:15 pm* **When scenes and words collide: Irrelevant background scenes modulate neural responses during lexical decisions.** Melissa Vo, Tim Cornelissen, Sabine Oehlschlaeger

35.26, *6:30 pm* **Laminar communication in V1 at ultra-high field fMRI** Luca Vizioli, Lars Muckli

35.27, *6:45 pm* **P-imaging: a technique for comparing visually evoked population responses across visual areas and subjects** Karl Zipser, Kendrick Kay

35.28, *7:00 pm* **Human and monkey detection performance in natural images compared with V1 population responses** Yoon Bai, Yuzhi Chen, Wilson Geisler, Eyal Seidemann

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Sunday Afternoon Posters

Perceptual Organization: Models and neural mechanisms

Sunday, May 17, 2:45 - 6:45 pm
Poster Session, Banyan Breezeway

36.3001 **Brain Activity in Response to Visual Symmetry** Marco Bertamini, Alexis Makin, Letizia Palumbo, Giulia Rampone, Damien Wright

36.3002 **Decoding the neural representation of size using multivariate pattern analyses and high density electroencephalography** Christopher Blair, Ryan Mruczek, Gideon Caplovitz

36.3003 **Neural responses to naturalistic movies in the common marmoset using electrocorticography and fMRI** ChiaChun Hung, Julian Day-Cooney, Brian Russ, Cecil Yen, Lucia Notardonato, Afonso Silva, David Leopold

36.3004 **fMRI decoding reveals neural representations of grouping in ventral visual cortex** Jiedong Zhang, Yaoda Xu

36.3005 **Scene Categorization: The Good, The Bad and The Early** Manoj Kumar, Yanqi Zhang, Diane Beck, Kara Federmeier

36.3006 **Towards a complete forward prediction from visual stimulus to BOLD.** Mark Schira, Peter Robinson, Michael Breakspear, Kevin Aquino

36.3007 **Use of a prior to improving the retinotopic maps of individual subjects** Noah Benson, Geoffrey Aguirre, Jonathan Winawer

36.3008 **Visual awareness is constrained by the functional organization of the higher-level visual system** Michael Cohen, Ken Nakayama, Talia Konkle, George Alvarez

36.3009 **A retinotopic basis for the division of category selectivity into lateral and ventral regions** Edward Silson, Annie Chan, Adam Steel, Richard Reynolds, Dwight Kravitz, Chris Baker

36.3010 **Retinotopic organization of the primary visual cortex before and after pharmacological treatment for a large prolactinoma with compression of the optic chiasm** Alexandra Coros, Philippe Chouinard, Stan Van Uum, Donald Lee, Alexander Fraser, Alain Proulx, Melvyn Foodale, Neil Duggal

36.3011 **Temporal framing in apparent motion perception cycles with a 12Hz (alpha) rhythm** Stephanie Morand, Joachim Gross, Gregor Thut

36.3012 **Competing for Dominance: Using Artificial Scotoma to Explore Figure-Ground Perception** Shruti Narang, Richard Plummer, James Brown

36.3013 **Electrophysiological responses to symmetry presented in the visual hemifields** Damien Wright, Alexis Makin, Marco Bertamini

36.3014 **Relationships Between Indices of Retinal Thinning as Revealed by Spectral Domain Optical Coherence Tomography, and Visual and Cognitive Impairments in Schizophrenia** Steven Silverstein, Brian Keane, Richard Rosen, Danielle Paterno, Shambhavi Metgud, Lindsay Cherneski, Stuart Green

Perception and Action: Pointing, tracking and catching

Sunday, May 17, 2:45 - 6:45 pm
Poster Session, Banyan Breezeway

36.3015 **Temporal evolution of theta and beta band activities during motor preparation reveals the reach endpoint formation process in a free pointing task** Dan Li, Claudio Campus, Alberto Inuggi, Thierry Pozzo

36.3016 **People quickly adjust their movement if a more attractive option arises** Eli Brenner, Jeroen Smeets

36.3017 **Small head movements that accompany goal-directed arm movements provide various useful cues about the target's distance** Cristina de la Malla, Stijn Buiteman, Wilmer Otters, Jeroen Smeets, Eli Brenner

36.3018 **Visual motor control in patients with Parkinson's disease** Jing Chen, Shu-Leong Ho, Mei-Chun Lee, Shek-Kwan Chang, Yin-Yu Pang, Li Li

36.3019 **An Action-specific perception effect that withstands feedback** Zach King, Nate Tenhudnfeld, Jessica Witt

36.3020 **Distinct influences of size-contrast illusion on action preparation and execution** Christine Gamble, Joo-Hyun Song

36.3021 **Haptic plus auditory feedback help timing interceptive actions in the absence of late vision.** Joan Lopez-Moliner

36.3022 **Lost in the Lights: The Effects of Glare on Catching Performance** Rob Gray, Luke Wilkins

Eye Movements: Saccades and perception

Sunday, May 17, 2:45 - 6:45 pm
Poster Session, Banyan Breezeway

36.3023 **Low Spatial Frequency Suppression During Vertical Saccadic Eye Movements** Abhishek Mandal, Niall Strang, Velitchko Manahilov

36.3024 **What is visual remapping to saccade adaptation, a cause or a consequence?** Reza Azadi, Mark Harwood

36.3025 **Trans-saccadic attraction between highly dissimilar pre- and post-saccadic stimuli.** Celine Paeye, Therese Collins, Patrick Cavanagh

36.3026 **Object-selective processing of remapped information** Benjamin Wolfe, David Whitney

36.3027 **Landmark-induced positional shifts point to a shared map for auditory and visual targets** David Aagten-Murphy, Martin Szinte, Heiner Deubel

36.3028 **Spatially-Specific Repetition Suppression in Transsaccadic Perception** Scott Fairhall, Jens Schwarzbach, Martijn van Koningsbruggen, Angelika Lingnau, David Melcher

36.3029 **Space-fixed, retina-fixed, and frame-independent mechanisms of trans-saccadic feature integration: repetition suppression and enhancement in an fMRIa paradigm.** B.-R. Baltaretu, B. Dunkley, S. Monaco, Y. Chen, J. Crawford

36.3030 **On saccade programming as a function of stimulus complexity: Estimating the population-averaging window for simple shapes, textured discs and natural objects** Lotje Linden, Gregory Zelinsky, Françoise Vitu

36.3031 **Saccadic eye movements reveal an orientational bias, but not a position bias, in the Poggendorff figure** Michael Morgan, Barbara Dillenburger

36.3032 **Information gain does not modulate the facilitation of saccades by a perceptual task** Christian Wolf, Alexander Schütz

Object Recognition: Mechanisms

Sunday, May 17, 2:45 - 6:45 pm
Poster Session, Banyan Breezeway

36.3033 **The neural basis of context-driven object perception** Talia Brandman, Marius Peelen

36.3034 **The fovea is essential for peripheral vision: The effect of foveal distractors on extra-foveal perception** Kimberly Weldon, Alexandra Woolgar, Anina Rich, Mark Williams

36.3035 **Neural representation of contextually consistent and inconsistent object pairs in human ventral visual cortex** Ruosi Wang, Yaoda Xu

36.3036 **The modulation of self-bias on the retinotopic C1 in size perception** Jie Sui, Yang Sun, Glyn Humphreys

36.3037 **Is LOC Responsive to Object Familiarity?** Bryan Shilowich, Manan Shah, Irving Biederman, Bosco Tjan, Brenton Keller

36.3038 **Isolation of ventral stream EEG sources using Steady State EEG and Independent Components Analysis** Shamsi Sanati Monfared, Sara Milligan, Jonathan Folstein

36.3039 **High Resolution fMRI Reveals Holistic Car Representations in the anterior FFA of Car Experts** David Ross, Benjamin Tamber-Rosenau, Thomas Palmeri, Jiedong Zhang, Yaoda Xu, Isabel Gauthier

36.3040 **White-matter connectivity of brain regions recruited during the perception of dynamic objects** John Pyles, Michael Tarr

36.3041 **Electrophysiological Correlates of Visual Object Category Formation in a Prototype-Distortion Task** Stephanie Long, Matthew Gannon, Nathan Parks

36.3042 **Exploring expert object recognition by the means of fast periodic visual stimulation** Simen Hagen, James Tanaka

36.3043 **Detecting unconscious processes: Demonstrating the flaws of a frequently used reasoning** Volker Franz, Ulrike von Luxburg

36.3044 **Ultra-fast decoding of snakes from cortical ventral visual stream** Michele Fabre-Thorpe, Maxime Cauchoix

36.3045 **Neurogenetic variations in enhanced perceptual vividness are linked to differences in task-related brain activity** Mana Ehlers, Jennifer Whitman, Daniel Müller, Adam Anderson, Rebecca Todd

36.3046 **Manipulating Perceptual Decisions Using Input From Others** Koel Das, Bapun Giri, Arpita Chowdhury, Sucheta Chakraborty

36.3047 **Category-selective patterns of neural response to scrambled images in the ventral visual pathway.** David Coggan, Wanling Liu, Daniel Baker, Timothy Andrews

36.3048 **Understanding the topography of face and body selectivity in human ventral temporal cortex** Annie Chan, Edward Silson, Chris Baker

36.3049 **Concurrent fMRI analysis of part-whole structure and subjective object norms for items from the BOSS (Bank of Standardized Stimuli) data set.** Anthony Cate, Stephanie Roldan

36.3050 **Curvature-biased cortical areas in human visual cortex** Xiaomin Yue, Amisha Gandhi, Leslie Ungerleider

Lightness and Brightness

Sunday, May 17, 2:45 - 6:45 pm
Poster Session, Pavilion

36.4001 **Dissecting the influence of the collinear and flanking bars in White's effect** Barbara Blakeslee, Ganesh Padmanabhan, Mark McCourt

36.4002 **Preference of Negative Contrast in Behaving Rats** Sheng-Hui Wu, Chun-I Yeh

36.4003 **Surface Perception of Lightness in Different Contexts** Christiane Wiebel, Manish Singh, Marianne Maertens

36.4004 **Viewing strategies that aid lightness constancy in dynamic scenes** Matteo Toscani, Sunčica Zdravković, Karl Gegenfurtner

36.4005 **Assimilation challenges contrast-based models of lightness perception** Marianne Maertens, Robert Shapley

36.4006 **Efficient brightness averaging of heterogeneous achromatic patches** Eiji Kimura, Yusuke Takano

36.4007 **Classification images reveal that local grouping within lighting frameworks drives the argyle illusion** Minjung Kim, Jason Gold, Richard Murray

36.4008 **Investigating the Effect of Lateral Inhibition in the Retinal Circuitry on Lightness Contrast and Assimilation: A Model Study** Jihyun Kim, Marcelo Bertalmío

36.4009 **A comparison of physical and visual light fields structures** Tatiana Kartashova, Dragan Sekulovski, Huib de Ridder, Susan te Pas, Sylvia Pont

36.4010 **Contour erasure and filling-in: Old simulations account for most new observations** Gregory Francis

36.4011 **At night even white cats are gray: scotopic lightness perception** Robert Ennis, Matteo Toscani, Karl Gegenfurtner

36.4012 **Edge influences on suprathreshold white brightness perception** Marcelo Costa

36.4013 **Neural circuitry of brightness induction: modeling and physiology** Hannah Choi, Artak Khachatryan, Charm Le'Pre, Ehud Kaplan, Qasim Zaidi, Youping Xiao

Development: Disorders

Sunday, May 17, 2:45 - 6:45 pm
Poster Session, Pavilion

36.4014 **Axial Diffusivity in the ILF and IFOF is Related to Autism Symptom Severity** K. Suzanne Scherf, Jennifer Legault, Indira Turney, Daniel Elbich, Nancy Minshew, Marlene Behrmann

36.4015 **Differences in the anatomical connectivity patterns of the lateral geniculate nucleus between subjects with dyslexia and controls** Monica Giraldo-Chica, Keith Schneider

36.4016 **Signatures of motor output variability across a spectrum of neurological disorders reveal severity levels and unexpected ties** Elizabeth Torres

36.4017 **Motor imagery vs. object-based visual imagery in adolescents with Autism Spectrum Disorder** Ya-Ting Chen, Hao-Ling Chen, Kuo-Su Tsou, Ching-Ching Wong, Yang-Tan Fang, Chien-Te Wu

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36.4018 **Atypical Binocular Rivalry Dynamics of Simple and Complex Stimuli in Autism** Jan Freyberg, Caroline Robertson, Simon Baron-Cohen

36.4019 **A systematic examination of early perceptual influences on low-, mid and high-level visual abilities in Autism Spectrum Disorder** Jacalyn Guy, Audrey Perreault, Laurent Mottron, Armando Bertone

36.4020 **Dissociation of chromatic discrimination ability in developmental disorders: Autism Spectrum Disorder and Williams Syndrome.** Matthew Cranwell, Deborah Riby, Ann Le Couteur, Brad Pearce, Anya Hurlbert

36.4021 **Do children with autism show reduced susceptibility to the Ebbinghaus illusion?** Catherine Manning, Michael Morgan, Craig Allen, Elizabeth Pellicano

36.4022 **A Two-Factor Structure within the Systemizing Trait of Autism Differentially Predicts Susceptibility to Lateral and Collinear Flanker Effects** Jeffrey Peterson, Scott Reed, Rebecca Kenny, Paul Dassonville

36.4023 **Don't look at the eyes: Live interaction reveals strong eye avoidance behavior in autism** Connie Wang, Eiko Shimojo, Shinsuke Shimojo

36.4024 **Do Individuals With Autism Spectrum Disorder Process Own- and Other-Race Faces Differently?** Li Yi, Paul Quinn, Cong Feng, Kang Lee

36.4025 **A survey of the integrity of major white matter tracts in strabismic amblyopia** Yiran Duan, Anthony Norcia, Jason Yeatman, Aviv Mezer

36.4026 **Neuronal response properties in area MT of an awake amblyopic macaque monkey** Tom Van Grootel, Lynne Kiorpes

36.4027 **An irreducible delay in manual and saccadic reaction time in amblyopia** Christina Gambacorta, Suzanne McKee, Preeti Verghese, Dennis Levi

36.4028 **Global motion perception deficits in children with amblyopia as a function of spatial and temporal stimulus parameters** Kimberly Meier, Brian Sum, Deborah Giaschi

36.4029 **Entropy estimation of resting-state EEG variability in amblyopia** Dave Saint-Amour, Karine Lacourse, Mathieu Simard, Sarah Lipppé

36.4030 **Amblyopic deficits in visual search** Herbert Goltz, Inna Tsirlin, Agnes Wong

36.4031 **Plasticity in adult amblyopia: a meta-review and analysis** Inna Tsirlin, Linda Colpa, Herb Goltz, Agnes Wong

36.4032 **The effect of pharmacological intervention on contrast sensitivity deficits in phenylketonuria** Marcus Watson, Nataliya Yuskiv, Christine Chapman, Sylvia Stockler, Deborah Giaschi

Visual Memory: Capacity and resolution

Sunday, May 17, 2:45 - 6:45 pm
Poster Session, Pavilion

36.4033 **The number of objects determines visual working memory capacity allocation even for complex items** Roy Luria, Halely Balaban, Ayala Allon

36.4034 **Competitive interactions automatically compromise visual working memory.** Jumana Ahmad, Anna Nobre, Kimron Shapiro, Fiona McNab

36.4035 **An equivalent noise method for measuring delay-induced degradation in VSTM.** Nicholas Van Horn, Alexander Petrov

36.4036 **The role of the occipital cortex in capacity limits and precision of visual working memory** Amanda van Lamsweerde, Jeffrey Johnson

36.4037 **Categorical modulation of contents in visual working memory by simple foveal discrimination** Gi-Yeul Bae, Steven Luck

36.4038 **Trial feedback and incentive structures decrease failures of working memory** Kirsten Adam, Edward Vogel

36.4039 **Pre-cues increase capacity at the expense of precision in visual working memory.** Andrea Bocincova, Amanda van Lamsweerde, Jeffrey Johnson

36.4040 **Detailed visual memory capacity is present early in life** Katrina Ferrara, Sarah Furlong, Barbara Landau, Soojin Park

36.4041 **Comparing Monkey and Human Multi-Item Memory** Shaul Hochstein, Volodya Yakovlev

36.4042 **Measuring the memory quality of a task irrelevant feature of an attended object** Garrett Swan, Brad Wyble

36.4043 **Measuring Stroop interference in the absence of response generation using the attentional blink** Gregory Wade, Brad Wyble

36.4044 **The focus of spatial attention determines the number and quality of individual faces retained in working memory** John Towler, Martin Eimer

36.4045 **Visual Working Memory Capacity for Own- and Other-race Faces: Effects of Set Size and Face Features** Yongna Li, Weiying Li, Zhe Wang

36.4046 **The Role of Working Memory in Selective Attention** Melissa Trevino, Bruno Breitmeyer, Jane Jacob

36.4047 **Visual Working Memory Performance is Determined by the Allocation of Attentional Resources: Evidence from Probabilistic Cueing** Holly Lockhart, Naseem Al-Aidroos, Stephen Emrich

36.4048 **Categorical Perception of Topological Relations between Objects** Andrew Lovett, Steven Franconeri

36.4049 **Visual short-term memory demonstrates retinotopic visual field asymmetries** Summer Sheremata, George Malcolm, Sarah Shomstein

36.4050 **Evaluating and excluding swap errors in analogue report** Paul Bays

36.4051 **The BDNF Val66Met polymorphism is associated with improved performance on a visual-auditory working memory task in varsity athletes** Ewa Niechwiej-Szwedo, David Gonzalez, Anthony Tapper, Emily Mardian, Eric Roy, Robin Duncan

Face Perception: Neural dynamics

Sunday, May 17, 2:45 - 6:45 pm
Poster Session, Pavilion

36.4052 **Face recognition: Early temporal negativity is Sensitive to Perceived (rather than Physical) Facial Identity** Stella Faerber, Jürgen Kaufmann, Stefan Schweinberger

36.4053 **The neural correlates of categorization and individuation of own-race and other-race faces** Grit Herzmann

36.4054 **From eye to face: support for neural inhibition in holistic processing** Roxane Itier, Karisa Parkington

36.4055 **Effects of stimulus inversion on the attentional selection and working memory encoding of individual faces** Joanna Parketny, Martin Eimer

36.4056 **Effects of aging on the horizontal selectivity of behavioural and ERP measures of face identification** Rabea Parpia, Ali Hashemi, Patrick Bennett, Allison Sekuler

36.4057 **Spatial frequency hemispheric specialization for filtered faces depends on temporal constraints** Rui de Moraes Júnior, Rafael Vasques, André Cravo, Jocelyn Faubert, Sérgio Fukusima

36.4058 **Tracking the separation of visual representations of face identity and emotional expression in real time** Katie Fisher, John Towler, Martin Eimer

36.4059 **Independent control of cortical representations for expression and identity of dynamic faces** Katharina Dobs, Johannes Schultz, Isabelle Bülthoff, Justin Gardner

36.4060 **Recognition memory for faces is modulated by attractiveness beyond distinctiveness and emotional valence – an ERP study.** Carolin Altmann, Stefan Schweinberger, Holger Wiese

36.4061 **Hometown population influences the N170 response to faces** Alyson Saville, Benjamin Balas

36.4062 **The N170 is mostly sensitive to pixels in the contralateral eye area** Guillaume Rousselet, Gilman Hannah, Robin Ince, Philippe Schyns

36.4063 **Processing of the same face features is delayed by 40 ms, weaker and differentially coded across hemispheres in healthy ageing** Katarzyna Jaworska, Fei Yi, Robin Ince, Philippe Schyns, Guillaume Rousselet

36.4064 **Objective electrophysiological evidence for increased visual discrimination of novel 3D objects following extensive training** Aliette Lochy, Renaud Laguesse, Friederike Zimmermann, Verena Willenbockel, Bruno Rossion, Quoc Vuong

36.4065 **The effect of head orientation on face detection in natural images as evidenced by fast periodic visual stimulation** Charles Or, Talia Retter, Bruno Rossion

36.4066 **Emotional face discrimination as revealed by electrophysiological periodic visual responses** Milena Dzhelyova, Bruno Rossion

36.4067 **The spatio-temporal signatures of category-selective responses to natural images as evidenced with fast periodic visual stimulation** Corentin Jacques, Talia Retter, Bruno Rossion

Face Perception: Behavioral characteristics

Sunday, May 17, 2:45 - 6:45 pm
Poster Session, Pavilion

36.4068 **Measuring the flexibility of orientation selectivity in face processing by varying task demands** Matthew Pachai, Allison Sekuler, Patrick Bennett

36.4069 **Effects of size, fixation location, and inversion on face identification** Allison Sekuler, Matthew Pachai, Ali Hashemi, Patrick Bennett

36.4070 **Seeing People in Motion Enhances Person Recognition** Noa Simhi, Galit Yovel

36.4071 **Where do people look on faces in the real world?** Matthew Peterson, Nancy Kanwisher

36.4072 **Mismatch prevalence influences response bias and discriminability in unfamiliar face matching** Dawn Weatherford, Barret Schein

36.4073 **Intrinsic Memorability Predicts Short- and Long-Term Memory of Static and Dynamic Faces** Mintao Zhao, Isabelle Bülthoff

36.4074 **Face Transformation in Recollection and Familiarity** Winnie Chan, William Hayward, Sing-Hang Cheung

36.4075 **Reconstructing a representational space of learned faces** Nicola van Rijsbergen, Guillaume Rousselet, Philippe Schyns

36.4077 **Reduced Sensitivity to Variation in Normality and Attractiveness for Other-Race Faces** Catherine Mondloch, Xiaomei Zhou

36.4078 **Perception of identity: Robust representation of familiar other-race faces despite natural variation in appearance** Xiaomei Zhou, Catherine Mondloch

36.4079 **Are Faces Important for Face Recognition?** Linoy Schwartz, Galit Yovel

36.4080 **"That's my teacher!": Children's recognition of familiar and unfamiliar faces in images containing natural variability** Sarah Laurence, Catherine Mondloch

36.4081 **The role of similarity in coding ensemble identity of face groups** Markus Neumann, Francesca De Bonis, Gillian Rhodes, Romina Palermo

36.4082 **House pareidolia occurs more frequently than face pareidolia in peripheral vision** Zhengang Lu, Jessica Goold, Ming Meng

36.4083 **The effect of emotional expression on perceived facial age** Tzvi Ganel

36.4084 **Face age affects the way we visually process and recognize faces: a study with adult and infant faces** Valentina Proietti, Francesca Dell'Amore, Emanuela Bricolo, Viola Macchi Cassia

36.4085 **Representing Young and Older Adult Faces: Shared or Age-Specific Prototypes?** Lindsey Short, Valentina Proietti, Catherine Mondloch

Multisensory Perception: Visuo-auditory interactions 1

Sunday, May 17, 2:45 - 6:45 pm
Poster Session, Pavilion

36.4086 **Synchronization is better to a visual than to an auditory beat** Xiang Wu, Lingyu Gan, Yingyu Huang, Liang Zhou, Cheng Qian

36.4087 **Fast and slow adaptation to multisensory asynchrony: Temporal recalibration at two time scales** David Alais, Hao Ho, Shui'er Han, Erik Van der Burg

36.4088 **Cleaving to cues that are no longer informative: Audio-visual asymmetry in cue utilization.** Ryo Kyung Lee, Kanji Tanaka, Keisuke Hachisuka, Eichi Okuno, Katsumi Watanabe

36.4089 **Audio-visual synchrony increase the saliency of visual direction changes: Evidence from individual differences and probe detection performance** Hauke Meyerhoff, Nina Gehrer

36.4090 **Audiovisual integration directing attention to the temporal dynamics of biological motion** Jinwoo Nam, Emily Grossman, Chai-Youn Kim

36.4091 **Cross-modal facilitation driven by metacognition** Derek Arnold, Cailem Murray, Alan Johnston

36.4092 **A bias-free measure of crossmodal audiovisual action adaptation** Nick Barraclough, Bruce Keefe, Steve Page

36.4093 **In-Phase is not Always Best: Auditory salience reverses crossmodal influences on visual detectability** Vivian Ciaramitaro, Hiu-mei Chow, Alexia Williams

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36.4094 **Visual spatial uncertainty influences auditory change localization** Kelly Dickerson, Jeremy Gaston, Timothy Mermagen, Ashley Foots, Daniel Hipp

36.4095 **Visual-auditory localization in central and peripheral space** Sara Garcia, Pete Jones, Gary Rubin, Marko Nardini

36.4096 **Predictive coding of auditory and contextual information in early visual cortex – evidence from layer specific fMRI brain reading** Lars Muckli, Luca Vizioli, Lucy Petro, Federico De Martino, Petra Vetter

36.4097 **Audiovisual integration in people with one eye: Normal temporal binding window and sound induced flash illusion but reduced McGurk effect** Stefania Moro, Jennifer Steeves

3D Perception: Slant, curvature, and shape

Sunday, May 17, 2:45 - 6:45 pm
Poster Session, Pavilion

36.4098 **Adaptation sharpens object representations: Evidence from shape discrimination thresholds** Maria Olkkonen, Marcelo Mattar, Geoffrey Aguirre, Russell Epstein

36.4099 **Stereoscopic camouflage: Can conflicting object segregation cues hinder depth perception?** Philip Cammack, Julie Harris

36.4100 **A New Slant on "Two Eyes Are Better Than One": Large Continuous Perspective Changes (≥45°) Allow Metric Slant Perception Using Cyclopean (or Stereo-) Motion** Xiaoye Michael Wang, Aaron Fath, Mats Lind, Geoffrey Bingham

36.4101 **Structure from motion without projective consistency** Xiaoli He, Jacob Feldman, Manish Singh

36.4102 **Perception of 3D structure and natural scene statistics: The Southampton-York Natural Scenes (SYNS) dataset.** Wendy Adams, James Elder, Erich Graf, Alex Muryy, Arthur Lugtigheid

36.4103 **Estimating 3D surface properties of natural scenes** Alex Muryy, Wendy Adams, James Elder, Erich Graf, Arthur Lugtigheid

36.4104 **Distortions of material and shape induced by misperceived depth of field** Scott Mooney, Barton Anderson

36.4105 **Role of 3D rotational symmetry in visual perception** Tadamasa Sawada, Qasim Zaidi

36.4106 **Ambiguous Cylinders: A New Class of Solid That Evokes Anomalous Perception** Kokichi Sugihara

36.4107 **Comparing sensitivity estimates from MLDS and forced-choice methods in a slant-from-texture experiment** Guillermo Aguilar, Felix Wichmann, Marianne Maertens

36.4108 **The effect of the bounding contour on the perception of surface shape** Erich Graf, Wendy Adams, James Elder

36.4109 **Biases in perceived slant and tilt of real surfaces** Arthur Lugtigheid, Wendy Adams, James Elder, Erich Graf, Alex Muryy

36.4110 **Local Surface Patch Classification Using Multilinear PCA+LDA on High-Order Image Structures Compared to Human Observers** Christopher Kallie, Eric Egan, James Todd

36.4111 **Knowledge effects on slant estimation are mediated by Conscientiousness** Abigail Robinson, Jaehyun Oh, Christopher Thomson, Ruth Talbot, Catherine Norris, Frank Durgin

36.4112 **Interactions between viewing from above and global convexity priors in the interpretation of depth-ambiguous shape-from-contour drawings** Séamas Weech, Daniel Gale, Nikolaus Troje

Monday Morning Talks

Attention: Control and mechanisms

Monday, May 18, 8:15 - 9:45 am
Talk Session, Talk Room 1
Moderator: Emma Dowd

41.11, *8:15 am* **Letting go: How the disappearance of a fixation target prompts the brain to shift attention** Louisa Kulke, Janette Atkinson, Oliver Braddick

41.12, *8:30 am* **Learning experience shapes attention deployment in the visual field** Tobias Feldmann-Wüstefeld, Metin Uengoer, Anna Schubö

41.13, *8:45 am* **Interference control theory: A new perspective on dual-task interference in memorizing and responding to visual targets** Mark Nieuwenstein, Sabine Scholz, Nico Broers

41.14, *9:00 am* **The temporal dynamics of target selection in real-world scenes** Daniel Kaiser, Nikolaas Oosterhof, Marius Peelen

41.15, *9:15 am* **Competitive tradeoffs between working memory and attention: An fMRI approach** Emma Dowd, Anastasia Kiyonaga, Tobias Egner

41.16, *9:30 am* **Executive attention in adults with and without ADHD – an ERP study** Lilach Shalev, Roy Luria, Keren Saar, Irina Nesterovsky, Baruch Styr, Carmel Mevorach, Haleli Balaban, Orli Azulai

Face Perception: Mechanisms and models

Monday, May 18, 10:45 am - 12:15 pm
Talk Session, Talk Room 1
Moderator: Tim Kietzmann

42.11, *10:45 am* **The deceptively simple N170 hides a complex diagnostic coding mechanism involving visual feature transfer across hemispheres.** Robin Ince, Katarzyna Jaworska, Stefano Panzeri, Guillaume Rousselet, Philippe Schyns

42.12, *11:00 am* **Representational dynamics of facial viewpoint encoding: Head orientation, viewpoint symmetry, and front-on views** Tim Kietzmann, Anna Gert, Peter König

42.13, *11:15 am* **Relative sensitivity to low- vs. high-level visual properties in face-sensitive regions of the human ventral occipito-temporal cortex: evidence from intra-cerebral recordings** Joan Liu-Shuang, Jacques Jonas, Justin Ales, Anthony Norcia, Louis Maillard, Bruno Rossion

42.14, *11:30 am* **The topographical representation of the human body in visual cortex** Ghazaleh Kiani, Sherryse Corrow, Jodie Davies-Thompson, Jason Barton

42.15, *11:45 am* **Near-perfect prediction of reaction time for face gender judgments based on activity in ventral temporal cortex** Kalanit Grill-Spector, Kevin Weiner, Nikolaus Kriegeskorte, Kendrick Kay

42.16, *12:00 pm* **The Emergence of Face-Selective Units in a Model that Has Never Seen a Face** Daniel Yamins, Michael Cohen, Ha Hong, Nancy Kanwisher, James DiCarlo

Perception and Action: Interactions

Monday, May 18, 8:15 - 9:45 am
Talk Session, Talk Room 2
Moderator: Robert Volcic

41.21, *8:15 am* **Learning efficient perceptual sampling** Marko Nardini, Pete Jones, Linnea Landin, Mordechai Juni, Laurence Maloney, Tessa Dekker

41.22, *8:30 am* **Increasing eye height makes slopes appear less steep** Bruce Bridgeman, Ian Cooke

41.23, *8:45 am* **Predicting the outcome of an opponent's tennis stroke: Insights from a classification-sequence analysis** Sepehr Jalali, Kielan Yarrow, Joshua Solomon

41.24, *9:00 am* **A dissociation of motion processing for saccades, smooth pursuit, and perception measured for the same target.** Matteo Lisi, Patrick Cavanagh

41.25, *9:15 am* **The visual coupling between neighbors in a virtual crowd** William Warren, Kevin Rio

41.26, *9:30 am* **Velocity of the Human Stadium or "Mexican" La Ola Wave: Systematic Variations Due to Type and Direction** Michael McBeath, R. Chandler Krynen

Visual Search: Models

Monday, May 18, 10:45 am - 12:15 pm
Talk Session, Talk Room 2
Moderator: Jared Abrams

42.21, *10:45 am* **Visual search in natural scenes: a double-dissociation paradigm for comparing observer models** Jared Abrams, Wilson Geisler

42.22, *11:00 am* **Independent Contributions of Multiple Types of Scene Context on Eye Movement Guidance and Visual Search Performance** Kathryn Koehler, Miguel Eckstein

42.23, *11:15 am* **Linearity in perceptual space** Sripati Arun

42.24, *11:30 am* **The microgenesis of information acquisition in visual 'popout'** Jonathan Flombaum, Sheng-hua Zhong, Bruno Jedynak, Huaibin Jiang

42.25, *11:45 am* **Foraging in satellite imagery: When is it time to move to the next map?** Krista Ehinger, Jeremy Wolfe

42.26, *12:00 pm* **Effects of Object Affordance in a Visual Search Task** Melanie Wulff, Alexandra Stainton, Pia Rotshtein

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Monday Morning Posters

Spatial Vision: Texture and image statistics

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

43.3001 **Dimensions of Masking Measured by Constrained Natural Scene Sampling** Stephen Sebastian, Jared Abrams, Wilson Geisler

43.3002 **What is a clear picture? Human sensitivity to noise in naturalistic images.** Jasmine Patel, Ramandeep Kaur, Bhavin Sheth

43.3003 **Border ownership assignment in real images** Cornelia Fermuller, Ching Lik Teo, Yiannis Aloimonos

43.3004 **Tilt Aftereffect due to Adaptation to Natural Images** Ron Dekel, Dov Sagi

43.3005 **Evidence for Bound Scene Gist Representations: Statistical Summary Representations across Multiple Dimensions** Melissa Beck, Rebecca Goldstein, Katherine Moen, Jesse Clifton

43.3006 **Statistics of retinal image blur during natural viewing** William Sprague, Emily Cooper, Martin Banks

43.3007 **The posterior part of area LO responds to image statistics, the anterior part to categorical differences.** H.Steven Scholte, Ilja Sligte, Iris Groen, Sennay Ghebreab

43.3008 **Cathodal trans-cranial Direct Current Stimulation (tDCS) modifies discrimination thresholds of the slope of the amplitude spectrum.** Bruno Richard, Rebecca Birkett, Bruce Hansen, Aaron Johnson

43.3009 **An Edgy Image Statistic: Semi-Automated Edge Extraction and Fractal Box-Counting Algorithm Allows for Quantification of Edge Dimension In Natural Scenes** Alexander Bies, Richard Taylor, Margaret Sereno

43.3010 **Opposing effects of summary statistics on peripheral discrimination** Corey Ziemba, Eero Simoncelli

43.3011 **Adaptation to texture reveals a local metric underlying perceived size and distance** Rumi Hisakata, Shin'ya Nishida, Alan Johnston

43.3012 **Anchoring of "black" in texture discrimination** Chien-Chung Chen, Charles Chubb

43.3013 **Detection of Orientation-Defined Boundaries is Just as Inefficient as Estimation of Mean Orientation** Joshua Solomon, Michael Morgan

43.3014 **Approximately uniform isodiscrimination contours within a perceptual space of local image statistics** Mary Conte, Syed Rizvi, Jonathan Victor

43.3015 **The texture centroid paradigm: A new method for isolating preattentive visual mechanisms** Charles Chubb, Michael Landy, Zack Westrick, Eero Simoncelli

43.3016 **Lower in Contrast, Higher in Numerosity Estimation** Quan Lei, Adam Reeves

Eye Movements: Cognition and models

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

43.3017 **The Effects of Task- and Switch-Predictability on Oculomotor Inhibition of Return During Visual Search** Brett Bahle, Mark Mills, Edwin Dalmaijer, Stefan Van der Stigchel, Michael Dodd

43.3018 **Effects of task- and switch-predictability on task-switching during scene viewing** Mark Mills, Brett Bahle, Edwin Dalmaijer, Stefan Van der Stigchel, Michael Dodd

43.3019 **Blinking by Surprise: Eye-Blink Rate and Latency Uncover Stimulus Predictability** Yoram Bonneh, Moshe Fried, Yael Adini

43.3020 **Characteristic visuomotor influences on eye-movement patterns to faces and other high level stimuli** Joseph Arizpe, Chris Baker

43.3021 **Mapping and Correcting the Influence of Gaze Position on Pupil Size Measurements** Taylor Hayes, Alexander Petrov

43.3022 **Target Detection in Visual Search: Unravelling the Pupillary Response** Joel Martin, Stephen Johnston

43.3023 **Objects in the peripheral visual field influence gaze location in natural vision** Elena Hitzel, Matthew Tong, Alexander Schütz, Mary Hayhoe

43.3024 **Modeling Task Control of Gaze** Matthew Tong, Shun Zhang, Leif Johnson, Dana Ballard, Mary Hayhoe

43.3025 **Visual updating across saccades by working memory integration** Leonie Oostwoud Wijdenes, Louise Marshall, Paul Bays

43.3026 **Reward associations slow the release of visual fixation** Jane Raymond, Sandra Murphy

43.3027 **Motor preparation and attentional benefits: dependencies on the number of possible saccade targets** Michael Puntiroli, Dirk Kerzel, Sabine Born

43.3028 **Trans-saccadic prediction error re-calibrates perceived size in the peripheral visual field** Matteo Valsecchi, Karl Gegenfurtner

43.3029 **Selective scanpath repetition supports memory-guided visual search** Jordana Wynn, Michael Bone, Michelle Dragan, Kari Hoffman, Bradley Buchsbaum, Jennifer Ryan

43.3030 **What can we learn from eye tracking data on 20,000 images?** Jianxiong Xiao, Pingmei Xu, Yinda Zhang, Krista Ehinger, Adam Finkelstein, Sanjeev Kulkarni

43.3031 **Eye movement correlates of behavioral performance in a simulated guard duty task** Jon Touryan, Anthony Ries

43.3032 **Eye movements to tool images are predicted by frequency of physical experience with the tool** Rafal Skiba, Jacqueline Snow

43.3033 **iMap 4: An Open Source Toolbox for the Statistical Fixation Mapping of Eye Movement data with Linear Mixed Modeling** Junpeng Lao, Sébastien Miellet, Cyril Pernet, Nayla Sokhn, Roberto Caldara

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Development: Typical develoment and aging

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

43.3034 **Three-month-old infants' sensitivity to horizontal information within faces** Adelaide de Heering, Nicolas Dollion, Ornella Godard, Valerie Goffaux, Jean-Yves Baudouin

43.3035 **Visual exploration and discrimination of emotional facial expressions in 3-, 7- and 12-month-old infants** Nicolas Dollion*, Robert Soussignan*, Karine Durand, Benoist Schaal, Jean-Yves Baudouin*

43.3036 **Cues For Accommodation and Vergence in Infancy and Early Childhood** T. Rowan Candy, Erin Babinsky, Tawna Roberts, Vivian Manh, Eric Seemiller, Yifei Wu, Don Lyon

43.3037 **Evolutionary-based threat modulates perception of looming visual stimuli in human infants** Vladislav Ayzenberg, Matthew Longo, Stella Lourenco

43.3038 **Oculomotor response to radial optic flow in infancy** Elizabeth Nawrot, Mark Nawrot

43.3039 **Infant-specific gaze patterns to the focus of a radial optic flow** Nobu Shirai, Tomoko Imura

43.3040 **Early development of Apparent Motion processing mechanisms** Francesca Pei, Anthony Norcia

43.3041 **Do infants have requirements for perceiving shadows?** Kazuki Sato, So Kanazawa, Masami Yamaguchi

43.3042 **Visual Attention Differences in Caesarean versus Vaginally Delivered Infants** Audrey Wong Kee You, Scott Adler

43.3043 **The effects of aging on perception and cognition** Albulena Shaqiri, Aaron Clarke, Marina Kunchulia, Daniela Herzig, Karin Pilz, Michael Herzog

43.3044 **Global and local biases and biological motion processing in healthy ageing.** Hannah Agnew, Louise Phillips, Karin Pilz

43.3045 **Value-based modulation of saccadic control across adult lifespan** Jutta Billino, Elena Hitzel, Sabine Margolf-Hackl, Karl Gegenfurtner

43.3046 **Characterizing Motion Parallax Depth Thresholds in Older Adults** Jessica Holmin, Mark Nawrot

Temporal Processing

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Pavilion0

43.4001 **Similarity of Low-Pass Filtered and Pixelated Images at Different Time Scales** Takeshi Suzuki, Yannik Schelske, Tandra Ghose

43.4002 **Neuro-encryption: concealing perceptual targets in observer-dependent, experimentally controlled alpha phase patterns** Sasskia Bruers, Rufin VanRullen

43.4003 **Decoding the temporal structure of perception and reflection** Scott Guerin, Stefan Uddenberg, Marcia Johnson, Chun Chun

43.4004 **Changes in temporal integration mitigate the disruptive effects of transcranial magnetic stimulation over visual cortex in humans** Timothy Ledgeway, David Heslip, Paul McGraw

43.4005 **Time compression in an unadapted region after adaptation to a moving surround** Soki Nakamura, Ikuya Murakami

43.4006 **Perception of transient pattern at the transition between high-speed flickering stimuli** Yutaka Nakajima, Yutaka Sakaguchi

43.4007 **Continuous flash suppression effectiveness depends on mask temporal frequency** Weina Zhu, Jan Drewes, David Melcher

43.4008 **Individual differences in the perception of time** Simon Cropper, Alan Johnston, Christopher Groot

43.4009 **Metacognition of time perception** Brendan Keane, Kielan Yarrow, Derek Arnold

43.4010 **Affective distortions of temporal duration and resolution judgments** Kevin Roberts, Rebecca Todd

43.4011 **Context-dependent neural modulations in the perception of duration, revealed by fMRI** Yuki Murai, Yuko Yotsumoto

Color and Light: Surfaces, textures, and materials

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Pavilion

43.4013 **Coupled computations of depth, material, and illumination** Barton Anderson, Phillip Marlow

43.4014 **Brain processing of gloss information with 2D and 3D depth cues** Hua-Chun Sun, Massimiliano Di Luca, Roland Fleming, Alexander Muryy, Hiroshi Ban, Andrew Welchman

43.4015 **Appearance of 'gold' affects glossiness and metallicity of a surface** Tomohisa Matsumoto, Kazuho Fukuda, Keiji Uchikawa

43.4016 **Estimating discrimination ellipsoids for skin images** Tushar Chauhan, Kaida Xiao, Julian Yates, Sophie Wuerger

43.4017 **Exploring the perceptual similarity structure of dynamic textures** Yaniv Morgenstern, Shinho Cho, Daniel Kersten

43.4018 **Can the classifier trained to separate surface texture from specular shading infer geometric consistency of specular highlight?** Hideki Tamura, Shigeki Nakauchi

43.4019 **Perception of a thick transparent object is affected by object and background motions but not dependent on the motion speed** Shohei Ueda, Yusuke Tani, Takehiro Nagai, Kowa Koida, Shigeki Nakauchi, Michiteru Kitazaki

43.4020 **MatMix 1.0, a novel material probe for quantitatively measuring visual perception of materials** Fan Zhang, Huib de Ridder, Sylvia Pont

Binocular Vision: Stereopsis and depth

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Pavilion

43.4021 **Gaze Dependent Vergence Adaptation** Muriel Dysli, Mathias Abegg

43.4022 **Stereoacuity improves after short-term binocular pattern mismatch** Bart Farell, Cherlyn Ng

43.4023 **Modulating ocular dominance in the adult in real time.** Robert Hess, Jiawei Zhou, Alexandre Reynaud

43.4024 **Comparison of monocular and stereo sources of motion information about time-to-contact of slow and fast objects** Aaron Fath, Mats Lind, Geoffrey Bingham

43.4025 **The alignment of functional selectivity in V1 following ocular misalignment** Veronica Choi, Benjamin Scholl, Nicholas Priebe

43.4026 **Decision-related activity in V2 for a fine disparity discrimination task** Stéphane Clery, Bruce Cumming, Hendrikje Nienborg

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43.4027 **Disparity defined depth of a dynamic random noise patch within a static random dot field is easier to see than that of a normal random dot stereogram** Masahiro Ishii, Akiko Yasuoka

43.4028 **Apparent depth of a patch of dynamic random noise within a static field of random dots** Akiko Yasuoka, Shinichi Kita, Masahiro Ishii

43.4029 **Vertical size disparity pooling across attended color and contrast** Benjamin Backus, Baptiste Caziot

43.4030 **Invariance of processing latency across signal types and strengths** Baptiste Caziot, Benjamin Backus

43.4031 **Assessment of depth magnitude from binocular disparity** Brittney Hartle, Laurie Wilcox

43.4032 **The impact of binocular disparity on visual short-term memory** Sarah Zohar, Laurie Wilcox

43.4033 **On the consequences of perceptual organization via good continuation in depth** Lesley Deas, Laurie Wilcox

Perceptual Organization: Grouping

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Pavilion

43.4034 **Percept-Concept Consistency Facilitates Memory** Yun-Hsuan Lai, Karen Schloss

43.4035 **The Salience of Lower-Order Features in Highly Self-Similar Wallpaper Groups** Shivam Vedak, Rick Gilmore, Peter Kohler, Yanxi Liu, Anthony Norcia

43.4036 **Similarity grouping as feature-based attention** Dian Yu, Steven Franconeri

43.4037 **The change of reading/writing habit induces the directional change in drawings, but not in photos.** Hachoung Lee, Songjoo Oh

43.4038 **Driving a rotating Necker Cube: context position matters** Marouane Ouhnana, Frederick Kingdom

43.4040 **How Do Multiple Inducers Group in Perceptual Completion Stimuli - Psychophysics and Modeling** Gal Nir, Ohad Ben Shahar

43.4041 **Decreases in Variance are Detected Better than Inceases in Variance** Drew Walker, Timothy Lew

43.4042 **Non-specific Perceptual Organization Deficits After Traumatic Brain Injury.** Thiago Costa, Ana Zaninotto, Gláucia Benute, Mara Lúcia, Wellingson Paiva, Johan Wagemans, Lee de-Wit, Paulo Boggio

43.4043 **Individual differences in autistic traits predict visual binding abilities** Sol Sun, Ryan Stevenson, Naomi Hazlett, Morgan Barense, Jonathan Cant, Susanne Ferber

43.4044 **Evidence for global perceptual averaging in individuals with Autism Spectrum Disorder** Jennifer Corbett, David Melcher

Multisensory Perception: Visuo-auditory interactions 2

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Pavilion

43.4045 **An elephant never forgets the sound of a hammer: Task difficulty and multimodal search.** Bonnie Angelone, Alyssa Lompado

43.4046 **Age-Related Differences in the Flash-Induced Beep Illusion** Denton DeLoss, George Andersen

43.4047 **A mid-level sound-shape correspondence: Bouba/Kiki and radial frequency patterns** Pi-Chun Huang, Yi-Chuan Chen, Charles Spence

43.4048 **The correspondence between neutral voice and face is mediated by common perceptual properties** Shoko Kanaya, Yoshiyuki Ueda, Hideyuki Tochiya, Kazuhiko Yokosawa

43.4049 **Acquiring multiple cross-modal correspondences** Erika Kumakura, Kazuhiko Yokosawa

43.4050 **Relations among Visual Texture, Musical Features, and Emotion** Thomas Langlois, Joshua Peterson, Stephen Palmer

43.4051 **Dissociation of Perception and Action in Audiovisual Multisensory Integration** Lynnette Leone, Mark McCourt

43.4052 **Emotion mediation in audio-visual correspondences among natural sounds, texture, and art** Joshua Peterson, Stephen Palmer

43.4053 **The impact of auditory task demands on visual search: Evidence from behavior and fixation-related brain potentials** Anthony Ries, Jon Touryan, Barry Ahrens, Patrick Connolly

43.4054 **Influence of vision on auditory spatial perception in sighted people.** Alessia Tonelli, Luca Brayda, Monica Gori

43.4055 **Inter-individual response differences predict multisensory response enhancement** Maarten van der Smagt, Nathan van der Stoep

Multisensory Perception: Visuo-haptic and visuo-vestibular interactions

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Pavilion

43.4056 **V6 is active during antero-posterior but not in lateral galvanic vestibular stimulation.** Felipe Aedo-Jury, Simona Celebrini, Benoit Cottereau, Maxime Rosito, Alexandra Séverac-Cauquil

43.4057 **The development and organization of visuohaptic modality-biased signals in the LOC** R. Joanne Jao, Karin James, Thomas James

43.4058 **Inter-modal attention shifts trigger the selective activation of task-relevant tactile or visual working memory representations** Tobias Katus, Anna Grubert, Martin Eimer

43.4059 **The influence of scene rigidity and head tilt on vection.** Pearl Guterman, Robert Allison

43.4060 **Direction discrimination of self motion consistent optic flow stimuli in multisensory integration cortices.** Nadine Hummel, Virginia Flanagin

43.4061 **Combining visual and proprioceptive cues to improve the discrimination of object location** Mark Adams, Peter Scarfe, Andrew Glennerster

43.4062 **Visual and Haptic Shape Recognition Memory** J Farley Norman, Jacob Cheeseman, Olivia Adkins, Connor Rogers, Andrea Cox, Michael Baxter, Hideko Norman

43.4063 **Visual and haptic geometry of 3D shape discrimination** Flip Phillips, Emerson O'Donnell, Noah Kernis

Attention: Divided attention and capture

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Pavilion

43.4064 **Time-Shared Visual Awareness of Multiple Moving Objects** Joseph Lappin, Douglas Morse, Adriane Seiffert

43.4065 **Attentional tuning to events associated with long-term concerns** Jennifer Whitman, Kevin Roberts, Rochelle Picardo, Jiaying Zhao, Rebecca Todd

43.4066 **The limitations of visual working memory in prioritizing visual stimuli for conscious access** Dirk van Moorselaar, Jan Theeuwes, Christian Olivers

43.4067 **Feature priming rather than visual working memory affects oculomotor selection in a bottom-up manner** Jeroen Silvis, Artem Belopolsky, Jozua Murris, Mieke Donk

43.4068 **Exploring Visual Search as a Paradigm for Predicting Medication Errors** Nelson Roque, Timothy Wright, Walter Boot

43.4069 **Active Suppression in Video-Game Players: An ERP Study** James Patten, John Gaspar, John McDonald, Thomas Spalek

43.4070 **Automatic incorporation of a top-down cross-dimensional attentional setting into the focus of attention** Motohiro Ito, Jun Kawahara

43.4071 **Bow your head in shame, or, hold your head up with pride: Self-esteem concepts orient attention vertically** Alison Chasteen, Eric Taylor, Timothy Lam, Jay Pratt

43.4072 **Attention expands visual space** Liu Zhou, Teng Leng Ooi, Zijiang He

43.4073 **Hemifield-specific resources for controlling apparent motion** Christine Nothelfer, Satoru Suzuki, Steven Franconeri

43.4074 **Catching The Mind's Eye: The Effect of Internal Distraction on Visual Attention** Matthew Windsor, Daniel Simons

43.4075 **A Novel Approach to Measuring the Useful Field of View in Simulated Real-World Environments Using Gaze Contingent Displays: The GC-UFOV.** Ryan Ringer, Zachary Throneburg, Tera Walton, Greg Erickson, Allison Coy, Jake DeHart, Aaron Johnson, Arthur Kramer, Lester Loschky

43.4076 **Cost of Dividing Attention Moderated by Contrast Level** John Plummer, Rui Ni

43.4077 **Are accuracy and reaction time equivalent measures of the attentional blink?** Hayley Lagroix, Vincent Di Lollo, Thomas Spalek

43.4078 **Visual attention does not independently influence on chromatic and achromatic contrast-discrimination processes** Keiko Kuwamura, Masayuki Sato, Keiji Uchikawa

43.4079 **Perceptual and cognitive limitations interact in multiple object tracking** Nisheeth Srivastava, Edward Vul

43.4080 **Perturbing object stability across saccadic eye movements facilitates displacement detection but hinders object recognition** Christian Poth, Arvid Herwig, Werner Schneider

43.4081 **The effects of red light running camera flashes on older and younger driver's covert and overt attention.** Timothy Wright, Walter Boot, Neil Charness, Thomas Vitale

Attention: Features and objects

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Pavilion

43.4082 **Target 'on' or 'of' an object? It does not matter for object-based attention** Shahd Al-Janabi, Adam Greenberg

43.4083 **Unconscious processing of shape-pair relationship** Matt Oxner, Edoardo Zamuner, Paul Corballis, William Hayward

43.4084 **Object Substitution Masking for an Attended and Foveated Target** Hannah Filmer, Jason Mattingley, Paul Dux

43.4085 **Color dominates! The importance of color in attentional templates for target objects in visual search.** Rebecca Nako, Tim Smith, Martin Eimer

43.4086 **Evidence for the role of Feature-Based-Attention at a very early processing stage** Peng Sun, Brianna Turbow, Charles Chubb, Charles Wright, George Sperling

43.4087 **Visual Features as Carriers of Information** Ronald Rensink

43.4088 **Ensemble summary statistics as a basis for visual categorization** Igor Utochkin

43.4089 **Statistical Learning without Attention** Feitong Yang, Jonathan Flombaum

43.4090 **Interference in the Perception of Two-Population Scatterplots** Madison Elliott, Ronald Rensink

43.4091 **An EEG Study of Illusory Conjunctions** Alex Mitko, William Prinzmetal, Michael Esterman, Alexandra List

43.4092 **The interaction between spatial cueing and cue-target feature similarity** Greg Huffman, Naseem Al-Aidroos, Jay Pratt

43.4093 **Feature-based attention separately influences visual working memory resolution and encoding probability** Blaire Dube, Stephen Emrich, Naseem Al-Aidroos

43.4094 **Disc Size Supports Top-Down, Selective Attention in a Task Requiring Integration across Multiple Target** Garrett Blair, Charles Wright, Charlie Chubb, Peng Sun, George Sperling

43.4095 **Attention in Low Resolution: Learning Proto-Object Representations with a Deep Network** Chengyao Shen, Xun Huang, Qi Zhao

43.4096 **Learned Attention in an Object-Based Frame of Reference** Kao-Wei Chua, Isabel Gauthier

43.4097 **Shifts of Object-Based Attention Differ Across Visual Field Meridians** Adam Barnas, Adam Greenberg

43.4098 **Binding object features to locations: Does the "Spatial Congruency Bias" update with object movement?** Avni Bapat, Colin Kupitz, Julie Golomb

43.4099 **Dissociable effects of attention and expectation during orientation discrimination** Nuttida Rungratsameetaweemana, Sirawaj Itthipuripat, John Serences

43.4100 **Expectancies about the frequency of a target-similar distractor impact target selection** Jeongmi Lee, Carly Leonard, Steven Luck, Joy Geng

Objects: Numbers

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Pavilion

43.4101 **Vertical and diagonal Kanizsa illusory contour targets in an enumeration task** Natasha Dienes, Lana Trick

43.4102 **Early Cortical Contributions to Object Individuation** Paul Dux, Claire Naughtin, Jason Mattingley

43.4103 **The influence of pre-stimulus brain oscillations on the visual sense of number: an MEG study** Rakesh Sengupta, Philipp Rhinou, David Melcher, Raju Bapi Surampudi

43.4104 **Enumeration and Reentrant Processes** Marcus Cappiello, Weiwei Zhang

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Objects: Reading

Monday, May 18, 8:30 am - 12:30 pm
Poster Session, Pavilion

43.4105 **Individual differences in sensitivity to configural information predicts word recognition fluency** Terri Ng, Vince Ngan, Yetta Wong, Alan Wong

43.4106 **Scrutinizing subliminal priming of numbers in the dissociation paradigm** Chung-Shan Kao, Martin von Eltz, Volker Franz

43.4107 **The SNARC effect and visual and semantic features of Chinese numerals** Karl Kopiske, Christian Löwenkamp, Owino Eloka, Florian Schiller, Chung-Shan Kao, Chaohua Wu, Xiaorong Gao, Volker Franz

43.4108 **Word and Sentence Level Spatial Information In Reading** Peter Bex, Ayo Ayeni, Emily Wiecek

43.4109 **The efficiency of trans-saccadic integration in foveal and peripheral word recognition** Jean-Baptiste Bernard, Carlos Aguilar, Françoise Vitu, Eric Castet

43.4110 **Behavioral and neural evidence of stored letter shape and abstract letter identity representations** David Rothlein, Brenda Rapp

43.4111 **The VWFA and FFA have sharply contrasting functional selectivities and patterns of connectivity** Zeynep Saygin, Terri Scott, Jenelle Feather, Deanna Youssoufian, Evelina Fedorenko, Nancy Kanwisher

43.4112 **Interference between holistic processing of English and Chinese words** Vince Ngan, Terri Ng, Yetta Wong, Alan Wong

Tuesday Morning Talks

Vision in Neurological Disorders

Tuesday, May 19, 8:15 - 9:45 am
Talk Session, Talk Room 1
Moderator: Geoff Boynton

51.11, *8:15 am* **Ensemble perception of emotions in children with autism** Themis Karaminis, Louise Neil, Catherine Manning, Marco Turi, Chiara Fiorentini, David Burr, Liz Pellicano

51.12, *8:30 am* **GABA Measured in Visual Cortex using MRS Predicts Atypical Dynamics of Binocular Rivalry Associated with Autism** Caroline Robertson, Katherine Hermann, Eva-Maria Ratai, Nancy Kanwisher

51.13, *8:45 am* **Are reading and face processing related? A study of word processing in developmental prosopagnosia.** Randi Starrfelt, Solja Klargaard, Anders Petersen, Christian Gerlach

51.14, *9:00 am* **Frequency tuning in auditory but not occipital cortex predicts frequency discrimination in early blind individuals.** Elizabeth Huber, Jessica Thomas, Geoffrey Boynton, Ione Fine

51.15, *9:15 am* **Effect of familiarity on Braille writing and reading in the blind: From graphemes to comprehension** Lora Likova, Christopher Tyler, Laura Cacciamani, Kris Mineff, Spero Nicholas

51.16, *9:30 am* **Agnosic vision is crowded** Marialuisa Martelli, Francesca Strappini, Enrico Di Pace, Denis Pelli

Face Perception: Social

Tuesday, May 19, 10:45 am - 12:30 pm
Talk Session, Talk Room 1
Moderator: Constantin Rezlescu

52.11, *10:45 am* **The Face is the Mirror of the Cultural Mind** Chaona Chen, Oliver Garrod, Philippe Schyns, Rachael Jack

52.12, *11:00 am* **The serial dependence of perceived emotional expression** Alina Liberman, David Whitney

52.13, *11:15 am* **Cultural similarities and differences in processing facial expressions of basic emotions** Xiaoqian Yan, Andy Young, Timothy Andrews

52.14, *11:30 am* **Exploring the relationship between body shapes and descriptions by linking similarity spaces** Matthew Hill, Stephan Streuber, Carina Hahn, Michael Black, Alice O'Toole

52.15, *11:45 am* **What is holistic processing, and is it related to face perception?** Constantin Rezlescu, Tirta Susilo, Alfonso Caramazza

52.16, *12:00 pm* **Optimal point of fixation to faces for vision with a simulated central scotoma** Yuliy Tsank, Miguel Eckstein

52.17, *12:15 pm* **Use of shallow, non-invariant representations in high-level face perception tasks** Sam Anthony, Walter Scheirer, Ken Nakayama

Attention: Features and objects

Tuesday, May 19, 8:15 - 9:45 am
Talk Session, Talk Room 2
Moderator: Viola Stormer

51.21, *8:15 am* **Time course of early visual cortex dynamics during top-down modulated attention shifts within or between feature dimensions** Matthias Mueller, Christian Keitel

51.22, *8:30 am* **My Color Singleton: Visual Attention to Learned Action-Effects** Davood Gozli, Hira Aslam, Jay Pratt

51.23, *8:45 am* **Evidence against global attention filters selective for absolute bar-orientation in human vision** Matthew Inverso, Peng Sun, Charlie Chubb, Charles Wright, George Sperling

51.24, *9:00 am* **Attribute Amnesia: Failure to report attended, task-relevant attributes of a highly visible object** Hui Chen, Brad Wyble

51.25, *9:15 am* **Feature correlation guidance in category visual search** Rachel Wu, Zoe Pruitt, Megan Runkle, Kristen Meyer, Gaia Scerif, Richard Aslin

51.26, *9:30 am* **Tuning attention to high-level objects: Spatially global effects of attention to faces in visual processing** Viola Störmer, Michael Cohen, George Alvarez

Color Perception: Material properties

Tuesday, May 19, 10:45 am - 12:30 pm
Talk Session, Talk Room 2
Moderator: Bei Xiao

52.21, *10:45 am* **Seeing transparent liquids from refraction-based image deformation and specular reflection** Takahiro Kawabe, Shin'ya Nishida

52.22, *11:00 am* **The influence of optical material appearance on the perception of liquids and their properties** Jan Jaap van Assen, Roland Fleming

52.23, *11:15 am* **Visual perception of surface wetness** Masataka Sawayama, Shin'ya Nishida

52.24, *11:30 am* **Perceptual Dimensions of Material Properties of Fabrics in Dynamic Scenes** Bei Xiao, William Kistler

52.25, *11:45 am* **Gloss averaging and simultaneous contrast effects on real bicolored glossy surfaces** Sabrina Hansmann-Roth, Pascal Mamassian, Sylvia Pont

52.26, *12:00 pm* **Material-dependent shape distortion by local intensity order reversal** Shin'ya Nishida, Masataka Sawayama, Takeaki Shimokawa

52.27, *12:15 pm* **Gloss constancy across changes in illumination** Gizem Kucukoglu, Wendy Adams, Michael Landy

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Tuesday Morning Posters

Visual Memory: Encoding and retrieval

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

53.3001 **Visual and semantic subliminal priming by two unrelated images** Muge Erol, Arien Mack, Lindsey Holder, John Bert, Jason Clarke

53.3002 **The semantic advantage in object memorization** Farahnaz Ahmed Wick, Marc Pomplun

53.3003 **Exploring the visual components that make an image memorable** Rachit Dubey, Joshua Peterson, Bernard Ghanem, Ming-Hsuan Yang, Po-Jang Hsieh

53.3004 **Reexamining the Attention Rehearsal Hypothesis of Spatial Working Memory Maintenance** Koki Ikeda, Motoyuki Sanada, Toshikazu Hasegawa

53.3005 **Evidence of probabilistic representation in assessing visual summary statistics** Sára Jellinek, Laurence Maloney, József Fiser

53.3006 **Spatial memory relative to the 3D environment guides body orientation in visual search.** M Pilar Aivar, Chia-Ling Li, Dmitry Kit, Matthew Tong, Mary Hayhoe

53.3007 **The Adaptive Nature of False Memories is Revealed by Gist-based Distortion of True Memories** Timothy Brady, Daniel Schacter, George Alvarez

53.3008 **Gestalt priors in visual working memory** Timothy Lew, Edward Vul

53.3009 **Exogenous retro-cue modulates the precision of Visual Working Memory** Moran Israel, Asher Cohen, Yoni Pertzov

53.3010 **Retrieval-induced competition in visual short-term memory** Min-Suk Kang, Joongrul Choi

53.3011 **Incidental Learning and Memory for Spatial, Temporal and Spatio-Temporal Visual Stimuli** Sujala Maharjan, Jason Gold, Robert Sekuler

53.3012 **Recognition-induced forgetting of objects is independent of remembering** Ashleigh Maxcey, Kimberly Halvorson, Geoffrey Woodman

53.3013 **Temporal dynamics of immediate forgetting in visual working memory.** Yoni Pertzov, Nori Jakoby

53.3014 **Human egocentric position estimation** Arash Yazdanbakhsh, Celia Gagliardi

53.3015 **Evidence for parallel consolidation of motion direction and orientation into visual short-term memory** Reuben Rideaux, Deborah Apthorp, Mark Edwards

53.3016 **The working memory Ponzo illusion: Involuntary integration of visuospatial information stored in visual working memory** Jifan Zhou, Haokui Xu, Haihang Zhang, Rende Shui, Mowei Shen

53.3017 **Visual working memory for negative events is weakened by alternation between event types during judgments of trends.** Rochelle Picardo, Jennifer Whitman, Jiaying Zhao, Rebecca Todd

Visual Search: Models and learning

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

53.3018 **The Information Theory of Vision: Evidence from Eye-Tracking** Deborah Cronin, Alejandro Lleras, Simona Buetti

53.3019 **A nonlinear predictive model of natural scenes and visual saliency and search** Jinhua Xu, Zhiyong Yang

53.3021 **Spatial Reference Frame of Incidentally Learned Attention in a Probability Cuing Paradigm** Ying Fang, Shiyi Li, Nadia Wong, Shahan Tariq, Hanzhuang Zhu, Xuejun Bai, Hong-Jin Sun

53.3022 **Learning visual search: increased retinotopic response to target vs. distractors in early visual cortex** Sebastian Frank, Eric Reavis, Mark Greenlee, Peter Tse

53.3023 **Variability during learning facilitates generalization in contextual cueing** Yoko Higuchi, Yoshiyuki Ueda, Jun Saiki

3D Perception: Shading

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

53.3024 **Exploring the veridicality of shape-from-shading for real 3D objects** Jenny Bartov, Martin Giesel, Qasim Zaidi

53.3025 **Distinguishing between texture and shading flows for 3D shape estimation** Steven Cholewiak, Romain Vergne, Benjamin Kunsberg, Steven Zucker, Roland Fleming

53.3026 **The Effects of Smooth Occlusions and Directions of illumination on the Visual Perception of 3D Shape from Shading** Eric Egan, James Todd, Christopher Kallie

53.3027 **Global constraints on integral curves of shaded surfaces** Benjamin Kunsberg, Daniel Holtmann-Rice, Steven Zucker

53.3028 **Visual search using realistic camouflage: countershading is highly effective at deterring search.** Olivier Penacchio, George Lovell, Simon Sanghera, Innes Cuthill, Graeme Ruxton, Julie Harris

53.3029 **Shape from shading under inconsistent lighting** John Wilder, Richard Murray

53.3030 **Image Statistics and Surface Likelihoods under Generic Lighting** Daniel Holtmann-Rice, Benjamin Kunsberg, Steven Zucker

Perception and Action: Methods and models

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

53.3031 **An investigation of the relationship between apparent motion velocity and illusion of agency** Yoshihiko Hatada, Masahiro Furukawa, Hideyuki Ando, Taro Maeda

53.3032 **Disentangling the neural bases of action intentions: evidence from fMRI studies** Gregory Kroliczak, Bartosz Michalowski, Agnieszka Kubiak, Mikolaj Pawlak

53.3033 **Retinal representation of escape-related visual information** Midori Matuzaki, Hiroshi Ishikane

53.3034 **Confidence leak between independent tasks** Dobromir Rahnev, Ai Koizumi, Hakwan Lau, Mark D'Esposito

53.3035 **Computing global confidence: psychophysical evidence for an integration mechanism** Alan Lee, Vincent de Gardelle, Pascal Mamassian

53.3036 **Separating Noise from Suboptimal Inference in Choice Behavior Variability** James Tee, Laurence Maloney

53.3037 **Acquisition and transfer of models of visuo-motor uncertainty in a throwing task** Hang Zhang, Mila Kulsa, Laurence Maloney

53.3038 **Sensory measurement and motor planning are not separable in interval timing** Evan Remington, Mehrdad Jazayeri

53.3039 **A New Context Effect of Human Resolving Power Distinguishes between Perception and Action** Gal Namdar, Daniel Algom, Tzvi Ganel

53.3040 **Exploring new wearable sensing technology in perceptual experiments** Vilelmini Kalampratsidou, Elizabeth Torres

Perception and Action: Interactions

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Banyan Breezeway

53.3041 **Are we overthinking it? Haptic perception of geographic slant is accurate when embedded within a secondary task** Jonathan Doyon, Alen Hajnal, Jeffrey Wagman, Michael McGathy, Joseph Clark, Zsolt Palatinus

53.3042 **To use, to pass, or to move: an fMRI study of neural bases of action intentions** Bartosz Michalowski, Agnieszka Kubiak, Mikolaj Pawlak, Grzegorz Kroliczak

53.3043 **Localizing tool and hand-selective areas with fMRI: Comparing video and picture stimuli** Scott Macdonald, Fiona van den Heiligenberg, Jody Culham, Tamar Makin

53.3044 **Activity in hand- and tool-selective regions for prosthetic limbs in amputees is associated with prosthesis usage in everyday life** Fiona van den Heiligenberg, Scott Macdonald, Eugene Duff, David Henderson Slater, Heidi Johansen-Berg, Jody Culham, Tamar Makin

53.3045 **Rethinking the Mirror Neuron System Theory** Sejal Mistry, Polina Yanovich, Elizabeth Torres

53.3046 **Response mapping interacts with perceptual thresholds and stimulus processing speed** Nir Shalev, Glyn Humphreys, Nele Demeyere

53.3047 **After-effects in the learning of sensorimotor mappings for the visually-guided control of hand gestures** Pouyan Fard, Dominik Endres, Martin Giese

Spatial Vision: Neural mechanisms

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Pavilion

53.4001 **Age-related changes in gray and white matter microstucture of patients with macular dystrophies and healthy controls as revealed by DTI** Anton Beer, Sang-Yee Go, Tina Plank, Mark Greenlee

53.4002 **Topographic maps of depth in human visual cortex** Daniel Berman, Nonie Finlayson, Julie Golomb

53.4003 **Freely viewed movie stimuli and connective field modeling used to identify far extrastriate and subcortical retinotopic organization** Andrew Bock, Ari Kahn, Geoffrey Aguirre

53.4004 **ON and OFF subfield organization of layer 2/3 neurons in tree shrew visual cortex.** Kuo-Sheng Lee, Xiaoying Huang, David Fitzpatrick

53.4005 **Spatio-temporal uncertainty and cortical-hippocampal interactions: fMRI study** Nisha Dalal, Virginia Flanagin, Stefan Glasauer

53.4006 **Perceived illusory orientation from the flash grab effect induces the Tilt Aftereffect** Yijun Ge, Lan Wang, Sheng He

53.4007 **What information is 'decoded' from stimulus orientation with fMRI and MVPA?** Susan Wardle, J. Brendan Ritchie, Kiley Seymour, Thomas Carlson

53.4008 **Do cigars feed into contour integration mechanisms?** Lynn Olzak

53.4009 **Assessing the upper bound on performance of multi-voxel pattern analysis in peripheral V1** Rachel Millin, Bosco Tjan

53.4010 **Human Pain Sensitivity Is Related To Visual But Not To Auditory Thresholds** Michele Mercer, Russell Adams

53.4011 **Imaging resolution affects neural response property estimation** Timothy Hendrickson, Andrea Grant, Cheryl Olman

53.4012 **The Spatial Extent of Short-Term Plasticity Effects in the Human Visual System** Matthew Gannon, Stephanie Long, Nathan Parks

53.4013 **Neural representation of a high-dimensional perceptual space in macaque visual cortex** Jonathan Victor, Jonathan Witztum, Daniel Thengone, Eyal Nitzany, Yunguo Yu

53.4014 **Cross-orientation suppression and the topography of orientation preferences** Erin Koch, Jiazhong Jin, Yushi Wang, Jens Kremkow, Jose Manuel Alonso, Qasim Zaidi

53.4015 **Orientation-tuned surround suppression improves computational models of human visual cortex** Catherine Olsson, Kendrick Kay, Jonathan Winawer

53.4016 **Comparison of four types of suppression using steady-state EEG** Daniel Baker, Greta Vilidaitė, Alex Wade

53.4017 **The Functional Separability of Early Visual Evoked Potentials** Bruce Hansen, Andrew Haun, Aaron Johnson, Dave Ellemberg

53.4018 **Cortical sources of vernier acuity: an EEG-source imaging study** Chuan Hou, Yee-Joon Kim, Preeti Verghese

53.4019 **Factor analysis of individual differences in retinal (PERG) and cortical (VEP) visual contrast responses reveals two retinal and two cortical processes in adults with and without depression.** David Peterzell, Emanuel Bubl, Michael Bach

53.4020 **Inconsistencies between simultaneously measured neural and behavioral sensitivities in monkeys performing a fine orientation discrimination task** Yuzhi Chen, Yoon Bai, Wilson Geisler, Eyal Seidemann

Motion Perception: Optic flow and heading

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Pavilion

53.4021 **The Neural Correlates of Vection - an fMRI study** Ramy Kirollos, Robert Allison, Stephen Palmisano

53.4022 **Adult Observer's Sensitivity to Optic Flow Varies by Pattern and Speed** William Adamiak, Amanda Thomas, Shivani Patel, Rick Gilmore

53.4023 **The robustness and stability of heading perception in dynamic environments** Oliver Layton, Brett Fajen

53.4024 **Proximity of adjacent velocities and collision detection** Carissa Lemon, George Andersen

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53.4025 **Adaptation to the spatial smoothness of visual motion flow.** Kazushi Maruya, Takahiro Kawabe, Shin'ya Nishida

53.4026 **Disentangling the effects of object position and motion on heading judgments in the presence of a moving object** Long Ni, Diederick Niehorster, Li Li

53.4028 **Heading Detection From Optic Flow In The Presence Of Human Motion** Hugh Riddell, Markus Lappe

53.4029 **During self-movement humans are better at judging whether an object is moving (flow parsing) than whether they will hit it (heading).** Simon Rushton, Diederick Niehorster, Li Li

53.4030 **Heading Perception with Simulated Visual Defects** Margarita Vinnikov, Stephen Palmisano, Robert Allison

Eye Movements: Pursuit

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Pavilion

53.4031 **Evolution of the oculomotor tracking with an accelerating or decelerating target** Clara Bourrelly, Julie Quinet, Laurent Goffart

53.4032 **Anticipatory smooth pursuit of intentional finger movement** Jing Chen, Matteo Valsecchi, Karl Gegenfurtner

53.4033 **Anticipatory smooth eye movements evoked by motor intentions** Eileen Kowler, Lakshmi Kolisetty, Cordelia Aitkin, Nicholas Ross, Elio Santos, Radha Shah

53.4034 **Anticipatory smooth eye movements and reinforcement** Jean-Bernard Damasse, Laurent Madelain, Laurent Perrinet, Anna Montagnini

53.4035 **Interactions between fixation and pursuit systems** Scott Watamaniuk, Elena Potapchuk, Japjot Bal, Stephen Heinen

53.4036 **Directional asymmetry in contrast sensitivity during smooth pursuit eye movement depends on spatial frequency** Ryohei Nakayama, Isamu Motoyoshi, Takao Sato

53.4037 **Changes in visual sensitivity during smooth pursuit and saccadic eye movement** Doris Braun, Alexander Schütz, Karl Gegenfurtner

53.4038 **Foveal attention augments catch-up saccade frequency during smooth pursuit** Stephen Heinen, Elena Potapchuk, Scott Watamaniuk

Perceptual Organization: Shapes and objects 2

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Pavilion

53.4039 **Cues to closed-contour shape revealed using visual search.** David Badcock, Krystle Haley, Edwin Dickinson

53.4040 **How perceived causality influences perceived symmetry** Patrick Spröte, Filipp Schmidt, Roland Fleming

53.4041 **Evaluating Phase Dependent Masking with Radial Frequency Contours** Michael Slugocki, Allison Sekuler, Patrick Bennett

53.4042 **Representing dynamic stimulus information during occlusion** Jim Maarseveen, Chris Paffen, Frans Verstraten, Hinze Hogendoorn

53.4043 **Representation of shape and space when objects undergo transformations** Filipp Schmidt, Patrick Spröte, Roland Fleming

53.4044 **Object Knowledge Shapes Properties of Early Feature-Detectors by Top-Down Modulation** Christoph Teufel, Steven Dakin, Paul Fletcher

53.4045 **Numerosity perception is distinct from mean or sum perception** Ru Qi Yu, Jiaying Zhao

53.4046 **Rejecting probability summation for RF patterns, not so Quick!** Alex Baldwin, Gunnar Schmidtmann, Frederick Kingdom, Robert Hess

53.4047 **Integration times of global shape mechanisms are limited by low level processes operating prior to spatial integration** Jason Bell, Gideon Sacks, David Burr

53.4048 **The perception of multi-dimensional regularities** Sumeyye Cakal, Ru Qi Yu, Jiaying Zhao

53.4049 **Decoding identity of spatiotemporal objects in intermediate and dorsal visual areas** Gideon Caplovitz, Gennady Erlikhman

53.4050 **The perception of history: Seeing causal history in static shapes is powerful enough to induce illusory motion perception** Yi-Chia Chen, Brian Scholl

53.4051 **Representational biases in the perception of visuospatial orientation: Gravitational and other reference frames** Frank Durgin, Brennan Klein, Christopher Thomson, Elizabeth Cifuentes

Binocular Vision: Rivalry and awareness

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Pavilion

53.4052 **Suppression of unformed visual hallucinations in homonymous hemianopia from occipital stroke using TMS** Sara Rafique, John Richards, Jennifer Steeves

53.4053 **Visual representations in the absence of visual awareness** Noya Meital-Kfir, Yoram Bonneh, Dov Sagi

53.4054 **Real-world regularities facilitate visual awareness of objects under continuous flash suppression** Timo Stein, Daniel Kaiser, Marius Peelen

53.4055 **Construction of and adaptation to 3D perspectives in the absence of awareness** Shinho Cho, Sheng He

53.4056 **Contextual processing modulates hemispheric differences in visual perceptual selection** Elise Piazza, Karen Wong, Michael Silver

53.4057 **Interocular grouping of negative afterimages after binocular rivalry** Min Bao, Bo Dong

53.4058 **Probing binocular rivalry: Suppressed-eye probes draw attention to the object in the suppressed-eye** Brian Metzger, Xinhui Hu, Diane Beck

53.4059 **Inversion effect and hemifield asymmetry independently affect how faces break through interocular suppression** Jessica Goold, Ming Meng

53.4060 **Consistent Individual Differences in Suppression Breaking Speed in Continuous Flash Suppression.** Asael Sklar, Ran Hassin

53.4061 **Absolute pitch impacts visual awareness of musical scores accompanied by auditory melodies during binocular rivalry** Sujin Kim, Minyoung Lee, Chai-Youn Kim

53.4062 **Emotion Perception is Valence-Dependent during Binocular Rivalry** Nour Malek, Andy Gao, Daniel Messinger, Ridha Joober, Karim Tabbane, Julio Martinez-Trujillo

Attention: Selection and modulation

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Pavilion

53.4063 **Receptive field complexity in primate prefrontal cortex area 8A varies as a function of neuronal type** Kelly Bullock, Florian Pieper, Adam Sachs, Julio Martinez-Trujillo

53.4064 **Sustained spatial attention excludes external noise and narrows the perceptual template** Yukai Zhao, Zhong-Lin Lu, Barbara Dosher

53.4065 **Generalizability of implicit spatial learning depends on task difficulty** Bo-Yeong Won, Andrew Leber

53.4066 **Univariate frontoparietal BOLD does not track the magnitude of attentional modulations in visual cortex** Mary Smith, Thomas Sprague, John Serences

53.4067 **Attentional Orienting Expectations Broaden and Constrain the Window of Spatial Selection** Anthony Sali, Susan Courtney

53.4068 **Predictive spatial cues reduce competition between items in crowded visual displays: Evidence from ERPs** Joel Robitaille, Holly Lockhart, Stephen Emrich

53.4069 **Space Depends On Time: Informational Asymmetries in Visual and Auditory Short-Term Memory** Abigail Noyce, Nishmar Cestero, Barbara Shinn-Cunningham, David Somers

53.4070 **Modulation of intracranial field potential responses in the human large-scale attention network during a spatial attention task** Anne Martin, Liang Wang, Yuri Saalmann, Avgusta Shestyuk, Su Keun Jeong, Nathan Crone, Josef Parvizi, Robert Knight, Sabine Kastner

53.4071 **Overt Retrospective Cues Elicit Location Specific Enhancement of Visual Working Memory** Henry Liu, Jason Rajsic, Jay Pratt

53.4072 **High response conflict devaluates attractivenes** Kei Kuratomi, Jun Kawahara

53.4073 **Rapid parallel allocation of attention to multiple objects** Anna Grubert, Martin Eimer

53.4074 **The Attentional "Zoom-Lens" is Already Developed in 8-Month-Old Infants** Andrea Facoetti, Luca Ronconi, Laura Franchin, Eloisa Valenza, Simone Gori

53.4075 **Attention immaturity in late adolescence: Conflict adaptation with value associated stimuli** Daniel Dodgson, Jane Raymond

53.4076 **Correlation between the effects of attention and response normalization in prefrontal area 8A neurons is cell type dependent.** Lyndon Duong, Sebastien Tremblay, Adam Sachs, Julio Martinez-Trujillo

53.4077 **Feature binding and eye movements: Object identity is bound to retinotopic location regardless of stimulus complexity** Anna Shafer-Skelton, Colin Kupitz, Adeel Tausif, Julie Golomb

53.4078 **The spatio-temporal distribution of attention within a face during identification** Wei Chen, Carl Gaspar

Attention: Search and features

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Pavilion

53.4079 **Effects of perceptual load in visual search in immersive virtual reality** Bettina Olk, David Zielinski, Regis Kopper

53.4080 **Working Memory Deficits in Dynamic Sport Athletes with a History of Concussion Revealed by A Visual-Auditory Dual-Task Paradigm** Anthony Tapper, Ewa Niechwiej-Szwedo, David Gonzalez, Eric Roy

53.4081 **Acute aerobic exercise modulates feature selectivity in human visual cortex** Tom Bullock, James Elliott, John Serences, Barry Giesbrecht

53.4082 **Implied action affordance facilitates visual search** Michael Gomez, Jacqueline Snow

53.4083 **Visual foraging with fingers and with eyes reveals challenges for current theories of visual attention** Árni Kristjansson, Ómar Jóhannesson, Andrey Chetverikov, Irene Smith, Ian Thornton

53.4084 **Selection in Flanker Tasks is Governed by Identities and Not by Locations** Ricardo Max, Yehoshua Tsal

53.4085 **Attentional cartography: Mapping the distribution of attention across time and space** Eric Taylor, David Chan, Patrick Bennett, Jay Pratt

53.4086 **The Effects of Blur on Selective Visual Attention** Jared Peterson, Greg Erickson, Alicia Johnson, Jeff Dendurent, Lester Loschky

53.4087 **The role of cue processing in advancing the onset of inhibition of return** Andrew Rodriguez, Brittney Hernandez, Eriko Self

53.4088 **Statistical processing of partly occluded sets** Tatiana Aloi Emmanouil, Jaeeun Lee

3D Perception: Space

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Pavilion

53.4089 **Claustrophobic Fear and Compression of Visual Space** Samuel Hunley, Eugene Park, Matthew Longo, Stella Lourenco

53.4090 **Monocular visual perception of target displacements relative to a slanted surface specified by a regular array** H. Sedgwick

53.4091 **Perceptual Consequences of Curved Screens** Marina Zannoli, Martin Banks

53.4092 **Ordered Planes in Stereo-transparency** Adam Reeves, Asli Unver

53.4093 **Depth Perception of Augmented Reality Information in an Automotive Contact Analog Head-Up Display** Lisa Pfannmüller, Matthias Walter, Bernhard Senner, Klaus Bengler

53.4094 **Efficient coding provides a better account of systematic biases in locomotor space perception than does action ability** Jaehyun Oh, Abigail Robinson, Christopher Thomson, Ruth Talbot, Catherine Norris, Frank Durgin

53.4095 **Modelling observers' errors in pointing to an unseen target** Andrew Glennerster, Jenny Vuong, Andrew Fitzgibbon

53.4096 **Aging and the visual perception of exocentric distance** Olivia Adkins, J Farley Norman, Hideko Norman, Andrea Cox, Connor Rogers

53.4097 **The interaction between relative, familiar object size and binocular vision cues when perceiving stereoscopic 3D content** Paul Hands, Aniketa Khushu, Jenny Read

53.4098 **Two eyes are identical to one: Three-dimensional motor tracking of visual targets** Kathryn Bonnen, Alexander Huk, Lawrence Cormack

53.4099 **Detection of unusual shadows is faster in scenes with weaker 3D cues** Brent Carpenter, Cheryl Olman, Daniel Kersten

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53.4100 **Judgments of Distance to Elevated Targets With and Without a Visible Ground Contact** Daniel Gajewski, John Philbeck, Sandra Mihelič

53.4101 **Reorientation in three-dimensional space: is distance the key?** Sami Yousif, Vlad Ayzenberg, Stella Lourenco

Object Recognition: Mechanisms and models

Tuesday, May 19, 8:30 am - 12:30 pm
Poster Session, Pavilion

53.4102 **Decoding the emerging representation of degraded visual objects in the human brain.** Tijl Grootswagers, Thomas Carlson

53.4103 **Learning invariant object representations: asymmetric transfer of learning across line drawings and 3D cues** Moqian Tian, Dan Yamins, Kalanit Grill-Spector

53.4104 **The effects of recurrent dynamics on ventral-stream representational geometry** Seyed-Mahdi Khaligh-Razavi, Johan Carlin, Radoslaw Martin Cichy, Nikolaus Kriegeskorte

53.4105 **Semantic Unmasking Effect is Not Explained by Triggering of Memory** Alisabeth Ayars, Mary Peterson, Joseph Sanguinetti

53.4106 **The Deep Model** Panqu Wang, Garrison Cottrell

53.4107 **Orientation, Rotary Motion, and Congruency Effects: Models of Visual Object Identification** James Ryland, Alice O'Toole, Richard Golden

53.4108 **Computational similarities between visual and auditory cortex studied with convolutional neural networks, fMRI, and electrophysiology** Alexander Kell, Daniel Yamins, Sam Norman-Haignere, Darren Seibert, Ha Hong, Jim DiCarlo, Josh McDermott

53.4109 **Supposing that crowding is compulsory grouping suggests a remarkably simple model for object recognition** Denis Pelli, Sarah Rosen

53.4110 **Mixing hierarchical edge detection and medial axis models of object perception** Daniel Leeds, Michael Tarr

53.4111 **Backward masking vs. common onset masking using two different types of face mask** Marwan Daar, Hugh Wilson

53.4112 **Shared noise variability facilitates discrimination of natural images in V4 population** Shaobo Guan, Ruobing Xia, David Sheinberg

53.4113 **Perceiving the lifelikeness of crowds: summary statistical representations of abstract visual dimensions** Allison Yamanashi Leib, Anna Kosovicheva, David Whitney

Tuesday Afternoon Talks

3D Perception

Tuesday, May 19, 2:30 - 4:15 pm
Talk Session, Talk Room 1
Moderator: Johannes Burge

54.11, *2:30 pm* **Intact implicit representation of object 3D structure in object agnosia** Erez Freud, Tzvi Ganel, Galia Avidan, Marlene Behrmann

54.12, *2:45 pm* **Naturalistic Depth Perception** Brian McCann, Mary Hayhoe, Wilson Geisler

54.13, *3:00 pm* **Optimal estimates of distance and direction are mutually inconsistent** Peter Scarfe, Andrew Glennerster

54.14, *3:15 pm* **The binocular energy model and V1 neurons signal disparity in half-matched stereograms** Sid Henriksen, Bruce Cumming, Jenny Read

54.15, *3:30 pm* **Estimation of 3D surface shape from line drawings: a Bayesian model** Seha Kim, Manish Singh, Jacob Feldman

54.16, *3:45 pm* **Priors on surface shape, reflectance, and illuminance that overcome the generalized bas-relief ambiguity in shape from shading** Richard Murray

54.17, *4:00 pm* **3D Object Recognition in Honeybees** Annette Werner, Wolfgang Stürzl, Johannes Zanker

Visual Memory: Neural mechanisms

Tuesday, May 19, 5:15 - 7:15 pm
Talk Session, Talk Room 1
Moderator: Nicholas Turk-Browne

55.11, *5:15 pm* **Neural represenations of category information in viual short-term memory** Bobby Stojanoski, Rhodri Cusack

55.12, *5:30 pm* **Theta Oscillations Track the Content of Representations Retrieved from Long Term Memory** David Sutterer, David Anderson, John Serences, Edward Vogel, Edward Awh

55.13, *5:45 pm* **Electrophysiology reveals distinct neural mechanisms for lateralized and spatially global visual working memory representations.** Keisuke Fukuda, Min-Suk Kang, Geoffrey Woodman

55.14, *6:00 pm* **Visual working memory representations are distributed throughout human cortex.** Edward Ester, Thomas Sprague, John Serences

55.15, *6:15 pm* **Recovery of degraded information in visuospatial working memory representations in occipital, parietal and frontal cortex** Thomas Sprague, Edward Ester, John Serences

55.16, *6:30 pm* **Hippocampal representations of attentional state predict the formation of visual memories** Mariam Aly, Nicholas B. Turk-Browne

55.17, *6:45 pm* **Reprioritization of features of multi-dimensional objects stored in visual working memory** Young Eun Park, Jocelyn Sy, Frank Tong

55.18, *7:00 pm* **Neural coding of object knowledge reflects the co-occurrence statistics of the environment** Amy Price, Michael Bonner, Jonathan Peelle, Murray Grossman

Visual Search

Tuesday, May 19, 2:30 - 4:15 pm
Talk Session, Talk Room 2
Moderator: Justin Ericson

54.21, *2:30 pm* **Guided Search 5.0: Meeting the challenge of hybrid search and multiple-target foraging** Jeremy Wolfe, Matthew Cain, Krista Ehinger, Trafton Drew

54.22, *2:45 pm* **Visual search through a 3D volume: Studying novices in order to help radiologists** Avigael Aizenman, Matthew Thompson , Krista Ehinger, Jeremy Wolfe

54.23, *3:00 pm* **Long-term visual search: Examining trial-by-trial learning over extended visual search experiences** Justin Ericson, Adam Biggs, Jonathan Winkle, Christina Gancayco, Stephen Mitroff

54.24, *3:15 pm* **Foveal vision loss interferes with visual search guidance by learned spatial contexts in contextual cueing** Stefan Pollmann, Franziska Geringswald

54.25, *3:30 pm* **Visualizing trumps vision when training attention** Robert Reinhart, Laura McClenahan, Geoffrey Woodman

54.26, *3:45 pm* **Creating shortcuts in the visual hierarchy: improving saccadic reaction time and accuracy with RSVP training** Jacob Martin, Maximilian Riesenhuber, Simon Thorpe

54.27, *4:00 pm* **The rise and fall of hybrid visual and memory search** Todd Horowitz

Perceptual Organization

Tuesday, May 19, 5:15 - 7:15 pm
Talk Session, Talk Room 2
Moderator: Steven Dakin

55.21, *5:15 pm* **Dissociations and associations between shape and category representations in the two visual pathways.** Stefania Bracci, Hans Op de Beeck

55.22, *5:30 pm* **A canonical circuit for visual contextual integration explains induction effects across visual modalities** David Mély, Thomas Serre

55.23, *5:45 pm* **Parametric responses to rotation symmetry in mid-level visual cortex** Peter Kohler, Alexandra Yakovleva, Alasdair Clarke, Yanxi Liu, Anthony Norcia

55.24, *6:00 pm* **Differentiating Local and Global Processes in Amodal Completion Through Dot Localization** Susan Carrigan, Evan Palmer, Philip Kellman

55.25, *6:15 pm* **The shrunken finger illusion: Amodal volume completion can make your finger feel shorter** Vebjørn Ekroll, Bilge Sayim, Ruth van der Hallen, Johan Wagemans

55.26, *6:30 pm* **Can you simultaneously represent a figure as both an object and an open contour? Hybrid shape representations revealed by the "tap-the-shape" task** Chaz Firestone, Brian Scholl

55.27, *6:45 pm* **Predicting shape variations from single exemplars** Roland Fleming

55.28, *7:00 pm* **Visual coding of natural contours leads to poor discrimination of object-shape around canonical views** Steven Dakin, Rosilari Bellacosa Marotti

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Tuesday Afternoon Posters

Perceptual Learning: Higher-level processes and mechanisms

Tuesday, May 19, 2:45 - 6:45 pm
Poster Session, Banyan Breezeway

56.3001 **Perceptual Training and Competition for Representation in Visual Cortex** Paige Scalf, Samantha Srivathsan Koushik, Autri Hafezi, Erica Wager, Jonathan Folstein

56.3002 **Perceptual learning for multiple features: Neural correlates of changes in RT-based measures of processing dependencies** Michael Wenger, Stephanie Rhoten

56.3003 **Perceptual Learning on Simultaneity and Temporal Order Judgments** Nestor Matthews, Leslie Welch, Rebecca Achtman

56.3004 **The neural correlates of medical expertise.** Liam Rourke, Verena Willenbockel, Leanna Cruickshank, Jim Tanaka

56.3005 **No correlations between the magnitude of visual illusions** Lukasz Grzeczkowski, Aaron Clarke, Fred Mast, Michael Herzog

56.3006 **Does donepezil improve visual stimuli detection and perceptivo-cognitive performance of heathy young adults ?** Mira Chamoun, Frédéric Huppé-Gourgues, Isabelle Legault, Pedro Rosa-Neto, Jocelyn Faubert, Elvire Vaucher

56.3007 **Target selective tilt-after effect during texture learning** Hila Harris, Noga Pinchuk-Yacobi, Dov Sagi

56.3008 **Position-specific learning in a texture identification task** Patrick Bennett, Ali Hashemi, Allison Sekuler

56.3009 **Multiple-object tracking training benefits display incomplete transfer across motion type and retinotopic location.** Roger Strong, George Alvarez

56.3010 **Specificity and transfer in perceptual learning of motion** Ruyuan Zhang, Oh-Sang Kwon, Duje Tadin

56.3011 **Sleep rescues perceptual learning from interference** Elizabeth McDevitt, Mohammad Niknazar, Sara Mednick

56.3012 **Sigma activity originated in the early visual cortex during sleep associated with visual perceptual learning** Masako Tamaki, Aaron Berard, Takeo Watanabe, Yuka Sasaki

56.3013 **LImits of Expertise: Investigating the Role of Holistic Processing in Visual Discrimination and Recognition** Cindy Bukach, Jessie Peissig, Wesley Meredith, Sophia Minassian, Austen Winkler

56.3014 **Multidimensional-expertise space: Multidimensional scaling changes after expertise training with objects** Hillary Hadley, Erik Arnold, James Tanaka, Tim Curran, Lisa Scott

56.3015 **Play Sports to Improve Visual Functions** Kelly Ha, Inga Sogaard, Logan Gisick, Rui Ni

56.3016 **A reward-driven reweighting model of perceptual learning** Grigorios Sotiropoulos, Aaron Seitz, Peggy Seriès

Perception and Action: Reaching and grasping

Tuesday, May 19, 2:45 - 6:45 pm
Poster Session, Banyan Breezeway

56.3017 **Human cortical activity for visual processing is modulated by cued actions** Simona Monaco, John Crawford

56.3018 **Sequential Movements: When does Binocular Vision Facilitate Object Grasping and Placing** Dave Gonzalez, Ewa Niechwiej-Szwedo

56.3019 **Expected utility maximization in motor decision-making: differences in representing probability through size vs. through distance** David Aguilar-Lleyda, Elisabet Tubau, Joan López-Moliner

56.3020 **Grasping lacks depth constancy in both virtual and real environments** Chiara Bozzacchi, Robert Volcic, Fulvio Domini

56.3021 **Sequential dependencies in grasping movements** Robert Volcic, Fulvio Domini

56.3022 **Haptic feedback overrides visual size information during repeated grasping** Carlo Campagnoli, Evan Cesanek, Fulvio Domini

56.3023 **Incorrect haptic feedback in 50% of trials is sufficient to bias grip aperture** Rachel Foster, Annika Januszewski, Volker Franz

56.3024 **Visuomotor strategies for grasping a rotating target.** Charlotte Leferink, Hannah Stirton, Jonathan Marotta

56.3025 **Eye-hand coordination strategies in older adults** Rachel Coats, Aaron Fath, Sarah Astill, John Wann

56.3026 **Does the grasp type reveal action intention?** Yi Zhang, Yezhou Yang, Cornelia Fermuller, Yiannis Aloimonos

56.3027 **Training of compliance control across different scales of movement yields general learning in children** Winona Snapp-Childs, Aaron Fath, Geoffrey Bingham

56.3028 **Global and local attentional influences on target selection for action** J. Daniel McCarthy, Joo-Hyun Song

56.3029 **Modulation of the Material-Weight Illusion in objects made of more than one material** Vivian Paulun, Gavin Buckingham, Karl Gegenfurtner, Roland Fleming, Melvyn Goodale

56.3030 **Does behavioral dissociation of real vs. pantomime movements only apply to visually guided action?** Jenni Karl, Derek Quinlan, Ian Whishaw, Jody Culham

56.3031 **Inhibitory modulation of perception and action by repeated colors without consciousness** Hee Yeon Im, Joo-Hyun Song

Object Recognition: Categories

Tuesday, May 19, 2:45 - 6:45 pm
Poster Session, Banyan Breezeway

56.3032 **Animate shape features influence high-level animate categorization** Abla Alaoui Soce, Bria Long, George Alvarez

56.3033 **Modeling the Dynamics of Visual Object Categorization** Jianhong Shen, Thomas Palmeri

56.3034 **Greebles actually do look like faces (but not in the way you thought).** Juliet Shafto, John Pyles, Carol Jew, Michael Tarr

56.3035 **Coding of object size and object category in scene regions** Jack Ryan, Joshua Julian, Russell Epstein

56.3036 **The development of visual object categorization as revealed by fast periodic visual stimulation** Stefanie Peykarjou, Stefanie Hoehl, Bruno Rossion, Sabina Pauen

56.3037 **Human Visual Search Performance for Camouflaged Targets** Olivia Matthews, Eric Liggins, Tim Volonakis, Nick Scott-Samuel, Roland Baddeley, Innes Cuthill

56.3038 **Visual search speed is influenced by differences in shape arbitrariness** Anna Leshinskaya, Alfonso Caramazza

56.3039 **The effect of category learning on the temporal dynamics of object similarity** Jonathan Folstein, Kelly Fuller, Thomas DePatie, Dorothy Howard

56.3040 **Pushing the Boundaries of Fine-Grained Object Classification with fMRI Decoding in Human Occipito-Temporal Cortex** Clara Fannjiang, Marius Cătălin Iordan, Diane Beck, Li Fei-Fei

56.3041 **Right away! Early, lateralised color category effect revealed by first-saccade dynamics.** Merryn Constable, Stefanie Becker

56.3042 **Contextual influences on object representations in the occipito-temporal cortex** Olivia Cheung, Alfonso Caramazza

56.3043 **Task modulates category selectivity along a gradient from occipitotemporal cortex to prefrontal cortex in word- and face-selective regions** Lior Bugatus, Kevin Weiner, Kalanit Grill-Spector

56.3044 **Recognizing Urban Tribes with pre-trained Convolutional Neural Networks** Yufei Wang, Garrison Cottrell

56.3045 **Visual Classification Expertise without Training** Brett Roads, Michael Mozer

56.3046 **The emergence of decision boundaries is predicted by second order statistics of stimuli in visual categorization** Feryal M. P. Behbahani, A. Aldo Faisal

Motion Perception: Local and higher order

Tuesday, May 19, 2:45 - 6:45 pm
Poster Session, Pavilion

56.4001 **The effects of different orientations of in-phase and counter-phase backgrounds on horizontal motion discrimination** Andrew Silva, Zili Liu

56.4002 **Dmax: Motion seen better in the periphery than in the fovea** Neal Dykmans, Stuart Anstis

56.4003 **Misperceived motions of stripes moving behind holes.** Stuart Anstis, Sae Kaneko

56.4004 **Feeling the future** Patrick Cavanagh, Marianne Duyck, Cécile Eymond, Gerrit Maus, Frank Schumann, Viola Störmer, Arielle Veenemans, David Whitney, Daw-An Wu

56.4005 **Speed of visual attention and localization of motion onset** Nika Adamian, Patrick Cavanagh

56.4006 **Both Dedicated and Flexible Motion Detection Benefit From Interocular Integration** Matthew Seifert, Howard Hock

56.4007 **Head tracking in virtual reality displays reduces the misperception of 3D motion** Jacqueline Fulvio, Michelle Wang, Bas Rokers

56.4008 **Two eyes more sensitive than one: Monocular speed discrimination is better across eyes than within an eye** Devon Greer, Kathryn Bonnen, Alexander Huk, Lawrence Cormack

56.4009 **Phase Integration Bias Predicts Performance in a Motion Binding Task** Jessica Cali, Matthew Pachai, Patrick Bennett, Allison Sekuler

56.4010 **EEG and fMRI correlates of non-retinotopic motion processing in the human visual system** Evelina Thunell, Gijs Plomp, Wietske Van der Zwaag, Haluk Ögmen, Michael Herzog

56.4011 **Predictability, efference copies, and non-retinotopic motion** Marc Lauffs, Haluk Öğmen, Michael Herzog

56.4012 **Binocular integration of pattern motion signals in the human oculomotor system** Christian Quaia, Lance Optican, Bruce Cumming

56.4013 **Effect of light level on the postdictive perception of visual motion** Sanae Yoshimoto, Tatsuto Takeuchi

56.4014 **The automaticity of perceiving animacy: Seeing goal-directed motion in simple shapes influences visuomotor behavior even when task-irrelevant** Benjamin van Buren, Stefan Uddenberg, Brian Scholl

Face Perception: Development, adaptation, and learning

Tuesday, May 19, 2:45 - 6:45 pm
Poster Session, Pavilion

56.4015 **Fundamental differences in early face experiences** Swapnaa Jayaraman, Linda Smith

56.4016 **Capturing developmental shifts in facial identity and expression processing strategies.** Louise Ewing, Annette Karmiloff-Smith, Emily Farran, Marie Smith

56.4017 **Horizontal tuning of face-specific processing from childhood to elderly adulthood** Valerie Goffaux, Aude Poncin, Christine Schiltz

56.4018 **Neural discriminability for face identity improves from childhood to adulthood** Vaidehi Natu, Michael Barnett, Jake Hartley, Jesse Gomez, Kalanit Grill-Spector

56.4019 **The development of gender and age biases in face recognition from childhood into adulthood** Giorgia Picci, K. Scherf

56.4020 **No quantitative differences in face memory with regard to different viewpoints and viewpoint changes between children and adults** Marisa Nordt, Sarah Weigelt

56.4021 **Development of small-world networks for own- and other-race face recognition in children from preschool to adolescence** Kang Lee, Xiao Ding, John Richards, Wangze Xie, Genyue Fu

56.4022 **Development of functional connectivity during own- and other-race face processing: A Granger causality analysis** Guifei Zhou, Xin Jiang, Pu Zheng, Jiangang Liu, Xiaopan Ding, Genyue Fu, Kang Lee

56.4023 **Normal repetition probability effects in the occipito-temporal cortex in Schizophrenia** Mareike Grotheer, Igor Nenadic, Lisa Münke, Szabolcs Kéri, Gyula Kovács

56.4024 **A bias-free measure of the face viewpoint aftereffect from radial frequency patterns** Bruce Keefe, Samuel Lawrence, Alex Wade, Declan McKeefry, Antony Morland

56.4025 **Adaptor gaze direction affects the magnitude of face identity aftereffects** Nadine Kloth, Linda Jeffery, Gillian Rhodes

56.4026 **Faces are repulsive: Gender and identity aftereffects involve local repulsion, not re-normalisation** Katherine Storrs, Derek Arnold

56.4027 **An objective measure of face identity adaptation with fast periodic visual stimulation** Talia Retter, Bruno Rossion

56.4028 **Noise can be good: Visual adaptation to noise with different Fourier power spectrum characteristics affects the electrophysiological correlates of face processing** Claudia Menzel, Gregor Hayn-Leichsenring, Christoph Redies, Gyula Kovács

56.4029 **Learning faces from variability** Kay Ritchie, A. Mike Burton

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56.4030 **Neural mechanisms of the implicit learning of average and principal component faces** Xiaoqing Gao, Hugh Wilson, Frances Wilkinson, Kang Lee

Face Perception: Disorders

Tuesday, May 19, 2:45 - 6:45 pm
Poster Session, Pavilion

56.4031 **Developing Behavioural Tools for Characterizing Normal and Abnormal Face Perception in 6-14 Years Old Children** Elite Mardo, Bat Sheva Hadad, Galia Avidan

56.4032 **Recognition of facial emotion in Developmental Prosopagnosia** Federica Biotti, Richard Cook

56.4033 **Impaired face detection may explain some but not all cases of developmental prosopagnosia** Kirsten Dalrymple, Brad Duchaine

56.4034 **Decreased activation to faces in lateral occipital cortex in acquired prosopagnosia** Jiahui Guo, Tirta Susilo, Bradley Duchaine

56.4035 **All new kids on the block? Personally familiar face processing in a case of pure prosopagnosia following brain damage** Meike Ramon, Thomas Busigny, Frederic Gosselin, Bruno Rossion

56.4036 **Phonagnosia, a Voice Homologue to Prosopagnosia** Irving Biederman, Sarah Herald, Xiaokun Xu, Ori Amir, Bryan Shilowich

56.4037 **Atypical trait inferences from facial cues in alexithymia** Rebecca Brewer, Fredrika Collins, Richard Cook, Geoffrey Bird

56.4038 **Caricaturing improves face identity recognition in simulated prosthetic vision** Jessica Irons, Tamara Gradden, GuanLing Zhang, Xuming He, Nick Barnes, Elinor McKone

56.4039 **Altered functional connectivity in the core and extended face-processing network in adolescents with autism** Elisabeth Whyte, Daniel Elbich, Marlene Behrmann, Nancy Minshew, K. Suzanne Scherf

56.4040 **Reduced repetition suppression to faces in the fusiform face area of adults with autism spectrum conditions** Michael Ewbank, Philip Pell, Thomas Powell, Elisabeth von em Hagen, Simon Baron-Cohen, Andrew Calder

56.4041 **Autism and Developmental Prosopagnosia: A Cross-Disorder Study** Richard Cook, Punit Shah, Anne Gaule, Rebecca Brewer, Geoffrey Bird

56.4042 **Autistic social traits predict poor face recognition behavior in men but not women** Mikayla Borusiewicz, Daniel Elbich, K, Scherf

Face Perception: Social

Tuesday, May 19, 2:45 - 6:45 pm
Poster Session, Pavilion

56.4043 **Effects of animation face on skin color perception** Hyejin Han, Keiji Uchikawa

56.4044 **Facial contrast is a cue for health perception** Richard Russell, Aurélie Porcheron, Jennifer Sweda, Emmanuelle Mauger, Frederique Morizot

56.4045 **Revealing mental defaults in face space with serial reproduction** Stefan Uddenberg, Brian Scholl

56.4046 **Diagnostic information for accurate trustworthiness judgments for Caucasian and African-American faces** Karolann Robinson, Daniel Fiset, Josiane Leclerc, Caroline Blais

56.4047 **Using scalar ratings to track changes in apparent trustworthiness induced by helpful and misleading gaze cues.** James Strachan, Steven Tipper

56.4048 **Competition makes faces look more aggressive** Benjamin Balas, Laura Thomas

56.4049 **Chinese perceivers' facial first impressions** Clare Sutherland, Xixi Liu, Ying Chu, Lingshan Zhang, Julian Oldmeadow, Andrew Young

56.4050 **Serial Dependence in the perception of attractiveness** Ye Xia, Alina Liberman, Allison Yamanashi Leib, David Whitney

56.4051 **Averaging of Social Cues Using Equivalent Noise** Joseph Florey, Colin Clifford, Steven Dakin, Isabelle Mareschal

56.4052 **Visual representation of age as a function of the level of ageism** Youna Dion Marcoux, Caroline Blais, Daniel Fiset, Arianne Goulet, Chloë Pruneau, Hélène Forget

56.4053 **Facial contrast is a universal cue for perceiving age.** Aurélie Porcheron, Emmanuelle Mauger, Frédérique Soppelsa, Richard Russell, Frédérique Morizot

56.4054 **Emotion perception or social cognitive complexity: What drives face processing deficits in autism spectrum disorder?** M.D. Rutherford, Jennifer Walsh, Sarah Creighton

56.4055 **Social features impact visual exploration of naturalistic scenes** Xavier Morin-Duchesne, Dan Kennedy

56.4056 **How do we make social decisions? Gaze strategies used to predict and optimize social information during conversation.** Nida Latif, Mashal Haque, Monica Castelhano, Kevin. Munhall

56.4057 **Direct gaze N170 modulation is dependent of low spatial frequency information** Inês Mares, Marie Smith, Mark Johnson, Atsuhi Senju

Attention: Temporal

Tuesday, May 19, 2:45 - 6:45 pm
Poster Session, Pavilion

56.4058 **Gradual development of temporal attention in letter identification and motion judgment tasks** Shiori Sato, Jun Kawahara

56.4059 **The role of the continuity field: Serial dependence promotes object stability during occlusion** Kathy Zhang, Alina Liberman, David Whitney

56.4060 **The relation of object substitution masking (OSM) and attention dynamics: A neuro-computational modeling study** Frederik Beuth, Fred Hamker

56.4061 **Beyond the blink: Understanding order perception in RSVP** Ellis Gootjes-Dreesbach, Howard Bowman

56.4062 **Effect of object substitution masking on the perceived duration of supra-threshold object representations** Geoffrey Harrison, Chelsia Lau, Jason Rajsic, Daryl Wilson

56.4063 **Dissociation between Attentional Capture and Attentional Engagement: an Attentional Blink study** Alon Zivony, Dominique Lamy

56.4064 **Musical Minds: Attentional blink reveals modality-specific restrictions** Sander Martens, Stefan Wierda, Mathijs Dun, Michal de Vries, Henderikus Smid

56.4065 **Biased competition can explain the effect of relative target contrast on the attentional blink** Simon Nielsen, Tobias Andersen

56.4066 **Degraded precision of consciously perceived targets in the attentional blink.** Jocelyn Sy, René Marois, Frank Tong

56.4067 **Temporal yoking in continuous multitasking** Yuhong Jiang, Khena Swallow

56.4068 **Gains and losses in continuous dual-task performance: The role of task engagement** Khena Swallow

56.4069 **"Why do cuts work?" – Implicit memory biases attention and gaze after cuts in edited movies** Christian Valuch, Raphael Seywerth, Peter König, Ulrich Ansorge

56.4070 **Attentional Volleying Across Visual Quadrants** Andrew Clement, Nestor Matthews

56.4071 **Selective spatial enhancement: Attentional spotlight sizes impacts spatial but not temporal perception** Stephanie Goodhew, Elizabeth Shen, Mark Edwards

56.4072 **The fidelity of attentional set develops during a temporal visual search** Tomoe Inukai, Tomonari Shimomura, Jun-ichiro Kawahara

56.4073 **Training-induced Changes in the Dynamics of Attention as Reflected in Pupil Dilation** Charlotte Willems, Atser Damsma, Stefan Wierda, Niels Taatgen, Sander Martens

56.4074 **Breakthroug Percepts - (Sub)liminal Salience Search and EEG Deception Detection on the Fringe of Awareness** Howard Bowman, Abdulmajeed Alsufyani, Omid Hajilou, Marco Filetti, Alexia Zoumpoulaki

56.4075 **Human brain mapping of theta-band behavioral oscillations in masked priming** Huan Luo, Bingbing Guo, Jessica Goold , Yan Huang, Ming Meng

Attention: Mechanisms and models

Tuesday, May 19, 2:45 - 6:45 pm
Poster Session, Pavilion

56.4076 **Attentional control strategies lead to different task performance across cognitive domains** Stefan Bourrier, James Enns

56.4077 **Visual selectivity and top-down modulation of neurons in monkey V2 during free viewing** Li Zhang, Rudiger von der Heydt

56.4078 **Behavioral oscillation in priming: competing perceptual predictions conveyed in alternating theta-band rhythms** Yan Huang, Lin Chen, Huan Luo

56.4079 **Functional MRI Reveals a Cognitive Control Subnetwork Supporting Long-Term Memory-Guided Visual Attention** Maya Rosen, Chantal Stern, Kathryn Devaney, David Somers

56.4080 **Time-resolved neural effects of attention precuing and spatial location in the left and right fusiform face areas** Ming Meng, Bingbing Guo, Jessica Goold, Huan Luo

56.4081 **The effect of visual entrainment on target detection in visual search.** Aleksandra Pastuszak, Simon Hanslmayr , Kimron Shapiro

56.4082 **Understanding the PD and the N2pc: modeling the neural mechanisms underlying spatial attention shifts** Brad Wyble, Hui Chen, Joseph Stucynski, Chloe Callahan-Flintoft, Mingxuan Tan

56.4083 **The attentional strobe: auditory manipulation of visual conscious awareness** Julia Thompson, David Crewther

56.4084 **Decoding Feedback to the Lesion Projection Zone of V1 in Individuals with Glaucoma** J. Brendan Ritchie, Susan Wardle, Anina Rich, Stuart Graham, Mark Williams

56.4085 **Human vision is preattentively sensitive to the mean and variance of L-M cardinal axis white noise textures** Christian Herrera, Charlie Chubb

56.4086 **A mechanistic cortical microcircuit of attention for amplification, normalization and suppression** Fred Hamker, Frederik Beuth

56.4087 **Towards a better understanding of the role of parallel attention in visual search.** Alejandro Lleras, Anna Madison, Deborah Cronin, Zhiyuan Wang, Simona Buetti

56.4088 **Explaining intertrial priming from the visual code** Wouter Kruijne, Martijn Meeter

56.4089 **Formation of the priority map by the reciprocal connections between LIP and FEF** Koorosh Mirpour, James Bisley

56.4090 **Towards grasping the underlying neuronal processes in ADHD using a visual search task: a computational modelling approach.** Eirini Mavritsaki, Amy Cook, Glyn Humphreys

Attention: Eye movements

Tuesday, May 19, 2:45 - 6:45 pm
Poster Session, Pavilion

56.4091 **The influence of attention on contrast perception, contrast discrimination, and saccadic reaction time.** Madhumitha Mahadevan, Harold Bedell, Scott Stevenson

56.4092 **Feature-based attention modulates onset capture in a feed-forward manner.** Stefanie Becker

56.4093 **Disconjugate eye movement responses to direction stimuli** Olivier Coubard

56.4094 **Size of attentional suppressive surround** Sang-Ah Yoo, John Tsotsos, Mazyar Fallah

56.4095 **Object-based attention influences saccade latency** Gozde Senturk, Adam Greenberg, Taosheng Liu

56.4096 **Attentional Switching in Bilingual and Monolingual Infants: An Eye Movement Study** Mahta Kakvan, Audrey Wong Kee You, Scott Adler

56.4097 **Ocular fixations are consistent with the endogenous selection of multiple discrete spatial foci of attention** Dhanraj Vishwanath, Megan Fluharty, Ines Jentzsch, Manuel Spitschan

56.4098 **Context-sensitive adjustments of cognitive control: Further insights from eye movement behavior** Sebastian Pannasch, Caroline Gottschalk, Jens Helmert, Rico Fischer

56.4099 **Effects of social stimuli on covert attentional orienting and saccaddic eye-movements during visual search** Marcus Morrisey, M.D. Rutherford

56.4100 **Visual distraction in a patient with abnormal occipital gyration – an eye-tracking study** Buse Urgen, Pinar Demirayak, Fatma Ustun, Katja Doerschner

Eye Movements: Statistics

Tuesday, May 19, 2:45 - 6:45 pm
Poster Session, Pavilion

56.4101 **Human classifier: Can individuals deduce which task someone was performing based solely on their eye movements?** Michael Dodd, Brett Bahle, Mark Mills, Monica Rosen, Gerald McDonnell, Joseph MacInnes

56.4102 **Quantifying the variance in eye movements while watching intact versus scrambled movies.** Lucia Farisello, Karine Elalouf, Jacob Applebaum, Jim Pfaus, Aaron Johnson

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56.4103 **Effect of Exogenous Factors on Eye Movement-Based User Identification** Yannik Schelske, Tandra Ghose

56.4104 **Task Decoding using Recurrence Quantification Analysis of Eye Movements** Daniel LaCombe, Jr., Elan Barenholtz

56.4105 **Fixational eye movements improve visual performance at the sampling limit** Kavitha Ratnam, Wolf Harmening, Austin Roorda

56.4106 **Quiet eyes: Stress, worry, and anxiety fail to influence fixational stability, accuracy, or movement frequency** Arryn Robbins, Michael Hout, Hayward Godwin, Gemma Fitzsimmons

56.4107 **Microsaccade rate is not suppressed in adults with amblyopia.** Bonnie Lawrence, Marisa Carrasco

56.4108 **A Bayesian model for microsaccade detection** Andra Mihali, Bas van Opheusden, Wei Ji Ma

56.4109 **Inter-dependency of microsaccades and its modulation by visual context** Roy Amit, Shlomit Greenberg

Eye Movements: Learning and adaptation

Tuesday, May 19, 2:45 - 6:45 pm
Poster Session, Pavilion

56.4110 **Complex changes in eye head coordination in progressive lens wearers during driving** Katharina Rifai, Siegfried Wahl

56.4111 **Peripheral Oculomotor Control Training in Healthy Individuals: Effects of Training and Training Transfer** Dylan Rose, Peter Bex

56.4112 **Spatially Specific Dependence of Saccade Inhibition on Distractor Repetition** Yijing Shan, Jay Edelman

56.4113 **Differential saccadic adaptation controlled by the target color** Laurent Madelain, Jeremie Jozefowiez, Sohir Rahmouni

56.4114 **Inter-individual variability in saccadic adaptation** Sohir Rahmouni, Laurent Madelain

56.4115 **Meaningful images produce stronger saccadic adaptation** Annegret Meermeier, Svenja Gremmler, Markus Lappe

Wednesday Morning Talks

Spatial Vision: Neural mechanisms

Wednesday, May 20, 8:15 - 10:00 am
Talk Session, Talk Room 1
Moderator: Emily Cooper

61.11, *8:15 am* **Overlapping topographic representations of numerosity and object size in human parietal cortex** Ben Harvey, Alessio Fracasso, Natalia Petridou, Serge Dumoulin

61.12, *8:30 am* **Feedback Signal Contributes to The Flash Grab Effect: Evidence from fMRI and ERP Study** Hao Zhou, Yijun Ge, Lan Wang, Peng Zhang, Sheng He

61.13, *8:45 am* **Broadband spectral responses in visual cortex revealed by a new MEG denoising algorithm** Eline Kupers, Helena Wang, Kendrick Kay, David Heeger, Jonathan Winawer

61.14, *9:00 am* **Broadband field potentials, but not gamma oscillations, correlate with BOLD fMRI in human visual cortex** Mai Nguyen, Dora Hermes, Jonathan Winawer

61.15, *9:15 am* **What are the natural scene statistics of cortical input?** Emily Cooper, Anthony Norcia

61.16, *9:30 am* **Temporal differentiation by photoreceptors reduces spatiotemporal correlation of natural visual input on the retina** Dawei Dong, Sergei Nikonov

61.17, *9:45 am* **Human visual cortex gradually transitions from 2D to 3D spatial representations** Nonie Finlayson, Julie Golomb

Perceptual Learning

Wednesday, May 20, 11:00 am - 12:45 pm
Talk Session, Talk Room 1
Moderator: Cong Yu

62.11, *11:00 am* **Stimulus-specificity of training with explicit or ambiguous diagnostic structure** Ali Hashemi, Matthew Pachai, Allison Sekuler, Patrick Bennett

62.12, *11:15 am* **Under-stimulation at untrained retinal locations may explain location specificity in perceptual learning** Cong Yu, Ying-Zi Xiong, Jun-Yun Zhang

62.13, *11:30 am* **Training reveals a coupling between overestimation and improved discrimination** Sarit Szpiro, Laura Wang, Marisa Carrasco

62.14, *11:45 am* **Reducing the size of the human blind spot through training.** Paul Miller, Derek Arnold

62.15, *12:00 pm* **Neural mechanism of reactivation of consolidated perceptual learning revealed by the concentration of excitatory and inhibitory neurotransmitters** Ji Won Bang, Kazuhisa Shibata, Takeo Watanabe, Yuka Sasaki

62.16, *12:15 pm* **External reward facilitates visual perceptual learning over a night's sleep** Aaron Berard, Tyler Barnes-Diana, Jose Nanez, Yuka Sasaki, Takeo Watanabe

62.17, *12:30 pm* **Random walks of internal visual states** Mark Wexler, Pascal Mamassian

Visual Memory: Capacity and models

Wednesday, May 20, 8:15 - 10:00 am
Talk Session, Talk Room 2
Moderator: Melchi Michel

61.21, *8:15 am* **Using a betting game to directly reveal the rich nature of visual working memories** Daryl Fougnie, Anish Kanabar, Timothy Brady, George Alvarez

61.22, *8:30 am* **Memory routines for the transformation of visuospatial representations** Benjamin Bernstein, Brandon Liverence, Steven Franconeri

61.23, *8:45 am* **Human cache memory enables ultrafast serial access to spatial representations** Brandon Liverence, Steven Franconeri

61.24, *9:00 am* **Placing a Lower Bound on Transsaccadic Memory Capacity Using Visual Search** Nicholas Kleene, Melchi Michel

61.25, *9:15 am* **"What" and "Where" in Visual Context Learning** Tal Makovski

61.26, *9:30 am* **Breaking Visual Working Memory: Cases of In/dependence between Storage and Manipulation Costs** Hrag Pailian, Justin Halberda

61.27, *9:45 am* **Accounting For Variable Precision In Visual Working Memory Reveals A Discrete Capacity Limit** Michael Pratte, Young Eun Park, Rosanne Rademaker, Frank Tong

Eye Movements: Saccades and space

Wednesday, May 20, 11:00 am - 12:45 pm
Talk Session, Talk Room 2
Moderator: Laurent Madelain

62.21, *11:00 am* **Prediction of visual content across eye movements and their modulation by inferred information in the blind spot** Benedikt Ehinger, Peter König, José Ossandón

62.22, *11:15 am* **The timecourse of spatial information integration across saccades** Melchi Michel, Umang Parikh

62.23, *11:30 am* **Near-optimal integration of orientation information across saccadic eye movements** Elad Ganmor, Michael Landy, Eero Simoncelli

62.24, *11:45 am* **Perisaccadic perception: temporal unmasking or spatial uncrowding?** David Melcher, Antimo Buonocore, Alessio Fracasso

62.25, *12:00 pm* **Target displacements during blinks trigger corrective gaze adaptation** Gerrit Maus, Patrick Cavanagh, Thérèse Collins, Marianne Duyck, Matteo Lisi, Mark Wexler, David Whitney

62.26, *12:15 pm* **A common trans-saccadic map of multi-sensory locations revealed with saccade curvature** Martin Szinte, David Aagten-Murphy, Donatas Jonikaitis, Heiner Deubel

62.27, *12:30 pm* **Pupil size reveals preparatory processes in the generation of pro- and anti-saccades** Chin-An Wang, Donald Brien, Douglas Munoz

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Wednesday Morning Posters

Color Perception: Models, methods, and meaning

Wednesday, May 20, 8:30 am - 12:30 pm
Poster Session, Pavilion

63.4001 **Predicting visual search for abnormal color vision with perceptual models of color deficient vision** Vasco de Almeida, Jorge Santos, João Linhares, Catarina João, Sérgio Nascimento

63.4002 **Symbolic Effects on Color Preferences in China and the US** Stephen Palmer, Karen Schloss, Tianquan Guo, Vivian Wung, Kaiping Peng

63.4003 **Testing perceptual models of dichromacy and anomalous trichromacy with a computer-based color-vision test** Sérgio Nascimento, João Linhares, Catarina João, Jorge Santos, Vasco de Almeida

63.4004 **Color preferences change with changes in environmental colors** Isobel Heck, Karen Schloss

63.4005 **Visual memory for colour: the long and the short of it** Marina Bloj, David Weiß, Karl Gegenfurtner

63.4006 **Assessing the effects of dynamic luminance contrast noise masking on a colour discrimination task on normal and deuteranomalous observers** João Linhares, Catarina João , Jorge Santos, Vasco de Almeida, Leticia Álvaro, Sérgio Nascimento

63.4007 **Which color means more? An investigation of color-quantity mapping in data visualization** Karen Schloss, Connor Gramazio, Charlotte Walmsley

63.4008 **Measuring saturation** Florian Schiller, Matteo Valsecchi, Karl Gegenfurtner

63.4009 **A comparison of display technologies for accurate reproduction of colour stimuli** Caterina Ripamonti, Mark Hodgetts, Jakob Thomassen

63.4010 **Color-Concept Consistency Helps Observers Infer Meaning from Visual Displays** Charlotte Walmsley, Karen Schloss

Perception and Action: Walking

Wednesday, May 20, 8:30 am - 12:30 pm
Poster Session, Pavilion

63.4011 **Visual information for the control of walking over complex terrain** Brett Fajen, Sean Barton, Jonathan Matthis

63.4012 **Eye, head, and foot tracking during locomation over real-world complex terrain** Jonathan Matthis, Mary Hayhoe

63.4013 **How do the biomechanics of walking constrain the visual control of stepping over obstacles?** Melissa Parade, Brett Fajen

63.4014 **The contributions of active and passive modes of control during walking over complex terrain** Sean Barton, Jonathan Matthis, Brett Fajen

63.4016 **Persistent personal biases in walking** Norbert Boeddeker, Simon Jetzschke, Marc Ernst

63.4017 **Individual differences in perception and control of walking direction** Isabelle Poulain, Charlene Gaignard, Gildas Marin, Bruno Mantel, Delphine Bernardin

63.4018 **Evaluation of a Phantogram Groundplane for the Study of Visually Guided Walking Behavior** Gabriel Diaz, Andrew Smith, Kamran Binaee, Rahul Gopinathan

63.4019 **Can where we are tell us where to go? The role of positional cues in visual guidance of human walking.** Danlu Cen, Simon Rushton, Seralynne Vann

63.4020 **Man vs. Mouse: The act of walking does not alter spatial suppression in humans** Kait Clark, Simon Rushton

63.4021 **Nonvisual information contributes to flow parsing during walking** Jeffrey Saunders, Xing Xing

63.4022 **Behavioral dynamics of visually-guided heading alignment in pedestrian following** Gregory Dachner, William Warren

63.4023 **Intercepting a learned moving target: On-line or model-based control?** Huaiyong Zhao, William Warren

Attention: Individual differences

Wednesday, May 20, 8:30 am - 12:30 pm
Poster Session, Pavilion

63.4024 **Keeners and Procrastinators: Investigating Individual differences in visual cognition between voluntary signup across school semesters** David Chan, Jason Rajsic, Jay Pratt

63.4025 **It's in the game: Exploring Cognitive Differences between Professional Gamers and Novices** Alyssa Hess, Mark Neider

63.4026 **Cue-it? We say: Block-it!** Bart Cooreman, Iris Wiegand, Anders Petersen, Signe Vangkilde, Claus Bundesen

63.4027 **Stimulus strength and visual competition contribute to individual differences in Stroop-Task performance** Marnix Naber, Stephen Brown, Anneke Vedder, Sander Nieuwenhuis

63.4028 **Electrophysiological evidence for decreased top-down attentional control in adults with ADHD** Irina Nesterovsky, Lilach Shalev, Roy Luria, Keren Saar, Pnina Stern, Baruch Styr, Carmel Mevorach

63.4029 **Enhanced pro-active distractor filtering in adults with high autistic traits** Carmel Mevorach, Mayra Muller Spaniol, Lilach Shalev

63.4030 **Amblyopic adults demonstrate intact endogenous spatial attention** Mariel Roberts, Marisa Carrasco

63.4031 **Tonic and Phasic Alertness Training Enhances Executive Function, Working Memory, and Skill Acquisition in Older Adults** Thomas Van Vleet, Joseph DeGutis, Michael Merzenich

63.4032 **Aging effects on expectancy use in driving scenes as assessed by the ideal observer** Steven Shimozaki, Eleanor Swan, Claire Hutchinson, Jaspreet Mahal

63.4033 **Neural and Behavioral Markers of Inter- and Intra- hemispheric Communication** Stephanie Simon-Dack

Attention: Reward and affective influences

Wednesday, May 20, 8:30 am - 12:30 pm
Poster Session, Pavilion

63.4034 **Visuocortical changes during discriminant aversive conditioning: Effects of inter-individual differences in contingency awareness and autonomic engagement** L. Forest Gruss, Andreas Keil

63.4035 **Proactive deprioritization of emotional distractors enhances target perception** Briana Kennedy, Steven Most

63.4036 **Task-irrelevant reward-learning elicits value-driven attentional capture** Chisato Mine, Jun Saiki

63.4037 **High Susceptibility to Stress Associated with Increased Value-Driven Attentional Capture** Evan Palmer, Andrew Miranda, Maria Chaparro, Amanda Hood, Joseph Keebler

63.4038 **"Wishful seeing" in non-human primates: can reward shape size perception?** Samy Rima, Benoit Cottereau, Jean-Baptiste Durand

63.4039 **Explicit awareness mediates reward-based prioritization of spatial attention** Li Sha, Roger Remington, Yuhong Jiang

63.4040 **Reward- and space-based repetition priming is weighted by task relevance.** Beth Stankevich, Arni Kristjánsson, Joy Geng

63.4041 **Generalization of value to visual statistical associates during reinforcement learning** Timothy Vickery, Kyle Friedman

63.4042 **Reward-based involuntary capture interacts with voluntary attentional control during search** Gisella Diaz, Mary MacLean, Barry Giesbrecht

63.4043 **Reward history enhances working memory precision in a continuous partial report task** Mary MacLean, Barry Giesbrecht

63.4044 **More than distractor devaluation: The emotional boost of grasping a real object** Nathan Wispinski, Bruce Nip, James Enns, Craig Chapman

63.4046 **The detection of fearful and angry expressions in visual search** Alisdair Taylor, Jason Barton

Visual Search

Wednesday, May 20, 8:30 am - 12:30 pm
Poster Session, Pavilion

63.4048 **The Importance of Slow Consistent Movement when Searching for Hard-to-Find Targets in Real-World Visual Search** Charlotte Riggs, Katherine Cornes, Hayward Godwin, Richard Guest, Nick Donnelly

63.4049 **Investigating Confirmation Bias in Overt Visual Selection** Jason Rajsic, Daryl Wilson, Jay Pratt

63.4050 **Memory is Necessary in Visual Search with Limited Guidance** Chad Peltier, Mark Becker

63.4051 **Coactivation in Peripheral Triple Conjunction Search** Ada Mishler, Mark Neider

63.4052 **Singleton search performance predicts performance on heterogeneous displays: Evidence in support of the Information Theory of Vision** Anna Madison, Simona Buetti, Alejandro Lleras

63.4053 **Through The Looking (Google) Glass: Attentional Costs in Distracted Visual Search** Joanna Lewis, Mark Neider

63.4054 **When is stereopsis useful in visual search?** Emilie Josephs, Matthew Cain, Barbara Hidalgo-Sotelo, Gregory Cook, Nelson Chang, Krista Ehinger, Aude Oliva, Jeremy Wolfe

63.4055 **Prior knowledge of objects improves efficiency during hybrid visual search** Aaron Johnson, John Brand, Yvette Esses, Bianca Grohmann, H. Onur Bodur

63.4056 **Guidance of Attention by Multiple Feature Values in Visual Working Memory** Andrew Hollingworth, Valerie Beck

63.4057 **Visual search for shape singletons as a function of visual hemifield** Christophe Carlei, Dirk Kerzel

63.4058 **Keep on rolling: Visual search asymmetries in 3D scenes with motion-defined targets** Matthew Cain, Emilie Josephs, Jeremy Wolfe

63.4059 **The role of selective attention during visual search using random dot motion stimuli.** Zeinab Bolandnazar, Bianca Lennarz, Koorosh Mirpour, James Bisley

63.4060 **Involuntary semantic bias during search for words and word pairs** Chia-Chien Wu, Nada Attar, Marc Pomplun

63.4061 **Intensity of Visual Search Asymmetry Depends on Physical Property in Target-Present Trials and Search Type in Target-Absent Trials** Yoshiyuki Ueda, Shingo Kurosu, Jun Saiki

63.4062 **Search in actively organized spaces** Grayden Solman, Alan Kingstone

63.4063 **Interpersonal competitiveness and improvement in reaction time in a visual search task** Carissa Romero, Kandace Markovich, Yvonne Johnson, Eriko Self

63.4064 **For better or worse: Prior trial accuracy affects current trial accuracy in visual search** Jonathan Winkle, Adam Biggs, Justin Ericson, Stephen Mitroff

63.4065 **An individual differences approach to multiple-target search errors: Errors correlate with attentional deficits** Stephen Adamo, Matthew Cain, Stephen Mitroff

Face Perception: Emotion 2

Wednesday, May 20, 8:30 am - 12:30 pm
Poster Session, Pavilion

63.4066 **Spatial integration and nonlinear transduction of emotional expression** Katie Gray, Tessa Flack, Daniel Baker

63.4067 **Individual differences in antisocial and prosocial traits predict perception of dynamic expression** Alison Campbell, James Tanaka

63.4068 **Valence, expression and identity effects in the affective priming paradigm** Shanna Yeung, Alisdair Taylor, Cristina Rubino, Jason Barton

63.4069 **Blocking facial mimicry reduces perceptual sensitivity for facial expressions** Alberta Ipser, Richard Cook

63.4070 **Facial mimicry is modulated by implicit and explicit emotion consistency.** Alexander Kirkham, Amy Hayes, Steven Tipper

63.4071 **Happiness is in the mouth of the beholder and fear in the eyes.** Louise Delicato, Rosie Mason

63.4072 **Detecting emotions is easier in less realistic faces.** William Kendall, Alan Kingstone, Rebecca Todd

63.4073 **A Comparison of Perceptual and Emotional Expression Processing Between Real and Line-drawn Faces** Ya-Yun Chen, Gary Shyi

63.4074 **Impact of Peripherally Presented Emotional Expressions on Subsequent Target Detection** Brandon Coffey, Siera Bramschreiber, Andrew Mienaltowski

63.4075 **The impact of an acute social stress on the use of visual information in facial expression categorization** Camille Daudelin-Peltier, Caroline Blais, Hélène Forget, Andréa Deschênes, Daniel Fiset

63.4076 **Facial expression recognition impairment following acute social stress** Andréa Deschênes, Hélène Forget, Camille Daudelin-Peltier, Daniel Fiset, Caroline Blais

63.4077 **Pubertal Development and Emerging Sensitivity to Complex Facial Expressions** Natalie V. Garcia, K. Suzanne Scherf

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3D Perception: Neural mechanisms

Wednesday, May 20, 8:30 am - 12:30 pm
Poster Session, Pavilion

63.4078 **Adaptation decorrelates object representations: Evidence from Multivoxel Pattern Analysis** Marcelo Mattar, Maria Olkkonen, Geoffrey Aguirre, Russell Epstein

63.4079 **Cortical responses to congruent and incongruent stereo cues for objects on a collision path with the observer** Jac Billington, John Wann

63.4080 **Vergence, accommodation, and apparent viewing distance in the perception of depth from motion parallax** Mark Nawrot, Brian Connelly, Keith Stroyan

63.4081 **Alcohol intoxication does not increase the temporal processing interval for the perception of depth from motion parallax** Shanda Lauer, Mark Nawrot

63.4082 **Studying the cortical response to binocular disparity using EEG temporal frequency tagging** Zoltán Derzsi, Ghaith Tarawneh, Kai Alter

63.4083 **Position shifts of fMRI-based population receptive fields induced by the Ponzo illusion** Ce Mo, Dongjun He, Fang Fang

63.4084 **Cortical representations of object motion trajectories in 3D space** Hiroshi Ban, Yuji Ikegaya

Topic Index

Below is a list of talk and poster sessions by topic. Parentheses indicate the abstracts that are included in each session.

Author Index

Entries are indexed by abstract number, not page number. "S" entries indicate symposia. **Bold** indicates first author.

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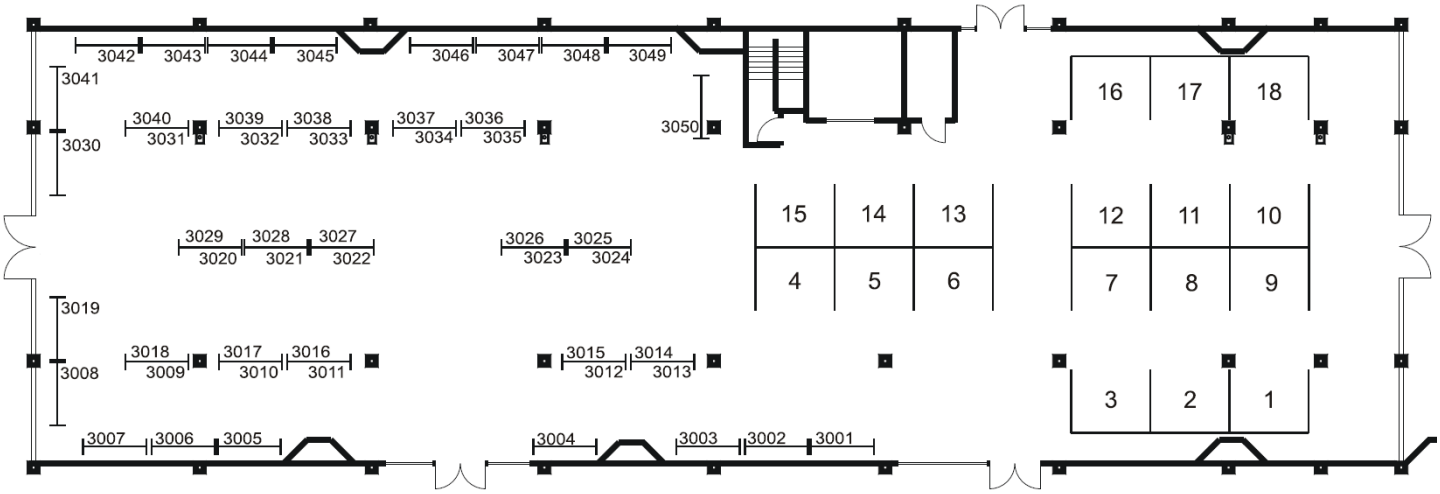
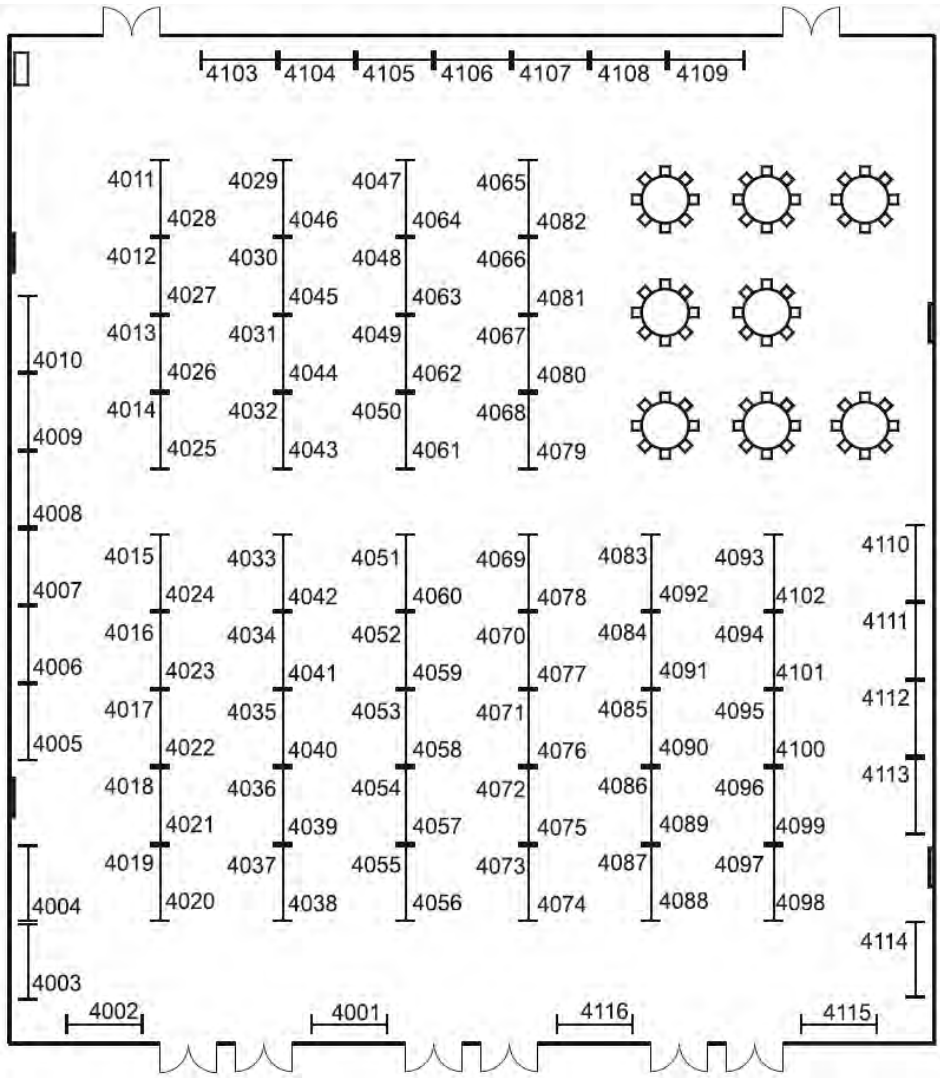


Banyan Breezeway



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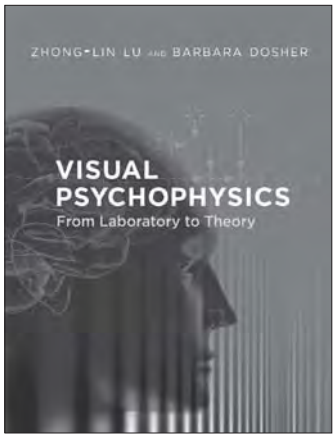

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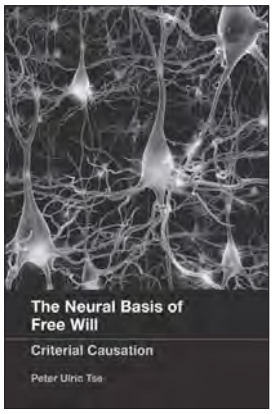

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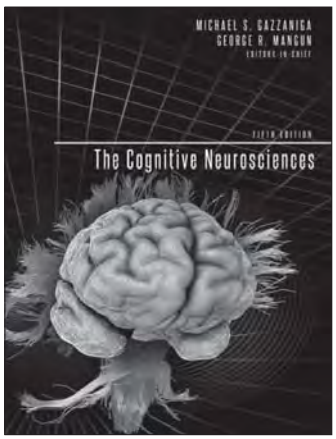

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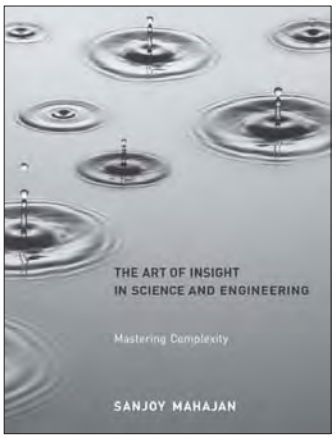

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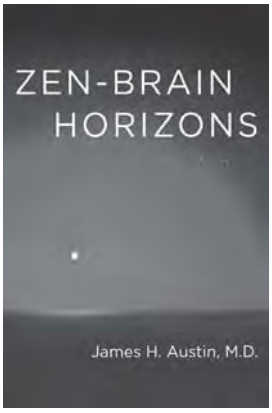

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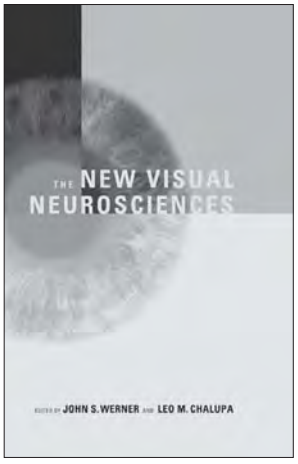

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