



*2011 Organizers*

Brian Levinthal  
Valve Corporation

Timothy Vickery  
Yale University

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Davis

Melissa Võ  
Harvard Medical School

**19th Annual Conference  
Object Perception, Attention, & Memory  
November 3, 2011 - Seattle, WA**





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## OPAM 2011 Talk Session

### Metropolitan A Ballroom, Sheraton Seattle Hotel

8:00	Registration	
8:30	Opening Remarks	
<b>8:40</b>	<b>Lead: Tim Vickery</b>	<b>Ecological Factors in Perception and Attention</b>
8:45	Davoli & Brockmole	Holding on and letting go: The allocation of attention to space and objects is constricted and slowed near the hands
9:00	Sugovic & Witt	Perception in obesity: Does physical or perceived body size affect perceived distance?
9:15	Caparos, Ahmed, Bremmer, Fockert, Linnell, & Davidoff	Exposure to an urban environment alters the local bias of a remote culture
9:30		----- BREAK -----
<b>9:40</b>	<b>Lead: Carly Leonard</b>	<b>Visual Working Memory</b>
9:45	Fougnie, Suchow, & Alvarez	Variable precision among working memory representations
10:00	Fiacconi & Milliken	Interference in visual memory can obscure explicit awareness of contingencies
10:15	Tas, Luck, & Hollingworth	The automatic encoding of distractors into VWM through overt, but not covert attention
10:30	Ester, Anderson, Serences, & Awh	Sustained population responses in human primary visual cortex reveal individual differences in the precision of working memory
10:45		----- BREAK -----
<b>10:55</b>	<b>Lead: Brian Levinthal</b>	<b>Object Perception and Recognition</b>
11:00	Liverence & Scholl	Selective inhibition of change detection along the axis of motion: A case study of perception compensating for its own limitations
11:15	Tapia, Breitmeyer, & Jacob	Properties of spatial attention during conscious and nonconscious processing of visual features and objects
11:30	Snow & Culham	Is the lateral occipital complex necessary for haptic object recognition? Object shape representation in a visual agnosic with bilateral occipito-temporal lesions
11:45	Van Gulick & Gauthier	Category learning for a (perceptual) purpose
12:00		----- LUNCH BREAK / POSTERS UP BY 12:45 -----
<b>1:00-2:00</b>	<b>Poster Session - Ballroom 6ABC, Washington State Convention &amp; Trade Center</b>	
2:00		----- BREAK -----
<b>2:10</b>	<b>Lead: Melissa Vo</b>	<b>Visual attention and conscious perception</b>
2:15	Bredemeier, Berenbaum, & Simons	Individual differences in controlled attention and susceptibility to inattentional blindness
2:30	Vatterott & Vecera	Experience with an irrelevant singleton is necessary to prevent capture in feature search mode
2:45	Wang & Most	Dissociating the impact of emotion from the impact of attentional capture on conscious perception
3:00	Hout & Goldinger	Multiple-target search increases workload but enhances incidental learning: A computational modeling approach to a memory paradox.
3:15		----- BREAK -----
<b>3:30-4:30</b>	<b>Keynote Address: Dr. Brian Scholl</b>	<b>It's Alive! Some Visual Roots of Social Cognition</b>
4:40	Closing Remarks	



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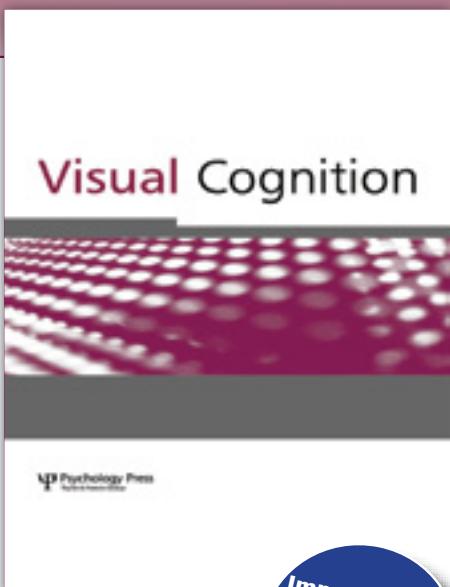
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EDITOR: **John M. Henderson**,  
University of South Carolina, USA

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## OPAM 2011 Keynote Address

Metropolitan A Ballroom  
Seattle Sheraton Hotel  
3:30 p.m.



**Dr. Brian Scholl**  
Department of Psychology, Yale University

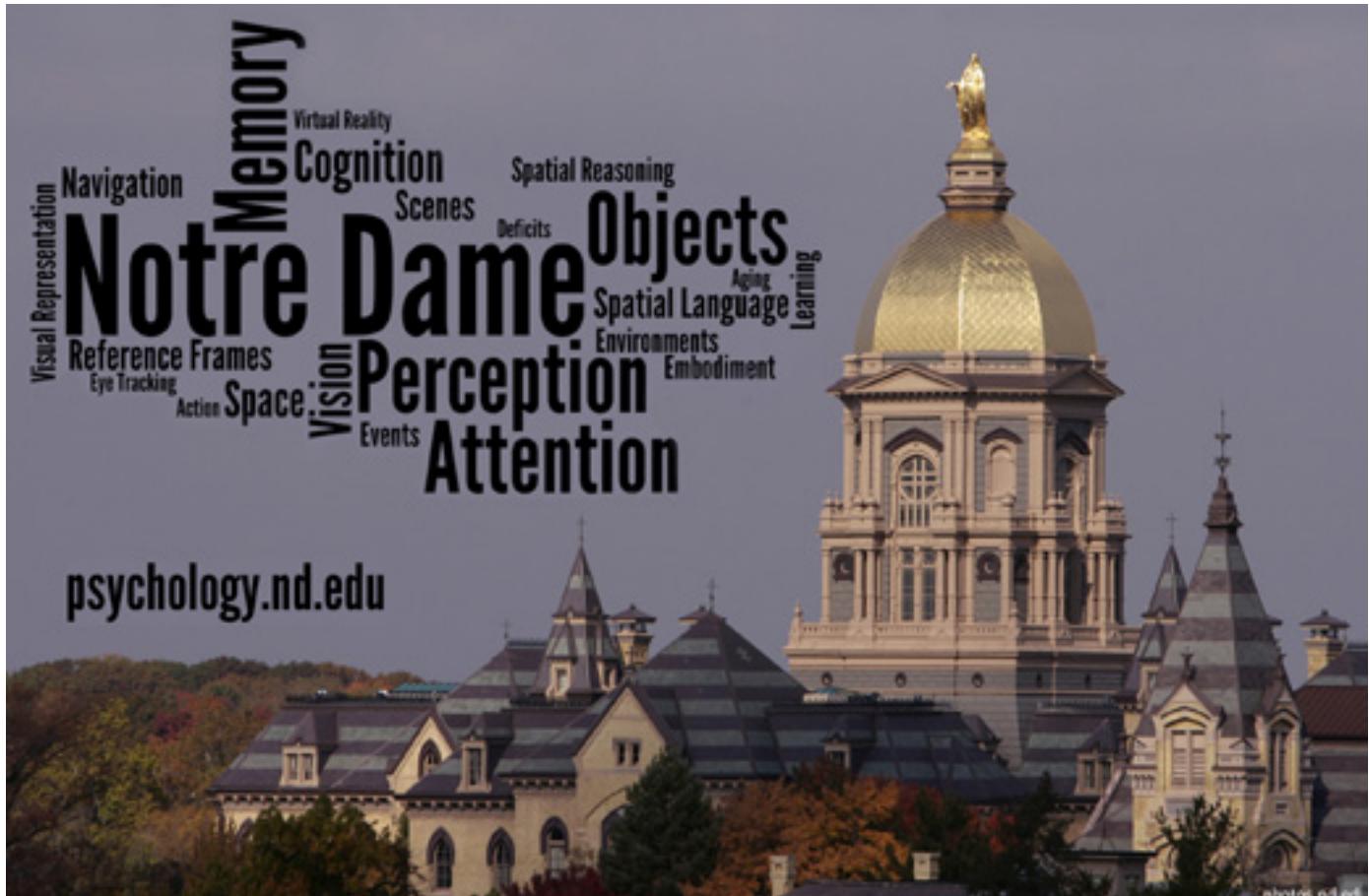
### **It's Alive! Some Visual Roots of Social Cognition**

Beyond features such as color and shape, visual percepts can also involve properties that we typically associate with higher-level cognition -- such as animacy, intentionality, and goal-directedness. Cognitive scientists have long been captivated by such phenomena, but have faced challenges in studying them with precision, and in distinguishing true perceptual effects from higher-level inferences. I will describe and demonstrate several projects from our group that address these challenges, exploring the perception of animacy from some new perspectives: (1) Demonstrations of several new types of perceived animacy (including the 'psychophysics of chasing', the 'wolfpack effect', and the 'slithering snake' animation; (2) Illustrations of how it is possible to assess the objective accuracy of certain types of perceived animacy; and (3) Explorations of how perceived animacy connects up with the rest of mind, and influences other aspects of perception and attention. Each of these research strands will involve perceptually salient demonstrations of various types. Collectively, these projects show how the perception of animacy and intentionality is wired into our minds in deep and pervasive ways, and how perception involves recovering not only the physical structure of the world, but also its causal and social structure.

Visual Representation Navigation Memory Virtual Reality Cognition Scenes Spatial Reasoning Deficits Objects Aging Spatial Language Learning Environments Embodiment Reference Frames Eye Tracking Action Space Vision Perception Events Attention

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of Johns Hopkins University



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## OPAM 2011 POSTER SESSION

1:00-2:00 p.m. - Ballroom 6ABC, Washington State Convention & Trade Center

### Temporal Dynamics and Awareness

- (1) Perceptual biases in reading the analog clock influence the perceived time of action: Free will may not be illusory after all  
*Eve Isham, William Banks, & Joy Geng*
- (2) Involvement of dorsal stream pathway in conscious visual perception  
*Abbas Khani*
- (3) Perceived simultaneity with static or moving stimuli of different complexity  
*Stéphane Buffat & Jean Lorenceau*
- (4) When does backward masking by pattern happen? Temporal dynamics of integration and interruption  
*Sven Panis & Johan Wagemans*
- (5) Understanding recovery from object substitution masking  
*Stephanie Goodhew, Paul Dux, Ottmar Lipp, & Troy Visser*
- (6) Evaluating a directional tuning account of motion-induced blindness  
*Erika Wells & Andrew Leber*

### Face Perception

- (7) Face recognition in emotional scenes  
*Kaitlin Ryan*
- (8) The effect of perceptual load on the processing of a distracting schematic face  
*Ting-Yun Chang, Yi-Cheng Tsai, & Cheng-Ta Yang*
- (9) Memory for facial feature location: The effect of face inversion on the category bias  
*Cristina Sampaio, Lawrence A. Symons, & Michael Claiborne*
- (10) The effect of flankers on the perception of a racially ambiguous face  
*Hsin-Mei Sun & Benjamin Balas*
- (11) Performance differences in composite-face task reveal asymmetry of holistic processing within faces  
*Gary Shyi & George Wang*
- (12) Holistic processing of faces is unaffected by acquired familiarity  
*George Wang & Gary Shyi*

### Emotion-Attention Interaction

- (13) Learned emotional associations and the attentional blink  
*Jessica Collins, Kara Blacker, & Kim Curby*
- (14) The role of arousal in automatic attentional capture triggered by negative distractor words  
*Minwoo Kim, Boyoung Kim, & Yang Seok Cho*
- (15) The failure of attentional disengagement from negative facial expression  
*Ji Hyun Suh, Sang-A Kim, & Yang Seok Cho*
- (16) Perceptual, not memorial, disruption underlies emotion-induced blindness  
*Briana L. Kennedy & Steven B. Most*

## Ecological Perception and Human Factors

- (17) Time perception and frustration with the peak-end rule in progress bars  
*Daniel Hor, Igor Dolgov, William Graves, & Jeremy Schwark*
- (18) Are individual differences in proactive cognitive control and error monitoring linked with difficulties in weight management?  
*Amanda Skoranski, Steven Most, Robert Simons, & Sandra Hassink*
- (19) The impact of automated aids on strategy in target search tasks  
*Jeremy Schwark, Igor Dolgov, Daniel Hor, & William Graves*
- (20) The impact of drug use on everyday memory and attention  
*Larry Jasper, Christopher Koch, & Mary Kate Koch*
- (21) Naturalistic presentation method of written text improves memory retrieval  
*Matthew Rambert & Igor Dolgov*
- (22) Relationships between attentional traits and media multitasking behavior  
*Matthew Cain & Stephen R. Mitroff*
- (23) Altered attention for stimuli on the body versus near the body: Evidence for a new perceptual boundary  
*Eric Taylor & Jessica Witt*
- (24) The Mass-Effect Bias: Lighter objects don't necessarily go further  
*Rosaline Brimhall, Thomas Crawford, Michael McBeath, & Chris Zagami*
- (25) A language-independent methodology for testing intergroup differences in color perception  
*Alexander O'Brien*
- (26) Inconsistency in the usability of Wiimote accessories when playing Wii sports games  
*Igor Dolgov, Timothy Robards, Caroline Zamora, Mieka Wenner, & Matthew Sanchez*

## Object Perception

- (27) A study of unit formation under conflicting information from contour vs. surface-based processes for spatiotemporal interpolation  
*Tandra Ghose, Gennady Erlikhmann, & Philip Kellman*
- (28) Biases in judging the area of regular polygons  
*Eric Cooper & Jonathan Kahl*
- (29) Perception of 2D relative size is largely invariant with everything but shape  
*Pamela Glosson & John Hummel*
- (30) Rotation reveals the importance of configural cues in handwritten word perception  
*Anthony Barnhart & Stephen Goldinger*
- (31) Motion supports object recognition: Insight into possible interactions between the two primary pathways of the human visual system  
*Steven R. Holloway & Michael K. McBeath*
- (32) Differences in the rotation functions for identifying faces, animals and objects  
*Jonathan Kahl & Eric Cooper*

## Perceptual Organization

- (33) The perception of four-dot configurations  
*Mary Portillo, James Pomerantz, Dolapo Sokumbi, & Carl Hammarsten*

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- (34) **Figure-ground decay in primary visual cortex**  
*Lars Strother, Cheryl Lavell, & Tutis Vilis*
- (35) **Fundamental properties of simple emergent feature processing**  
*Robert Hawkins, Joseph Houpt, Ami Eidels, James Townsend, & Michael Wenger*
- (36) **Emergent features predict grouping of line segments**  
*Anna Cragin, Amanda Hahn, & James Pomerantz*
- (37) **Liquid attention: The effect of the contour on the attentional spreading**  
*Kazuki Ikegami & Chikashi Michimata*
- (38) **Visual attention deployment in Chinese reading**  
*Xingshan Li & Guojie Ma*

#### Spatial Configuration

- (39) **Snapshot encoding of spatial information: Location memory for visual-short-term- and short-term-memory exposures**  
*Harry Haladjian & Fabien Mathy*
- (40) **False recognition of a pre-change object is position dependent**  
*Ju-Chi Yu, Cheng-Ta Yang, & Yei-Yu Yeh*
- (41) **Semantic similarity does not affect layout learning**  
*Marie Shoda & Kazuhiko Yokosawa*
- (42) **Organizational properties for spatial perception: Perceptual grouping effects on local and global configurations**  
*Amy Clements-Stephens & Amy Shelton*
- (43) **The Roelofs effect is not driven by visuospatial shifts of attention**  
*Ben Lester & Paul Dassonville*

#### Multiobject Processing

- (44) **Evidence for optimality of simultaneous deployment of attention in multi-RSVP stream paradigms**  
*Maxwell Bay & Brad Wyble*
- (45) **Spatial proximity does not influence tracking performance, but changing target trajectories does**  
*Justin Ericson & Melissa Beck*
- (46) **Inhibition in multiple object tracking does not bushwhack, but follow distractors**  
*Hauke Meyerhoff, Frank Papenmeier, Georg Jahn, & Markus Huff*

#### Attention: Inhibitory Processing

- (47) **Electrophysiological evidence for feature-based inhibition during early visual processing**  
*Jeff Moher, Balaji Lakshmanan, Howard Egeth, & Josh Ewen*
- (48) **The dark side: Configuring attention to ignore task-irrelevant features**  
*Jason Arita, Nancy B. Carlisle, & Geoffrey F. Woodman*
- (49) **Non-spatial inhibition of return**  
*Adam Spadaro & Bruce Milliken*
- (50) **Psychophysiological evidence for the non-target singleton suppression**  
*Haein Jung, Young Eun Park, Soo Min Kim, & Yang Seok Cho*

## Attentional Control

- (51) Searching for two things at once: Multiple attentional control settings independent of space  
*Zachary Roper & Shaun Vecera*
- (52) High spatial validity is insufficient to elicit voluntary shifts of attention  
*Gregory Davis & Bradley Gibson*
- (53) Practice produces improved frontal filtering of distracting information  
*Todd Kelley & George Mangun*
- (54) Visual search is guided by multiple active templates in visual working memory  
*Valerie Beck, Andrew Hollingworth, & Steven Luck*
- (55) Cuing with color: The cost of binding space to color for visual selection  
*Kirsten C. S. Adam, Ted A. Bryant, & Bradley S. Gibson*
- (56) Spatial shifts of the covert attention cued by symbols of non-digital nature: Possible SQUARC effect  
*Atanas Kirjakovski & Narisuke Utsuki*
- (57) Developmental differences using a nonverbal Stroop task  
*Christopher Koch, Jacob Lowen, & Michelle McWilliams*
- (58) Examining the relationships between verbal and nonverbal Stroop tasks  
*Jennifer Saleme & Christopher Koch*

## Preattention and Attention

- (59) An identity intrusion effect in the absence of attentional capture  
*Brandon Ashinoff & Howard Egeth*
- (60) Does covert attention alter perceived contrast? Evidence from gender perception  
*Jason Rajsic & Daryl Wilson*
- (61) No attentional blink during arithmetic  
*Akihiro Kobayashi & Matia Okubo*
- (62) The fate of unattended stimuli in the color flanker paradigm  
*Serap Yigit-Elliot, John Palmer, & Cathleen Moore*
- (63) Mechanisms of pre-saccadic shifts of attention during pauses between successive saccades  
*Min Zhao, Barbara Dosher, & Eileen Kowler*
- (64) Perceptual load and distractor position modulate the contralateral negativity of target processing  
*Shoa-Ming Lee & Yei-Yu Yeh*
- (65) Motor response repetition modulates priming of popout through target activation  
*Yana Kim, Susannah Bruno, & Bryan Burnham*

## Interaction of Attention and Memory

- (66) Visual-spatial attention aids the maintenance of object representations in visual working memory  
*Melonie Williams, Pierre Pouget, Leanne Boucher, & Geoffrey Woodman*
- (67) Working memory biases attention as a default tendency  
*Chun-Yu Kuo, Yei-Yu Yeh, & Hsuan-Fu Chao*
- (68) The breadth of attention affects iconic memory  
*Leon Gmeindl, Lisa N. Jefferies, & Steven Yantis*

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- (69) **Resource competition influences the efficiency of selective attention**  
*Szu-Hung Lin & Yei-Yu Yeh*
- (70) **Expertise in radiological screening and satisfaction of search**  
*Kait Clark, Ehsan Samei, Jay Baker, & Stephen R. Mitroff*

#### Visual Working Memory

- (71) **Spatial priority for orientation but not color: Evidence for correspondence problems in visual working memory**  
*Florent Levillain & Jonathan Flombaum*
- (72) **What determines capacity of visual short-term memory? And when?**  
*Shriradha Sengupta, Paul Verhaeghen, & Patricia Mary Hearons*
- (73) **Reaction-time assessment of form and color processing in visual short-term memories**  
*Jane Jacob & Bruno Breitmeyer*
- (74) **Isolation of random and non-random factors that contribute to limited working memory capacity**  
*Joshua Sandry, Stephen Rice, David Trafimow, Gayle Hunt, Lisa Busche, & Edward Rubio*
- (75) **Enhanced visual short-term memory in action video game players**  
*Kara Blacker & Kim Curby*

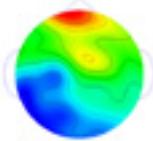
#### Remembering and Forgetting

- (76) **Item-method directed forgetting is effortful and impoverishes memory for abstract images**  
*Jonathan Fawcett, Michael Lawrence, & Tracy Taylor*
- (77) **The influence of corrective feedback on retrieval-induced forgetting**  
*Matthew Erdman & Jason Chan*
- (78) **Incidental memory for scene detail following visual search**  
*Jennifer Olejarczyk & John Henderson*
- (79) **Contextual distinctiveness and long-lasting priming in singleton search**  
*David Thomson & Bruce Milliken*
- (80) **The role of spatial location in human perceptual learning**  
*Tony Wang & Chris Mitchell*



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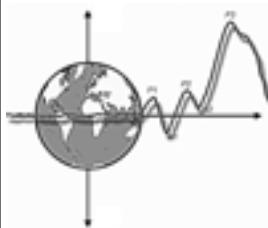
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*NOTES:*

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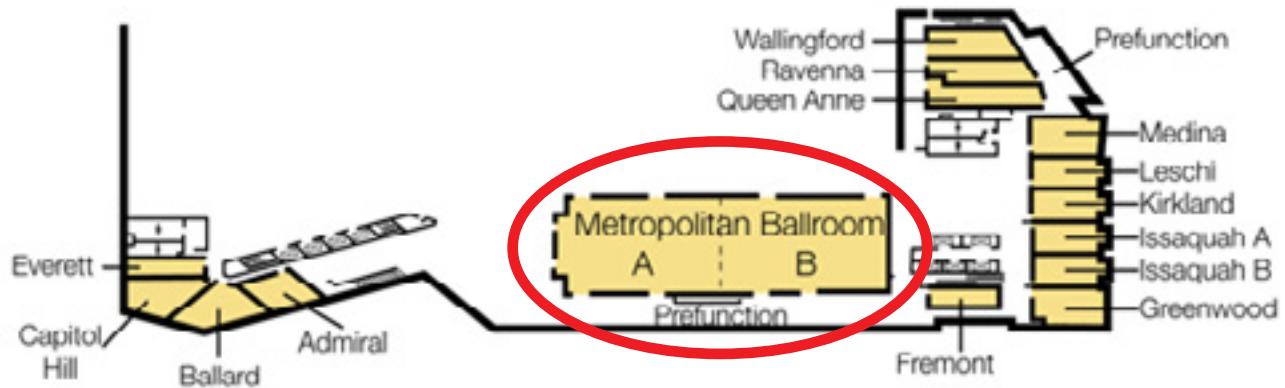
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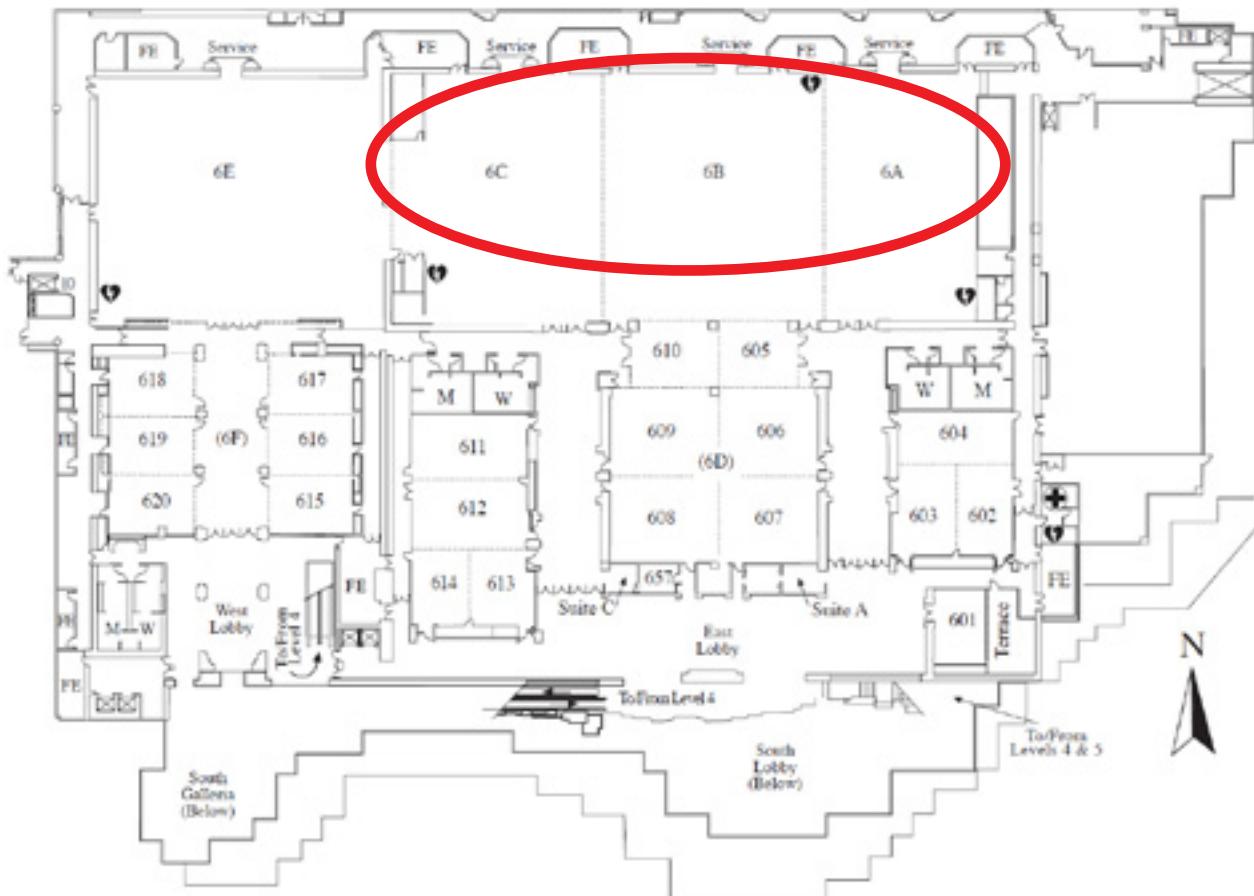
Covers human memory and learning, conceptual processes, psycholinguistics, problem solving, thinking, decision making, and skilled performance.

## Talks: Metropolitan Ballroom A, Third Floor, Sheraton Seattle Hotel

### Third Floor



## Posters: Ballroom 6ABC, 6th floor, Washington State Convention & Trade Center



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