Symposium 1: Contributions of Innate Constraints and Experience to the Development of Visual Cortex: Evidence from Infants and Blind adults

The building blocks of vision: Cortical and subcortical organization of the newborn visual system

Vladislav Ayzenberg[1] and Michael Arcaro[1]
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Category selectivity in human infant ventral temporal cortex

Heather L. Kosakowski[1], Michael A. Cohen[2,3], Lyneé Herrera[4], Boris Keil[5], Isabel Nichoson[6], Atsuhi Takahashi[2], Nancy Kanwisher[2], and Rebecca Saxe[2]
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In people born blind, lateral vOTC specializes for language, not voices

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From waveform to meaning: Development and reorganization of the dynamics of sound representation in the human brain

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Symposium 2: From Lipreading to Listening: How Visual Cues Shape Auditory Speech Processing

Visual speech qua speech? Unraveling the hierarchy of audiovisual speech

Aaron R. Nidiffer[1] and Edmund C. Lalor[1]
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Eye-movements track unheard acoustic speech during silent visual speech

Kaja Rosa Benz[1], Anne Hauswald[1], Nina Suess[1], Quirin Gehmacher[1], Patrick Reisinger[1], Fabian Schmidt[1], Thomas Hartmann[1], and Nathan Weisz[1,2]
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Auditory cortex encodes lipreading information through spatially distributed activity
David Brang[1], Ganesan Karthik[1], Cody Zhewei Cao[1], Michael I. Demidenko[1], Andrew Jahn[1], William C. Stacey[2], and Vibhangini S. Wasade[3,4]
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[3]Henry Ford Hospital, Detroit, MI, USA
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Visual speech differently restores temporal and spectral speech information in the auditory cortex
Cody Zhewei Cao[1], G Karthik[1], Areti Majumbar[1], Andrew Jahn[1], and David Brang[1]
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Suppressed multisensory activity in posterior superior temporal gyrus is related to increased visual benefit during audiovisual speech perception
J.F. Magnotti[1], I. Yu[1], A. Lado[1], Y. Zhang[1], and M.S. Beauchamp[1]
[1]Department of Neurosurgery, University of Pennsylvania, Philadelphia, PA, USA

Symposium 3: From Passive to Active: the Influence of Active Perception on Multisensory Processing

Sensory augmentation in an active multisensory environment
James Negen[1], Heather Slater[2], and Marko Nardini[2]
[1]Liverpool John Moores University, Liverpool, England
[2]Durham University, Durham, England

Investigating the link between head and trunk movements and spatial orientation abilities in VR
Davide Esposito[1] and Monica Gori[1]
[1]Istituto Italiano di Tecnologia, Genoa, Italy

Walking entrains saccade behaviour and modulates audiovisual synchrony perception
David Alais[1], Gabriel Clouston[1], and Matthew Davidson[1]
[1]The University of Sydney, Camperdown, Australia

The effect of running on visual and auditory time perception

Roberto Arrighi[1], Irene Petrizzo[1], Eleonora Chelli[1], Tommaso Bartoloni[1], and Giovanni Anobile[1]
[1]University of Florence, Florence, Italy

Continuous tracking of audiovisual stimuli
Alessia Tonelli[1,2], David Burr[1,3], and David Alais[1]
[1]The University of Sydney, Camperdown, Australia
[2]Istitutito Italiano di Tecnologia, Genoa, Italy
[3]University of Florence, Florence, Italy

Contrast sensitivity depends on locomotor phase
Brian Székely[1] and Paul Macneilage[1]
[1]University of Nevada, Reno, Reno, NV, USA

Symposium 4: Unravelling the Neural Mechanisms of Multisensory Self-Motion Processing: From Primate Models to Clinical Applications

Spatial and temporal congruency of vestibular and visual signals in nonhuman primates for self-motion perception
Yong Gu[1]
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Area V6 in human and non-human primates: a critical hub in the dorsal visual stream for visual motion processing
Annalisa Bosco[1], Michela Gamberini[1], Claudio Galletti[1], and Patrizia Fattori[1]
[1]University of Bologna, Bologna, Italy

How crucial is V6 for self-motion cortical processing in human and non-human primates?
Sarah Marchand[1], Vanessa De Castro[1], Elisabeth Excoffier[1], Maxime Rosito[1], Nathalie Vayssiere[1], Jean-Baptiste Durand[1], and Alexandra Severac Cauquil[1]
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Multisensory integration in egomotion-related visual areas
Sabrina Pitzalis[1]
[1]University of Rome ‘‘Foro Italico’’, Rome, Italy

The anterior-medial vestibular-visual network in humans
Mark W. Greenlee[1], Markus Becker[1], Sebastian M. Frank[1], and Anton L. Beer[1]
[1]University of Regensburg, Regensburg, Germany

Egocentric navigation network plasticity: Training extends functional connectivity of V6 to frontal areas of congenitally blind people
Elena Aggius-Vella[1], Daniel-Robert Chebat[2], Shachar Maidenbaum[3,4], and Amir Amedi[1]

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[2]Visual and Cognitive Neuroscience Laboratory (VCN Lab), Department of Psychology, Faculty of Social Sciences and Humanities, Ariel University, Ariel, Israel
[3]Biomedical Engineering, Ben-Gurion University of the Negev, Beersheba, Israel
[4]Zlotowski Center for Neuroscience, Ben Gurion University, Beersheba, Israel

Symposium 5 (invited): Processes of Multisensory Learning

How can the tendency to integrate the senses be modified?
Ladan Shams[1]
[1]University of California, Los Angeles, Los Angeles, CA, USA

Learning to combine cues during childhood development and beyond
Marko Nardini[1] and Meike Scheller[1]
[1]Durham University, Durham, England

Perceptual learning and adaptation with Bayesian mixture models
Ulrik Beierholm[1]
[1]Durham University, Durham, England

How adaptable are object categories formed from multisensory inputs?
Fiona Newell[1,2], Alan O' Dowd[1,2], and Rebecca Hirst[1,2]
[1]Trinity College, Dublin, Ireland
[2]New York University Abu Dhabi, Abu Dhabi, United Arab Emirates

Multisensory Facilitation of Perceptual Learning and Working Memory Training
Aaron Seitz[1]
[1]Northeastern University, Boston, MA, USA

Symposium 6: Multisensory Development in Humans from Birth through Young Adulthood

Immersive Environments for Studying Multisensory Development
Mark T. Wallace[1]
[1]Vanderbilt University, Nashville, TN, USA

Tools to develop, control, and analyze dynamic, immersive multisensory experiments
Marcus R. Watson[1]
[1]York University, Toronto, Ontario, Canada

Generative AI and cognitive science: Unifying sensory modalities in latent spaces

David Tovar[1]
[1]Vanderbilt University, Nashville, TN, USA

Haptic development and multisensory processing: Basic science and technology
Monica Gori[1]
[1]Italian Institute of Technology, Genoa, Italy

Human movement biomechanics: How can we get inspiration from other disciplines?
Julien Favre[1]
[1]Centre Hospitalier Universitaire Vaudois (CHUV), University of Lausanne, Vaud, Switzerland

Symposium 7 (invited): Multisensory Processing in Mouse and Insect Models

Multisensory enhancement of prey pursuit behavior in mice
Jennifer Hoy[1]
[1]University of Nevada, Reno, Reno, NV, USA

Topographic alignment of auditory and visual receptive fields in the mouse superior colliculius
David Feldheim[1]
[1]University of California, Santa Cruz, Santa Cruz, CA, USA

A framework for modeling active multisensory integration
Ben Cellini[1], Burak Boyacioglu[1], S. David Stupski[1], and Floris van Breugel[1]
[1]University of Nevada, Reno, Reno, NV, USA

Visual and acoustic integration in mosquito swarms: Strategy for finding mates while avoiding collisions
Saumya Gupta[1] and Jeffrey A. Riffell[1]
University of Washington, Seattle, WA, USA

Symposium 8: Shifting Sensory Reliance: Adaptive Strategies in Vision Impairment and Blindness

Does losing stereoscopic vision matter? Age-related differences in cue combination compensation
Adrien Chopin[1,2], Diana Rdeini,[1,3], Catherine Agathos[2], Chiara Ciucci,[1,4] Yuling Wang[1], Valérie Parmentier[5], Denis Sheynikhovich[1], and Angelo Arleo[1,5]
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[3]Hôpital National de la Vision, Université Paris Cité, Paris, France

[4]School of Advanced Study Sant'Anna, Pisa University, Pisa, Italy
[5]Center Innovation & Technologies Europe, Essilor International SAS (EssilorLuxottica), Charenton-le-Pont, France

Sensory reweighting in central visual field loss
Catherine Agathos[1], Anca Velisar[1], and Natela Shanidze[1]
[1]The Smith-Kettlewell Eye Research Institute, San Francisco, CA, USA

Improving visual rehabilitation strategies in patients with macular degeneration by combining perceptual learning with tRNS
Giulio Contemori[1,2], Marcello Maniglia[3], Jade Guénot[4], Vincent Soler[2,5], Marta Cherubini[6,7], Benoit R. Cottereau[2,6], and Yves Trotter[2,6]
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[4]The Smith-Kettlewell Eye Research Institute, San Francisco, CA, USA
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[6]Centre National de la Recherche Scientifique, Toulouse, France
[7]Department of Psychology and Cognitive Science, University of Trento, Rovereto, Italy

Integrating across hands in bimanual braille reading
Santani Teng[1]
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Neural dynamics of human click-based echolocation
Haydée García-Lázaro[1] and Santani Teng[1]
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