International Multisensory Research Forum 2017

Nashville, Tennessee // May 19-22, 2017

Welcome to IMRF 2017!

INTERNATIONAL MULTISENSORY RESEARCH FORUM

We would like to personally welcome each of you to Nashville, Tennessee for the 18th Annual International Multisensory Research Forum! Multisensory research continues to be an exciting and dynamic field and we hope you enjoy our program of exceptional scientific lectures, poster presentations, and networking forums that benefit your research.

Table of Contents

For workshop, symposia, and poster abstracts, see the Abstract Supplement

General Information

Registration

Registration will be available at the Vanderbilt Student Life Center from 8AM to 1PM on Friday May 19th and beginning at 7AM on Saturday May 20th through Monday May 22nd.

Conference badges may also be picked up at the Country Music Hall of Fame beginning at 4:30 PM on Friday May 19th (see page 14).

Venue

Vanderbilt Student Life Center is the main venue for this event. It is located at 310 25th Ave S. Other events will be held at the Country Music Hall of Fame (see page 14) and Marathon Music Works (see page 21). Select meals (see page 5) will be served at Rand Dining Hall, a convenient 5 minute walk from the Student Life Center.

Mobile App

Guidebook is the official mobile app of IMRF 2017. It can be accessed at http://guidebook.com/g/imrf2017nashville.

General Information

Wireless Internet

Free wireless internet is available at all Vanderbilt locations by using the vummiv network. No password is required.

Meal Hours and Location

Complimentary breakfast, lunch and dinner will be served each day at the following times:

Breakfast will be served 7AM-8AM, Saturday through Monday at the Student Life Center

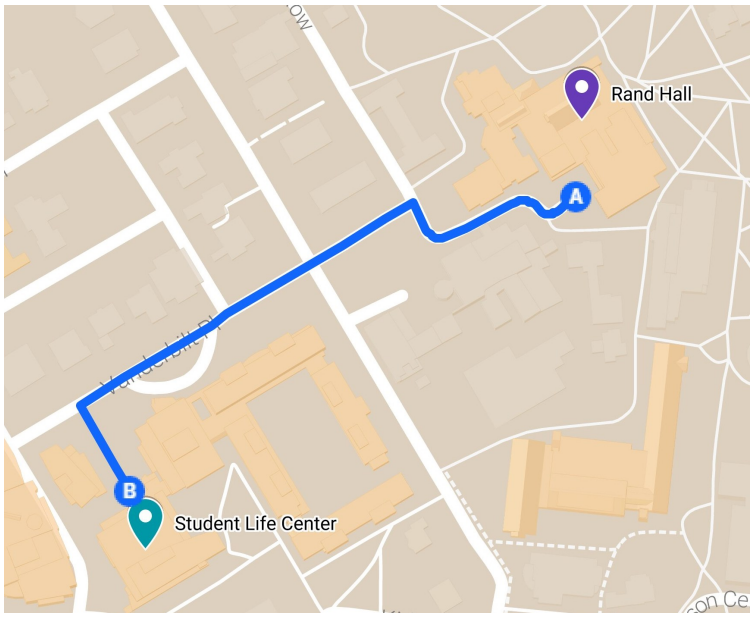
Lunch will be served at Rand Dining Hall, 12:15PM-1:30PM, Saturday through Monday

Dinner will be served

Friday 7 - 9PM at Country Music Hall of Fame

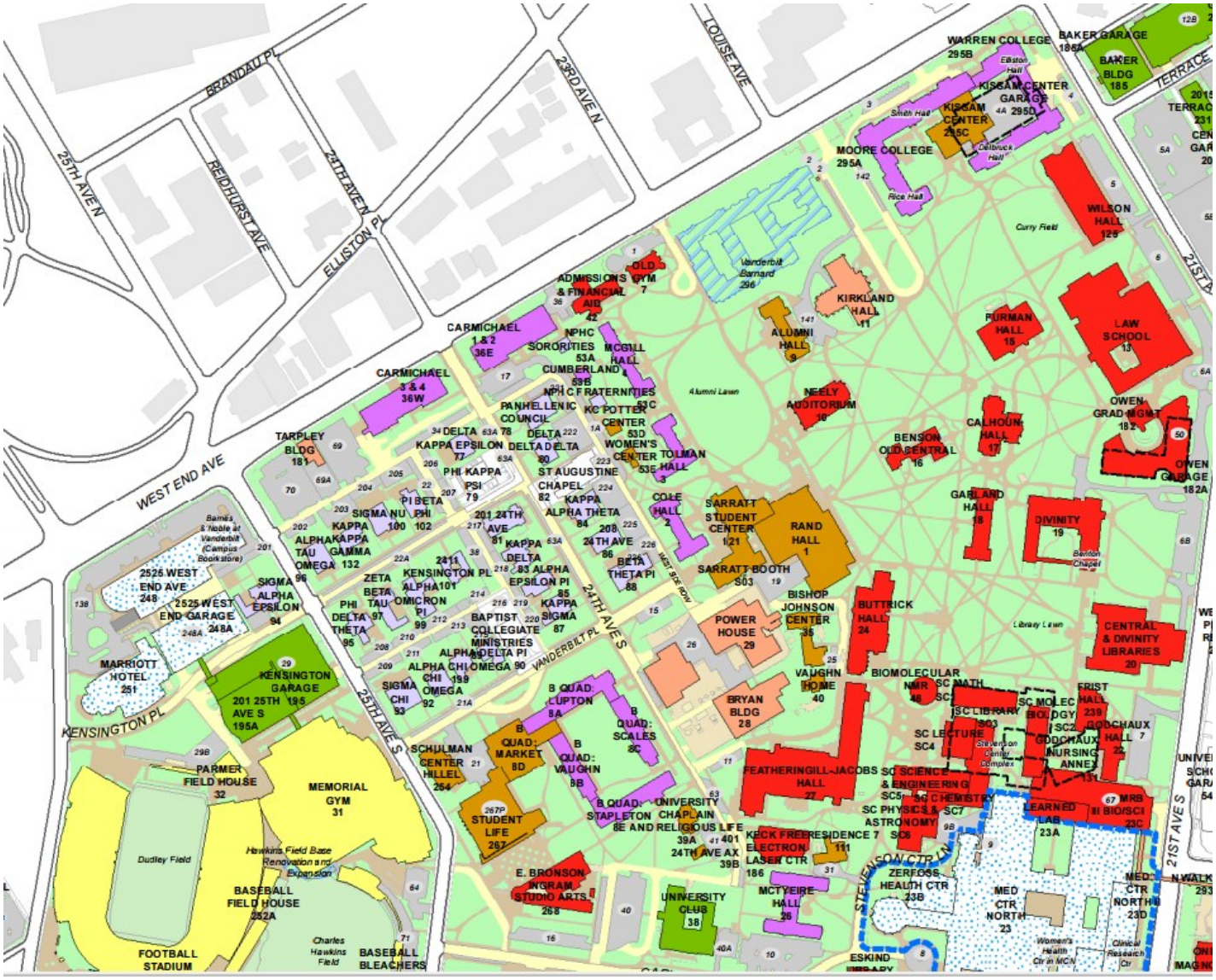
Saturday 6 - 8PM at Rand Dining Hall

Sunday 7 - 11PM at Marathon Music Works

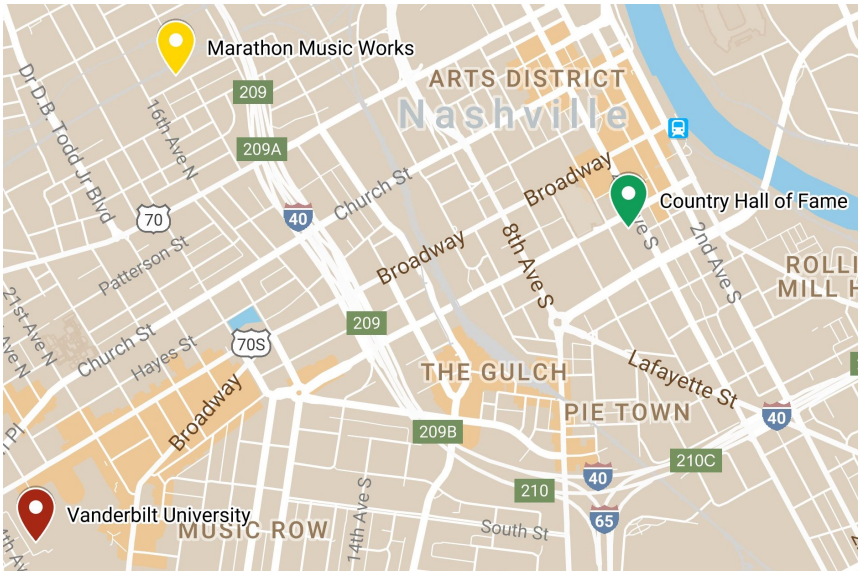


Walking directions to Rand Hall from Student Life Center. Please be prompt as they may not accept latecomers.

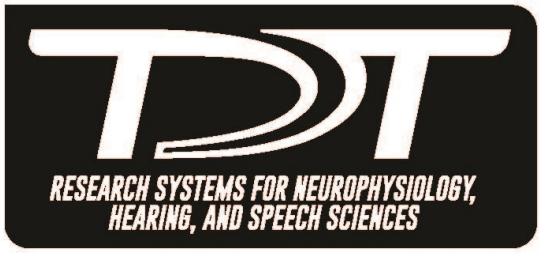
Vanderbilt Campus Map



Vanderbilt Area and Greater Nashville Maps



IMRF 2017 Sponsors



Committees

Scientific Advisory Committee

Mark Wallace, *Vanderbilt University*

David Alais, *University of Sydney*

Amir Amedi, *Hebrew University of Jerusalem*

Randolph Blake, *Vanderbilt University*

Lihan Chen, *Peking University*

Laurence Harris, *York University*

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Barry Stein, *Wake Forest*

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Sarah Baum

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Aaron Nidiffer

Jean-Paul Noel

David Simon

Antonia Thelen

David Tovar

Tiffany Woynaroski

International Multisensory Research Forum 2017
Student Life Center, Vanderbilt University

Student Life Center	Country Music Hall of Fame
Rand Dining Hall	Marathon Music Works

TIME	FRIDAY MAY 19	SATURDAY MAY 20	SUNDAY MAY 21	MONDAY MAY 22
7:00 AM		Continental Breakfast - SLC (7:00 - 8:00am)	Continental Breakfast - SLC (7:00 - 8:00am)	Continental Breakfast - SLC (7:00 - 8:00am)
8:00 AM	Workshop (optional) "Multisensory Integration and the Reproducibility Crisis" - Meeting Room 1&2, SLC (8:30am - 12:00 pm) / Workshop (optional) "Bridging the Gap: From Spikes to Behavior" - Meeting Room 3, SLC (8:30am - 12:00pm)	Symposium - Plasticity mechanisms of multisensory integration: Neurophysiological data, neurocomputational modeling and clinical perspectives Ballroom A/B/C, SLC (8:00 - 10:00am)	Symposium - Should binding and integration be synonymous? Ballroom A/B/C, SLC (8:00 - 10:00am)	Symposium - The development of multisensory space in early life: Perception, integration and attention Ballroom A/B/C, SLC (8:00 - 10:00am)
9:00 AM				
10:00 AM		Coffee Break	Coffee Break	Coffee Break
11:00 AM		Symposium - Multisensory Processes: A Balancing Act Across the Lifespan Ballroom A/B/C (10:30 - 12:00pm)	Student Talk Session - Ballroom A/B/C (10:30 - 12:00pm)	Postdoc/Faculty Talk Session - Ballroom A/B/C (10:30 - 12:00pm)
12:00 PM		"Multisensory funding opportunities" - Jim Gnadt Rand Dining Hall (12:15 - 1:30pm) / Lunch - Rand Dining Hall (12:15 - 1:30pm)	Business Meeting - Rand Dining Hall (12:15 - 1:30pm) / Lunch - Rand Dining Hall (12:15 - 1:30pm)	Lunch - Rand Dining Hall (12:15 - 1:30pm)
1:00 PM				
2:00 PM		Symposium - Multimodal stimulation in virtual reality: Neuro-technologies tools for experiments and therapy Ballroom A/B/C (1:30 - 3:30pm)	Symposium - Supramodality and cross-modal plasticity in blindness: Their balance and the implications for rehabilitation Ballroom A/B/C (1:30 - 3:30pm)	Symposium - Crossmodal plasticity in the auditory cortex induced by sensory deprivation during development and adulthood Ballroom A/B/C (1:30 - 3:30pm)
3:00 PM		Poster Session 1 - Board of Trust Room (3:30 - 4:45pm)	Poster Session 2 - Board of Trust Room (3:30 - 4:45pm)	Poster Session 3 - Board of Trust Room (3:30 - 4:45pm)
4:00 PM				
5:00 PM	Cocktail Hour CMA Grand Foyer (5:00 - 6:00pm)	Adam Gazzaley - Keynote Lecture Ballroom A/B/C (4:45 - 5:45pm)	Charlie Schroeder - Founders Lecture Ballroom A/B/C (4:45 - 5:45pm)	
6:00 PM	Robert Zatorre - Music and the Mind Lecture CMA Theater (6:00 - 7:00pm)	Dinner - Rand Dining Hall (6:00 - 8:00pm)		
7:00 PM	Reception Mike Curb Conservatory and Rotunda (7:00 - 9:00pm)		Gala Dinner - Marathon Music Works (7:00 - 11:00pm)	
8:00 PM				
9:00 PM				
10:00 PM				

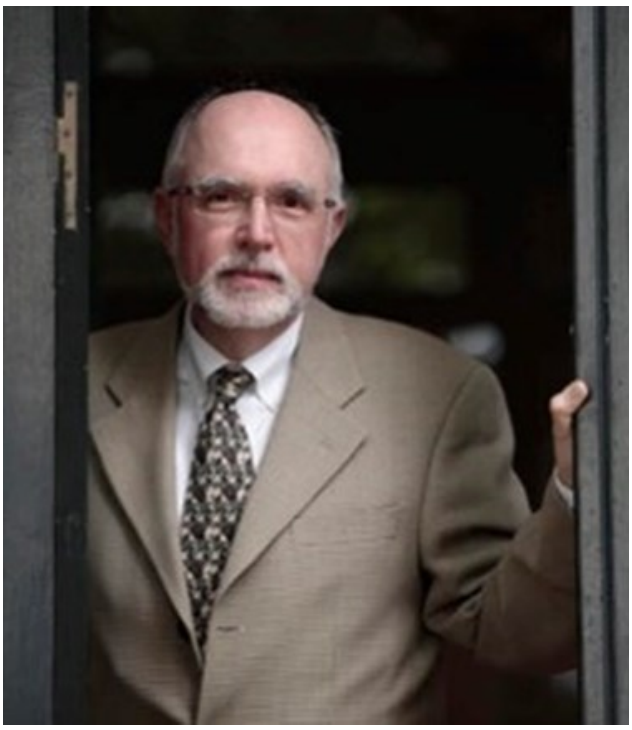
Schedule subject to change.

Music and Multisensory Lecture

Robert J. Zatorre, PhD
McGill University

May 19th, 2017, 6:00 PM
Country Music Hall of Fame

Music and movement: Auditory-motor transformations and the dorsal pathway



Biosketch

Dr. Robert Zatorre obtained his PhD in Experimental Psychology at Brown University in Rhode Island, and postdoctoral fellowship at Montreal Neurological Institute. He is the Co-Director of the International Laboratory for Brain, Music, and Sound Research and James McGill Professor of Neuroscience at McGill University in Québec. His research deals with complex auditory perceptual processes, especially the processing of musical sounds and speech. He also works on auditory spatial processes and cross-modal plasticity. Additional research is concerned with anatomical measures of auditory cortex and its relation to hemispheric asymmetries. Research methods include functional imaging techniques (fMRI, PET), cortical morphometry, and behavioral-lesion methods in patients with focal brain damage. One of his projects investigates the ability to "hear" music in the mind, the goal being to determine whether the same part of the brain is used to perceive sounds originating internally and externally.

Keynote Speaker

Adam Gazzaley, MD, PhD
University of California, San Francisco

May 20th, 2017, 4:45 PM
Vanderbilt Student Life Center

Technology meets neuroscience - A vision of the future of brain fitness

Biosketch
Dr. Adam Gazzaley obtained an M.D. and a Ph.D. in Neuroscience at the Mount Sinai School of Medicine in New York, completed Neurology residency at the University of Pennsylvania, and postdoctoral training in cognitive neuroscience at University of California, Berkeley. He is now Professor in Neurology, Physiology and Psychiatry at University of California, San Francisco and the Founder / Executive Director of Neuroscape, a translational neuroscience center engaged in technology creation and scientific research. He designs and develops novel brain assessment and optimization tools to impact education, wellness, and medicine practices. This novel approach involves the development of custom-designed, closed-loop video games integrated with the latest advancements in software (brain computer interfaces, GPU computing, cloud-based analytics) and hardware (virtual/augmented reality, motion capture, mobile physiological recording devices, transcranial electrical brain stimulation). He advances these new technologies to rigorous research studies that evaluate their impact on multiple aspects of brain function and physiology.

Founder's Lecture

Charles E. Schroeder, PhD
Colombia University

May 21st, 2017, 4:45 PM
Vanderbilt Student Life Center

Multisensory processing from an active sensing perspective

Biosketch

Dr. Charles Schroeder obtained his PhD in University of North Carolina, and postdoctoral fellowship at Albert Einstein College of Medicine. He is the Director of the Laboratory of Cognitive Neuroscience and Neuroimaging at the Nathan S. Kline Institute for Psychiatric Research and Professor of Psychiatry at Columbia University College of Physicians and Surgeons in New York. His research group, including the Schroeder Laboratory and affiliates, has hubs at the Nathan Kline Institute and Columbia University Medical Center in Gotham City (NYC), edged by the George Washington Bridge. He investigates the neuronal mechanisms of cognition and behavior. Specifically, his research program aims to define the neuronal circuits, cellular mechanisms and oscillatory dynamics of sensory processing, related cognitive processes such as attention, and motor influences on sensory processing and perception ("active sensing"). His research paradigms range from simple sensory encoding and discrimination to perception of language and music. His group pursues an active, direct integration of monkey and human studies, made possible by recent advances in electrode, computing and brain imaging technologies, as well as in anatomical circuit and cell structure investigation techniques. There is constant exchange between empirical and computational modeling investigations.

Pre-Conference Workshops

Friday May 19, 8:30AM to 12PM

New to IMRF this year, we are featuring two educational workshops!
For more information on these workshops, visit our website or view the abstract supplement.

Workshop 1 - Multisensory Integration and the Reproducibility Crisis

Vanderbilt Student Life Center, Meeting Rooms 1&2

Organizer: Sarah Baum (shbaum@uw.edu)

8:30 - 9:30AM - Models and mechanisms of multisensory integration (Michael Beauchamp)

9:30 - 10:30AM - Amazon Mechanical Turk: Online methods for mass data collection (John Magnotti)

11AM - 12PM - Models of multisensory integration: How and why (John Magnotti)

Workshop 2 - Bridging the Gap: From Spikes to Behavior

Vanderbilt Student Life Center, Meeting Room 3

Organizer: Antonia Thelen (thelen.antonia@gmail.com)

8:30 - 9AM - Introduction (Lorenzo Fontolan and Antonia Thelen)

9 - 9:30AM - Multifeature integration during urgent choices (Emilio Salinas)

9:30 - 10AM - Laminar Neurophysiology (Alexander Maier)

10 - 10:30AM - Bridging gaps in neuroscience: the example of illusory contours for inter-disciplinary cross-fertilization (Micah Murray)

11AM - 12PM - Moderated discussion

Opening Night Reception — May 19, 5-9PM

Country Music Hall of Fame
222 5th Ave S, Nashville, TN 37203

Cocktail hour, 5-6PM
Music and Multisensory Lecture, 6-7PM
Reception, 7-9PM

Highlights include:

Tennessee barbeque dinner

Ticketed drinks and cash bar

Live music featuring local musicians

Please use the entrance on 5th Avenue (pictured above) for the most direct access to the event.

Conference ID badges and drink tickets may be picked up beginning at 4:30PM.

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Scientific Program

Saturday, May 20

7:00 – 8:00 AM Breakfast at Student Life Center

8:00 – 10:00 AM Symposium 1

Plasticity Mechanisms of Multisensory Integration: Neurophysiological Data, Neurocomputational Modeling and Clinical Perspectives

Chairs: Mauro Ursino, Elisa Magosso and Cristino Cuppini

Speakers:

Benjamin A. Rowland - Defects in multisensory integration produced by sensory deprivation: induction and recovery

John J. Foxe - The battle of the senses: A multimodal view of multisensory integration in autism

Mauro Ursino - Mechanisms for Bayesian inference maturation in a biologically inspired neuro- computational model

Nadia Bolognini - Multisensory integration in brain-damaged patients and its relation to functional recovery

10:00 – 10:30 AM Coffee Break

Scientific Program

Saturday, May 20

10:30 AM – 12:00 PM Symposium 2

Multisensory Processes: A Balancing Act Across the Lifespan

Chair: David J. Lewkowicz

Speakers:

David J. Lewkowicz - Development of multisensory processing in infancy & early childhood

Mark T. Wallace - Development and plasticity of multisensory temporal function

Micah M. Murray - Interdependency of low-level multisensory processes and memory functions across the lifespan

Amir Amedi - The brain as a flexible sensory-independent task machine: Visual and multisensory navigation in the human brain and its dependence on visual experience

12:15 – 1:30 PM Lunch at Rand Dining Hall with a talk by Jim Gnadt, "Multisensory Funding Opportunities at NIH"

Scientific Program

Saturday, May 20

1:30 – 3:30 PM Symposium 3

Multimodal stimulation in virtual reality: Neuro-technology tools for experiments and therapy

Chair: Andrea Serino

Speakers:

Andreas Serino - Multisensory integration of bodily signals within the peripersonal space underling self experience

Michela Bassolino and Olaf Blanke - Artificial neural signals to induce embodiment: examples of cortical and peripheral stimulation

Catherine Mercier - Alterations in sensorimotor integration in acute and chronic pain

Ohmar Ahmad - The Neurotherapeutic potential of VR and animation

3:30 – 4:45 PM Poster Session 1 in the Student Life Center Board of Trust Room

4:45 – 5:45 PM Keynote Lecture
Adam Gazzaley, MD, PhD
"Technology meets neuroscience - A vision of the future of brain fitness"

6:00 – 8:00 PM Dinner at Rand Dining Hall

Scientific Program

Sunday, May 21

7:00 – 8:00 AM Breakfast at Student Life Center

8:00 – 10:00 AM Symposium 4

Should Binding and Integration be Synonymous?

Chairs: Sarah H. Baum and Ross Maddox

Speakers:

Sophie Molholm - Multisensory feature binding: Deductions from high-density electrophysiological recordings in humans

Ryan Stevenson - Does the temporal binding window actually reflect "binding"? Evidence from clinical populations

John Magnotti - Reducing playback rate of audiovisual speech leads to a surprising decrease in the McGurk effect

Jennifer Bizley - Auditory-visual integration in auditory cortex promotes auditory scene analysis via multisensory binding

10:00 – 10:30 AM Coffee Break

Scientific Program

Sunday, May 21

10:30 AM – 12:00 PM Highlighted Student Research, featuring Student Travel Award winners (see page 35)

Speakers:

Raquel London - Both power and frequency of pre-stimulus alpha oscillations predict the temporal resolution of multisensory perception on a trial-by-trial basis.

Jean-Paul Noel - Increased neural strength and reliability at the boundary of peri-personal space

Isa Rao - The neurophysiological correlates of the rubber hand illusion: effects on evoked potentials and event-related oscillations

David Murphy - Eye movement-related eardrum oscillations (EMREOs) suggest visual-auditory spatial integration begins in the auditory periphery

Meaghan McManus - Linear vection is enhanced by conflict between visual and non-visual cues to orientation

12:15 – 1:30 PM Lunch and Business Meeting at Rand Dining Hall

Scientific Program

Sunday, May 21

1:30 – 3:30 PM Symposium 5

Supramodality and Cross-Modal Plasticity in Blindness: Their Balance and the Implications for Rehabilitation

Chairs: Emiliano Ricciardi, Olivier Collignon, and Ella Striem-Amit

Speakers:

Emiliano Ricciardi - Supramodality and cross-modal plasticity as the "yin and yang" of (the blind) brain development

Olivier Collignon - How input modality and visual experience affect the functional response of the "visual" cortex

Ella Striem-Amit - Early sensory cortices in sensory deprivation – what remains of the original organization?

Monica Gori - Multisensory integration development for rehabilitation

Łukasz Bola - Task-specific reorganization of the auditory cortex in deaf humans

3:30 – 4:45 PM Poster Session 2 in the Student Life Center Board of Trust Room

4:45 – 5:45 PM Founder's Lecture
Charles E. Schroeder, PhD
"Multisensory processing from an active sensing perspective"

7:00 – 11:00 PM Gala Dinner at Marathon Music Works

Gala Dinner — May 21, 7-11PM

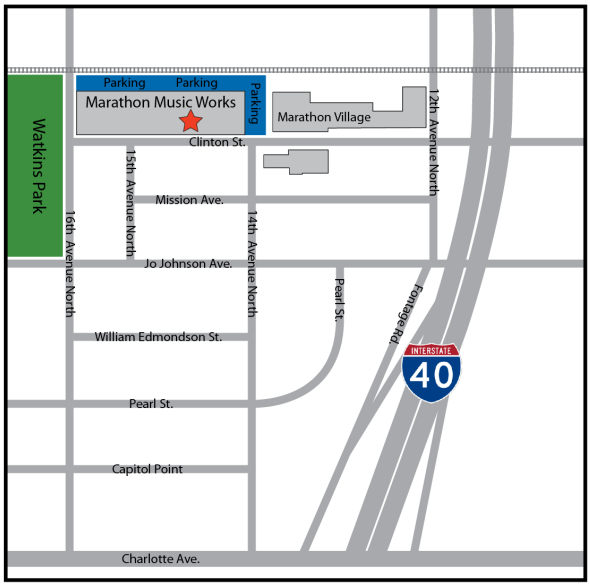
Marathon Music Works
1402 Clinton St, Nashville, TN 37203

Highlights include:

Social reception with open bar

Dinner buffet with local flavors

Live Music In the Round “Nashville Style” featuring Local Songwriters



Map to the venue

Scientific Program

Monday, May 22

7:00 – 8:00 AM Breakfast at Student Life Center

8:00 – 10:00 AM Symposium 6

The Development of Multisensory Space in Early Life: Perception, Integration and Attention

Chairs: Dorothy Cowie and Andrew J. Bremner

Speakers:

Giulia Orioli - Effects of auditory trajectories (towards or away from the observer) on visual ERPs in 5-month-old human infants

Rhiannon Thomas - Multisensory attention in infancy and childhood: Exogenous crossmodal cuing effects between touch and vision in brain and behavior

Dorothy Cowie – Multisensory contributions to body awareness in childhood

James Negen - Learning Audio-Visual Cue Combination in Late Childhood via Feedback

Giulia Cappagli - Multisensory development of spatial localization skills in sighted and visually impaired children

10:00 – 10:30 AM Coffee Break

Scientific Program

Monday, May 22

10:30 AM – 12:00 PM Highlighted Research

Speakers:

Qi Wang - Correlation between EEG and active haptic sensing implicates the visual cortex in tactile decision making

Chrysa Retsa - Cross-modal activation of visual cortices depends on auditory selective attention

David Hairston - Real-world neuroimaging: Technologies for moving neuroscience beyond the laboratory

Lars Boenke - Reframing variability: From nuisance to an aid to understand complex systems dynamics. Evidence from auditory, visual, and audiovisual timing tasks and simulations.

Krish Sathian - Processing of sound symbolic crossmodal correspondences

Albert Powers - Hallucinations result from overweighting of perceptual priors

12:15 – 1:30 PM Lunch at Rand Dining Hall

Scientific Program

Monday, May 22

1:30 – 3:30 PM Symposium 7

Crossmodal Plasticity in the Auditory Cortex Induced by Sensory Deprivation during Development and Adulthood

Chair: Brian Allman

Speakers:

Anu Sharma - Crossmodal plasticity in developmental and age-related hearing loss

Brian Allman - Crossmodal plasticity in auditory, visual and multisensory cortical areas following noise-induced hearing loss

Hey-Kyoung Lee - Crossmodal plasticity in auditory cortex circuit

Stephen Lomber - A causal link between crossmodal reorganization and behavior

3:30 – 4:45 PM Poster Session 3 in the Student Life Center Board of Trust Room

4:45 – 5:00 PM Concluding Remarks

Poster Sessions, Student Life Center Board of Trust Room

Poster Session 1 — Saturday May 20, 3:30 – 4:45 PM

Poster	Presenter	Title
101	Lars Boenke	Multi-modal ongoing activity modulation in temporal cross-modalities adaptation of audition and vision
102	Janet Bultitude	Impaired localisation and visuo-motor integration in complex regional pain syndrome
103	Fumio Mizuno	The system to provide a user an artificial oculomotor function to control directions of gaze and zooming-in/out of both of eyes independently
104	Brenda Malcolm	Cognitive and sensory load modulates gait and electrocortical activity during treadmill walking
105	Vanessa Harrar	Audio-visual multiple object tracking
106	Patrick Bruns	Repeated (but not incremental) training enhances cross-modal recalibration in the ventriloquism aftereffect
107	Jérémy Roque	Investigating the multisensory perception of freshness in beverages: The case of audio-visual interactions
108	Rebecca Barnstaple	Dance and neurorehabilitation quantified using neuroimaging: rsEEG & fMRI
109	Meike Scheller	Haptic information facilitates audiovisual size perception in children but not adults: an ERP study in support of the developmental cross-calibration theory
110	Sharon Chee	Can lexical retuning of perceived segments transfer across modalities?
111	Luca Brayda	Interaction and manipulation of dynamical virtual content by visually impaired people
112	Simon Lacey	Preferences for surface and structural properties in mental imagery: A multisensory organizing principle
113	Lindsey Fraser	Asymmetric bias in perceived finger orientation across hands in right-handers, but not left-handers
114	Walter Setti	Audio spatial memory and visual experience
115	Jose Herrero	Intracranial EEG signatures of the Sound-Induced Flash Illusion
116	Aaron Nidiffer	Audiovisual stimulus correlation drives multisensory perceptual decisions
117	David Simon	Integration and error processing of asynchronous audiovisual speech

Poster Sessions, Student Life Center Board of Trust Room

Poster Session 1 — Saturday May 20, 3:30 – 4:45 PM

Poster	Presenter	Title
118	Tiziana Vercillo	Action–effect contingency modulates readiness potentials
119	Tiziana Vercillo	Spatial modulation of sensory-motor processing in early deaf individuals
120	Jemaine Stacey	The relationship between eye movements and the McGurk effect when stimuli are degraded in noise
121	Hyun-Woong Kim	Prior information on audiovisual correspondence affects visual perception outside of awareness
122	Stephen Gordon	The ventriloquist aftereffect in the cat
123	Olga Escanilla	Chemosensory convergence in the brainstem: retronasal odorants modulate responses of taste cells in the parabrachial nucleus of the pons
124	Thijs van Laarhoven	Temporal and identity prediction in visual-auditory events: Electrophysiological evidence from stimulus omissions
125	Tristan Loria	Tossing out vision: Modulation of audio-visual integration during rapid actions
126	Vivian Ciaramitaro	Crossmodal attention alters contrast sensitivity for amplitude and frequency modulated auditory information via a mechanism of contrast gain
127	David Alais	Behavioural oscillations of perceptual sensitivity and criterion in vision and audition
128	Carmel Levitan	Multisensory spatial displacement of a visual illusory flash by auditory cues
129	Wataru Teramoto	Behavioral evidence for shared representations of peripersonal space between self and others
130	Alexandre Medina	Effects of developmental alcohol exposure on neuronal plasticity and multisensory integration in the cortex
131	Luke Shaw	The race may be over: Behavior and neurophysiology show modality “switch-costs” give rise to apparent redundant target effect
132	Maria Stuckenberg	Stimulus probability modulates visually induced auditory expectations whereas task requirements have only minor impact
133	Fang Jiang	Face discrimination in deaf and hearing individuals
134	John Plass	Monitoring of prediction errors facilitates cognition in action
135	Jacqunae Mays	Effect of speaker familiarity on perception of the McGurk effect

Poster Sessions, Student Life Center Board of Trust Room

Poster Session 1 — Saturday May 20, 3:30 – 4:45 PM

Poster	Presenter	Title
136	Shlomit Beker	Components of cross-sensory oscillations in the human brain
137	Yuna Kwak	Bisensory association between sound and shape
138	Ksander de Winkel	Causal inference in the perception of verticality
139	Hannah Block	Visuo-proprioceptive realignment in hand perception associated with modality-specific changes in motor corticospinal excitability
140	Anupama Nair	Startling sounds presented under dark adaptation evoke synesthetic experiences in non-synesthetes
141	Michael Schutz	The crucial (yet easily overlooked) role of amplitude envelope in audio-visual integration
142	EunHee Chang	A new approach to develop haptic feedback based on multisensory integration
143	Yasmeenah Elzein	Background motion caused by self-motion does not cause motion-induced blindness
144	Michael Crosse	Investigating the Developmental Course of Multisensory Speech Integration using a Hierarchical EEG Framework
145	EunSeon Ahn	Lipreading primes auditory cortical networks prior to speech onset: evidence from invasive neural recordings in humans
146	Jared Medina	Disembodied touch: A mirror-induced illusion
147	Shuichi Sakamoto	Enhancing the effect of full-body vibration generated from audio signal on perceived reality
148	Doris Chow	What makes a shape /baba/ to a child versus an adult? Changing contributions from shape contour, protrusion number, and protrusion size in sound-
149	Ying Fang	The effects of modality switching and maintaining on visual and auditory detection
150	Alexander Dakos	The timing of multisensory enhancements in physiological response reliability
151	Lizabeth Romanksi	Responses of prefrontal neurons during enhancement of auditory discrimination with face distractors in nonhuman primates
152	Brigitte Röder	Crossmodal learning mechanisms change from development to adulthood

Poster Sessions, Student Life Center Board of Trust Room

Poster Session 2 — Sunday May 21, 3:30 – 4:45 PM

Poster	Presenter	Title
201	Manuel Mercier	Electrophysiological evidence for multisensory integration contribution to decision making
202	Yang Liu	A high-level cognitive prosthesis for blind people
203	Luke Miller	Sensing the world through a hand-held tool
204	James Dias	Temporal processing of audio-visual speech as regulated by cortical oscillations in the alpha frequency range
205	Adrian Rakochi	Peripherally-presented sounds facilitate early visual processing of spatially aligned visual targets: evidence from intracranial electrophysiological record-
206	Corinne Holmes	Embodied geometry: The role of development on perceived angular magnitude across vision and haptics
207	Hélène Turpin	Premature birth and perinatal risk impact auditory object discrimination during late childhood
208	Céclie Juan	Short latencies and integrative responses to naturalistic stimuli in the primate posterior cingulate cortex
209	Brynna Heflin	Increased tendency for proximal proprioceptive errors in limb bisection for individuals with autism spectrum disorder is not mitigated by tool use
210	Pawel Matusz	Multi-pronged effects of typical experience on multisensory object processing: Insights from selective attention and memory
211	Giulia Orioli	Peripersonal space boundaries in newborns
212	Lihan Chen	Differential attentional mechanisms for tactile subtizing and numerosity estimation
213	Lihan Chen	Cross-modal freezing effect: Evidence from eye tracking on audiovisual integration
214	Lihan Chen	Temporal reference and crossmodal assimilation
215	Danja Porada	One, two, three–It is quantity that counts: Multisensory benefit on odor object formation increases with the number of stimulated senses
216	Adele Diederich	Prior knowledge of spatiotemporal configuration facilitates crossmodal response
217	Danielle Briggs	The interdependence of visual salience and audiovisual synchrony on auditory contrast detection

Poster Sessions, Student Life Center Board of Trust Room

Poster Session 2 — Sunday May 21, 3:30 – 4:45 PM

Poster	Presenter	Title
218	Alexander Tu	The impact of singing on multisensory integration in children with autism spectrum disorder
219	Julie Conrad	Perceptual training in children with autism spectrum disorder: A proposed study utilizing single case research design
220	Pooja Santapuram	Looking predicts vocal complexity and language development in infants at risk for ASD
221	Wayne Kuang	Correlations between multisensory integration and sensory responsiveness in children with and without autism spectrum disorder
222	Monica Gori	Building auditory spatial metrics elicits stronger early occipital response in sighted than in blind individuals
223	Cristiano Cuppini	Distinct but not independent peripersonal space representations around different body parts: A neural network model
224	Ivan Patané	My peri-personal property: Exploring the effect of object ownership on peripersonal space
225	Stephanie Boyle	Neural mechanisms underlying audio-visual crossmodal associations
226	Lucy Lai	Contextual determinants of cue binding or separation in multisensory time perception
227	Brendan Stanley	The developmental trajectory of auditory–tactile simultaneity perception
228	Ruxandra Tivadar	Sounds facilitate visual completion
229	Ryan Morrill	Visual modulation of deep layer neurons in mouse auditory cortex
230	Kaian Unwalla	The critical role of vestibular inputs in tactile remapping
231	Yi-Chuan Chen	Comparing audiovisual semantic interactions between linguistic and non-linguistic stimuli
232	Leslie Kwakye	An electroencephalography investigation of the effects of attention on cross-modal temporal acuity
233	Boyer D. Winters	Dynamic cortical interactions mediate crossmodal object recognition in rats
234	Carlos Carrasco	Age related changes in sensory-motor processing
235	Francesca Sorgini	Vibrotactile stimulation of fingertips via tactile displays affects the perceived surface and shape properties of objects

Poster Sessions, Student Life Center Board of Trust Room

Poster Session 2 — Sunday May 21, 3:30 – 4:45 PM

Poster	Presenter	Title
236	Lindsey Kishline	Influence of spatial congruence in the sound-induced flash illusion using competing sounds
237	Robert Keys	Visuotactile synchrony perception in own-body contexts
238	Nathan Van der Stoep	Audiovisual integration in the depth dimension: An asymmetrical effect of distance on the temporal profile of multisensory gain and binding
239	Cesare Parise	Audiovisual integration of ON and OFF signals
240	Josh Dorsi	Audio-tactile speech training provides sustained benefits for perception of degraded auditory speech
241	Ambra Ferrari	The role of endogenous modality-specific attention in multisensory integration
242	Ana Francisco	Cross-sensory prediction in ASD
243	Ben Stettler	Detection and integration of auditory and visual signals: Comparing typical and high Autism Spectrum Quotient (ASQ) performance.
244	Minsun Park	Audiovisual congruence of adapting stimuli facilitates visual motion aftereffect
245	Johannes Rennig	Simultaneous measurements of BOLD fMRI activity in the Superior Temporal Sulcus and behavior during perception of the McGurk effect
246	Brianna Leonardo	Do global or local features make an abstract shape appear more “baba” or “kiki”?
247	Jennifer Campos	Multisensory self-motion perception in healthy older and younger adults
248	Blake Butler	Auditory cortical projections to the superior colliculus are altered by early-onset hearing loss in the cat
249	Aida Davila	Investigating the utility of Phoneme-Related Potentials (PRPs) to study the development of audiovisual speech processing
250	Valeria Caruso	Reconciling discrepant codes of visual and auditory space

Poster Sessions, Student Life Center Board of Trust Room

Poster Session 3 — Monday May 22, 3:30 – 4:45 PM

Poster	Presenter	Title
301	Sara List	Which sounds mean pointed? Examining auditory-visual cross-modal correspondences using representational similarity analysis
302	Jiale Yang	Representation of sound symbolism in the infant brain: Investigation using the near-infrared spectroscopy
303	Wen Su	Modality-specific and general neural mechanisms underlying momentary lapses and enhancement of attention
304	Nora Turoman	Semantics in the multisensory brain: Insights from electrical neuroimaging
305	Lexi Crommett	Multisensory interactions in frequency sweep perception
306	Roma Shusterman	Odor concentration change detectors in the olfactory bulb
307	Souta Hidaka	Relationships between crossmodal correspondences and autistic traits in typically developing adults
308	Yuqi Liu	Two mechanisms for shifts in perceived limb position in the mirror box illusion
309	Aisling O'Sullivan	Multisensory effects in natural audiovisual speech processing are reflected in EEG predictions
310	Silvia Convento	State-dependent influences of somatosensory cortex on audition
311	Monica Gori	Crossmodal correspondences between audition and vision in children
312	Yi-Chuan Chen	Reduced tactile modulation of visual event perception during development
313	Jane Aspell	Chronic pain reduction with a multisensory 'out of body' illusion
314	Georgiana Juravle	Seeing what you will feel: On the relationship between sensory priors and movement kinematics
315	Rebecca Hirst	A meta-analysis of the Colavita effect: Do visual stimuli overshadow auditory targets in children and adults
316	Jacob Feldman	The relation between multisensory integration, communication and autism symptomatology: A meta-analysis
317	Sarah Edmunds	Temporal facilitation of audiovisual speech processing in young children with autism spectrum disorder

Poster Sessions, Student Life Center Board of Trust Room

Poster Session 3 — Monday May 22, 3:30 – 4:45 PM

Poster	Presenter	Title
318	Stephanie Badde	Effect of prior knowledge on localization of tactile stimulation
319	Yaseen Jamal	Interactions between auditory elevation, auditory pitch and visual elevation during multisensory perception
320	Sara Finocchietti	Visual experience and spatial reference frames for sound localization
321	Steven W. McNair	Pre-stimulus influences on auditory perception and decision-making in healthy ageing
322	Hans Colonius	Time window of integration depends on the reliability of sensory inputs
323	Charlotte Verfaille	Does CRPS impair visuo-motor coordination in peripersonal space?
324	Michael Crosse	Impaired development of audiovisual integration in autism and the effects of modality switching
325	Ashley Symons	The role of temporal prediction in multisensory emotion perception
326	Marcia Grabowecky	Amplitude-modulated sounds reduce peripheral flicker-detection thresholds
327	Max Smith	Using rotational apparent motion aftereffects to characterize influences of audiovisual dynamics on motion perception
328	Norman Hendrich	Visual-tactile integration in solving 3D puzzles
329	Stefanie Bodison	Investigating changes in the neural mechanisms of sensorimotor integration in children with autism following a 20-week intervention: A pilot feasibility
330	Yeseul Kim	Perceptual deficits in audiovisual temporal integration in schizophrenia
331	Jessica Ross	Dorsal and ventral premotor contributions to auditory timing: A continuous theta-burst stimulation study
332	Jose Herrero	Oscillatory tracking of visual speech by auditory cortex: An intracranial EEG study
333	Gérard Loqet	Electrical neuroimaging bridges non-human primate models and clinical research
334	Steve Keller	The sound of salsa: Enhancing the evaluation of piquancy by means of a customised crossmodally congruent soundtrack

Poster Sessions, Student Life Center Board of Trust Room

Poster Session 3 — Monday May 22, 3:30 – 4:45 PM

Poster	Presenter	Title
335	Alessia Tonelli	Investigate echolocation with sighted people
336	Basil Wahn	Shared or distinct: Is attentional resource allocation across sensory modalities task-dependent?
337	Sarah D'Amour	Full-body size perception in healthy adults depends on viewpoint
338	Hazel Anderson	Exploring the relationship between synaesthesia, susceptibility to hypnosis and mental imagery
339	Ross Muers	Functional imaging of audio-visual selective attention in the monkey brain: How do lapses in performance affect brain modulations and the correspondence to humans?
340	Camille Vanderclausen	Measuring the sensitivity of tactile temporal order judgment in sighted and blind participants using the PSI method
341	Jena McDaniel	Auditory-only versus audiovisual word learning in children with cochlear implants
342	Maria Bianca Amadeo	Impact of years of blindness on neural circuits underlying spatial perception
345	Daiki Yamasaki	Looming sounds modulate visual size perception depending on the audiovisual spatial consistency
346	Ashley Schormans	Cortical consequences of adult-onset partial hearing loss on audiovisual temporal processing and synchrony perception
347	Heather Bortfeld	Infant sensitivity to audiovisual timing driven by articulator-speech sound relationship
349	Silvio Ionta	Mirror, mirror on the wall, is that me at all?
350	Shachar Maidenbaum	When vision lies: Non-visual and visual navigation under different reliability levels

Student Travel Award Winners

We would like to thank Plexon and Brain Vision for sponsoring student travel awards for IMRF 2017! Each student received $500 and will be showcased in the student talk session on Sunday, May 21st.

The student travel award winners are:

Raquel London, *Ghent University*

Meaghan McManus, *York University*

David L. K. Murphy, *Duke University*

Isa Rao, *University of Glasgow*