10TH ANNUAL MEETING

Society for the Neurobiology of Language

AUGUST 16 - 18 **2018** QUEBEC CITY, CANADA

SCIENTIFIC PROGRAM

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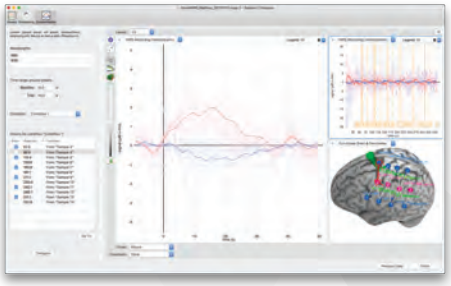

Welcome to the Tenth Annual Meeting of the Society for the Neurobiology of Language

HAPPY ANNIVERSARY! The Society for the Neurobiology of Language has been thriving and growing since the first meeting in Chicago in 2009, and it is time to celebrate! This year we expanded the meeting to three whole days, to accommodate an amazing program, featuring four keynote lectures (**Robert Zatorre**, **Dorothee Saur**, **Morten Christiansen**, and **Julie Fiez**), talks by our Early Career (**Bharath Chandrasekaran** and **Pascale Tremblay**) and Distinguished Career (**Steven Small**) awardees, and a panel discussion about the past, present, and future of our field (moderated by **Sophie Scott**). In addition to these special events, our scientific program features three slide sessions and five poster sessions – each preceded by a poster slam where eight selected presenters highlight their findings in one minute (one clap for each!). The evening before the meeting, we are hosting a public lecture (by **Robert Laforce** and **Noémie Auclair-Ouellet**) focused on neurodegenerative disorders of language, targeting the local French-speaking people of Québec. The goal of this new initiative is to raise awareness to issues related to the neurobiology of language among the population of the host city, and to disseminate the products of research in our field to the general public.

Our keynote speakers will explore the neurobiology of language from the perspectives of language evolution, neural plasticity, recovery of the language pathways after stroke, and the reading brain. This 10th anniversary meeting is an excellent opportunity to take stock of the achievements within our field and to discuss the challenges and goals for the next 10 years – bring your questions and join the panel discussion with our past SNL chairs on Saturday morning. For all sessions, we have left plenty of room for lively discussions, and I encourage speakers and session chairs to call on junior scientists to ask the first questions.

Please join us for the opening night reception at the fabulous Musée national des beaux-arts du Québec (a lovely 15-minute walk from the Convention Centre) where you will be treated to Québec traditional music while enjoying excellent Canadian cuisine. **For student and postdoctoral researchers**, we have set up a networking opportunity for you to meet each other: Look for the "Gotta Catch 'Em All: Scientist Edition" worksheet at the welcome table and have fun (there will be prizes)! Please also join us in celebrating our 10th anniversary with Prosecco and cake at the Friday evening social hour.

I would like to thank the Program Committee for putting together an exciting scientific program: Manuel Carreiras, Jim Magnuson, Clara Martin, with special thanks to Michal Ben-Shachar as Chair of the Program Committee, and to Pascale Tremblay as Head of the local organizers. Shauney Wilson, Shawna Lampkin, and their team also deserve a round of applause for their skill in running this meeting. Thanks also to all who took time to review and provide feedback for the abstract submissions.

Finally, I am thrilled to announce that our Society will be joining with MIT Press to launch a new open access journal titled Neurobiology of Language. Please talk with Steve Small, Kate Watkins, or any board member to find out how SNL members can get involved and benefit from reduced publications costs. Come to the business meeting at the end of the conference to learn more!

Karen Emmorey
Chair, Society for the Neurobiology of Language

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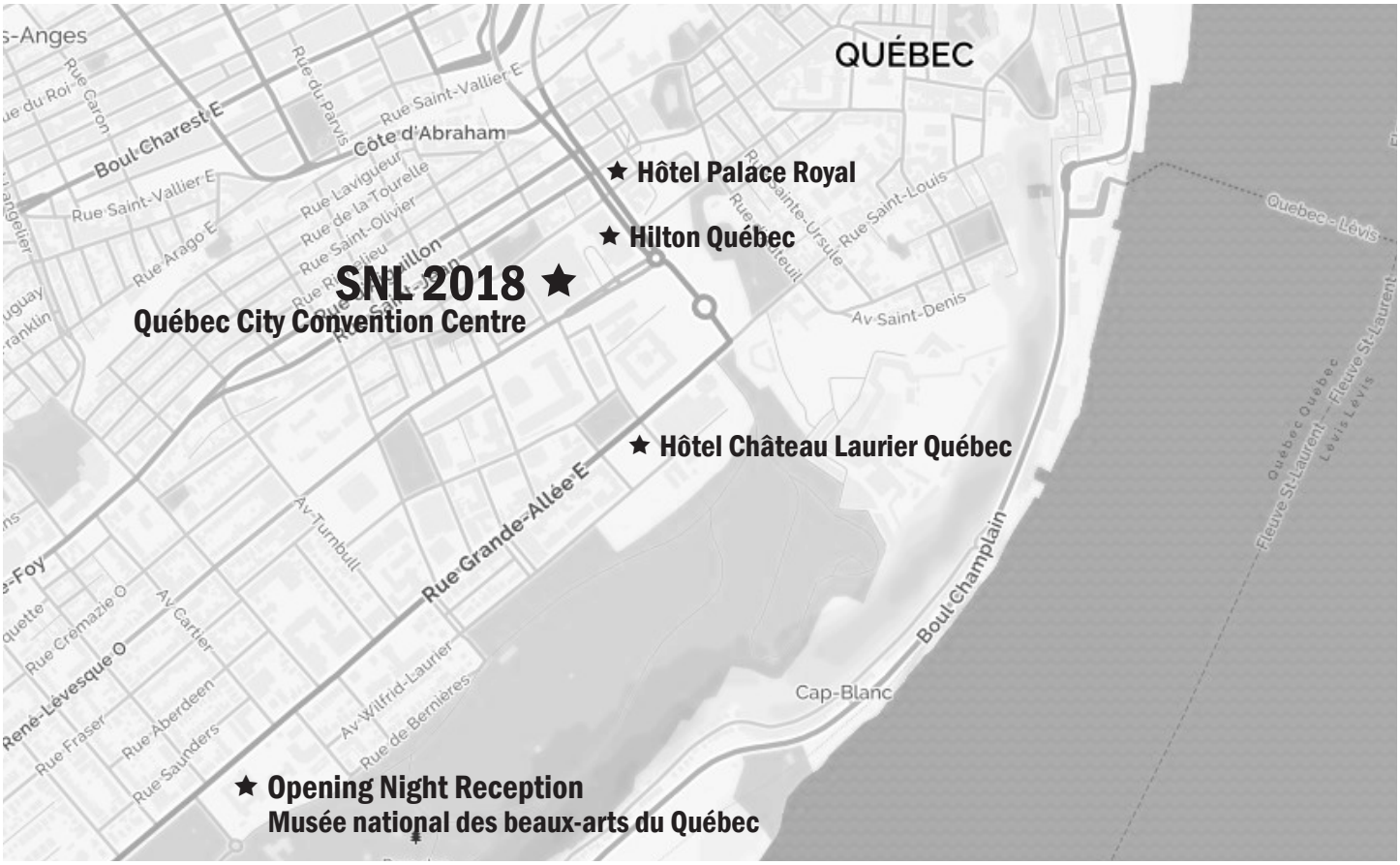
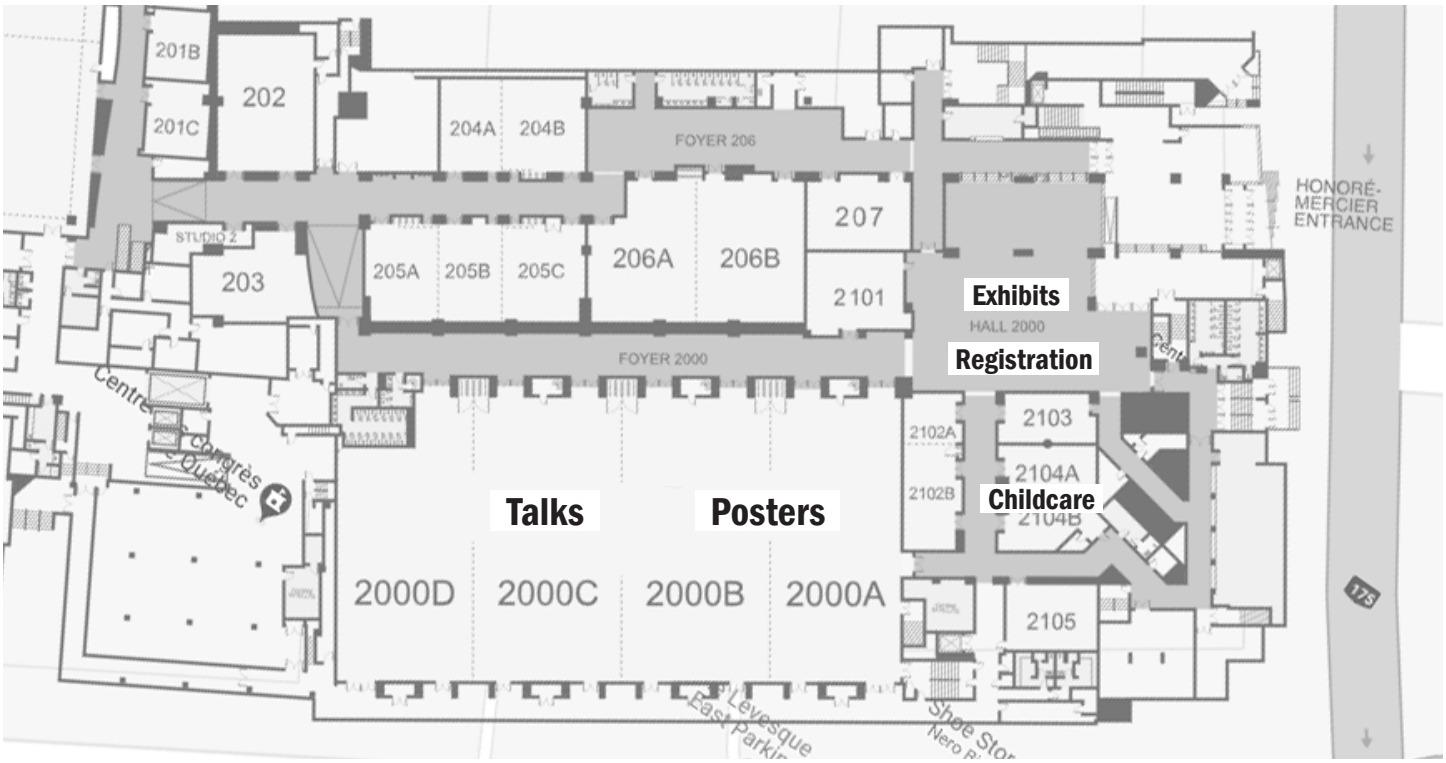
Québec City Map



Québec City Convention Centre - Level 2



Schedule of Events

Wednesday, August 15

8:30 am – 4:30 pm	Satellite Symposium at Domaine Cataraqui *Offsite: 2141, chemin Saint-Louis*
6:30 – 7:45 pm	Public Lecture *Room 2000C*

Thursday, August 16

7:00 am – 5:45 pm	Meeting Registration *Hall 2000*
7:45 – 8:45 am	Continental Breakfast *Hall 2000*
8:00 am – 5:00 pm	Exhibits Open *Hall 2000*
8:45 – 9:00 am	Opening Remarks: Karen Emmorey *Room 2000C*
9:00 – 10:00 am	**Keynote Lecture: Robert Zatorre** Predispositions and Plasticity in Auditory-Motor Learning: Hemispheric Asymmetries *Room 2000C*
10:00– 10:15 am	Poster Slam Session A *Room 2000C*
10:15 – 10:45 am	Coffee Break *Hall 2000*
10:15 am – 12:00 pm	Poster Session A *Room 2000AB*
12:00 – 1:30 pm	Lunch (on your own)
1:30 – 2:50 pm	Slide Session A *Room 2000C*
2:50 – 3:05 pm	Poster Slam Session B *Room 2000C*
3:05 – 3:35 pm	Coffee Break *Hall 2000*
3:05 – 4:50 pm	Poster Session B *Room 2000AB*
4:50 – 5:35 pm	**Distinguished Career Award: Steven L. Small** *Room 2000C*
6:30 – 9:30 pm	**Opening Night Reception** at the Musée national des beaux-arts du Québec *Offsite: 179 Grande Allée Ouest*

Friday, August 17

7:00 am – 6:30 pm	Meeting Registration *Hall 2000*
7:30 – 8:30 am	Continental Breakfast, *Hall 2000*
8:00 am – 6:30 pm	Exhibits Open *Hall 2000*
8:30 – 9:30 am	**Keynote Lecture: Dorothee Saur** Recovery from Aphasia – Insights into Plasticity of the Language Network *Room 2000C*
9:30 – 10:15 am	**Early Career Awards: Bharath Chandrasekaran and Pascale Tremblay** *Room 2000C*
10:15 – 10:30 am	Poster Slam Session C *Room 2000C*
10:30 – 11:00 am	Coffee Break *Hall 2000*
10:30 am – 12:15 pm	Poster Session C *Room 2000AB*
12:15 – 1:40 pm	Lunch (on your own)
1:40 – 3:00 pm	Slide Session B *Room 2000C*
3:00 – 3:30 pm	Coffee Break *Hall 2000*
3:30 – 4:30 pm	**Keynote Lecture: Morten H. Christiansen** Language Evolution through the Bottleneck: From Milliseconds to Millennia *Room 2000C*
4:30 – 4:45 pm	Poster Slam Session D *Room 2000C*
4:45 – 6:30 pm	Poster Session D and Social Hour *Room 2000AB*

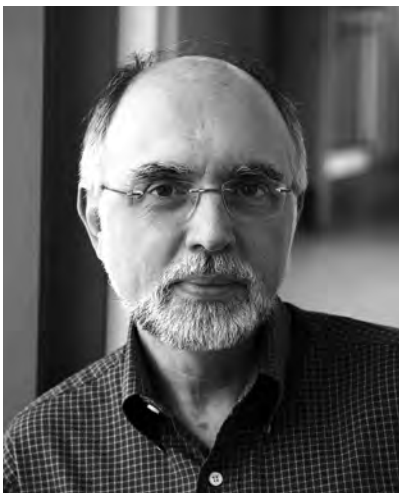
Saturday, August 18

7:30 am – 5:30 pm	Meeting Registration *Hall 2000*
7:30 – 8:30 am	Continental Breakfast *Hall 2000*
8:00 am – 3:30 pm	Exhibits Open *Hall 2000*
8:30 – 10:30 am	**Panel: Neurobiology of Language: Past, Present and Future** *Room 2000C*
10:30 – 11:00 am	Coffee Break *Hall 2000*
11:00 am – 12:20 pm	Slide Session C *Room 2000C*
12:20 – 12:30 pm	NSF Funding Opportunities: **Uri Hasson** *Room 2000C*
12:20 – 1:45 pm	Lunch (on your own)
1:45 – 2:45 pm	**Keynote Lecture: Julie Fiez** How Does the Brain Teach Itself to Read *Room 2000C*
2:45 – 3:00 pm	Poster Slam Session E *Room 2000C*
3:00 – 3:30 pm	Coffee Break *Hall 2000*
3:00 – 4:45 pm	Poster Session E *Room 2000AB*
4:45 – 5:30 pm	Business Meeting, Closing Remarks and Outlook to SNL 2019: Karen Emmorey and Manuel Carreiras *Room 2000C*

Keynote Lecture: Robert Zatorre

Robert Zatorre

Montreal Neurological Institute, McGill University



Robert Zatorre is a cognitive neuroscientist at the Montreal Neurological Institute of McGill University. His principal interests relate to the neural substrate for auditory cognition, with special emphasis on two complex and characteristically human abilities: speech and music. He and his collaborators have published over 280 scientific papers on a variety of topics including pitch perception, auditory imagery, auditory-motor integration, music and emotion, perception of auditory space, and brain plasticity in the blind and the deaf. In 2005 he was named holder of a James McGill chair in Neuroscience. In 2006 he became the founding co-director of the international laboratory for Brain, Music, and Sound research (BRAMS), a unique multi-university consortium with state-of-the art facilities dedicated to the cognitive neuroscience of music. In 2011 he was awarded the IPSEN foundation prize in neuronal plasticity, and in 2013 he won the Knowles prize in hearing research from Northwestern University. He lives in Montreal with his wife and collaborator Virginia Penhune, professor of psychology at Concordia University. He tries to keep up his baroque repertoire on the organ whenever he can get a chance.

Predispositions and Plasticity in Auditory-Motor Learning: Hemispheric Asymmetries

Thursday, August 16, 9:00 – 10:00 am, Room 2000C

Chair: Pascale Tremblay, Université Laval, Québec

Our lab has focused on music as a powerful model for understanding plasticity in a human cognitive neuroscience context. This talk will present evidence that musical training modifies auditory and motor networks, and their functional and anatomical relationships, and that important asymmetries exist across the two hemispheres in these systems. We will also discuss evidence that individual differences in learning are related to functional features that may serve as predictors of later learning success. Our goal is to develop a better model of how the large-scale organization and asymmetries of auditory-motor networks relate to the experience-dependent plasticity that underlies complex skills such as playing a musical instrument, which may also have implications for speech.

Keynote Lecture: Dorothee Saur

Dorothee Saur

University of Leipzig

Dorothee Saur serves as the Vice Chair of Neurology at the Department of Neurology, University of Leipzig. Her specialty areas are vascular and cognitive neurology. Early in her career, she started studying aphasic stroke patients with functional MRI from the acute to the chronic stage after stroke. This allowed her to identify the dynamics of language reorganisation promoting recovery from aphasia. Her research combines a broad spectrum of modern neuroimaging and non-invasive brain stimulation techniques aiming to reveal key mechanisms of brain reorganization at a systems level. As a neurologist, her dedication is to answer questions derived from her daily work with patients.

Recovery from Aphasia – Insights into Plasticity of the Language Network

Friday, August 17, 8:30 – 9:30 am, Room 2000C

Chair: Michal Ben-Shachar, Bar Ilan University

The organization of language in left-lateralized large-scale networks of closely connected and interacting brain areas in the temporal, frontal and parietal lobe allows the brain to flexibly adapt when a focal lesion hits the network. On one hand, lesions to this network may be induced by non-invasive brain stimulation such as transcranial magnetic stimulation. Although the analogy to stroke lesions is not perfect, this approach allows us to study principles of network reorganisation in a controlled lesion model in healthy subjects. On the other hand, using neuroimaging in order to map the recovery process in stroke patients with aphasia represents a unique possibility to identify mechanisms of brain repair in vivo. Synthesizing these findings in a comprehensive model of language reorganisation will, hopefully, open up new perspectives in the neurorehabilitation of stroke patients with aphasia.

Keynote Lecture: Morten H. Christiansen

Morten H. Christiansen

Cornell University, Aarhus University, Haskins Laboratories

Morten H. Christiansen is the William R. Kenan, Jr. Professor of Psychology and Co-Director of the Cognitive Science Program at Cornell University as well Senior Scientist at the Haskins Labs and Professor in Cognitive Science of Language at the School of Communication and Culture and the Interacting Minds Centre at Aarhus University, Denmark. He was the Ida Cordelia Beam Distinguished Visiting Professor at the University of Iowa (2010) and Visiting Professor at the University of Hong Kong (2012). His research focuses on the interaction of biological and environmental constraints in the evolution, acquisition and processing of language. He employs a variety of methodologies, including computational modeling, corpus analyses, statistical learning, psycholinguistic experiments, and neuroimaging. Dr. Christiansen is the author of nearly 200 scientific papers and has edited four books. His newest book, Creating language: Integrating evolution, acquisition, and processing, from MIT Press (2016), provides a comprehensive overview of his work over the past two decades. He is a Fellow of the Cognitive Science Society, the Association for Psychological Science, and the Psychonomic Society. Among his awards are a Cognitive Psychology Section Award from the British Psychological Society (2013) and a Charles A. Ryskamp Research Fellowship from the American Council of Learned Societies (2006). Dr. Christiansen delivered the 2009 Nijmegen Lectures at the Max Planck Institute for Psycholinguistics, the Netherlands, and was the inaugural keynote speaker at the Edinburgh Lectures in Language Evolution, Centre for Language Evolution, University of Edinburgh, in 2017.

Language Evolution through the Bottleneck: From Milliseconds to Millennia

Friday, August 17, 3:30 – 4:30 pm, Room 2000C

Chair: Jim Magnuson, University of Connecticut

Over the past few decades, the language sciences have seen a shift toward explaining language evolution in terms of cultural evolution rather than biological adaptation. This work has demonstrated how various nonlinguistic biases amplified by cultural transmission across generations, along with pressures from interactions between individuals within each generation, may help explain many aspects of linguistic structure observable in today's languages. Language universals, on this account, are viewed as probabilistic tendencies deriving from domain-general constraints on the nature of our thought processes, our sensori-motor apparatus, socio-pragmatic factors, and cognitive limitations on learning, memory and processing. As an illustration, I discuss the possible contribution to language evolution of a fundamental constraint on processing. During normal linguistic interaction, we are faced with an immense challenge by the combined effects of rapid input, short-lived sensory memory, and severely limited sequence memory. To overcome this Now-or-Never bottleneck, language users must learn to compress and recode language input as rapidly as possible into increasingly more abstract levels of linguistic representation. I highlight some of the key implications for theories of language acquisition and processing as well as the neurobiology of language.

Keynote Lecture: Julie Fiez

Julie A. Fiez

University of Pittsburgh

Julie A. Fiez is a Professor and Chair of Psychology, and she holds appointments in the Department of Neuroscience, Department of Communication Science and Disorders, the Learning Research and Development Center, and the Center for the Neural Basis of Cognition at the University of Pittsburgh. She received her PhD in Neuroscience from Washington University in 1992, completed a postdoctoral fellowship at the University of Iowa, and then joined the Department of Psychology at the University of Pittsburgh in 1997. Her research uses behavioral, neuropsychological, neurophysiological, and neuroimaging methods to examine the neural basis of speech, language, reading, working memory, and learning in healthy and patient populations. Dr. Fiez has received honorary awards for her research accomplishments from the Society for Human Brain Mapping and the American Psychological Association.

How does the brain teach itself to read?

Saturday, August 18, 1:45 – 2:45 pm, Room 2000C

Chair: Clara Martin, Basque Center on Cognition, Brain and Language (BCBL)

Reading is a culturally recent innovation and so it is unlikely the brain is biologically hard-wired with specialized areas devoted to this skill. This means that humans must somehow use explicit instruction and reading practice to drive neural change. For successful learners, the result is a brain in which visual word recognition occurs automatically. How does this happen? In this talk, I consider a key brain region that supports visual word recognition — the "visual word form area" — and the ways in which reading experience shapes its location and functional interactions with a broader speech and language network. I conclude by considering how the work may inform intervention efforts for struggling readers.

Panel Discussion: Neurobiology of Language: Past, Present and Future

Saturday, August 18, 2018, 8:30 – 10:30 am,
Room 2000C

Moderator: Sophie Scott

Panelists: Greig de Zubicaray, Nina Dronkers, Gregory Hickok, Jeffrey Binder, Lorraine K. Tyler, Peter Hagoort, Karen Emmorey, Steven Small, Pascale Tremblay

A distinguished panel of Chairs and Founders of the Society will take a broad look at the field and its evolution over the past decade. The 10th meeting of the Society is an opportunity to take stock of what our field has achieved in the past decade and discuss the goals and aspirations for the next 10 years. Prepare your questions for the panelists and join us for this unique interactive event.

Sophie Scott
University College London

Greig de Zubicaray
Queensland University of Technology
SNL Chair 2015-2016

Nina Dronkers
VA Northern California Health Care System and
University of California, Davis
SNL Chair 2014-2015

Gregory Hickok
University of California, Irvine
SNL Chair 2010-2011

Jeffrey Binder
Medical College of Wisconsin
SNL Chair 2012-2013

Lorraine K. Tyler
University of Cambridge
SNL Chair 2016-2017

Peter Hagoort
Max Planck Institute for Psycholinguistics and
Radboud University, Nijmegen
SNL Chair 2013-2014

Karen Emmorey
San Diego State University
SNL Chair 2017-2018

Steven Small
University of California, Irvine
Founder of SNL
SNL Chair 2009-2010

Pascale Tremblay
CERVO Brain Research Centre, Université Laval
Founder of SNL
Meeting Organizer 2009-2010

Including a short presentation, ***SNL in Numbers***, by Svetlana Pinet and Raphaël Fargier.

Svetlana Pinet
Johns Hopkins University

Raphaël Fargier
Aix-Marseille University

Distinguished Career Award: Steven L. Small

The Society for the Neurobiology of Language is pleased to announce the 2018 Distinguished Career Award winner: Steven L. Small.

The Distinguished Career Award is generously sponsored by *Language, Cognition and Neuroscience*.

Steven L. Small

Professor of Neurology, Neurobiology & Behavior, and Cognitive Sciences, University of California, Irvine

The career of **Steven L. Small** has been fundamentally dedicated to understanding the neurobiology of language. Dr. Small completed his undergraduate training in mathematics at Dartmouth College, his Ph.D. in computer science at the University of Maryland, and his M.D. at the University of Rochester. For his dissertation, Dr. Small built a parser, reflecting an early interest in the complex rules governing human language. A neurology residency at the University of Pittsburgh developed his understanding of the brain that engenders this ability. The unique perspective afforded by this rare combination of backgrounds has caused Dr. Small to be consistently positioned at the forefront of the study of the neurobiology of language, and led to the founding of this Society, in collaboration with Dr. Pascale Tremblay.

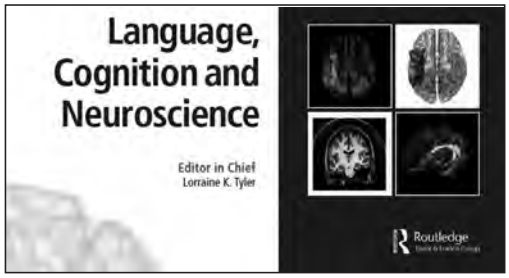
Over the past four decades, Dr. Small has made many critical scientific contributions to the neurobiology of language. These include copious work in normal language function, as well as post-stroke aphasia, and early focal brain injury. His recent work focuses on the interactions between the neural systems for controlling movement and those related to speech production and comprehension. Dr. Small's research consistently uses innovative methods to interrogate language production and processing, including multivariate structural equation models applied to observation and imitation of audiovisual speech from the level of syllables to discourse. In studies of naturalistic language comprehension, development following early stroke, and aphasia recovery, Dr. Small has used functional network analyses and graph theoretical approaches to characterize the complexity of the language system. Important advances from this work include the surprising finding of preserved network structure among language areas following pre- and peri-natal stroke. In sum, Dr. Small's scientific contributions bring us closer to understanding and modeling the neurobiology of language.

The Neurobiology of Language

Thursday, August 16, 4:50 – 5:35 pm, Room 2000C

Chair: Lorraine Tyler, University of Cambridge

The biological mechanisms of language are only beginning to be elucidated though intense interaction of behavioral and brain sciences, using advanced methods of human anatomical and physiological investigation, statistical inference, and computational modeling. This paradigm shift is not without innovation and controversy, and this talk with delve into a few examples of each.



Early Career Award: Bharath Chandrasekaran

The Society for the Neurobiology of Language is pleased to announce the 2018 Early Career Award winners: Bharath Chandrasekaran and Pascale Tremblay.

The Early Career Awards are generously sponsored by *Brain and Language*.

Bharath Chandrasekaran

Associate Professor, The University of Texas at Austin, Department of Communication Sciences & Disorders

Bharath Chandrasekaran received his Ph.D. in Integrative Neuroscience from Purdue University in 2008, and after a two-year Postdoctoral Fellowship at Northwestern University, he became an Assistant Professor in the Department of Communication Sciences and Disorders at The University of Texas at Austin, receiving tenure in 2015.

Dr. Chandrasekaran has developed two theoretical models of speech learning that are paradigm shifting. The Predictive Tuning Model argues against a corticocentric view of speech learning and proposes that top-down corticofugal connections are instrumental in selectively enhancing speech signals in challenging listening environments and during auditory learning. His dual learning systems (DLS) model proposes two dissociable cortico-striatal neural streams that are active during learning: a sound-to-rule mapping 'reflective' system, wherein processing is under conscious, deliberative control, and a sound-to-reward mapping 'reflexive' system that is not under conscious control. His most recent research examines the impact of non-invasive peripheral nerve stimulation on language learning in adults. Dr. Chandrasekaran has published 60 peer-reviewed papers (17 in the last two years), and his work was recently highlighted in Scientific American. His publications and collaborative research projects cover the entire gamut of neuroimaging approaches: EEG, fMRI, electrocorticography, neuromodulation via peripheral nerve stimulation, and near-infrared spectroscopy.

In addition to his rich research contribution, Dr. Chandrasekaran serves as the Editor-in-Chief of the Journal of Speech, Language, and Hearing Research (Speech section), and he is a standing member of the NIH Language and Communication (LCOM) panel. During his early career, Dr. Chandrasekaran has demonstrated continued excellence in research and is an exceptional academic citizen.

Corticostriatal Systems in Speech Categorization

Friday, August 17, 9:30 – 9:55 am, Room 2000C

Chair: Karen Emmorey, San Diego State University

Speech sounds are multidimensional, acoustically variable, and temporally ephemeral. Despite the enormous computational challenge, native speech perception is rapid and automatic. Over the last decade, we have made substantial progress in understanding the cortical mechanisms underlying mapping of speech onto meaning (ventral pathway) and articulation (dorsal pathway). The dorsal and ventral streams are useful points of reference to understand the processing of native speech signals. The primary goal of this talk is to elucidate mechanisms underlying how novel speech categories are acquired and represented in the mature brain. I will discuss a novel theoretical framework, the dual-learning systems (DLS) model that characterizes the neurobiology of two complementary corticostriatal streams involved in **sound-to-rule** and **sound-to-reward** mapping. I test the premise that temporal lobe circuits are trained by the dual corticostriatal circuits to incorporate dimensional rules (via the sound-to-rule stream), multidimensional integration (via the sound-to-reward stream), ultimately leading to automatic, and abstract neural representations related to categories. Our systems neuroscience approach delineates the role of multiple, functionally distinct corticostriatal loops in speech and language processing and provides a scaffolding for evaluating the impact of striatal dysfunction in individuals with communication disorders

Early Career Award: Pascale Tremblay

Pascale Tremblay

Assistant Professor, Université Laval, Québec, Canada

Pascale Tremblay received her Ph.D. in Communication Sciences and Disorders in 2009 from McGill University. The same year, with Dr. Steven Small, she co-founded the Society for the Neurobiology of Language. She organized the Society´s first two meetings in Chicago (2009) and in San Diego (2010), and later remained involved with the Society as elected Treasurer from 2013 to 2016. This year she is the local organizer for the 10th anniversary meeting.

After completing two postdoctoral periods at the University of Chicago and at the Università degli Studi di Trento in Italy, she joined the Speech-language pathology program at Université Laval in 2011 as an Assistant Professor. In 2014, she became the co-director of the CINQ, a group that promotes and facilitates brain imaging research at Université Laval through diverse scientific activities. She was promoted to Associate Professor in 2016. Dr. Tremblay has made significant contributions in the areas of speech motor control, speech perception and the "language connectome," using multimodal brain imaging and non-invasive brain stimulation. She has also made significant contributions to understanding the impact of aging on the aforementioned neurobiological processes and the neural structures with which they are associated. Dr. Tremblay's productivity has been impressive, with 50 publications including 41 peer-reviewed articles (19 of which published in the past three years). She has also been successful in obtaining research funds from foundations and several funding agencies in Canada and the United States.

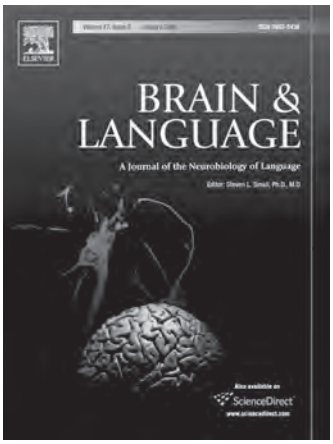
Dr. Tremblay's research interest stem from a view that speech and language are a highly evolved communicative behavior that rely on neurobiological mechanisms shared with a wide range of human behaviors. Dr. Tremblay has a strong research interest in uncovering and identifying the manner in which generalized neural functions engage specialized mechanisms associated with the flexible and complex variations that give each behavior its own identity.

Studying the Aging of Speech Functions

Friday, August 17, 9:55 – 10:15 am, Room 2000C

Chair: Karen Emmorey, San Diego State University

The ability to produce and perceive speech forms the building blocks of human communication. The complexity of the neural networks that support speech functions, and its important ties with other functional systems, is increasingly recognized in the scientific community. Yet, despite the importance of speaking, communication and social interactions, little is known about the sensorimotor and cognitive mechanisms that underlie age-related changes in speech perception and production and how they affect communication and well-being. In this talk, I will present recent work from my lab that explored the organisation of the neural speech systems, and the impact of aging on speech functions using behavioural and multimodal brain imaging techniques. I will describe the neurobiological mechanisms that underlie these changes, focusing on neuroplasticity. I will also briefly touch on our recent work on singing as a modifier of normal aging. Understanding how the speech network evolve throughout the lifespan is a timely scientific challenge that holds implications for preventive medicine and rehabilitation.



Merit Awards

The Society for the Neurobiology of Language Abstract Merit Awards are given to the students and postdocs who submitted the highest ranked abstracts.

M. Florencia Assaneo New York University, USA

Florence Bouhali University of California, San Francisco, USA

Emilie McKinnon Medical University of South Carolina, USA

Travis White-Schwoch Northwestern University, USA

Honorable Mention

Lisa Bruckert Stanford University, USA

Seyedehrezvan Farahibozorg University of Cambridge and University of Oxford, UK

Sivan Jossinger Bar-Ilan University, Israel

Han Gyol Yi University of California, San Francisco, USA

Travel Awards

This year, the Society for the Neurobiology of Language granted 23 Travel Awards. The awards, funded by the National Institutes of Health (NIH), help to cover travel and registration costs for the 2018 Society for the Neurobiology of Language Meeting in Québec City.

Through the Travel Awards, SNL aims to encourage and foster the participation of junior scientists who are members of underrepresented groups.

The 2018 Travel Award winners are:

Beatriz Barragan Arizona State University, USA

Mahsa Barzy University of Kent, UK

Jennifer Chesters Oxford University, UK

Jessica de Leon University of California, San Francisco, USA

Heather Dial The University of Texas at Austin, USA

Giulia Elli Johns Hopkins University, USA

Andrea Gajardo Vidal University College London, UK

Sandra Gisbert-Muñoz Universidad del País Vasco, Spain

Brenda Guerrero Texas A&M International University, USA

Laura Gwilliams New York University, USA

Jungna Kim CUNY, USA

Jixing Li Cornell University, USA

Diego Lorca-Puls University College London, UK

Barbara Marebwa Medical University of South Carolina, USA

Suhail Matar New York University, USA

Meghan McGarry San Diego State University, USA

Andrea Olguin University of Cambridge, UK

Lorelei Phillip University of South Carolina, USA

Alexandra Reyes Texas A&M International University, USA

Marybel Robledo Gonzalez Children's Hospital Los Angeles, USA

Zed Sevcikova Sehyr San Diego State University, USA

Neelima Wagley University of Michigan, USA

Bradley White Gallaudet University, USA

Public Lecture

Wednesday, August 15, 6:30 - 7:45 pm, Room 2000C

Chairs: Pascale Tremblay and Steven Small

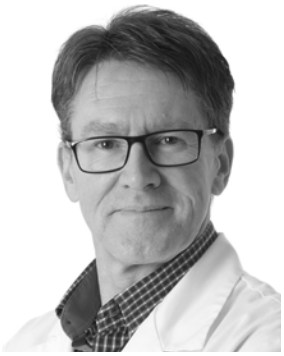
This year, for the first time, SNL will be hosting a public lecture on the neurobiology of language. The goal of this new initiative is to raise awareness to issues related to the neurobiology of language among the population of the host city, and to disseminate the products of research in our field to the general public.

This year's lecture will focus on the topic of language disorders in neurodegenerative disorders. Because this event is targeting the local population, **it will be offered in French**, the official language in Québec City. The lecture will feature two experts in neurodegenerative disorders, Dr. Robert Laforce and Dr. Joël Macoir.

Au-delà de la mémoire: Comprendre les troubles qui affectent le langage dans la démence

[Beyond memory: understanding language disorders in dementia]

Neurodegenerative disorders constitute a silent epidemic that is threatening the world's population health. Although these diseases are most often described in terms of their impact on the memory and motor systems, they are also frequently associated with speech and language disorders, a lesser known, but very important aspect of these diseases, and one that has a huge impact on the quality of life of the patients. Early screening of speech and language disorders is key to treating these symptoms, as well as raising the awareness of the patients and their families about these disorders and how to deal with them. In this lecture, the issue of language disorders in dementia will be discussed from a dual perspective, neurology and speech-language pathology, to offer a comprehensive overview of the phenomenon and related issues.



Robert Laforce, PhD, MD

Neurologist and Neuropsychologist
Associate Professor
Faculty of Medicine
Université Laval
Clinique Interdisciplinaire de Mémoire, CHU de Québec

Noémie Auclair-Ouellet, PhD

Speech-Language Pathologist, Assistant Professor, School of Communication Sciences & Disorders, McGill University, Centre for Research on Brain, Language and Music (CRBLM)

This event is organized by SNL, in collaboration with the CINQ, the CERVO Brain Research Foundation and the Québec City Convention Centre.

Fondation CERVO RECHERCHE ENSEIGNEMENT SOINS

cinq Consortium d'imagerie en neurosciences et santé mentale de Québec

CENTRE DES CONGRÈS DE QUÉBEC

Attendee Resources

ATM

There are two ATMs within the Convention Centre. They are located near the main entrance at 1000 boul. (Banque Scotia and Desjardins). The two nearest ATMs outside of the Convention Centre are a BMO, located in Hotel Palace Royal (400 m – 4 min walk), 775 Avenue Honore-Mercier, Quebec, QC G1R6A5, and an ATM at "Caisse Populaire Desjardins" (500 m – 5 min walk), 550 Rue Saint-Jean, Québec, QC G1R 3C6. In addition, there are several ATMs located in nearby financial institutions.

Abstracts

The full text of poster and slide abstracts can be found in the SNL 2018 Abstracts Book, which can be downloaded in PDF format from www.neurolang.org.

Audio-Visual

An LCD projector (e.g., for PowerPoint presentations) will be provided in Room 2000C; however, computers are NOT provided. Presenters must bring their own computers and set them up BEFORE the start of the session in which they are presenting. Presenters must arrive at Room 2000C a minimum of 30 minutes before their talk.

Business Center

The Business Center is located on Level 3 of the Québec City Convention Centre.

Business Meeting

The SNL Business Meeting is Saturday, August 18th at 4:45 pm. All SNL members are encouraged to attend. This is your opportunity to hear about SNL, ask questions, and give feedback.

Certificate of Attendance

To receive a Certificate of Attendance, please visit the Registration Desk. If you require any changes, we will be happy to email or mail a copy after the meeting (info@neurolang.org).

Childcare

Thanks to generous funding from the National Institutes of Health, SNL is pleased to offer free onsite childcare as part of the 2018 meeting! Childcare will allow you to enjoy the scientific program and time with colleagues, while the little ones create their own fun memories in Québec City.

This year, we have contracted with the highly recommended La Garderie Mobile, a Québec-based provider of professional child care services. La Garderie Mobile has a reputation for experience and professionalism. Activities will include age appropriate arts and crafts, educational activities, interactive games, and much more!

Childcare will be offered free of charge for children 0-12 years of age. Spaces are limited and will be filled on a first-come, first-served basis.

Childcare is in Room 2104. To reserve a spot, please see the Registration Desk.

Childcare Schedule

Thursday, August 16th, 8:30 am – 5:45 pm
Friday, August 17th, 8:15 am – 6:45 pm
Saturday, August 18th, 8:15 am – 5:45 pm

Code of Conduct

The Society for the Neurobiology of Language is committed to providing a safe and professional environment during our annual meeting. All attendees are expected to conduct themselves in a professional manner. It is unlawful to harass any person or employee because of that person's gender, sexual orientation or race. In addition, we require that all questions and comments to speakers and poster presenters be respectful and collegial. Verbal aggression will not be tolerated.

Contact Us

To contact us onsite, visit the Registration Desk, or send an email to info@neurolang.org. We will respond to your email at our earliest opportunity.

Copying, Printing and Office Supplies

A Business Center is located on Level 3 of the Convention Centre. The Business Center has photocopying and printing services, as well as internet workstations and cell phone charging stations. Computers are also available in the Hall 2000 Foyer.

Disclaimer

The SNL Program Committee reserves the right to make changes to the meeting program at any time without notice. This program was correct at the time of printing.

Exhibits

All Exhibits are located in Hall 2000.

Exhibit Hours

Thursday, August 16, 8:00 am – 5:00 pm
Friday, August 17, 8:00 am – 6:30 pm
Saturday, August 18, 8:00 am – 3:30 pm

Food Service

The Convention Centre is part of a complex that hosts two restaurants, Le Subtil and La Prep. In addition, light meals are available at Le Lounge restaurant and the Petit Café. A convenience store is also located in the complex. See the Restaurant section below for more information.

Complimentary food and beverage service is available to all registered attendees at the times below. All food and beverage is served in Hall 2000.

Thursday

Continental Breakfast, 7:45 – 8:45 am
Coffee Break, 10:15 – 10:45 am
Afternoon Coffee, 3:05 – 3:35 pm
Opening Night Reception, 6:30 - 9:30 pm (offsite)

Friday

Continental Breakfast, 7:30 – 8:30 am
Coffee Break, 10:30 – 11:00 am
Afternoon Coffee, 3:00 – 3:30 pm
Social Hour and Celebration, 4:45 - 6:30 pm

Saturday

Continental Breakfast, 7:30 – 8:30 am
Coffee Break, 10:30 – 11:00 am
Afternoon Coffee, 3:00 – 3:30 pm

Future Meetings

SNL 2019 will be held August 20 - 22 in Helsinki, Finland.

Guest Policy

Guests are allowed complimentary entry into one SNL session (for the purpose of seeing the poster or slide of the person they are a guest of). Guests are welcome to attend the Opening Night Reception.

Guests must register at the SNL Registration Desk upon arrival and must be accompanied by the SNL attendee. Guests must wear a badge for entrance into the session they are attending.

Interpreters

We are very pleased to provide an ASL interpreter service this year. Should you request assistance, please visit the Registration Desk.

Internet Access

Internet access is free throughout the Québec City Convention Centre. Free WiFi is also available in the Desjardins Promenade outside the Centre.

Lost & Found

Please check with the SNL Registration Desk for lost and found items.

Meeting Rooms

All general sessions (Keynotes, Award Talks, Slides, Slams, and the Panel Discussion) will be held in Room 2000C. Posters will be presented in Room 2000AB.

Messages

A bulletin board will be available for messages and job postings near the SNL Registration Desk.

Mobile Phones

Attendees are asked to silence their mobile phones when in sessions.

Musée de la Civilisation

Upon presentation of your SNL badge, receive a 15% discount from August 16th through 18th to visit the Musée de la Civilisation de Québec, 16, rue de la Barricade, Québec (QC) G1K 8W9 Canada. You can either walk to the museum or take a taxi or a city bus.

Name Badges

For security purposes, all attendees must wear their name badges to all sessions and social functions. Entrance into sessions is restricted to registered attendees only. If you misplace your name badge, please go to the Registration Desk for a replacement.

Parking

A pedestrian tunnel links the Québec City Convention Centre to four indoor parking lots. The lots are managed by Indigo and Société Parc-Auto du Québec.

Phone Charging Station

For your convenience, a phone charging station is located at the Registration Desk.

Poster Sessions

Posters are located in Room 2000AB. Poster Slam Sessions are located in Room 2000C.

Public Transportation

Get around safely and sustainably with Réseau de transport de la Capitale (RTC), Québec City's public transit system. The cost for one bus ride is $3.5 CAD. You can pay with exact change when you board the bus, or you can buy a pass that allows for unlimited travel on weekends or for five consecutive days—a very handy way to get around the city during the meeting.

There is an RTC office right across from the Convention Centre on 884 rue Saint-Joachim where you can purchase tickets and passes and gather information.

To get to the airport by bus, take Bus Route #78 offered by Réseau de transport de la Capitale (RTC), which serves the Québec City Jean Lesage International Airport, Monday through Friday (in the early morning from the terminus Les Saules and in the late afternoon to the terminus Les Saules).

Given the Convention Centre's terrific location amidst major hotels and steps away from Old Québec, walking is always a great active transportation option.

Registration

The SNL Registration Desk is located in Hall 2000 at the Québec City Convention Centre. The Registration Desk hours are:

Thursday, August 16, 7:00 am – 5:45 pm
Friday, August 17, 7:00 am – 6:30 pm
Saturday, August 18, 7:30 am – 5:30 pm

Restaurants in Québec City

Québec City is quite the foodie's paradise. The Convention Centre is just minutes away from dozens of restaurants of every kind and price range. Home to French restaurants, microbreweries, bistros, sidewalk cafés and much more, the city has earned an outstanding reputation for its innovative cuisine, fine regional products, and creative artisans and chefs.

The Convention Centre is part of a complex that has two restaurants, Le Subtil and La Prep, as well as a convenience store. In addition, light meals are available at Le Lounge restaurant and the Petit Café.

During the lunch break on Thursday, the SAGA Nomade food-truck, which is associated with the prestigious La Sagamité restaurant will be available on the Promenade Desjardins (in front of the Centre's main entrance). The food-truck features popular French Canadian cuisine, including:

- **Poutine** This popular poutine is garnished with thyme confit guinea fowl, gouda grain, onion crisp and mushroom mayonnaise.
- **Elk Burger** Served with Oka cheese, onion confit and spicy mayonnaise.
- **Deer Burrito** Garnished with mozzarella cheese, chopped salad and fresh tomatoes.
- **Bison Sandwich** Homemade smoked bison sandwich with melting Swiss cheese and truffle mayonnaise.

If you'd like to go out for lunch, but want to keep it relatively quick, we have negotiated special rates at La Scala and Café Sirocco, two popular restaurants that are within walking distance from the Convention Centre. Both are located nearby Cartier Avenue, one of the most popular streets in Québec City. Cartier Avenue is a small street with shops and restaurants that are praised by locals and visitors alike. Both La Scala and Café Sirocco have agreed to make sure that you can be in and out in an hour or less to be back in time for the meeting!

2 km from the Convention Center, Nicky Sushi is offering SNL attendees a 10% discount upon presentation of your SNL badge. Nicky Sushi is located at 311, chemin de la Canardière, Limoilou, G1L 2V1, Québec, QC.

Shipping

To ship your poster or other items home from the meeting, ask for the Concierge, located on the 3rd floor of the Québec City Convention Centre.

Sightseeing and Guided Tours of Québec City

The Concierge, located on Level 3 of the Québec City Convention Centre, can help you with making arrangements for sightseeing and guided tours, as well as recommend restaurants and shows.

Smoking

Smoking, including the use of e-cigarettes, is not permitted inside the Québec City Convention Centre. According to the provincial law, you may not smoke within nine metres of the door to a public place where smoking is usually forbidden. This rule also applies near the windows and air-intake ducts of these places.

Social Events

Opening Night Reception at the Musée national des beaux-arts du Québec

Join your colleagues on Thursday, August 16 at 6:30 pm for an elegant evening of food, drinks and stimulating conversation against the backdrop of one of Canada's premier collections of fine art. The Musée national des beaux-arts du Québec is a short, picturesque stroll from the Québec City Convention Centre.

You can walk from the Convention Centre to the Museum. The distance is 1.4 KM, about 15 minutes.

You can also take a bus to the Museum. The fastest

itinerary would be to board Bus #11 at the Convention Centre, which will take you right to the Museum.

For guests needing extra assistance in getting to the event, please contact the SNL Registration Desk.

Friday Evening Social Hour

Attendees are invited to enjoy a special Social Hour in Room 2000AB during the Friday evening poster session.

Social Media

Join the SNL discussion on Twitter!

Follow @SNLmtg for meeting information.
Follow SNL colleagues (like @kemmorey1)
Tag meeting-related tweets with #snlmtg18
Join in the conversation by searching for tweets tagged #snlmtg18

Speakers

Please report to Room 2000C at least thirty minutes before the start of your session. Upon request at the Registration Desk, a speaker ready-room with a computer will be made available for testing your presentation. See Audio-Visual.

Taxi

Taxis can be used to get around the city. The cost is the same whether you call the company or hail a cab from the street. From the YQB terminal to downtown Québec City or from downtown Québec City to YQB, a taxi ride will cost approximately $34.25 CAD (≈$28 USD, 22 Euros).

The following is a list of some of the taxi companies that serve both the airport and the city:

Taxi Coop Québec (418-525-5191)
Taxi Coop Sainte-Foy-Sillery (418-653-7777)
Taxi Laurier (418-651-2727)

Uber

Uber is available within Québec City, as well as at Québec City Jean Lesage International Airport.

Sponsors

The Society for the Neurobiology of Language thanks the following companies for their support of our 2018 meeting. Please visit our exhibitors in the Room 2000AB.

National Institutes of Health Major Sponsor

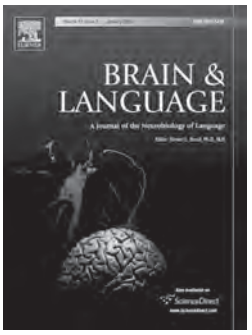
The 10th meeting of the Society for Neurobiology of Language is generously supported by the National Institutes of Health (R13 grant #DC011445). The NIH has been supporting SNL meetings by sponsoring travel grants to under-represented minorities, daycare services, sign language interpreting services and more, thus enhancing the accessibility of the meetings to various audiences. We are extremely grateful to the NIH for its generous support of SNL meetings over the years.

Rogue Research Inc. Gold Sponsor

Rogue Research, developers of the Brainsight® family of neuronavigation products, has been providing neuroscience researchers with best in class tools for over 18 years. Brainsight TMS is used in more than 500 labs and is the most popular image-guided TMS system. Our new cTMS stimulator gives you more control over the pulse shape than any other TMS device available. Our Brainsight NIRS imaging system combines our navigator with our multi-modality friendly NIRS device for combined NIRS and EEG, EMG, MRI, MEG or tDCS.

Brain & Language (Elsevier) Award Sponsor

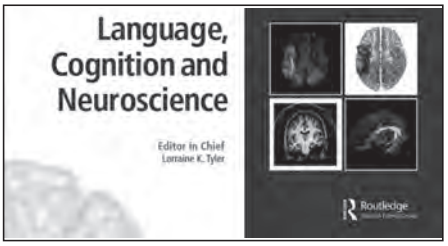
Sponsor of the SNL Early Career Awards



An interdisciplinary journal, *Brain & Language* focuses on the neurobiological mechanisms underlying human language. The journal covers the large variety of modern techniques in cognitive neuroscience, including lesion-based approaches as well as functional and structural brain imaging, electrophysiology, cellular and molecular neurobiology, genetics, and computational modeling. All articles must relate to human language and be relevant to an elaboration of its neurobiological basis. Along with an emphasis on neurobiology, journal articles are expected to take into account relevant data and theoretical perspectives from psychology and linguistics.

Language, Cognition and Neuroscience (Routledge) Award Sponsor

Sponsor of the SNL Distinguished Career Award



Language, Cognition and Neuroscience publishes high-quality papers taking an interdisciplinary approach to the study of brain and language, and promotes studies that integrate cognitive theoretical accounts of language and its neural bases. The Journal publishes both high quality, theoretically-motivated cognitive behavioural studies of language function, and papers which integrate cognitive theoretical accounts of language with its neurobiological foundations.

Local Sponsors

Québec City Business Destination

Québec City Business Destination is the city's official convention bureau. It aims to drive business tourism and facilitate North American and international conferences in Québec City. It provides support to individuals and groups interested in organizing conferences in the form of grants and consulting services. The Québec City Business Destination is in charge of the Québec City's Ambassadors' Club, founded in 1996, which offers one-stop consulting services that provide tools, resources, and financial support to local experts and industry leaders looking to organize North American and international conferences in Québec City. It brings together 150 influential and dedicated ambassadors who have organized a conference or have a viable project underway.

Quebec bio-imaging network (QBIN)

Founded in 2008, the **QBIN** is a provincial network of researchers, clinicians and students that promote and facilitate the development of high quality, innovative and collaborative research in the field of bioimaging in the province of Quebec. Funded by the "Fonds de la Recherche du Québec en Santé (FRQS)", the QBIN's mission is to support bioimaging research aimed at uncovering normal and pathological functioning in humans using human and animal models and through the development of innovative image acquisition techniques and advanced post-acquisition processing methods. The QBIN plays an important part in fostering bioimaging research in the province of Québec through various grant programs, student scholarships and support to scientific activities throughout the province including scientific talks, workshops and public lectures.

Université Laval, Office of the Vice Rector of Research and Innovation

Université Laval (UL) is the first French-language university in the Americas. Located in Québec City, UL hosts about 43,000 students each year, of which 25% are graduate students. UL is a carbon-neutral institution that is committed to sustainable development and contributing to community well-being. The UL Office of the Vice Rector of Research and Innovation bears executive responsibility for developing research and innovation activities and establishing general policies in matters of research and innovation. Finally, the Vice Rector sees to the sound management of intellectual property derived from the commercialization of university research.

Mrs. Hélène David, Minister responsible for Higher Education and for the Status of Women

Québec's parliamentary system, which is based on cooperation between the legislative body (Parliament) and the executive body (government), is modelled on the British Westminster parliamentary system. The Premier is the head of the political party with the most elected members after a general election. The Government is composed of several departments and agencies. The mission of the **Ministère de l'enseignement supérieur**, [higher education], headed by Mrs David, one of the Government's most important department, under its constituting Act, is to carry out its activities in the areas of preschool, elementary and secondary school, college and university education, research, student financial assistance, and recreation and sports. Mrs. David is a member of the Québec Liberal party.

André Drolet
Deputy for Jean-Lesage, member of the Quebec Liberal Party
Parliamentary Assistant to the Minister for Small and Medium Enterprises, Regulatory Streamlining and Regional Economic Development

Opening Night Reception

Thursday, August 16, 6:30 – 9:30 pm

Musée national des beaux-arts du Québec
179 Grande Allée Ouest
Québec (Québec) G1R 2H1, Canada

SNL invites you to our Opening Night Reception at the world-renowned Musée national des beaux-arts du Québec. Join your colleagues for an elegant evening of food, drinks and stimulating conversation against the backdrop of fine arts and Québec traditional music.

For our student and postdoctoral researchers, this year's reception will include a structured networking opportunity to develop lateral connections by meeting other students and postdocs. Look for the "Gotta Catch 'Em All: Scientist Edition" worksheet at the reception welcome table; all students and postdocs who complete it will receive a free SNL 10th anniversary notebook courtesy of the Québec Bio-Imaging Network.

Located in Québec City, a world heritage site, the Musée's four pavilions are situated in the heart of the magnificent National Battlefields Park: the Gérad Morisset pavilion (the original museum, 1933), the central pavilion (built in 1991), the Charles Baillairgé pavilion (a prison dating from 1867) and the new Pierre Lassonde pavilion, giving the Musée a street-front presence on one of the city's main arteries, the Grande Allée. Designed by OMA New York in association with Provencher_Roy, this building enabled the Musée to nearly double its floor space and to display its contemporary art, design and Inuit art collections.

The reception will be hosted in the new Pierre Lassonde pavilion, located on the marvellous Grande Allée, which is the gateway to the Musée. The building's architecture is harmoniously tiered with generous exhibition spaces: six exhibition galleries for the display of post-1960 collections, two temporary exhibition galleries and three permanent exhibition galleries (contemporary art, Inuit art and decorative arts and design).

You can walk from the Convention Centre to the Museum. The distance is 1.4 KM, this should take you about 15 minutes. You can also take a bus to the Museum. The fastest itinerary would be to take bus #11 at the convention center, which will take you right to the Museum. For guests needing extra assistance getting to the event, please contact the SNL Registration Desk.

Friday Night Social Hour and 10th Anniversary Celebration

Friday, August 17, 4:45 – 6:30 pm, Room 2000AB

Join us in the foyer for some Prosecco and cake to celebrate the 10th anniversary of our Society's annual meeting, an exciting journey than began in Chicago in 2009.

Slide Sessions

Slide Session A

Thursday, August 16, 1:30 – 2:50 pm, Room 2000C

Chair: Manuel Carreiras

Speakers: M. Florencia Assaneo, Albert Costa, Han G. Yi, Jennifer Chesters

1:30 pm

A1 Spontaneous synchronization to speech reveals neural mechanisms facilitating language learning *M. Florencia Assaneo[1], Pablo Ripolles[1], Joan Orpella[2,3,4], Ruth de Diego-Balaguer[2,3,4,5], David Poeppel[6]; [1]Department of Psychology, New York University, [2]Cognition and Brain Plasticity Unit, IDIBELL, [3]Department of Cognition, Development and Educational Psychology, University of Barcelona, [4]Institute of Neuroscience, University of Barcelona, [5]ICREA, [6]Neuroscience Department, Max-Planck Institute for Empirical Aesthetics, Frankfurt*

1:50 pm

A2 Active bilingualism as a cognitive reserve factor against cognitive decline *Albert Costa[1,2], Marco Calabria[1], Mireia Hernández[1], Gabriele Cattaneo[1], Mariona Serra[1], Anna Suades[3], Montserrat Juncadella[3], Ramon Reñé[3], Isabel Sala[4], Alberto Lleó[4], Jordi Ortiz-Gil[5], Lidia Ugas[5], Asunción Ávila[6], Isabel Gómez Ruiz[6], César Ávila[7]; [1]Center for Brain and Cognition, Pompeu Fabra University, Barcelona, Spain, [2]Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, Spain, [3]Hospital Universitari de Bellvitge, L'Hospitalet de Llobregat, Barcelona, Spain, [4]Neurology Department, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain, [5]Hospital General de Granollers, Barcelona, Spain, [6]Consorci Sanitari Integral, Barcelona, Spain, [7]Departamento de Psicología Básica, Clínica y Psicobiología, Universitat Jaume I, Castelló de la Plana, Spain*

2:10 pm

A3 Learning novel speech sounds reorganizes acoustic representations in the human superior temporal gyrus *Han G. Yi[1], Matthew K. Leonard[1], Bharath Chandrasekaran[2], Kirill V. Nourski[3], Matthew A. Howard III[3], Edward F. Chang[1]; [1]University of California, San Francisco, [2]The University of Texas at Austin, [3]The University of Iowa*

2:30 pm

A4 Neural changes related to successful stutter reduction using transcranial direct current stimulation *Jennifer Chesters[1], Riikka Mottonen[2], Kate E. Watkins[1]; [1]Department of Experimental Psychology, University Oxford, [2]School of Psychology, University of Nottingham*

Slide Session B

Friday, August 17, 1:40 – 3:00 pm, Room 2000C

Chair: Brenda Rapp

Speakers: Mante Nieuwland, Seyedehrezvan Farahibozorg, Laura Gwilliams, Beth Jefferies

1:40 pm

B1 Dissociable effects of prediction and integration during language comprehension: Evidence from a large-scale study using brain potentials *Mante Nieuwland[1,2], Dale J. Barr[3], Federica Bartolozzi[1,2], Simon Busch-Moreno[4], Emily Darley[5], David I. Donaldson[6], Heather J. Ferguson[7], Xiao Fu[4], Evelien Heyselaar[1,8], Falk Huettig[1], E. Matthew Husband[9], Aine Ito[2,9], Nina Kazanina[5], Vita Kogan[2], Zdenko Kohút[10], Eugenia Kulakova[11], Diane Mézière[2], Stephen Politzer-Ahles[9,12], Guillaume Rousselet[3], Shirley-Ann Rueschemeyer[10], Katrien Segaert[8], Jyrki Tuomainen[4], Sarah Von Grebmer Zu Wolfsthurn[5]; [1]Max Planck Institute for Psycholinguistics, Nijmegen, the Netherlands, [2]School of Philosophy, Psychology and Language Sciences, University of Edinburgh, UK, [3]Institute of Neuroscience and Psychology, University of Glasgow, UK, [4]Division of Psychology and Language Sciences, University College London, UK, [5]School of Experimental Psychology, University of Bristol, UK, [6]Psychology, Faculty of Natural Sciences, University of Stirling, UK, [7]School of Psychology, University of Kent, Canterbury, UK, [8]School of Psychology, University of Birmingham, UK, [9]Faculty of Linguistics, Philology & Phonetics; University of Oxford, UK, [10]Department of Psychology, University of York, UK, [11]Institute of Cognitive Neuroscience, University College London, UK, [12]Department of Chinese and Bilingual Studies, the Hong Kong Polytechnic University, Kowloon, Hong Kong*

2:00 pm

B2 Processor Hub Versus Integrator Hubs: Distinct Roles for Anterior Temporal Lobe and Angular Gyrus in Semantic Processing *Seyedehrezvan Farahibozorg[1,2], Richard Henson[1], Anna Woollams[3], Elisa Cooper[1], Gemma Evans[4], Yuanyuan Chen[1], Karalyn Patterson[1], Olaf Hauk[1]; [1]MRC Cognition and Brain Sciences Unit, University of Cambridge, [2]Wellcome Centre For Integrative Neuroimaging, Nuffield Department of Clinical Neurosciences, University of Oxford, [3]Neuroscience and Aphasia Research Unit, School of Psychological Sciences, University of Manchester, [4]Department of Psychology, University of Chester*

2:20 pm

B3 Parsing continuous speech into linguistic representations *Laura Gwilliams[1,2], Jean-Rémi King[1,3], David Poeppel[1,4]; [1]New York University, [2]NYUAD Institute, [3]Frankfurt Institute for Advanced Studies, [4]Max-Planck-Institute*

2:40 pm

B4 Individual differences in default mode connectivity relate to perceptually-coupled and decoupled modes of semantic retrieval: Functional consequences for comprehension and mind-wandering *Beth Jefferies[1], Meichao Zhang[1], Nicola Savill[2], Daniel Margulies[3], Jonathan Smallwood[1]; [1]University of York, UK, [2]York St John University, UK, [3]CNRS, Institut du cerveau et de la moelle épinière (ICM), Paris*

Slide Session C

Saturday, August 18, 11:00 am – 12:20 pm, Room 2000C

Chair: Marina Bedny

Speakers: Florence Bouhali, Emilie McKinnon, Katherine Travis, Travis White-Schwoch

11:00 am

C1 Distinct areas for the processing of graphemes and words in the left occipitotemporal cortex *Florence Bouhali[1,2,3,4,5], Zoé Bézagu[1,2,3,4], Stanislas Dehaene[6,7], Laurent Cohen[1,2,3,4,8]; [1]Inserm, U 1127, F-75013, Paris, France, [2]CNRS, UMR 7225, F-75013, Paris, France, [3]Sorbonne Universités, UPMC Univ Paris 06, UMR S 1127, F-75013, Paris, France., [4]Institut du Cerveau et de la Moelle épinière, ICM, F-75013, Paris, France., [5]University of California San Francisco (UCSF), San Francisco, CA 94143, [6]Cognitive Neuroimaging Unit, CEA DRF/I2BM, INSERM, Université Paris-Sud, Université Paris-Saclay, NeuroSpin center, 91191 Gif/Yvette, France, [7]Collège de France, 11 Place Marcelin Berthelot, 75005 Paris, France, [8]AP-HP, Hôpital de la Pitié Salpêtrière, Féderation de Neurologie, F-75013, Paris, France*

11:20 am

C2 Synergism between cortical damage and white matter disconnection contributes to aphasia severity *Emilie McKinnon[1], Barbara Marebwa[1], Chris Rorden[2], Alexandra Basilakos[2], Ezequiel Gleichgerrcht[1], Julius Fridriksson[2], Leonardo Bonilha[1]; [1]Medical University of South Carolina, [2]University of South Carolina*

11:40 am

C3 More than Myelin: Interrogating white matter tissue properties underlying receptive and expressive language abilities in 8 year old children *Katherine Travis[1], Lisa Brucket[1], Aviv A. Mezer[2], Michal Ben-Shachar[3], Heidi M. Feldman[1]; [1]Stanford University, [2]The Hebrew University of Jerusalem, [3]Bar Ilan University*

12:00 pm

C4 Pre-school auditory processing predicts school-age reading achievement: A 4-year longitudinal study *Travis White-Schwoch[1], Elaine C. Thompson[1], Silvia Bonacina[1], Jennifer Krizman[1], Trent Nicol[1], Ann R. Bradlow[1], Steven G. Zecker[1], Nina Kraus[1]; [1]Northwestern University*

National Science Foundation Funding

Saturday, August 18, 12:20 - 12:30 pm, Room 2000C

The National Science Foundation funds research related to the neurobiology of language through its Cognitive Neuroscience, Linguistics, Perception-Action-and-Cognition, Developmental Sciences and Science of Learning programs. Dr. Uri Hasson (Program Director, Cognitive Neuroscience) will present funding opportunities. Attendees are welcome to contact him in advance to arrange a meeting (uhasson@nsf.gov).

Poster Slam Schedule

Poster Slams provide a fast-paced and entertaining showcase for posters. Forty presenters have been invited to provide one-minute, one-slide overviews of their posters. Poster Slams take place just prior to the beginning of each poster session. Participants will present their Slam on the main stage (Room 2000C), ensuring effective exposure to the entire SNL audience. We envision that presenters will address an exciting or provocative finding, challenge current dogma, or highlight how their data or technique addresses current issues in the Neurobiology of Language. We encourage participants to think outside the box and use their one-minute, one-slide presentation in a novel and creative way to communicate their science.

Session	Date	Mandatory Briefing	Line-Up Time	Session Begins
Session A	Thursday, August 16	8:30 am	9:55 am	10:00 am
Session B	Thursday, August 16	1:15 pm	2:45 pm	2:50 pm
Session C	Friday, August 17	8:15 am	10:10 am	10:15 am
Session D	Friday, August 17	3:15 pm	4:25 pm	4:30 pm
Session E	Saturday, August 18	1:15 pm	2:40 pm	2:45 pm

Information for Slam Presenters

You must arrive at the main lecture hall (Room 2000C) for a short Mandatory Briefing at the designated time for your Slam Session (see above). At the Mandatory Briefing, SNL staff will meet you at the podium and explain the logistics of Slam sessions, including where to line up, use of the microphone, timing and so on. This is critical for the success of this fast-paced micro-session. Slam presenters will line up according to their presentation order at Line-Up Time (see above).

Poster Slam Sessions

For poster details, see "Poster Sessions" on page 29.

Poster Slam Session A

Thursday, August 16, 10:00 – 10:15 am, Room 2000C

Chair: Matt Davis

A5 Self-monitoring in L1 and L2 speech production: an MEG study *Sarah Bakst*

A21 How are visual words represented? Insights from EEG-based image reconstruction during reading *Shouyu Ling*

A26 Hierarchical syntactic structures modulate brain activity during morphological processing *Yohei Oseki*

A29 Inter-individual differences in predictive coding during language processing: the role of individual alpha frequency and idea density *Ina Bornkessel-Schlesewsky*

A49 Automatic speech analysis technology yields reproducible dysprosodic markers in Primary progressive aphasia *Naomi Nevler*

A57 Brain activation for spoken and sign language in infancy: Impact of experience in unimodal and bimodal bilinguals *Evelyne Mercure*

A63 The impoverished comprehension of non-native speech in noise *Esti Blanco-Elorrieta*

A64 Neurodevelopmental impact of early bilingual acquisition on children's syntactic processing *Neelima Wagley*

Poster Slam Session B

Thursday, August 16, 2:50 – 3:05 pm, Room 2000C

Chair: David Corina

B4 Syllable sequencing into words: A computational model of speech production *Meropi Topalidou*

B7 Neural representation of phonemic categories in tonotopic auditory cortex *Deborah F. Levy*

B14 Neural oscillations track changes in speech rate shown by MEG adaptation and perceptual after-effects *Matthew H Davis*

B22 fMRI evidence for binding theory during anaphora resolution in naturalistic listening *Jixing Li*

B27 Spatial attention and perceptual-motor representations of demonstratives: a fast fMRI study using naturalistic auditory stimuli *Roberta Rocca*

B51 Neural plasticity of speech and reading networks associated with language learning *Kshipra Gurunandan*

B59 Picture naming in American Sign Language: an ERP study of the effects of iconicity and alignment *Meghan McGarry*

Poster Slam Session C

Friday, August 17, 10:15 – 10:30 am, Room 2000C

Chair: Mairéad MacSweeney

C3 The Role of Primary Motor Cortex in Second Language Word Recognition *Beatriz Barragan*

C4 Cortico-striatal tractography: Structural connectivity of the left inferior frontal gyrus along the rostrocaudal length of the putamen *Simone Renée Roberts*

C8 Brain activity predicts future learning potential in intensive second language listening training *Mayumi Kajiura*

C14 The neurobiology of Braille reading beyond the VWFA *Judy Sein Kim*

C36 Using local neural heterogeneity to both predict and track in language recovery *Jeremy Purcell*

C39 Neuromodulatory effects of individualized tDCS on MEG dynamics in chronic post-stroke aphasia *Priyanka Shah-Basak*

C40 Syntactic and thematic mechanisms of subject-verb integration in aphasia and typical sentence comprehension *Jennifer Mack*

C48 Reading efficiency is associated with fractional anisotropy, but not with myelin content, in the superior cerebellar peduncles. *Lisa Bruckert*

C61 Worse than useless: traditional ERP baseline correction reduces power through self-contradiction *Phillip M. Alday*

Poster Slam Session D

Friday, August 17, 4:30 – 4:45 pm, Room 2000C

Chair: Angela Grant

D5 Speech rate is associated with cerebellar white matter in persistent developmental stuttering *Sivan Jossinger*

D6 Ageing does not affect excitability of articulatory motor cortex during speech perception *Helen E Nuttall*

D7 Sensorimotor adaptation in speech is sensitive to vowel targets of altered feedback *Hardik Kothare*

D11 Electrophysiological Effects of Bilingualism and Aging on Working Memory *Cassandra Morrison*

D15 Impaired Incidental Phonetic Learning in People with Aphasia *Christopher Heffner*

D16 Lexical tone classification in frontal and posterior regions using fNIRS *Benjamin Zinszer*

D20 Measuring the N400 during naturalistic conversation: An EEG hyperscanning study *Caitriona Douglas*

D23 Examining plasticity of the reading network: insights from deaf readers of Chinese *Junfei Liu*

Poster Slam Session E

Saturday, August 18, 2:45 – 3:00 pm, Room 2000C

Chair: Patti Adank

E15 Human cortical encoding of a discrete temporal landmark for processing syllables in continuous speech *Yulia Oganian*

E16 Structural connectivity across stimulation-defined critical language areas *Brian H. Silverstein*

E25 Interaction of morphological and long-distance dependency processing: MEG evidence *Suhail Matar*

E41 Classification of fMRI Data in Aphasia Based on Task, Time Point, and Subject *E. Susan Duncan*

E43 Aphasia therapy results in differential changes in functional connectivity depending on treatment response *Jeffrey P. Johnson*

E44 Continuous theta burst stimulation over right pars triangularis facilitates naming abilities in chronic post-stroke aphasia by enhancing phonological access *Denise Y. Harvey*

E45 Neural Correlates of Impaired Emotional Prosody Recognition in Acute Right Hemisphere Stroke *Shannon M. Sheppard*

E46 Bilingualism delays age of symptom onset in the language variant but not the amnestic variant of Alzheimer's dementia *Jessica de Leon*

Poster Schedule

Poster sessions are scheduled from Thursday, August 16 through Saturday, August 18. Poster sessions are one hour and forty-five minutes long. Presenting authors are expected to be at their poster during the entire session. Posters are located in Room 2000AB. You may post your materials on your assigned board at the scheduled "Setup Begins" time shown below. Please note that any posters not removed by the "Teardown Complete" time will be discarded. Do not leave personal items in the poster room.

Date & Time	Posters	Topics
Poster Session A Thursday, August 16 10:15 am – 12:00 pm *Room 2000AB* Setup Begins: 8:00 am Teardown Complete: 1:00 pm	A1 - A4	Control, Selection, and Executive Processes
	A5 - A10	Speech Motor Control and Sensorimotor Integration
	A11 - A13	Phonology and Phonological Working Memory
	A14 - A19	Perception: Speech Perception and Audiovisual Integration
	A20	Writing and Spelling
	A21 - A25	Perception: Orthographic and Other Visual Processes
	A26 - A28	Grammar: Morphology
	A29 - A34	Grammar: Syntax
	A35 - A41	Meaning: Lexical Semantics
	A42 - A46	Meaning: Discourse and Pragmatics
	A47 - A48	Language Therapy
	A49 - A56	Language Disorders
	A57 - A61	Language Development
	A63 - A70	Multilingualism
Poster Session B Thursday, August 16 3:05 – 4:50 pm *Room 2000AB* Setup Begins: 1:00 pm Teardown Complete: 5:30 pm	B1 - B3	Control, Selection, and Executive Processes
	B4 - B6	Speech Motor Control and Sensorimotor Integration
	B7 - B13	Perception: Speech Perception and Audiovisual Integration
	B14 - B17	Perception: Auditory
	B18 - B21	Perception: Orthographic and Other Visual Processes
	B22 - B26	Grammar: Syntax
	B27 - B34	Meaning: Lexical Semantics
	B35 - B36	Language Therapy
	B37 - B45	Language Disorders
	B46 - B50	Language Development
	B51 - B57	Multilingualism
	B59 - B62	Signed Language and Gesture
	B63 - B66	Methods
	B67 - B70	Computational Approaches
Poster Session C Friday, August 17 10:30 am – 12:15 pm *Room 2000AB* Setup Begins: 8:00 am Teardown Complete: 1:00 pm	C1 - C2	Control, Selection, and Executive Processes
	C3 - C4	Speech Motor Control and Sensorimotor Integration
	C5 - C7	Phonology and Phonological Working Memory
	C8 - C13	Perception: Speech Perception and Audiovisual Integration
	C14 - C17	Perception: Orthographic and Other Visual Processes
	C18 - C24	Grammar: Syntax
	C25 - C31	Meaning: Lexical Semantics
	C32 - C35	Meaning: Prosody, Social and Emotional Processes
	C36 - C38	Language Therapy
	C39 - C47	Language Disorders
	C48 - C52	Language Development
	C53 - C60	Multilingualism
	C61 - C65	Methods
	C66 - C67	Computational Approaches

Poster Session D Friday, August 17 4:45 – 6:30 pm *Room 2000AB* Setup Begins: 1:00 pm Teardown Complete: 7:00 pm	D1 - D4	Control, Selection, and Executive Processes
	D5 - D10	Speech Motor Control and Sensorimotor Integration
	D11 - D14	Phonology and Phonological Working Memory
	D15 - D19	Perception: Speech Perception and Audiovisual Integration
	D20 - D22	Perception: Auditory
	D23 - D24	Writing and Spelling
	D25 - D27	Grammar: Morphology
	D28 - D32	Grammar: Syntax
	D33 - D41	Meaning: Lexical Semantics
	D42 - D43	Meaning: Combinatorial Semantics
	D44 - D47	Meaning: Discourse and Pragmatics
	D48	Language Therapy
	D49 - D56	Language Disorders
	D57 - D64	Multilingualism
	D65 - D67	Signed Language and Gesture
	D68 - D70	Computational Approaches
Poster Session E Saturday, August 18 3:00 – 4:45 pm *Room 2000AB* Setup Begins: 8:00 am Teardown Complete: 5:30 pm	E1 - E4	Control, Selection, and Executive Processes
	E5 - E7	Phonology and Phonological Working Memory
	E8 - E14	Perception: Speech Perception and Audiovisual Integration
	E15 - E19	Perception: Auditory
	E20 - E24	Perception: Orthographic and Other Visual Processes
	E25 - E27	Grammar: Syntax
	E28 - E34	Meaning: Lexical Semantics
	E35 - E36	Meaning: Combinatorial Semantics
	E37 - E40	Meaning: Discourse and Pragmatics
	E41 - E42	Language Therapy
	E43 - E51	Language Disorders
	E52 - E55	Language Development
	E57 - E64	Multilingualism
	E65	History of the Neurobiology of Language

Satellite Symposium

The Bilingual Brain - A lifelong perspective

Wednesday, August 15, 8:00 am – 4:00 pm, Reception Following
Domaine Cataraqui, 2141, chemin Saint-Louis, Québec City, QC., G1T 1 P9

This first SNL official symposium reflects on language learning across the lifespan and how our experience with language and multiple language learning informs questions of brain plasticity and organization. The symposium is organized by the Center for Research on Brain, Language, and Music (CRBLM) and by the Québec Brain Imaging Consortium (CINQ). For more information, please go to http://www.cinq.ulaval.ca/Bilingual-Brain.

Poster Sessions

Poster Session A

Thursday, August 16, 10:15 am – 12:00 pm, Room 2000AB

Control, Selection, and Executive Processes

A1 Assessment of Bilingual Language Context on Cognitive Aging *Angelique M. Blackburn[1], Nayeli Rojas[1], Nayeli Rivas[1], Alejandra Santos[1], Alexandra Reyes[1], Brenda Guerrero[1]; [1]Texas A&M International University*

A2 Early Detection of Alzheimer's Disease: Combining EEG and Pupillometry to Assess Automatic and Controlled Language Processing Dynamics *Nicole Amichetti[1], Elena Festa[1], William Heindel[1]; [1]Brown University*

A3 How attention relates to consecutive interpreting performance: the importance of processing rather than storage *Junyan Wei[1,2], Yulei Gao[1], Shuyi Liu[1], Chuanbin Ni[1]; [1]Nanjing Normal University, [2]McGill University*

A4 Lexical access and cognitive control in healthy bilinguals and bilinguals with aphasia: Evidence from the category generation task *Leela A Rao[1], Claudia Penaloza[1], Swathi Kiran[1]; [1]Boston University*

Speech Motor Control and Sensorimotor Integration

A5 Self-monitoring in L1 and L2 speech production: an MEG study *Sarah Bakst[1], Caroline A. Niziolek[1]; [1]University of Wisconsin–Madison*

A6 Neuroanatomical Correlates of Foreign Speech Production in Musician and Non-Musician Bilinguals *Paul-Noel Rousseau[1,4], Lucía Vaquero[2,3], Virginia Penhune[2,4], Denise Klein[1,4]; [1]McGill University, [2]Concordia University, [3]University of Barcelona, [4]CRBLM - The Centre for Research on Brain, Language and Music*

A7 Intracranial Neurophysiology of Auditory Feedback Control During Speech Production *Muge Ozker Sertel[1], Margaret A McAlister[1], Patricia Dugan[1], Daniel Friedman[1], Werner Doyle[2], Orrin Devinsky[1], Adeen Flinker[1]; [1]Department of Neurology, New York University School of Medicine, [2]Department of Neurosurgery, New York University School of Medicine*

A8 Quantification and parcellation of posterior inferior frontal cortex connections to auditory association and supplementary motor area targets *Vatche Baboyan[1], Gregory Hickok[1], Nitin Tandon[2,3]; [1]Department of Cognitive Sciences, University of California, Irvine, [2]Vivan L Smith Department of Neurosurgery, University of Texas Medical School at Houston, [3]Memorial Hermann Hospital, Texas Medical Center, Houston*

A9 What can we learn about reading from a lollipop? Exploring the role of sensorimotor feedback on the speed of reading in adults and children *Jacqueline Cummine[1], Angela Cullum[1], Daniel Aalto[1,2], Cassidy Fleming[1], Alesha Reed[1], Amber Ostevik[1], William Hodgetts[1,2]; [1]Communication Sciences and Disorders, Faculty of Rehabilitation Medicine, University of Alberta, [2]Institute for Reconstructive Science in Medicine*

A10 Effects of HD-tDCS Current Intensity on Vocal Pitch Motor Control *Dirk B. Den Ouden[1], Danielle Fahey[1], Taylor McDonald[1], Janelle Rocktashel[1], Roozbeh Behroozmand[1]; [1]University of South Carolina*

Phonology and Phonological Working Memory

A11 Adaptive paradigms for mapping phonological regions in individual participants *Melodie Yen[1], Andrew T. DeMarco[2], Stephen M. Wilson[1]; [1]Vanderbilt University Medical Center, [2]Georgetown University*

A12 The impact of alphabetic script acquisition on Cantonese phoneme judgement: a combined behavioral and ERP study *Yubin Zhang[1], Jessica Ka Yui Leung[1], Chotiga Pattamadilok[2], Dustin Kai Yan Lau[1], Mehdi Bakhtiar[1], Caicai Zhang[1,3]; [1]The Hong Kong Polytechnic University, [2]Laboratoire Parole et Langage, CNRS, [3]Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences*

A13 Fast phonotopic mapping with oscillation-based fMRI – Proof of concept *Mikkel Wallentin[1,2], Torben Ellegaard Lund[2], Camilla M. Andersen[1], Roberta Rocca[1]; [1]Department of Linguistics, Cognitive Science and Semiotics, Aarhus University, [2]Center of Functionally Integrated Neuroscience, Aarhus University Hospital*

Perception: Speech Perception and Audiovisual Integration

A14 Articulatory suppression enhances visual discrimination of speech *Matthew Masapollo[1], Frank Guenther[1,2]; [1]Department of Speech, Language, & Hearing Sciences, Boston University, [2]Department of Biomedical Engineering, Boston University*

A15 Audiovisual speech integration in cochlear implant users: A behavioral and optical neuroimaging study *Iliza Butera[1], Rene Gifford[1], Mark Wallace[1]; [1]Vanderbilt University*

A16 Audiovisual facilitation in speech depends on musical background – An ERP study. *Marzieh Sorati[1], Dawn Marie Behne[1]; [1]Norwegian University of Science and Technology (NTNU)*

A17 Aging diminishes auditory activation for single spoken words: evidence from fMRI *Chad Rogers[1], Michael S. Jones[1], Sarah M. McConkey[1], Brent Spehar[1], Nichole Runge[1], Kristin J. Van Engen[1], Mitchell S. Sommers[1], Jonathan E. Peelle[1]; [1]Washington University in St. Louis*

A18 The role of left vs. right superior temporal gyrus in speech perception: An fMRI-guided TMS study *Aurora I Ramos Nunez[1], Qiuhai Yue[2], Siavash Pasalar[2], Randi C Martin[2]; [1]College of Coastal Georgia, [2]Rice University*

A19 Neural orienting response does not differ between hearing own and other names in autistic individuals with language impairments *Sophie Schwartz[1], Le Wang[1], Barbara Shinn-Cunningham[1], Helen Tager-Flusberg[1]; [1]Boston University*

Writing and Spelling

A20 Word-Level Spelling Performance in Patients with Parietal versus Temporal-Frontal Lobe Lesions: Implications for the Dual Lexica Model *Venugopal Balasuramanian[1,2], Maureen Costello-Yacano[3], Maha Alders[4], Judith Koebli[1]; [1]School of Health and Medical Sciences, Seton Hall University, South Orange, New Jersey, [2]SCORE Lab, Johns Hopkins School of Medicine, [3]LaSalle University, Philadelphia, PA, USA, [4]King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia*

Perception: Orthographic and Other Visual Processes

A21 How are visual words represented? Insights from EEG-based image reconstruction during reading *Shouyu Ling[1], Andy C.H. Lee[1,2], Blair C. Armstrong[1,3], Adrian Nestor[1]; [1]University of Toronto Scarborough, [2]Rotman Research Institute, [3]BCBL. Basque Center on Cognition, Brain, and Language*

A22 The left lateralization of print-specific negativity depends on visual attention in competitive stimuli. *Tomoki Uno[1,2], Takashi Katakura[3], Tetuko Kasai[4]; [1]Graduate School of Education, Hokkaido University, [2]Japan Society for Promotion of Science Research Fellow, [3]School of Education, Hokkaido University, [4]Faculty of Education, Hokkaido University*

A23 White matter tract of orthographic recognition and its functional plasticity: Evidence from patients and congenital blinds *Ke Wang[1], Xiaonan Li[1], Ruiwang Huang[2], Junhua Ding[1], Luping Song[3], Zaizhu Han[1]; [1]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, [2]School of Psychology, South China Normal University, Guangzhou, China, [3]College and China Rehabilitation Research Center, Capital Medical University, Beijing, China*

A24 Neural oscillations as a brain signature of statistical learning? *Louisa Bogaerts[1], Ayelet N. Landau[1], Craig G. Richter[2], Ram Frost[1,2,3]; [1]The Hebrew University of Jerusalem, Israel, [2]Basque center on Cognition, Brain and Language, [3]Haskins Laboratories*

A25 Masked identity priming survives the rotation of individual letters within words: An ERP investigation *Marta Vergara-Martinez[1], Maria Fernandez-Lopez[1], Ana Marcet[1], Manuel Perea[1]; [1]Universitat de València*

Grammar: Morphology

A26 Hierarchical syntactic structures modulate brain activity during morphological processing *Yohei Oseki[1,2], Alec Marantz[2]; [1]Waseda University, [2]New York University*

A27 Perception of Morphologically Complex Words Using Single-Trial EEG *Laurie Lawyer[1]; [1]University of Essex*

A28 Morpheme-based word production is associated with ventral-stream white matter pathways *Maya Yablonski[1], Benjamin Menashe[1], Michal Ben-Shachar[1]; [1]Bar-Ilan University*

Grammar: Syntax

A29 Inter-individual differences in predictive coding during language processing: the role of individual alpha frequency and idea density *Ina Bornkessel-Schlesewsky[1], Caitlin Howlett[1], Isabella Sharrad[1], Erica Wilkinson[1], Matthias Schlesewsky[1]; [1]University of South Australia*

A30 Improving pre-operative mapping of language in clinical fMRI using assessment of grammar *Monika Polczynska[1], Kevin Japardi[1], Susan Curtiss[1], Teena Moody[1], Christopher Benjamin[2], Andrew Cho[1], Celia Vigil[1], Taylor Kuhn[1], Michael Jones[1], Susan Bookheimer[1]; [1]University of California, Los Angeles, [2]Yale University*

A31 Experimental L2 Semantics/Pragmatics of Scalar Implicature: An ERP Study *Euiyon Cho[1], Wonil Chung[1], Myung-Kwan Park[1]; [1]Dongguk University*

A32 Dissociating prediction and constituent-structure during sentence-structure building *Murielle Fabre[1], Shohini Bhattasali[1], John Hale[1], Christophe Pallier[2]; [1]Cornell University, [2]INSERM-CEA Cognitive Neuro-imaging Unit*

A33 Neural Correlates of Sentence Processing in Acute Stroke Patients *Sigfus Kristinsson[1], Brielle Stark[1], Grigori Yourganov[1], Alexandra Basilakos[1], Helga Thors[1], Julious Fridriksson[1]; [1]Center for the Study of Aphasia Recovery at the University of South Carolina*

A34 Differentiating three different types of double subjects/Nominatives in Korean: An ERP-based study *Kiyong Choi[1], Daeho Chung[2], Wonil Chung[3], Say Young Kim[2], Bum-Sik Park[3], Myung-Kwan Park[3]; [1]Kwangwoon University, [2]Hanyang University, [3]Dongguk University*

Meaning: Lexical Semantics

A35 The neural correlates of the interaction between phonological and semantic processing in Reading Chinese characters *Min Dang[1], Rui Zhang[1], Xiangyang Zhang[1], Xiaojuan Wang[1]; [1]Shaanxi Normal University*

A36 Pictures produce orthographic neighborhood effects, but only following familiarization *Gabriela Meade[1,2], Phillip J. Holcomb[1]; [1]San Diego State University, [2]University of California, San Diego*

A37 Lexical access and integration in context: a fixation-related fMRI study of the word predictability and word frequency interaction during sentence comprehension *Jie-Li Tsai[1], Guan-Huei Lee[1], Chia-Ying Lee[2], Chung-I Erica Su[1], Tzu-Hsuan Lin[1]; [1]National Chengchi University, Taiwan, [2]Academia Sinica, Taipei, Taiwan*

A38 The dynamics of lexico-semantic access in the aging brain *Rocío López Zunini[1], Martijn Baart[1,2], Arthur Samuel[1,3,4], Blair Armstrong[1,5]; [1]BCBL, Basque Center on Cognition, Brain and Language, [2]Tilburg University, [3]IKERBASQUE, Basque Foundation for Science, [4]Stony Brook University, [5]University of Toronto, Scarborough*

A39 Learning scientific concepts with metaphor: An ERP study *Vicky Tzuyin Lai[1], Nyssa Bulkes[1]; [1]Department of Psychology, University of Arizona*

A40 The neural network of action language: a comparative meta-analysis *Melody Courson[1,2], Pascale Tremblay[1,2]; [1]Université Laval, Faculty of Medicine, Department of Rehabilitation, Québec, Canada, [2]CERVO research center, Québec, Canada*

A41 Effects of stimulus modality on semantic processing *Joshua Troche[1], Jamie Reilly[2]; [1]University of Central Florida, [2]Temple University*

Meaning: Discourse and Pragmatics

A42 The exceptional role of the first person: Evidence from natural story processing *Matthias Schlesewsky[1], Ingmar Brilmayer[2], Alexandra Werner[3], Beatrice Primus[2], Ina Bornkessel-Schlesewsky[1]; [1]Centre for Cognitive and Systems Neuroscience, School of Psychology, Social Work and Social Policy, University of South Australia, Adelaide, Australia, [2]Department of German Language and Literature I, University of Cologne, Cologne, Germany, [3]Department of English and Linguistics, Johannes Gutenberg-University, Mainz, Germany*

A43 Gray and white matter correlates of indirect speech act comprehension in behavioral variant frontotemporal degeneration *Meghan Healey[1], Murray Grossman[1]; [1]University of Pennsylvania*

A44 Individual Differences in Text Comprehension: A Resting-State Functional Connectivity Study *Anya Yu[1], Benjamin Schloss[1], Chun-Ting Hsu[1], Ping Li[1]; [1]Department of Psychology, The Pennsylvania State University*

A45 Brain-behaviour correlations of angry, dancing, thoughtful triangles: Heider & Simmel in the scanner *Brea Chouinard[1], Tamara Vanderwal[2], Louise Gallagher[1], Clare Kelly[1]; [1]Trinity College Dublin, [2]Yale Child Study Centre*

A46 The modulation of the N400 effect: reference and dispositional affect *Veena D. Dwivedi[1], Janahan Selvanayagam; [1]Brock University*

Language Therapy

A47 Augmented reading outcomes for people with alexia following treatment paired with transcranial direct current stimulation. *Grace S. Lee[1], Esther S. Kim[1]; [1]University of Alberta*

A48 Left-lateralizing tDCS for aphasia: a randomized, double-blind, placebo-controlled clinical trial *Elizabeth H Lacey[1,2], Fama Mackenzie E[1], Anbari Zainab[1], Turkeltaub Peter E[1,2]; [1]Department of Neurology, Georgetown University, [2]MedStar National Rehabilitation Hospital*

Language Disorders

A49 Automatic speech analysis technology yields reproducible dysprosodic markers in Primary progressive aphasia *Naomi Nevler[1], Sharon Ash[1], David J Irwin[1], Molly Ungrady[1], Mark Liberman[1], Murray Grossman[1]; [1]University of Pennsylvania*

A50 Neuroanatomical substrates of lexical retrieval *Janina Wilmskoetter[1,2], Julius Fridriksson[3], Ezequiel Gleichgerrcht[2], Brielle Stark[3], John Delgazio[2], Gregory Hickok[4], Kenneth Vaden[5], Argye Hillis[6], Chris Rorden[7], Leonardo Bonilha[2]; [1]Department of Health Sciences and Research, College of Health Professions, Medical University of South Carolina, Charleston, [2]Department of Neurology, College of Medicine, Medical University of South Carolina, Charleston, [3]Department of Communication Sciences and Disorders, University of South Carolina, Columbia, [4]Department of Cognitive Sciences, University of California, Irvine, [5]Department of Otolaryngology–Head and Neck Surgery, College of Medicine, Medical University of South Carolina, Charleston, [6]Department of Neurology, Johns Hopkins University, [7]Department of Psychology, University of South Carolina, Columbia*

A51 Testing embodied cognition with a large premotor cortex lesion - a single case study *Hanna Gauvin[1,2], Kori Ramajoo[1,2], Sonia Brownsett[1,2], Katie McMahon[3,4], Greig de Zubicaray[1]; [1]Faculty of Health and Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane, QLD, Australia, [2]School of Psychology and Counselling, Queensland University of Technology, Brisbane, QLD, Australia hanna.gauvin@qut.edu.au, [3]. School of Clinical Sciences, Queensland University of Technology, Brisbane, QLD, Australia, [4]Herston Imaging Research Facility, Royal Brisbane & Womens Hospital, Brisbane, QLD, Australia*

A52 Bringing Resting-state connectivity into the Operating Room: Comparing task and resting-state functional connectivity in presurgical language mapping *Daniel A. Di Giovanni[1], D. Louis Collins[1], Denise Klein[1]; [1]McGill University*

A53 Impaired Phoneme Discrimination and Word Comprehension Due to Acute Left Superior Temporal Gyrus Dysfunction *Luke Adams[1], Kevin Kim[1], Lynsey Keator[1], Amy Wright[1], Sadhvi Saxena[1], Corianne Rogalsky[2],*

Greg Hickok[3], Argye Hillis[1]; [1]Johns Hopkins University School of Medicine, [2]Arizona State University, [3]University of California Irvine

A55 Beyond left hemisphere versus right hemisphere in aphasic language recovery: Evidence from effective connectivity during lexical-semantic processing *Erin Meier[1], Jeffrey Johnson[1], Yue Pan[1], Swathi Kiran[1]; [1]Boston University*

A56 Individual Pseudo-Lesioning to Assess Secondary White Matter Connectivity Changes in Post-Stroke Aphasia *Natalie Busby[1], Ajay D. Halai[1], Geoffrey J.M. Parker[1,2], Matthew A. Lambon Ralph[1]; [1]University of Manchester, [2]Bioxydyn Ltd.*

Language Development

A57 Brain activation for spoken and sign language in infancy: Impact of experience in unimodal and bimodal bilinguals *Evelyne Mercure[1], Samuel Evans[2], Laura Pirazzoli[3], Laura Goldberg[1], Harriet Bowden-Howl[1,4], Kimberley Coulson[1,5], Sarah Lloyd-Fox[3], Indie Beedie[1], Mark H. Johnson[3,6], Mairead MacSweeney[1]; [1]University College London, [2]University of Westminster, [3]Birkbeck - University of London, [4]University of Plymouth, [5]University of Hertfordshire, [6]University of Cambridge*

A58 Pinpointing the neuroanatomical correlates of foreign language learning ability and musical aptitude *Sabrina Turker[1,2], Annemarie Seither-Preisler[1,3], Susanne M. Reiterer[5], Annemarie Peltzer-Karpf[2], Peter Schneider[5]; [1]Centre for Systematic Musicology, University of Graz, [2]Department of English and American Studies, University of Graz, [3]BioTechMed Graz, Austria, [4]Department of Linguistics, University of Vienna, [5]University Hospital Heidelberg, Department for Neuroradiology, Heidelberg, Germany*

A59 Socioeconomic Status (SES) differences in children's N400 responses when learning new words from linguistic context. *Yvonne Ralph[1], Julie M. Schneider[1], Mandy J. Maguire[1]; [1]University of Texas at Dallas*

A60 What can neuroscience teach us about the origin of language? *Oren Poliva[1]; [1]Bangor University*

A61 An Investigation of the Relationship between Reading and Speech Production in Children and Adolescents *Cassidy Fleming[1], Angela Cullum[1], Jacqueline Cummine[1,2]; [1]Faculty of Rehabilitation Medicine, University of Alberta, [2]Neuroscience and Mental Health Institute, University of Alberta*

Multilingualism

A63 The impoverished comprehension of non-native speech in noise *Esti Blanco-Elorrieta[1], Nai Ding[2], Liina Pylkkänen[1,3], David Poeppel[1,4]; [1]New York University, [2]Zhejiang University, [3]NYUAD Institute, [4]Max Planck Institute*

A64 Neurodevelopmental impact of early bilingual acquisition on children's syntactic processing *Neelima Wagley[1], Frank Hu[1], Alisa Baron[2], James Booth[3], Teresa Satterfield[1], Lisa M. Bedore[2], Ioulia Kovelman[1]; [1]University of Michigan, [2]University of Texas - Austin, [3]Vanderbilt University*

A65 How spatial-temporal metaphors shape time conceptualisation in bilinguals *Yang LI[1], Guillaume Thierry[1]; [1]School of Psychology, Bangor University*

A66 The impact of successive bi-/multilingualism on the cognitive abilities of healthy older speakers: Evidence from Norwegian academics. *Valantis Fyndanis[1], Sarah Cameron[1], David Caplan[2], Christina Davril[3], Nina Hagen Kaldhol[1], Monica Knoph[1], Hanne Gram Simonsen[1], Ane Theimann[1], Charalambos Themistocleous[4,5], Thomas Bak[6]; [1]University of Oslo, Oslo, Norway, [2]Massachusetts General Hospital, Boston, USA, [3]University of Freiburg, Freiburg, Germany, [4]Johns Hopkins University, Baltimore, USA, [5]University of Gothenburg, Gothenburg, Sweden, [6]University of Edinburgh, Edinburgh, UK*

A67 Neural Correlates of Spoken Word Processing in Korean-Chinese-English Trilinguals: An fMRI Study *Say Young Kim[1], Fan Cao[2]; [1]Hanyang University, Seoul, Korea, [2]Michigan State University, MI, USA*

A68 Bilingual Recruitment of Inhibitory Control While Translating *Jamie Renna[1], Yazmin Medina[1], Ksenija Marinkovic[1,2], Katherine J. Midgley[1], Phillip J. Holcomb[1]; [1]San Diego State University, [2]University of California, San Diego*

A69 Neural processing of sound in bilinguals: The influence of early-life dual language exposure on auditory processing in adults *Erika Skoe[1]; [1]University of Connecticut*

A70 Age of acquisition of L2 affects alpha power during bilingual speech in noise processing *Angela Grant[1,2], Kristina Coulter[1,2], Shanna Kousaie[2,3], Annie C. Gilbert[2,3], Shari Baum[2,3], Vincent Gracco[2,3,4], Denise Klein[2,3], Debra Titone[2,3], Natalie Phillips[1,2]; [1]Concordia University, [2]Centre for Research on Brain, Language, and Music, [3]McGill University, [4]Yale University*

Poster Session B

Thursday, August 16, 3:05 – 4:50 pm, Room 2000AB

Control, Selection, and Executive Processes

B1 The interplay between interference control and L2 proficiency in L2 auditory sentence comprehension in the presence of verbal and non-verbal masking *Jungna Kim[1], Klara Marton[1], Brett A. Martin[1], Loraine K. Obler[1]; [1]The CUNY Graduate Center*

B2 Lexical selection and the elusive role of the left IFG: an fMRI study *Hanna Gauvin[1,2], Katie McMahon[3,4], Greig de Zubicaray[1]; [1]Faculty of Health and Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane, QLD, Australia, [2]School of Psychology and*

Counselling, Queensland University of Technology, Brisbane, QLD, Australia, [3]School of Clinical Sciences, Queensland University of Technology, Brisbane, QLD, Australia, [4]Herston Imaging Research Facility, Royal Brisbane & Womens Hospital, Brisbane, QLD, Australia

B3 Interference interacts with prediction during language comprehension: Implications for predictive coding *Pia Schoknecht[1], Dietmar Roehm[1], Ina Bornkessel-Schlesewsky[2]; [1]University of Salzburg, [2]University of South Australia*

Speech Motor Control and Sensorimotor Integration

B4 Syllable sequencing into words: A computational model of speech production *Meropi Topalidou[1], Emre Neftci[1], Gregory Hickok[1]; [1]Department of Cognitive Sciences, University of California Irvine*

B5 Changes in sensorimotor control of speech observed in oscillations of the EEG mu rhythm *Tim Saltuklaroglu[1], Ashley Harkrider[1], Tiffani Kittilstved[1], David Thornton[1], David Jenson[1]; [1]University of Tennessee Health Sciences Center*

B6 Planning to manipulate virtual objects elicits activation of motor-related brain activity: evidence from ERPs in a CAVE automatic virtual environment *Cheryl Frenck-Mestre[1,2], Ana Zappa[1], Dierdre Bolger[1], Jean Marie Pergandi[1], Pierre Mallet[1,2], Anne-Sophie Dubarry[1,2], Daniel Mestre[1,2]; [1]Aix-Marseille Univ, [2]Centre National de Recherche Scientifique*

Perception: Speech Perception and Audiovisual Integration

B7 Neural representation of phonemic categories in tonotopic auditory cortex *Deborah F. Levy[1], Stephen M. Wilson[1]; [1]Vanderbilt University Medical Center*

B8 Neural coding schemes for lexically-driven prediction in superior temporal cortex *Ediz Sohoglu[1], Matthew Davis[1]; [1]University of Cambridge*

B9 Language-driven anticipatory eye-movements in naturalistic environments *Evelien Heyselaar[1], David Peeters[1,2], Peter Hagoort[1,2]; [1]Max Planck Institute for Psycholinguistics, The Netherlands, [2]Radboud University, Donders Institute for Brain, Cognition, and Behaviour, The Netherlands*

B10 Early neural reconfiguration predicts future sound-to-word learning success *Gangyi Feng[1], Bharath Chandrasekaran[2], Patrick C.M. Wong[1]; [1]The Chinese University of Hong Kong, [2]The University of Texas at Austin*

B11 Neural processing of hyperarticulated speech in second language learners *Yang Zhang[1], Keita Tanaka[2], Yue Wang[3], Dawn Behne[4]; [1]University of Minnesota, [2]Tokyo Denki University, [3]Simon Fraser University, [4]Norwegian University of Science and Technology*

B12 Cortical Tracking of Predictive Coding Features in Continuous Speech *Hugo Weissbart[1], Katerina Kandylaki[2], Tobias Reichenbach[1]; [1]Imperial College London, [2]University of Maastricht*

B13 Testing the engagement of dorsal stream motor areas during the perception of phonemes, words, and environmental sounds *Kelly Michaelis[1], Andrei Medvedev[1,2], Peter Turkeltaub[1,2,3]; [1]Georgetown University Interdisciplinary Program in Neuroscience, [2]Georgetown University Medical Center, Department of Neurology, [3]Medstar National Rehabilitation Hospital*

Perception: Auditory

B14 Neural oscillations track changes in speech rate shown by MEG adaptation and perceptual after-effects *Matthew H Davis[1], Lucy J. MacGregor[1], Helen Blank[1,2], Stephen A. Engel[3], Saskia Helbling[1,4], Ediz Sohoglu[1], Leonhard Waschke[5]; [1]University of Cambridge, UK, [2]University Medical Center Hamburg-Eppendorf, Hamburg, Germany, [3]University of Minnesota, Minneapolis, [4]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, [5]University of Lübeck, Germany*

B15 Transcutaneous vagus nerve stimulation enhances non-native speech categorization *Fernando Llanos[1], Jacie R. McHaney[1], Matthew K. Leonard[2,3], William L. Schuerman[2], Han G. Yi[2], Bharath Chandrasekaran[1,4,5,6,7]; [1]Department of Communication Sciences and Disorders, The University of Texas at Austin, [2]Neurological Surgery, University of California, San Francisco, [3]Weill Institute for Neurosciences, University of California, San Francisco, [4]Institute for Mental Health Research, The University of Texas at Austin, [5]Department of Psychology, The University of Texas at Austin, [6]Department of Linguistics, The University of Texas at Austin, [7]Institute for Neuroscience, The University of Texas at Austin*

B16 The relation between speech-in-noise and vocal pitch recognition abilities in high-functioning autism spectrum disorder *Stefanie Schelinski[1,2], Katharina von Kriegstein[1,2]; [1]Max Planck Institute for Human Cognitive and Brain Sciences, [2]Technical University of Dresden*

B17 Bilinguals and monolinguals hear the world differently *Jennifer Krizman[1], Adam Tierney[1,2], Trent Nicol[1], Nina Kraus[1]; [1]Northwestern University, [2]Now at Birkbeck, University of London*

Perception: Orthographic and Other Visual Processes

B18 How the brain learns to read in environments with high-risk of illiteracy: an fNIRS study of reading development in rural Côte d'Ivoire *Kaja Jasinska[1,2], Axel Blahoua[3], Fabrice Tanoh[4]; [1]University of Delaware, USA, [2]Haskins Laboratories, USA, [3]Centre d'Action et de Recherche pour la Paix, Abidjan, Côte d'Ivoire, [4]Université Félix Houphouët-Boigny, Abidjan, Côte d'Ivoire*

B19 Decoding of word frequency from pre-stimulus MEG activation in a repetition priming paradigm *Susanne Eisenhauer[1], Benjamin Gagl[1,2], Christian J. Fiebach[1,2]; [1]Goethe University Frankfurt, Germany, [2]Center for Individual Development and Adaptive Education of Children at Risk (IDeA), Frankfurt, Germany*

B20 Encoding of abstract letter identity in deaf readers: the role of lexical feedback *Eva Gutierrez-Sigut[1,2], Marta Vergara-Martínez[1], Manuel Perea[1,3]; [1]University of Valencia, [2]University College London, [3]Basque Center on Cognition, Brain, and Language*

B21 Localization of dual stream contributions to sublexical and lexical-semantic reading: a multivariate lesion-symptom mapping study of left hemisphere stroke survivors *J. Vivian Dickens[1], Mackenzie E. Fama[1], Andrew T. DeMarco[1], Elizabeth H. Lacey[1,2], Rhonda B. Friedman[1], Peter E. Turkeltaub[1,2]; [1]Georgetown University Medical Center, Washington, DC, USA, [2]MedStar National Rehabilitation Hospital, Washington, DC, USA*

Grammar: Syntax

B22 fMRI evidence for binding theory during anaphora resolution in naturalistic listening *Jixing Li[1], Murielle Fabre[1], Wen-Ming Luh[1], John Hale[1]; [1]Cornell University*

B23 Voice (mis)match in Korean right dislocation constructions: An ERP study *Bum-Sik Park[1], Kiyong Choi[2], Daeho Chung[3], Wonil Chung[1], Say Young Kim[3], Myung-Kwan Park[1]; [1]Dongguk University, [2]Kwangwoon University, [3]Hanyang University*

B24 From Desynchronization to Synchronization: A Lifespan Shift of Alpha-Band Power During Sentence Comprehension *Caroline Beese[1], Benedict Vassileiou[1], Angela D. Friederici[1], Lars Meyer[1]; [1]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany*

B25 Korean Negative Polarity Items: Evidence from ERP responses *Sanghoun Song[1], Wonil Chung[2], Eunjeong Oh[3], Myung-Kwan Park[2], Euhee Kim[4]; [1]Incheon National University, [2]Dongguk University, [3]Sangmyung University, [4]Shinhan University*

B26 Neural signature of Cross-Linguistic Influence in L2 Learning *Hiroshi Ishinabe[1,2], Hyeonjeong Jeong[3,4], Shigeyuki Ikeda[3], Takayuki Nozawa[5], Kohei Sakaki[1], Motoaki Sugiura[3,6], Ryuta Kawashima[3]; [1]Graduate School of Medicine, Tohoku University, [2]Department of Social Care, Higashiosaka Junior College, [3]Institute of Development, Aging and Cancer, Tohoku University, [4]Graduate School of International Cultural Studies, Tohoku University, [5]Research Center for the Earth Inclusive Sensing Empathizing with Silent Voices, Tokyo Institute of Technology, [6]International Research Institute of Disaster Science, Tohoku University*

Meaning: Lexical Semantics

B27 Spatial attention and perceptual-motor representations of demonstratives: a fast fMRI study using naturalistic auditory stimuli *Roberta Rocca[1], Torben E. Lund[2], Marlene Staib[1], Kristian Tylén[1,3], Kenny R. Coventry[4], Mikkel Wallentin[1,2,3]; [1]Department of Linguistics, Cognitive Science and Semiotics, Aarhus University, Denmark, [2]Center of Functionally Integrative Neuroscience (CFIN), Aarhus University, Denmark, [3]The Interacting Minds Centre, Aarhus University, Denmark, [4]School of Psychology, University of East Anglia, United Kingdom*

B29 Dynamic Conceptome: Semantic hubs and spokes form functional modules in the whole-brain graphs with intra-/inter-modular connectivity *Seyedehrezvan Farahibozorg[1,2], Olaf Hauk[1]; [1]MRC Cognition and Brain Sciences Unit, University of Cambridge, [2]Wellcome Centre For Integrative Neuroimaging, Nuffield Department of Clinical Neurosciences, University of Oxford*

B30 Neural correlates of selection and inhibition of semantic features: an fMRI study of Chinese classifiers *Chu-Hsuan Kuo[1], Min Liu[1], Hsuan-Chih Chen[2], Tai-Li Chou[1]; [1]National Taiwan University, [2]Chinese University of Hong Kong*

B32 Do experiential semantic features predict automatic semantic priming in verbs? *Taylor Kalmus[1], Lisa Conant[2], Colin Humphries[2], Jeffrey Binder[2], Leonardo Fernandino[2]; [1]Carroll University, [2]Medical College of Wisconsin*

B33 The neural basis of concrete noun and verb meanings in congenitally blind individuals: An MVPA fMRI study *Giulia Elli[1], Rashi Pant[1], Rebecca Achtman[2], Marina Bedny[1]; [1]Johns Hopkins University, [2]DePauw University*

B34 Not all "visual knowledge" are created equal: Blind individuals' judgments about animal appearance. *Judy Sein Kim[1], Giulia Elli[1], Erin Brush[1], Marina Bedny[1]; [1]Johns Hopkins University*

Language Therapy

B35 Effects of auricular vagus nerve stimulation on novel orthography acquisition: a pilot study *Tracy Centanni[1], Vishal Thakkar[1], Alexis Jefferson[1], Carly Stacey[1], Navid Khodaparast[2]; [1]Texas Christian University, Fort Worth, TX, USA, [2]Nexeon MedSystems Inc., Dallas, TX, USA*

B36 French version of the Phonological Component Analysis: Preliminary results with three participants *Michele Masson-Trottier[1,2], Karine Marcotte[1,2], Carol Leonard[3,5,6], Elizabeth Rochon[3,4,5,7], Ana Inés Ansaldo[1,2]; [1]Centre de recherche de l'Institut de gériatrie de Montréal, [2]École d'orthophonie et d'audiologie, Université de Montréal, [3]Department of Speech-Language Pathology, Faculty of Medicine, University of Toronto, [4]Toronto Rehabilitation Institute – University Health Network, [5]Heart and Stroke Foundation, Canadian Partnership for Stroke Recovery,*

[6]Audiology and Speech-Language Pathology Program, School of Rehabilitation Sciences, University of Ottawa, [7]Rehabilitation Sciences Institute, University of Toronto

Language Disorders

B37 Leukoaraiosis Predicts Naming Outcomes after Treatment in Aphasia *Lisa Johnson[1], Alexandra Basilakos[1], Brielle C. Stark[1], Sigfus Kristinsson[1], Bonilha Leonardo[2], Chris Rorden[3], Julius Fridriksson[1]; [1]University of South Carolina Department of Communication Sciences and Disorders, [2]Medical University of South Carolina, [3]University of South Carolina Department of Psychology*

B38 Oscillatory dynamics during lexico-semantic retrieval: Evidence for neuroplasticity of language in patients with left-hemisphere temporal tumors *Shuang Geng[1], Lucia Amoruso[1], Polina Timofeeva[1], Santiago Gil Robles[2], Íñigo Pomposo[2], Nicola Molinaro[1,3], Manuel Carreiras[1,3]; [1]BCBL,Basque Center on Cognition, Brain and Language, San Sebastian, Spain, [2]Neurosurgery Cruces University Hospital. BioCruces, Bilbao, Spain, [3]Ikerbasque, Basque Foundation for Science, Bilbao Spain*

B39 Predictive Neural Correlates of Action Naming and Recovery in Chronic Stroke Patients *Lynsey M Keator[1], Shannon M Sheppard[1], Kevin Kim[1], Sadhvi Saxena[1], Amy Wright[1], Rajani Sebastian[1], Argye E Hillis[1,2,3]; [1]Department of Neurology, Johns Hopkins University School of Medicine, [2]Department of Physical Medicine and Rehabilitation, Johns Hopkins University School of Medicine, [3]Department of Cognitive Science, Krieger School of Arts and Sciences, Johns Hopkins University*

B40 Functional modularity supports treatment-induced recovery in chronic aphasia *Yuan Tao[1], Brenda Rapp[1]; [1]Johns Hopkins University*

B41 Receptive but not expressive language relates to age-equivalent of auditory event-related potentials in children with autism spectrum disorder *Elaine Kwok[1], Edwin Dovigi[2], Janis Oram Cardy[1]; [1]University of Western Ontario, [2]Rush University Medical College*

B42 Neurofunctional correlates of overall language function in aphasia *Jillian M. Lucanie[1], Sarah M. Schneck[1], Dana K. Eriksson[2], Melodie Yen[1], Deborah F. Levy[1], Ian Quillen[1], L. Taylor Davis[1], Wayneho Kam[1], Howard S. Kirshner[1], Michael de Riesthal[1], Stephen M. Wilson[1]; [1]Vanderbilt University Medical Center, [2]University of Arizona*

B43 Predicting naming responses based on pre-articulatory electrical activity in individuals with aphasia *Janina Wilmskoetter[1,2], John Delgazio[2], Lorelei Phillip[3], Roozbeh Behroozmand[3], Ezequiel Gleichgerrcht[2], Julius Fridriksson[3], Leonardo Bonilha[2]; [1]Department of Health Sciences and Research, College of Health Professions, Medical University of South Carolina, Charleston, SC, [2]Department of Neurology, College of Medicine, Medical University of South Carolina, Charleston, SC, [3]Department of Communication Sciences and Disorders, University of South Carolina, Columbia, SC*

B44 Data-driven Aphasia Sub-Typing using Lesion-Symptom Mapping and Community Detection Analysis *Jon-Frederick Landrigan[1], Daniel Mirman[2]; [1]Drexel University, [2]University of Alabama at Birmingham*

B45 The progression of leukoaraiosis and the integrity of perilesional tissue predict changes in language abilities *Alexandra Basilakos[1], Lisa Johnson[1], Leonardo Bonilha[2], Brielle Stark[1], Chris Rorden[1], Grigori Yourganov[1], Julius Fridriksson[1]; [1]University of South Carolina, [2]Medical University of South Carolina*

Language Development

B46 Developmental differences in the neural mechanisms supporting natural sentence comprehension *Julie Schneider[1], Mandy Maguire[1]; [1]Callier Center for Communication Disorders, University of Texas at Dallas*

B47 Does grapheme knowledge or phonological awareness determine detailed speech perception in preliterate children? *Anne Bauch[1], Claudia K. Friedrich[1], Ulrike Schild[1]; [1]University of Tuebingen, Germany*

B48 Tracking the time course of statistical learning in pre-lingual infants: online evidence from neural entrainment *Laura Batterink[1,2], Dawoon Choi[3], Alexis Black[3], Ken Paller[1], Janet Werker[3]; [1]Northwestern University, [2]University of Western Ontario, [3]University of British Columbia*

B49 Better phase-locking to song than speech in difficult listening conditions *Christina Vanden Bosch der Nederlanden[1], Marc Joanisse[1], Jessica Grahn[1]; [1]Western University*

B50 Exploring 9-year-old children's brain activity during verbal irony processing using Event-Related Potentials *Hugo Corona-Hernández[1], Gloria Avecilla-Ramírez[1], Karina Hess Zimmermann[1], Silvia Ruiz-Tovar[1], Lucero Díaz-Calzada[1], AV Carrillo-Pena[2], Josué Romero-Turrubiates[1]; [1]Autonomous University of Queretaro, [2]Neurobiology Institute, National Autonomous University of Mexico*

Multilingualism

B51 Neural plasticity of speech and reading networks associated with language learning *Kshipra Gurunandan[1], Manuel Carreiras[1,2], Pedro M. Paz-Alonso[1]; [1]BCBL - Basque Center on Cognition, Brain and Language, San Sebastián, Spain, [2]Ikerbasque - Basque Foundation for Science, Bilbao, Spain*

B52 Network selectively responding to bilingual sentence comprehension vary as a function of the L2 age of acquisition *Sandra Gisbert-Muñoz[1], Ileana Quiñones[1], Manuel Carreiras[1,2]; [1]Basque Center on Cognition, Brain, and Language, 20009 Donostia, Spain, [2]Ikerbasque, Basque Foundation for Science, 48013 Bilbao, Spain*

B53 The Impact of Semantic Context and Age of Acquisition on Bilingual Speech Perception in Noise: An ERP Study *Kristina Coulter[1,4], Annie C. Gilbert[2,4], Shanna Kousaie[2,4], Shari Baum[2,4], Vincent Gracco[2,3,4], Denise Klein[2,4], Debra Titone[2,4], Natalie A. Phillips[1,4]; [1]Concordia University, [2]McGill University, [3]Yale University, [4]Centre for Research on Brain, Language, and Music*

B54 Bilingual language control: MEG evidence of inhibition in word production *Judy D. Zhu[1,2], Robert A. Seymour[1,2,3], Paul F. Sowman[1,2]; [1]ARC Centre of Excellence in Cognition and its Disorders, Sydney, Australia, [2]Macquarie University, Sydney, Australia, [3]Aston University, Birmingham, United Kingdom*

B55 Short exposure to a foreign accent impacts subsequent cognitive processes. *Alice Foucart[1,2], Hernando Santamaría-García[3,4,5], Robert J. Hartsuiker[1]; [1]Ghent University, [2]Universitat Pompeu Fabra, [3]Pontificia Universidad Javeriana, [4]Instituto de Neurociencia Cognitiva y Traslacional, [5]Hospital San Ignacio*

B56 ERP correlates of picking up new foreign-language words in dialogue *Kristin Lemhöfer[1], Julia Egger[1,2], James McQueen[1]; [1]Radboud University, [2]Max-Planck-Institute for Psycholinguistics*

B57 Is semantic processing language-dependent? Evidence from bilingual aphasia *Marco Calabria[1], Nicholas Grunden[1,2], Mariona Serra[1], Carmen García Sánchez[2], Albert Costa[1,3]; [1]Center for Brain and Cognition, Pompeu Fabra University, Barcelona, Spain, [2]Hospital de la Santa Creu i Sant Pau, Barcelona, Spain, [3]Institució Catalana de Recerca i Estudis Avançats (ICREA), Spain*

Signed Language and Gesture

B59 Picture naming in American Sign Language: an ERP study of the effects of iconicity and alignment *Meghan McGarry[1], Megan Mott[1], Katherine J. Midgley[1], Phillip J. Holcomb[1], Karen Emmorey[1]; [1]San Diego State University*

B60 Sensorimotor EEG indicates deaf signers simulate tactile properties of ASL signs when reading English *Lauren Berger[1], Lorna C. Quandt[1]; [1]Gallaudet University*

B61 Examining the effect of language experience on plasticity in superior temporal cortices in deaf and hearing signers *Tae Twomey[1], Dafydd Waters[1], Cathy Price[1], Mairéad MacSweeney[1]; [1]University College London*

B62 Single-parameter phonological priming in American Sign Language: An ERP study *Natasja Massa[1], Gabriela Meade[1,2], Brittany Lee[1,2], Katherine J. Midgley[1], Phillip J. Holcomb[1], Karen Emmorey[1]; [1]San Diego State University, [2]University of California, San Diego*

Methods

B63 The superior longitudinal fasciculi or refining the fronto-parietal connectivity patterns between specific language regions *Elise B. Barbeau[1,2,3], Denise Klein[1,2,3], Michael Petrides[1,2,3,4]; [1]Cognitive Neuroscience Unit, Montreal Neurological Institute, McGill University, Montreal, [2]Department of Neurology and Neurosurgery, McGill University, Montreal, [3]Center for Research on Brain, Language and Music (CRBLM), Montreal, [4]Department of Psychology, McGill University, Montreal*

B64 Restricted Diffusion Imaging (RDI) as a measure of axonal packing density in children and adults *Anthony Dick[1], Dea Garic[1]; [1]Florida International University*

B65 An in-depth examination of the morphology of two sulci of the frontal language zone and comparisons to cytoarchitectonic Brodmann areas 44 and 45 *Trisanna Sprung-Much[1,2], Michael Petrides[1,2]; [1]McGill University, [2]Montreal Neurological Institute*

B66 How distributed processing produces false negatives in voxel-based lesion-deficit analyses *Andrea Gajardo-Vidal[1], Diego Lorca-Puls[1], Jennifer Crinion[1], Jitrachote White[1], Mohamed Seghier[1,2], Alex Leff[1], Thomas Hope[1], Philipp Ludersdorfer[1], David Green[1], Howard Bowman[3,4], Cathy Price[1]; [1]University College London, [2]Emirates College for Advanced Education, [3]University of Kent, [4]University of Birmingham*

Computational Approaches

B67 Evaluating the functional neuroanatomy of language represented across 11,406 neuroimaging studies: a multivariate meta-analysis *Alex Teghipco[1], Gregory Hickok[1]; [1]University of California, Irvine*

B68 A cognitive psychometric model of picture naming improves lesion-symptom maps *Grant Walker[1], Julius Fridriksson[2], Gregory Hickok[1]; [1]University of California, Irvine, [2]University of South Carolina*

B69 Quantitative Assessment of Cognitive Models with Neuroimaging Data *Frank H Guenther[1], Ayoub Daliri[2], Alfonso Nieto-Castanon[1], Megan Thompson[1], Jason A Tourville[1]; [1]Boston University, [2]Arizona State University*

B70 How event probability impacts sentence processing: Modeling N400 amplitudes during reversal anomalies *Milena Rabovsky[1], James L. McClelland[2]; [1]Freie Universitaet Berlin, [2]Stanford University*

Poster Session C

Friday, August 17, 10:30 am – 12:15 pm, Room 2000AB

Control, Selection, and Executive Processes

C1 The critical role of interference control during novel metaphor comprehension *Hee-Dong Yoon[1], Min-Suk Kang[2], Tae-Hyun Yoo[1], Hyeon-Ae Jeon[1,3]; [1]Daegu Gyeongbuk Institute of Science and Technology (DGIST), Daegu, Republic of Korea, [2]Sungkyunkwan University, Seoul, Republic of Korea, [3]Partner Group of the Max Planck Institute for Human Cognitive and Brain Sciences, DGIST, Daegu, Republic of Korea*

C2 Pre-output language monitoring in sign production *Stephanie Ries[1], Soren Mickelsen[1], Linda Nadalet[1], Megan Mott[1], Katherine J. Midgley[1], Phillip J. Holcomb[1], Karen Emmorey[1]; [1]San Diego State University*

Speech Motor Control and Sensorimotor Integration

C3 The Role of Primary Motor Cortex in Second Language Word Recognition *Beatriz Barragan[1], Kazumasa Uehara[1], Marissa Miller[1], Yuto Tauchi[2], Marco Santello[1], Julie Liss[1]; [1]Arizona State University, [2]Okayama University*

C4 Cortico-striatal tractography: Structural connectivity of the left inferior frontal gyrus along the rostrocaudal length of the putamen *Simone Renée Roberts[1,2,3], Anastasia Bohsali[4,5], Stella Maria Tran[1,2,3], Jonathan Harris Drucker[1,2], Steven Hirschmann, Tricia Z. King[3], Lisa C. Krishnamurthy[1,2,3], Venkatagiri Krishnamurthy[1,2], Thomas Mareci[5], Bruce Crosson[1,2,3]; [1]Center for Visual & Neurocognitive Rehabilitation, US Department of Veterans Affairs, Atlanta, GA, [2]Emory University, [3]Georgia State University, Atlanta, [4]Brain Rehabilitation Research Center, US Department of Veterans Affairs, Gainesville, FL, [5]The University of Florida, Gainesville, FL*

Phonology and Phonological Working Memory

C5 Does alphabetic orthography influence sound variation and change? Evidence from Hong Kong Cantonese *Yubin Zhang[1], Kisa Sze Wai Chan[1], Caicai Zhang[1,2]; [1]The Hong Kong Polytechnic University, [2]Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences*

C6 Does the modified Sternberg task measure verbal working memory function? Evidence from experimental pharmacology *Christopher Barkley[1], Zhenhong Hu[2], Ann Fieberg[1], Lynn Eberly[1], Susan Marino; [1]University of Minnesota, [2]University of Florida*

C7 Phonological rule application recruits left inferior frontal gyrus *Mathias Scharinger[1,2,3], Johanna Steinberg[3,4], Frank Zimmerer[5], Jonas Obleser[6]; [1]Phonetics Research Group, Department of German Linguistics, Philipps-University Marburg, Germany, [2]Center for Mind, Brain and Behavior, Philipps-University Marburg, Germany, [3]Cognitive and Biological Psychology, University of Leipzig, Germany, [4]AGAPLESION Diakonieklinikum Rotenburg GmbH, Rotenburg (Wuemme), Germany, [5]Language Science & Technology, Saarland University, Germany, [6]Institute for Psychology, University of Luebeck*

Perception: Speech Perception and Audiovisual Integration

C8 Brain activity predicts future learning potential in intensive second language listening training *Mayumi Kajiura[1], Hyeonjeong Jeong[2], Natasha Y. S. Kawata[2], Shaoyun Yu[1], Toru Kinoshita[1], Ryuta Kawashima[2], Motoaki Sugiura[2]; [1]Nagoya University, [2]Tohoku University*

C9 Do you see what i am saying? An EEG study about the perception of visual speech. *Maëva Michon[1], Gonzalo Boncompte[1], Vladimir López Hernández[1]; [1]Pontifical Catholic University of Chile, School of Psychology*

C10 Talker-anchoring deficit in lexical tone processing in Cantonese-speaking congenital amusics: Evidence from event-related potentials *Jing Shao[1,2], Rebecca Yick Man Lau[1], Caicai Zhang[1,2]; [1]The Hong Kong Polytechnic University, [2]Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences*

C11 Neural evidence of voice processing: the distinction between familiar and unknown voices *Julien Plante-Hébert[1], Boutheina Jemel[2], Victor Boucher[1]; [1]Laboratoire de sciences phonetiques de l'Universite de Montreal, [2]Laboratoire de recherche en electrophysiologie cognitive, Hopital Riviere-des-Prairies*

C12 Orofacial somatosensory inputs improves speech sound detection in noisy environments *Rintaro Ogane[1,2], Jean-Luc Schwartz[1,2], Takayuki Ito[1,2,3]; [1]GIPSA-lab, CNRS, Grenoble Campus, BP46, F-38402 Saint Martin D'Hères Cedex, France, [2]Univ. Grenoble Alpes, 38400 Saint Martin D'Hères, France, [3]Haskins Laboratories, New Haven, CT*

C13 Brain oscillations and speech rate variations: cortical tracking of syllable rate and fundamental frequency in children and adults *Véronique Boulenger[1], Guiraud Hélène[1], Hincapié Ana-Sofia[2,3], Jerbi Karim[2]; [1]Laboratoire Dynamique Du Langage, CNRS/Université de Lyon UMR5596, Lyon, France, [2]Département de Psychologie, Université de Montréal, Canada, [3]Pontificia Universidad Católica de Chile, Santiago de Chile, Chile*

Perception: Orthographic and Other Visual Processes

C14 The neurobiology of Braille reading beyond the VWFA *Judy Sein Kim[1], Erin Brush[1], Shipra Kanjlia[1], Marina Bedny[1]; [1]Johns Hopkins University*

C15 Word Inversion Sensitivity as a Marker of Word Identification Style and Visual Word Form Area Lateralization *Elizabeth Hirshorn[1], Brandon Carlos[2], Corrine Durisko[3,4], Charles Perfetti[3,4], Julie Fiez[3,4], Marc Coutanche[3,4]; [1]SUNY New Paltz, [2]University of Houston, [3]University of Pittsburgh, [4]Learning Research and Development Center*

C16 Tracking the time course of letter visual-similarity effects during word recognition: A masked priming ERP investigation *Eva Gutierrez-Sigut[1,2], Ana Marcet[1], Manuel Perea[1,3]; [1]University of Valencia, [2]University College London, [3]Basque Center on Cognition, Brain, and Language*

C17 ERPs reveal early orthographic and phonological selectivity during single word reading. *Laurie S. Glezer[1], Katherine J. Midgley[1], Karen Emmorey[1], Phillip J. Holcomb[1]; [1]San Diego State University*

Grammar: Syntax

C18 Subject and Object Asymmetry in Korean Scrambling: An ERP Study *Oh Eunjeong[1], Wonil Chung[2], Myung-Kwan Park[2], Sanghoun Song[3], Euhee Kim[4]; [1]Sangmyung University, [2]Dongguk University, [3]Incheon National University, [4]Shinhan University*

C19 Syntactic and semantic specialization in 5-6 year-old children during auditory sentence processing *Jin Wang[1], Mable Rice[2], James Booth[1]; [1]Psychology and Human Development Department, Vanderbilt University, [2]College of Liberal Arts and Sciences-Speech-Language-Hearing, The University of Kansas*

C20 Abstract rules versus abstract representation: A neural decoding analysis of localized representation in an artificial grammar task *Adriana Schoenhaut[1], Anne Marie Crinnion[2], Ahlfors Seppo[1,3], Gow David[1,3,4]; [1]Massachusetts General Hospital, [2]Harvard University, [3]Athinoula A. Martinos Center for Biomedical Imaging, [4]Salem State University*

C22 Processing linguistic complexity in Japanese scrambled sentences: an fMRI study *Hyeonjeong Jeong[1], Kaoru Koyanagi[2], Fuyuki Mine[2], Yoko Mukoyama[3], Hiroshi Ishinabe[4], Haining Cui[1], Kiyo Okamoto[1], Ryuta Kawashima[1], Motoaki Sugiura[1]; [1]Tohoku University, Sendai, Japan, [2]Sophia University, Tokyo, Japan, [3]Musashino University, Tokyo, Japan, [4]Higashiosaka Junior College, Osaka, Japan*

C23 ERP responses reveal differences in how subject-verb agreement violations are resolved based on the grammatical class of the words involved *Carrie Jackson[1], Patricia Schempp[1], Janet G. van Hell[1]; [1]Pennsylvania State University*

C24 Korean English L2ers' sensitivity to information structure: An ERP study *Wonil Chung[1], Myung-Kwan Park[1]; [1]Dongguk University*

Meaning: Lexical Semantics

C25 Lower Beta Suppression during Early Verb Learning *Emma K. Tharp[1], Yvonne Ralph[1], Julie M. Schneider[1], Mandy J. Maguire[1]; [1]University of Texas at Dallas*

C26 Evaluating experiential models of word semantics relative to distributional and taxonomic models *Leonardo Fernandino[1], Lisa Conant[1], Colin Humphries[1], Jeffrey Binder[1]; [1]Department of Neurology, Medical College of Wisconsin*

C27 Lexical access in reading vs. naming: MEG evidence from semantic priming and inhibition *Julien Dirani[1], Liina Pylkkänen[1,2]; [1]New York University Abu Dhabi, [2]New York University*

C28 The relation between alpha/beta oscillations and the encoding of sentence induced contextual information *René Terporten[1,2], Anne Kösem[2], Bohan Dai[1,2], Jan-Mathijs Schoffelen[2], Peter Hagoort[1,2]; [1]Max Planck Institute for Psycholinguistics, [2]Donders Centre for Cognitive Neuroimaging*

C29 Watching the brain during the acquisition of new words with rich and poor meaning: Electrophysiological evidence *Roberto Ferreira[1], Patricia Román[2], Ton Dijkstra[3]; [1]Universidad Católica de la Santísima Concepción, [2]Universidad Loyola Andalucía, [3]Donders Centre for Cognition, Radboud University*

C30 Neural correlates of automatic semantic priming revealed by an event-related fMRI *Maria Varkanitsa[1], Erin Meier[2], Yue Pan[2], David Caplan[1], Swathi Kiran[2]; [1]Massachusetts General Hospital, Harvard Medical School, [2]Boston University, Sargent College of Health & Rehabilitation Sciences*

C31 The neural correlates of semantic radicals in processing Chinese characters *Xiangyang Zhang[1], Fakun Chen[1], Rui Zhang[1], Jianfeng Yang[1]; [1]Shaanxi Normal University*

Meaning: Prosody, Social and Emotional Processes

C32 Decoding another's feeling of knowing from spoken language with multivariate pattern analysis on fMRI *Xiaoming Jiang[1,2], Ryan Sanford[3], Marc D. Pell[2,3]; [1]Department of Psychology, School of Humanity, Tongji University, China, [2]School of Communication Sciences and Disorders, McGill University, Canada, [3]Montreal Neurological Institute, McGill University, Canada*

C33 Being in love changes brain activity during speaking *Clara Martin[1,2], Ileana Quinones[1], Manuel Carreiras[1,2]; [1]BCBL, [2]Ikerbasque*

C34 Individual differences in sarcasm perception: behavioral and eye tracking evidence *Kathrin Rothermich[1], Mathew Fammartino[2], Hana Kim[1], Gitte Joergensen[2]; [1]East Carolina University, Greenville, USA, [2]University of Connecticut, Storrs, USA*

C35 Neural processes of sarcasm interpretation: the role of tone of voice *Maël Mauchand[1], Jonathan Caballero[1], Xiaoming Jiang[1], Marc Pell[1]; [1]McGill University*

Language Therapy

C36 Using local neural heterogeneity to both predict and track in language recovery *Jeremy Purcell[1], Robert Wiley[1], Brenda Rapp[1]; [1]Department of Cognitive Science, Johns Hopkins University, USA*

C37 Perilesional white matter microstructure and aphasia recovery *Emilie T. McKinnon[1], Jens H. Jensen[1], Chris Rorden[2], Alexandra Basilakos[2], Ezequiel Gleichgerrcht[1], Julius Fridriksson[2], Joseph A. Helpern[1], Leonardo Bonilha[1]; [1]Medical University of South Carolina, [2]University of South Carolina*

C38 BDNF Genotype and tDCS Interaction in Aphasia Therapy *Julius Fridriksson[1], Jordan Elm[2], Brielle Stark[1], Alexandra Basilakos[1], Chris Rorden[3], Souvik Sen[4], Mark George[5,6,7], Leonardo Bonilha[7]; [1]University of South Carolina Department of Communication Sciences and Disorders, [2]Medical University of South Carolina Department of Public Health Sciences, [3]University of South Carolina Department of Psychology, [4]University of South Carolina Department of Neurology, [5]Medical University of South Carolina Department of Psychiatry, [6]Ralph H. Johnson VA Medical Center, Charleston, [7]Medical University of South Carolina Department of Neurology*

Language Disorders

C39 Neuromodulatory effects of individualized tDCS on MEG dynamics in chronic post-stroke aphasia *Priyanka Shah-Basak[1], Gayatri Sivaratnam[1], Selina Teti[1], Alexander Francois-Nienaber[1], Tiffany Deschamps[1], Jed Meltzer[1]; [1]Rotman Research Institute, Baycrest Health Sciences, Toronto, ON Canada*

C40 Syntactic and thematic mechanisms of subject-verb integration in aphasia and typical sentence comprehension *Jennifer Mack[1], Cynthia K. Thompson[2]; [1]UMass-Amherst, [2]Northwestern University*

C41 Diversity of modular networks determines aphasia severity. *Barbara Khalibinzwa Marebwa[1], Julius Fridriksson[2], Leonardo Bonilha[1]; [1]Medical University of South Carolina, [2]University of South Carolina*

C42 Exploring neural organization for two different auditory-motor tasks in typical adults and adults who stutter. *Anastasia Sares[1,4], Mickael Deroche[1,4], Hiroki Ohashi[2], Douglas Shiller[3,4], Vincent Gracco[1,2,4]; [1]Integrated Program in Neuroscience and School of Communication Sciences and Disorders, McGill University, Montréal, QC, Canada, [2]Haskins Laboratories, New Haven, CT, USA, [3]School of Speech-Language Pathology & Audiology, Université de Montréal, Montréal, QC, Canada, [4]Centre for Research in Brain, Language, and Music, Montreal, QC, Canada*

C43 The role of white-matter tracts in language processing in patients with brain tumors *Svetlana Malyutina[1], Olga Dragoy[1], Elisaveta Gordeyeva[1], Andrey Zyryanov[1], Dmitry Kopachev[2], Ekaterina Stupina[1], Valeria Tolkacheva[3], Igor Pronin[2], Maria Ivanova[1]; [1]National Research University Higher School of Economics, [2]Burdenko National Scientific and Practical Center for Neurosurgery, [3]European Master in Clinical Linguistics*

C44 Assessing speech movements in people who stutter using real-time MRI of the vocal tract *Charlotte Wiltshire[1], Jennifer Chesters[1], Mark Chiew[1], Kate E Watkins[1]; [1]University of Oxford*

C45 Apraxia of speech in aphasia maps to lesions in the arcuate fasciculus *Sebastien Paquette[1], Karen Chenausky[1], Andrea Norton[1], Gottfried Schlaug[1]; [1]Music, Stroke Recovery, and Neuroimaging Laboratory, Beth Israel Deaconess Medical Center - Harvard Medical School*

C46 Does a discrete lesion to the posterior left Middle temporal gyrus produce a language deficit? *Sonia Brownsett[1,2], Kori Ramajoo[1,2], Katie McMahon[3], Hanna Gauvin[1,2], Greig de Zubicaray[1,2]; [1]Faculty of Health, School - Psychology and Counselling, QUT, [2]Institute of Health Biomedical Innovation, QUT, [3]Faculty of Health, School - Clinical Sciences*

C47 Atypical neural responses associated with inaccurate speech production in children with speech sound disorders *Alycia Cummings[1], Ying Wu[2]; [1]Idaho State University - Meridian, [2]University of California San Diego*

Language Development

C48 Reading efficiency is associated with fractional anisotropy, but not with myelin content, in the superior cerebellar peduncles. *Lisa Bruckert[1], Katherine E. Travis[1], Aviv A. Mezer[2], Michal Ben-Shachar[3], Heidi M. Feldman[1]; [1]Stanford University, [2]The Hebrew University of Jerusalem, [3]Bar Ilan University*

C49 Development of Spoken Language Comprehension in Children with Cochlear Implants: Data from a Passive Listening Task *David Corina[1], Sharon Coffey-Corina[1], Laurie Lawyer[2], Kristina Backer[1], Andrew Kessler[3], Lee Miller[1]; [1]Center for Mind and Brain, University of California, Davis, [2]University of Essex, United Kingdom, [3]University of Washington, Seattle WA*

C50 Resting state versus Task Based Exploration of Age-Related Changes of the Neurofunctional Connectome. *Perrine Ferré[1], Yassine Benhajali[1], Jason Steffener[2], Yaakov Stern[3], Yves Joanette[1], Pierre Bellec[1]; [1]Centre de recherche de l'Institut Universitaire de Gériatrie de Montréal (CRIUGM), UdeM, [2]Interdisciplinary School of Health Sciences, University of Ottawa, [3]Cognitive Neuroscience Division, Columbia University, USA*

C51 Refining diffusion MRI as a tool to link Anatomical Connectivity and Second-Language Learning Success *Kaija Sander[1,2], Elise B. Barbeau[1,2], Shari Baum[2,3], Michael Petrides[1,2,4], Denise Klein[1,2]; [1]Cognitive Neuroscience Unit, Montreal Neurological Institute, McGill University, Montreal, [2]Centre for Research on Brain, Language and Music (CRBLM), Montreal, [3]School of Communication Sciences and Disorders, McGill University, Montreal, [4]Department of Psychology, McGill University, Montreal*

C52 Neural correlates of sematic ambiguity in second language learners *Kiyo Okamoto[1], Hyeonjeong Jeong[2,3], Haining Cui[3], Ryuta Kawashima[4], Motoaki Sugiura[2]; [1]Graduate School of Medicine, Tohoku University, Sendai, Japan, [2]Department of Human Brain Science, IDAC, Tohoku University, Sendai, Japan, [3]Graduate School of International Cultural Studies, Tohoku University, Sendai, Japan, [4]Department of Advanced Brain Science, IDAC, Tohoku University, Sendai, Japan*

Multilingualism

C53 Bilingualism interacts with age-related cortical thinning in children and adolescents *Christos Pliatsikas[1], Vincent DeLuca[1], Lotte Meteyard[1], Michael Ullman[2]; [1]School of Psychology and Clinical Language Sciences, University of Reading, UK, [2]Department of Neuroscience, Georgetown University, USA*

C54 Bilingualism is a Spectrum: Effects of specific language experiences on brain function and executive control in bilinguals. *Vincent DeLuca[1], Christos Pliatsikas[1], Jason Rothman[1,2], Ellen Bialystok[3]; [1]University of Reading, UK, [2]UiT: The Arctic University of Norway, [3]University of York, Canada*

C55 Bilingual switching experience improves executive control: A follow-up fMRI study *Cong Liu[1], Lu Jiao[2], Yuan Chen[1], Ruiming Wang[1]; [1]South China Normal University, [2]Beijing Normal University*

C56 Individual Differences in Executive Function and L2 Age of Acquisition Modulate Bilingual Homograph Processing *Pauline Palma[1], Veronica Whitford[2], Debra Titone[1]; [1]McGill University, [2]University of Texas at El Paso*

C57 The Impact of Second Language Age of Acquisition and Language Usage Entropy on Reinforcement Learning among Bilingual Adults in a Non-Verbal Decision Making Task *Mehrgol Tiv[1], Jason Gullifer[1], A. Ross Otto[1], Debra Titone[1]; [1]McGill University*

C58 Bilingualism modulates L1 word processing in the developing brain *Olga Kepinska[1], Myriam Oliver[1], Zhichao Xia[1,2], Rebecca Marks[3], Leo Zekelman[1], Roeland Hancock[1,4], Stephanie Haft[1], Priscilla Duong[1,5], Yuuko Uchikoshi Tonkovich[6], Ioulia Kovelman[3], Fumiko Hoeft[1,4,7]; [1]University of California, San Francisco, [2]Beijing Normal University, [3]University of Michigan, [4]University of Connecticut, [5]Palo Alto University, [6]University of California, Davis, [7]Haskins Laboratories*

C59 Neural discrimination of non-native vowel contrasts by late Spanish-English bilinguals *Daniela Castillo[1,2], Eve Higby[3], Sarah Kresh[1], Nancy Vidal-Finnerty[4], Jason A Rosas[1], Valerie L Shafer[1]; [1]The Graduate Center of the City University of New York, [2]Queens College, [3]University of California, Riverside, [4]Iona College*

C60 The Electrophysiological Effects of L2 Negation Processing *Gabrielle Manning[1], Laura Sabourin[1], Sara Farshchi[2]; [1]University of Ottawa, [2]Lund University*

Methods

C61 Worse than useless: traditional ERP baseline correction reduces power through self-contradiction *Phillip M. Alday[1]; [1]Max Planck Institute for Psycholinguistics*

C62 Overcoming the challenges of electrophysiology recordings during multi-word speech production *Svetlana Pinet[1], Nazbanou Nozari[1], Robert T. Knight[2], Stephanie K. Riès[3]; [1]Johns Hopkins University, [2]University of California, Berkeley, [3]San Diego State University*

C63 Analysis of functional connectivity furthers understanding of spontaneous speech and auditory comprehension in chronic stroke. *Helga Thors[1], Brielle C. Stark[1], Grigori Yourganov[1], Alexandra Basilakos[1], Julius Fridriksson[1]; [1]University of South Carolina*

C64 The impact of sample size on the reproducibility of voxel-based lesion-deficit mappings *Diego Lorca-Puls[1], Andrea Gajardo-Vidal[1], Jitrachote White[1], Mohamed Seghier[1,2], Alexander Leff[1], David Green[1], Jenny Crinion[1], Philipp Ludersdorfer[1], Thomas Hope[1], Howard Bowman[3,4], Cathy Price[1]; [1]University College London, [2]Emirates College for Advanced Education, [3]University of Kent, [4]University of Birmingham*

C65 Post-stroke impairment of auditory comprehension is associated with changes in cerebral blood flow *Grigori Yourganov[1], Jaleel Jefferson[1], Julius Fridriksson[1], Brielle Stark[1], Christopher Rorden[1]; [1]University of South Carolina*

Computational Approaches

C66 Break the ice vs. boa constrictors: Do they have different neural bases? *Shohini Bhattasali[1], Murielle Fabre[1], John Hale[1]; [1]Cornell University*

C67 DeepListener: A computational model of human speech recognition that works with real speech and develops distributed phonological codes *Heejo You[1], Hosung Nam[2], Paul Allopenna[1], Kevin Brown[1], James Magnuson[1]; [1]University of Connecticut, [2]Korea University*

Poster Session D

Friday, August 17, 4:45 – 6:30 pm, Room 2000AB

Control, Selection, and Executive Processes

D1 How does functional connectivity between domain-general and language networks relate to sentence comprehension? A resting-state fMRI study in older adults *Megan C. Fitzhugh[1], Leslie C. Baxter[2], Corianne Rogalsky[1]; [1]Arizona State University, [2]Barrow Neurological Institute & St. Joseph's Hospital and Medical Center*

D2 Neural correlates of nonverbal executive performance in chronic post-stroke aphasia *Rahel Schumacher[1], Matthew A. Lambon Ralph[1]; [1]Neuroscience and Aphasia Research Unit, University of Manchester, UK*

D3 Identifying the Neural-Computational Correlates of Cognitive Control During Language Processing - Combined Activation Likelihood Estimation and Functional Imaging Evidence of Language Production *Nicolas Bourguignon[1], Vincent Gracco[2]; [1]Department of experimental psychology, Ghent University, Belgium, [2]Haskins Laboratories, New Haven*

D4 Effect of bilingualism and perceptual load on the subcomponents of attention in older adults: Evidence from the ANT task *Tanya Dash[1,2], Yves Joanette[1,2], Ana Inés Ansaldo[1,2]; [1]Centre de recherche de l'Institut Universitaire de Gériatrie de Montréal, Quebec, [2]École d'orthophonie et d'audiologie, Faculté de médecine, Université de Montréal, Quebec*

Speech Motor Control and Sensorimotor Integration

D5 Speech rate is associated with cerebellar white matter in persistent developmental stuttering *Sivan Jossinger[1], Vered Kronfeld-Duenias[1], Avital Zislis[1], Ofer Amir[2], Michal Ben-Shachar[1]; [1]Bar-Ilan University, [2]Tel-Aviv University*

D6 Ageing does not affect excitability of articulatory motor cortex during speech perception *Helen E Nuttall[1,2], Gwijde Maegherman[2], Patti Adank[2]; [1]Lancaster University, UK, [2]University College London, UK*

D7 Sensorimotor adaptation in speech is sensitive to vowel targets of altered feedback *Hardik Kothare[1,2], Inez Raharjo[1,2], Kamalini Ranasinghe[2], Vikram Ramanarayanan[2,3], Benjamin Parrell[4], John Houde[2], Srikantan Nagarajan[1,2]; [1]UC Berkeley-UCSF Graduate Program in Bioengineering, [2]University of California, San Francisco, [3]Educational Testing Service R&D, [4]University of Wisconsin- Madison*

D8 Neural mechanisms underlying the impact of speech sound naturalness during transformed auditory feedback *Sadao Hiroya[1], Takemi Mochida[1]; [1]NTT Communication Science Labs*

D9 Stuttering-related differences in auditory-motor coherence in speech and tone discrimination. *Tim Saltuklaroglu[1], Ashley Harkrider[1], David Jenson[1], David Thornton[1]; [1]University of Tennessee Health Sciences Center*

D10 Delayed auditory feedback, vocal oscillations, and embedded rhythms *François-Xavier Brajot[1]; [1]Ohio University*

Phonology and Phonological Working Memory

D11 Electrophysiological Effects of Bilingualism and Aging on Working Memory *Cassandra Morrison[1,2], Farooq Kamal[1,2], Giovanna Busa[1,2], Vanessa Taler[1,2], Jason Steffener[1]; [1]University of Ottawa, [2]Bruyère Research Institute*

D12 Nonword repetition recruits distinct and overlapping nodes of language and working memory networks *Terri L. Scott[1], Sara C. Dougherty[1], Ja Young Choi[1,2], Tyler K. Perrachione[1]; [1]Boston University, [2]Harvard University*

D13 Neural dynamics of repetition-based learning of language comprehension parallels perceptual learning *Ayelet Gertsovski[1], Olga Aizenberg[1], Merav Ahissar[1]; [1]Hebrew University of Jerusalem*

D14 Phonotactic Rule-Learning Without Semantics: An EEG study *Enes Avcu[1], Ryan Rhodes[1]; [1]University of Delaware*

Perception: Speech Perception and Audiovisual Integration

D15 Impaired Incidental Phonetic Learning in People with Aphasia *Christopher Heffner[1], David Saltzman[1], Samantha Formica[1], Emily Myers[1]; [1]University of Connecticut*

D16 Lexical tone classification in frontal and posterior regions using fNIRS *Benjamin Zinszer[1], Todd Hay[1], Alex Athey[1], Bharath Chandrasekaran[1]; [1]The University of Texas at Austin*

D17 Perceptual processing of pre-boundary lengthening during phrase segmentation in English: Preliminary ERP evidence. *Annie Gilbert[1,2], Jasmine Lee[3], Max Wolpert[2,4], Shari Baum[1,2]; [1]School of Communication Sciences and Disorders, McGill University, Canada., [2]Centre for Research on Brain, Language and Music, Canada., [3]Honours in Cognitive Science, McGill University, Canada., [4]Integrated Program in Neuroscience, McGill University, Canada.*

D18 Speaker-normalized vowel representations in human auditory cortex *Matthias Sjerps[1,2], Neal Fox[3], Keith Johnson[4], Edward Chang[3]; [1]Donders Institute for Brain Cognition and Behavior, [2]Max Planck Institute Nijmegen, [3]University of California San Francisco, [4]UC Berkeley*

D19 Multimodal effects on comprehension in left hemisphere stroke *Laurel Buxbaum[1], Harrison Stoll[1], Anna Krason[2], Alessandro Monte[2], Gabriella Vigliocco[2]; [1]Moss Rehabilitation Research Institute, [2]University College London*

Perception: Auditory

D20 Measuring the N400 during naturalistic conversation: An EEG hyperscanning study *Caitriona Douglas[1], Antoine Tremblay[1], Aaron Newman[1]; [1]Dalhousie University*

D21 Hierarchical Processing of Degraded Speech: A Functional Near-Infrared Spectroscopy Study *Bradley E. White[1,2,3], Clifton Langdon[1,2,3]; [1]Language and Educational Neuroscience Laboratory, [2]PhD in Educational Neuroscience Program, [3]Gallaudet University*

D22 An EEG study on the influence of dialectal competence on neural processing of front vowels in German *Sarah Franchini; [1]*

Writing and Spelling

D23 Examining plasticity of the reading network: insights from deaf readers of Chinese *Junfei Liu[1,2,3,4], Tae Twomey[1,2], Mengke Wu[3,4], Yiming Yang[3,4], Mairead MacSweeney[1,2]; [1]Institute of Cognitive Neuroscience, University College London, [2]Deafness, Cognition and Language Research Centre, University College London, [3]Jiangsu Key Laboratory of Language and Cognitive Neuroscience, Jiangsu Normal University, [4]School of Linguistic Sciences and Arts, Jiangsu Normal University*

D24 Relationship between functional connectivity and spelling behaviour in individuals with dyslexia *Kulpreet Cheema[1], Dr. William Hodgetts[1,2], Dr. Jacqueline Cummine[1]; [1]Faculty of Rehabilitation Medicine, University of Alberta, Canada, [2]The Institute for Reconstructive Sciences in Medicine, Canada*

Grammar: Morphology

D25 Contributions of left frontal and temporal cortex to sentence comprehension: Evidence from simultaneous TMS-EEG. *Thomas Gunter[1], Leon Kroczek[1], Anna Rysop[1], Angela Friederici[1], Gesa Hartwigsen[1]; [1]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany*

D26 A neurophysiological investigation of translation and morphological priming in biscriptal bilinguals *Myung-Kwan Park[1], Wonil Chung[1], Say Young Kim[2]; [1]Dongguk University, [2]Hanyang University*

D27 Can morphological structure compensate for missing phonological information during reading? Evidence from skilled and un-skilled readers *Tali Bitan[1,2], Yael Weiss[3], Tammar Truzman[4], Laurice Haddad[4], Bechor Barouch[1], Tami Katzir[5]; [1]Psychology Department, IIPDM, University of Haifa, Israel, [2]Department of Speech Pathology, University of Toronto, Canada, [3]Psychology Department University of Texas at Austin, US, [4]Department of Communication Sciences and Disorders, University of Haifa, Israel, [5]Department of Learning Disabilities, The E.J. Safra Brain Research center, University of Haifa, Israel*

Grammar: Syntax

D28 Expectation modulations based on verb bias and grammatical structure probability shape sentence processing: An ERP study *Kirsten Weber[1,2], Lena Henke[1], Cristiano Micheli[2]; [1]Max Planck Institute for Psycholinguistics, Nijmegen, the Netherlands, [2]Donders Institute for Brain,Cognition and Behaviour, Nijmegen, the Netherlands*

D29 EEG Evidence for Different Syntactic Expectations in Parsing Chinese Subject and Object-relative Clauses *Jiayi Lu[1], Matthew Walenski[1], Cynthia K. Thompson[1]; [1]Northwestern University*

D30 Beta-band ERP activity during cyclic wh-movement in French as a physiological index of non-nativeness *Laurent Dekydtspotter[1], Kate A. Miller[2], Mike Iverson[1], Yanyu Xiong[1], Swanson Kyle[1], Gilbert Charlene[1]; [1]Indiana University Bloomington, [2]Indiana University Purdue University Indianapolis*

D31 Left dorsal white-matter microstructure and oscillatory coupling jointly predict language comprehension *Benedict Vassileiou[1], Caroline Beese[1], Angela D. Friederici[1], Lars Meyer[1]; [1]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany*

D32 An ERP study of Q-particle licensing and question-answer congruence in Korean *Daeho Chung[1], Kiyong Choi[2], Wonil Chung[3], Say Young Kim[1], Bum-Sik Park[3], Myung-Kwan Park[3]; [1]Hanyang University, [2]Kwangwoon University, [3]Dongguk University*

Meaning: Lexical Semantics

D33 Language production across the lifespan: Insights from inferential naming *Raphael Fargier[1], Marina Laganaro[1]; [1]FPSE, University of Geneva, Switzerland*

D34 A lesion study of semantic hubs: the anterior temporal lobe and temporo-parietal junction *Nicholas Riccardi[1], Chris Rorden[1], Julius Fridriksson[1], Rutvik Desai[1]; [1]University of South Carolina*

D35 Multi-voxel pattern analysis reveals conceptual flexibility and invariance in language *Markus Ostarek[1], Jeroen van Paridon[1], Peter Hagoort[1,2], Falk Huettig[1,2]; [1]Max Planck Institute for Psycholinguistics, Nijmegen, [2]Donders Institute for Brain, Cognition, and Behavior, Radboud University, Nijmegen*

D36 Fine subdivisions of the left anterior temporal lobe in semantic processing of social words *Xiaosha Wang[1], Bijun Wang[1], Yanchao Bi[1]; [1]Beijing Normal University*

D37 An integrated neural decoder of experiential and linguistic meaning *Andrew Anderson[1], Jeffrey Binder[2], Leonardo Fernandino[2], Colin Humphries[2], Lisa Conant[2], Douwe Kiela[3], Rajeev Raizada[1], Feng Lin[1], Edmund Lalor[1,4]; [1]University of Rochester, [2]Medical College of Wisconsin, [3]Facebook, [4]Trinity College Dublin*

D38 Emojis and Prediction in Sentence Contexts *Ben Weissman[1], Darren Tanner[1]; [1]University of Illinois at Urbana-Champaign*

D39 The neural basis of phonological and semantic neighborhood density *Michele T. Diaz[1], Hossein Karimi[1], Anna Eppes[1], Victoria Gertel[1], Sara Winter[1]; [1]The Pennsylvania State University*

D40 The neural organization of speech production: A lesion-based study of error patterns in connected speech *Brielle Stark[1], Alexandra Basilakos[1], Gregory Hickok[2], Chris Rorden[3], Leonardo Bonilha[4], Julius Fridriksson[1]; [1]University of South Carolina Department of Communication Sciences and Disorders, [2]University of California Irvine Department of Cognitive Science, [3]University of South Carolina Department of Psychology, [4]Medical University of South Carolina Department of Neurology*

D41 Visual stream semantic priming of reading aloud and lexical decision *Josh Neudorf[1], Chelsea Ekstrand[2], Shaylyn Kress[3], Alexandra Neufeldt[4], Ron Borowsky[5]; [1]University of Saskatchewan, [2]University of Saskatchewan, [3]University of Saskatchewan, [4]University of Saskatchewan, [5]University of Saskatchewan*

Meaning: Combinatorial Semantics

D42 Neural evidence for prediction of animacy features by verbs during language comprehension: Evidence from MEG and EEG Representational Similarity Analysis *Lin Wang[1,2], Ole Jensen[3], Gina Kuperberg[1,2]; [1]Department of Psychiatry and the Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Harvard Medical School, Charlestown, MA, USA, [2]Department of Psychology, Tufts University, Medford, MA, USA, [3]Centre for Human Brain Health, University of Birmingham, Birmingham, UK*

D43 Single trial analysis of EEG elicited by expected and implausible words in sentences *Seana Coulson[1], Megan Bardolph[1], Cyma Van Petten[2]; [1]UC San Diego, [2]Binghamton University*

Meaning: Discourse and Pragmatics

D44 Negation, prediction and truth-value judgments: evidence from ERPs *Maria Spychalska[1], Viviana Haase[2], Jarmo Kontinen[2], Markus Werning[2]; [1]University of Cologne, [2]Ruhr University Bochum*

D45 The neural basis of shared discourse: fMRI evidence on the relation between speakers' and listeners' brain activity when processing language in different states of ambiguity *Karin Heidlmayr[1,2], Kirsten Weber[1,2], Atsuko Takashima[1,2], Peter Hagoort[1,2]; [1]Max Planck Institute for Psycholinguistics, Wundtlaan 1, 6525XD Nijmegen, The Netherlands, [2]Donders Institute for Brain, Cognition and Behaviour, Radboud University, 6500 HB Nijmegen, The Netherlands*

D46 Anatomical connectivity and conversational impairments in patients who suffered from a moderate to severe traumatic brain injury *Karine Marcotte[1,2], Simona Maria Brambati[2,3], Erlan Sanchez-Gonzalez[1,2], Caroline Arbour[1,2], Christophe Bedetti[3], Nadia Gosselin[1,3]; [1]Centre de recherche du CIUSSS du Nord-de-l'île-de-Montréal (Hôpital du Sacré-Cœur de Montréal) Montréal, Quebec, Canada., [2]Université de Montréal, [3]Centre de recherche de l'Institut Universitaire de Gériatrie de Montréal, Montréal, Québec, Canada.*

D47 Prior experience modulates electrophysiological responses to novel metaphorical language. *Rafal Jonczyk[1,2], Gül E. Kremer[3], Zahed Siddique[4], Janet G. Van Hell[1]; [1]Pennsylvania State University, USA, [2]Adam Mickiewicz University, Poland, [3]Iowa State University, USA, [4]University of Oklahoma, USA*

Language Therapy

D48 Sensorimotor Strategies for the Improvement of Naming Abilities in Aphasia: Neural and Behavioral Correlates of POEM – Personalized Observation, Execution, and Mental Imagery Therapy in two participants with verb anomia *Edith Durand[1,2], Pierre Berroir[1,3], Ana Inés Ansaldo[1,2,3]; [1]Centre de Recherche de l'Institut Universitaire de Gériatrie de Montréal CRIUGM, Canada, [2]Ecole d'orthophonie et d'audiologie, Faculté de médecine, Université de Montréal, Canada, [3]Université de Montréal et Ecole polytechnique, Institut de génie biomédical, Canada*

Language Disorders

D49 Dissociable thalamo-cortical network disruption explains language, motor and sensory deficits after stroke *Anika Stockert[1], Sophia Hormig[1], Max Wawrzyniak[1], Mandy Pirlich[1], Stefan Schob[1], Dorothee Saur[1]; [1]University Clinic of Leipzig, Germany*

D50 Effects of active and sham tDCS on lexical decision in three persons with chronic aphasia *Rachael M. Harrington[1], Simone R. Roberts[1,2], Lisa C. Krishnamurthy[1,2,3], Venkatagiri Krishnamurthy[2,3], Amy D. Rodriguez[3], Keith M. McGregor[2,3], Marcus Meinzer[4], Bruce Crosson[1,2,3]; [1]Georgia State University, Atlanta, GA, USA, [2]Emory University, Atlanta, GA, USA, [3]Atlanta VAMC, Decatur, GA, USA, [4]University of Queensland, Herston, QLD, AU*

D51 Rethinking Effects of White Matter Tract Disconnection on Post-Stroke Language Impairment *Jason Geller[1], Melissa Thye[1], Daniel Mirman[1]; [1]University of Alabama-Birmingham*

D52 Formulaic language in bilingual individuals with Parkinson's Disease: A comparison with healthy controls *Binna Lee[1,2], Diana Van Lancker Sidtis[1,2]; [1]New York University, [2]Nathan Kline Institute for Psychiatric Research, Orangeburg, NY*

D53 Functional contribution of the arcuate fasciculus to language processing: A tractography study in individuals with stroke *Maria V. Ivanova[1,2], Allison Zhong[1], And Turken[1], Brian Curran[1], Nina F. Dronkers[1,3,4]; [1]Center for Aphasia and Related Disorders, VA Northern California Health Care System, Martinez, California, USA, [2]National Research University Higher School of Economics, Center for Language and Brain, Moscow, Russian Federation, [3]University of California, Davis, California, USA, [4]University of California, Berkeley, California, USA*

D54 Neural plasticity and right hemisphere contributions to recovery of sentence comprehension in aphasia: evidence from sentence processing treatment *Elena Barbieri[1], Jennifer E. Mack[1], Brianne M. Chiappetta[1], Eduardo R.H. Europa[1], Cynthia K. Thompson[1]; [1]Northwestern University*

D55 Picture description versus picture naming: assessing language deficits following dominant hemisphere tumour resection. *Sonia Brownsett[1,2], Kori Ramajoo[1,2], Katie McMahnon[3], Hanna Gauvin[1,2], Greig de Zubicaray[1,2]; [1]Faculty of Health, School - Psychology and Counselling, QUT, [2]Institute of Health Biomedical Innovation, QUT, [3]Faculty of Health, School - Clinical Sciences, QUT*

D56 Relative Contributions of Lesion Location and Lesion Size to Predictions of Varied Language Deficits in Post-Stroke Aphasia *Melissa Thye[1], Daniel Mirman[1]; [1]University of Alabama at Birmingham*

Multilingualism

D57 The influence of bilingual language experience on verbal fluency and brain structure and function *Shanna Kousaie[1], Shari Baum[2,3], Natalie A. Phillips[2,4,5], Vincent Gracco[2,3,6], Debra Titone[2,7], Jen-Kai Chen[1,2], Denise Klein[1,2]; [1]Cognitive Neuroscience Unit, Montreal Neurological Institute, McGill University, Montreal, QC, H3A 2B4, Canada, [2]Centre for Research on Brain, Language and Music, McGill University, Montreal, QC, H3G 2A8, Canada, [3]School of Communication Sciences and Disorders, Faculty of Medicine, McGill University, Montreal, QC, H3A 1G1, Canada, [4]Department of Psychology/ Centre for Research in Human Development, Concordia University, Montreal, QC, H4B 1R6, Canada, [5]Bloomfield Centre for Research in Aging, Lady Davis Institute for Medical Research and Jewish General Hospital/McGill University Memory Clinic, Jewish General Hospital, Montreal, QC, H3T 1E2, Canada, [6]Haskins Laboratories, New Haven, CT, 06511, USA, [7]Department of Psychology, McGill University Montreal, QC, H3A 1G1, Canada*

D58 Pardon My Code-Switching: Electrophysiological Effects of Mixing within the Determiner Phrase *Leah Gosselin[1], Michèle Burkholder[1], Laura Sabourin[1]; [1]University of Ottawa*

D59 Working Memory Filtering and Individual Differences in Second Language Aptitude *Chantel Prat[1], Malayka Mottarella[1], Brianna Yamasaki[1]; [1]University of Washington*

D60 Neural correlates of between-language competition in foreign language attrition *Anne Mickan[1,2], James M. McQueen[2], Vitória Piai[2,3], Kristin Lemhöfer[2]; [1]Max-Planck Institute for Psycholinguistics, [2]Donders Centre for Cognition, Radboud University Nijmegen, [3]Department of Medical Psychology, Radboudumc*

D61 Linking Second Language Proficiency and Naming Failures in Native Language: An fMRI Study *Katy Borodkin[1], Abigail Livny-Ezer[2,3], Galia Tsarfaty[2], Miriam Faust[4,5]; [1]Department of Communication Disorders, Sackler Faculty of Medicine, Tel Aviv University, [2]Department of Diagnostic Imaging, Sheba Medical Center, [3]Joseph Sagol Neuroscience Center, Sheba Medical Center, [4]The Leslie and Susan Gonda (Golschmied) Multidisciplinary Brain Research Center, Bar-Ilan University, [5]Department of Psychology, Bar-Ilan University*

D62 Beyond dementia: interaction of bilingualism and neurodegeneration *Toms Voits[1], Holly Robson[1], Jason Rothman[1], Christos Pliatsikas[1]; [1]University of Reading*

D63 The relationship between resting state networks and bilingual reading: A preliminary investigation *Jason Gullifer[1,4], Xiaoqian Chai[2,4], Veronica Whitford[3,4], Irina Pivneva[1,4], Shari Baum[1,4], Denise Klein[1,4], Debra Titone[1,4]; [1]McGill University, [2]Johns Hopkins University, [3]University of Texas at El Paso, [4]Centre for Research on Brain, Language & Music*

D64 The Effects of Short-term Literacy Training on Phonological Awareness *Brenda Guerrero[1], Angelique M. Blackburn[1]; [1]Texas A&M International University, [2]Texas A&M International University*

Signed Language and Gesture

D65 Gesture incongruity effects on speech preserved with verbal but not visuospatial WM load: An ERP study *Jacob Momsen[1,2], Jared Gordon[1], Seana Coulson[1]; [1]University of California San Diego, [2]San Diego State University*

D66 ERP evidence for implicit co-activation of English during recognition of American Sign Language *Brittany Lee[1,2], Gabriela Meade[1,2], Megan Mott[1], Katherine J. Midgley[1], Phillip J. Holcomb[1], Karen Emmorey[1]; [1]San Diego State University, [2]University of California, San Diego*

D67 ERPs in multimodal language comprehension: How discourse information and synchrony influence gesture-speech processing *Isabella Fritz[1,3], Sotaro Kita[2], Jeannette Littlemore[3], Andrea Krott[3]; [1]Norwegian University of Science and Technology (NTNU), [2]University of Warwick, [3]University of Birmingham*

Computational Approaches

D68 A simulation-based approach to statistical power with ERPs *Chia-Wen Lo[1], Jonathan Brennan[1]; [1]University of Michigan*

D69 Discern: a computational model of naming deficits in bilingual speakers with aphasia *Claudia Penaloza[1], Uli Grasemann[2], Maria Dekhtyar[1], Risto Miikkulainen[2], Swathi Kiran[1]; [1]Boston University, [2]The University of Texas at Austin*

D70 Flexible meaning: the neuromodulation of noun meaning by a prior verb *Bingjiang Lyu[1], Alex Clarke[1], Hun Choi[1], Lorraine Tyler[1]; [1]Department of Psychology, University of Cambridge*

Poster Session E

Saturday, August 18, 3:00 – 4:45 pm, Room 2000AB

Control, Selection, and Executive Processes

E1 Semantic diversity affects word processing similarly for PWA with and without semantic deficits: Evidence against the semantic control hypothesis *Curtiss Chapman[1], Randi Martin[1]; [1]Rice University*

E2 The Lifelong Impact of Language Context on the Neural Correlates of Switching *Alexandra Reyes[1], Angelique Blackburn[1]; [1]Texas A&M International University*

E3 Is the Ventrolateral Prefrontal Cortex language-specific or domain-general? An intracranial-EEG study *Marcela Perrone-Bertolotti[1], Samuel El Bouzaïdi Tiali[1], Richard Palluel-Germain[1], Lorella Minotti[2,3,4], Anne-Sophie Job[2,3,4], Philippe Kahane[2,3,4], Monica Baciu[1], Jean-Philippe Lachaux[5,6]; [1]Univ. Grenoble Alpes, CNRS, LPNC UMR 5105, 38000, Grenoble, France, [2]Univ. Grenoble Alpes, Institut des Neurosciences, GIN, 38000 Grenoble, France, [3]CHU Grenoble Alpes, Pôle Neurologie Psychiatrie, 38000, Grenoble, France, [4]INSERM, U1216, F-38000, Grenoble, France, [5]INSERM, U1028, CNRS, UMR5292, Lyon Neuroscience Research Center, Brain Dynamics and Cognition Team, DYCOG, Lyon F-69000, France, [6]Lyon's University, Lyon, France*

E4 Neural tracking of attended continuous speech in early and late bilinguals *Andrea Olguin[1], Mario Cekic[2], Tristan A. Bekinschtein[1], Mirjana Bozic[1]; [1]Department of Psychology, University of Cambridge, [2]Department of Computer Science and Technology, University of Cambridge*

Phonology and Phonological Working Memory

E5 Resting state and task-related neural oscillations in adults who stutter and controls implicate deficits in sensorimotor integration *Andrew Bowers[1], Dan Hudock[2], Lisa Bowers[1], Heather Ramsdell-Hudock[2]; [1]University of Arkansas, [2]Idaho State University*

E6 Investigating brain lateralization during speechreading and reading in deaf adults using functional transcranial Doppler sonography (fTCD). *Eva Gutierrez-Sigut[1,2], Victoria Mousley[2], Laura Monroy[2], Sophie Harte[2], Mairead MacSweeney[2]; [1]University of Valencia, [2]University College London*

E7 Neurobiological correlates of age-related auditory verbal working memory decline *Maxime Perron[1], Isabelle Deschamps[1], Julie Poulin[1], Pascale Tremblay[1]; [1]Université Laval, Centre de recherche CERVO*

Perception: Speech Perception and Audiovisual Integration

E8 Word Learning Influences Phonotactic Repair: A Granger Analysis of MR-constrained MEG/EEG data *Adriana Schoenhaut[1], Mulliner Cody[3], Ahlfors Seppo[1,2], Gow David[1,2,3]; [1]Massachusetts General Hospital, [2]Athinoula A. Martinos Center for Biomedical Imaging, [3]Salem State University*

E9 Using machine learning to model effects of attention and language-experience on neural phonemic constancy *Fernando Llanos[1], Rachel Reetzke[1], Zilong Xie[1], Liberty Hamilton[1], Bharath Chandrasekaran[1,2,3,4,5]; [1]Department of Communication Sciences and Disorders, The University of Texas at Austin, [2]Institute for Mental Health Research, The University of Texas at Austin, [3]Department of Psychology, The University of Texas at Austin, [4]Department of Linguistics, The University of Texas at Austin, [5]Institute for Neuroscience, The University of Texas at Austin*

E10 Emotionally expressed voices are retained in memory following a single exposure *YOON JI KIM[1,2], John Sidtis[2,1], Diana Van Lancker Sidtis[1,2]; [1]New York University, [2]Nathan Kline Institute for Psychiatric Research*

E11 The Development of Mismatch Response to Vowels and Initial Consonants from birth to 24 Months *Ying-Ying Cheng[1], Chia-Ying Lee[1]; [1]Institute of Linguistics, Academia Sinica, Taiwan*

E12 Formal and temporal predictions in speech perception *Alexandra K. Emmendorfer[1,2,3], Joao Correia[1,2,4], Joëlle Schroën[1], Bernadette M. Jansma[1,2], Sonja A. Kotz[3], Milene L. Bonte[1,2]; [1]Department of Cognitive Neuroscience, Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, The Netherlands, [2]Maastricht Brain Imaging Center, Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, The Netherlands, [3]Department of Neuropsychology*

and Psychopharmacology, Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, The Netherlands, [4]Basque Center on Cognition, Brain and Language, San Sebastian, Spain

E13 Electrophysiological Evidence of Early Lexical Influences on Sub-lexical Processing: Evidence from the Ganong Paradigm *Colin Noe[1], Simon Fischer-Baum[1]; [1]Rice University, Department of Psychology*

E14 Neurophysiological correlates of directional asymmetries in adult vowel perception: An auditory brainstem study *Matthew Masapollo[1], T. Christina Zhao[2], Linda Polka[3,4], Lucie Ménard[4,5]; [1]Boston University, [2]Institute for Learning & Brain Sciences, University of Washington, [3]McGill University, [4]Center for Research on Brain, Language & Music, [5]University of Quebec at Montreal*

Perception: Auditory

E15 Human cortical encoding of a discrete temporal landmark for processing syllables in continuous speech *Yulia Oganian[1], Edward F. Chang[1]; [1]University of California, San Francisco*

E16 Structural connectivity across stimulation-defined critical language areas *Brian H. Silverstein[1], Eishi Asano[1,2], Yasuo Nakai[2,3], Jeong-won Jeong[1,2]; [1]Wayne State University, Detroit, MI, USA, [2]Children's Hospital of Michigan, Detroit, MI, USA, [3]Wakayama Medical University, Wakayama, JPN*

E17 Investigating non-verbal vocal communication with fNIRS *Addison Niemeyer[1], Sophie Scott[1]; [1]Institute of Cognitive Neuroscience, University College London*

E18 Temporal voice areas exist in autism spectrum disorder but are dysfunctional for voice identity recognition *Stefanie Schelinski[1,2], Kamila Borowiak[1,2,3], Katharina von Kriegstein[1,2]; [1]Max Planck Institute for Human Cognitive and Brain Sciences, [2]Technical University of Dresden, [3]Berlin School of Mind and Brain, Humboldt University of Berlin*

E19 Phonetic content of auditory representations *Ryan Rhodes[1], Chao Han[1]; [1]University of Delaware*

Perception: Orthographic and Other Visual Processes

E20 The Role of left Fusiform gyrus in Chinese character recognition: an ERP study using Adaptation Paradigm *Rui Zhang[1], Shujuan Liu[1], Xiangyang Zhang[1], Jianfeng Yang[1]; [1]Shaanxi Normal University*

E21 Priming effects between fingerspelled fonts and printed letters *Zed Sevcikova Sehyr[1], Jamie Renna[1], Stephanie Osmond[1], Katherine Midgley[1], Phillip Holcomb[1], Karen Emmorey[1]; [1]San Diego State University*

E22 Asymmetrical connectivity underlying the right visual field advantage in lateralized lexical decision *Jed Meltzer[1,2], Ronald Chu[1,2]; [1]Baycrest Hospital, [2]University of Toronto*

E23 Statistical learning and reading: An information-theoretical perspective *Noam Siegelman[1], Victor Kuperman[2], Ram Frost[1,3,4]; [1]Hebrew University of Jerusalem, [2]McMaster University, [3]Haskins Laboratories, [4]Basque center of Cognition, Brain and Language (BCBL)*

E24 Electrophysiological evidence for a left hemisphere bias towards letters as early as 100ms *Kurt Winsler[1,2], Stephanie Osmond[1], Katherine Midgley[1], Phillip Holcomb[1], Jonathan Grainger[3]; [1]San Diego State University, [2]University of California, Davis, [3]Aix-Marseille Université*

Grammar: Syntax

E25 Interaction of morphological and long-distance dependency processing: MEG evidence *Suhail Matar[1,2], Ryan King[1], Wesley Leong[1], Liina Pylkkänen[1,2]; [1]New York University, [2]NYU Abu Dhabi Research Institute*

E26 Predicting what, when, and how in the course of Japanese classifier-noun comprehension *Hiromu Sakai[1], Yohei Oseki[1], Naho Orita[2]; [1]Waseda University, [2]Tokyo University of Science*

E27 Producing sentences in the MRI scanner: Effects of lexicality and verb arguments *Atsuko Takashima[1], Antje Meyer[1], Peter Hagoort[1,2], Kirsten Weber[1,2]; [1]Max Planck Institute for Psycholinguistics, Nijmegen, the Netherlands, [2]Donders Institute for Brain, Cognition and Behaviour, Nijmegen, the Netherlands*

Meaning: Lexical Semantics

E28 Dissociating the Role of Repetition and Semantic Association *Neus Ramos Escobar[1,2], Clement Francois[1,2], Mtti Laine[3], Antoni Rodriguez-Fronells[1,2,4]; [1]Cognition and Brain Plasticity Group, Bellvitge Biomedical Research Institute (IDIBELL), L'Hospitalet de Llobregat, Barcelona, Spain, [2]Department of Basic Psychology, Campus Bellvitge, University of Barcelona, L'Hospitalet de Llobregat, Barcelona 08097, Spain, [3]Department of Psychology, Abo Akademi University, Turku, Finland, [4]Catalan Institution for Research and Advanced Studies, ICREA, Barcelona, Spain*

E29 Network Analysis of Concreteness within Association Modules *Dominick DiMercurio[1], Chaleece Sandberg[1]; [1]Pennsylvania State University*

E30 Learning Novel Words with Meanings: The Role of Consolidation in Word Learning and Memory Retention *Yushuang Liu[1], Janet G. van Hell[1]; [1]The Pennsylvania State University*

E31 Anterior temporal lobe in identification of specific entities *Nicholas Riccardi[1], Rutvik Desai[1]; [1]University of South Carolina*

E32 Frequency, orthographic neighborhood, and concreteness effects in deaf readers of English: An ERP study *Stephanie Osmond[1], Kurt Winsler[2], Gabriela Meade[1,3], Phillip J Holcomb[1], Katherine J Midgley[1], Karen Emmorey[1]; [1]San Diego State University, [2]University of California, Davis, [3]University of California, San Diego*

E33 Temporal and spatial differences in the lexical and morphosyntactic incongruence processing *María Francisca Alonso-Sánchez[1,2], Lucía Zepeda[1,3], Pavel Prado[3], Pedro Alfaro-Faccio[4], Debra von Chrismar[4]; [1]Escuela de Fonoaudiología, Facultad Salud, Universidad Santo Tomás, [2]Centro de investigación del desarrollo en cognición y lenguaje (CIDCL), Universidad de Valparaíso, [3]Advanced Center for Electrical and Electronic Engineering (AC3E), Universidad Federico Santa María, [4]Instituto de Literatura y Ciencias del Lenguaje (ILCL), Pontificia Universidad Católica de Valparaíso*

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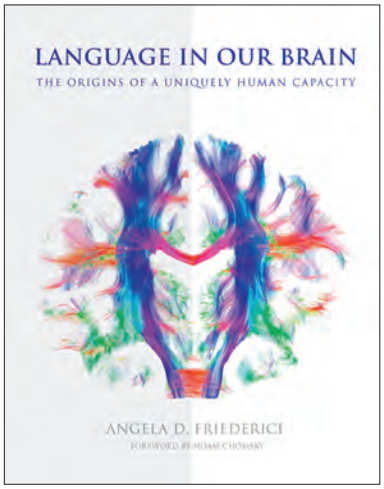

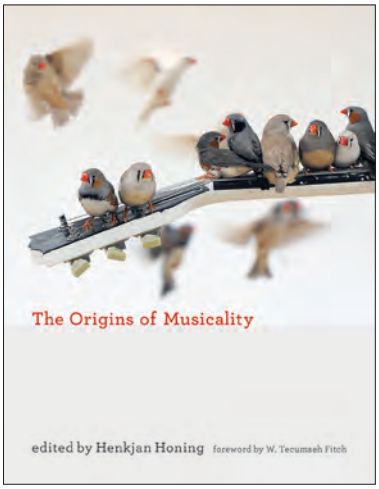

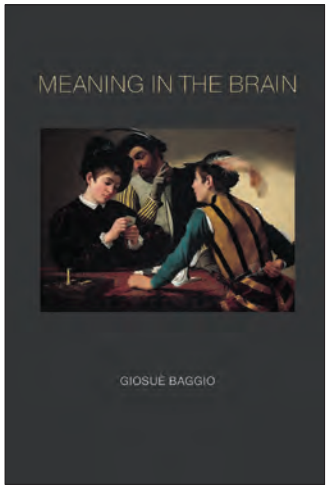

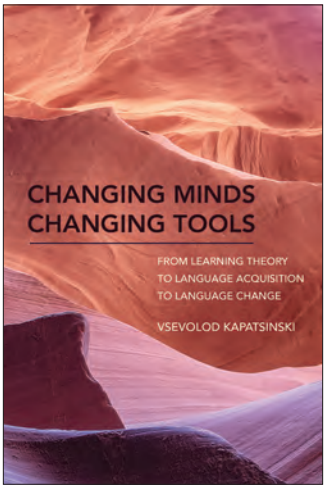

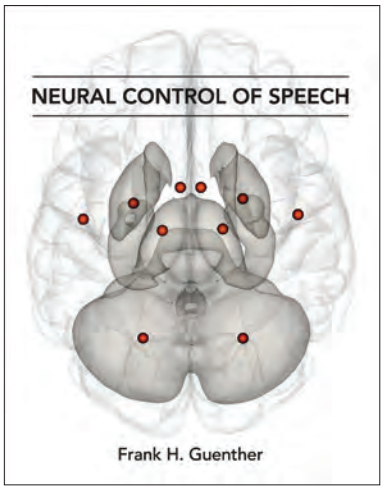

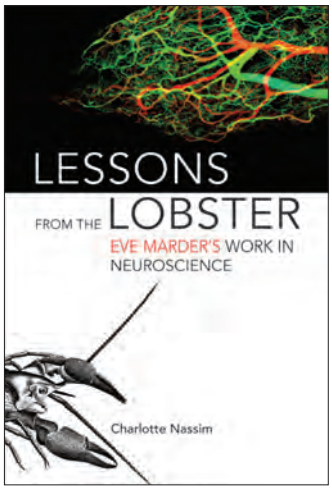

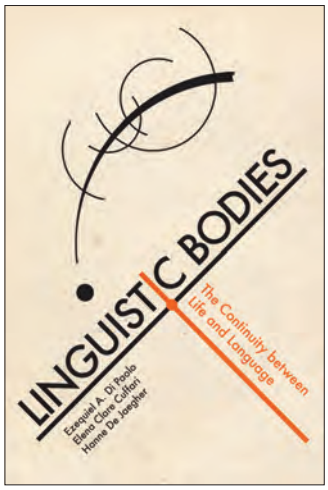

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