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SNL Directors and Committees

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- Past Meeting Liaison:** **Pascale Tremblay**, Ph.D.,
Université Laval, Québec, Canada

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- Sonja Kotz**, Ph.D., Max Planck Institute, Germany
- Cathy Price**, Ph.D., Wellcome Trust Centre for
Neuroimaging, University College London, UK

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- | | |
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| Christiana Leonard , Ph.D. | Zude Zhu , Ph.D. |
| Ran Liu | |
| Anna MacDonald , Ph.D | |

Welcome to NLC 2011

Welcome to the Third Annual Neurobiology of Language Conference (NLC) and the first NLC to be formally run by our new organization, the Society for the Neurobiology of Language (SNL)! You may have noticed some growing pains over the last year as we worked to coordinate websites, rules for Society membership, conference abstract submission, and conference registration systems. It turns out that setting up and managing a new society and planning an annual meeting is a lot of work and a bit overwhelming for a group of mere neuroscientists. Happily we were able to secure the help of a team of professionals –Tara Miller Events (TME), the same management group that runs the Cognitive Neuroscience Society, among others. TME is helping us with management and planning so that we can spend more time doing what we do best – fighting for grant money and arguing about the neurobiology of language.

By all accounts, the Neurobiology of Language Conference has been a resounding success. In just a couple of years, the NLC has emerged as the primary meeting in our field. We can thank Steve Small and his group (i.e., Pascale Tremblay) for getting the ball rolling. But now with the formation of our new Society and the realization that operating a quasi-satellite to SfN is not feasible in the long term, we are beginning a new phase in the development of our organization. We are growing up – and that's where you come in. Although it may seem like meetings and societies exist independently of the scientists and students who decide (or not) to partake in what these entities have to offer, this is not the case. Meetings and societies exist because people like you and me recognize a need and decide to put in the effort to make them happen. What this means is that if you value what we all have created, it is your responsibility to keep it going by participating in and promoting the effort. You don't have to run for office. There are lots of ways to participate: join the Society, nominate and vote, submit abstracts and attend the meeting, provide feedback and suggestions, tell your friends and colleagues about how cool we are. You get the idea. This is our Society and annual meeting. Let's work together as a community to help it grow and prosper. It won't do it on its own.

I would personally like to thank the SNL Board of Directors, the Program Committee, the Nomination Committee, as well as Shaune, Shawna, and Tara at TME – all of whom worked very hard to pull things together. I would also like to thank our invited speakers for accepting our invitation. It is important to acknowledge NIDCD who provided funding to support our invited speakers and provide, for the first time, merit and travel scholarships.

On behalf of the Board, welcome to Annapolis!

Gregory Hickok

Chair, Society for the Neurobiology of Language

Schedule of Events

Wednesday, Nov. 9

4:00 - 7:00 pm

Pre-Registration Check-in and Onsite Registration

Capitol A Pre-Function

Thursday, Nov. 10

7:00 am - 6:00 pm

Pre-Registration Check-in and Onsite Registration

Capitol A Pre-Function

7:30 - 8:45 am

Continental Breakfast

Capitol A Pre-Function

8:45 - 9:00 am

Opening Remarks: *Greg Hickok, Chair*

Capitol Ballroom B & D

9:00 - 10:00 am

Keynote: *Troy Hackett*

Primate Auditory Cortex: Principles of Organization and Future Directions

Capitol Ballroom B & D

10:00 - 10:30 am

Coffee Break

Capitol Pre-Function

10:00 - 11:30 am

Poster Session A

Speech Perception, Prosody, Acquisition, Manual & Sign Language, Pathology, Speech Production

Senate, Capitol C, and Capitol C Pre-Function

11:30 am - 12:50 pm

Slide Session A

Capitol Ballroom B & D

12:50 - 2:00 pm

Lunch Break

on your own

2:00 - 3:20 pm

Slide Session B

Capitol Ballroom B & D

3:20 - 3:50 pm

Coffee Break

Capitol Pre-Function

3:20 - 4:50 pm

Poster Session B

Speech Perception, Prosody, Multilingualism, Reading & Writing, Social & Emotional Processing

Senate, Capitol C, and Capitol C Pre-Function

4:50 - 6:10 pm

Discussion Panel: *David Poeppel & Sophie Scott*

Mechanisms underlying the lateralisation of speech perception

Capitol Ballroom B & D

6:15 - 8:15 pm

Poster Session C and Welcome Reception

Multilingualism, Reading & Writing, Social & Emotional Processing, Acquisition, Manual & Sign Language, Pathology, Speech Production

Senate, Capitol C, and Capitol C Pre-Function

Friday, Nov. 11

7:00 am - 6:45 pm	Pre-Registration Check-in and Onsite Registration <i>Capitol A Pre-Function</i>
7:30 - 8:45 am	Continental Breakfast <i>Capitol A Pre-Function</i>
8:50 - 9:00 am	Opening Remarks: <i>Greg Hickok, Chair</i> <i>Capitol Ballroom B & D</i>
9:00 - 10:00 am	Keynote: <i>Katrin Amunts</i> <i>Broca's region – architecture and novel organizational principles</i> <i>Capitol Ballroom B & D</i>
10:00 - 10:30 am	Coffee Break <i>Capitol Pre-Function</i>
10:00 - 11:30 am	Poster Session D <i>Anatomy, Cognitive & Executive Processing, Syntax, Conceptual/Semantic/Discourse Processing</i> <i>Senate, Capitol C, and Capitol C Pre-Function</i>
11:30 am - 12:50 pm	Slide Session C <i>Capitol Ballroom B & D</i>
12:50 - 2:00 pm	Lunch Break on your own
2:00 - 3:20 pm	Slide Session D <i>Capitol Ballroom B & D</i>
3:20 - 3:50 pm	Coffee Break <i>Capitol Pre-Function</i>
3:20 - 4:50 pm	Poster Session E <i>Anatomy, Cognitive & Executive Processing, Syntax, Conceptual/Semantic/Discourse Processing</i> <i>Senate, Capitol C, and Capitol C Pre-Function</i>
4:50 - 5:20 pm	Business Meeting <i>Capitol Ballroom B & D</i>
5:20 - 6:40 pm	Discussion Panel: <i>Alfonso Caramazza & Friedemann Pulvermuller</i> <i>What is the Role of the Motor System in Action Concepts?</i> <i>Capitol Ballroom B & D</i>

Awards

The Society for the Neurobiology of Language (SNL) awards several Travel Awards funded by the National Institute on Deafness and Communication Disorders (NIDCD) to help cover travel and registration costs for the 2011 Neurobiology of Language Conference (NLC) in Annapolis, Maryland.

ABSTRACT MERIT AWARDS

Abstract Merit Awards were given to the two students and two postdocs submitting the highest ranked abstracts.

The SNL 2011 Merit Awards were given to:

Elisabeth Karuza, *The University of Rochester, NY, US*

Hannah Snyder, *University of Colorado at Boulder, US*

Siyan Liu, *National Institutes of Health, National Institute on Deafness and Other Communication Disorders, US*

Michael Wolmetz, *Johns Hopkins University, MD, US*

TRAVEL AWARDS

12 Travel awards were given to students and postdocs to help defray the costs of attending the meeting.

The SNL 2011 Travel Awards were given to:

Teon Brooks, *New York University, US*

Brea Chouinard, *University of Alberta, Canada*

Kimiko Domoto-Reilly, *Massachusetts General Hospital and Harvard Medical School, US*

Sarah Grace Hudspeth, *University of South Carolina, US*

Nina Hsu, *University of Pennsylvania, US*

Shinae Kang, *University of California, Berkeley, US*

Mikel Lizarazu, *Basque Center on Cognition, Brain and Language (BCBL), Spain*

Aya Meltzer-Asscher, *Northwestern University, US*

Takenobu Murakami, *Goethe-University, Frankfurt, Germany*

Tepring Piquado, *University of California, Irvine, US*

Rubén Torres, *National Autonomous University of Mexico, Mexico*

Jean Mary Zarate, *New York University, US*

Keynote Lectures

PRIMATE AUDITORY CORTEX: PRINCIPLES OF ORGANIZATION AND FUTURE DIRECTIONS

Thursday, November 10, 9:00 – 10:00 am, Capitol Ballroom B & D

Chair: *Greg Hickok*, University of California, Irvine, US



Speaker: *Troy Hackett*, Department of Hearing and Speech Sciences, Vanderbilt University School of Medicine, USA and Department of Psychology, Vanderbilt University, US

Every major region of the brain contains areas that are involved in the processing of sound, and each of these areas is thought to perform unique functional roles. After decades of inquiry, however, we have not been able to determine even the primary function of any of these areas. In part, progress has been limited by methodological and technological constraints, especially for studies of the human brain. As a result, much of what is known about central auditory processing depends on studies in species chosen as model systems. As an animal model of central auditory processing, nonhuman primates play an important role in bridging the findings from research conducted in humans with those derived from other species. But, like all animal models, the nonhuman primate is unavoidably incomplete as a model system for understanding human

audition. The expanded auditory-related capabilities of humans, including language, make use of extensive adaptations and elaborations of brain structures and associated networks – most of which are waiting to be discovered. This expansion is most obvious in the cortex. Compared to the subcortical auditory pathway, which appears to be more highly conserved across species, the organization of auditory areas in cortex varies so widely that the establishment of homologous areas is currently limited to only one or two primary fields. Yet, amidst this diversity, a growing number of shared anatomical and physiological features are being identified. These common ‘principles of organization’ are not only a means of comparing and contrasting model species, but their extension to studies of the human brain is also moving us closer to establishing a working model of human auditory cortex that can be tested and refined. These efforts will provide an improved foundation for advanced functional imaging and electrophysiological studies of normal and impaired auditory processing both now and into the future.

BROCA'S REGION – ARCHITECTURE AND NOVEL ORGANIZATIONAL PRINCIPLES

Friday, November 11, 9:00 – 10:00 am, Capitol Ballroom B & D

Chair: *Murray Grossman*, University of Pennsylvania, Philadelphia, US



Speaker: *Katrin Amunts*, Institute of Neuroscience and Medicine, Research Center Juelich, Germany and Department of Psychiatry, Psychotherapy and Psychosomatics, RWTH Aachen University, Germany

Different aspects of language processing are associated with localized activations in specific brain regions and networks. Modern neuroimaging has opened the possibility to analyse language in the human brain during experimentally well-controlled tasks. However, the microstructural correlates of such activations and their relationship are not well understood. Apart from the classical concept of two language centres, Broca's and Wernicke's, there was little progress in the last decades with respect to their structural segregation, localization and extent, and distinctiveness as “language” region. Evidence will be provided that the segregation of Broca's region is more complex than previously assumed. The talk will show how the inferior frontal cortex has been analysed using multivariate statistical tools for the definition of cortical borders.

Cytoarchitectonic and receptorarchitectonic analysis of six transmitter receptors show a more detailed parcellation of areas 44 and 45, but also indicate a new landscape of areas in neighbouring regions of the frontal operculum, precentral gyrus and inferior frontal sulcus. The relevance of such new parcellation will be discussed with respect to different aspects of language function and dysfunction.

Discussion Panels

MECHANISMS UNDERLYING THE LATERALISATION OF SPEECH PERCEPTION

Thursday, November 10, 4:50 - 6:10 pm, Capitol Ballroom B & D



Chair: *Jeff Binder*, Department of Neurology, Medical College of Wisconsin, US

Speakers: *David Poeppel*, Department of Psychology, New York University, US and *Sophie Scott*, Institute of Cognitive Neuroscience, University College London, UK

For the past dozen years, in part stimulated by the availability of non-invasive recording techniques, there has been increasing research on the brain mechanisms underlying speech perception. Several themes have emerged that have led to consensus and debate. One major generalization about which there is consensus is that there exist concurrent processing pathways responsible for different aspects of speech perception. However, the organization and relative lateralization of these pathways remain vigorously debated. While

the classic neuropsychological approach to language processing has emphasized a left dominance for language processing, controversies exist as to the extent to which this is true, and also around the mechanisms that might underlie any such asymmetries. On one hand, generic computational operations have been suggested to underlie specialization, at least in part, including temporal strategies. On the other hand, more functional differences between the two hemispheres have been identified as relevant to candidate asymmetries in language processing. There is also considerable debate about the levels of analysis that are relevant to brain asymmetry. In this debate we will try to lay out a few major findings and arguments for and against these positions.



Funding Opportunities at NSF

William Badecker, a program officer in NSF's Linguistics Program, will be on-hand on Friday to discuss funding and job opportunities available at NSF. A sign-up sheet will be located at the Registration desk.

WHAT IS THE ROLE OF THE MOTOR SYSTEM IN ACTION CONCEPTS?

Friday, November 11, 5:20 - 6:40 pm, Capitol Ballroom B & D



Chair: *Greig de Zubicaray*, School of Psychology, University of Queensland, Brisbane, Australia

Speakers: *Alfonso Caramazza*, Cognitive Neuropsychology Laboratory, Harvard University, US and Center for Mind/Brain Sciences, University of Trento, Italy and *Friedemann Pulvermüller*, Cognition and Brain Sciences Unit, Medical Research Council, UK and Brain Language Lab, Free University of Berlin

ASPECTS OF THE REPRESENTATION AND ORGANIZATION OF CONCEPTUAL KNOWLEDGE

Alfonso Caramazza - Many reports claim to provide evidence for the view that concepts are no more than recapitulations of sensory-motor experiences. However, those claims do not withstand close scrutiny: the proffered experimental results do not

allow unambiguous inferences about the nature of conceptual representations and the theoretical proposals lack specificity. I will outline an alternative proposal that assumes distinct, progressively more abstract levels of representation of action and object knowledge.

NEURONAL MECHANISMS FOR SEMANTIC KNOWLEDGE ABOUT ACTION, ABSTR-ACTION, PERCEPTION, EMOTION, RECOMBINATION, AND CONSTRUCTIONS. – WHAT'S LEFT FOR THE SYMBOL BOX? *Friedemann Pulvermüller*

- Some words are used to speak about objects and actions and one may therefore propose that the brain mechanisms linking symbol (form) and meaning tie neuronal circuits for actions and objects to linguistic cell assemblies. This view has gained plausibility from studies documenting focal and rapid activation of sensorimotor brain systems reflecting the meaning of presented symbols, along with studies documenting an influence of sensorimotor activation or lesion on the processing of symbols. This research shows that, at least for some symbols, embodied sensorimotor systems and representations are semantically relevant.

However, not all words are used to speak about specific objects and actions. Some words are so abstract in meaning that an “embodied” approach to their semantics seems to be prone to fail. Therefore, meaning has been proposed to require a semantic-conceptual symbol box dealing with the really difficult stuff, especially with abstract words, such as “beautiful”, “free” or “dread”. In a symbolic approach, each concept and meaning has its abstract symbolic representation. “Dread” can be learned because we connect the word with this abstract concept – which is possibly given to us. I will show that this approach to meaning is flawed. Even if we had an inborn concept of “dread”-ness, how should one know which word to connect with it? In contrast, an explanation of the meaning of abstract words such as “dread” requires that the emotions such words are used to speak about can be expressed by actions. The theoretical argument will be bolstered by brain imaging evidence. Without such action-grounded meaning, abstract symbolic meaning cannot be explained. Abstract meaning resulting from combinatorial information and construction storage will also be addressed, as for example in the case of “grasping ideas” or “cooling down”. A range of concrete sensorimotor, affective-emotional, combinatorial and construction-related brain mechanisms are available for mechanistically explaining meaning and concepts. So is a semantic symbol box still needed?

General Information

ABSTRACTS

The poster and slide abstracts can be found in the PDF which is downloadable from the neurolang.org website.

ATM

Located near the Annapolis Grill

BAGGAGE CHECK

All Attendees, even those not staying at the Westin, are welcome to check their bags at the front desk or with the valet.

BUSINESS CENTER

The Business Center is located on P1 level and is open 24 hours a day.

CERTIFICATE OF ATTENDANCE

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

CONTACT US

To contact us onsite, visit the Registration Desk in the Capitol A Pre-Function, or send an email to Info@neurolang.org. We will respond to your email at our soonest opportunity.

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.

FITNESS CENTER

The Fitness Center is located on P1 level, next to the Business Center. The Fitness Center is open 24 hours a day and can be accessed using a guest key. There is also a small indoor pool, open Monday – Friday, 6:00 am – 10:00 am and 4:00 pm – 10:00 pm; and Weekends, 8:00 am – 10:00 pm.

FOOD SERVICE

Complimentary food and beverage service is available to all registered attendees at the following times in Capitol A Pre-Function.

Thursday

Continental Breakfast, 7:30 – 9:00 am
Coffee Break, 10:00 – 10:30 am
Coffee Break & Light Snack, 3:20 – 3:50 pm
Welcome Reception, 6:15 – 8:15 pm

Friday

Continental Breakfast, 7:30 – 9:00 am
Coffee Break, 10:00 – 10:30 am
Coffee Break & Light Snack, 3:20 – 3:50 pm

HOTEL OUTLETS

The hotel restaurant, **Azure**, is located on the Lobby level. Hours: Monday – Friday, 6:00 am – 2:00 pm for breakfast and lunch; Weekends: 7:00 am – 2:00 pm. Light Fare can also be ordered in the Lobby Lounge from 2:00 – 11:00 pm. Room service is available 6:30 am – 11:00 pm.

FUTURE MEETING

NLC 2012 will be held in San Sebastian, Spain, from October 25-27, 2012.

LOST & FOUND

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

MESSAGES

A bulletin board will be available for messages and job postings near the NLC Registration Desk in Capitol A Pre-function.

MOBILE PHONES

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

NAME BADGES

For security purposes, all attendees are asked to 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.

ONSITE MEETING REGISTRATION

The NLC Registration Desk is located in Capitol A Pre-function. The Registration Desk hours are:

Wednesday, November 9, 4:00 – 7:00 pm
Thursday, November 10, 7:00 am – 6:00 pm
Friday, January 28, 7:00 am – 6:00 pm

PARKING

Self-parking is available for \$1.25/hour, up to \$5.00 a day. Valet parking is \$10.00 for day parking and \$23.00 for overnight parking. Self-parking cannot be put on your hotel bill and must be paid for every time you exit the garage (located beneath the hotel).

PHOTOGRAPHY AND VIDEOTAPING

Photography, audiotaping, video recording, digital taping or any other form of duplication is strictly prohibited in the sessions and poster areas.

SLIDE SESSIONS

An LCD projector (e.g., for PowerPoint presentations) will be provided in the talk room; however, computers will NOT be provided. Presenters must bring their own computers and set them up BEFORE the start of the session in which they are presenting. A switch box will be provided to allow several computers to be connected to the LCD projector in a room. Presenters are strongly encouraged to arrive in their scheduled room a minimum of 30 minutes before their talk so that they know how to set up their equipment.

SMARTPHONE APP

NLC 2011 has a Smartphone application (Grupio) that makes attending NLC 2011 a lot more convenient and fun! It provides easy access to event information, schedules, maps, speaker information and a whole lot more to all Attendees.

iPhone, download “Grupio” from the app store.

Android, download “Grupio” from Android Market, look for the SNL event listed.

Blackberry, (Storm and Torch) only if you have a touch screen device with OS 5.0 and above.

No Smartphone? No problem – you can use the mobile application website at www.grupio.com/snl2011

TRANSPORTATION

Airport Transportation – Discounted transportation is available with SuperShuttle for transportation between *Baltimore Washington International* (BWI), *Dulles* (IAD), and *Regan National* (DCA) airports and the Westin Annapolis. Discounted rates: \$2.00 off one-way; \$5.00 off round-trip fare. Book more than one reservation at the same time will result in greater savings. For reservations, call 1-800-BLUE-VAN and use code **ZXVUA**.

Transportation to SfN – For those traveling on to SfN, we will offer a complimentary bus service from the *Westin Hotel* to the *New Carrollton Metro*. SfN attendees can take the metro rail directly into DC. This transportation will be provided by *Huber's Bus Service*. Motor coaches will be available in front of the hotel at the following times:

Friday, Nov 11: 6:30 pm, 7:45 pm, 9:00 pm and 10:15 pm

Saturday, Nov 12: 7:30 am, 8:45 am, 10:00 am, and 11:15 am

SAVE THE DATE!
NLC 2012

October 25-27 2012
San Sebastian, Spain



Slide Sessions

Slide Session A

Thursday, November 10 11:30 am - 12:50 pm

Capitol Ballroom B & D

Chair: **Pascal Tremblay**, *Université Laval*

A1 11:30 am

Did auditory localization drive the development of complex speech? **Lenhardt, M.** *Virginia Commonwealth University, Richmond, VA*

A2 11:50 am

Neural correlates of statistical learning in a word segmentation task: An fMRI study **Karuza, E.A.** (1), **Newport, E.L.** (1), **Aslin, R.N.** (1), **Davis, S.J.** (1), **Tivarus, M.E.** (1), & **Bavelier, D.** (1). 1. *The University of Rochester, Rochester, NY, US.*

A3 12:10 pm

Auditory discrimination in illiterates: How effective is alphabetization? **Schaadt, G.** (1), **Pannekamp, A.** (1), and **van der Meer, E.** (1). 1. *Humboldt University of Berlin, Berlin, Germany*

A4 12:30 pm

Cortical mechanisms of selective listening in a multi-speaker environment **Mesgarani, N.**, (1,2), **Chang, E.** (1,2). 1. *University of California, San Francisco, CA US.* 2. *Keck Center for Integrative Neuroscience*

Slide Session B

Thursday, November 10 2:00 - 3:20 pm

Capitol Ballroom B & D

Chair: **Vincent Gracco**, *McGill University*

B1 2:00 pm

The role of task-specific feedback mechanisms in the categorical perception of speech: A Kalman-filter driven Granger analysis of MRI-constrained MEG/EEG data **Gow, D.** (1,2,3), **Sachdeva, R.** (1,2), **Ahlfors, S.** (1,2). 1. *Massachusetts General Hospital, Boston, MA, US.* 2. *Athinoula A. Martinos Center for Biomedical Imaging, Charlestown, MA, US.* 3. *Salem State University, Salem, MA, US.*

B2 2:20 pm

How we store the sounds of words: Testing the neurocognitive predictions of abstract and exemplar models of spoken word recognition **Wolmetz, M.** (1), **Wilson, C.** (1), and **Rapp, B.** (1). 1. *Johns Hopkins University, Baltimore, MD, US.*

B3 2:40 pm

Can irony reveal extensive Theory of Mind activation? **Spotorno, N.** (1), **Koun, E.** (1), **Prado, J.** (2), **Van Der Henst, J.B.** (1), and **Noveck, I.** (1). 1. *Laboratory L2C2, CNRS (FRE3406), Bron, France.* 2. *Northwestern University, Evanston, IL, US.*

B4 3:00 pm

Actor identification in natural stories: Qualitative distinctions in the neural bases of actor-related features **Alday, P.** (1), **Nagels, A.** (1), **Schlesewsky, M.** (2), **Bornkessel-Schlesewsky, I.** (1). 1. *Philipps-Universität Marburg, Germany.* 2. *Johannes Gutenberg Universität Mainz, Mainz, Germany*

Slide Session C

Friday, November 11 11:30 am - 12:50 pm

Capitol Ballroom B & D

Chair: *Cynthia Thompson*, Northwestern University

C1 11:30 am

Modality Independent Decoding of Semantic

Information from the Human Brain *Simanova I.* (1,2),

Oostenveld R. (2), *Hagoort P.* (1,2), *van Gerven M.* (2,3). 1.

Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands.

2. Donders Institute for Brain, Radboud University Nijmegen, The

Netherlands. 3. Institute for Computing and Information Sciences,

Radboud University Nijmegen, Nijmegen, The Netherlands

C2 11:50 am

**Theta coherence as a mechanism for long-range
network formation for lexical-semantic processing**

Mellem, M. S., (1), *Medvedev, A. V.*, (1), *Friedman, R. B.*, (1).

1. Georgetown University Medical Center, Washington, DC.

C3 12:10 pm

Predicting language: MEG evidence for lexical

preactivation *Dikker, S.* (1,2) and *Pylkkänen, L.* (2). 1.

Sackler Institute for Developmental Psychobiology, Weill-Cornell

Medical College, NY, US. 2. New York University, NY, US.

C4 12:30 pm

Parkinson's disease selectively disrupts processing of

action verbs *Fernandino, L.*, *Conant, L.L.*, *Binder, J.R.*,

Blindauer K., *Hiner, B.*, *Spangler K.*, *Desai, R.H.* The Medical

College of Wisconsin, Department of Neurology, Milwaukee, WI, US.

Slide Session D

Friday, November 11 2:00 - 3:20 pm

Capitol Ballroom B & D

Chair: *Ghislaine Dehaene-Lambertz*, CNRS

D1 2:00 pm

Neurotransmitter receptor distribution in Broca's

area and the posterior superior temporal gyrus

Bacha-Trams, M. (1,2), *Zilles, K.* (2,4), *Amunts, K.* (2,3) and

Friederici, A.D. (1). 1 Max Planck Institute for Human Cognitive

and Brain Sciences, Leipzig, Germany. 2 Institute of Neuroscience and

Medicine, Research Center Juelich, Germany. 3 University Hospital

Aachen, Germany. 4 Heinrich Heine University Duesseldorf, Germany

D2 2:20 pm

**The role of competitive neural inhibition in language
production: Insights from the effects of trait anxiety
on selecting among competing words** *Snyder, H.*

R., *Kaiser, R.*, *Whisman, M.* and *Munakata, Y.* University of
Colorado at Boulder, CO, US

D3 2:40 pm

**A neuroanatomically grounded model of spontaneous
word generation in the human brain** *Garagnani, M.*,

(1), *Pulvermüller, F.* (1). 1. MRC Cognition and Brain Sciences

Unit, Cambridge, UK.

D4 3:00 pm

Functional connectivity at rest predicts word

comprehension after stroke *Wei, T.* (1), *Hamilton, C.* (1),

Ellmore, T. (2), *Schnur, T.* (1). 1. Rice University, Houston, TX, US.

2. The University of Texas Medical School, Houston, TX, US.

Poster Schedule

Poster sessions are scheduled on Thursday, November 10 and Friday, November 11. Poster sessions are 1½ hours and presenting authors are expected to be present the entire time. Posters are located in the Senate room, Capitol C ballroom and the pre-function space outside of Capitol C.

You may post your materials on the board assigned to you starting at the scheduled “Set-up Begins” time shown below. Please note that any posters not removed by “Take-down Complete” time will be discarded. The doors will close and lock for the evening at 8:45 pm on Thursday. There is no re-entry after this time. Do not leave personal items in the poster room.

	Date & Time	Set-up Begins	Session Begins	Session Ends	Take-down Complete	Topics
A	THURSDAY, NOVEMBER 10	8:00 am	10:00 am	11:30 am	1:30 pm	Speech Perception, Prosody, Acquisition, Manual & Sign Language, Pathology, Speech Production
B	THURSDAY, NOVEMBER 10	1:30 pm	3:20 pm	4:50 pm	5:30 pm	Speech Perception, Prosody, Multilingualism, Social & Emotional Processing, Reading & Writing
C	THURSDAY, NOVEMBER 10	5:30 pm	6:15 pm	8:15 pm	8:30 pm	Multilingualism, Reading & Writing, Pathology, Manual & Sign Language, Speech Production, Acquisition
D	FRIDAY, NOVEMBER 11	8:00 am	10:00 am	11:30 am	1:30 pm	Syntax, Cognitive and Executive Processing, Anatomy, Conceptual/Semantic/Discourse Processing
E	FRIDAY, NOVEMBER 11	1:30 pm	3:20 pm	4:50 pm	5:30 pm	Syntax, Cognitive and Executive Processing, Anatomy, Conceptual/Semantic/Discourse Processing

Poster Sessions

Poster Session A

Thursday, November 10 10:00 - 11:30 am
Senate, Capitol C, and Capitol C Pre-Function

SPEECH PERCEPTION

A1 Different spatial scales of categorical phoneme processing in Broca's area and the supramarginal gyrus: feasible evidence for a posterior-to-anterior gradient in pre-lexical speech processing *Lee, Y.-S. (1), Granger, R. (2), Raizada, R. (3); 1. University of Pennsylvania, Philadelphia; 2. Dartmouth College, Hanover, NH; 3. Dartmouth College, Neukom Institute, Hanover, NH*

A2 The latency of lexical access in visual and spoken word recognition *Lewis, G., (1), Marantz, A. (1); 1. New York University, NY*

A3 Bilateral Temporal Regions Involved in Monosyllabic Word Intelligibility *Maddox, C.D. (1), Okada, K. (1), Venezia, J. (1), Hickok, G. (1); 1. The University of California, Irvine*

A4 Temporal receptive fields in auditory cortex: An fMRI study using periodic noise *Okada, K. (1), Fillmore, P.T. (2), Hsieh, I. (3), Serences J.T. (4), Muftuler, L.T. (5), Saberi, K. (1), Hickok, G. (1); 1. University of California, Irvine; 2. University of South Carolina, Columbia, SC; 3. National Central University, Taiwan; 4. University of California, San Diego; 5. Medical College of Wisconsin, Milwaukee*

A5 Phonological underspecification in the mental lexicon: an investigation of the P2 ERP component and lexical decision latency *Tanigawa, N. (1), Rahni, R. (1), Kim, J. J. (1), Geisler, M. W. (1); 1. San Francisco State University, CA*

A6 Enhancing left lateralization of posterior temporal cortex using tDCS shifts perception on a voice-onset time continuum *Turkeltaub, P.E. (1,2), Benson, J. (2), Hamilton, R.H. (2), and Coslett H.B. (2); 1. Georgetown University, Washington, DC; 2. University of Pennsylvania, Philadelphia*

A7 Brain Signature of Comprehending Sentences with Acoustic Noise: An fMRI study *Alexei A. Smaliy (1), Melody S. Berens (1), Joseph Dien (1), Valerie Karuzis (1), Suzanne Freynik (1), Peter Osthus (1), Henk J. Haarmann (1); 1. University of Maryland*

A8 ERP measures response to violations of voicing agreement constraint *Chandlee, J. (1), Hestvik, A. (1); 1. University of Delaware, Newark, DE*

A9 Responses to sub-categorical mismatches in auditory word-recognition following picture contexts in native English speakers *Datta, H. (1) Zevin, J. (1); 1. Sackler Institute of Developmental Psychobiology, Weill Cornell Medical College, New York*

A10 Cortical processing of continuous speech in auditory cortex during monaural and dichotic listening *Nai Ding (1), Jonathan Z. Simon (1); 1. University of Maryland, MD*

A11 The Role of Broca's area in Speech Perception: Evidence from Aphasia Revisited *Hickok, G. (1), Costanzo, M. (2), Capasso, R. (2,3), Miceli, (2); 1. University of California, Irvine, CA; 2. Università di Trento, Rovereto, Italy; 3. Fondazione Santa Lucia IRCSS, Rome, Italy*

A12 Brain responses to figurative language during story perception: an fMRI study *Nagels, A. (1), Kauschke, C. (1), Schrauf, J. (1), Whitney, C. (3), Krach, S. (1), Kircher, T. (1); 1. Philipps-University Marburg, Marburg, Germany; 2. University of York, York, UK*

A13 Investigating the temporal evolution of speech comprehension using time-resolved sparse fMRI *Peelle, J. E. (1), Sohoglu, E. (2), Davis, M. H. (2); 1. The University of Pennsylvania, Philadelphia; 2. Medical Research Council Cognition and Brain Sciences Unit, Cambridge, UK*

A14 Individual differences in older adults' hearing acuity affect the neural systems supporting speech comprehension *Peelle, J. E. (1), Troiani, V. (2), Wingfield, A. (3), Grossman, M. (1); 1) Department of Neurology, University of Pennsylvania, Philadelphia PA, US, 2) University of Pennsylvania, Philadelphia PA US, 3) Volen National Center for Complex Systems, Brandeis University, Waltham MA USA*

A15 Lexical Information Interferes with Phonological Processing in an Auditory Discrimination Task *Robles-Aguirre, F., (1), Torres-Agustín, A. (1), López-Tinajero, A. (1), ez-López, M. (1); 1. Instituto Nacional de Neurología y Neurocirugía*

A16 Human brainstem plasticity to linguistic pitch patterns: distinct effects of auditory context and training *Chandrasekaran, B. (1), Skoe, E. (2), Wong, P.C.M. (2), Kraus, N. (2); 1. Institute for Neuroscience, The University of Texas at Austin; 2. Northwestern University, Evanston, IL*

A17 Human inferior colliculus response to pitch patterns predict auditory learning success *Bharath Chandrasekaran (1), Nina Kraus (2), Patrick C.M. Wong (2); 1. Institute for Neuroscience, The University of Texas at Austin; 2. School of Communication, Northwestern University, Evanston, IL*

A18 Phonetic encoding by intracranial signals in human auditory cortex *Pasley, B.N.* (1), *Crone, N.E.* (2), *Knight, R.T.* (1), *Chang, E.F.* (3); 1. Helen Wills Neuroscience Institute, University of California Berkeley; 2. The Johns Hopkins University, Baltimore, Maryland; 3. University of California, San Francisco

A19 Rapid use of sentential context in spoken word recognition by young and older adults *Revill, K. P.* (1); 1. Georgia State University/Georgia Institute of Technology, Atlanta, GA

A20 Phonological therapy in aphasic patients strengthens top-down connections within the auditory system *Schofield, T.* (1), *Penny, W.* (1), *Stephan, K.* (1,2), *Crinion, J.* (3), *Thompson, A.* (4), *Price, C.* (1) *Leff, A.* (3,4); 1. Wellcome Trust Centre for Neuroimaging, University College London; 2. University of Zurich, Switzerland; 3. Institute of Cognitive Neuroscience, University College London; 4. Institute of Neurology, University College London

A21 Acoustic and phonemic factors determine the amplitude and laterality of mismatch fields in humans *Teki, S.* (1,2), *Barnes, G.R.* (2), *Penny, W.* (2), *Griffiths, T.D.* (1,2), *Leff, A.P.* (3); 1. Newcastle Auditory Group, Medical School, Newcastle University, Newcastle-upon-Tyne, UK; 2. Wellcome Trust Centre for Neuroimaging, Institute of Neurology, University College London; 3. Institute of Cognitive Neuroscience, University College London

A22 Genome-wide linkage analysis of human auditory cortical evoked responses suggests distinct loci on chromosomes 2, 3 and 8 *Renwall, H.* (1), *Salmela, E.* (2), *Vihla, M.* (1), *Leinonen, E.* (2), *Kere, J.* (2,3), *Salmelin, R.* (1); 1. Aalto University, Brain Research Unit, Espoo, Finland; 2. University of Helsinki, Helsinki, Finland; 3. Karolinska Institutet, Huddinge, Sweden

A23 Sensitivity to temporal structure in the human auditory system *Overath, T.* (1,2), *McDermott, J. H.* (3), *Zarate, J. M.* (1), *Poeppel, D.* (1); 1. New York University, NY; 2. The UCL Ear Institute, University College London; 3. Center for Neural Science, New York University, NY

A24 A spontaneous ability of songbirds to discriminate syntactic rules in auditory information *Abe, K.* (1,2) *Watanabe, D.* (1,3); 1. Kyoto University, Graduate School of Biostudies, Kyoto, Japan; 2. PRESTO, Japan Science and Technology Agency, Saitama, Japan; 3. Kyoto University, Faculty of Medicine, Kyoto, Japan

PROSODY

A25 Separate neural recognition pathways for word stress and phonemes in 3-month-old infants *Becker, A.B.C.* (1), *Schild, U.* (1), *Friedrich, C.K.* (1); 1. University of Hamburg, Germany

A26 Patterns in Speech and Song *Groh, J.* (1), *Sammler, D.* (1), *Bangert, M.* (2), *Goldhahn, D.* (1), *Lohmann,*

G. (1), *Turner, R.* (1), *Friederici, A.D.* (1); 1. Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig; 2. Hochschule für Musik Dresden, Institut für Musikernmedizin, Dresden, Germany

ACQUISITION

A27 Word learning from context: accuracy and reaction time in judgments of congruency *Jackson, A.* (1) and *Bolger, D.J.* (1); 1. University of Maryland, MD

A28 Event-related brain potential measures of the acquisition of grammatical constraints *Boyd, J.K.* (1), *Federmeier, K.D.* (1); 1. University of Illinois, Urbana-Champaign, IL

A29 Effects of Frequency and Imageability on N400 amplitudes in Adolescents with and without Specific Language Impairment *Sizemore, M. L.* (1,2), *Polse, L.* (1,2), *Burns, E. L.* (2), *Evans, J. L.* (1,2); 1. SDSU/UCSD Joint Doctoral Program, San Diego, CA; 2. San Diego State University, San Diego, CA

A30 Maturation of auditory processing in adolescents: Relationships to gamma power and reading fluency *Escobedo-Quiroz, R.* (1), *Warrier, C.* (1), *Hornickel, J.* (1), *Kraus, N.* (1); 1. Northwestern University

MANUAL & SIGN LANGUAGE

A31 Neural Basis of Action Understanding: Evidence from Sign Language Aphasia *Hickok, G.* (1), *Rogalsky, C.* (2), *Tomkovicz, V.* (2), *Batch, L.* (3), *Damasio, H.* (2), *Bellugi, U.* (3); 1. University of California, Irvine; 2. University of Southern California; 3. Salk Institute for Biological Studies

A32 The communicative style of a speaker can affect language comprehension? ERP evidence from gesture-speech integration *Gunter, T.C.* (1), *Kelly, S.D.* (2), *Obermeier, C.* (1); 1. Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig; 2. Colgate University, Hamilton, NY

A33 The neural processing of co-verbal gestures: The relevance of content and abstractness *Straube, B.* (1), *Nagels, A.* (1), *Kircher, T.* (1); 1. Philipps-Universität Marburg, Germany

A34 Language Representation for American Sign Language: Data from Implicit Sign Recognition *Corina, D.P.* (1,4), *Lawyer, L.* (1), *Hirshorn, E.* (2), *Mendoza, M.* (1), *Williams, D.* (1), and *Hauser, P.* (3,4); 1. University of California, Davis; 2. University of Rochester; 3. Rochester Institute of Technology; 4. Gallaudet University Science of Learning Center on Visual Language and Visual Learning

PATHOLOGY

A35 An aphasic patient with damage to the left STS but preserved McGurk effect *Baum, S.* (1), *Nath,*

A.,(1), Hamilton, C.,(2), Martin, R.(2), Beauchamp, M.,(1,2);
1. University of Texas Health Science Center at Houston, TX; 2. Rice University, Houston, TX

A36 Impaired auditory object processing in residual Landau-Kleffner Syndrome **Stefanatos, G.A.** (1) and **DeMarco, A.T.** (1); 1. Temple University, Philadelphia, PA

A37 Comparing auditory-motor interaction in static and time-varying articulation between stutterers and normal speakers **Cai, S.** (1,3), **Beal, D.S.** (2), **Ghosh, S.S.** (1,3), **Tiede, M.K.** (1), **Guenther, F.H.** (2,3), **Perkell, J.S.** (1,2,3); 1. Massachusetts Institute of Technology, Cambridge, MA; 2. Boston University, Boston, MA; 3. Harvard-MIT Division of Health Sciences and Technology, Cambridge, MA

A38 Auditory feedback masking in apraxia of speech: Neural correlates of increased speech fluency **Jacks, A.** (1), **Haley, K.L.** (1), **Roth, H.L.** (1); 1. The University of North Carolina at Chapel Hill

A39 Neural substrates of short and long-term repetition priming of naming in aphasia **MacDonald, A. D.** (1), **Heath, S.** (1), **McMahon, K. L.** (1), **Angwin, A.** (1), **Nickels, L.** (4), and **Copland, D. A.** (1); 1. The University of Queensland, Brisbane, Australia; 2. Macquarie University, Sydney, Australia

A40 A neurocognitive perspective on Specific Language Impairment: New evidence and the Procedural Deficit Hypothesis **Pullman, M. Y.** (1), **Pierpont, E. I.** (2), **Ullman, M. T.** (1); 1. Georgetown University, 2. University of Wisconsin-Madison

A41 ADHD and language impairment: A new perspective on comorbidity **Tagarelli, K. M.** (1), **Pullman, M. Y.** (1), **Ullman, M. T.** (1); 1. Georgetown University, Washington DC

A42 Neural basis for category-specific semantic memory impairment in Alzheimer's disease **Grossman, M.** (1), **Smith, E.E.** (2), **McMillan, C.T.** (1), **Cook, P.** (1), **Dreyfuss, M.** (1), **Bonner, M.F.** (1), **Bonner, A.** (1), **Buckholder, L.** (1); 1. University of Pennsylvania; 2. Columbia University

A43 ERP evidence for both similar and distinct cortical networks underlying semantic integration in adolescents with Specific Language Impairment **Polse, L.** (1,2), **Sizemore, M. L.** (1,2), **Burns, E. L.** (2), **Evans, J.L.** (1,2); 1. San Diego State University/University of California San Diego Joint Doctoral Program, San Diego; 2. San Diego State University, San Diego

A44 An investigation of lexical-semantics in the semantic variant of Primary Progressive Aphasia: Monitoring eye-movements in a word-picture

matching task **Race, D.** (1), **Hillis, A.** (1); 1. Johns Hopkins University School of Medicine, Baltimore, MD

A45 Error patterns in the Semantic Judgment Test differentiate semantic variant primary progressive aphasia (sv-PPA) from Alzheimer's disease (AD) **Rascovsky, K.** (1), **Libon, D.J.** (2), **McMillan, C.T.** (1), **Cook, P.A.** (1), **Dreyfuss, M.** (1), **Bonner, M.** (1), **Moore, P.** (1), **Grossman, M.** (1); 1. University of Pennsylvania School of Medicine, Philadelphia, PA; 2. Drexel University College of Medicine, Philadelphia, PA

SPEECH PRODUCTION

A46 Persistent developmental stuttering as a disorder of neural adaptation **Gracco V.L.** (1,2), **Frost S.** (2), **Mencl E.** (2), **Max L.** (2, 3); 1. McGill University, Montreal, QC, Canada; 2. Haskins Laboratories, New Haven, CT; 3. University of Washington, Seattle, WA

A47 Variable patterns of BOLD signal changes in the recovery of chronic anomia: An fMRI study **Magon, S.** (1), **Basso, G.** (1), **Capasso, R.** (1,2), **Gandolfi, M.** (3), **Florio, E.** (1), **Smania, N.** (3), **Miceli, G.** (1); 1. Università di Trento, Italia; 2. Fondazione Santa Lucia IRCCS, Roma, Italia; 3. Università di Verona, Italia

A48 Speech Mirroring to Treat Non-fluent Aphasia **Fridriksson, J.** (1), **Hubbard, H.I.** (1), **Hudspeth, S.** (1), **Floyd, B.** (1), **Holland, A.** (2); 1. University of South Carolina; 2. University of Arizona

A49 The Phonological Facilitation of Naming in Aphasia - Its Neurocognitive Mechanisms and Longevity **Heath, S.** (1), **McMahon, K.** (1), **Nickels, L.** (2), **Angwin, A.** (1), **MacDonald, A.** (1), **van Hees, S.** (1), **Copland, D.** (1); 1. University of Queensland, Brisbane, Australia; 2. Macquarie University, Sydney, Australia

A50 Neural Correlates of Improvisation, Autobiography, and Social Interaction: An fMRI Study of Narrative Production **AbdulSabur, N.** (1,2), **Xu, Y.** (1), **Erkinnen, M.** (3), **Braun, A.R.** (1); 1. National Institutes of Health, NIDCD, Bethesda, MD; 2. University of Maryland, College Park, MD; 3. Dartmouth Medical School, Hanover, NH

A51 Investigating the neural basis of individual susceptibility to speaking under delayed auditory feedback **Agnew, Z.K.** (1), **McGettigan, C.** (1), **Banks, B.** (1), **Scott, S.K.** (1); 1. UCL ICN, Alexandra House, London

A52 Speech sensory motor transformations occur bilaterally in the dorsal stream **Cogan, G. B.** (1), **Thesen, T.** (2), **Carlson, C.** (2), **Doyle, W. K.** (2), **Devinsky, O.** (2), **Pesaran, B.** (1); 1. New York University, NY; 2. NYU Langone Medical Center, NY

Poster Session B

Thursday, November 10 3:20 - 4:50 pm
Senate, Capitol C, and Capitol C Pre-Function

SPEECH PERCEPTION

B1 Acquisition of frequent syllabic sensory and motor patterns within a neurocomputational model of speech processing *Eckers, C. (1), Kannampuzha, J. (1), Heim, S. (1, 2), Kröger, B. J. (1); 1. University Hospital Aachen and RWTH Aachen University, Aachen, Germany; 2. Research Center Jülich, Institute of Neuroscience and Medicine (INM-1), Jülich, Germany*

B2 Essential cortical sites for single word repetition in the posterior peri-Sylvian operculum identified by electrocortical stimulation *Babiak, M.C. (1), DeLeon, J. (1), and Chang, E.F. (1); 1. University of California San Francisco, CA*

B4 Visual Speech and Speech Production Rely on Separate Cognitive Networks: Evidence from Articulatory Suppression, the McGurk Effect and fMRI *Matchin, W. (1), Hickok, G. (1); 1. University of California, Irvine*

B5 On the role of the dorsal auditory stream: syllable onset complexity in speech perception and speech production *Deschamps, I. (1), Gracco, V. (1, 2), Baum, S. (1); 1. McGill University, Montreal, Canada; 2. Haskins Laboratories, New Haven, Connecticut*

B6 Feedforward vocal predictions characterized by speaking-induced suppression of auditory cortex *Niziolek, C. (1), Nagarajan, S. S. (1), Houde, J. F. (1); 1. UCSF, San Francisco, CA*

B7 Cortical regions involved in sensorimotor processing of syllable sequences *Rong, F. (1), Isenberg, A.L. (1), Hickok, G. (1); 1. University of California, Irvine*

B8 A mediating role of the auditory-motor dorsal pathway in selective adaptation to speech *Grabski, K. (1), Tremblay, P. (2), Gracco, V. (3,4), Sato, M. (1); 1. CNRS & Grenoble Universités, Grenoble, France; 2. CIMeC, University of Trento, Trento, Italy; 3. CRLMB, Montreal, Canada; 4. McGill University, Montreal, Canada*

B9 Incongruence between low- and high-level speech perception within core production regions *Elgie, B. (1), Baum, S.R. (1), Gracco V.L. (1,2); 1. McGill University, Montreal, QC, Canada; 2. Haskins Laboratories, New Haven, CT*

B10 Source space analysis of cortical responses to auditory feedback perturbations: An MEG study *Kort, N. (1), Houde, J.F. (1), Nagarajan, S.S. (1); 1. University of California, San Francisco*

B11 A longitudinal study on the neural development of English vowel processing: Comparing monolingual versus bilingual children *Shafer, V.L. (1), Yu, Y.H. (1), Tessel, C. (1), Gerometta, J. (1), Garrido-Nag, K. (1,2); 1. City University of New York; 2. Gallaudet University*

B12 Language-Specific Tuning of Audiovisual Integration in Early Development *Depowski, N. (1), Flynn, J. (1), Baart, M. (2), Bortfeld, H. (1); 1. University of Connecticut, Storrs, CT; 2. Tilburg University, Tilburg, The Netherlands*

B13 Elucidating neural mechanisms for speech perception development: An MEG study with children with autism, their clinically typical siblings, and typically developing children *Gage, N. (1), Isenberg, A. (1), Fillmore, P. (2), Osann, K. (1), Spence, M. (1); 1. The University of California, Irvine; 2. The University of South Carolina, Columbia*

B14 Neural specialization for speech at birth: Comparing native and non-native language *May, L. (1), Gervain, J. (2), Carreiras, M. (3), Werker, J.F. (1); 1. University of British Columbia, Vancouver, BC; 2. CNRS and Université Paris Descartes, Institut Neurosciences Cognition, Paris, France; 3. Basque Centre on Cognition, Brain and Language, Scientific Director, Donostia-San Sebastián, Spain*

B15 Subcortical correlates of pattern detection *Skoe, E. (1), Spitzer, E. (1), Kraus N. (1); 1. Northwestern University, Evanston, IL*

B16 Bilinguals show enhanced subcortical representation of sound *Krizman, J. (1), Marian, V. (1), Shook, A. (1), Skoe, E. (1), Kraus, N. (1, 2); 1. Northwestern University, Evanston, IL; 2. Northwestern University, Chicago, IL*

B17 Response bias modulates motor system activity during speech discrimination *Venezia, J.H. (1), Saberi, K. (1), Hickok, G. (1); 1. University of California, Irvine*

B18 Neurophysiological indices of Mandarin lexical tone processing: Effect of language experience and memory load *Yu, Y. H. (1), Shafer, V.L. (1); 1. Graduate School and University Center, City University of New York*

B19 Attending to the unpredictable: contextual constraint modulates early perceptual processing of word onsets in natural speech *Astheimer, L. B. (1), Sanders, L. D. (2); 1. York University, Toronto, ON; 2. University of Massachusetts, Amherst*

B20 Neural correlates of interindividual differences in children's audiovisual speech perception

Beauchamp, M., (1,2), **Nath, A.**, (1); 1. University of Texas Medical School at Houston, TX; 2. Rice University, Houston, TX

B21 Psychophysical and physiological studies of synthetic vowel harmonic structure

Jenkins, Julian III (1), **Simon, J. Z.** (1), **Poeppel, David** (2), **Idsardi, William J.** (1); 1. University of Maryland, College Park, MD; 2. NYU, New York

B22 Featural encoding of speech sounds and hemispheric differences in speech perception: an fMRI-adaptation study

Lawyer, L. (1), **Corina, D.** (1); 1. University of California Davis, CA

PROSODY**B23 Influence of Music Aptitude on Metrical Expectancy during speech perception**

Magne, C., (1), **Jordan, D.**, (1), **Gordon, R. L.**, (2); 1. Middle Tennessee State University, Murfreesboro, TN; 2. Vanderbilt University, Nashville

B24 Stress and phonemes are processed independently in neuronal word form recognition

Schild, U. (1), **Becker, A.** (1), **Friedrich, C. K.** (1); 1. University of Hamburg

B25 The word order processing is modulated by rhythmic pattern during silent reading: ERP evidence

Luo, Y. (1), **Zhou, X.** (1); 1. Peking University, Beijing, China

MULTILINGUALISM**B26 Emergent MMN response in Spanish learners as a result of high variability training**

Herd, W. (1), **Fiorentino, R.** (1), **Jongman, A.** (1), **Sereno, J.** (1); 1. University of Kansas, Lawrence, KS

B27 Language discrimination in monolingual and bilingual infants of Spanish and Basque

Monika Molnar (1), **Judit Gervain** (2), and **Manuel Carreiras** (1); 1. Donostia, Spain; 2. CNRS & Universite Paris Descartes, Paris

B28 The effect of cognates on the perception of English vowels by late Spanish-English bilinguals

Tessel, C. A. (1), **Gitterman, M.** (1), **Shafer, V. L.** (1); 1. City University of New York

B29 Language experience modulates perception of phonemic categories

Harvey, P. (1), **Zevin, J.** (1); 1. Sackler Institute for Developmental Psychobiology, Weill Cornell Medical College, New York

B30 Bilingualism: characteristics of intensive language training in the adult brain

Jennika Soles (1), **Megan Callahan** (1), **Jen-Kai Chen** (1), **Kate Watkins** (2), **Denise Klein** (1); 1. Montreal Neurological Institute; 2. University of Oxford

B31 Priming Tip-of-the-Tongue States in Poor and Good Foreign Language Learners

Borodkin, K. (1), **Faust, M.** (1); 1. Bar Ilan University, Ramat Gan, Israel

B32 Sensorimotor plasticity when learning to produce non-native speech

Simmonds, A. J. (1), **Wise, R. J. S.** (1), **Iverson, P.** (2), **Leech, R.** (1); 1. Imperial College London, UK; 2. University College London, UK

READING & WRITING**B33 fMRI Masked Transposed Letter Repetition Suppression and VWFA Localization**

Eddy, M. (1), **Grainger, J.** (2), **Holcomb, P.H.** (3), **Del Tufo, S.** (1), **Gabrieli, J.** (1); 1. Massachusetts Institute of Technology, Cambridge, MA; 2. Aix-Marseille University & CNRS, Marseille, France; 3. Tufts University, Medford, MA

B34 Early decomposition effects during visual processing of past tense verbs: An MEG study using masked priming and single-word lexical decision tasks

Fruchter, J. (1), **Stockall, L.** (2), **Marantz, A.** (1); 1. New York University, New York; 2. Queen Mary, University of London, UK

B35 Number of meanings and number of senses: An ERP study of sublexical ambiguities in reading Chinese disyllabic compounds

Huang, H.W. (1), **Lee, C.Y.** (2); 1. University of Illinois, Urbana-Champaign; 2. Institute of Linguistics, Academia Sinica, Taiwan

B36 Interhemispheric effective connectivity increases during processing of Japanese Kanji

Keith J. Kawabata Duncan (1,2), **Tae Twomey** (3), **Parker Jones** (1), **Mohamed Seghier** (1), **Katsuyuki Sakai** (2), **Cathy J. Price** (1), **Joseph T. Devlin** (3); 1. Wellcome Trust Centre for Neuroimaging, UCL, London, UK; 2. University of Tokyo, Japan; 3. UCL, London, UK

B37 Neuronal Interactions for Words and Pseudowords during Lexical Decision

Kielar, A. (1), **Mack, J.** (1), **Meltzer-Assher, A.** (1), **Wali, E.**, (1), **Thompson, C. K.** (1); 1. Northwestern University

B38 The role of left frontal regions in phonological assembly: Insights from a novel paradigm

MacSweeney, M. (1,2), **Waters, D.** (2), **Kherif, F.** (3), **Woll, B.** (2), **Price, C.J.** (4); 1. Institute of Cognitive Neuroscience, London; 2. ESRC Deafness, Cognition and Language (DCAL) Research Centre, London; 3. Université de LaUSne, Suisse; 4. Wellcome Trust Centre for Neuroimaging, London

B39 Learning to read a new language shapes the neural activities associated with reading in the native language *Leilei Mei* (1), *Gui Xue* (2,3), *Zhonglin Lu* (3), *Qi Dong* (2), *Chuansheng Chen* (1); 1. University of California, Irvine, CA; 2. Beijing Normal University, Beijing, China; 3. University of Southern California, Los Angeles, CA

B40 Reading faces: Investigating the use of a novel face-based orthography in acquired alexia *Moore, M.W.* (1), *Brendel, P.C.* (1), and *Fiez, J.A.* (1); 1. The University of Pittsburgh, PA

B41 Abstract letter identity representations revealed through multi-voxel similarity analysis *Rothlein, D.* (1), *Rapp, B.* (1); 1. The Johns Hopkins University, MD

B42 Functional network elements in patterned hand movements and writing *Saarinen, T.* (1), *Kujala, J.* (1), *Jalava, A.* (1), *Laaksonen, H.* (1), *Salmelin, R.* (1); Aalto University, Espoo, Finland

B43 Orthographic learning in real-time: Differential contributions of the fusiform gyrus and the hippocampus *Schubert, T.* (1), *Rapp, B.* (1); 1. Johns Hopkins University, Baltimore, MD

B44 Spatial specification in Chinese character recognition: The role of structural configuration and radical similarity *Su, I.-F.* (1), *Lee, R.H.-M.* (1), *Law, S.-P.* (1); 1. The University of Hong Kong, Hong Kong

B45 Eye Movement Modulation of Word Processing *Temereanca, S.* (1), *Hamalainen, M.S.* (1), *Kuperberg, G.* (1,2), *Stufflebeam, S.M.* (1), *Halgren, E.* (3), *Brown, E.N.* (4,5); 1. Harvard Medical School, Martinos Center for Biomedical Imaging, Charlestown, MA; 2. Tufts University, Medford, MA; 3. University of California, San Diego, CA; 4. Massachusetts General Hospital, Boston; 5. Harvard/MIT, Cambridge, MA

B47 Dissociating visual form from frequency using Japanese *Twomey, T.* (1), *Kawabata Duncan, K. J.* (2,3), *Hogan, J. S.* (1), *Morita, K.* (3), *Umeda, K.* (3), *Sakai, K.* (3), *Devlin, J. T.* (1); 1. University College London, UK; 2. University College London; Wellcome Trust Centre for Neuroimaging, London, UK; 3. University of Tokyo, Japan

B48 Hierarchical processing effects support reading of words and false fonts *Woodhead, Z.* (1), *Barnes, G.* (1), *Penny, W.* (1), *Teki, S.* (2), *Price, C.* (1), and *Leff, A.* (3); 1. Wellcome Trust Centre for Neuroimaging, Institute of Neurology, University College London, UK; 2. Newcastle Auditory Group, Medical School, Newcastle University, Newcastle-upon-Tyne, UK; 3. Institute of Cognitive Neuroscience, University College London, UK

SOCIAL & EMOTIONAL PROCESSING

B49 Understanding speaker meaning: Neural correlates of pragmatic inferencing in discourse comprehension *Basnakova, J.* (1), *Weber, K.* (2), *Petersson, K.-M.* (1), *Hagoort, P.* (1), *van Berkum, J.* (1,3); 1. Max Planck Institute for Psycholinguistics, Nijmegen, Netherlands; 2. Radboud University, Donders Institute (RU/DI-BCB), Nijmegen, Netherlands; 3. Utrecht University, Utrecht, Netherlands

B50 Is it over-respectful or dis-respectful? Differential brain responses in perceiving pragmatic violation of social status during language communication *Xiaoming Jiang* (1), *Yi Li* (1), *Xiaolin Zhou* (1); 1. Peking University, Beijing, China

B51 The Neural Underpinnings of Theory of Mind Reasoning: Evidence from Aphasia *Ramachandra, V.* (1), *Schneider, E.* (1); 1. Marywood University, Scranton, PA

SPEECH PERCEPTION

B52 "A salmon is not a bib" (but perhaps vice versa): asymmetric mismatch negativity responses to word-final consonants *Scharinger, M.* (1), *Bendixen, A.* (2), *Obleser, J.* (1); 1. Max-Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany; 2. Institute of Psychology, University of Leipzig, Germany

Poster Session C

Thursday, November 10 6:15 - 8:15 pm
Senate, Capitol C, and Capitol C Pre-Function

MULTILINGUALISM

C1 Examining the role of proficiency in second language processing: An event-related potential (ERP) investigation of number and gender agreement in L2 Spanish *Alemán Bañón, J.* (1), *Fiorentino, R.* (1), *Gabriele, A.* (1); 1. University of Kansas, Lawrence, KS

C2 Neural Substrates Underlying New Word Learning in Adult Monolinguals and Early Spanish-English Bilinguals *Kailyn Bradley* (1), *Kelly E. King* (2), *Arturo E. Hernandez* (1); 1. University of Houston, TX; 2. University of Minnesota

C3 The Assessment of Code-Switching Experience Survey (ACSES): A new tool for assessing code-switching behavior in Spanish/English bilinguals *Blackburn, A.* (1), *Wicha, N.Y. Y* (1); 1. The University of Texas at San Antonio, TX

C4 Pathétique! Or simply sad? Processing emotion in L1 and L2: an ERP study *Midgley, K. J.*(1,2), *Delaney-Bush, N.*(1) *Holcomb, P. J.* (1); 1. Tufts University, Medford, MA; 2. Laboratoire de Psychologie Cognitive, Marseille, France

C6 On bilingual lexical access: when does language membership come into play? *Ng, S.* (1), *Cisneros, E. M.* (1), *Wicha, N.* (1); 1. The University of Texas, San Antonio, TX

READING & WRITING

C8 Interaction between task demands and stimuli type during word reading *Yang, J.* (1), *Zevin, J.* (1); 1. Sackler Institute of Developmental Psychobiology, Weill Cornell Medical College, New York, NY

C9 Stimulus by task interactions in Chinese character processing *Jason D. Zevin* (1,2), *Jianfeng Yang* (3), *Xiaojuan Wang* (4) *Hua Shu* (4); 1. Sackler Institute of Developmental Psychiatry, Weill Cornell Medical College, New York; 2. Haskins Laboratories, New Haven, CT; 3. Institute of Psychology, Chinese Academy of Sciences, Beijing, China; 4. State Key Laboratory of Cognitive Science and Learning, Beijing Normal University, Beijing, China

C10 Association of the DYX1C1 dyslexia susceptibility gene in the general Chinese population *Zhang, Y.* (1) *Shu, H.* (1), *Shi, B.* (1), *Li, J.* (1), *Burmeister, M.* (2), *Tardif, T.* (2); 1. Beijing Normal University, Beijing, China; 2. The University of Michigan

C11 The repeated name penalty in Hebrew using MEG *Almor, A.*(1), *Harpaz, Y.*(2), *Goldstein A.*(2); 1. The University of South Carolina, Columbia, SC; 2. Ghonda Brain Center, Bar Ilan University, Ramat Gan, Israel

C12 Patterns of language and reading deficit in children exposed to domestic violence *Blackburn, J.* (1); 1. Towson University, Towson, MD

C13 ERP evidence of a cost for metrical reanalysis in silent reading *Breen, M.* (1), *Sanders, L. D.* (2), *Clifton, C. Jr.* (2); 1. Mount Holyoke College, South Hadley, MA; 2. UMass Amherst, Amherst, MA

C14 ERP evidence for distinguishing between orthographic/phonological and balanced adult English readers *Karuzis, V.* (1) *Dien, J.* (1), *Berens, M.* (1), *O'Rourke, P.* (1), *Haarmann, H.* (1); 1. The University of Maryland, College Park, MD

C15 Age-related Differences in the Posterior-Anterior Gradient of Word-Specificity in the Visual Word Form System *Olulade, O.* (1), *Flowers, D-L.* (1), *Napoliello, E.* (1), and *Eden, G.* (1); 1. Georgetown University Medical Center, Washington, D.C.

C16 Resting-state functional connectivity related to single-character reading in healthy Chinese-speakers *Wang, X.* (1), *Han, Z.* (1), *He, Y.* (1), *Bi, Y.* (1); 1. Beijing Normal University, Beijing, China

C17 Impaired inflectional morphology in children with Developmental Dyslexia: converging evidence from behavioral and electrophysiological measures *Cantiani, C.* (1,2), *Guasti, M. T.* (2), *Perego, P.* (1), *Lorusso, M. L.* (1); 1. Scientific Institute E. Medea, Bosisio parini, LC, Ital; 2. University of Milano-Bicocca, Italy

C18 Lexical Processing is Delayed by 100 ms in a Second Language *Coderre, E.*(1), *van Heuven, W.J.B.*(1), *Conklin, K.* (1); 1. The University of Nottingham, Nottingham, UK

C19 The effect of mood on second language word processing *van der Meij, M.* (1), *López-Pérez, J.* (1), *van de Velde, A.* (1), *Barber, H.A.* (1); 1. University of La Laguna, La Laguna, Spain

C20 Semantic parafoveal processing in reading Chinese: An ERP study *Suiping Wang* (1), *Wenjia Zhang*(1), *Nan Li* (1), *Hsuan-Chih Chen* (2); 1. South China Normal University, Guangzhou, China; 2. Chinese University of Hong Kong, China

C21 Parafoveal N400 effect during sentence reading: a fixation-related brain potentials (FRPs) study in combination with the boundary technique *Muñoz, S.*(1), *Hawelka, S.*(2), *Barber, H.A.*(1), *Hutzler, F.*(2); 1. University of La Laguna, Spain; 2. University of Salzburg, Austria

C22 Neural bases of dyslexia in primary progressive aphasia *Henry, M.L.* (1), *Galantucci, S.* (1,2), *Tartaglia, M.C.* (3), *Gesierich, B.* (1), *Wilson, S.M.* (4), *Babiak, M.* (1), *Miller, B.L.* (1), *Henry, R.G.* (1), *Gorno-Tempini, M.L.* (1); 1. University of California San Francisco, 2. Scientific Institute and University Hospital San Raffaele, Milan, Italy; 3. University of Toronto; 4. University of Arizona

C23 Dysfunctional visual word form area in a case of progressive alexia *Wilson, S.M.* (1), *Beeson, P.M.* (1), *Rising, K.* (1), *Andersen, S.M.* (1), *Stib, M.T.* (1), *Gendreau, A.* (1), *Rapcsak, S.Z.* (1); 1. University of Arizona, Tucson, AZ

C24 Making the brain dyslexic: Evaluation of a novel simulation paradigm *Heim, S.* (1,2), *Tholen, N.* (2,1), *von Overheid, A.C.* (2,1), *Grande, M.* (1), *Weidner, R.* (2), *Amunts, K.* (1,2); 1. Medical School, RWTH Aachen University, Aachen, Germany; 2. Institute of Neurosciences and Medicine (INM1,INM3), Research Centre Juelich, Germany

SOCIAL & EMOTIONAL PROCESSING

C25 Neural correlates of lyrical improvisation and musical communication: an fMRI study of freestyle rap *Liu, S. (1), Chow, H. (1), Xu, Y. (1), Erkkinen, M. (1), Rizik-Baer, D. (2), Eagle, M. (2), Braun, A. (1);* 1. National Institutes of Health, National Institute on Deafness and Other Communication Disorders; 2. Justice by Uniting in Creative Energy

C26 Activation of a mentalizing region predicts behavioral accuracy in the classification of 'posed' and genuine amusement laughter *McGettigan, C. (1), Agnew, Z.K. (1), Walsh, E. (1,2), Jessop, R. (1), Scott, S.K. (1);* 1. Institute of Cognitive Neuroscience, University College London, UK; 2. Institute of Psychiatry, King's College London, UK

ACQUISITION

C27 Contributions of development and oral motor skill to functional neural activation for picture naming in school-aged children and young adults *Krishnan, S. (1), Leech, R. (2), Mercure, E. (3), Lloyd-Fox, S. (1), Dick, F. (1);* 1. Birkbeck, University of London, UK; 2. Imperial College London, UK; 3. Institute of Cognitive Neuroscience, University College London, UK

C28 Untrained word combinations and grammatical forms in a previously non-verbal adult with autism *Loughlin, E. (1), Thorne, J. (1), O'Grady, J. (1), Gordon, B. (1);* 1. The Johns Hopkins University, Baltimore, MD

C29 Age-of-acquisition effects on temporal integration windows: Evidence from non-native sign language processing *Langdon, C. (1), Hwang, S.-O. (2), Pucci, C. (1), Idsardi, W. (2), Mathur (1);* 1. Gallaudet University, Washington, D.C.; 2. University of Maryland, College Park, Maryland

C30 Experience affects neural basis of language development: evidence from blind children. *Bedny, M. (1), Richardson, H. (1), and Saxe, R. (1);* 1. Massachusetts Institute of Technology, Cambridge, MA

C31 Developmental changes in sentence processing: from adolescence to adulthood *Humphreys, G. (1), Levita L. (1), Pfeifer, G. (1), Eimontaite, I. (1), Oladapo, F. (1), Gennari, S. (1);* University of York, UK

MANUAL & SIGN LANGUAGE

C32 Functional-anatomy of auditory-motor integration involving hand, eye, and tongue motor effectors *Isenberg, A.L. (1), Rong, F. (1), Saberi, K. (1), Hickok, G. (1);* University of California, Irvine, CA

C33 Signs that violate phonological rules differentially activate parietal areas in deaf native signers. *Cardin, V. (1), Orfanidou, E. (1), Kästner, L. (1,2), Capek, C.M. (3), Rönnberg, J. (4), Woll, B. (1), Rudner, M. (4);* 1. University College London, UK; 2. Ruhr-University Bochum, Germany; 3. University Of Manchester, UK; 4. Linnaeus Centre HEAD, Swedish Institute for Disability Research, Linköping University, Sweden

C34 Spatial and temporal dynamics of lexico-semantic processing in American Sign Language *Ferjan Ramirez, N. (1), Leonard, M. (1), Torres, C. (1), Hatrak, M. (1), Mayberry, R. (1), Halgren, E. (1);* 1. University of California San Diego

PATHOLOGY

C35 Verb and Noun Comprehension in Frontotemporal Degeneration *Camp, E. (1), Boller, A. (1), Burkholder, L. (1), Morgan, B. (1), Moore, P. (1), Weinberg, D. (1), Grossman, M. (1);* 1. The University of Pennsylvania, Philadelphia, PA

C36 Patterns of Aphasia and Language Recovery in a Prospective Cohort of At-Risk Neurosurgical Patients *Deleon, J. (1), Babiak, M. (1), Perry, D. (1), Berger, M. (1), Chang, E. (1);* 1. University of California, San Francisco

C37 Impaired Verbal Memory in Patients with Traumatic Brain Injury *Yang, F. (1), Luks, L.T. (2), LaHue, S. (2), Chu, L. (1), Mukherjee, P. (2);* 1. National Tsing Hua University; 2. University of California San Francisco

C38 Deficits in the organization and anatomy of narrative comprehension and expression in Lewy body spectrum disorders *Ash, S. (1), Xie, S. (1), Gross, R. G. (1), Dreyfuss, M. (1), Boller, A. (1), Camp, E. (1), Morgan, B. (1), Grossman, M. (1);* 1. University of Pennsylvania, Philadelphia, PA

C39 Object naming during overt picture naming in healthy and anomic stroke patients *Holland, R. (1), Leff, A.P. (1), Price, C.P. (1), Crinion, J. (1);* 1. Institute of Cognitive Neuroscience, University College London

C40 Effects of lexical processing impairments on sentence comprehension in Broca's aphasia *Choy, J. (1, 2);* 1. University of Kansas, Life Span Institute, Lawrence, KS

C41 The common neuroanatomical basis for ideomotor apraxia and aphasia: a lesion-symptom mapping investigation *Turken, A.U. (1), Dronkers, N.F. (1,2);* 1. US Department of Veterans Affairs, Research Service, Martinez, CA; 2. University of California Davis, Davis, CA

C42 The timecourse of anticipatory sentence comprehension in children with SLI *Borovsky, A. (1,2), Elman, J. E. (1), Evans, J. L. (1,3); 1. University of California, San Diego, La Jolla, CA; 2. Stanford University, Palo Alto, CA; 3. San Diego State University, San Diego, CA*

C43 Use of Multi-modal Imaging in uncovering the pathological basis of Primary Progressive Aphasia syndromes *H. Chertkow (1), James Nikelski (1), Gabriel Leger (2), Ziad Nasredinne (3), Victor Whitehead (1), Randi Pilon (1), Stephan Probst (4); 1. Lady Davis Institute, Jewish General Hospital, McGill; 2. (CHUM) Centre Hospitalier de l'Université de Montréal; 3. Neuro Rive Sud, McGill; 4. Jewish General Hospital, McGill University*

C44 Patterns of Dysgraphia in Primary Progressive Aphasia *Faria, A. V. (1), Tsapikini, K. (1), Race, D. (1), Crinion J. (3), Mori, S. (1), Hillis, A. (1); 1. Johns Hopkins University, Baltimore; 3. Institute of Cognitive Neuroscience, University College London, UK*

C45 Effects of subthalamic nucleus deep brain stimulation on language in Parkinson's disease *Litcofsky, K. A. (1), Herscovitch, L. (2), Pelster, M. (2), Gelfand M. (1), Charles, P. D. (2), Ullman, M. T. (1); 1. Georgetown University, Washington DC; 2. Vanderbilt University, Nashville TN*

SPEECH PRODUCTION

C46 Independent distractor frequency and age-of-acquisition effects in picture-word interference: fMRI evidence for post lexical and lexical accounts according to distractor type *de Zubizaray, G.I. (1), Miozzo, M. (2), Johnson, K. (1), Schiller, N.O. (4), McMahon, K.L. (1); 1. The University of Queensland, Brisbane, Australia; 2. Cambridge University, Cambridge, UK; 3. Leiden University, Leiden Institute for Brain and Cognition (LIBC), Netherlands*

C47 Speech Production: Towards an Integration of Motor Control, Psycholinguistic, Neurolinguistic, and Neurophysiological Models *Hickok, G. (1); University of California, Irvine, CA*

C48 Cortico-cortical connectivity differs for action versus object naming *Liljeström, M. (1), Kujala, J. (1), Vartiainen, J. (1), Salmelin, R. (1); Aalto University, Brain Research Unit, Espoo, Finland*

C49 The Error-Related Negativity (ERN) as general marker of monitoring in speech production: Evidence from the overt naming of cognates *Acheson, D. J. (1,2), Ganushchak, L. Y. (1), Christoffels, I. K. (3), Hagoort, P. (1,2); 1. Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands; 2. Donders Institute for Brain, Nijmegen, The Netherlands; 3. Leiden University, Leiden Institute of Psychology & Leiden Institute of Brain and Cognition, Leiden, The Netherlands*

C50 Denoising the speaking brain: characterizing and removing image artifacts in BOLD fMRI of continuous overt speech production *Xu, Y. (1), AbdulSabur, N. (1,2), Liu, S. (1), Chowh, H. (1), Braun, A. (1); 1. National Institutes of Health, Bethesda, MD; 2. University of Maryland, College Park, MD*

C51 Working, Declarative and Procedural Memory in Specific Language Impairment *Jarrad A. G. Lum (1,2), Gina Conti-Ramsden (3), Debra Page (3), Michael T. Ullman (4); 1. Deakin University, Melbourne, Australia; 2. The University of Southern Denmark, Odense, Denmark; 3. The University of Manchester, UK; 4. Georgetown University, Washington D.C.*

C52 Discourse-Level Impairment in "Well-Recovered" Post-Stroke Aphasia *Wagage, S. (1), Ryder, J. (2), Chow, H.M. (1), Liu, S. (1), Solomon, B. (2), Braun, A. (1); 1. The National Institute on Deafness and Other Communication Disorders, The National Institutes of Health; 2. Rehabilitation Medicine, The National Institutes of Health*

Poster Session D

Friday, November 11 10:00 - 11:30 am
Senate, Capitol C, and Capitol C Pre-Function

ANATOMY

D1 Characterizing Functional-anatomic Variability of Sensory-Motor Integration Area Spt *Isenberg, A. L., Okada, K., and Hickok, G.; University of California, Irvine, CA*

D2 Why white matter matters in understanding chronic stroke aphasia: Novel evidence from Anatomical Connectivity Mapping *Rebecca A. Butler (1), Anna M. Woollams (1), Karl V. Embleton (2), Geoffrey J. M. Parker (3), Matthew A. Lambon Ralph (1); 1. Neuroscience and Research Unit, University of Manchester; 2. School of Psychological Sciences, University of Manchester; 3. Biomedical Imaging Institute, University of Manchester*

COGNITIVE AND EXECUTIVE PROCESSING

D3 Role of Working Memory in Explicit and Implicit Artificial Grammar Learning *Yang, J. (1), Clark, P. (1), Swick, K. (1), Watkins, H. (1), Li, P. (1); Pennsylvania State University, University Park, PA*

D4 The effect of active prediction on the N400: MEG evidence for a left anterior temporal generator *Lau, E. (1,2), Burns, S. (1,2), Gramfort, A. (1), Delaney-Busch, N. (1,2), Fields, E. (1,2), Fanucci, K. (1,2), Holcomb, P. (2), Hamalainen, M. (1,2), Kuperberg, G. (1,2); 1. Massachusetts General Hospital, Athinoula A. Martinos Center for Biomedical Imaging, Charlestown, MA; 2. Tufts University, Medford, MA*

D5 Towards the Functional Neuroanatomy of a Common Meaning System for Language and Visual Images Revealed by fMRI and DTI *Jouen, A.-L.* (1), *Ellmore, T.M.* (2), *Madden, C.* (1), *Pallier, C.* (3), *Dominey P.F.* (1), *Ventre-Dominey J.* (1); 1.INSERM Stem Cell and Brain Research Institute, Robot Cognition Lab, Lyon, France; 2.The University of Texas Medical School at Houston, Houston, TX; 3.Unité de Neuroimagerie Cognitive INSERM-CEA, Neurospin center, Gif-sur-Yvette, France

D6 White Matter and Letter Fluency: a Correlational Story With Frontotemporal Lobar Degeneration *Strain, J.* (1), *Hart, J.* (1), *Diaz-Arrastia, R.* (2), and *Womack, K.* (2); 1. The University of Texas at Dallas, TX; 2. The University of Southwestern Medical Center at Dallas, TX

D7 Common cognitive control mechanisms in sentence production and comprehension *Humphreys, G.* (1), and *Gennari, S.* (1); 1. University of York, UK

D8 Subdivision of frontal cortex mechanisms for language production *Thothathiri, M.* (1,2,3), *Gagliardi, M.* (1), and *Schwartz, M. F.* (1); 1. Moss Rehabilitation Research Institute, Philadelphia, PA; 2. University of Pennsylvania, Philadelphia, PA; 3. Swarthmore College, Swarthmore, PA

SYNTAX

D9 Shared Network for Noun and Verb Reading in the Ventral and Dorsal Streams: Converging Evidence From fMRI Activation and Reaction Time *Borowsky, R.* (1), *Esopenko, C.* (1), *Gould, L.* (1), *Kuhlmann, N.* (1), *Sarty, G.* (1), *Cummine, J.* (2); 1. University of Saskatchewan, Saskatoon, SK, Canada; 2. University of Alberta, Edmonton, AB, Canada

D10 Neural mechanisms supporting implicit versus explicit acquisition of grammar in adults *Batterink, L.* (1) *Neville, H.* (1); 1. The University of Oregon, Eugene, OR

D11 Is there a lexical boost for syntactic repetition effects as measured by fMRI adaptation? *Segaert, K.* (1,2), *Kempen, G.* (1,3), *Petersson, K.M.* (1) and *Hagoort, P.* (1,2); 1. Max Planck Institute for Psycholinguistics, Nijmegen, the Netherlands; 2. Radboud University, Donders Institute for Brain, Cognition and Behavior, Nijmegen, the Netherlands; 3. Cognitive Psychology Unit, Leiden University, Leiden, the Netherlands

D12 Extending Template Construction Grammar: A Model of Language Comprehension *Barres, V.* (1), *Lee, J.* (1), *Arbib, M.* (1,3); 1. University of Southern California, CA; 2. USB Brain Project

D13 Cognitive and language proficiencies predict variability in neural activity mediating semantic and syntactic processing in children *Hampton Wray, Amanda* (1), *Weber-Fox, Christine* (1); Purdue University, West Lafayette, IN

D14 Neural mechanisms underlying noun-verb distinction— fMRI Evidence from semantic processing of Chinese words *Yu, X.* (1), *Law, S.-P.* (1), *Han, Z.* (2), *Bi, Y.* (2); 1. The University of Hong Kong, Hong Kong; 2. Beijing Normal University, Beijing, China

D15 The Neural Correlates of Incremental Structure-Building and Interpretation *Brennan, J.* (1), *Pylkkänen, L.* (1); New York University, New York, NY

D17 Increasing Combinatoric Complexity in MEG *Leiken, K.* (1), *Pylkkänen, L.* (1); 1. New York University, New York, NY

D18 Neural correlates of prosody and plausibility in garden-path processing *Den Ouden, D.B.* (1), *Christianson, K.* (2), *Anderson, C.* (3), *Dickey, M.* (4); 1. University of South Carolina, SC; 2. University of Illinois at Urbana-Champaign, IL; 3. McMaster University, Ontario, Canada; University of Pittsburgh, PA

D19 Damage to left anterior temporal cortex predicts impairment of complex syntactic processing: A lesion-symptom mapping study *Fillmore, P.* (1), *Magnusdottir, S.* (2), *DenOuden, D.B.* (1), *H. Hjaltason, H.* (2), *Rorden, C.* (1), *Kjartansson, O.* (2), *Bonilha, L.* (3) *Fridriksson, J.*; 1. University of South Carolina, 2. Landspítali – University Hospital, Reykjavík, Iceland, 3. Medical University of South Carolina, Charleston, SC.

D20 Syntactic Movement in Broca's aphasic patients: An ERP study *Torres-Agustín R.* (1), *Rodríguez Camacho M.* (2), *Silva-Pereyra J.* (2), *Rodríguez-Agudelo Y.* (1), *Robles Aguirre F.* (1); 1. National Institute of Neurology and Neurosurgery, Mexico; 2. National Autonomous University of Mexico, Iztacala Higher Education Faculty

D21 Learning Structural Biases of Novel Verbs: An ERP Study *Qi, Z.* (1), *Garnsey, S. M.* (1); 1. University of Illinois, Urbana-Champaign, IL

D22 Effects of second language proficiency in late learners on neural organization for syntactic processing indexed by ERPs and fMRI *Pakulak, E.* (1), *Dow, M.* (1), *Neville, H.* (1); 1. University of Oregon, Eugene, OR

D23 Multi-Voxel Pattern Analysis of Noun and Verb Differences in Visual and Ventral Temporal Cortex *Boylan, C.* (1), *Trueswell, J.* (1), *Thompson-Schill, S. L.* (1); 1. University of Pennsylvania, Philadelphia

D24 Interactions between verb subcategorization and syntactic priming: Evidence from self-paced reading and event-related potentials *Brothers, T.* (1), *Ledoux, K.* (1), *Gordon, B.* (1); 1. The Johns Hopkins Medical Institutions

D25 Probabilistic cues to grammatical category representations in the human brain *Arciuli, J.* (1), *Moseley, E.* (2), *McMahon, K.* (3), *de Zubicaray, G.* (3); 1. The University of Sydney, Sydney, Australia; 2 The University of Washington, St Louis; 3 The University of Queensland, Brisbane, Australia

D26 Time frequency analysis of null arguments and anaphoric violations *Pierce, L.J.*(1), *Oshima-Takane, Y.*(1), *Kanayama, N.*(2), *Nakano, H.*(3), *Genesee, F.*(1); 1. McGill University, Department of Psychology, Montreal, QC, Canada, 2. The University of Tokyo, Graduate School of Arts and Sciences, Tokyo, Japan, 3. Saint Mary's University, Department of Psychology, Moraga, California, US

CONCEPTUAL/SEMANTIC/DISCOURSE PROCESSING

D27 Neural correlates of sentence comprehension in adolescents *Stewart R. A.* (1), *Pisupati A.S.* (2), *Davis N.* (2), *Rosenberg L.* (1), *Young K.M.* (1), *Ryan M.* (1), *Pekar J.* (1), *Rimrodt S. L.* (2), *Cutting L. E.* (1,2); 1. Kennedy Krieger Institute, Baltimore, MD; 2. Vanderbilt University, Nashville, TN

D28 Constructing conversation: fMRI intersubject correlations during communication *Menenti, L.* (1), *Garrod, S.C.* (1); 1. University of Glasgow, Institute for Neuroscience and Psychology, Glasgow, United Kingdom

D29 Functional community structure for discourse comprehension and gesture processing *Andric, M.* (1), *Small, S.L.* (1,2); 1. The University of Chicago, IL; 2. University of California, Irvine, CA

D30 The Use of Implicit Measures to Assess Receptive Vocabulary Knowledge in Individuals with Autism *Gangopadhyay, I.* (1) *Ledoux, K.* (1) *Bosley, L.* (1) *Gordon, B.* (1); 1. The Johns Hopkins University School of Medicine, Baltimore, MD

D31 The differentiation of semantic categories during acquisition of novel words *Fargier, R.* (1), *Ploux, S.* (1), *Paulignan, Y.* (1), *Reboul, A.* (1) and *Nazir, T.A.* (1); 1. UCBL-CNRS FRE 3406, Institut des Sciences Cognitives, Bron, France

D32 Body Part Representations in Action Verb Processing and Naming: What Happens in Aphasia? *Farooqi-Shah, Y* (1); 1. University of Maryland

D33 The influence of written distractor words on brain activity during overt picture naming *Michele T. Diaz* (1), *Larson J. Hogstrom* (1); 1. Duke Institute for Brain Sciences

D34 When the leash constrains the dog: Neural correlates of associative interference during sentence production *Sass, K.* (1,3), *Muehlhaus, J.* (1,3), *Habel, U.* (1,3), *Heim, S.* (1,2,3); 1. RWTH Aachen University, Aachen, Germany; 2. Jülich, Institute of Neurosciences and Medicine (INM-1), Jülich, Germany; 3. JARA - Translational Brain Medicine

D35 The many timings of semantic interference during word production *Llorens, A.* (1,2), *Trébuchon-Da Fonseca, A.* (1), *Riès, S.* (2), *Alario F.-X.* (2) *Liègeois-Chauvel, C.*(1); 1. Aix-Marseille Université & INSERM UMR 751; 2. Aix-Marseille Université & CNRS

D36 Towards the Unification of the N400 in Lexical Access and in Sentence Processing *Gomes, J. N.* (1), *Soto, M.* (1), *França, A. I.* (1), *Gesualdi, A. R.* (2); 1. Federal University of Rio de Janeiro, UFRJ; 2. Federal Center of Technology of Rio de Janeiro, CEFET-Rio

D37 Eye Movements and the Temporal Unfolding of the SemRep Semantic Representation in Scene Description *Lee, J.* (1), *Yang, B.* (1), *Arbib, M.* (1,2); 1. University of Southern California, CA; 2. USB Brain Project

D38 Simple Composition in Reading, Listening, and Production: An MEG Investigation *Bemis, D.* (1), *Pylkkänen, L.* (1); 1. New York University, New York, NY

D39 From words to emotion via body motion: a role for the motor system in binding abstract meaning *Moseley, R. L.* (1), *Carota, F.* (1), *Hauk, O.* (1), *Mohr, B.* (1,2), *Pulvermüller, F.* (1); 1. MRC Cognition and Brain Sciences Unit, Cambridge, UK; 2. Anglia Ruskin University, Cambridge, UK

D40 When concepts go quiet: A link between impaired knowledge of sound words and atrophy of auditory association cortex in logopenic progressive aphasia *Bonner, M.F.* (1), and *Grossman, M.* (1); 1. University of Pennsylvania, Philadelphia

D41 The Pyramids and Palm Trees Test, the Kissing and Dancing Test, and tests on other semantic attributes: further evidence from the Chinese population *Chenxi He* (1), *Qihao Guo* (2), *Xiaoliang Wen* (1), *Zaizhu Han* (1), *Yanchao Bi* (1); 1. Beijing Normal University, Beijing, China; 2. Huashan Hospital, State, Shanghai Medical College, Fudan University, Shanghai, China

D42 Orthographic, phonological and semantic dynamics during ambiguity resolution: an fMRI investigation *Bitan, T.* (1), *Kaftory, A.* (1), *Leib, A.* (1), *Markus, A.* (1), *Eviatar, Z.* (1) *Peleg, O.* (1); 1. University of Haifa, Israel

D43 Different temporal lobe regions support processing of lexical, compositional and discourse-level semantics *Costanzo, M. (1), Xu, J. (1), Braun, A. R. (1); 1. National Institutes of Health, Bethesda, MD*

D44 An EEG time frequency analysis of noun-object and verb-action identification *Delarosa, B. (1), Maguire, M. (1), Sides, L. (1), Magnon, G. (1); 1. The University of Texas at Dallas, TX*

D45 When Moses built the Ark: ERP evidence for qualitative cross-linguistic variation in the neural processing of semantic illusions *Tune, S. (1), Schlesewsky, M. (2), Bornkessel-Schlesewsky, I. (1); 1. University of Marburg, Germany; 2. Johannes-Gutenberg-University Mainz, Germany*

D46 Online monitoring of the impact of language processing on motor processes: prehensile grip-force measures during passive listening of manual action words and sentences *Aravena, P. (1), Delevoe, Y. (3), Frak, V. (2), Deprez, V. (1), Paulignan, Y. (1), Cheylus, A. (1), Nazir, T. (1); 1. CNRS UMR 5015, Institut des Sciences Cognitives, Bron, France; 2. Institut de Réadaptation Gingras-Lindsay de Montréal, Centre de recherche interdisciplinaire en réadaptation du Montréal métropolitain, Université de Montréal, Québec; 3. Laboratoire URECA, UFR de Psychologie, Université Lille Nord de France, Lille, France.*

D47 N400m does not differ between phonological, semantic or morpho-syntactic processing *Bettus, G. (1,2), Dhond, R.P. (3), Kovacevic, S. (1), Sherfey, J. S. (1), Halgren, E. (1), Marinkovic, K. (1); 1. UCSD, San Diego, CA; 2. INSERM U751, Marseille, France; 3. MGH/HMS/MIT Martinos Center for Biomed. Imaging, Massachusetts Gen. Hosp., Boston, MA*

D48 Transcranial direct current stimulation speeds up automatic word retrieval *Bosley, L.V. (1), Vannorsdall, T.D. (1), Andrejczuk, M. (1), Reese, K. (1), Schretlen, D.J. (1), and Gordon, B. (1); 1. The Johns Hopkins University, Johns Hopkins University School of Medicine, Baltimore, MD*

D49 Body part-specific representations of semantic noun categories *Carota, F. (1), Moseley, R. (1), Pulvermüller, F. (1); 1. Medical Research Council, Cognition and Brain Sciences Unit, Cambridge, UK*

D50 Beyond Broca's and Wernicke's areas: The roles of visual, motor and affective systems in narrative comprehension *Chow, H. M. (1), Mar, R. A. (2), Braun, A. R. (1); 1. NIDCD/NIH, Bethesda, Maryland; 2. York University, Toronto, Ontario*

D51 Theory of Mind and Other Theories: The Role of the Temporo-Parietal Junction in Semantic Processing *Leshinskaya, A. (1), Caramazza, A. (1); 1. Harvard University, Cambridge, MA*

D52 The representations of sensory-motor word features during a semantic association task *Price, A. (1), Bonner, M. (1), Peelle, J. (1), McMillan, C. (1), and Grossman, M. (1); 1. The University of Pennsylvania, Philadelphia*

Poster Session E

Friday, November 11 3:20 - 4:50 pm
Senate, Capitol C, and Capitol C Pre-Function

ANATOMY

E1 Structural and functional connectivity of the anterior temporal lobe *Gesierich, B. (1), Henry, M. L. (1), Galantucci, S. (1,2), Papinutto, N. (1,3), Kramer, J. (1), Miller, B. L. (1), Seeley, W.W. (1), Gorno-Tempini, M. L. (1); 1. University of California San Francisco, San Francisco; 2. Scientific Institute and University Hospital San Raffaele, Division of Neuroscience, Institute of Experimental Neurology, Milan, Italy; 3. University of Trento, (CIMEC), Trento, Italy*

E2 Gray matter correlates of variation in adult reading skill *Chiarello, C. (1), Felton, A. (1), Vazquez, D. (1), Leonard, C.M. (2); 1. University of California, Riverside, CA; 2. University of Florida, McKnight Brain Institute, Gainesville, FL*

E3 Dissociating gray and white matter neural integrity in chronic aphasia *Bahrani, E. (1), Harvey, D. (1), Hamilton, A.C. (1), Ellmore, T.M. (2), and Schnur, T.T. (1); 1. Rice University, Department of Psychology, Houston, TX, US., 2. The University of Texas Health Science Center, Department of Neurosurgery, Houston, TX, US.*

COGNITIVE AND EXECUTIVE PROCESSING

E4 Strategic decision-making mechanisms support the resolution of doubly-quantified sentences *McMillan, C. (1), Coleman, D. (1), Clark, R. (1), Grossman, M. (1); 1. University of Pennsylvania, Philadelphia, PA*

E5 Developmental Changes underlying Calculation: an fMRI Study *Evans, T. M. (1), Flowers, L. D. (1), Napoliello, E. M. (1), Einbinder, E. (1), Eden, G. F. (1); Georgetown University Medical Center*

E6 Individual Differences in Executive Function Modulate Within- and Cross-Language Lexical Ambiguity Resolution: Evidence from Eye Movement Measures of Bilingual Reading *Whitford, V. (1), Titone, D. (1); 1. McGill University, Montreal, QC, Canada*

E7 The differential effect of working memory on sentence processing and responding to the comprehension probe *Newman, S. (1), Seo, R. (1), Malaia, E. (1); Indiana University*

E8 Discourse production and comprehension following left anterior medial prefrontal and anterior cingulate lesion **Balasubramanian, V.** (1); 1. Seton Hall University, South Orange, NJ

E9 Mode-Dependent Social Interference in Bilingual Lexical Selection: An fMRI Study **Wang, Y. P.** (1), **Dong, Q.** (1), **Pat, S.** (2), **Kuhl, P.K.** (2); 1. Beijing Normal University, Beijing, P. R. China; 2. Institute for Learning and Brain Sciences, University of Washington, Seattle

SYNTAX

E10 Structural processes in language and music are largely non-overlapping in the human brain **Fedorenko, E.** (1), **McDermott, J.** (2), **Norman-Haignere, S.** (1), **Kanwisher, N.** (1); 1. Massachusetts Institute of Technology, 2. New York University, Center for Neural Science

E11 Subliminal facilitation of predictive effects on syntactic processing in the left frontal region: An MEG study **Iijima K.** (1, 2), **Sakai K. L.** (1, 3); 1. University of Tokyo, Komaba, Japan; 2. Japan Society for the Promotion of Science, Tokyo, Japan; 3. CREST, Japan Science and Technology Agency, Tokyo, Japan

E12 Specialization of the human language areas for the recursive computation of syntactic structures **Ohta, S.** (1,2), **Fukui, N.** (2,3), **Sakai, K. L.** (1,2); 1. The University of Tokyo, Graduate School of Arts and Sciences, Tokyo; 2. CREST, Japan Science and Technology Agency, Tokyo; 3. Sophia University, Tokyo

E13 Priming at a Distance: Evidence for the Dual-Mechanism Account of Syntactic Priming **Boudewyn, M.A.** (1), **Tooley, K.M.** (2), **Zirnsstein, M.** (1), **Swaab, T.Y.** (1), and **Traxler, M.J.** (1); 1. University of California, Davis; 2. Beckman Institute, University of Illinois

E14 Placing heads in phrases: when bilingual parameters clash **Erdocia, K.** (1), **Zawiszewski, A.** (1), **Laka, I.** (1); 1. University of the Basque Country

E15 Working memory span modulates the latency of event-related potential (ERP) responses to gap-filling **Hestvik, A.** (1), **Bradley, E.** (1), **Bradley, C.** (1,2); 1. University of Delaware, Newark, DE; 2. Florida International University, Miami, FL

E16 Event-Related Brain Potential Indices of Hyper-Active Gap-Filling **Hestvik, A.** (1), **Stöhr, A.** (1), **Kurban, E.** (1,2), **Seong, J.** (1); 1. University of Delaware, Newark, DE; 2. University of Pennsylvania, Philadelphia, PA

E17 Exploring the neural bases of dependency resolution using coordination sentences **Linzen, T.** (1), **Shetreet, E.** (2,3), **Friedmann, N.** (3); 1. New York University, New York; 2. Children's Hospital Boston, MA; 3. Tel-Aviv University, Tel Aviv, Israel

E18 MEG correlates of grammatical agreement processing in Spanish **Molinero, N.** (1), **Monahan, P.** (1), **Barber, H.A.** (2), **Carreiras, M.** (1); 1. BCBL, Donostia-San Sebastian, Spain; 2. Universidad de La Laguna, La Laguna, Spain

E19 Neural correlates of unaccusative and unergative verb processing **Schuchard, J.** (1), **Kielar, A.** (1), **Barbieri, E.** (2), **Thompson, C.K.** (1); 1. Northwestern University, Evanston, IL; 2. University of Milano-Bicocca, Department of Psychology, Milan, Italy

E20 The effects of complement predictability on the processing of verb's complementation options **Shetreet E.** (1,2), **Linzen T.** (3), **Friedmann N.** (1); 1. Tel Aviv University, Tel Aviv, Israel; 2. Children's Hospital Boston, Boston, MA; 3. New York University, New York

E21 The Left Hemisphere Alone Cannot Process Sentences That Are Not Easy **Hyun, J.** (1, 2, 3), **Obler, L. K.** (1, 2, 3), **Spiro, III, A.** (2, 3, 4), **Kim, D-S.** (5), **Albert, M. L.** (2, 3); 1. The Graduate Center of the City University of New York, NY; 2. VA Boston Healthcare System, Boston, MA; 3. Boston University School of Medicine, Boston, MA; 4. Boston University School of Public Health, Boston, MA; 5. Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea

E22 Word, syntax, and context in sign language: An fMRI study **Inubushi, T.** (1), **Sakai, K.L.** (1); 1. The University of Tokyo, Japan.

E23 Distinguishing the respective roles of the MTG and IFG in language comprehension with rTMS **Acheson, D. J.** (1,2), **Hagoort, P.** (1,2); 1. Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands; 2. Donders Institute for Brain, Cognition, and Behavior

E24 Role of Broca's area in sentence comprehension: a lesion study **Rogalsky, C.** (1), **Tomkovicz, V.** (1), **Shivapour, S.** (2), **Hickok, G.** (3); 1. University of Southern California, Brain & Creativity Institute, Los Angeles, CA; 2. University of Iowa, Iowa City, IA; 3. University of California Irvine, Irvine

E25 The Dynamics of Complex Morphological Processes: Revealed by Searchlight Representational Similarity Analysis of MEG/EEG Data **Su, L.** (1,2), **Fonteneau, E.** (1,2), **Wingfield, C.** (2), **Marslen-Wilson, W.** (1,2); 1. University of Cambridge, UK; 2. MRC Cognition and Brain Science Unit, Cambridge, UK

E26 Plural attraction in attachment ambiguity *Lee, E.-K.* (1), *Garnsey, S. M.* (1); University of Illinois, Urbana-Champaign, IL

CONCEPTUAL/SEMANTIC/DISCOURSE PROCESSING

E27 Neural differences in metaphor processing modulated by modality *Schmidt, G. L.* (1), *Drew, A.* (1), *Miller, E.* (1); 1. Hope College, Holland, MI

E28 Tracking Neural Coding of Perceptual and Semantic Features of Concrete Nouns *Sudre, G.* (1), *Pomerleau, D.* (2), *Palatucci, M.* (1), *Wehbe, L.* (1), *Fyshe, A.* (1), *Salmelin, R.* (5), *Mitchell, T.* (1); 1. Carnegie Mellon University, Pittsburgh, PA; 2. Intel Labs, Pittsburgh, PA; 3. Aalto University School of Science, Espoo, FI

E29 Resting-state fMRI reveals the neural basis of individual differences on object color knowledge processing *Wang, X.* (1), *Han, Z.* (1), *He, Y.* (1), *Bi, Y.* (1); 1. Beijing Normal University, National Key Laboratory of Cognitive Neuroscience and Learning, Beijing, China

E30 Characterizing the Role of the Left Anterior Temporal Lobe in Combinatory Processes *Westerlund, M.* (1), *Pylkkänen, L.* (1); 1. New York University, New York

E31 Neural distinctions between categories of abstract and concrete words: A multi-voxel pattern analysis *Breining, B.* (1), *Rapp, B.* (1); 1. Johns Hopkins University, Baltimore, MD

E32 N400 is elicited by pragmatic as well as semantic anomalies: a visual-world study of scalar implicatures *Hunt III, L.* (1), *Politzer-Ahles, S.* (1), *Minai, U.* (1), *Fiorentino, R.* (1); 1. The University of Kansas, Lawrence, KS

E33 The spatio-temporal characteristics of intelligible and unintelligible auditory word processing *Halai, A.* (1,3), *Parkes, L.* (2), *Parker, G.* (2) and *Welbourne, S.* (1); 1. (NARU), School of Psychological Sciences, University of Manchester, UK; 2. (ISBE), School of Cancer and Imaging Sciences, University of Manchester, UK; 3. (BII), University of Manchester, UK.

E34 Contributions of anterior and posterior left hemisphere regions to semantic processing: Evidence from semantic competition during spoken word recognition in participants with aphasia *Mirman, D.* (1) *Graziano, K. M.* (1); 1. Moss Rehabilitation Research Institute

E35 The implicit transfer of motor strategy in language processing: an fMRI study *Papeo, L.* (1,2), *Cecchetto, C.* (1), *Rumiati, R. I.* (1), *Tomasino, B.* (3); 1. International School for Advanced Studies, SISSA, Trieste, Italy; 2. Harvard University, Cambridge MA; 3. I.R.C.C.S. "Medea", Polo Friuli Venezia Giulia, Italy

E36 Hemispheric asymmetries in processing expected and incongruous semantic information during sentence comprehension: a magnetoencephalography study. *Pendl, S.* (1), *Binder, J.R.* (1), *Frishkoff, G.* (2), *Humphries, C.J.* (1), *Gross, W.L.* (1), *Desai, R.* (1), *Baillet, S.* (1); 1. Medical College of Wisconsin; 2. Georgia State University

E37 Event-related potential investigation of scalar implicature processing using picture-sentence verification *Politzer-Ahles, S.* (1), *Fiorentino, R.* (1), *Jiang, X.* (2), *Zhou, X.* (2); 1. University of Kansas, Lawrence, KS; 2. Peking University, Beijing, China

E38 When meaning becomes open-ended: An ERP study on processing literary metaphors *Resta, D.* (1), *Bambini, V.* (2), *Grimaldi, M.* (1); 1. University of Salento, C.R.I.L., Lecce, Italy; 2. Scuola Normale Superiore, Pisa, Italy

E39 Body movement and action word memory: Facilitation and inhibition effects *Shebani, Z.* (1), *Pulvermuller, F.* (1); 1. MRC Cognition and Brain Sciences Unit

E40 Hierarchical agreement processing in pronoun resolution: ERP evidence *Xu, X.* (1,2), *Jiang, X.* (3), *Zhou, X.* (3); 1. Nanjing Normal University, Nanjing, China; 2. (Ministry of Education), Southeast University, Nanjing, China; 3. Peking University, Beijing, China

E41 "Even a rich person can afford that luxury house": Processing construction-based pragmatic violation during sentence comprehension *Xiaoming Jiang* (1), *Yi Li* (1), *Xiaolin Zhou* (1, 2); 1. Peking University, Beijing, China; 2. (Ministry of Education), Peking University, Beijing, China

E42 Electrophysiological investigation of biological and stereotypical gender violations in a gender-marked language *Siyanova-Chanturia, A.* (1), *Pesciarelli, F.* (1), and *Cacciari, C.* (1); 1. University of Modena and Reggio Emilia, Modena, Italy

E43 Language lateralization and verbal creativity: A developmental perspective *Patael, S.* (1), *Borodkin, K.* (1), *Faust, M.* (1); Bar-Ilan University, Ramat-Gan, Israel

E44 A dual lexicon model of cortical spoken language processing *Gow, D.* (1,2,3); 1. Massachusetts General Hospital, Boston, MA; 2. Athinoula A. Martinos Center for Biomedical Imaging, Charlestown, MA; 3. Salem State University, Salem, MA

E45 Neural Separation of Acoustophonemic from Lexicosemantic Word Encoding *Leonard, M. K.* (1), *Travis, K.E.* (1), *Torres, C.* (1), *Sizemore, M.L.* (2), *Qu, Z.* (1,3), *Hagler, D.J.* (1), *Dale, A.M.* (1), *Elman, J.L.* (1,4), and *Halgren, E.* (1,4); 1. UCSD; 2. Joint Doctoral Program, SDSU/UCSD; 3. Sun Yat-sen University; 4. Kavli Institute for Brain and Mind, UCSD

E46 Does the N400 reflect lexical access, integration, or both? *Huang, Y.* (1), *Hopfinger, J.* (1), and *Gordon, P.* (1); 1. University of North Carolina at Chapel Hill, Chapel Hill, NC

E47 Word frequency and contextual predictability effects in an eye movement reading study: Evidence for early interactive processing *Shahid, A.* (1), *Hand, C.J.* (1), *O'Donnell, P.J.* (1), *Sereno, S.C.* (1); 1. Institute of Neuroscience and Psychology, University of Glasgow

E48 The N400 in sentence frames or in prime word pairs: a unique electrophysiological effect? *Franca, A. I.* (1); *Gomes, J. N.* (1); *Soto, M.* (1); *Lage, A. C.* (1); *Gesualdi, A. R.* (2); 1. The Federal University of Rio de Janeiro, Brazil – UFRJ; 2. Federal Center for Technological Education - CEFET-Rio, Brazil

E49 The influence of discourse context on verb integration and argument prediction: Evidence from Event-Related Potentials *Crocker, M.* (1), *Niefind, F.* (1), *Drenhaus, H.* (1); Saarland University, Saarbruecken, Germany

E50 Prominence features in discourse: an visual ERP study of prodrop constructions in Chinese *He, Y.* (1) and *Schlesewsky, M.* (1); 1. Johannes-Gutenberg University Mainz, Department of General Linguistics, Mainz, RP, Germany

E51 Reading words, sentences and stories: Distinct oscillatory brain mechanisms for processing language meanings and constructing abstract mental representations *Wang, C.* (1), *Xu, Y.* (1), *Chow, H.* (1), *McArdle, J.* (1), *Braun, A.* (1); 1. National Institute on Deafness and Other Communication Disorders/ National Institutes of Health, Bethesda, Maryland, US

E52 Functional heterogeneity within Broca's area *Fedorenko, E.* (1) *Kanwisher, N.* (1); 1. Massachusetts Institute of Technology

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