SNL 2016

Scientific Program

Are you running Psychology, Neuroscience or Vision experiments using a computer?

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TIMING ERROR MEANS YOUR STUDY MAY NOT BE WORKING AS YOU INTENDED CAUSING SPURIOUS RESULTS. GUARANTEE YOUR ABILITY TO REPLICATE: QUICKLY AND EASILY CHECK YOUR OWN ACCURACY. WORKS WITH ANY COMPUTER-BASED STUDY, EEG, FMRI OR EYE TRACKER.

1. WHAT – If you are a psychologist, neuroscientist or vision researcher who reports timing accuracy in units of a millisecond, then it's likely your timings are wrong! This can lead to replication failure, spurious results and questionable conclusions. The Black Box ToolKit lets you quickly and easily check your own timing accuracy in terms of stimulus presentation; synchronization with other equipment; and RT accuracy.

2. WHY – Modern hardware may be faster but millisecond timing accuracy is becoming harder to achieve: 'millisecond precision' does not equal 'millisecond accuracy'. Precision simply means timings are reported in units of a millisecond, not that they are accurate! Whatever experiment generator you use, it only knows when it requested a stimulus be shown and not the time when it physically appeared.

3. HOW – Currently self-validation of timing accuracy can only be done quickly and easily with a Black Box ToolKit. This acts as a programmable virtual human that can detect and respond to stimulus events with sub-millisecond accuracy. It enables you to check the accuracy of your own paradigm whilst running in-situ on your own equipment by using external sensors, TTL I/O and your own response devices.

To improve replication and enhance credibility all researchers should self-validate, or self-certify, their own studies in terms of millisecond presentation, synchronization and response timing accuracy.

Not ready for a Black Box ToolKit just yet. Our range of standalone USB response pads, voice keys and USB TTL event marking modules can all help improve your timing in any experiment generator!

To find out more about how we could help you improve your research please visit our website, www.blackboxtoolkit.com.

Serious about science: Serious about timing

The Black Box ToolKit

Measurement & Calibration Tools for Professionals

Welcome to the 8th Annual Meeting of the Society for the Neurobiology of Language

On behalf of the Board and the local organizers, I welcome you to London, the United Kingdom's largest and most cosmopolitan city. Our society is defined by a collective commitment to understand the neurobiological mechanisms of language. This commitment began with the aphasiologists of the 19th century and continues into the modern age with all its technological advantages.

This year, our meeting program spans both ancient and modern eras. It begins with a reception in the British Museum, with an expert introduction to the history of the Rosetta Stone. The Stone is probably the most iconic historical artefact specifically related to language. This is a perfect historical backdrop to our featured debate on a contemporary 'hot topic' in the field of neurobiology of language: the cognitive and neural consequences of bilingualism.

The keynote topics we have arranged for this year are diverse, encompassing the energetic design of the brain, the coupling of cortical oscillations with speech, and the neural adaptations necessitated by deafness and sign language. The major features of our meeting, the slide and poster presentations by members, continue to occupy pride of place. Acknowledging feedback from our members, we have organised poster sessions to allow more space for active discussion of presented work. In addition to the reception, we have arranged three social events, including a Science Showoff in nearby Bloomsbury and two Social Hours: one during an evening poster session and another in a conservatory and private garden. Aside from providing a respite from the scientific program, these events should provide ample opportunity to mingle and connect with colleagues from around the world.

As an indication that our Society and its Meetings continue to mature, we are proud to be able to offer childcare this year, and hope to make it a regular feature. I would like to express my thanks to colleagues on the Organizing Committee: Joe Devlin, Jonathan Peelle, and Lolly Tyler, and to our meeting planner Shauney Wilson and her colleague Shawna Lampkin, for helping organize this year's meeting. A special thank you goes to Steve Small who continues to successfully apply for NIH funding to support meetings of the Society he helped create. Thanks also go to all of our abstract reviewers who always ensure the excellent quality of our presentations.

I look forward to seeing you all at this year's meeting.

Greig de Zubicaray
Chair, Society for the Neurobiology of Language

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2016 Meeting

AUGUST 17-20, 2016

20 Bedford Way
UCL Institute of Education, London

Future Meetings

SNL 2017

Baltimore, Maryland, USA

SNL 2018

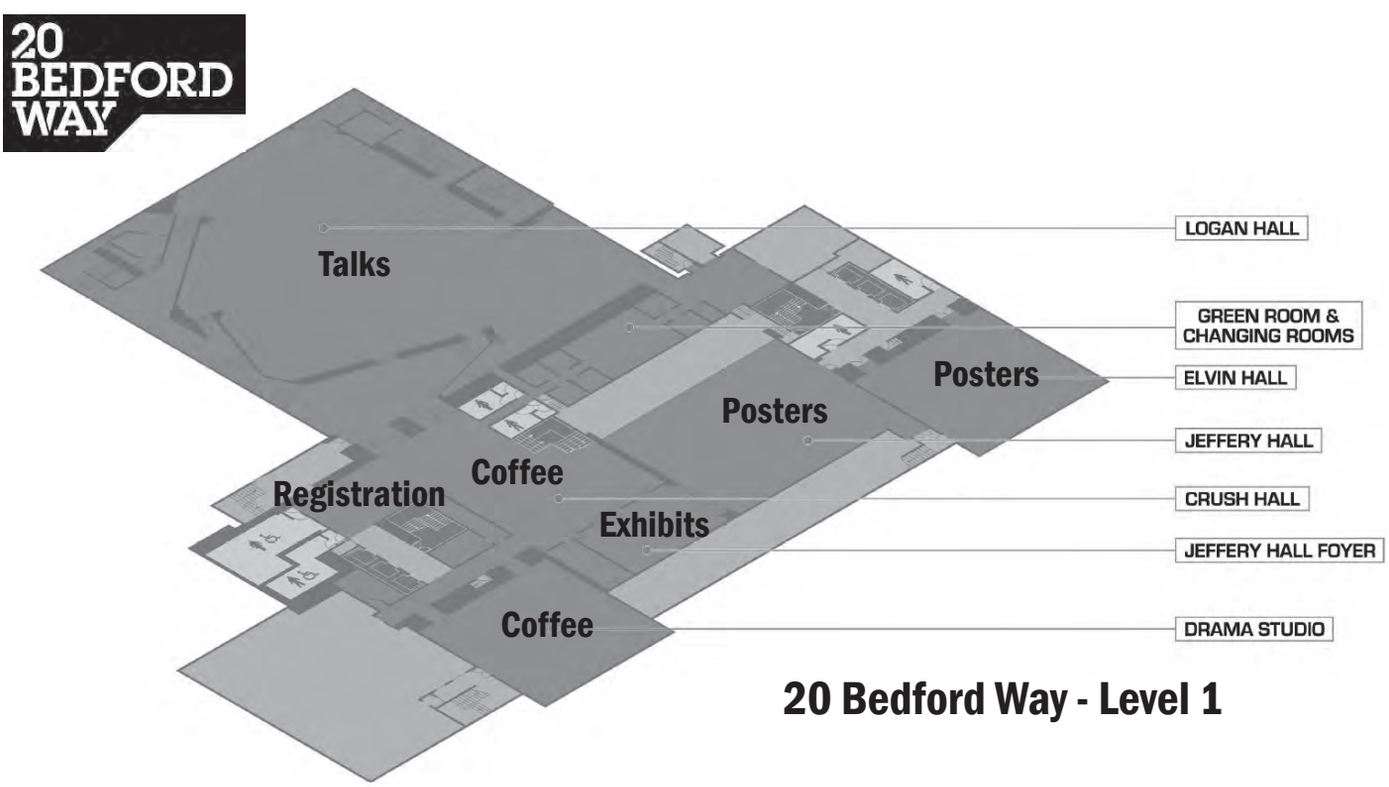
Québec City, Canada

Area Map

The 2016 meeting of the Society for the Neurobiology of Language is being held August 17-20, 2016, at 20 Bedford Way, UCL Institute of Education, London.

Venue Map

The entrance to 20 Bedford Way is on Level 2. SNL registration, talk sessions and posters are on Level 1 (see map below). Childcare (Committee Room 1), live streaming of talks (Committee Room 2), and overflow coffee break seating (Nunn Hall) are on Level 4.



Schedule of Events

Wednesday, August 17th

10:00 am – 5:30 pm	British Museum open to the public *Come early and enjoy the museum before the SNL Welcome Reception*
5:30 – 8:00 pm	Welcome Reception *Offsite, British Museum* *Museum gates close at 6:00 pm. No entrance to Welcome Reception after 6:00 pm.*
7:00 – 7:30 pm	Rosetta Stone Talk *At the SNL Welcome Reception, British Museum*

Thursday, August 18th

7:30 am – 6:00 pm	Meeting Registration *Crush Hall*
8:00 – 8:45 am	Coffee and Danish *Crush Hall, Drama Studio and Nunn Hall*
8:45 – 9:00 am	Opening Remarks: Greig de Zubicaray, Chair *Logan Hall*
9:00 – 10:00 am	**Keynote Lecture:** **Mairéad MacSweeney** Insights into the neurobiology of language processing from deafness and sign language *Logan Hall*
10:00 – 10:30 am	Coffee Break *Crush Hall, Drama Studio and Nunn Hall*
10:00 am – 12:00 pm	Poster Session A *Jeffery Hall and Elvin Hall*
12:00 – 1:30 pm	Lunch (on your own)
1:30 – 3:00 pm	**Debate: Ellen Bialystok and Manuel Carreiras** The consequences of bilingualism for cognitive and neural function *Logan Hall*
3:00 – 3:30 pm	Coffee Break *Crush Hall, Drama Studio and Nunn Hall*
3:00 – 5:00 pm	Poster Session B *Jeffery Hall and Elvin Hall*
5:10 – 6:30 pm	Slide Session A: Reading and Comprehension *Logan Hall*
6:30 pm	Social Hour *Offsite, Grange White Hall Hotel*
7:30 pm	Science Showoff: Brains and Language Special *Offsite, Bloomsbury Studio*

Friday, August 19th

8:00 am – 7:00 pm	Meeting Registration *Crush Hall*
8:00 – 8:45 am	Coffee and Danish *Crush Hall, Drama Studio and Nunn Hall*
8:45 – 9:00 am	Announcements *Logan Hall*
9:00 – 10:00 am	**Keynote Lecture: David Attwell** The energetic design of the brain *Logan Hall*
10:00 – 10:30 am	Coffee Break *Crush Hall, Drama Studio and Nunn Hall*
10:00 am – 12:00 pm	Poster Session C *Jeffery Hall and Elvin Hall*
12:00 – 1:30 pm	Lunch (on your own)
1:30 – 3:30 pm	Poster Session D *Jeffery Hall and Elvin Hall*
3:00 – 3:30 pm	Coffee Break *Crush Hall, Drama Studio and Nunn Hall*
3:40 – 4:00 pm	Business Meeting *Logan Hall*
4:00 – 5:20 pm	Slide Session B: Speech Perception and Prediction *Logan Hall*
5:30 – 7:30 pm	Poster Session E and Social Hour *Jeffery Hall and Elvin Hall*

Saturday, August 20th

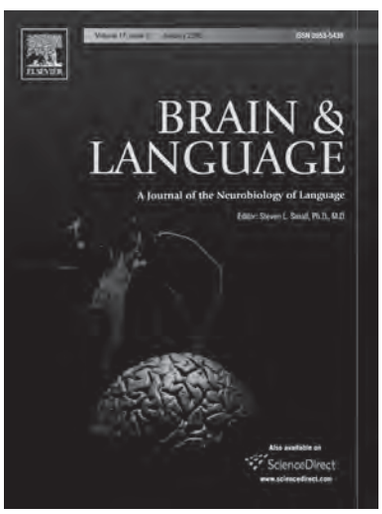
8:00 am – 1:40 pm	Meeting Registration *Crush Hall*
8:00 – 8:45 am	Coffee and Danish *Crush Hall, Drama Studio and Nunn Hall*
8:45 – 9:00 am	Announcements *Logan Hall*
9:00 – 10:00 am	**Keynote Lecture:** **Anne-Lise Giraud** Modelling neuronal oscillations to understand language neurodevelopmental disorders *Logan Hall*
10:00 – 10:30 am	Coffee Break *Crush Hall, Drama Studio and Nunn Hall*
10:00 am – 12:00 pm	Poster Session F *Jeffery Hall and Elvin Hall*
12:10 – 1:30 pm	Slide Session C: Language Disorders and Therapy *Logan Hall*
1:30 – 1:40 pm	Closing Remarks: Lorraine K. Tyler, Chair Elect *Logan Hall*

Sponsors

The Society for the Neurobiology of Language thanks the following sponsors for their support of our 2016 meeting.

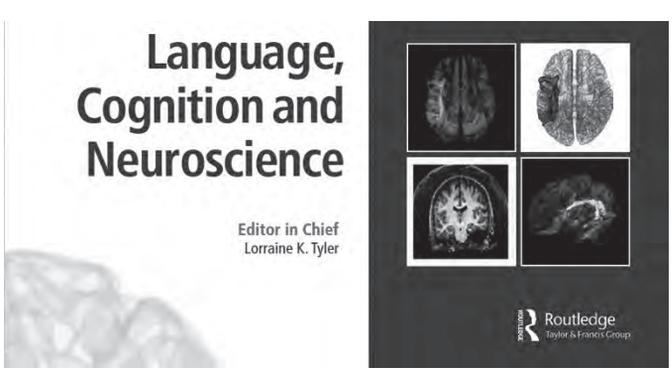
Brain & Language (Elsevier) Gold Sponsor

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



Language, Cognition & Neuroscience (Routledge) Silver Sponsor

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



Exhibitors

The Society for the Neurobiology of Language thanks the following SNL 2016 exhibitors. Please visit our exhibitors in Jeffery Hall Foyer.

Brain & Language (Elsevier) Gold Sponsor

See description under Sponsors.

Language, Cognition & Neuroscience (Routledge) Silver Sponsor

See description under Sponsors.

Brain Products

Brain Products dedicates itself to the research and understanding of the human brain and nervous system. The focus on positively impacting neuroscience made Brain Products the worldwide leading manufacturer of hard and software solutions for neurophysiological research. Our solutions cover the fields of: ERP, BCI, EEG/fMRI, EEG/TMS, as well as sports, sleep, behavioural sciences and similar disciplines. Since for us at Brain Products a solution is only solution if it covers all the researcher´s needs, we also provide caps, sensors, easily integrated stimulation software and much more.

Optoacoustics

Optoacoustics is the leader in high performance optical fiber-based sound and measurement solutions for functional, interventional and clinical MRI and MEG. Optoacoustics MR-safe microphones and headphones provide crisp, clear two-way communications. Our FOMRI-III noise cancelling microphone is today's standard for recording speech in fMRI. We've recently introduced OptoACTIVE slim headphones that actively/passively reduce >95% of EPI gradient noise and deliver high fidelity audio, enabling MR research that could not be done before.

Rogue Resolutions

At Rogue Resolutions, we specialize in bringing together and combining technologies, techniques and services for neuroscience and in doing so, help our customers to conduct robust, credible, replicable and cutting edge research. We achieve this by offering state of the art equipment combined with unrivalled service and support from our experienced team of product and application specialists.

Social Events

Welcome Reception and Rosetta Stone Talk

Wednesday, August 17
Reception: 5:30 – 8:00 pm, Talk: 7:00 - 7:30 pm
Clore Education Centre, British Museum

The museum closes to the public at 5:30 pm. The museum gates close at 6:00 pm. You must arrive before 6:00 pm to attend the SNL Welcome Reception.

SNL invites you to our Welcome Reception on Wednesday, August 17, 5:30 pm at the spectacular British Museum, just steps away from this year's meeting venue. Join your colleagues for an elegant evening of food, drinks and stimulating conversation at one of the world's oldest museums (established in 1753).

The museum us Britain's largest and is widely considered to be one of the world's greatest. The permanent collection comprises over 8 million objects spanning the history of the world's cultures from the stone tools of early man to twentieth century prints. The collection includes controversial items including the Elgin Marbles from the Parthenon in Greece and the Rosetta Stone from Egypt.

Don't miss this occasion to experience one of the world's greatest museums and an opportunity to socialize with colleagues and friends before the meeting commences. The British Museum is open from 10:00 am to 5:30 pm. Plan to spend the day or even just an hour before heading downstairs to the East and West Foyers beneath the Great Court in the Clore Education Centre. There is no admission fee for the museum.

The Rosetta Stone: Greek or Egyptian? Or both?

7:00 – 7:30 pm, During the SNL Welcome Reception

Speaker: Dr. Ilona Regulski

Dr. Ilona Regulski will discuss the role of the Rosetta Stone in understanding both ancient cultures, but also ancient writing systems and their relation to language. Dr. Regulski is the curator for the Rosetta Stone and the Egyptian papyrus collection at the British Museum. Her research focuses on the written culture of Ancient Egypt with concentration on inscribed material culture first-hand, an approach that materialized in a palaeographic study of early writing in Egypt. She is interested in how ancient writing systems came into existence independently in very different cultures and how their trajectories from pictographic to phonological representations developed.

Thursday Social Hour

Thursday, August 18, 6:30 pm
Offsite, Grange White Hall Hotel, Conservatory and Garden, 2-5 Montague Street

Join your colleagues for Social Hour after the meeting on Thursday evening at the charming Grange White Hall Hotel. The Conservatory and Garden will be reserved for SNL attendees only. Complimentary welcome drinks will be offered for the first 200 people.

The Grange White Hall Hotel is a six-minute walk from the meeting venue. To get to the hotel, turn right on Bedford Way; right at Russell Square; left at Montague St. The Grange White Hall Hotel will be on your right at 2-5 Montague Street.

Science Showoff: Brains and Language Special

Thursday, August 18, 7:30 pm
Bloomsbury Studio

Join eight brain experts for a night of chaotic science cabaret, hosted by comedian and celebrity nerd, Steve Cross. Expect to learn things, laugh at things and like things as our specially-chosen neuroscience and psychology brainboxes entertain you in any style they see fit for nine minutes each!

Performers to include Sophie Scott (UCL), Matt Davis (MRC CBU), Kathy Rastle (Royal Holloway), Jenni Rodd (UCL), Carolyn McGettigan (Royal Holloway), Zarinah Agnew (UCSF), Nadine Lavan (Royal Holloway) and Alex Billig (University of Western Ontario).

Admission: £6 in advance with promotion code, £8 at the door on the night of the event. Purchase tickets at https://www.thebloomsbury.com/event/run/16003. The SNL promotion code is "broca".

All profits from the ticket sales will go to local charities.

Bloomsbury Studio is a small theatre located on the UCL campus at 15 Gordon Street; a five block, 6-8 minute walk from the SNL meeting location. The theatre has room for only 70 people, so get there early if you want a seat.

Friday Social Hour

Friday, August 19, 5:30 – 7:30 pm
Crush Hall, Drama Studio and Nunn Hall

Friday evening's poster session will feature light snacks and a bar. Your first drink is on us. You'll find a drink ticket in the back of your badge.

Abstract Merit Awards

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

Graduate Student Merit Award Winners

Caroline Beelen, Parenting and Special Education, Faculty of Psychology and Educational Sciences, KU Leuven, Belgium

Dave Kleinschmidt, University of Rochester, USA

Post Doctoral Merit Award Winners

Anne Kosem, Donders Institute for Brain, Cognition, and Behaviour, Radboud University, Netherlands

Matthew Nelson, Institut National de la Santé et de la Recherche Médicale (INSERM) U992, and NeuroSpin Research Center, France

Travel Awards

This year, the Society for the Neurobiology of Language granted 25 Travel Awards. The awards, funded by the National Institutes of Health (NIH), help to cover travel and registration costs for the 2016 Society for the Neurobiology of Language Meeting in London.

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

The 2016 Travel Awards were given to:

Florencia Assaneo, New York University, USA

Elena Barbieri, Northwestern University, USA

Alexander Billig, Western University, Canada

Richard Binney, Temple University, USA

Idan Blank, Massachusetts Institute of Technology, USA

Faith Chiu, University College London, UK

Dawoon Choi, University of British Columbia, Canada

Shruti Dave, University of California, Davis, USA

Junhua Ding, Beijing Normal University, China

Laura Gwilliams, New York University, USA

Viviana Haase, Ruhr University of Bochum, Germany

Paul Hoffman, University of Edinburgh, Scotland

Lela Ivaz, BCBL, Spain

Sladjana Lukic, Northwestern University, USA

Barbara Marebwa, University of South Carolina, USA

Anne Mickan, Radboud University, Netherlands

Maxime Montembeault, University of Montreal, Canada

Lorelei Phillip, University of South Carolina, USA

Amy Price, University of Pennsylvania, USA

Katarzyna Rączy, Jagiellonian University, Poland

Miguel Santos, University of California, San Francisco, USA

Brielle Stark, University of South Carolina, USA

Yingying Tan, Max Planck Institute for Psycholinguistics, Netherlands

David Thornton, The University of Tennessee Health Science Center, USA

Maya Yablonski, Bar-Ilan University, Israel

Keynote Lecture: Mairéad MacSweeney

Mairéad MacSweeney
University College London

Dr. Mairéad MacSweeney is a Wellcome Trust Senior Research Fellow at the University College London Institute of Cognitive Neuroscience where she leads the Visual Communication group. She is also a Co-Director of the UCL Deafness, Cognition and Language Research Centre. She explores how the brain processes language through primarily visual means including reading, gesture, lipreading and sign language. Much of her research focusses on people who were born profoundly deaf.

INSIGHTS INTO THE NEUROBIOLOGY OF LANGUAGE PROCESSING FROM DEAFNESS AND SIGN LANGUAGE

Thursday, August 18, 2016, 9:00 – 10:00 am, Logan Hall

Chair: Greig de Zubicaray, Queensland University of Technology

The study of the neurobiology of language has, until recently, focussed primarily on auditory speech. In this talk I will consider how research with people born deaf can provide a unique perspective into the neural basis of language processing.

First, signed languages can be used as tools to determine the neural systems involved in processing language, regardless of whether it is seen or heard. I will review the current literature which suggests that the neural systems supporting signed and spoken language are very similar, both involving a predominantly left-lateralised perisylvian network. Yet they are not identical. Many recent studies highlight subtle differences between sign and speech processing. These findings have consequences for developing models of language processing that can be applied to all languages.

Second, examining how spoken languages, and representations of spoken languages, are processed in the absence of auditory input (e.g., lipreading/reading) provides unique insights into the influence of altered sensory experience on language processing. This research can help establish, for example, the role of auditory information in learning to read and may inform models of reading development.

Findings from this field further our understanding of how the brain processes language under conditions of altered sensory experience. Importantly however, it also encourages and stimulates the application of a wider, multimodal view of language and communication to the broader hearing population.

Debate: Ellen Bialystok & Manuel Carreiras

THE CONSEQUENCES OF BILINGUALISM FOR COGNITIVE AND NEURAL FUNCTION

Thursday, August 18, 2016, 1:30 – 3:00 pm, Logan Hall

Chair: Jonathan Peelle, Washington University in St. Louis

Ellen Bialystok

Distinguished Research Professor of Psychology at York University and Associate Scientist at the Rotman Research Institute of the Baycrest Centre for Geriatric Care

Ellen Bialystok is a Distinguished Research Professor of Psychology and Walter Gordon York Research Chair of Lifespan Cognitive Development at York University. She is also an Associate Scientist at the Rotman Research Institute of the Baycrest Centre for Geriatric Care. Her research uses both behavioral and neuroimaging methods to examine the effect of experience on cognitive processes across the lifespan, with most attention on the effect of bilingualism. Participants in these studies include children, younger and older adults, and patients, in an attempt to identify the mechanism by which experience modifies cognitive systems. She has published extensively in the form of books, scientific articles, and book chapters. She is a fellow of the Royal Society of Canada, Society for Experimental Psychology, American Psychological Society, and other professional organizations. Among her awards are the Canadian Society for Brain Behaviour and Cognitive Science Hebb Award (2011), Killam Prize for the Social Sciences (2010), York University President's Research Award of Merit (2009), Donald T. Stuss Award for Research Excellence at the Baycrest Geriatric Centre (2005), Dean's Award for Outstanding Research (2002), Killam Research Fellowship (2001), and the Walter Gordon Research Fellowship (1999). In 2016, she was named an Officer of the Order of Canada for her contributions to our understanding bilingualism and for opening up new avenues of research in her field.

Manuel Carreiras

Scientific Director of the BCBL (Basque Center on Cognition, Brain and Language), Donostia-San Sebastián, Spain

Manuel Carreiras is the Scientific Director of the BCBL (Basque Center on Cognition, Brain and Language, Donostia-San Sebastián, Spain) that has been recently awarded the "Severo Ochoa" label of excellence. He is also IKERBASQUE research professor, Honorary Professor of the UCL, and visiting professor of the UPV/EHU. His research focuses on reading, bilingualism and second language learning. He is the editor in chief of Frontiers in Language Sciences, and associated editor of Language, Cognition, and Neuroscience. He has published more than 200 papers in high impact journals in the field. His research has been funded by different research agencies. He was the coordinator of the Consolider-Ingenio2010 grant entitled COEDUCA, recipient of the ERC advanced grant entitled Bi-Literacy, recipient of the Euskadi Research Prize 2015, and others.

Talk Summary for Ellen Bialystok

There is now substantial evidence supporting the notion of lifelong neuroplasticity from intense experience, a situation that can lead to "cognitive reserve" in older age. The present proposal is that bilingualism is one such experience. Therefore, along with factors like formal education, aerobic exercise, and musical training, bilingualism has systematic consequences for both cognitive function and brain systems that benefit some aspects of cognitive performance and protect against cognitive decline in older age. The proposed mechanism by which these modifications occur will be explained, along with a summary of the evidence showing changes in cognitive and brain function across the lifespan that can be attributed to bilingualism. Following this, specific areas of the research that may appear to be inconsistent with this overall interpretation will be examined in more detail. The conclusion is that the body of evidence obtained from these studies of bilingualism and the underlying mechanism proposed to be responsible are consistent with the notion of lifelong neuroplasticity from bilingualism that lead to measurable changes in cognitive and brain function.

Talk Summary for Manuel Carreiras

Bilingualism and second language learning are interesting cases for understanding (1) whether effects of long term training generalize to other cognitive domains, and (2) brain plasticity. I will argue that, as documented in other cognitive domains, transfer of training effects are minimal. In particular, I will argue that bilinguals do not exhibit enhanced executive control as compared to monolinguals in several behavioral tasks when using tight controls and large samples. The so called "bilingual advantage" is non-existent or may stem from poorly matched samples or other uncontrolled factors. On the other hand, I will argue that the learning and daily use of two languages modulates structural and functional brain connectivity. However, the specific neural consequences of dealing with two languages are still a matter of debate since current findings are quite variable. In any case, it is important to note that differences between bilinguals and monolinguals in structural and functional brain connectivity cannot be used to argue against or in favor of the so called "bilingual advantage".

Keynote Lecture: David Attwell

David Attwell

Jodrell Professor of Physiology, University College London

David Attwell studied as an undergraduate in Oxford, first in physics and then in physiology. He subsequently did a PhD with Julian Jack, again in Oxford, studying the electrical properties of nerve and muscle cells, before moving to Berkeley to work on the retina in Frank Werblin's lab. On returning to the UK from California, he obtained a lectureship at UCL where he has been ever since, being appointed Jodrell Professor of Physiology in 1995 and made a Fellow of the Royal Society in 2001.

His research career has spanned a wide range of interests, including cardiac electrophysiology, visual information processing, synaptic channels and transporters, glial cells, and brain energy use and supply. He pioneered the use of patch-clamp methods to study how reversal of glutamate transporters causes neurotoxic glutamate release in stroke and related conditions, and (with Simon Laughlin) produced the first "energy budget" assessing the subcellular processes on which the brain uses energy. He has demonstrated that control of cerebral energy supply occurs, not only at the arteriole level, but also at the capillary level mediated by pericytes.

THE ENERGETIC DESIGN OF THE BRAIN

Friday, August 19, 2016, 9:00 – 10:00 am, Logan Hall

Chair: Joe Devlin, University College London

A universal constraint on the evolution of brains is that the nervous system's computational power is limited by its energy supply. By describing an energy budget for the grey matter of the mammalian CNS, I will explain how key design features of the brain are determined by the energy supply the brain receives as oxygen and glucose, and how matching of brain energy supply to brain energy use underpins BOLD functional magnetic resonance imaging. I will examine why the brain's white matter uses less energy than the grey matter, and whether myelination really saves energy. By examining how information flow along axons and through synapses relates to the energy used on these processes, I will show that a key concept in brain design is optimisation of information transfer per energy used. Finally, I will demonstrate that the primary locus of control of the brain's energy supply, and hence of the generation of BOLD fMRI signals, is in capillaries rather than arterioles, outline how dysfunction of this regulatory system occurs after stroke, and highlight the therapeutic opportunities this offers.

Keynote Lecture: Anne-Lise Giraud

Anne-Lise Giraud

Director, Auditory Language Group, Université de Genève

Anne-Lise was born in Lyon and lived there until she obtained her PhD in Neuroscience in 1997 on peripheral auditory neurophysiology. She did a post-doc at the Functional Imaging Lab in London between 1997 and 1999, where she studied the plasticity of auditory and visual systems during deafness and after cochlear implantation, using mainly positron emission tomography (PET) and fMRI. In 2001, Anne-Lise founded the Auditory Language Group, at the Brain Imaging Center in Frankfurt/Main Germany, where she worked on multisensory integration in speech processing.

The group survived a first move in 2004 to the Cognitive Neuroscience Lab of the DEC at Ecole Normale Supérieure Paris, where Anne-Lise took a CNRS research director's position, and a second one in 2012 to the Department of Neuroscience of the University of Geneva, where she is being appointed Director of Neuroscience. Anne-Lise is interested in the transformations of the neural code between cochlear speech encoding and access to meaning. She is particularly dedicated to using basic science to understand the causes of speech and language disorders.

MODELLING NEURONAL OSCILLATIONS TO UNDERSTAND LANGUAGE NEURODEVELOPMENTAL DISORDERS

August 20, 2016, 9:00 – 10:00 am, Logan Hall

Chair: Lorraine K. Tyler, University of Cambridge

Perception of connected speech relies on accurate syllabic segmentation and phonemic encoding. These processes are essential because they determine the building blocks that we can manipulate mentally to understand and produce speech. Segmentation and encoding might be underpinned by specific interactions between the acoustic rhythms of speech and coupled neural oscillations in the theta and low-gamma band. To address how neural oscillations interact with speech, we used a neurocomputational model of speech processing generating biophysically plausible coupled theta and gamma oscillations. We show that speech could be well decoded from the artificial network's low-gamma activity, when the phase of theta activity was taken into account. Based on this model we then asked what could happen to speech perception if different parts of the network were disrupted. We postulated that if low-gamma oscillations were shifted in frequency speech perception would still be possible, but phonemic units within syllables would have different format. Phonemic format anomalies could thus cause difficulties to map idiosyncratic phonemic representations, with universal ones, as those we are taught to become aware of when learning to read. A disruption of the auditory gamma oscillation could hence account for some aspects of the phonological deficit in dyslexia. Using MEG, and EEG combined with fMRI, we observed that dyslexia was associated with faster gamma activity in auditory cortex, and we found that this anomaly could explain several facets of the dyslexia phenotype. We also found that the theta/gamma coupling was preserved despite abnormal gamma frequency. Using a similar approach we reasoned that a disruption of the theta auditory network would likely cause more serious speech perception difficulties, such as perhaps those observed in autism spectrum disorders, as syllabic segmentation would also be altered. Using EEG combined with fMRI, we found that both theta activity and the coupling of auditory and gamma oscillations was profoundly abnormal in autism; this anomaly selectively predicted the severity of verbal impairment in autism. These data suggest that speech and language difficulties in dyslexia and autism can be brought together in a common theoretical framework involving the functional coupling between neural oscillations.

Attendee Resources

ATM

The closest ATM is located across the street in the Royal National Hotel lobby.

Abstracts

The full text of poster, slide, and symposium abstracts can be found in the SNL 2016 Abstracts book, which can downloaded in PDF format from www.neurolang.org.

Audio-Visual

An LCD projector (e.g., for PowerPoint presentations) will be provided in Logan Hall; however, computers are NOT provided. Presenters must bring their own computers and set them up BEFORE the start of the session in which they are presenting. The stage is set with two lecturns which can be used for alternating between speakers. A switch box is provided to switch the projector display between lecturns. To avoid setup problems affecting your presentation, presenters are strongly encouraged to arrive at their scheduled room a minimum of 30 minutes before their talk.

Baggage Check

A secure space will be allocated for luggage on the last day of the meeting. All items will need to be picked up no later 2:00 pm. Although the space will be secure, items are left at your own risk.

Certificate of Attendance

A signed and dated Certificate of Attendance is on the back of your badge. If you require something additional, we will be happy to email or mail a copy after the meeting. Contact us at info@neurolang.org.

Childcare

Thanks to the funding from the National Institutes of Health, SNL is pleased to be able to offer onsite childcare at this year's meeting in London. We have contracted with Relief Creche Care, a mobile creche company based in London.

Childcare will be offered free of charge, on a first-come first-served basis, for children 0-10 years of age. Drop-ins may be accommodated onsite if room allows, but cannot be guaranteed. Childcare is in Committee Room 1 on Level 4 of 20 Bedford Way.

All Relief Creche Care staff are first aid qualified and DBS cleared with recognized childcare qualifications including NNEBs, NVQs, Degrees, PGCE & Nursing qualifications.

For questions, contact SNL staff at info@neurolang.org or Relief Creche Care at info@reliefcrechecare.co.uk.

Childcare Schedule

Thursday, August 18, 9:00 am – 1:15 pm, 1:30 – 6:30 pm
Friday, August 19, 9:00 am – 1:15 pm, 1:30 – 6:30 pm
Saturday, August 20, 9:00 am – 1:30 pm

Contact Us

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

Copying, Printing and Office Supplies

Liquid Imaging (23a Tavistock Place; http://www.liquidimaging.co.uk/) is a 5-minute walk from and offers copying and printing services, including large format printing (posters). Basic office supplies can be purchased from the store in the Student Union (same building as the meeting). A larger office supply store, Rymans, is located inside Waterstones Bookstore on the corner of Gower Street and Tavistock Road (5-minute walk).

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.

Coffee Service

Complimentary coffee and tea service is available to all registered attendees at the times shown below. Coffee service is in Crush Hall with overflow seating in Drama Studio and Nunn Hall (Level 4).

Thursday

Coffee and Danish, 8:00 - 8:45 am
Crush Hall, Drama Studio and Nunn Hall

Coffee Break, 10:00 - 10:30 am
Crush Hall, Drama Studio and Nunn Hall

Afternoon Coffee, 3:00 – 3:30 pm
Crush Hall, Drama Studio and Nunn Hall

Friday

Coffee and Danish, 8:00 - 8:45 am
Crush Hall, Drama Studio and Nunn Hall

Coffee Break, 10:00 - 10:30 am
Crush Hall, Drama Studio and Nunn Hall

Afternoon Coffee, 3:00 – 3:30 pm
Crush Hall, Drama Studio and Nunn Hall

Saturday

Coffee and Danish, 8:00 - 8:45 am
Crush Hall, Drama Studio and Nunn Hall

Coffee Break, 10:00 - 10:30 am
Crush Hall, Drama Studio and Nunn Hall

Future Meetings

SNL 2017 will be held in Baltimore, Maryland, USA

SNL 2018 will be held in Québec City, Canada

Internet

Internet access is complimentary:

1. Connect to the UCLGuest wireless network.
2. Go to any web page and you will be redirected to the UCLGuest Welcome page.
3. Click Self Service.
4. Complete the form to create an account. For the Event code, enter SNL2016.
5. Click Login and enter your username and password.
6. Click Accept.

Go directly to the Login page for subsequent connections.

Live Streaming of Talks

Live streaming of the talks in Logan Hall will be provided in Committee Room 2 on Level 4.

Local Dining

For a Google map of local coffee shops, restaurants and pubs, go to http://tinyurl.com/snl2016map.

Lost & Found

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

Meeting Rooms

All general sessions (Keynotes, Debate, and Slides) will be held in Logan Hall.

Messages

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

Mobile Phones

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

Name Badges

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

Onsite Meeting Registration

The SNL Registration Desk is located in Crush Hall, on the lower level of 20 Bedford Way at the UCL Institute of Education. The Registration Desk hours are:

Thursday, August 18, 7:30 am – 6:00 pm
Friday, August 19, 8:00 am – 7:00 pm
Saturday, August 20, 8:00 am - 1:40 pm

Parking

There is no parking available onsite. On-street parking in the neighborhood is available and managed by Camden Council. Private parking is offered within a few minutes' walk by National Car Parks (NCP).

Photography, Video and Recording

Photography, video and audio recording for personal use is permitted. Attendees are encouraged to tweet about the meeting using the hashtag #snlmtg16.

Poster Sessions

Posters are located in the Jeffery and Elvin Halls. See page 18 for the Poster Schedule.

Social Events

See page 7 for details on the SNL Social Events.

Social Media

Attendees are encouraged to tweet about the meeting using the hashtag #snlmtg16.

Smoking

Smoking is not permitted at 20 Bedford Way. A smoking area is provided outside the main entrance.

Speakers

Please ensure that you are available at least thirty minutes before the start of the session. See "Audiovisual" for technical information.

Transportation

SNL 2016 will be held at 20 Bedford Way, at the UCL Institute of Education. To reach us:

Traveling by Bus - Bus stops, within a 5 to 15-minute walk, are located on Euston Road, Gower Street, Tottenham Court Road, Woburn Place and Southampton Row. The closest are on Woburn Place and Southampton Row.

Traveling by Tube (underground)

The closest tube station to the venue is Russell Square which is a 5- minute walk, but there are six more within a 5 to 15-minute walk, including: Euston, Euston Square, Goodge Street, Tottenham Court Road, Holborn and Warren Street, providing excellent access to most parts of the city via the Northern, Piccadilly, Victoria, and Central Lines.

Traveling by Train

The closest station to the venue is Euston which is a 10-minute walk or a short taxi ride away. Kings Cross and St Pancras stations are less than a mile away and provide access to national and international rail links.

Traveling by Bicycle

There is a cycle-hire docking station on the east side of the main building, on Bedford Way. It is managed by Transport for London. Visitors arriving on their own bikes may lock them to the perimeter railing of the concourse, on the west side of the main building.

Slide Sessions

Slide Session A

Thursday, August 18, 5:10 – 6:30 pm, Logan Hall

Reading and Comprehension

Chair: Liina Pylkkänen

Speakers: Matthew Nelson, Caroline Beelen, Shruti Dave, Ina Bornkessel-Schlesewsky

5:10 pm

A1 Neurophysiological dynamics of phrase structure building during sentence reading *Matthew Nelson[1,2], Imen El Karoui[3,4,5,6], Kristof Giber[7], Laurent Cohen[3,4,5,6,8], Sydney Cash[7], Josef Parvizi[9], Lionel Naccache[3,4,5,6,8], John Hale[10], Christophe Pallier[1,2,11], Stanislas Dehaene[1,2,11,12]; [1]Institut National de la Santé et de la Recherche Médicale (INSERM) U992, [2]NeuroSpin Research Center, [3]Institut National de la Santé et de la Recherche Médicale (INSERM) U1127, [4]Centre National de la Recherche Scientifique (CNRS) UMR7225, [5]Université Paris 6, [6]Institut du Cerveau et de la Moelle Épinière Research Center (ICM), [7]Massachusetts General Hospital, [8]AP-HP Groupe hospitalier Pitié-Salpêtrière, [9]Stanford University, [10]Cornell University, [11]Université Paris 11, [12]Collège de France*

5:30 pm

A2 Pre-reading neuroanatomical anomalies related to developmental dyslexia *Caroline Beelen[1], Jolijn Vanderauwera[1,2], Maaike Vandermosten[1,2], Jan Wouters[2], Pol Ghesquière[1]; [1]Parenting and Special Education, Faculty of Psychology and Educational Sciences, KU Leuven, Belgium, [2]Research Group ExpORL, Department of Neurosciences, KU Leuven, Belgium*

5:50 pm

A3 Age-Related Increase in Neural Noise Influences Predictive Processing during Reading *Shruti Dave[1,2], Trevor Brothers[1,2], Tamara Y Swaab[1,2]; [1]Center for Mind and Brain, Davis, CA, [2]University of California, Davis*

6:10 pm

A4 Social categorisation affects sentence comprehension: the role of the angular gyrus as a multimodal hub for contextualised event interpretation *Ina Bornkessel-Schlesewsky[1], Sabine Frenzel[2], Arne Nagels[2], Alexander Droege[2], Jens Sommer[2], Richard Wiese[2], Tilo Kircher[2], Matthias Schlesewsky[1]; [1]University of South Australia, [2]University of Marburg*

Slide Session B

Friday, August 19, 4:00 – 5:20 pm, Logan Hall

Speech Perception and Prediction

Chair: Ina Bornkessel-Schlesewsky

Speakers: Jona Sassenhagen, Dave F. Kleinschmidt, Helen Blank, Matthias J. Sjerps

4:00 pm

B1 Multilevel modeling of naturalistic language processing: An application to cross-level predictive processes *Jona Sassenhagen[1], Christian J. Fiebach[1]; [1]University of Frankfurt*

4:20 pm

B2 Neural mechanisms for coping with talker variability by rapid distributional learning *Dave F. Kleinschmidt[1], T. Florian Jaeger[1], Rajeev Raizada[1]; [1]University of Rochester*

4:40 pm

B3 Predictive coding but not neural sharpening simulates multivoxel fMRI response patterns during speech perception *Helen Blank[1], Matthew H Davis[1]; [1]MRC Cognition and Brain Sciences Unit, Cambridge, UK*

5:00 pm

B4 Hierarchical, acoustically-grounded, distinctive features are the dominant representations of perceived speech *Matthias J. Sjerps[1,2], Matthew K. Leonard[3], Liberty S. Hamilton[3], Keith Johnson[2], Edward F. Chang[3]; [1]Radboud University, Nijmegen, the Netherlands, [2]University of California, Berkeley, United States, [3]University of California, San Francisco, United States*

Slide Session C

Saturday, August 20, 12:10 – 1:30 pm, Logan Hall

Language Disorders and Therapy

Chair: David Corina

Speakers: Idan Blank, Diego L. Lorca-Puls, Magdalena Sliwinska, Kyrana Tsapkini

12:10 pm

C1 Functional reorganization of the brain networks that support language processing following brain damage in aphasia *Idan Blank[1], Sofia Vallila-Rohter[2], Swathi Kiran[2], Evelina Fedorenko[3]; [1]MIT, [2]Boston University, [3]Massachusetts General Hospital*

12:30 pm

C2 A new TMS-guided lesion-deficit mapping approach identifies brain areas where stroke damage impairs phonological processing *Diego L. Lorca-Puls[1], Andrea Gajardo-Vidal[1,2], Mohamed L. Seghier[1,3], Alexander P. Leff[1], Varun V. Sethi[1], Susan Prejawa[1,4], Thomas M. H. Hope[1], Joseph T. Devlin[1], Cathy J. Price[1]; [1]University College London, [2]Universidad del Desarrollo, [3]Emirates College for Advanced Education, [4]Max Planck Institute for Human Cognitive and Brain Sciences*

12:50 pm

C3 Defining the importance of domain-general brain systems in language. *Magdalena Sliwinska[1], Ines Violante[1], Adam Hampshire[1], Robert Leech[1], Joseph Devlin[2], Richard Wise[1]; [1]Imperial College London, [2]University College London*

1:10 pm

C4 Imaging tDCS intervention effects in primary progressive aphasia *Kyrana Tsapkini[1], Andreia Faria[1], Ashley Harris[2], Yenny Webb-Vargas[3], Tushar Chakravarty[1], Bronte Ficek[1], Brenda Rapp[4], John Desmond[1], Richard Edden[1], Constantine Frangakis[3], Martin Lindquist[3], Argye Hillis[1]; [1]Johns Hopkins Medicine, [2]University of Calgary, [3]Johns Hopkins School of Public Health, [4]Johns Hopkins University*

Poster Schedule

Poster sessions are scheduled on Thursday, August 18 through Saturday, August 20. Poster sessions are 2 hours, and presenting authors are expected to be present the entire time. Posters are located in Jeffery and Elvin Halls. 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 "Teardown Complete" time will be discarded. Do not leave personal items in the poster room.

IMPORTANT: Only the supplied velcro tabs are allowed to be used for securing your poster to your board.

Date & Time	Posters	Topics
Poster Session A	A1 - A4	Perception: Auditory
Thursday, August 18	A5 - A11	Perception: Speech Perception and Audiovisual Integration
10:00 am - 12:00 pm	A12 - A16	Multilingualism
Jeffery and Elvin Halls	A17 - A25	Meaning: Lexical Semantics
	A26 - A31	Language Development
	A32 - A37	Grammar: Morphology
	A38 - A47	Language Disorders
	A48	Perception: Orthographic and Other Visual Processes
	A49 - A52	Meaning: Combinatorial Semantics
	A53 - A55	Meaning: Discourse and Pragmatics
	A56 - A59	Perception: Orthographic and Other Visual Processes
	A60 - A61	Phonology and Phonological Working Memory
	A62 - A63	Signed Language and Gesture
	A64 - A66	Speech Motor Control and Sensorimotor Integration
	A67 - A69	Control, Selection, and Executive Processes
Setup Begins: 8:30 am	A70 - A71	Meaning: Prosody, Social and Emotional Processes
Teardown Complete: 1:00 pm	A72 - A74	Methods
	A75	Writing and Spelling
Poster Session B	B1 - B4	Perception: Auditory
Thursday, August 18	B5 - B11	Perception: Speech Perception and Audiovisual Integration
3:00 – 5:00 pm	B12 - B17	Multilingualism
Jeffery and Elvin Halls	B18 - B26	Meaning: Lexical Semantics
	B27 - B30	Language Development
	B31 - B32	Grammar: Morphology
	B33 - B36	Grammar: Syntax
	B37 - B46	Language Disorders
	B47 - B50	Meaning: Combinatorial Semantics
	B51 - B53	Meaning: Discourse and Pragmatics
	B54 - B57	Perception: Orthographic and Other Visual Processes
	B58	Language Disorders
	B59 - B60	Phonology and Phonological Working Memory
	B61 - B62	Signed Language and Gesture
	B63 - B66	Speech Motor Control and Sensorimotor Integration
	B67 - B69	Control, Selection, and Executive Processes
Setup Begins: 1:00 pm	B70 - B71	Meaning: Prosody, Social and Emotional Processes
Teardown Complete: 6:30 pm	B72 - B73	Methods
	B74	Writing and Spelling
Poster Session C	C1 - C4	Perception: Auditory
Friday, August 19	C5 - C11	Perception: Speech Perception and Audiovisual Integration
10:00 am - 12:00 pm	C12- C17	Multilingualism
Jeffery and Elvin Halls	C18 - C27	Meaning: Lexical Semantics
	C28 - C32	Language Development
	C33 - C38	Grammar: Syntax
	C39 - C48	Language Disorders
	C49 - C52	Meaning: Combinatorial Semantics
	C53 - C55	Meaning: Discourse and Pragmatics
	C56 - C58	Perception: Orthographic and Other Visual Processes
	C59 - C60	Phonology and Phonological Working Memory
	C61 - C62	Signed Language and Gesture
	C63 - C65	Speech Motor Control and Sensorimotor Integration
	C66 - C68	Control, Selection, and Executive Processes
Setup Begins: 8:30 am	C69	Meaning: Prosody, Social and Emotional Processes
Teardown Complete: 1:00 pm	C70	Methods
	C71	Writing and Spelling

Date & Time	Posters	Topics
Poster Session D Friday, August 19 1:30 – 3:30 pm *Jeffery and Elvin Halls*	D1 - D4	Perception: Auditory
	D5 - D11	Perception: Speech Perception and Audiovisual Integration
	D12 - D14	Multilingualism
	D15 - D23	Meaning: Lexical Semantics
	D24 - D28	Language Development
	D29 - D35	Grammar: Syntax
	D36 - D45	Language Disorders
	D46 - D49	Meaning: Combinatorial Semantics
	D50 - D52	Meaning: Discourse and Pragmatics
	D53 - D56	Perception: Orthographic and Other Visual Processes
	D57 - D58	Phonology and Phonological Working Memory
	D59 - D60	Signed Language and Gesture
	D61 - D63	Speech Motor Control and Sensorimotor Integration
	D64 - D66	Control, Selection, and Executive Processes
Setup Begins: 1:00 pm Teardown Complete: 4:00 pm	D67 - D68	Meaning: Prosody, Social and Emotional Processes
	D69 - D70	Methods
	D71	Writing and Spelling
Poster Session E Friday, August 19 5:30 – 7:30 pm *Jeffery and Elvin Halls*	E1 - E4	Perception: Auditory
	E5 - E9	Perception: Speech Perception and Audiovisual Integration
	E10	Signed Language and Gesture
	E11 - E12	Perception: Speech Perception and Audiovisual Integration
	E13 - E17	Multilingualism
	E18 - E26	Meaning: Lexical Semantics
	E27 - E31	Language Development
	E32 - E37	Grammar: Syntax
	E38 - E46	Language Disorders
	E48 - E50	Meaning: Combinatorial Semantics
	E51 - E53	Meaning: Discourse and Pragmatics
	E54 - E57	Perception: Orthographic and Other Visual Processes
	E58 - E59	Phonology and Phonological Working Memory
	E60	Signed Language and Gesture
	E61 - E63	Speech Motor Control and Sensorimotor Integration
	E64 - E66	Control, Selection, and Executive Processes
Setup Begins: 4:00 pm Teardown Complete: 7:45 pm	E67 - E68	Meaning: Prosody, Social and Emotional Processes
	E69 - E70	Methods
	E71	Writing and Spelling
Poster Session F Saturday, August 20 10:00 am - 12:00 pm *Jeffery and Elvin Halls*	F1 - F2	Perception: Auditory
	F3 - F8	Perception: Speech Perception and Audiovisual Integration
	F9 - F15	Multilingualism
	F16 - F20	Meaning: Lexical Semantics
	F21 - F26	Language Development
	F27 - F31	Grammar: Syntax
	F32 - F36	Language Disorders
	F37	Language Genetics
	F38 - F44	Language Therapy
	F45 - F46	Meaning: Combinatorial Semantics
	F47 - F48	Meaning: Discourse and Pragmatics
	F49	Perception: Orthographic and Other Visual Processes
	F50 - F51	Phonology and Phonological Working Memory
	F52	Signed Language and Gesture
	F53 - F58	Speech Motor Control and Sensorimotor Integration
	F59 - F60	History of the Neurobiology of Language
Setup Begins: 8:30 am Teardown Complete: 12:30 pm	F61	Animal Communication
	F62 - F64	Meaning: Prosody, Social and Emotional Processes
	F65	Methods

Poster Sessions

Poster Session A

Perception: Auditory

A1 Different rule-based violations of stem vowels of German verbs evoke differential ERP effects *Natalia Bekemeier[1], Carsten Eulitz[1]; [1]University of Konstanz*

A2 Vowel development in infancy: Multidimensional scaling of English vowels using cortical auditory evoked potentials *Kathleen McCarthy[1], Katrin Skoruppa[2], Paul Iverson[1]; [1]University College London, [2]University of Basel*

A3 How does newborns' brain process speech temporal information? *Laurianne Cabrera[1,2], Judit Gervain[2]; [1]University College London, [2]Université Paris Descartes-CNRS*

A4 Associations between language and cognitive skills and auditory discrimination in children. An ERP and behavioural study *Tanja Linnavalli[1], Vesa Putkinen[1,2], Minna Huotilainen[3,4], Mari Tervaniemi[3]; [1]Cognitive Brain Research Unit, Institute of Behavioural Sciences, University of Helsinki, Finland, [2]Department of Music, University of Jyväskylä, Finland, [3]Cicero Learning and Cognitive Brain Research Unit, Institute of Behavioural Sciences, University of Helsinki, Finland, [4]University of Turku, Finland*

Perception: Speech Perception and Audiovisual Integration

A5 Characterization of phase entrainment to speech sounds in laminar recordings in monkey A1 *Benedikt Zoefel[1,2,3], Jordi Costa-Faidella[3,4], Peter Lakatos[3], Charles E Schroeder[3], Rufin VanRullen[1,2]; [1]Université Paul Sabatier, Toulouse, France, [2]Centre de Recherche Cerveau et Cognition (CerCo), CNRS, Toulouse, France, [3]Nathan Kline Institute for Psychiatric Research, Orangeburg, NY, United States, [4]Institute for Brain, Cognition and Behavior (IR3C) and Cognitive Neuroscience Research Group, Department of Psychiatry and Clinical Psychobiology, University of Barcelona, Spain*

A6 Effects of phonetic category structure on brain activity during word recognition *Sahil Luthra[12], Sara Guediche[1], Sheila E. Blumstein[1], Emily B. Myers[2]; [1]Brown University, [2]University of Connecticut*

A7 Tracking of Speech Rhythm by Cortical oscillations: an MEG study in typically developing children *Hélène Guiraud[1], Ana-Sofia Hincapié[2,3], Karim Jerbi*[2], Véronique Boulenger*[1]; [1]CNRS/Université Lyon 2 UMR 5596, France, [2]Université de Montréal, Canada, [3]Pontificia Universidad Católica de Chile, Chile*

A8 Neural processing of congruent and incongruent audiovisual speech in school-aged children with and without specific language impairment (SLI) *Jenni Heikkilä[1], Kaisa Tiippana[1], Otto Loberg[2], Paavo Leppänen[2]; [1]University of Helsinki, [2]University of Jyväskylä*

A9 Reorganization of the neurobiology of speech perception after sentence overlearning *Yoon Ju Jo[1], Stephen Brown[1], Daniel R Lametti[1,2], Serena Lo[1], Emilia Molimpakis[1], Jeremy I Skipper[1]; [1]University College London, [2]The University of Oxford*

A10 A Functional transcranial Doppler sonography (fTCD) study of hemispheric dominance during silent speechreading. *Eva Gutierrez[1,2], Rachel Wayne[3], Heather Payne[1], Mairead MacSweeney[1]; [1]University College London, [2]University of Valencia, [3]Queen's University*

A11 Do you listen to your brain? Oscillatory activity and speech perception *Alejandro Pérez[1], Manuel Carreiras[1,2], Jon Andoni Duñabeitia[1]; [1]Basque Center on Cognition, Brain and Language, [2]IKERBASQUE, Basque Foundation for Science*

Multilingualism

A12 Behavioral and neural correlates of bilingual language switching in virtual reality *David Peeters[1]; [1]Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands*

A13 Beyond bilingualism - Multilingual language experience correlates with bilateral caudate volume in polyglots *Alexis Hervais-Adelman[1,2], Natalia Egorova[2], Narly Golestani[2]; [1]Max Planck Institute for Psycholinguistics, [2]University of Geneva*

A14 Language switching: beneficial or costly? Evidence from studies with second language learners and trilinguals *Suzanne Hut[1], Alina Leminen[1,2], Päivi Helenius[3], Jyrki Mäkelä[4], Minna Lehtonen[1,5]; [1]Cognitive Brain Research Unit, University of Helsinki, Finland, [2]Center of Functionally Integrative Neuroscience, Aarhus University, Denmark, [3]Division of Child Neurology, Helsinki University Hospital, Finland, [4]BioMag Laboratory, HUS Medical Imaging Center, University of Helsinki and Helsinki University Hospital, Finland, [5]Abo Akademi University, Turku, Finland*

A15 Grey matter changes associated to bilingualism across lifespan: combining voxel-based morphometry (VBM) and cortical thickness (CT). *Lorna García-Pentón[1], Yuriem Fernández García[1], Jon Andoni Duñabeitia[1], Manuel Carreiras[1,2,3]; [1]Basque Center on Cognition Brain and Language (BCBL), Spain, [2]IKERBASQUE, Basque Foundation for Science, Spain, [3]Euskal Herriko Unibertsitatea, UPV/EHU*

A16 Regulation and resolution: How bilingualism and cognitive aging affect the use of executive function in comprehension *Megan Zirnstein[1], Janet G. van Hell[2], Judith F. Kroll[1,2]; [1]University of California, Riverside, [2]Pennsylvania State University*

Meaning: Lexical Semantics

A17 Influence of the degree of object typicality in the course of word production : an ERP study *Raphael Fargier[1], Marina Laganaro[1]; [1]FPSE, University of Geneva, Switzerland*

A18 The older the better: how language shapes brain connectivity through lifetime *Perrine Ferré[1], Angela Tam[1], Yakoov Stern[2], Jason Steffener[3], Pierre Bellec[1], Yves Joanette[1]; [1]CRIUGM, University of Montreal, [2]Columbia University, [3]Ottawa University*

A19 Prediction is production: ERP evidence in sentence comprehension *Clara Martin[1,2], Francesca Branzi[3], Moshe Bar[4]; [1]BCBL, San Sebastian, Spain, [2]Ikerbasque, Bilbao, Spain, [3]University of Manchester, UK, [4]Bar-Ilan University, Tel-Aviv, Israel*

A20 Characteristics of abstract speech in bvFTD *Katheryn Cousins[1], Sharon Ash[1], Murray Grossman[1]; [1]University of Pennsylvania*

A21 Changes in neural oscillations provide insight into the engagement of cognitive processes during word learning *Alyson Abel[1], Julie M. Schneider[2], Mandy J. Maguire[2]; [1]San Diego State University, [2]University of Texas at Dallas*

A22 Put it in context: Investigating the effects of task demand on word processing *Alison Heard[1], Penny M. Pexman[1], Andrea B. Protzner[1]; [1]University of Calgary*

A23 Investigating the Effect of Experience on Concrete and Abstract Word Processing: A Study with Semantic Priming Task *Selgun Yuceil[1], Didem Gokcay[2]; [1]Middle East Technical University, [2]Middle East Technical University*

A24 Parietal circuit distinguishing between feminine and masculine entities: an fMRI study of gender agreement processing. *Ileana Quinones[1], Nicola Molinaro[1], Simona Mancini[1], Horacio Barber[2], Juan Andres Hernandez[2], Manuel Carreiras[1,3,4]; [1]BCBL. Basque Center on Cognition, Brain and Language, Donostia, Spain, [2]Universidad de La Laguna, Tenerife, Spain, [3]IKERBASQUE. Basque Foundation for Science. Bilbao, Spain, [4]University of the Basque Country, UPV/EHU. Bilbao, Spain.*

A25 Tracking the learning of new meanings for novel words and known words *Xiaoping Fang[1,2], Charles Perfetti[1,2]; [1]University of Pittsburgh, [2]Center for Neural Basis of Cognition*

Language Development

A26 Effects of familial dyslexia on neonatal speech sound processing as reflected by auditory ERPs *Anja Thiede[1,2], Iina Ala-Kurikka[1], Paula Virtala[1], Eino Partanen[1,3], Kaija Mikkola[4], Teija Kujala[1]; [1]Cognitive Brain Research Unit, University of Helsinki, Finland, [2]School of Science, Aalto University, Finland, [3]Center of Functionally Integrative Neuroscience (CFIN), Aarhus University, Denmark, [4]Helsinki University Central Hospital, Finland*

A27 Past tense production in children with and without specific language impairment: an fMRI study *Frederique Liegeois[1], Josefina Ihnen-Jory[2], Gina Conti-Ramsden[3], Sheena Reilly[4], Lauren Pigdon[5], Angela Mayes[5], Alan Connelly[6,7], Angela T. Morgan[5,7]; [1]UCL Institute of Child Health, London, UK, [2]Pontificia Universidad Católica de Chile, Santiago, Chile, [3]University of Manchester, Manchester, UK, [4]Menzies Health Institute Griffith University, Queensland, Australia, [5]Murdoch Childrens Research Institute, Melbourne, Australia, [6]Florey Institute of Neuroscience and Mental Health, Melbourne, Australia, [7]University of Melbourne, Australia*

A28 White matter connectivity in children with speech and/or language impairment: a diffusion weighted imaging and tractography study *Angela Morgan[1,2], Merina Su[3], Lauren Pigdon[2], Sheena Reilly[2,4], Alan Connelly[1,5], Frederique Liegeois[3]; [1]University of Melbourne, [2]Murdoch Children's Research Institute, [3]University College London Institute of Child Health, [4]Griffith University, [5]Florey Institute of Neuroscience and Mental Health*

A29 Where is the red ball (moving)?: Differences in the use of locative and directional prepositions in high-functioning autism *Agata Bochynska[1], Randi Alice Nilsen[1], Valentin Vulchanov[1], Mila Vulchanova[1]; [1]Norwegian University of Science and Technology*

A30 Impaired categorical perception of lexical tones in Chinese children with autism: An Event-Related Potential study *Xiaoyue Wang[1], Suiping Wang[1,2,3], Yuebo Fan[4], Dan Huang[4], Wei Zhang[1,2,3], Yang Zhang[5,6]; [1]School of Psychology, South China Normal University, [2]Center for Studies of Psychological Application, South China Normal University, [3]Guangdong Provincial Key Laboratory of Mental Health and Cognitive Science, South China Normal University, [4]Guangzhou Rehabilitation and Research Center for Children with Autism, Guangzhou Cana School, [5]Department of Speech-Language-Hearing Science, University of Minnesota, [6]Center for Neurobehavioral Development, University of Minnesota*

A31 Early Parental Input affects Brain Activation during Auditory Sentence Comprehension in Preadolescent Children *Salomi S. Asaridou[1], Özlem Ece Demir-Lira[2], Susan Goldin-Meadow[2], Steven L. Small[1]; [1]Department of Neurology, University of California, Irvine, [2]Department of Psychology, The University of Chicago*

Grammar: Morphology

A32 Neurocognitive Correlates of Verbs: Zero-Derivation versus Lexical-Selection costs *Sladjana Lukic[1], Aya Meltzer-Asscher[2], Todd Parrish[1], Cynthia K. Thompson[1]; [1]Northwestern University, USA, [2]Tel Aviv University, Israel*

A33 Processing of nouns and verbs in different contexts: An fMRI study *Shiwen Feng[1], Jing Yang[2], Jennifer Legault[3], Ping Li[3], Yiming Yang[1]; [1]Jiangsu Normal University, [2]Guangdong University of Foreign Studies, [3]Pennsylvania State University*

A34 Production of grammatical and lexical verbs in context: an ERP study. *Violaine Michel Lange[1,2], Kasper Boye[2], Hartwig Siebner[1]; [1]Danish Research Centre for Magnetic Resonance, Centre for Functional and Diagnostic Imaging and Research, Copenhagen University Hospital Hvidovre, Denmark, [2]Department of Scandinavian Studies and Linguistics, University of Copenhagen, Denmark*

A35 The role of memory consolidation in learning and generalising inflectional morphology: behavioural and fMRI findings *Lydia Vinals[1,2], Jelena Mirkovic[3,4], Gareth Gaskell[3], Matt Davis[1]; [1]Cognition and Brain Sciences Unit, [2]University of Cambridge, [3]University of York, [4]York St John University*

A36 Precision grip and whole hand grasp nominal classifiers in Japanese: An fMRI study *Marit Lobben[1,2], Tomoko Hansen[1], Friedemann Pulvermüller[2]; [1]University of Oslo, [2]University of Oslo, [3]Free University Berlin*

A37 White matter pathways associated with morphological processing *Maya Yablonski[1], Kathleen Rastle[2], J.S.H Taylor[2], Michal Ben-Shachar[1]; [1]Bar-Ilan University, [2]Royal Holloway, University of London*

Language Disorders

A38 Concentric Analysis of Category Naming Fluency in Frontotemporal Degeneration *Murray Grossman[1], Phil Cook[1], Corey McMillan[1], Charles Jester[1], Katya Rascovsky[1], Amy Halpin[1], Rachael Langey[1], Olga Kofman[1]; [1]University of Pennsylvania*

A39 Verbal Working Memory Capacities in Sentence Comprehension: Evidence from Aphasia *Yingying Tan[1,2], Randi Martin[2], Julie Van Dyke[3]; [1]Max Planck Institute for Psycholinguistics, [2]Rice University, [3]Haskins Laboratories*

A40 Artificial grammar learning tasks reveal global deficits in auditory sequence processing in vascular and progressive non-fluent aphasia *Benjamin Wilson[1,2], Thomas E Cope[1,3], Holly Robson[4], Rebecca Drinkall[5], Lauren Dean[1], Manon Grube[1], Karalyn Patterson[3,6], Timothy D Grifiths[1], James B Rowe[3,6], Christopher I Petkov[1,2]; [1]Institute of Neuroscience, Newcastle University, UK, [2]Centre for Behaviour and Evolution, Newcastle University, UK, [3]Department of Clinical Neurosciences, University of Cambridge, UK, [4]School of Psychology and Clinical Language Sciences, University of Reading, UK, [5]Berkshire Healthcare NHS Foundation Trust, Bracknell, UK, [6]Medical Research Council Cognition and Brain Sciences Unit, Cambridge, UK*

A41 From Oscillopathies to Neural Entrainment: Using Language Deficits in Autism and Schizophrenia to (Re)construct an Oscillomic Model of Linguistic Computation *Elliot Murphy[1], Antonio Benítez-Burraco[2]; [1]University College London, [2]University of Huelva*

A42 Neural Specialization for the Combination of Parsing and Task Performance *David Caplan[1], Jennifer Michaud[1], Rebecca Hufford[1], Gloria Waters[2]; [1]Massachusetts General Hospital, [2]Boston University*

A43 Neural mechanisms of auditory sentence comprehension, canonicity, and syntactic movement in people with aphasia *Eduardo Europa[1], Cynthia K. Thompson[1,2]; [1]Northwestern University, [2]Feinberg School of Medicine*

A44 On the association between memory capacity and sentence comprehension: Insights from a systematic review and meta-analysis of the aphasia literature *Maria Varkanitsa[1]; [1]Neuropsychology Laboratory, Department of Neurology, Massachusetts General Hospital, Boston, MA, USA*

A45 The role of the Uncinate Fasciculus in learning to read *Jolijn Vanderauwera[1,2], Stephanie J Forkel[3], Marco Catani[4], Maaike Vandermosten1[1,2], Astrid De Vos[1,2], Jan Wouters[2], Pol Ghesquière[1]; [1]Parenting and Special Education Research Unit, Faculty of Psychology and Educational Sciences, KU Leuven, Belgium, [2]Research Group ExpORL, Department of Neurosciences, KU Leuven, Belgium, [3]Natbrainlab, Department of Neuroimaging, Institute of Psychiatry, Psychology and Neurosciences, King's College London, UK, [4]Natbrainlab, Department of Forensic and Neurodevelopmental Sciences, Institute of Psychiatry Psychology and Neurosciences, King's College London, UK*

A46 Subcortical Correlates of Receptive Language Impairment in Children Aged 8-10 with Developmental Coordination Disorder *Alexandra F Bonthrone[1,2], Chris A Clark[1,2], Angela Morgan[3,4,5], Dido Green[6], Frederique Liegeois[1,2]; [1]UCL Institute of Child Health, London, UK, [2]Great Ormond Street Hospital for Children NHS Trust, London, UK, [3]University of Melbourne, Australia, [4]Royal Children's Hospital, Melbourne, Australia, [5]Murdoch Childrens Research Institute, Melbourne, Australia, [6]Centre for Rehabilitation, Oxford Brookes University, Oxford, UK*

A47 Language Comprehension and Functional Connectivity in Individuals with Optimal Outcome from Autism Spectrum Disorder *Monica Y.C. Li[1], Michael C. Stevens[2], Deborah A. Fein[1], Inge-Marie Eigsti[1]; [1]University of Connecticut, [2]Institute of Living, Hartford Hospital, Connecticut*

Perception: Orthographic and Other Visual Processes

A48 The English can't stand the bottle like the Dutch: ERPs show an effect of language on object perception *Monique Flecken[1], Geertje van Bergen[1]; [1]Max Planck Institute for Psycholinguistics*

Meaning: Combinatorial Semantics

A49 Effects of language modality on the neural correlates of semantic ambiguity processing *Lena Maria Holderer[1], Jennifer Rodd[1], Jane Warren[1]; [1]University College London*

A50 Time course of contextual semantics in spoken language comprehension as revealed by MEG: From automatic lexico-semantic access at 50 ms to top-down control at 400 ms *Yury Shtyrov[1], Lucy J. MacGregor[2]; [1]Center of Functionally Integrative Neuroscience (CFIN), Aarhus University, Denmark, [2]MRC Cognition & Brain Sciences Unit, Cambridge, UK*

A52 Silent memory for language processing *Hartmut Fitz[1], Dick van den Broek[1], Marvin Uhlmann[1], Renato Duarte[2,3,4,5], Peter Hagoort[1,6], Karl Magnus Petersson[1,6]; [1]Neurobiology of Language Department, Max Planck Institute for Psycholinguistics Nijmegen, the Netherlands, [2]Institute of Neuroscience and Medicine (INM-6), Institute for Advanced Simulation (IAS-6) and JARA BRAIN Institute I, Jülich Research Centre, Germany, [3]Bernstein Center Freiburg, Albert-Ludwig University of Freiburg, Germany, [4]Faculty of Biology, Albert-Ludwig University of Freiburg, Germany, [5]Institute of Adaptive and Neural Computation, School of Informatics, University of Edinburgh, UK, [6]Donders Institute for Brain Cognition and Behaviour, Center for Cognitive Neuroimaging, Radboud University Nijmegen, the Netherlands*

Meaning: Discourse and Pragmatics

A53 The role of semantic control in production of coherent speech: Evidence from young and older adults *Paul Hoffman[1], Cyril Pernet[2], Sergio Della Sala[1]; [1]Centre for Cognitive Ageing and Cognitive Epidemiology (CCACE) & Department of Psychology, University of Edinburgh, [2]Brain Research Imaging Centre (BRIC) & Centre for Clinical Brain Sciences (CCBS), University of Edinburgh*

A54 Referential ERP Effects Swing with the Antecedents: A Compilation Study *James Monette[1], John E. Drury[1]; [1]Stony Brook University*

A55 The contribution of working memory during discourse comprehension: a fMRI study *Xiaohong Yang[1], Nan Lin[1], Yufang Yang[1]; [1]Key Laboratory of Behavioral Science, Institute of Psychology, Chinese Academy of Sciences*

Perception: Orthographic and Other Visual Processes

A56 What does it mean to regress? The neural basis of regressive eye movements during reading as revealed by concurrent fMRI/eye-tracking measures *Anna Fiona Weiss[1], Franziska Kretzschmar[2], Arne Nagels[1,3], Matthias Schlesewsky[4], Ina Bornkessel-Schlesewsky[4]; [1]Department of Germanic Linguistics, University of Marburg, Marburg, Germany, [2]Department of English and Linguistics, Johannes Gutenberg University of Mainz, Mainz, Germany, [3]Department of Psychiatry and Psychotherapy, University of Marburg, Marburg, Germany, [4]School of Psychology, Social Work & Social Policy, University of South Australia, Adelaide, Australia*

A57 Where words and space collide: An fMRI investigation of the overlap between spatial attention and reading *Chelsea Ekstrand[1], Marla Mickleborough[1], Layla Gould[1], Eric Lorentz[1], Ron Borowsky[1]; [1]University of Saskatchewan*

A58 Graded Semantic Similarity Effects in Morphological Decomposition: Evidence from Event-Related Potentials *Marc F Joanisse[1], Debra J Jared[1], Olessia Jouravlev[2]; [1]The University of Western Ontario, [2]Massachusetts Institute of Technology*

A59 Top-down modulation of early word-like sensitivity in Chinese character recognition *Fang Wang[1], Urs Maurer[1]; [1]The Chinese University of Hong Kong*

Phonology and Phonological Working Memory

A60 Neural mechanisms for halting and monitoring in spoken word production: the role of phonology *Samuel Hansen[1], Katie McMahon[1], Jennifer Burt[1], Greig de Zubicaray[2]; [1]University of Queensland, Brisbane, Australia, [2]Queensland University of Technology, Brisbane, Australia*

A61 Cortical thickness of Planum Temporale in native language tone processing *Andrea Schremm[1], Mikael Novén[1], Merle Horne[1], Mikael Roll[1]; [1]Lund University*

Signed Language and Gesture

A62 Conduction Aphasia in American Sign Language: Implications for a Neural Model of Sign Language Processing *David Corina[1], Svenna Pedersen[2], Ursula Bellugi[2], Greg Hickok[3]; [1]University of Californina, Davis, [2]Salk Institute for Biological Studies, [3]University of California, Irvine*

A63 Organization of symbols in the middle temporal gyrus *Beatrice Agostini[1,2], Liuba Papeo[3], Angelika Lingnau[1,2]; [1]University of Trento, Italy, [2]Royal Holloway University of London, United Kingdom, [3]Institut des Sciences Cognitives "Marc Jeannerod", CNRS, France*

Speech Motor Control and Sensorimotor Integration

A64 Cortical representation of articulatory targets in speech movements *David Conant[1,2], Kristofer Bouchard[1,3,4], Edward Chang[1,2]; [1]Department of Neurological Surgery, University of California San Francisco (UCSF), [2]Center for Integrative Neuroscience, UCSF, [3]Biological Systems and Engineering Division, Lawrence Berkeley National Laboratories (LBNL), [4]Computational Research Division, LBNL*

A65 Speech Motor Adaptation in People Who Stutter *Abigail Bradshaw[1], Jennifer Chesters[1], John-Stuart Brittain[1], Daniel Lametti[1], Ned Jenkinson[2], Kate E. Watkins[1]; [1]University of Oxford, [2]University of Birmingham*

A66 Neurophysiological correlates of action word and sound processing in healthy controls and in individuals with autism spectrum disorders: A mismatch negativity (MMN) study *Bettina Mohr[1], Rachel Moseley[2], Dimitra Kandia[3], Neslihan Sener[3], Shiva Motlagh[4], Friedemann Pulvermüller[3,4], Stefan Röpke[1], Luigi Grisoni[3]; [1]Department of Psychiatry, Charité Universitätsmedizin Berlin, Campus Benjamin Franklin, Berlin, Germany, [2]Department of Psychology, Bournemouth University, Dorset, UK, [3]Brain Language Laboratory, Department of Philosophy and Humanities, Freie Universität Berlin, Berlin, Germany, [4]Berlin School of Mind and Brain, Humboldt-Universität Berlin, Berlin, Germany*

Control, Selection, and Executive Processes

A67 Fronto-parietal connectivity in the extraction of language rules *Joan Orpella[1,2], Ruth de Diego-Balaguer[1,2,3]; [1]Department of Basic Psychology, Universitat de Barcelona, Barcelona, Spain, [2]Cognition and Brain Plasticity Unit, IDIBELL (Institut d'Investigació Biomèdica de Bellvitge), L'Hospitalet de Llobregat, Spain, [3]ICREA (Catalan Institution for Research and Advanced Studies), Barcelona, Spain*

A68 Syntactic processing and proactive interference effects on verbal working memory capacity: A comparison between non-fluent post-stroke aphasia and non-fluent variant PPA *Eleni Peristeri[1], Ianthi-Maria Tsimpli[2], Kyrana Tsapkini[3]; [1]Aristotle University of Thessaloniki, GR, [2]University of Cambridge, UK, [3]Johns Hopkins Medicine, US*

A69 Oscillatory neural dynamics underlying the sentence superiority effect *Corinna E. Bonhage[1], Lars Meyer[2], Thomas Gruber[3], Surova Galina[2], Jutta L. Mueller[1]; [1]Institute of Cognitive Science, University of Osnabrueck, [2]Max Planck Institute for Human Cognitive and Brain Sciences, [3]University of Osnabrueck*

Meaning: Prosody, Social and Emotional Processes

A70 Neural mechanisms for monitoring emotional valence during spoken word production *Greig de Zubicaray[1], Kori Ramajoo[1], Katie McMahon[2], Katharina Sass[2]; [1]Queensland University of Technology (QUT), Brisbane, Australia, [2]University of Queensland, Brisbane, Australia*

A71 Insult back or empathize with the insulter? Cognitive strategies for dealing with insults *Marijn Struiksma[1], Hannah De Mulder[1], Ella Bosch[1], Jos van Berkum[1]; [1]Utrecht University, UiL-OTS*

Methods

A72 Whole-brain fMRI activity at a high temporal resolution *Niels Janssen[1,2], Juan Andres Hernández-Cabrera[1,3]; [1]Universidad de La Laguna, Spain, [2]Institute for Biomedical Technologies, Spain, [3]Basque Center for Brain, Cognition, and Language, Spain*

A73 Functional segregation of linguistic functions within fronto-parietal networks *Valeria Parlatini[1], Joaquim Radua[1], Flavio Dell'Acqua[1], Marco Catani[1], Declan Murphy[1], Michel Thiebaut de Schotten[1]; [1]Institute of Psychiatry, King's College London*

A74 Bad and good performers in a fMRI paradigm of three gendered language conditions – preliminary results *Anelis Kaiser[1]; [1]Social Psychology and Social Neuroscience, Institute of Psychology, University of Bern, Switzerland*

Writing and Spelling

A75 The impact of orthography on handwriting: A coupled fMRI and kinematics study of the interaction between spelling regularity and motor production. *Sarah Palmis[1], Jean-Luc Velay[1], Elie Fabiani[1], Sonia Kandel[2], Marieke Longcamp[1]; [1]Aix-Marseille University, [2]Grenoble - Alpes University*

Poster Session B

Perception: Auditory

B1 Neural oscillations in the developing auditory brain: a longitudinal dyslexia study *Sophie Vanvooren[1,2], Astrid De Vos[1,2], Pol Ghesquière[2], Jan Wouters[1]; [1]KU Leuven, Department of Neurosciences, ExpORL, Leuven, Belgium, [2]KU Leuven, Parenting and Special Education Research Unit, Leuven, Belgium*

B2 Neural auditory temporal processing at cortical and subcortical levels in children with and without (a family risk for) dyslexia *Astrid De Vos[1,2], Sophie Vanvooren[1,2], Pol Ghesquière[2], Jan Wouters[1]; [1]KU Leuven, Department of Neurosciences, ExpORL, Leuven (Belgium), [2]KU Leuven, Parenting and Special Education Research Group, Leuven (Belgium)*

B3 Not all who listen in babble use semantic context alike. *Ilse Wambacq[1], Joan Besing[1], Janet Koehnke[1], Abuhuziefa Abubakr[2]; [1]Montclair State University, [2]University of Mississippi Medical Center*

B4 Speaker identity in non-verbal signals – variability impairs generalization *Nadine Lavan[1], Lucia Garrido[2], Carolyn McGettigan[1,3]; [1]Royal Holloway, University of London, [2]Brunel University, London, [3]University College London*

Perception: Speech Perception and Audiovisual Integration

B5 Language-specificity in early cortical responses to speech sounds *Anne Cutler[1,2,3], Jake Baldacchino[1], Anita Wagner[4], Varghese Peter[1]; [1]The MARCS Institute, Western Sydney University, Australia, [2]ARC Centre of Excellence for the Dynamics of Language, Australia, [3]Max Planck Institute for Psycholinguistics, The Netherlands, [4]University Medical Centre Groningen, The Netherlands*

B6 Is cortical entrainment to speech a neural correlate of listening effort? *Jieun Song[1], Paul Iverson[1]; [1]University College London*

B7 Audiovisual matching ability in 4.5-month old monolingual and bilingual infants *Jovana Pejovic[1], Eiling Yee[2], Monika Molnar[1]; [1]BCBL. Basque Center on Cognition, Brain and Language., [2]University of Connecticut.*

B8 Theta oscillations determine auditory word segmentation *Antje Strauss[1,2], Molly Henry[3], Jean-Luc Schwartz[1,2]; [1]CNRS, GIPSA-Lab, F-38000 Grenoble, France, [2]Univ. Grenoble Alpes, GIPSA-Lab, F-38000 Grenoble, France, [3]Brain and Mind Institute, Western University London, ON, Canada*

B9 Tracking lexical garden-path resolution with MEG: Phonological commitment and sensitivity to subphonemic detail are independent *Laura Gwilliams[1,2], Tal Linzen[1], Kyriaki Neophytou[2], David Poeppel[1,3], Alec Marantz[1,2]; [1]New York University, [2]NYUAD Institute, [3]Max-Planck Institute*

B10 Perceptual sensitivity to voicing onsets in continuous speech can be indexed by phase resetting of ongoing theta neural oscillations *Guangting Mai[1], James W. Minett[2], William S.-Y. Wang[2,3]; [1]University College London, [2]The Chinese University of Hong Kong, [3]The Hong Kong Polytechnic University*

B11 Representation of audiovisual speech features in superior temporal cortex investigated with intracranial surface electrodes. *Cristiano Micheli[1], Inga M Schepers[1], Müge Özker Sertel[2], Daniel Yoshor[2], Michael S Beauchamp[2], Jochem W Rieger[1,3]; [1]Department of Psychology, Carl-von-Ossietzky University, Oldenburg, Germany, [2]Department of Neurosurgery, Baylor College of Medicine, Houston, TX, USA, [3]Helen Wills Neuroscience Institute, UC Berkeley, UC San Francisco, CA, USA*

Multilingualism

B12 Unbalanced Math in Bilingual Minds *Alejandro Martinez[1], Elena Salillas[1]; [1]Basque Center on Cognition, Brain and Language (BCBL)*

B13 Why do bilingual speakers have bigger attentional blinks? Insights from ERPs *Beinan Zhou[1], Andrea Krott[2]; [1]University of Oxford, [2]University of Birmingham*

B14 Cortical Thickness Changes with Short-Term Second Language Vocabulary Training *Jennifer Legault[1], Shin-Yi Fang[1], Yumna Ahmed[1], Yu-Ju Lan[2], Ping Li[1]; [1]The Pennsylvania State University, [2]National Taiwan Normal University*

B15 Bilingual Experience Influences Different Components of Cognitive Control: An fMRI Study *Xun Sun[1], Le Li[2], Guosheng Ding[2], Ping Li[3], Ruiming Wang[1]; [1]South China Normal University, [2]Beijing Normal University, [3]Pennsylvania State University*

B16 A tale of two enhancements: Monolinguals catch-up to bilinguals on executive control abilities during adolescence, auditory processing enhancements remain *Jennifer Krizman[1], Viorica Marian[1], Silvia Siu-Yin Lam[1], Nina Kraus[1]; [1]Northwestern University*

B17 How Bilingual are Bilectal Speakers? An fMRI Study of Text Comprehension in Different Language Varieties. *Julia M. Schmitt[1], Evelyn C. Ferstl[1], Peter Auer[1]; [1]Albert-Ludwigs-Universität Freiburg im Breisgau*

Meaning: Lexical Semantics

B18 Selective Action Verb Processing Deficits: Voxel-Based Lesion-Symptom Mapping *Jeffrey R. Binder[1], Sara B. Pillay[1], Leonardo Fernandino[1], Colin J. Humphries[1], Diane S. Book[1], Rutvik H. Desai[2]; [1]Medical College of Wisconsin, Milwaukee, WI, USA, [2]University of South Carolina, Columbia, SC, USA*

B19 Neuroplasticity of language in left-hemisphere stroke: evidence linking subsecond electrophysiology and structural connectivity *Vitoria Piai[1,2], Lars Meyer[3], Nina Dronkers[2,4], Robert Knight[1]; [1]Department of Psychology and Helen Wills Neuroscience Institute, University of California, Berkeley, [2]Center for Aphasia and Related Disorders, Veterans Affairs Northern California Health Care System, Martinez, California, [3]Department of Neuropsychology, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, [4]Department of Neurology, University of California, Davis*

B20 Cathodal tDCS of the bilateral anterior temporal lobe facilitates semantically-driven word retrieval *Bonnie Zuckerman[1], Richard J Binney[2], Sameer Ashaie[3], Jamie Reilly[4]; [1]Temple University, [2]Temple University, [3]City University of New York, [4]Temple University*

B21 Category-specific verb deficits in Alzheimer's: Thematic structure effects in naming and sentence production with dynamic scenes *Roberto G. de Almeida[1], Caitlyn Antal[1]; [1]Concordia University*

B22 Semantic memory performance following left vs. right anterior temporal lobe resection *Grace E Rice[1], Helen Caswell[2], Perry Moore[3], Paul Hoffman[4], Matthew A Lambon Ralph[1]; [1]Neuroscience and Aphasia Research Unit (NARU), School of Psychological Sciences, University of Manchester, UK, [2]Department of Clinical Neuropsychology, Salford Royal Hospital, Salford, Manchester, UK, [3]The Walton Centre NHS Foundation Trust, Liverpool, UK, [4]Centre for Cognitive Ageing and Cognitive Epidemiology (CCACE), Department of Psychology, University of Edinburgh, UK*

B23 Integration of verbal object descriptions recruits ventral stream including perirhinal cortex *Sasa L Kivisaari[1], Ali Faisal[1], Annika Hultén[1], Tiina Lindh-Knuutila[1], Riitta Salmelin[1]; [1]Department of Neuroscience and Biomedical Engineering. Aalto University, Finland*

B24 Alpha power reflects prediction differences in learning of nouns and verbs *Julie Schneider[1,2], Mandy J. Maguire[1,2], Alyson D. Abel[3]; [1]Callier Center for Communication Disorders, [2]University of Texas at Dallas, [3]San Diego State University*

B25 Adaptive plasticity in the semantic network: Evidence from combined theta-burst stimulation and functional neuroimaging *Gesa Hartwigsen[1], Maren Klein[2], Max Wawrzyniak[2], Anika Stockert[2], Katrin Wrede[2], Joseph Classen[2], Dorothee Saur[2]; [1]Max Planck Institute for Human Cognitive and Brain Sciences, [2]University of Leipzig*

B26 Explicit retrieval of visual and non-visual properties of concrete entities: Differential involvement of superior temporal sulcus and anterior inferior frontal gyrus *Antonietta Gabriella Liuzzi[1], Patrick Dupont[1], Ronald Peeters[2], Simon De Deyne[3], Gerrit Storms[3], Rik Vandenberghe[1,2]; [1]KU Leuven, Laboratory for Cognitive Neurology, Belgium, [2]University Hospitals Leuven, Belgium, [3]KU Leuven, Laboratory of Experimental Psychology, Belgium*

Language Development

B27 Structural brain deficits in Chinese children with English reading impairment *Hehui Li[1], Xiaoxia Feng[1], Manli Zhang[2], Xiujie Yang[2], Mengyu Tian[1], Weiyi Xie[2], Xiangzhi Meng[2], Guosheng Ding[1]; [1]Beijing Normal University, [2]Peking University*

B28 Using brain rhythms to improve behavioral predictors of reading *Camila Zugarramurdi[1,2], Marie Lallier[1], Juan C. Valle-Lisboa[2], Manuel Carreiras[1]; [1]Basque Center on Cognition Brain and Language (BCBL), [2]Facultad de Psicologia, Universidad de la Republica*

B29 Rule Learning is Modulated by Temporal Attention in Childhood *Anna Martinez-Alvarez[1,3], Pablo Ripollés[1,3], Monica Sanz-Torrent[1], Ferran Pons[1,4], Ruth de Diego-Balaguer[1,2,3]; [1]University of Barcelona, [2]ICREA, [3]Cognition and Brain Plasticity, IDIBELL, [4]Institute for Brain, Cognition and Behaviour*

B30 Morphological Processing in Chinese-Speaking Children: An Event-Related Potential Study. *I-Fan Su[1], Anna Petrova[1], Wei Yan Renee Fung[1], Kai Yan Dustin Lau[2], Sam Po Law[1], Hei Ling Ho[1]; [1]The University of Hong Kong, [2]The Hong Kong Polytechnic University*

Grammar: Morphology

B31 A quantitative account of the temporal dynamics of reading morphologically complex words *Tero Hakala[1], Annika Hultén[1], Minna Lehtonen[2], Riitta Salmelin[1]; [1]Aalto University, Espoo, Finland, [2]Abo Akademi University, Turku, Finland*

B32 Morphological structure revealed by microsaccades *Maya Yablonski[1], Yoram Bonneh[1], Uri Polat[1], Michal Ben-Shachar[1]; [1]Bar-Ilan University*

Grammar: Syntax

B33 A common neural hub resolves syntactic and non-syntactic conflict through cooperation with task-specific networks *Nina Hsu[1,2,3], Susanne Jaeggi[4,5], Jared Novick[1,2,3]; [1]Department of Hearing and Speech Sciences, University of Maryland, College Park, [2]Program in Neuroscience and Cognitive Science, University of Maryland, College Park, [3]Center for Advanced Study of Language, University of Maryland, College Park, [4]School of Education, University of California, Irvine, [5]Department of Cognitive Sciences, University of California, Irvine*

B34 Expectation effects on the processing of syntactic structure *Leon Kroczek[1], Angela D. Friederici[1], Thomas C. Gunter[1]; [1]Max Planck Institute for Human Cognitive and Brain Sciences*

B35 Grammatical constraints on lexical and structural processing strategies: EMEG evidence from Russian morphosyntax *Anastasia Klimovich-Smith[1], Elisabeth Fonteneau[1], William Marslen-Wilson[1]; [1]University of Cambridge*

B36 Plausibility and Agreement Effects of Adjectives on Noun-Noun Compounds in Icelandic: An ERP Study *Alicia Parrish[1], Patrick Kelley[1], Alan Beretta[1]; [1]Michigan State University*

Language Disorders

B37 Meta-analysis of mismatch negativity (MMN) studies on specific language impairment (SLI) *Miika Leminen[1,2,3], Teija Kujala[2]; [1]Department of Phoniatrics, Helsinki University Central Hospital, Finland, [2]Cognitive Brain Research Unit, Institute of Behavioural Sciences, University of Helsinki, Finland, [3]Center of Functionally Integrative Neuroscience, Department of Clinical Medicine, Aarhus University, Denmark*

B38 Spoken language following cardiorespiratory arrest in children *Sharon Geva[1], Aparna Hoskote[2], Faraneh Vargha-Khadem[1]; [1]Cognitive Neuroscience and Neuropsychiatry Section, UCL Institute of Child Health, 30 Guilford Street, London, UK, [2]Cardiac Intensive Care Unit, Critical Care and Cardiorespiratory Division, Great Ormond Street Hospital for Children NHS Foundation Trust, London, UK*

B39 Effects of early music intervention on neural speech processing in infants at risk for dyslexia *Paula Virtala[1], Jaana Meriläinen[1], Anja Thiede[1,2], Kaija Mikkola[3], Teija Kujala[1]; [1]Cognitive Brain Research Unit, University of Helsinki, Finland, [2]Aalto University, Finland, [3]Helsinki University Central Hospital, Finland*

B40 Impaired automatic and controlled semantic retrieval of words in Chinese dyslexic children: Evidence from lexicality effect on N400 *Yu-Lin Tzeng[1], Chun-Hsien Hsu[2], Chia-Ying Lee[1,2]; [1]Institute of Neuroscience, National Yang-Ming University, Taipei, Taiwan, [2]Institute of Linguistics, Academia Sinica, Taipei, Taiwan*

B41 Less is more: facilitating naming in aphasic patients *Davide Nardo[1], Rachel Holland[2], Alexander Leff[1], Cathy Price[3], Jennifer Crinion[1]; [1]1Institute of Cognitive Neuroscience, University College London, London, UK, [2]Language and Communication Sciences, City University London, London, UK, [3]Wellcome Trust Centre for Neuroimaging, University College London, London, UK*

B42 Functional ROI activation may predict functional communication and demonstrate post-therapy intervention in post-stroke expressive aphasia *Brielle Stark[1], Elizabeth Warburton[1]; [1]University of Cambridge*

B43 Patients with central alexia rely on direct top-down control of visual cortex from left IFG when reading single words *Sheila Kerry[1], Zoe Woodhead[1], Jenny Crinion[1], Oscar Aguilar[1], Will Penny[1], Gareth Barnes[1], Alex Leff[1]; [1]University College London*

B44 Transcranial direct current stimulation effects on neural processing in post-stroke aphasia *Marcus Meinzer[1], Robert Darkow[2], Andrew Martin[1], Anna Würtz[2], Agnes Flöel[2]; [1]The University of Queensland, [2]Charite University Medicine*

B45 Stimulating reading: Behavioural and neural correlates of left-lateralising tDCS to temporal parietal cortex in adults with developmental dyslexia *Isobel McMillan[1], Wael El-Deredy[1], Anna Woollams[1]; [1]The University of Manchester*

B46 Comparison of voxel-based lesion symptom maps for measures of speech fluency in chronic left-hemisphere stroke *Lynda Feenaughty[1,2], Alexandra Basilakos[2], Leonardo Bonilha[1], Chris Rorden[2], Brielle Stark[2], Julius Fridriksson[2]; [1]Medical University of South Carolina, [2]University of South Carolina*

Meaning: Combinatorial Semantics

B47 Different high-level language regions integrate information over the same time-window *Idan Blank[1], Evelina Fedorenko[2]; [1]MIT, [2]Massachusetts General Hospital*

B48 If so many are "few", how few are "many"? Intact semantic learning but failure to generalize in bvFTD patients with frontal atrophy *Stefan Heim[1,2], Corey McMillan[3], Kylie Ternes[3], Murray Grossman[3]; [1]RWTH Aachen University, Germany, [2]Research Centre Jülich, Germany, [3]University of Pennsylvania Perelman School of Medicine, USA*

B49 Fine-Grained Semantic Coding in White Matter Connections *Yuxing Fang[1], Xiaosha Wang[1], Zaixu Cui[1], Zaizhu Han[1], Yanchao Bi[1]; [1]Beijing Normal University*

B50 Hippocampal engagement in online, high-level linguistic processing *Idan Blank[1], Melissa C. Duff[2], Sarah Brown-Schmidt[3], Evelina Fedorenko[4]; [1]MIT, [2]University of Iowa, [3]University of Illinois, [4]Massachusetts General Hospital*

Meaning: Discourse and Pragmatics

B51 Neuropragmatic Speech-Language Deficits Specific To Speech Act Type Following Left-Hemispheric Lesion *Friedemann Pulvermuller[1,2], Felix Dreyer[1], Guglielmo Lucchese[1], Saskia Millrose[1], Lena Meissner[1], Valerie Keller[1,2], Bettina Mohr[3], Benjamin Stahl[1]; [1]Brain Language Laboratory, Freie Universität Berlin, Germany, [2]Berlin School of Mind and Brain, Humboldt Universität zu Berlin, Germany, [3]Charite Universitätsmedizin, Campus Benjamin Franklin, Berlin, Germany*

B52 Knowing vs. thinking: does factivity matter for event structure processing? *Einat Shetreet[1,2], Jacopo Romoli[3], Gennaro Chierchia[4], Gina Kuperberg[2,5]; [1]Tel Aviv University, [2]Tufts University, [3]Ulster University, [4]Harvard University, [5]Massachusetts General Hospital*

B53 A neural oscillatory signature of reference *Mante Nieuwland[1], Andrea Martin[1]; [1]University of Edinburgh*

Perception: Orthographic and Other Visual Processes

B54 Processing of lexical category and argument structure information in deverbal adjectives: An MEG study on Greek *Kyriaki Neophytou[1], Christina Manouilidou[2], Linnaea Stockall[3], Alec Marantz[1,4]; [1]New York University Abu Dhabi, [2]University of Patras, [3]Queen Mary University of London, [4]New York University*

B55 Comparing and validating methods of reading instruction using behavioural and neural findings in an artificial orthography *J S H Taylor[1], Matthew H Davis[2], Kathleen Rastle[1]; [1]Royal Holloway University of London, [2]Medical Research Council Cognition and Brain Sciences Unit*

B56 Context- and knowledge-based predictions in visual word recognition: A MEG study investigating the interaction of pseudoword familiarization and repetition *Susanne Eisenhauer[1], Benjamin Gagl[1,2], Christian J. Fiebach[1,2]; [1]Department of Psychology, Goethe University, Frankfurt am Main, Germany, [2]IDeA Center for Individual Development and Adaptive Education, Frankfurt am Main, Germany*

B57 Visual information aids statistical and rule-based learning of syllable triplets: evidence from ERPs *Kateřina Chládková[1], Andreea Geambașu[2], Paola Escudero[3]; [1]University of Leipzig, Germany, [2]Leiden University, the Netherlands, [3]Western Sydney University, Australia*

Language Disorders

B58 Listen-In: The development and testing of a tablet-based therapy application for patients with impaired speech comprehension caused by stroke. Phase 1: Development and consultation. *Sonia Brownsett[1], Victoria Fleming[1], Jennifer Crinion[1], David Howard[2], Rupert Leech[1], Yean Ong[1], Holly Robson[3], Alexander Leff[1]; [1]University College London, [2]University of Newcastle upon Tyne, [3]University of Reading*

Phonology and Phonological Working Memory

B59 Neural development of phonological working memory from childhood to adulthood *Zhenghan Qi[1], Yoel Sanchez[1], Carlo de los Angeles[1], Calvin Goetz[1], Michelle Han[1], Adrianne Harrison[2], Lisa Wisman Weil[2], Kelly Halverson[1], Tyler K. Perrachione[2], Kenneth Wexler[1], Helen Tager-Flusberg[2], John D. E. Gabrieli[1]; [1]Massachusetts Institute of Technology, [2]Boston University*

B60 Sequential encoding of acoustic features in EEG responses to continuous speech *Bahar Khalighinejad[1], Guilherme Cruzatto da Silva[1], Nima Mesgarani[1]; [1]Columbia University*

Signed Language and Gesture

B61 How do signers process spatial anaphora? – An ERP analysis of German Sign Language *Anne Wienholz[1], Derya Nuhbalaoglu[1], Nivedita Mani[1], Markus Steinbach[1]; [1]Georg-August-University Goettingen*

B62 Neural correlates of variation among lexical items in British Sign Language: a parametric fMRI study *David Vinson[1], Neil Fox[1], Pamela Perniss[2], Gabriella Vigliocco[1]; [1]University College London, [2]University of Brighton*

Speech Motor Control and Sensorimotor Integration

B63 Sensorimotor differences between stuttering and non-stuttering adults before and during fluent speech production recorded in EEG mu rhythms. *Tim Saltuklaroglu[1], Ashley Harkrider[1], David Jenson[1], David Thornton[1], Tiffani Kittilstved[1], Andrew Bowers[2]; [1]University of Tennesee Health Sciences Center, Department of Audiology and Speech-Language Pathology, [2]University of Arkansas, Department of Communication Disorders*

B64 Motor abilities in people who stutter: Impaired visuomotor adaptation and abnormal response timing *Emily L. Connally[1], Muriel T. N. Panouillères[1], Kate E. Watkins[1]; [1]Department of Experimental Psychology, University of Oxford, UK*

B65 Assessing error detection and correction abilities in patients with aphasia: MEG and behavioral evidence *Caroline Niziolek[1], Swathi Kiran[1]; [1]Boston University*

B66 Inner Speech with your own or someone else's voice. Cerebral correlates assessed with fMRI *Romain Grandchamp[1,2], Lucile Rapin[3], Loevenbruck Hélène[1,2], Perrone-Bertolotti Marcela[1,2], Cédric Pichat[1,2], Jean-Philippe Lachaux[4], Monica Baciu[1,2]; [1]Univ. Grenoble Alpes, LPNC, F-38040 Grenoble, France, [2]CNRS, LPNC UMR 5105, F□38040 Grenoble, France, [3]Douglas Mental Health University Institute, Department of Psychiatry, McGill University, Montreal, Canada, [4]Centre de Recherche en Neurosciences de Lyon, INSERM U1028 - CNRS UMR5292, Lyon France*

Control, Selection, and Executive Processes

B67 Language deficits induced by topiramate (TPM) administration *Christopher Barkley[1], Angela Birnbaum[1], Mingzhou Ding[2], Serguei Pakhomov[1], Lynn Eberly[1], Chao Wang[2], Susan Marino[1]; [1]University of Minnesota, [2]University of Florida*

B68 Effects of varying cloze probability on prediction and integration during sentence processing *Kate Pirog Revill[1]; [1]Emory University*

B69 The contribution of executive control to semantic cognition: Insights from semantic aphasia and dysexecutive syndrome *Hannah Thompson[1], Azizah Almaghyuli[1], Krist Noonan[2], Ohr Barak[3], Matthew Lambon Ralph[4], Elizabeth Jefferies[1]; [1]Department of Psychology and York Neuroimaging Centre, University of York, UK, [2]Research Institute for the Care of Older People, Royal United Hospital, Bath, UK, [3]Brain Injury Rehabilitation Trust (BIRT), York House, Heslington Road, York, UK, [4]Neuroscience and Aphasia Research Unit, School of Psychological Sciences, University of Manchester, UK*

Meaning: Prosody, Social and Emotional Processes

B70 Emotion and Spoken Language Generation *Megan S Barker[1], Nicole N Nelson[1], Gail A Robinson[1]; [1]School of Psychology, The University of Queensland*

B71 Early ERPs reflect "inner voice" experience in silent reading of direct versus indirect speech quotations *Bo Yao[1], Bing Cai[1], Jason R. Taylor[1]; [1]School of Psychological Sciences, University of Manchester, United Kingdom*

Methods

B72 A novel neurolinguistic corpus of spontaneous speech production and concurrent electrocorticographic data *Bella Diekmann[1,3,4,5], Olga Iljina[1,3,4,5], Pia Wiest[1,3,4,5], Andreas Schulze-Bonhage[1,2], Peter Auer[3,4,5], Tonio Ball[1,2]; [1]Department of Neurosurgery, Epilepsy Center, University Medical Center Freiburg, Freiburg, Germany, [2]Bernstein Center Freiburg, University of Freiburg, Freiburg, Germany, [3]GRK 1624, University of Freiburg, Freiburg, Germany, [4]Department of German Linguistics, University of Freiburg, Freiburg, Germany, [5]Hermann Paul School of Linguistics, University of Freiburg, Freiburg, Germany*

B73 Confound and control in language experiments *Phillip M. Alday[1], Jona Sassenhagen[2]; [1]University of South Australia, [2]Goethe University Frankfurt*

Writing and Spelling

B74 Learning to Read Alters Intrinsic Cortico-Subcortical Cross-Talk in the Low-Level Visual System *Falk Huettig[1], Uttam Kumar[2], Ramesh Mishra[3], Viveka Nand Tripathi[4], Anupam Guleria[2], Jay Prakash Singh[4], Frank Eisner[5], Michael Skeide[6]; [1]Max Planck Institute for Psycholinguistics, [2]CMBR Lucknow, [3]University of Hyderabad, [4]University of Allahabad, [5]Radboud University, [6]Max Planck Institute for Human Cognitive and Brain Sciences*

Poster Session C

Perception: Auditory

C1 Cortical encoding of speech intonation on human superior temporal gyrus *Claire Tang[1], Liberty S. Hamilton[1], Edward F. Chang[1]; [1]University of California, San Francisco*

C2 Online Modulation of Neural Pitch Encoding in Tone Language Speakers at Subcortical Levels *Joseph CY Lau[1], Patrick CM Wong[1], Bharath Chandrasekaran[2]; [1]The Chinese University of Hong Kong, [2]The University of Texas at Austin*

C3 Encoding and Organization of Phonemes by Feature in STG *Jessica L. Mow[1], Laura E. Gwilliams[2], Bahar Khalighinejad[3], Nima Mesgarani[3], Alec Marantz[1,2]; [1]New York University Abu Dhabi, [2]New York University, [3]Columbia University*

C4 Effects of Speaker and Listener Accent on Speech Perception Measured by Cortical Auditory Evoked Potentials *Emma Brint[1], Paul Iverson[1], Petra Hödl[2]; [1]University College London, [2]University of Graz*

Perception: Speech Perception and Audiovisual Integration

C5 Auditory Bubbles: A tool for measuring perceptual and neural representations of speech acoustics *Jonathan Venezia[1], Borja Sánchez[1], Jack Payne[1], Virginia Richards[1], Gregory Hickok[1]; [1]University of California, Irvine*

C6 Timing predictions in speech can be based on phoneme- or word-onset *Mathias Scharinger[1,2], Johanna Steinberg[2], Alexandra Bendixen[3]; [1]Department of Language and Literature, Max Planck Institute for Empirical Aesthetics, Frankfurt, [2]BioCog - Cognitive incl. Biological Psychology, Department of Psychology, Leipzig University, [3]School of Natural Sciences, Technische Universität Chemnitz, Chemnitz, Germany*

C7 Multi-level representations in speech processing in brain and machine: Evidence from EMEG and RSA *Cai Wingfield[1], Li Su[2], Barry Devereux[1], Xunying Liu[3], Chao Zhang[3], Phil Woodland[3], Elisabeth Fonteneau[1], Andrew Thwaites[1], William Marslen-WIlson[1,4]; [1]Department of Psychology, University of Cambridge, [2]Department of Psychiatry, University of Cambridge, [3]Department of Engineering, University of Cambridge, [4]MRC Cognition and Brain Sciences Unit, Cambridge*

C8 Intracranial recordings reveal modulation of high gamma activity in primary auditory cortex during speech pop-out *Alexander J. Billig[1], Ariane E. Rhone[2], Phillip E. Gander[2], Kirill V. Nourski[2], Conor J. Wild[1], Matthew A. Howard III[2], Ingrid S. Johnsrude[1]; [1]The University of Western Ontario, [2]The University of Iowa*

C9 Interactions between oscillatory power in fronto-parietal regions and prosodic entrainment in auditory areas *Anne Keitel[1], Joachim Gross[1], Christoph Kayser[1]; [1]University of Glasgow*

C10 MEG oscillation of auditory mismatch responses to changes in phonemes and f0 contours *Chun-Hsien Hsu[1], En-Ju Lin[1], Chia-Ying Lee[1]; [1]Institute of Linguistics, Academia Sinica, Taiwan*

C11 How language experiences influence the cognitive and neural oscillatory mechanisms of predictive language processing *Xiaoqing Li[1], Xiaohong Yang[1], Guiqin Ren[2]; [1]Key Laboratory of Behavioral Science, Institute of Psychology, Chinese Academy of Sciences, [2]Research Center of Psychological Development and Education, Liaoning Normal University*

Multilingualism

C12 Tracking syntactic conflict between languages over the course of L2 acquisition: A cross-sectional ERP study *Anne Mickan[1], Kristin Lemhöfer[1]; [1]Radboud University, Donders Institute for Brain, Cognition, and Behaviour*

C13 The role of uncertainty in electrophysiological correlates of error detection and feedback processing during second language learning *Sybrine Bultena[1], Claudia Danielmeier[1,2], Harold Bekkering[1], Kristin Lemhöfer[1]; [1]Radboud University Nijmegen, Donders Institute for Brain, Cognition and Behaviour, [2]University of Nottingham*

C14 The linguistic relativity of time *Yang LI[1], Guillaume Thierry[1]; [1]School of Psychology, Bangor University*

C15 Early classroom-based foreign language learning in children: vocabulary gains despite unchanged neural sensitivities in auditory MMN and visual word N1 *Urs Maurer[1,2], Simone E. Pfenninger[2], Aleksandra Eberhard-Moscicka[2], Lea Jost[2]; [1]The Chinese University of Hong Kong, [2]University of Zurich*

C16 Immersive late bilingualism reshapes the core of the brain *Christos Pliatsikas[1], Elisavet Moschopoulou[2], James Douglas Saddy[1]; [1]Department of Clinical Language Sciences, School of Psychology & Clinical Language Sciences, University of Reading, RG6 6AL Reading, UK., [2]Department of Psychology, School of Psychology & Clinical Language Sciences, University of Reading, RG6 6AL, Reading, UK.*

C17 Neural Correlates of Language Therapy Effects in a Bilingual with Nonfluent Aphasia *Katy Borodkin[1], Richard J Binney[2], Jamie Reilly[2], Lia Pazuelo[3], Aviva Yvonne Mielle Lerman[3], Amy Vogel Eyny[3], Mira Goral[3,4]; [1]Department of Communication Disorders, Sackler Faculty of Medicine, Tel Aviv University, Israel, [2]Communication Sciences and Disorders, Temple University, Philadelphia, [3]Speech-Language-Hearing Sciences, The Graduate Center, The City University of New York, New York, [4]Speech-Language-Hearing Sciences, Lehman College, The City University of New York, New York*

Meaning: Lexical Semantics

C18 The Representation of Taxonomic and Thematic Knowledge in the Human Brain *Yangwen Xu[1], Jiahong Gao[2], Weiwei Men[2], Yanchao Bi[1]; [1]Beijing Normal University, [2]Peking University*

C19 Serving two Masters: Electrophysiological Evidence for Parallel Idiom Processing *Ruth Kessler[1], Andrea Weber[1], Claudia Friedrich[1]; [1]Eberhard Karls University of Tuebingen*

C20 Working memory, not language experience, predicts N400 effects to semantically anomalous words during reading *Darren Tanner[1], Nyssa Z. Bulkes[1], Kailen Shantz[1], Andrew Armstrong[1], Amalia Reyes[1]; [1]University of Illinois at Urbana-Champaign*

C21 The role of the left and right anterior temporal lobes in pictures and names semantic processing *Max Wilson[1], Georges Chedid[2], Jean-Sebastien Provost[2], Isabelle Rouleau[3], Sven Joubert[2], Simona Maria Brambati[2]; [1]Centre de Recherche de l'Institut Universitaire en Santé Mentale de Québec and Département de réadaptation, Université Laval, Québec City, Canada, [2]Centre de recherche de l'Institut universitaire de gériatrie de Montréal and Département de psychologie, Université de Montréal, Québec, Canada, [3]Département de psychologie, Université du Québec à Montréal (UQAM), Québec, Canada*

C22 The influence of semantic associations on sentence production in schizophrenia: An fMRI study *Maike Creyaufmueller[1,2], Stefan Heim[1,2,3], Katharina Sass[1,2], Ute Habel[1,2], Juliane Muehlhaus[1,2,4,5]; [1]Uniklinik RWTH Aachen, Aachen, Germany, [2]JARA Translational Brain Medicine, [3]Research Centre Jülich, Jülich, Germany, [4]Hochschule für Gesundheit, Bochum, Germany, [5]TU Dortmund University, Dortmund, Germany*

C23 ERP responses to (un)expected spatial and non-spatial prepositional phrases *Emily Zane[1,2], Sandeep Prasada[2,3], Valerie Shafer[2]; [1]Emerson College, [2]Graduate Center (CUNY), [3]Hunter College (CUNY)*

C24 Expect the unexpected: Speaker reliability shapes online lexical anticipation *Trevor Brothers[1,2], Shruti Dave[1,2], Liv J. Hoversten[1,2], Matthew J. Traxler[1,2], Tamara Y. Swaab[1,2]; [1]University of California, Davis, [2]Center for Mind and Brain*

C25 Processing enhancement for conventional metaphors following stimulation of Broca's area *Ekaterini Klepousniotou[1], Eleanor Boardman[1], Alison Allsopp[1], Daniel J Martindale[1]; [1]University of Leeds*

C26 The neuromagnetic time-course of semantic ambiguity resolution in speech comprehension *Lucy J MacGregor[1], Jennifer M Rodd[2], Olaf Hauk[1], Matthew H Davis[1]; [1]MRC Cognition and Brain Sciences Unit, [2]University College London*

C27 Left primary motor cortex stimulation affects language comprehension during semantic judgment but not lexical decision task: an online rTMS study of action vs. abstract word processing *Nikola Vukovic[1,2], Matteo Feurra[2], Anna Shpektor[2], Andriy Myachykov[2,3], Yury Shtyrov[1,2]; [1]Center of Functionally Integrative Neuroscience, Institute for Clinical Medicine, Aarhus University, Denmark, [2]Center for Cognition and Decision Making, Higher School of Economics, Moscow, Russia, [3]Department of Psychology, Northumbria University, Newcastle upon Tyne, UK*

Language Development

C28 Changes in cortical functional and structural organization related to the development of language production skills *Imogen Large[1], Jennie Deignan[1], Fred Dick[1]; [1]Birkbeck College, University of London*

C29 Age-related N400 delay and reduction during Chinese sentence comprehension *Zude Zhu[1], Nannan Xu, Beibei Zhao, Xiaopu Hou; [1]Collaborative Innovation Center for Language Competence, and School of Linguistics and Arts, Jiangsu Normal University, China, 221009*

C30 Large-scale functional network differences between children and adults during reading *Liu lanfang[1], Wang Zhengke[2], Wei Na[1], Meng Xiangzhi[2], Ding Guosheng[1]; [1]State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, 100875, P.R. China, [2]Dpartment of psychology and Beijing Key Laboratory of Behavior and Mental Health, Peking University, Beijing, 100871, P.R. China*

C31 The cerebellum's relationship to language function *Carolina Vias[1], Jairo Munoz[1], Jefferson Salan[1], Sophia Tchir[1], German Lopez[1], Ania Suros[1], Matteo Grudny[1], Ana Solodkin[2], Steven L. Small[2], Anthony Steven Dick[1]; [1]Florida International University, [2]University of California, Irvine*

C32 Developmental Changes of the Functional Near Infrared Spectroscopy (fNIRS) Network Architecture in Emerging Readers *Lan Shuai[1], Kaja Jasinska[1], Airey Lau[1,2], Tao Gong[1], Hailey Mulder[1], Nicole Landi[1,3,4], Ken Pugh[1,3,4]; [1]Haskins Laboratories, [2]Columbia University Teachers College, [3]Yale University Child Study Center, [4]University of Connecticut*

Grammar: Syntax

C33 Neural Bases of Chinese Syntactic Representation across both Tasks and Syntactic Constructions *Wenjia Zhang[1,2], Gangyi Feng[1,2], Hsuan-Chih Chen[3], Xuefei Gao[4], Suiping Wang[1,2]; [1]Center for Studies of Psychological Application and School of Psychology, South China Normal University, Guangzhou, China, [2]Key Laboratory of Mental Health and Cognitive Science of Guangdong Province, South China Normal University, Guangzhou, China, [3]Department of Psychology, Chinese University of Hong Kong, Hong Kong, [4]Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands*

C34 Automatic detection of morpho-syntactic violations in Dutch: A Mismatch Negativity study *Cas Coopmans[1], Marijn Struiksma[1], Peter Coopmans[1], Aoju Chen[1]; [1]Utrecht University*

C35 Probability, Semantics, Syntax, Memory: Within Subject Comparisons of Late Positive Components *Michelle Leckey[1], Ryan J. Hubbard[1], Kara D. Federmeier[1]; [1]University of Illinois at Urbana-Champaign*

C36 Left inferior frontal cortex mediates morphosyntactic processing: ERP evidence from left-hemisphere damaged patients *Stefanie Regel[1,2], Sonja Kotz[1,3], Ilona Henseler[1], Angela Friederici[1]; [1]Max-Planck-Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, [2]Humboldt University Berlin, Berlin, Germany, [3]Maastricht University, Maastricht, The Netherlands*

C37 ERP Effects of Scrambled/'Floating' Numeral Classifiers in Korean *Myung-Kwan Park[1], Euiyon Cho[1], Jeong-Ah Shin[1], Wonil Chung[1]; [1]Dongguk University*

C38 Voice mismatch in Korean pseudo-sluicing: An ERP study *Myung-Kwan Park[1], Euiyon Cho[1], Jeong-Ah Shin[1], Wonil Chung[1]; [1]Dongguk University*

Language Disorders

C39 Interfered naming and its improvement in aphasia: A group fMRI study on a novel approach to impaired word processing *Stefanie Abel[1,2], Klaus Willmes[2]; [1]Neuroscience and Aphasia Research Unit, University of Manchester, UK, [2]Department of Neurology, RWTH Aachen University, Germany*

C40 Predicting speech entrainment success using white matter connectivity *Lynda Feenaughty[1,2], John Delgaizo[1], Alexandra Basilakos[2], Julius Fridriksson[2], Chris Rorden[2], Leonardo Bonilha[1]; [1]Medical University of South Carolina, [2]University of South Carolina*

C41 A DTI study of speech-related white matter tracts in patients with left-hemisphere stroke *Chiara Caldinelli[1], Fatemah Geranmayeh[2], Richard J. S. Wise[2], Kate Watkins[1]; [1]University of Oxford, [2]Imperial College London*

C42 Intra- and inter-category regions in semantic dementia: Evidence from anti-VLSM and representational similarity analyses *Junhua Ding[1], Keliang Chen[2], Yan Chen[1], Yuxing Fang[1], Qing Yang[2], Yingru Lv[3], Nan Lin[4], Yanchao Bi[1], Qihao Guo[2], Zaizhu Han[1]; [1]State Key Laboratory of Cognitive Neuroscience and Learning & IDG/McGovern Institute for Brain Research, Beijing Normal University, [2]Department of Neurology, Huashan Hospital, Fudan University, [3]Department of Radiology, Huashan Hospital, Fudan University, [4]Institute of Psychology, Chinese Academy of Sciences*

C43 Lesion correlates of noun and verb processing in post-stroke aphasia: Voxel-Based Correlational Methodology *Reem S. W. Alyahya[1,2], Ajay Halai[1], Paul Conroy[1], Matthew Lambon Ralph[1]; [1]Neuroscience and Aphasia Research Unit, The University of Manchester, United Kingdom, [2]King Fahad Medical City, Saudi Arabia*

C44 Longitudinal changes of resting state functional connectivity during naming recovery after stroke *Rajani Sebastian[1], Andreia V Faria[2], Hinna Shahid[1], Cameron Davis[1], Amy Wright[1], Argye E Hillis[1,3,4]; [1]Department of Neurology, Johns Hopkins University School of Medicine, Baltimore, USA, [2]Department of Radiology, Johns Hopkins University School of Medicine, Baltimore, USA, [3]Department of Physical Medicine and Rehabilitation, Johns Hopkins University School of Medicine, Baltimore USA, [4]Department of Cognitive Science, Johns Hopkins University, Baltimore, USA*

C45 Association between language functional network and attenuated psychotic symptoms in clinical high-risk psychosis patients in Shanghai *Zhenghan Qi[1], Yingying Tang[2], Susan Whitfield-Gabrieli[1], Tianhong Zhang[2], Huiru Cui[2], Robert W. McCarley[3], Martha E. Shenton[3], Huijun Li[4], Jijun Wang[2], Larry J. Seidman[3]; [1]Massachusetts Institute of Technology, [2]Shanghai Mental Health Center, Shanghai Jiaotong University School of Medicine, [3]Harvard Medical School, [4]Florida Agricultural and Mechanical University*

C46 Language brain networks in anomic versus non-anomic early Alzheimer's disease patients *Maxime Montembeault[1,2], Isabelle Rouleau[3], Marianne Chapleau[1,2], Simona Maria Brambati[1,2]; [1]Universite de Montréal, [2]Centre de recherche de l'Institut universitaire de gériatrie de Montréal, [3]Université du Québec a Montréal*

C47 Abnormal semantic processing of emotional and neutral words in post traumatic stress disorder *Einat Liebenthal[1], Hong Pan[1], Swathi Iyer[1], Monica Bennett[1], Benjamin Coiner[1], Daniel Weisholtz[1], David Silbersweig[1], Emily Stern[1]; [1]Brigham and Women's Hospital, Harvard Medical School*

C48 Using fMRI to predict post-stroke aphasia recovery *Tracy Roxbury[1,2,5], Katie McMahon[2], Stephen Read[4], Robert Henderson[4], Andrew Wong[4], Alan Coulthard[3,4], Kate O'Brien[1], Anna Farrell[4], Penni Burfein[4], Shana Taubert[4], Christine McHenery[4], David Copland[1,5]; [1]Centre for Clinical Research, University of Queensland, [2]Centre for Advanced Imaging, University of Queensland, [3]Academic Discipline of Medical Imaging, University of Queensland, [4]Royal Brisbane and Women's Hospital, [5]School of Health and Rehabilitation Sciences, University of Queensland*

Meaning: Combinatorial Semantics

C49 Quantifier Polarity Processing and Numerical Comparison: fMRI results show striking Modularity *Yosef Grodzinsky[1], Galit Agmon[1], Isabelle Deschamps[2]; [1]ELSC. LLCC, Hebrew University, Jerusalem, [2]Faculté de Médecine Département de réadaptation, Université Laval*

C50 Less is more: negative polarity in quantifiers is more difficult to process than negative polarity in adjectives *Galit Agmon[1], Yonatan Loewenstein[1], Yosef Grodzinsky[1]; [1]The Hebrew University of Jerusalem*

C51 Compositionality and imagination: Assessing the neuronal correlates of indeterminate sentence interpretation *Roberto G. de Almeida[1]; [1]Concordia University*

C52 Lexical access feeds composition: Temporal modulation of combinatory LATL activity according to lexical access demands *Graham Flick[1], Amanda R. Kaczmarek[2], Yohei Oseki[3], Alec Marantz[1,3], Liina Pylkkänen[1,3]; [1]New York University Abu Dhabi, [2]University of California, Santa Barbara, [3]New York University*

Meaning: Discourse and Pragmatics

C53 The brain dissociates between different levels of prediction during language comprehension *Edward W. Wlotko[1], Margarita Zeitlin[1], Simone Riley[1], Maria Luiza Cuhna Lima[1], Gina Kuperberg[1,2,3]; [1]Tufts University, [2]Massachusetts General Hospital, [3]Harvard Medical School*

C54 The neural difference between Chinese and English in reading and listening stories *Mengxing Liu[1], Xiaojuan Wang[1], Hua Shu[2], Jason D. Zevin[3], Jianfeng Yang[1]; [1]Shaanxi Normal University, [2]Beijing Normal University, [3]University of Southern California*

C55 Processing affirmation and negation in contexts with unique or multiple alternatives *Maria Spychalska[1,2,3], Viviana Haase[1,2], Jarmo Kontinen[1,2], Markus Werning[1,2]; [1]Institute of Philosophy II, Ruhr University Bochum, [2]Mercator Research Group "Structure of Memory", [3]Institute for German Language and Literature, University Cologne*

Perception: Orthographic and Other Visual Processes

C56 Left inferior longitudinal fasciculus underlies orthographic processing: Evidence from lesion-behavior mapping analysis *Ke Wang[1], Xiaonan Li[1], Luping Song[2], Ruiwang Huang[2], Junhua Ding[1], Yanchao Bi[1], Zaizhu Han[1]; [1]1State Key Laboratory of Cognitive Neuroscience and Learning and IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing 100875, China, [2]2Department of Neurology, China Rehabilitation Research Center, Rehabilitation College of Capital Medical University, Beijing 100068, China*

C57 To gaze – to see – to read: Brain activity beyond orthographic processing *Stefan Heim[1,2], Franziska von Tongeln[1], Rebekka Hillen[1], Ralph Radach[3], Thomas Günther[1]; [1]RWTH Aachen University, Germany, [2]Research Centre Jülich, Germany, [3]University of Wuppertal, Germany*

C58 Training-induced changes in the neural mechanisms underlying visual word recognition *Sophia van Hees[1,2], Penny Pexman[1,2], Bijan Mohammed[1], Sage Brown[1], Andrea Protzner[1,2]; [1]University of Calgary, [2]Hotchkiss Brain Institute*

Phonology and Phonological Working Memory

C59 Foreign sound learning and mismatch negativity (MMN): a longitudinal ERP study *Andreas Højlund Nielsen[1,2,3], Nynne Thorup Horn[3], Stine Derdau Sørensen[3], William B. McGregor[3], Mikkel Wallentin[1,2,3]; [1]Center of Functionally Integrative Neuroscience (CFIN), Aarhus University, [2]Interacting Minds Center, Aarhus University, [3]Dept. of Linguistics, Cognitive Science and Semiotics, Aarhus University*

C60 Subcortical involvement in phonological input processing: an electrophysiological registration study *Arnout Bruggeman[1], Kim De Keyser[1], Annelies Aerts[1], Pieter Van Mierlo[1], Gregor Strobbe[1], Paul Boon[1], Dirk Van Roost[1], Patrick Santens[1], Miet De Letter[1]; [1]Ghent University*

Signed Language and Gesture

C61 Co-Activation of American Sign Language in Deaf Readers: An ERP Study *Gabriela Meade[1,2], Katherine Midgley[1], Phillip Holcomb[1], Karen Emmorey[1]; [1]San Diego State University, [2]University of California, San Diego*

C62 How are individual spoken words and signs represented in sign-speech bilinguals? *Samuel Evans[1], Jörn Diedrichsen[2], Mairéad MacSweeney[1]; [1]Institute of Cognitive Neuroscience, University College London, [2]Brain and Mind Institute, University of Western Ontario*

Speech Motor Control and Sensorimotor Integration

C63 Using Acoustic Measures to Refine the Differential Diagnosis of Apraxia of Speech: A Behavioral and Multimodality Neuroimaging Study *Alexandra Basilakos[1], Leonardo Bonilha[2], Grigori Yourganov[2], Chris Rorden[1], Lynda Feenaughty[1], Dirk den Ouden[1], Daniel Fogerty[1], Julius Fridriksson[1]; [1]University of South Carolina, [2]Medical University of South Carolina*

C64 Cortical representation of vocal pitch production *Benjamin Dichter[1,2], Matthew Leonard[1], Edward Chang[1]; [1]University of California San Francisco, [2]University of California Berkeley*

C65 Investigating the role of auditory feedback in the production of speech and non-speech vocal behaviours *Zarinah Agnew[1], Hardik Kothare[2], Srikantan Nagarajan[3], John Houde[4]; [1]UCSF*

Control, Selection, and Executive Processes

C66 Age-related changes in differentiated neural responses to resolution of conflict in magnitude system *Chih-Mao Huang[1,2], Ya-Yi Wang[2], Hsu-Wen Huang[1,2]; [1]National Chiao Tung University, Taiwan, [2]Institute of Linguistics, Academia Sinica, Taiwan*

C67 An early locus of associative and categorical context effects in speech production: Evidence from an ERP study using the picture-word interference paradigm *Andus Wing-Kuen Wong[1], Ho-Ching Chiu[1], Siu-San Wong[1], Jie Wang[2], Jinlu Cao[2], Hsuan-Chih Chen[2]; [1]Department of Applied Social Sciences, City University of Hong Kong, Hong Kong S. A. R., [2]Department of Psychology, Chinese University of Hong Kong, Hong Kong S. A. R.*

C68 Control of Language Production: The Influence of Strategy Provision on Verbal Suppression and its Neural Substrates in Parkinson's Disease *Megan L Isaacs[1,2,3,5], Katie L McMahon[2], Anthony J Angwin[3], Bruce Crosson[4], Peter A Silburn[5], David A Copland[1,3]; [1]Centre for Clinical Research, University of Queensland, Herston, Australia, [2]Centre for Advanced Imaging, University of Queensland, St Lucia, Australia, [3]School of Health and Rehabilitation Sciences, University of Queensland, St Lucia, Australia, [4]Centre for Visual and Neurocognitive Rehabilitation, Veteran's Affairs Medical Centre, Atlanta, [5]APCN, QBI, University of Queensland, Brisbane, Australia*

Meaning: Prosody, Social and Emotional Processes

C69 Metaphor in Politics: Bringing affect to the decision space? *Vesna Gamez-Djokic[1,2], Elisabeth Wehling[4], Lisa Aziz-Zadeh[1,2,3]; [1]Brain and Creativity Institute, University of Southern California, [2]Neuroscience Graduate Program, [3]Division of Occupational Science and Occupational Therapy, University of Southern California, [4]International Computer Science Institute, University of California, Berkeley*

Methods

C70 Estimating aphasia scores with SMAP: stacked multimodal aphasia predictions *Dorian Pustina[1,3], Branch Coslett[1], Brian Avants[2,3], Myrna Schwartz[4]; [1]Department of Neurology, University of Pennsylvania, Philadelphia, PA, USA, [2]Department of Radiology, University of Pennsylvania, Philadelphia, PA, USA, [3]Penn Image Computing and Science Lab, University of Pennsylvania, Philadelphia, PA, USA, [4]Moss Rehabilitation Research Institute, Elkins Park, PA, USA.*

Writing and Spelling

C71 The functional relationship between language and motor processing in typing: An EEG study *Svetlana Pinet[1,3], Michele Scaltritti[1,3], Marieke Longcamp[2,3], F.-Xavier Alario[1,3]; [1]LPC UMR 7290, [2]LNC UMR 7291, [3]Aix-Marseille Université & CNRS, France*

Poster Session D

Perception: Auditory

D1 Predictive coding is key for early sensory language processing in both auditory and visual modalities *Benjamin Gagl[1,2], Jona Sassenhagen[1], Christian J. Fiebach[1,2]; [1]Department of Psychology, Goethe-University Frankfurt, Frankfurt am Main, [2]Center for Individual Development and Adaptive Education of Children at Risk (IDeA), Frankfurt am Main*

D2 Neural entrainment reflects temporal predictions guiding speech comprehension *Anne Kösem[1,2], Hans Rutger Bosker[1,2], Antje Meyer[1,2], Ole Jensen[2], Peter Hagoort[1,2]; [1]Donders Institute for Brain, Cognition, and Behaviour, Radboud University, The Netherlands, [2]Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands*

D3 The relationship between speech production and speech perception deficits in Parkinson's disease *Kim De Keyser[1], Patrick Santens[1], Annelies Bockstael[1], Dick Botteldooren[1], Durk Talsma[1], Paul Corthals[1], Miet De Letter[1]; [1]Ghent University*

D4 Cortical-acoustic alignment in cochlear implant users: is it an artifact or a measure of speech processing? *Anita Wagner[1,2], Natasha Maurits[2,3], Deniz Başkent[1,2]; [1]University of Groningen, University Medical Centre Groningen Department of Otorhinolaryngology/Head and Neck Surgery Groningen, The Netherlands, [2]Graduate School of Medical Sciences, School of Behavioral and Cognitive Neuroscience, University of Groningen, [3]University of Groningen, University Medical Centre Groningen Department of Neurology Groningen, The Netherlands*

Perception: Speech Perception and Audiovisual Integration

D5 The role of ventral and dorsal pathway in sublexical speech perception: insights from fMRI *Susann Bräuer[1,2], Inga M. Schepers[1,2], Gesa Müller[1], Jochem W. Rieger[1,2]; [1]University of Oldenburg, Germany, [2]Cluster of Excellence Hearing4all, Germany*

D6 Pure Linguistic Interference during Comprehension of Competing Speech Signals *Bohan Dai[1], Anne Kösem[2], James McQueen[2,1], Peter Hagoort[1,2]; [1]Max Planck Institute for Psycholinguistics, 6500 AH Nijmegen, The Netherlands, [2]Donders Institute for Brain, Cognition and Behaviour, Radboud University, 6500 HB Nijmegen, The Netherlands*

D7 A brain potential signalling linguistic pre-activation? An analysis of the pre-activation negativity (PrAN) *Pelle Soderstrom[1], Merle Horne[1], Johan Frid[1], Mikael Roll[1]; [1]Lund University*

D8 On the role of low-frequency neural entrainment to acoustic envelopes during phonological and semantic processing of speech *Guangting Mai[1], James W. Minett[2], William S.-Y. Wang[2,3]; [1]University College London, [2]The Chinese University of Hong Kong, [3]The Hong Kong Polytechnic University*

D9 Lexical and lip-reading information as sources of phonemic boundary recalibration *Shruti Ullas[1], Frank Eisner[2], Anne Cutler[3], Elia Formisano[1]; [1]Maastricht University, [2]Donders Institute for Brain, Cognition and Behaviour at Radboud University, [3]Max Planck Institute for Psycholinguistics*

D10 Laterality and unilateral deafness: Patients with congenital right ear deafness do not develop atypical language dominance *Lise Van der Haegen[1], Frederic Acke[2], Guy Vingerhoets[1], Ingeborg Dhooge[2], Els De Leenheer[2], Qing Cai[3], Marc Brysbaert[1]; [1]Ghent University, Belgium, [2]Ghent University Hospital, Belgium, [3]East China Normal University, China*

D11 How early does linguistic processing start and where in the brain? *Andrew Papanicolaou[1,2]; [1]University of Tennessee Health Science Center, Memphis, USA, [2]Neuroscience Institute, Le Bonheur Children's Hospital, Memphis, USA*

Multilingualism

D12 Neural Network Modelling of Lexical Development in Bilingual Toddlers *Themis Karaminis[1], Jeremy Goslin[1], Caroline Floccia[1], Kim Plunkett[2]; [1]School of Psychology, Plymouth University, [2]Department of Experimental Psychology, University of Oxford*

D13 Contextualizing Treatment Outcomes in a Bilingual-Speaker with Anomia by Examining Gray Matter Volume and Functional Connectivity *Stephanie Grasso[1], H. Isabel Hubbard[2], Maria Luisa Mandelli[2], Elizabeth Peña[1], Maria Luisa Gorno-Tempini[2], Maya Henry[1]; [1]The University of Texas at Austin, [2]The University of California, San Francisco*

D14 Proactive and reactive control during bilingual lexical access is driven by different portions within the prefrontal cortex *Francesca Martina Branzi[1,2], Clara Martin[2,3], Manuel Carreiras[2,3], Pedro Paz-Alonso[2]; [1]The University of Manchester, [2]Basque Center on Cognition, Brain and Language, [3]IKERBASQUE, Basque Foundation for Science*

Meaning: Lexical Semantics

D15 Mapping the multiple graded contributions of the anterior temporal lobe representational hub to abstract and social concepts: Evidence from distortion-corrected fMRI *Richard J. Binney[1,2], Paul Hoffman[1,3], Matthew A. Lambon Ralph[1]; [1]University of Manchester, [2]Temple University, [3]University of Edinburgh*

D16 Processing abstract concepts: The role of imageability and emotional valence *Gabriella Vigliocco[1], David Vinson[1], Marta Ponari[2], Tim Shallice[3]; [1]Experimental Psychology, UCL, [2]Department of Psychology, Kent University, [3]ICN, UCL*

D17 The Good, the bad, and the neutral: The brain organizes abstract semantics primarily by valence *Wei Wu[1], Xiaosha Wang[1], Xiaoying Wang[1], Weiwei Men[2], Jiahong Gao[2], Zhenhua Ling[3], Yanchao Bi[1]; [1]Beijing Normal University, [2]Peking University, [3]University of Science and Technology of China*

D18 Predicting neural activity patterns associated with sentences using a neurobiologically motivated model of semantic representation *Andrew Anderson[1], Jeffrey Binder[2], Leonardo Fernandino[2], Colin Humphries[2], Lisa Conant[2], Mario Aguilar[3], Xixi Wang[1], Donias Doko[1], Rajeev Raizada[1]; [1]Brain and Cognitive Sciences, University of Rochester, NY 14627, [2]Medical College of Wisconsin, Department of Neurology, Milwaukee, WI 53226, [3]Teledyne Scientific Company, Durham, NC 27703*

D19 GABA concentrations in the anterior temporal lobe predict human semantic processing *JeYoung Jung[1], Stephen Williams[2], Matthew Lambon Ralph[1]; [1]Neuroscience and Aphasia Research Unit (NARU), School of Psychological Sciences, University of Manchester, UK, [2]Center for Imaging Sciences, University of Manchester, UK*

D20 tDCS to Premotor Cortex Changes Action Verb Understanding: Complementary Effects of Inhibitory and Excitatory Stimulation *Tom Gijssels[1,2], Daniel Casasanto[1,3]; [1]University of Chicago, IL, [2]Vrije Universiteit Brussel, Belgium, [3]Grossman Institute for Neuroscience, IL*

D21 Neural decoding reveals differences between concrete and abstract words *Annika Hulten[1], Ali Faisal[1], Lotta Lammi[1], Marijn van Vliet[1], Tiina Lindh-Knuutila[1], Sasa Kivisaari[1], Riitta Salmelin[1]; [1]Aalto University*

D22 Individual differences in sentence processing based on handedness and family sinistrality in left- and right-handers *Franziska Kretzschmar[1], Ingmar Brilmayer[1], Phillip M. Alday[2], Ina Bornkessel-Schlesewsky[2], Matthias Schlesewsky[2]; [1]Johannes Gutenberg University Mainz, Mainz, Germany, [2]University of South Australia, Adelaide, Australia*

D23 An Experiential Attribute Model of Semantic Representation Predicts Semantic Priming *Leonardo Fernandino[1], Colin Humphries[1], Lisa Conant[1], Jeffrey Binder[1]; [1]Medical College of Wisconsin*

Language Development

D24 Influence of early language experience on brain activation to language: A study of hearing infants with Deaf mothers *Evelyne Mercure[1], Sarah Lloyd-Fox[2], Mark Johnson[2], Mairead MacSweeney[1]; [1]UCL Institute of Cognitive Neuroscience, [2]Birkbeck College, University of London*

D25 Connectivity of the hippocampus and Broca's area during novel grammar acquisition: a PPI investigation *Olga Kepinska[1], Mischa de Rover[1,2], Johanneke Caspers[1], Niels O. Schiller[1]; [1]Leiden University, [2]Leiden University Medical Center*

D26 Sex differences in second language word learning: fMRI evidence *Jing Yang[1,2], Ping Li[2]; [1]Bilingual Cognition and Development Lab, National Key Research Center for Linguistics and Applied Linguistics, Guangdong University of Foreign Studies, Guangzhou 510420, China, [2]Department of Psychology, and Center for Brain, Behavior, & Cognition, Pennsylvania State University, University Park, PA 16802, USA*

D27 Do 6 months of bilingual exposure impact neuronal processing of native and non-native regularities? *Sonja Rossi[1,2,3], Manfred F. Gugler[1]; [1]Department for Medical Psychology, Medical University of Innsbruck, Austria, [2]Department for Hearing, Speech, and Voice Disorders, Medical University of Innsbruck, Austria, [3]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany*

D28 Neocortical dynamics underpinning rapid and automatic learning mechanism in children: A neuromagnetic investigation *Eino Partanen[1,2], Alina Leminen[1,2], Stine de Paoli[1], Anette Bundgaard[1], Osman Skjold Kingo[3], Peter Krøjgaard[3], Yury Shtyrov[1,4,5]; [1]Center of Functionally Integrative Neuroscience (CFIN), Department of Clinical Medicine, Aarhus University, Aarhus, Denmark, [2]Cognitive Brain Research Unit, Institute of Behavioural Sciences, University of Helsinki, Finland, [3]Center on Autobiographical Memory Research (CON AMORE), Department of Psychology and Behavioural Sciences, Aarhus University, Denmark, [4]Centre for Cognition and Decision Making, National Research University Higher School of Economics, Moscow, Russian Federation, [5]Medical Research Council (MRC), Cognition and Brain Sciences Unit, Cambridge, UK*

Grammar: Syntax

D29 The role of procedural memory in the skill for language: Evidence from syntactic priming in patients with amnesia. *Evelien Heyselaar[1], Katrien Segaert[2,1], Serge J.W. Walvoort[3], Roy P.C. Kessels[3,4,5], Peter Hagoort[1,4]; [1]Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands, [2]University of Birmingham, Birmingham, United Kingdom, [3]Vincent van Gogh Institute for Psychiatry, Centre of Excellence for Korsakoff and Alcohol-Related Cognitive Disorders, Venray, The Netherlands, [4]Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, The Netherlands, [5]Radboud University Medical Center, Nijmegen, The Netherlands*

D30 How expectation modulations based on verb bias and grammatical structure probabilities shape the sentence processing network *Kirsten Weber[1,2], Cristiano Micheli[3], Esther Ruigendijk[4], Jochem Rieger[3]; [1]Max Planck Institute for Psycholinguistics, Nijmegen, the Netherlands, [2]Hanse Institute for Advanced Studies, Delmenhorst, Germany, [3]Department of Psychology, Carl-von-Ossietzky University, Oldenburg, Germany, [4]School of Linguistics and Cultural Studies, Carl-von-Ossietzky University, Oldenburg, Germany*

D31 Event-related potentials (ERP) in healthy young and older participants: semantic integration, verb argument structure, and morphosyntactic processing *Elena Barbieri[1], Matthew Walenski[1], Chien-Ju Hsu[1], Brianne Dougherty[1], Katrin Bovbjerg[1], Cynthia K. Thompson[1,2,3]; [1]Aphasia and Neurolinguistics Laboratory, Center for the Neurobiology of Language Disorders, Northwestern University, [2]Cognitive Neurology and Alzheimer's Disease Center, Northwestern University, [3]Department of Neurology, Northwestern University*

D32 Spread the word: MMN brain response reveals whole-form access of discontinuous verbs *Jeff Hanna[1], Bert Cappelle[2], Friedemann Pulvermüller[1,3]; [1]Brain Language Laboratory - Freie Universität Berlin, [2]University of Lille 3, [3]Berlin School of Mind and Brain - Humboldt Universität zu Berlin*

D33 Retrieval cues in language comprehension: Interference effects in monologue but not dialogue *Andrea E. Martin[1]; [1]School of Philosophy, Psychology and Language Sciences, University of Edinburgh*

D34 A fine differentiation of Korean NPIs: Evidence from ERP responses *Myung-Kwan Park[1], Euiyon Cho[1], Jeong-Ah Shin[1], Wonil Chung[1]; [1]Dongguk University*

D35 Selectional restriction and chord sequence incongruities: Further evidence from event-related potentials in processing language and music *Myung-Kwan Park[1], Euiyon Cho[1], Jeong-Ah Shin[1], Wonil Chung[1]; [1]Dongguk University*

Language Disorders

D36 Semantic word category impairments in semantic dementia and posterior cortical atrophy *Zubaida Shebani[1,2], Karalyn Patterson[1,3], Peter J Nestor[4], Lara Z Diaz-de-Grenu[3], Kate Dawson[3], Friedemann Pulvermuller[1,5,6]; [1]Medical Research Council Cognition and Brain Sciences Unit, Cambridge, [2]Department of Linguistics, United Arab Emirates University, [3]Department of Clinical Neurosciences, University of Cambridge, [4]German Center for Neurodegenerative Diseases (DZNE), Magdeburg, Germany, [5]Tecnalia Research and Innovation Center, Health Division, Neurotechnology Unit, Bizkaia Technology Park, Derio, Spain, [6]Brain Language Laboratory, Department of Philosophy and Humanities, WE4, Freie Universität Berlin, Berlin, Germany*

D37 Aberrant neural activity and linguistic dimensions during natural conversation in autism. *Kyle Jasmin[1,2], Stephen J. Gotts[1], Cameron Riddell[1], John Ingeholm[1], YiSheng Xu[3], Siyuan Liu[3], Allen R. Braun[3], Alex Martin[1]; [1]National Institute of Mental Health/NIH, [2]Birkbeck, University of London, [3]National Institute on Deafness and Other Communication Disorders*

D38 Dysprosody As A Clinical Biomarker In Neurodegeneration *Naomi Nevler[1], Sharon Ash[1], Charles Jester[1], Mark Liberman[1], Murray Grossman[1]; [1]University of Pennsylvania*

D39 Longitudinal resting state functional connectivity patterns in the early phase of recovery from aphasia *Julian Klingbeil[1], Anika Stockert[1], Max Wawrzyniak[1], Katrin Wrede[1], Dorothee Saur[1]; [1]University of Leipzig*

D40 A biomarker for recovery and decline of language function years after stroke *Thomas M.H. Hope[1], Alex P. Leff[1], Susan Prejawa[1], Rachel Bruce[1], Zula Haigh[1], Louise Lim[1], Sue Ramsden[1], Marion Oberhuber[1], Philipp Ludersdorfer[1], Jenny Crinion[1], Mohamed L. Seghier[1], Cathy J. Price[1]; [1]University College London*

D41 Dynamics of perilesional activation in aphasia recovery *Anika Stockert[1], Max Wawrzyniak[1], Julian Klingbeil[1], Katrin Wrede[1], Dorothee Saur[1]; [1]Language and Aphasia Lab, Department of Neurology, University of Leipzig, Germany*

D42 Brain regions supporting phonological and semantic reading processes in Central Alexia *Oscar Aguilar[1], Zoe Woodhead[1], Martina F. Callaghan[1], Sheila Kerry[2], Jenny Crinion[2], Alex Leff[2]; [1]Wellcome Trust Centre for Neuroimaging - University College London, UK., [2]Institute of Cognitive Neuroscience - University College London, UK.*

D43 Fragmentation of structural brain networks is associated with more severe post-stroke aphasia. *Barbara Khalibinzwa Marebwa[1], Lynda Feenaughty[1,2], Julius Fridriksson[2], Chris Rorden[2], Grigori Yourganov[1], Leonardo Bonilha[1]; [1]Medical University of South Carolina, [2]University of South Carolina*

D44 The unique neural correlates of speech fluency, phonology and semantics in chronic post-stroke aphasia. *Ajay Halai[1], Anna Woollams[1], Matthew Lambon Ralph[1]; [1]Neuroscience and Aphasia Research Unit, School of Psychological Sciences, Zochonis Building, Brunswick Street. University of Manchester, M13 9PL. England*

D45 Reorganization of language networks in people with aphasia: resting state fMRI data *Olga Dragoy[1], Svetlana Kuptsova[1,2], Victoria Zavyalova[1,3], Nicola Canessa[4], Alexey Petrushevsky[2], Oksana Fedina[2], Stefano Cappa[4]; [1]National Research University Higher School of Economics, [2]Center for Speech Pathology and Neurorehabilitation, [3]National Research Centre 'Kurchatov Institute', [4]University of Pavia*

Meaning: Combinatorial Semantics

D46 A common, fine-grained code for object meaning in a subregion of the anterior temporal cortex *Amy Price[1], Michael Bonner[1], Jonathan Peelle[2], Murray Grossman[1]; [1]University of Pennsylvania, [2]Washington University in St. Louis*

D47 That was not what I expected: specifying the role of the left inferior frontal gyrus in processing unexpected words *Sofia Frade[1], Andrea Santi[2], Ana Raposo[1]; [1]University of Lisbon, [2]University College of London*

D48 The Priming of Basic Combinatory Responses in MEG *Esti Blanco-Elorrieta[1], Victor S. Ferreira[3], Paul Del Prato[1], Liina Pylkkänen[1,2]; [1]New York University, [2]NYUAD Institute, [3]University of California San Diego*

D49 An ERP study of the relationship between verb semantics and events *Annika Andersson[1], Marianne Gullberg[1,2]; [1]Lund University Humlab, [2]Lund University Centre for Languages and Literature*

Meaning: Discourse and Pragmatics

D50 Online modelling of social perspectives in joint interaction: Event-related potential evidence *Jyrki Tuomainen[1], Alexandra Westley[2], John Swettenham[2]; [1]UCL, Speech Hearing and Phonetic Sciences, [2]UCL, Language and Cognition*

D51 Neural correlates of social appropriateness in dynamic conversation *Kathrin Rothermich[1], Marc D. Pell[1]; [1]School of Communication Sciences & Disorders, McGill University, Montreal, Canada*

D52 Finding your way in the zoo: how situation model alignment affects interpersonal neural coupling *Lotte Schoot[1], Arjen Stolk[3,2], Peter Hagoort[1,2], Simon Garrod[4], Katrien Segaert[5,1], Laura Menenti[4,1]; [1]Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands, [2]Donders Institute for Brain, Cognition and Behaviour, Nijmegen, The Netherlands, [3]Knight Lab, University of California, Berkeley, US, [4]Institute of Neuroscience and Psychology, University of Glasgow, Glasgow, UK, [5]School of Psychology, University of Birmingham, Birmingham, UK*

Perception: Orthographic and Other Visual Processes

D53 The time course of lexical access for handwritten words: An ERP investigation *Marta Vergara-Martinez[1], Manuel Carreiras[2], Eva Gutiérrez-Sigut[1], Cristina Gil[2], Manuel Perea[1,2]; [1]Universitat de València, [2]Basque Center on Cognition, Brain and Language (BCBL)*

D54 Early ERP effects of orthographic and phonological lexicality in native, Spanish-English, and Chinese-English readers of English *Gary Dicks[1], Naira Taroyan[1], Jane Morgan[1], Anna Maria Di Betta[1]; [1]Sheffield Hallam University*

D55 There is no „pure" orthographic brain area in the visual system of the blind *Katarzyna Rączy[1], Aleksandra Sadowska[1], Marianna Boros[1], Anna Chabuda[2], Paweł Hańczur[3], Ewa Sumera[4], Marcin Szwed[1]; [1]Jagiellonian University, [2]University of Warsaw, [3]Warsaw University of Technology, [4]Institute for the Blind and Partially Sighted Children*

D56 The anatomy of the posterior segment of the arcuate fasciculus correlates with reading and vocabulary comprehension performance *Naianna Robertsson[1,2], Stephanie J. Forkel[1], Flavio Dell'Acqua[2], Marco Catani[2]; [1]Natbrainlab, Centre for Neuroimaging Sciences, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London UK, [2]Natbrainlab, Department of Forensic and Neurodevelopmental Sciences and The Sackler Institute for Translational Neurodevelopmental Sciences, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK*

Phonology and Phonological Working Memory

D57 MMN investigation of voicing features in Russian *Kevin Schluter[1], Stephen Politzer-Ahles[2], Diogo Almeida[1]; [1]New York University Abu Dhabi, [2]University of Oxford*

D58 The involvement of the pedunculopontine nucleus (PPN) in phonological auditory processing: A case report *Kim De Keyser[1], Arnout Bruggeman[1], Dirk Van Roost[1], Patrick Santens[1], Miet De Letter[1]; [1]Ghent University*

Signed Language and Gesture

D59 Neural integration of speech and naturally produced, meaningful gestures *Karen Emmorey[1], Jill Weisberg[1], Amy Hubbard; [1]San Diego State University, [2]Institute of Health Promotion and Clinical Movement Science*

D60 The neural basis of the integration of speech and gesture: A brain stimulation approach *Wanying Zhao[1], Kevin Riggs[1], Igor Schindler[1], Henning Hollo[1]; [1]University of Hull, Department of Psychology*

Speech Motor Control and Sensorimotor Integration

D61 Exploring the interaction between the rhythms of motor and auditory cortices *M. Florencia Assaneo[1], David Poeppel[1,2]; [1]New York University, [2]Max-Planck-Institute, Frankfurt*

D62 Acoustic and articulatory outcomes of speech training examined with real-time vocal tract MRI *Daniel Carey[1], Marc E. Miquel[2], Matthieu Ruthven[2], Bronwen G. Evans[3], Patti Adank[3], Carolyn McGettigan[1]; [1]Dept. of Psychology, Royal Holloway, University of London, [2]Clinical Physics, Barts London NHS Trust, [3]Dept. of Speech, Hearing and Phonetic Sciences, University College London*

D63 Functional brain outcomes of speech training: generalization from phones to words *Daniel Carey[1], Marc E. Miquel[2], Bronwen G. Evans[3], Patti Adank[3], Carolyn McGettigan[1]; [1]Dept. of Psychology, Royal Holloway, University of London, [2]Clinical Physics, Barts London NHS Trust, [3]Dept. of Speech, Hearing and Phonetic Sciences, University College London*

Control, Selection, and Executive Processes

D64 Development of the Frontal Aslant Tract (FAT) and its relation to executive function in typical children. *Dea Garic[1], Iris Broce[1], Anthony Steven Dick[1]; [1]Florida International University*

D65 Language-Related Functional Networks in the Ventromedial Prefrontal Cortex *Rebecca Jackson[1], Lauren L Cloutman[2], Matthew A Lambon Ralph[3]; [1]Neuroscience & Research Unit, University of Manchester*

D66 The role of task complexity in mediating relations of whole brain modularity to task performance *Qiuhai Yue[1], Randi C. Martin[1], Simon Fischer-Baum[1], Aurora Ramos Nunez[1], Michael Deem[1], Fengdan Ye[1]; [1]Rice University, Houston, TX, USA*

Meaning: Prosody, Social and Emotional Processes

D67 Temporal network dynamics of prosody perception: An MEG study *Daniela Sammler[1], Burkhard Maess[1], Maren Grigutsch[1]; [1]Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany*

D68 Reduced sensorimotor responses to laughter in children with conduct problems and high callous-unemotional traits *Cesar Lima[1], Elizabeth O'Nions[2,3], Ruth Roberts[2], Rachael Lickley[2], Sophie Scott[1], Eamon McCrory[2], Essi Viding[2,3]; [1]Institute of Cognitive Neuroscience, University College London, [2]Division of Psychology and Language Sciences, University College London, [3]Institute of Psychiatry, Psychology and Neuroscience, King's College London*

Methods

D69 Signal-space-projection (SSP) methods for extracting single-trial time courses from EEG/MEG data *Olaf Hauk[1], Matthias S. Treder[1], Dennis Norris[1]; [1]MRC Cognition and Brain Sciences Unit, Cambridge, UK*

D70 Electrophysiological correlates of interference effects in the picture-word interference paradigm *Audrey Bürki[1]; [1]Methodology and data analysis & Psycholinguistic research group, Faculty of Psychology and Educational Sciences, University of Geneva, Switzerland*

Writing and Spelling

D71 The brain regions that translate phonology into orthography during oral spelling *Philipp Ludersdorfer[1], Suz Prejawa[1], Marion Oberhuber[1], Julie Guerin[1], Mohamed L. Seghier[2], Thomas M. Hope[1], Oiwi Parker Jones[3], David W. Green[4], Cathy J. Price[1]; [1]Wellcome Trust Centre for Neuroimaging, University College London, UK, [2]Cognitive Neuroimaging Unit, Emirates College for Advanced Education, Abu Dhabi, United Arab Emirates, [3]FMRIB (Oxford Centre for Functional MRI of the Brain), Oxford University, UK, [4]Experimental Psychology Research Department, Division of Psychology and Language Sciences, University College London, UK*

Poster Session E

Perception: Auditory

E1 Presentation rate is a constraint on neurobiological theories of sensitivity to regularity *Ben Davis[1], Giuseppe Notaro[1], Uri Hasson[1]; [1]University of Trento*

E2 The importance of white matter tract integrity in aging speech perception: moving beyond the auditory periphery. *Dan Kennedy-Higgins[1,3], Maxime Descoteaux[4], Isabelle Deschamps[1,2], Anthony S. Dick[5], Marie-Hélène Tessier[1], Pascale Tremblay[1,2]; [1]Centre de Recherche de l'Institut Universitaire en santé mentale de Québec, Québec, Canada, [2]Faculté de Médecine, Département de Réadaptation, Université Laval, Québec, Canada, [3]Department of Speech, Hearing and Phonetic Sciences, University College London, UK, [4]Sherbrooke Connectivity Imaging Lab, Faculté des Sciences, Université de Sherbrooke, Sherbrooke, Canada, [5]Department of Psychology, Florida International University, Miami, USA*

E3 Word-frequency and phoneme-frequency differentially modulate predictive processing of speech *Johanna Steinberg[1], Anna Marzecová[1], Mathias Scharinger[1,2]; [1]Leipzig University, Germany, [2]Max Planck Institute for Empirical Aesthetics, Frankfurt, Germany*

E4 Bilingual perception of language code-switching: Auditory event-related potentials for different exposure times to second language *Chikage Kameyama[1,2], Ryoya Saji[2]; [1]Tamagawa University, Engineering dept.□Tokyo, Japan., [2]Tamagawa University, Brain science Inst., Tokyo, Japan*

Perception: Speech Perception and Audiovisual Integration

E5 Orthographic influence on spoken word identification: Behavioral and fMRI evidence *Christine Chiarello[1], Kenneth I. Vaden[2], Mark A. Eckert[2]; [1]University of California, Riverside, [2]Medical University of South Carolina*

E6 In search of the kiki-bouba effect *Gwilym Lockwood[1], Linda Drijvers[2,3], Peter Hagoort[1,3], Mark Dingemanse[1]; [1]Max Planck Institute for Psycholinguistics, [2]Centre for Language Studies, Radboud University, [3]Donders Institute for Brain, Cognition, and Behaviour*

E7 Decoupling activity in auditory cortices caused by the detection of categorical phoneme changes *Faith Chiu[1], Jyrki Tuomainen[1]; [1]University College London, UK*

E8 Is a high tone sharp or smooth? Sound symbolism and the limits of 'perceptual tuning' to tone in language *Suzy J Styles[1], Nan Shang[1]; [1]Nanyang Technological University*

E9 Incremental processing of Chinese spoken words and the influence of different tonal contrasts on lexical competition effects: Evidence from eye movements *Chung-I Erica Su[1], Guan-Huei Li[1], Jie-Li Tsai[1]; [1]National Chengchi Univsersity, Taiwan*

Signed Language and Gesture

E10 The neural systems supporting phonological processing of British Sign Language (BSL): the effect of the age of BSL acquisition and phonological parameters *Tae Twomey[1], Dafydd Waters[1], Cathy Price[1], Mairéad MacSweeney[1]; [1]University College London*

Perception: Speech Perception and Audiovisual Integration

E11 Phonological specification of spectral change in Australian English front vowels *Daniel Williams[1], Kateřina Chládková[2]; [1]University of Potsdam, [2]University of Leipzig*

E12 Gestural enhancement of degraded speech comprehension engages the language network, motor and visual cortex as reflected by a decrease in the alpha and beta band *Linda Drijvers[1,2], Asli Ozyurek[1,3], Ole Jensen[2]; [1]Centre for Language Studies, Radboud University, Nijmegen, The Netherlands, [2]Donders Institute, Radboud University, Nijmegen, The Netherlands, [3]Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands*

Multilingualism

E13 Cross-language phonological activation through translation in Chinese-English bilinguals: Evidence from brain potentials and brain oscillations *Yun Wen[1], Ruth Filik[1], Walter J. B. van Heuven[1]; [1]School of Psychology, The University of Nottingham, United Kingdom*

E14 One brain, one language, two codes? The curious case of Norwegian *Viktoria Havas[1], Mila Vulchanova[1]; [1]Language Acquisition and Language Processing Lab, Norwegian University of Science and Technology, Trondheim, Norway*

E15 Won't get fooled again? Lie production and lie perception in native and non-native languages. *Lela Ivaz[1], Albert Costa[2,3], Jon Andoni Duñabeitia[1]; [1]BCBL, Basque Center on Cognition, Brain and Language; Donostia, Spain, [2]CBC, Center of Brain and Cognition, Universitat Pompeu Fabra, Barcelona, Spain, [3]ICREA, Institució Catalana de Recerca i Estudis Avançats, Barcelona, Spain*

E16 Age of language acquisition influences the cortical language organization in multilingual patients undergoing awake brain mapping *Viktoria Havas[1,2], Alejandro Fernandez-Coello[3], Montserral Juncadella[4], Antoni Rodríguez-Fornells[1,5], Andreu Gabarrós[3]; [1]Cognition and Brain Plasticity Group, Bellvitge Biomedical Research Institute [IDIBELL], [2]Language Acquisition and Language Processing Lab, Norwegian University of Science and Technology [NTNU], [3]Hospital Universitari de Bellvitge (HUB), Neurosurgery Section, Campus Bellvitge, University of Barcelona – IDIBELL, [4]Hospital Universitari de Bellvitge (HUB), Neurology Section, Campus Bellvitge, University of Barcelona – IDIBELL, [5]Catalan Institution for Research and Advanced Studies, ICREA*

E17 Mean Diffusivity reveals white matter microstructural differences between monolinguals and bilinguals *Nandini Singh[1], Archana Malagi[1], Archith Rajan[1], Keerthi Ramanujan[1], Matteo Canini[2], Pasquale Della Rosa[2], Partha Raghunathan[1], Brendan Weekes[3], Jubin Abutalebi[2]; [1]National Brain Research Centra, Manesar, INDIA, [2]2Centre of Cognitive Neuroscience, University Vita Salute San Raffaele, Milan, Italy, [3]3Division of Speech and Hearing Sciences, University of Hong Kong, Hong Kong*

Meaning: Lexical Semantics

E18 Task-related effects on visual word recognition. A MEG study. *Lorenzo Vignali[1], Philipp Ruhnau[2], Burkhard Maess[3], Stefan Hawelka[1], Nathan Weisz[1], Florian Hutzler[1]; [1]Centre for Cognitive Neuroscience, University of Salzburg, Salzburg, Austria, [2]Department of Neurology, Otto-von-Guericke-University Magdeburg, Magdeburg, Germany, [3]MEG and Cortical Networks, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany*

E19 The semantic representations of words reflect co-occurrence statistics and conceptual taxonomies in distinct brain regions. *Francesca Carota[1,4], Friedemann Pulvermuller[2], Hamed Nili[3], Nikolaus Kriegeskorte[4]; [1]Humboldt Universität, Berlin, [2]Freie Universität, Berlin, [3]University of Oxford, [4]MRC-CBU/Cambridge University*

E20 FMRI dissociations between subclasses of abstract nouns in left motor areas during passive reading *Felix R. Dreyer[1], Friedemann Pulvermüller[1,2]; [1]Brain Language Laboratory, Freie Universität Berlin, [2]Berlin School of Mind and Brain, Humboldt-Universität Berlin*

E21 Semantic hub or convergence zones? EEG/MEG evidence for the central role of the Anterior Temporal Lobe in semantic processing *S.Rezvan Farahibozorg[1,2], Anna Woollams[3], Elisa Cooper[1], Gemma Evans[3], Yuanyuan Chen[3], Karalyn Patterson[2], Olaf Hauk[1]; [1]MRC Cognition and Brain Sciences Unit, Cambridge, UK, [2]University of Cambridge, Cambridge, UK, [3]University of Manchester, Manchester, UK*

E22 Evidence for Inner Speech: Orthographic and Phonological Effects without Words N. Zur1, N. Binur1, Orna Peleg2 and Zohar Eviatar1 1 Institute of Information Processing and Decision Making, Haifa University 2 Program of Cognitive Studies of Language and Its Uses, Tel-Aviv University *Naama Zur[1], Nahal Binur[1], Orna Peleg[2], Zohar Eviatar[1]; [1]Institute of Information Processing and Decision Making, Haifa University, [2]Program of Cognitive Studies of Language and Its Uses, Tel-Aviv University*

E23 How Serious are Games? Electrophysiological evidence of rapid L2 learning *Ana Zappa[1,5], Keira O'Neil[2], Aaron Newman[2], Jean-Marie Pergandi[1,3,4], Daniel Mestre[1,3,4,6], Cheryl Frenck-Mestre[1,5,6]; [1]Aix-Marseille Université, [2]Dalhousie University, [3]Institute of Movement Sciences, [4]Meditteranean Virtual Reality Center, [5]Laboratoire Parole et Langage, [6]Centre National de Recherche Scientifique*

E24 Spoken words can make the invisible visible: Testing the involvement of low-level visual representations in spoken word processing *Markus Ostarek[1,2], Falk Huettig[1,3]; [1]Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands, [2]International Max Planck Research School of Language Sciences, [3]Donders Institute for Brain, Cognition, and Behavior, Radboud University, Nijmegen*

E25 The effect of word predictability and its relation to reading proficiency: A fixation-related fMRI study *Sarah Schuster[1,2], Florian Hutzler[1,2], Fabio Richlan[1,2], Martin Kronbichler[1,2,3], Stefan Hawelka[1,2]; [1]Centre for Cognitive Neuroscience, University of Salzburg, Hellbrunnerstr. 34, 5020 Salzburg, Austria, [2]Department of Psychology, University of Salzburg, Hellbrunnerstr. 34, 5020 Salzburg, Austria, [3]Neuroscience Institut, Christian-Doppler Klinik, Ignaz-Harrer-Str. 79, 5020 Salzburg, Austria*

E26 Lexical and semantic processing explored using visual Mismatch Negativity *Dawei Wei[1], Yijin Lin[1], Margaret Gillon Dowens[1]; [1]Cognitive Neuroscience of Language Laboratory, University of Nottingham Ningbo China*

Language Development

E27 Processing of phonemes and prosody throughout infancy: two peas in a pod? *Claudia Teickner[1,2], Angelika Becker[2], Claudia K. Friedrich[1,2]; [1]University of Tuebingen, [2]University of Hamburg*

E28 Beginning readers process more speech details than prereaders *Anne Bauch[1], Claudia Friedrich[1], Ulrike Schild[1]; [1]Eberhard Karls University of Tuebingen*

E29 Hemispheric lateralisation in school-aged children during picture naming. *Elizabeth Worster[1], Heather Payne[1], Mairéad MacSweeney[1]; [1]University College London*

E30 Rapid neural memory-trace formation for novel words is independent of attention but influenced by individual language experience and reading ability *Lilli Kimppa[1], Teija Kujala[1], Eino Partanen[1,2], Alina Leminen[1,2], Martti Vainio[3], Yury Shtyrov[2,4]; [1]Cognitive Brain Research Unit, Institute of Behavioural Sciences, University of Helsinki, Finland, [2]Center of Functionally Integrative Neuroscience, Institute for Clinical Medicine, Aarhus University, Denmark, [3]Phonetics and Speech Synthesis Research Group, Institute of Behavioural Sciences, University of Helsinki, Finland, [4]Centre for Cognition & Decision Making, NRU Higher School of Economics, Moscow, Russia*

E31 Early active acoustic experience with non-speech may confer a phonemic mapping advantage at 7- and 9-months-of-age. *Silvia Ortiz-Mantilla[1], Teresa Realpe-Bonilla[1], Cynthia P. Roesler[1], Naseem Choudhury[1,2], April A. Benasich[1]; [1]Center for Molecular and Behavioral Neuroscience, Rutgers University, Newark, NJ, [2]Ramapo College of New Jersey, Mahwah, NJ*

Grammar: Syntax

E32 What verbs can do: an ERP study on Basque *Simona Mancini[1], Stephanie Massol[1,2], Jon A. Duñabeitia[1], Manuel Carreiras[1], Nicola Molinaro[1]; [1]Basque Center on Cognition, Brain and Language, [2]University of Nîmes*

E33 Shared and distinct cognitive resources for syntax and prosody: a sentence comprehension study *Arianna N. LaCroix[1], Nicole Blumenstein[1], Chloe Houlihan[1], Corianne Rogalsky[1]; [1]Arizona State University*

E34 A neurocomputational mechanism for parsing: Finding hierarchical linguistic structure in a model of relational processing *Andrea E. Martin[1], Leonidas A. A. Doumas[1]; [1]School of Philosophy, Psychology and Language Sciences, University of Edinburgh*

E35 Granularity of Prediction for English Verb Complements *Victoria Sharpe[1], Samir Reddigari[1], Alec Marantz[1,2], Liina Pylkkänen[1,2]; [1]New York University, [2]New York University Abu Dhabi*

E36 The eyes have it: cross-method and cross-linguistic patterns *Phillip M. Alday[1], Franziska Kretzschmar[2], Svenja Lüll[2], Louise Kyriaki[1], Matthias Schlesewsky[1], Ina Bornkessel-Schlesewsky[1]; [1]University of South Australia, [2]Johannes-Gutenberg University Mainz*

E37 The P600 behaves like a P3: adding MVPA to the evidence from skin response, event-related desynchronization, response time alignment, and heart period *Jona Sassenhagen[1], Christian J. Fiebach[1]; [1]University of Frankfurt*

Language Disorders

E38 Acute cerebral perfusion does not predict long-term recovery from aphasia *Lorelei Phillip[1], Helga Thors[1], Grigori Yourganov[2], Christopher Rorden[1], Leonardo Bonilha[2], Sigridur Magnusdottir[3], Julius Fridriksson[1]; [1]University of South Carolina, Columbia, South Carolina, [2]Medical University of South Carolina, Charleston, South Carolina, [3]Landspitali - University Hospital, Reykjavik, Iceland*

E39 Rhythm processing deficits in the non-fluent variant of primary progressive aphasia *Rose Bruffaerts[1,2], Jolien Schaeverbeke[1,3], Manon Grube[4,5], Veerle Neyens[1], Bruno Bergmans[6], Eva Dries[2], Timothy Griffiths[4,7], Rik Vandenberghe[1,2,3]; [1]Laboratory for Cognitive Neurology, KU Leuven Department of Neurosciences, Belgium, [2]Neurology Department, University Hospitals Leuven, Leuven, Belgium, [3]Alzheimer Research Centre KU Leuven, Leuven research Institute for Neuroscience & Disease, University of Leuven, Belgium, [4]Institute of Neuroscience, Medical School, Newcastle University, Newcastle-upon-Tyne, UK, [5]Machine Learning Group, Berlin Institute of Technology, Berlin, Germany, [6]Neurology Department, AZ Sint-Jan Brugge-Oostende AV, Brugge, Belgium, [7]Wellcome Centre for Neuroimaging, UCL, London, UK*

E40 "quack" and duck : processing environmental sounds and auditory speech comprehension in aphasia. *Henry Coley-Fisher[1], Sonia Brownsett[1], Robert Leech[2], Fred Dick[3], Alex Leff[1], Jennifer Crinion[1]; [1]University College London, [2]Imperial College London, [3]Birkbeck University of London*

E41 Verbal and non-verbal auditory processing impairments in Primary Progressive Aphasia: an event-related potential investigation *Robert Hurley[1,2], Marsel Mesulam[1,2], Emily Rogalski[1], Okkes Kuybu[1]; [1]Cognitive Neurology & Alzheimer's Disease Center, [2]Department of Neurology*

E42 Progressive aphasias as disorders of auditory information processing: behavioural signatures and structural neuroanatomy *Chris Hardy[1], Charles Marshall[1], Camilla Clark[1], Lucy Russell[1], Emilie Brotherhood[1], David Thomas[1], Sebastian Crutch[1], Jonathan Rohrer[1], Jennifer Agustus[1], Jason Warren[1]; [1]University College London*

E43 Dyslexic brain activation abnormalities in deep and shallow orthographies: a meta-analysis of 28 functional neuroimaging studies *Fabio Richlan[1], Anna Martin[1,2], Martin Kronbichler[1,2]; [1]University of Salzburg, [2]Christian Doppler Clinic Salzburg*

E44 Can you play with fire and not hurt yourself? A comparative study in idiom comprehension between individuals with and without Autism Spectrum Disorder *Mila Vulchanova[1], Sobh Chahboun[1], Valentin Vulchanov[1], Hendrik Eshuis[1], David Saldaña[2]; [1]Language Acquisition and Language Processing Lab, NTNU, [2]Individual Differences, Language and Cognition Lab Department of Developmental and Educational Psychology University of Seville*

E45 Computer-based word reading training improves oral reading accuracy in patients with chronic central alexia *Zoe Woodhead[1], Sheila Kerry[1], Yean-Hoon Ong[1], Oscar Aguilar[1], Jenny Crinion[1], Alex Leff[1]; [1]University College London*

E46 Lesion and fMRI data reveal the contribution of right-hemisphere subcortical regions to auditory sentence comprehension *Andrea Gajardo-Vidal[1,2], Diego Lorca-Puls[1], Thomas M.H Hope[1], Oiwi Parker Jones[3], Marion Oberhuber[1], Mohamed L. Seghier[4], Alex P. Leff[5], David W. Green[6], Cathy J. Price[1]; [1]Wellcome Trust Centre for Neuroimaging, University College London, [2]Faculty of Health Sciences, Universidad Del Desarrollo, Chile, [3]FMRIB Centre, University of Oxford, [4]Cognitive Neuroimaging Unit, Emirates College for Advanced Education, Abu Dhabi, [5]Institute of Cognitive Neuroscience, University College London, [6]Experimental Psychology, University College London*

Meaning: Combinatorial Semantics

E48 Metaphor initiates semantic changes: Evidence from an fMRI study on Chinese verbs *Jiexin Gu[1,2], Shixiao Chen[1], Jinjun Wang[1], Yiming Yang[1,2]; [1]Jiangsu Normal University, [2]Language Ability Collaborative Innovation Center*

E49 Early Sensitivity to Argument Structure in the Left Inferior Parietal Lobe *Samir Reddigari[1], Liina Pylkkänen[1,2]; [1]New York University, [2]NYUAD Institute*

E50 Metaphors are concrete: Evidence from ERP *Vicky Tzuyin Lai[1], Olivia Howerton[1], Rutvik H. Desai[1]; [1]Department of Psychology, University of South Carolina*

Meaning: Discourse and Pragmatics

E51 To plan or to listen? The trade-off between comprehension and production in conversation. *Sara Bögels[1], Marisa Casillas[1], Stephen Levinson[1,2]; [1]Max Planck Institute for Psycholinguistics, Nijmegen, [2]Donders Institute for Brain, Cognition and Behaviour, Nijmegen*

E52 Mismatch Negativity Differences Reflect Community-based Conventionalization of Conceptual Metaphors in Taiwanese Mandarin *Paul Yu-Chun Chang[1], Chia-Lin Lee[2], Hans-Jörg Schmid[1]; [1]LMU Munich, [2]National Taiwan University*

E53 I spy with my little eye: ERP signatures of perspective taking in referential communication *Maria Richter[1], Lu Zhang[1], Choonkyu Lee[1], Barbara Höhle[1], Isabell Wartenburger[1]; [1]University of Potsdam*

Perception: Orthographic and Other Visual Processes

E54 The Label Feedback Effect: Speech Modulates Visual Search, but Language Isn't the Culprit *Katherine P Hebert[1], Stephen D Goldinger[1]; [1]Arizona State University*

E55 Investigating the role of linguistic and attentional processes in lexicality judgements in Alzheimer's disease *Nancy Azevedo[1,2], Ruth Ann Atchley[3], Eva Kehayia[1,2], Paul Atchley[3], N.P. Vasavan Nair[1,4]; [1]McGill University, [2]Centre for Interdisciplinary Research in Rehabilitation (CRIR)- Jewish Rehabilitation Hospital, [3]University of Kansas, [4]Douglas Mental Health University Institute*

E56 Hemispheric lateralization of early ERP components in deaf and hearing readers with low and high vocabulary size *Zed Sevcikova Sehyr[1], Karen Emmorey[1], Katherine Midgley[1], Phillip Holcomb[1]; [1]San Diego State University*

E57 Literacy acquisition drives hemispheric lateralization of reading *Frank Eisner[1], Uttam Kumar[2], Ramesh K. Mishra[3], Viveka Nand Tripathi[4], Anupam Guleria[2], Jay Prakash Singh[4], Falk Huettig[5]; [1]Radboud University, Netherlands, [2]Centre of Biomedical Research, India, [3]University of Hyderabad, India, [4]University of Allahabad, India, [5]Max Planck Institute for Psycholinguistics, Netherlands*

Phonology and Phonological Working Memory

E58 Do skilled deaf readers access phonological codes? *Noemi Fariña[1], Alejandro Pérez[1], Jon Andoni Duñabeitia[1], Manuel Carreiras[1,2,3]; [1]BCBL. Basque Center on Cognition, Brain and Language; Donostia, Spain, [2]Ikerbasque, Basque Foundation for Science; Bilbao, Spain, [3]University of the Basque Country EHU/UPV, Bilbao, Spain*

E59 Fiber pathways important for early literacy in young children *Iris Broce[1], Aaron Mattfeld[1], Byron Bernal[2], Nolan Altman[2], Catherine Bradley[3], Natalie Baez[1], Luis Cabrera[1], Gretter Hernandez[1], Anna Deferia[1], Anthony Steven Dick[1]; [1]Florida International University, [2]Nicklaus Children's Hospital, [3]James Haley Veterans' Hospital*

Signed Language and Gesture

E60 Why short term memory span for signs is lower than for speech? *Anna Petrova[1], Michele Miozzo[2], Simon Fischer-Baum[3], Francesca Peressotti[4]; [1]The University of Hong Kong, [2]Columbia University, [3]Rice University, [4]University of Padua*

Speech Motor Control and Sensorimotor Integration

E61 Neural mechanisms underlying auditory feedback processing during speech production *Matthias K. Franken[1,2], Frank Eisner[1], Daniel J. Acheson[1,2], James M. McQueen[1,2,3], Peter Hagoort[1,2], Jan-Mathijs Schoffelen[1]; [1]Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, The Netherlands, [2]Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands, [3]Behavioural Sciences Institute, Radboud University, Nijmegen, The Netherlands*

E62 Role of the motor system in perceptual categorization of ambiguous speech sounds *Yue Sun[1,2], Sharon Peperkamp[2]; [1]Max-Planck-Institute for Empirical Aesthetics, [2]Ecole Normale Superieure*

E63 Sex-related sensorimotor processing differences during speech discrimination tasks revealed in EEG mu rhythms *David Thornton[1], David Jenson[1], Ashley Harkrider[1], Tiffani Kittilstved[1], Tim Saltuklaroglu[1]; [1]University of Tennessee Health Science Center*

Control, Selection, and Executive Processes

E64 Interpreting Experience Enhances Early Attentional Processing, Conflict Monitoring and Interference Suppression *Yanping Dong[1], Fei Zhong[1], Yifei Ji[1]; [1]Bilingual Cognition and Development Lab, National Key Research Center for Linguistics and Applied Linguistics, Guangdong University of Foreign Studies, Guangzhou 510420, China*

E65 Effects of task demand and intelligibility on the cortical entrainment response *Lucas Baltzell[1], Virginia Richards[1], Ramesh Srinivasan[1]; [1]Department of Cognitive Sciences, University of California, Irvine*

E66 Control adjustments in speaking: Electrophysiology of the Gratton effect in picture naming *Natalia Shitova[1,2], Ardi Roelofs[1], Herbert Schriefers[1], Marcel Bastiaansen[3], Jan-Mathijs Schoffelen[1,4]; [1]Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, [2]International Max Planck Research School for Language Sciences, Max Planck Institute for Psycholinguistics, Nijmegen, [3]NHTV Breda University of Applied Science, [4]Max Planck Institute for Psycholinguistics, Nijmegen*

Meaning: Prosody, Social and Emotional Processes

E67 Neural mechanisms for the perception of voluntary and involuntary emotional vocalisations *Sinead H.Y. Chen[1], Saloni Krishnan[1,2], Cesar Lima[1,3], Samuel Evans[1], Stella Guldner[1], Ana Assis Gomes[1], Sophie Scott[1]; [1]University College London, [2]University of Oxford, [3]Faculty of Psychology and Education, University of Porto*

E68 What can ERPs and neural oscillations tell us about emotional vocal change detection? *Ana Pinheiro[1,2], Carla Barros[1], Sonja A. Kotz[3,4]; [1]School of Psychology, University of Minho, [2]Faculty of Psychology, University of Lisbon, [3]Max Planck Institute for Human Cognitive and Brain Sciences, [4]Faculty of Psychology and Neuroscience, Maastricht University*

Methods

E69 From sound to syntax: Novel task-free EEG paradigm for registering multiple levels of language processing in the brain *Christelle Gansonre[1], Andreas Højlund Nielsen[1,2], Alina Leminen[1,3], Morten Overgaard[4], Yury Shtyrov[1]; [1]Center of Functionally Integrative Neuroscience (CFIN), Aarhus University, [2]Dept. of Neurology, Aarhus University, [3]Cognitive Brain Research Unit, University of Helsinki, [4]Cognitive Neuroscience Research Unit, CFIN, Aarhus University*

E70 Investigation of Depth-Dependent BOLD During Language Processing *Daniel Sharoh[1], Tim van Mourik[1], Lauren J. Bains[1], Katrien Segaert[2], Kirsten Weber[3], Peter Hagoort[1,3], David G. Norris[1,4]; [1]Radboud University, Donders Institute for Brain, Cognition and Behaviour, [2]University of Birmingham, [3]Max Planck Institute for Psycholinguistics, [4]Erwin L. Hahn Institute for Magnetic Resonance Imaging*

Writing and Spelling

E71 Componential and holistic processing of novel visual-verbal associations *Connor Quinn[1,2], J. S. H. Taylor[3], Matthew H. Davis[1]; [1]MRC Cognition and Brain Sciences Unit, Cambridge, [2]University of Cambridge, [3]Royal Holloway, University of London*

Poster Session F

Perception: Auditory

F1 Musicians and non-musicians show distinct spatiotemporal network activity while listening *Saloni Krishnan[1], Samuel Evans[2], César Lima[2], Sinead Chen[2], Stella Guldner[2], Sophie Scott[2]; [1]Department of Experimental Psychology, University of Oxford, [2]Institute of Cognitive Neuroscience, University College London*

F2 The role of auditory cortex morphology in language aptitude *Sabrina Turker[1], Peter Schneider[2], Annemarie Seither-Preisler[1,3], Susanne Reiterer[4]; [1]Karl-Franzens University of Graz, Austria, [2]University Clinic Heidelberg, Germany, [3]BioTechMed, Graz, Austria, [4]University of Vienna, Austria*

Perception: Speech Perception and Audiovisual Integration

F3 Native language status of the listener modulates the neural integration of speech and gesture in clear and adverse listening conditions *Linda Drijvers[1,2], Asli Ozyurek[1,3]; [1]Centre for Language Studies, Radboud University, Nijmegen, The Netherlands, [2]Donders Institute, Radboud University, Nijmegen, The Netherlands, [3]Max Planck Institute for Psycholinguistics, Nijmegen, The NetherlandsMax Planck Institute for Psycholinguistics, Nijmegen, The Netherlands*

F4 Lip movements entrain the observers' low-frequency brain oscillations to facilitate speech intelligibility *Hyojin Park[1], Christoph Kayser[1], Gregor Thut[1], Joachim Gross[1]; [1]Institute of Neuroscience and Psychology, University of Glasgow, Glasgow, United Kingdom*

F5 Sensorimotor differences between stuttering and non-stuttering adults in speech and tone discrimination tasks observed in EEG mu rhythms *Ashley Harkrider[1], Tim Saltukaroglu[1], David Thornon[1], David Jenson[1], Tiffani Kittilstved[1], Andrew Bowers[2]; [1]University of Tennesee Health Sciences Center, Department of Audiology and Speech-Language Pathology, [2]University of Arkansas, Department of Communication Disorders*

F6 The role of the premotor cortex in multisensory speech perception throughout adulthood: a rTMS study *Avril Treille[1], Marc Sato[2], Jean-Luc Schwartz[1], Coriandre Vilain[1], Pascale Tremblay[3]; [1]GIPSA-lab, Department of Speech and Cognition, CNRS & Grenoble University, France, [2]Speech and Language Laboratory, CNRS & Aix-Marseille University, France, [3]Centre de recherche de l'institut en santé mentale de Québec, Département de réadaptation, Université Laval, Québec City, QC, Canada*

F7 Distributed Networks of Speech Production Regions Play a Context Determined Role in Speech Perception *Jeremy I Skipper[1], Joseph Devlin[1], Daniel R Lametti[1,2]; [1]University College London, [2]The University of Oxford*

F8 Speech rhythm measure of non-native speech using a statistical phonemic duration model *Sadao Hiroya[1], Kyle Jasmin[2], Samuel Evans[2], Saloni Krishnan[3], Cesar Lima[2], Marcus Ostarek[2], Dana Boebinger[4], Sophie K. Scott[2]; [1]NTT, [2]UCL, [3]Oxford, [4]Harvard*

Multilingualism

F9 Bilingualism impacts white-matter connectivity: evidence from DTI *Eleonora Rossi[1], Hu Cheng[2], Judith F. Kroll[3], Michele T. Diaz[3], Sharlene Newman[2]; [1]California State Polytechnic University, Pomona, [2]Indiana University, Bloomington, [3]Pennsylvania State University*

F10 Neural underpinnings of grammatical processing for less proficient L2 learners *Kyra Krass[1], Yanina Prystauka[1], Eleonora Rossi[2]; [1]University of Connecticut, [2]California State Polytechnic University, Pomona*

F11 While language-switching in the lab localizes in anterior cingulate cortex, comprehending code-switches in the wild begins in auditory cortex *Esti Blanco-Elorrieta[1], Liina Pylkkänen[1,2]; [1]New York University, [2]NYUAD Institute*

F12 Perception and production interactions in non-native speech category learning *Jana Krutwig[1], Makiko Sadakata[1,2], Eliana Garcia-Cossio[1], Peter Desain[1], James M. McQueen[1,3]; [1]Donders Institute, Centre for Cognition, Radboud University, Nijmegen, The Netherlands, [2]Institute for Logic, Language and Computation, University of Amsterdam, The Netherlands, [3]Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands*

F13 Unconscious translation from Japanese kanji to Chinese hanzi by Chinese-Japanese bilinguals: An ERP investigation *Yingyi Luo[1], Yunzhu Wang[2], Shota Momma[3], Hiromu Sakai[1]; [1]Waseda University, [2]Hiroshima University, [3]The University of Maryland*

F14 The effects of cross-linguistic phonologic and semantic overlap in masked priming paradigm: behavioral and ERP evidence *Nikolay Novitskiy[1], Myachykov Andriy[1,2], Shtyrov Yury[1,3]; [1]Center for Cognition and Decision Making, National Research University Higher School of Economics, Russian Federation, [2]Department of Psychology, Northumbria University, Newcastle upon Tyne, UK, [3]Center of Functionally Integrative Neuroscience, Department of Clinical Medicine, Aarhus University, Denmark*

F15 Improving foreign language pronunciation with VocalXplorer: an interactive phone application providing immediate and customized auditory feedback. *Anna J Simmonds[1], Laura Simmons[1], Richard J S Wise[1], Robert Leech[1]; [1]Imperial College London*

Meaning: Lexical Semantics

F16 Electrophysiological registration of body and mental action processing within the thalamus, subthalamic and pedunculopontine nucleus *Miet De Letter[1], Arnout Bruggeman[2], Kim De Keyser[3], Annelies Aerts[4], Pieter Van Mierlo[5], Gregor Strobbe[6], Paul Boon[7], Dirk Van Roost[8], Patrick Santens[9]; [1]Ghent University, [2]Ghent University, [3]Ghent University, [4]Ghent University, [5]Ghent University, [6]Ghent University, [7]Ghent University, [8]Ghent University, [9]Ghent University*

F17 Lexical specificity, imageability and emotional arousal modulate the N400 and the N700 *Frida Blomberg[1], Mikael Roll[1], Magnus Lindgren[1], Merle Horne[1]; [1]Lund University*

F18 EEG correlates of word frequency and contextual predictability during reading *Sara C. Sereno[1], Christopher J. Hand[2], Aisha Shahid[3], Hartmut Leuthold[4]; [1]Institute of Neuroscience and Psychology, University of Glasgow, [2]Department of Psychology, Social Work and Allied Health Sciences, Glasgow Caledonian University, [3]The Quality Assurance Agency for Higher Education, The Open University, [4]Department of Psychology, University of Tuebingen*

F19 Unitary vs. modality-specific semantic knowledge in object perception: On the neural correlates of perceiving pictures, spoken and written words *Friederike Seyfried[1], Mathias Hegele[1], Ina Bornkessel-Schlesewsky[2]; [1]Neuromotor Behavior Lab, Justus-Liebig University Giessen, [2]School of Psychology, Social Work and Social Policy, University of South Australia*

F20 Age-related changes in brain activity underlying word and gesture production *Lars Marstaller[1,2], Sam Fynes-Clinton[1], Hana Burianová[1,3], David Reutens[1,2]; [1]Centre for Advanced Imaging, The University of Queensland, Australia, [2]ARC Science of Learning Research Centre, [3]Department of Psychology, Swansea University, Swansea, UK*

Language Development

F21 Segmentation of words from song in 10-month-old infants *Tineke M. Snijders[1,2,3], Titia Benders[4], Paula Fikkert[2]; [1]Max Planck Institute for Psycholinguistics, Nijmegen, the Netherlands, [2]Centre for Language Studies, Radboud University, Nijmegen, the Netherlands, [3]Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, the Netherlands, [4]ARC Center of Excellence in Cognition and its Disorders, Macquarie University, North Ryde, Sydney, Australia*

F22 Phonological awareness and number-system knowledge in healthy school children: an fMRI study *Katie McMahon[1], Wendy Arnott[2], Jenny Ziviani[1], Kori Ramajoo[3], Rebecca Banney[1], Greig de Zubicaray[3]; [1]University of Queensland, Brisbane, Australia, [2]Hear and Say, Brisbane, Australia, [3]Queensland University of Technology (QUT), Brisbane, Australia*

F23 Language ability in children born preterm is predicted by arcuate fasciculi microstructure at term equivalent *Piergiorgio Salvan[1], J Donald Tournier[1], Dafnis Batalle[1], Shona Falconer[1], Andrew Chew[1], Nigel Kennea[2], Tomoki Arichi[1,3], A David Edwards[1,3], Serena J Counsell[1]; [1]Centre for the Developing Brain, King's College London, London, United Kingdom, [2]Neonatal unit, St. George's University Hospital NHS, London, United Kingdom, [3]Department of Bioengineering, Imperial College London, London, United Kingdom*

F24 Electrophysiological Evidence of Sublexical Phonological Access During Character Naming by Chinese-Speaking Children. *I-Fan Su[1], Wei Yan Renee Fung[1], Anna Petrova[1], Sam Po Law[1], Kai Yan Dustin Lau[2], Lai Ting Chan[1]; [1]The University of Hong Kong, [2]The Hong Kong Polytechnic University*

F25 Top-down Predictions in Statistical Learning Carried by Alpha Oscillations *Geoffrey Brookshire[1], Nicholas B. Turk-Browne[2,3], Daniel Casasanto[1,4]; [1]University of Chicago, [2]Princeton University, [3]Princeton Neuroscience Institute, [4]Grossman Institute for Neuroscience, Quantitative Biology and Human Behavior*

F26 Children born profoundly deaf show typical hemispheric asymmetries in cerebral blood flow during language production *Heather Payne[1,2], Eva Gutierrez-Sigut[1,2], Bencie Woll[2], Mairead MacSweeney[1,2]; [1]Instititute of Cognitive Neuroscience, UCL, [2]ESRC Deafness, Cognition & Language Research Centre, UCL*

Grammar: Syntax

F27 Neuro-computational modelling of lexico-syntactic representation and integration during speech comprehension *Hun Choi[1], Billi Randall[1], Barry Devereux[1], Lorraine Tyler[1]; [1]Department of Psychology, University of Cambridge*

F28 The interaction of syntactic structure and lexical constraints during sentence processing *Barry Devereux[1], Billi Randall[1], William Marslen-Wilson[1,2], Lorraine Tyler[1]; [1]Department of Psychology, University of Cambridge, [2]MRC Cognition and Brain Sciences Unit, Cambridge*

F29 An investigation of the relationship between the cognitive resources engaged by syntactic and acoustic complexity *Megan C. Fitzhugh[1], Peter Whitehead[1], Lisa Johnson[1], D. Caleb Price[1], Corianne Rogalsky[1]; [1]Arizona State University, Tempe, AZ*

F30 Dynamics of supramodal unification processes during sentence comprehension *Julia Udden[1,2], Annika Hulten[1,2], Jan-Mathijs Schoffelen[1,2], Nietzsche Lam[1,2], Gerard Kempen[1], Karl Magnus Petersson[1,2], Peter Hagoort[1,2]; [1]Max Planck Institute for Psycholinguistics, Nijmegen, the Netherlands, [2]Donders Institute for Brain, Cognition and Behaviour, Centre for Cognitive Neuroimaging, Radboud University Nijmegen, Netherlands*

F31 The relationship between language abilities and brain activity *Sarah Weber[1], Susanne Weis[1], Philip Kane[2], Markus Hausmann[1]; [1]Durham University, [2]South Tees Hospitals, NHS*

Language Disorders

F32 Language impairment profile across distinct clinical variants of amyloid positive early onset Alzheimer's disease *Miguel Angel Santos-Santos[1], Andreas Lazaris[1], Gautam Tammewar[1,2], Maya Henry[1], Isabel Hubbard[1], Zachary Miller[1], Maria Luisa Mandelli[1], William Jagust[2,6], Bruce Miller[1], Gil D. Rabinovici[1,2,6], Maria Luisa Gorno-Tempini[1]; [1]Memory and Ageing Center, University of California San Francisco, [2]Helen Wills Neuroscience Institute, University of California Berkeley, [3]Lawrence Berkeley National Laboratory University of California Berkeley*

F33 Classification of language impairments in acute aphasic patients *Dorothee Kuemmerer[1], Cornelius Weiller[1]; [1]Neurology, Faculty of Medicine, University of Freiburg, Germany*

F34 Behavioural predictors of functional communication in post-stroke aphasia *Brielle Stark[1], Sharon Geva[2], Elizabeth Warburton[1]; [1]University of Cambridge, [2]University College London*

F35 The effect of the lesion in Broca's area in naming: an MEG study *Jeong-Sug Kyong[1,2], June Sic Kim[2,4], Hyang-Jeong Lee[3], Chun Kee Chung[2,4]; [1]Medical Research Centre, College of Medicine, Seoul National University, Seoul, Korea, [2]Human Brain Function Lab., Dept. Neurosurgery, Seoul National University Hospital, Seoul, Korea, [3]Internship Research Program for Undergraduate Students, College of Medicine, Seoul, [4]Dept. Brain and Cognitive Sciences, College of Natural Science, Seoul National University, Seoul, Korea*

F36 Lower network efficiency in the speech production network in dyslexia: a resting-state fMRI graph-analysis *Mark van den Bunt[1], Ana Francisco[1], Margriet Groen[1], Atsuko Takashima[1], Rogier Mars[1], Ludo Verhoeven[1]; [1]Radboud University*

Language Genetics

F37 Effects of FOXP2 mutation: abnormal structure of the cerebellum associated with verbal and orofacial dyspraxia *Georgios P.D. Argyropoulos[1], Kate E. Watkins[2], Emma Belton-Pagnamenta[1], Frederique Liegeois[1], Mortimer Mishkin[3], Faraneh Vargha-Khadem[1,4]; [1]Cognitive Neuroscience and Neuropsychiatry Section, Institute of Child Health, University College London, London, UK, [2]Department of Experimental Psychology, University of Oxford, Oxford, UK, [3]Laboratory of Neuropsychology, National Institutes of Mental Health, Bethesda, Maryland, USA, [4]Great Ormond Street Hospital for Children National Health Foundation Trust, London, UK*

Language Therapy

F38 Changes in dynamic resting state network connectivity following aphasia therapy *E. Susan Duncan[1,2], Steven L. Small[1]; [1]University of California, Irvine, [2]Louisiana State University*

F39 Investigating microstructural changes of the ipsilateral SLF and ILF underlying speech therapy using advanced diffusion MRI techniques *Emilie McKinnon[1], G. Russell Glenn[1], Jens Jensen[1], Joseph Helpern[1], Leonardo Bonilha[1], Julius Fridriksson[2]; [1]Medical University of South Carolina, [2]University of South Carolina*

F40 Dementia Patients Demonstrate Reduced Anomia after Parietal tDCS Anodal Stimulation with Language Training *Carlos Roncero[1], Erik Service[1], Melanie Malus[1], Shelley Solomon[1], Alexander Thiel[1], Stefan Probst[2], Howard Chertkow[1]; [1]Lady Davis Institute, Jewish Gen. Hospital, McGill University, Montreal, Canada, [2]Dept. of Nuclear Medicine, Jewish General Hospital, Montreal, Canada*

F41 Design and Validation of a Novel Test to Measure Single Word Reading Speed and Accuracy for an Online Reading Therapy *Aikaterini Pappa[1], Alexander P. Leff[1], Zoe V.J. Woodhead[1]; [1]University College London*

F42 The development of an Auditory Comprehension of Speech Test that will be used in a clinical trial to establish the effectiveness of an auditory comprehension therapy application for patients with impaired speech comprehension caused by a stroke. *Maria Maegli[1], Sonia Brownsett[1], Victoria Fleming[1], Alex Leff[1]; [1]University College London*

F43 The role of dopamine in the comprehension of a simulated cochlear implant speech signal *Velia Cardin[1,2], Stuart Rosen[3], Kim Coulson[1], Daniel Lametti[4], Mark Edwards[4], Bencie Woll[1]; [1]Deafness, Cognition, and Language Research Centre, University College London, UK., [2]Psychology Department, University of East Anglia, Norwich, UK., [3]Speech, Hearing & Phonetic Sciences Department, University College London, UK., [4]Sobell Department of Motor Neuroscience and Movement Disorders, University College London, UK.*

F44 Donepezil improves speech output but not speech comprehension abilities in patients with Wernicke's aphasia. *Victoria Fleming[1], Zoe VJ Woodhead[1,2], Jenny Crinion[3], Sundeep Teki[4], William D Penny[2], Cathy J Price[2], Alex P Leff[1,2,3]; [1]1 Department of Brain Repair and Rehabilitation, University College London, National Hospital for Neurology & Neurosurgery, Queen Square, London, WC1N 3BG, UK, [2]2 Wellcome Trust Centre for Neuroimaging, University College London, 12 Queen Square, London, WC1N 3BG, UK, [3]3 Institute of Cognitive Neuroscience, University College London, 17 Queen Square, London, WC1N 3AR, UK, [4]4 Department of Physiology, Anatomy and Genetics, University of Oxford, South Parks Road, Oxford, OX1 3QX, UK*

Meaning: Combinatorial Semantics

F45 Concurrent emotional generation and language combination: An event related potential study *Lin Wang[1], Yang Cao[1], Yufang Yang[1]; [1]Key Laboratory of Behavioral Science, Institute of Psychology, Chinese Academy of Sciences, Beijing, China*

F46 Shared neural circuits subserve processing of reference frames in spatial navigation and language comprehension *Nikola Vukovic[1,2], Yury Shtyrov[1,2]; [1]Center of Functionally Integrative Neuroscience, Institute for Clinical Medicine, Aarhus University, Denmark, [2]Center for Cognition and Decision Making, Higher School of Economics, Moscow, Russia*

Meaning: Discourse and Pragmatics

F47 Predicting discourse topics: Evidence for the privileged role of the syntactic subject during the comprehension of naturalistic auditory stories using event-related potentials. *Ingmar Brilmayer[1], Katerina Kandylaki[2], Ina Bornkessel-Schlesewsky[3], Matthias Schlesewsky[3]; [1]Department of English and Linguistics, Johannes Gutenberg-University Mainz, Mainz, Germany, [2]Department of Bioengineering, Imperial College London, London, United Kingdom, [3]Cognitive Neuroscience Laboratory, School of Psychology, Social Work and Social Policy, University of South Australia, Adelaide, Australia*

F48 Narrative reading comprehension versus Narrative scene comprehension: An fMRI study *Mariam Sood[1], Martin Sereno[1,2]; [1]Department of Psychological Sciences, Birkbeck, University of London, [2]Experimental Psychology, Division of Psychology and Language Sciences, UCL, 26 Bedford Way,London, WC1H 0AP,*

Perception: Orthographic and Other Visual Processes

F49 Effect of word lengths' morphological family size (type frequency) when reading Arabic words in adults *Sharifa Alragam[1], Alexander P. Leff[1], Jennifer T. Crinion[1]; [1]University College London*

Phonology and Phonological Working Memory

F50 Place and height mismatch in vowels: evidence from an MMN study *Sandra Kotzor[1,2], Kai Alter[1,3], Beinan Zhou[1], Aditi Lahiri[1]; [1]University of Oxford, [2]Oxford Brookes University, [3]Newcastle University*

F51 MMN magnitude reveals asymmetries in phonological encoding: phoneme-specific representations for vowel length in Dutch *Kateřina Chládková[1], Daniel Williams[2]; [1]University of Leipzig, Germany, [2]University of Potsdam, Germany*

Signed Language and Gesture

F52 Cortical encoding of sensorimotor and linguistic features in American Sign Language *Matthew Leonard[1], Ben Lucas[1], Shane Blau[2], David Corina[2], Edward Chang[1]; [1]University of California, San Francisco, [2]University of California, Davis*

Speech Motor Control and Sensorimotor Integration

F53 Speech error analysis in isolated Apraxia of Speech may reveal subtypes: evidence from two stroke case studies *Claudia Cramer[1], Naianna Robertsson[1,2], Stephanie J. Forkel[1], Marco Catani[2]; [1]Natbrainlab, Centre for Neuroimaging Sciences, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK, [2]Natbrainlab, Department of Forensic and Neurodevelopmental Sciences and The Sackler Institute for Translational Neurodevelopment, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK*

F54 Exogenous and Endogenous Auditory Prediction in Speech *Douglas Shiller[1,2,3], Marc Sato[4,5]; [1]School of Speech-Language Pathology and Audiology, Université de Montréal, Canada, [2]CHU Sainte-Justine Research Centre, Montreal, Canada, [3]Centre for Research on Brain, Language and Music, Montreal, Canada, [4]Laboratoire Parole et Langage, Aix-Marseille Université & CNRS, France, [5]Brain and Language Research Institute, Aix-en-Provence, France*

F55 Speech comprehension and associated lip motor activity are modulated by suppression of premotor cortex *Helen Nuttall[1], Dan Kennedy-Higgins[1], Joseph T Devlin[1], Patti Adank[1]; [1]University College London (UCL), London, UK*

F56 Age-related differences in language production: The neural correlates of semantic inference, phonological facilitation, and target picture frequency *Michele Diaz[1], Avery Rizio[1]; [1]The Pennsylvania State University*

F57 Disrupting the speech motor mechanism: exploring left hemisphere specialisation for verbal and manual sequencing using a dual task approach *Jessica C. Hodgson[1], John M. Hudson[1]; [1]University of Lincoln, UK*

F58 Shared Neural Correlates of Spoken and Written Communication *Marc Sato[1], Marieke Longcamp[2], Jean-Michel Hupé[3], Nathalie Vayssière[3], Mathieu Ruiz[3]; [1]Laboratoire Parole et Langage, Aix-Marseille Université & CNRS, Aix-Marseille France, [2]Laboratoire de Neurosciences Cognitives, Aix-Marseille Université & CNRS, Marseille, France, [3]Centre de Recherche Cerveau et Cognition, Université de Toulouse & CNRS, Toulouse, France*

History of the Neurobiology of Language

F59 Evolutionary origins of non-adjacent rule processing in primate brain potentials *Alice Milne[1], Jutta Mueller[2,3], Adam Attaheri[1], Claudia Männel[2], Angela Friederici[2], Chris Petkov[1]; [1]Newcastle University, [2]Max Planck Institute for Human Cognitive and Brain Sciences, [3]University of Osnabrück*

F60 Heinrich Sachs on the neurobiology of language *Stephanie Forkel[1], Filip Marcinowski[2], Anne Fritz[3], Henrietta Howells[3], Marco Catani[3]; [1]Natbrainlab, Department of Neuroimaging, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK, [2]Department and Psychiatric Clinic of the Warsaw Medical University, Poland, [3]Natbrainlab, Department of Forensic and Neurodevelopmental Sciences, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK*

Animal Communication

F61 Hyperscaling of frontal white matter in the human brain may be linked to the emergence of language *Rachel Barrett[1], Flavio Dell'Acqua[1], Tim Dyrby[2], Kristine Krug[3], Marco Catani[1]; [1]King's College London, [2]Copenhagen University Hospital Hvidovre, [3]University of Oxford*

Meaning: Prosody, Social and Emotional Processes

F62 Understanding Communicative Intentions via Prosody – Neural Bases and Networks *Nele Hellbernd[1], Daniela Sammler[1]; [1]Otto Hahn Group "Neural Bases of Intonation in Speech", Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig*

F63 Neural Correlates of Linguistic Prosody Discrimination in Children *Jennifer Vannest[1], Thomas Maloney[1]; [1]Cincinnati Children's Hospital Medical Center*

F64 Comprehension of Sentential Prosody in Brain Lesioned Cases: A Test of Two Hypotheses *Venu Balasuramanian[1,2], Maureen Costello-Yacano[1], Maha Aldera[1], Judith Koebler[1]; [1]Seton Hall University, [2]Communication Neuroscience Aphasia Research Laboratory*

Methods

F65 Parallel Processing in a Language Task: Estimates from Intracerebral Single Trial Data *Anne-Sophie Dubarry[1,2,3], Anais Llorens[1,2,3], Agnes Trébuchon-Da Fonseca[1,3,4], Romain Carron[5], Catherine Liégeois-Chauvel[1,3], Christian Bénar[1,3], F.-Xavier Alario[2]; [1]Aix-Marseille Université, Faculté de Médecine La Timone, 13005, Marseille, France, [2]Aix-Marseille Université, CNRS, LPC UMR 7290, 13331, Marseille, France, [3]INSERM, UMR1106, Institut de Neurosciences des Systèmes, 13005, Marseille, France, [4]APHM, Hôpital de la Timone, Service de Neurophysiologie Clinique, 13385, Marseille, France, [5]APHM, Hôpital de la Timone, Service de Neurochirurgie Fonctionnelle, 13385, Marseille, France*

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