



Science of Aphasia

20th International Science of Aphasia Conference

The temporal lobe revisited: Neural and Functional updates

Rome, September 23-26, 2019

ACADEMIA NAZIONALE DEI LINCEI
VILLA FARNESENA - PALAZZINA DELL'AUDITORIO

Hosted by
Gabriele Miceli
CIMeC - Università di Trento



UNIVERSITÀ DEGLI STUDI
DI TRENTO

CIMeC - Center for Mind/Brain Sciences





Science of Aphasia

Scientific committee

Roelien Bastiaanse

(Chair, University of Groningen)

Wendy Best

(University College, London)

Ria de Bleser

(Honorary member)

David Howard

(Newcastle University)

Roel Jonkers

(University of Groningen)

Gabriele Miceli

(Università di Trento)

Lyndsey Nickels

(Macquarie University, Sydney)

Carlo Semenza

(Università di Padova)

PREFACE

Dear participants,

We are very pleased to welcome you to the 20th International Science of Aphasia (SoA) conference. The Conference will be held from September 23 till September 26, 2019 in Rome. The program theme of the 20th International Science of Aphasia conference is:

The Temporal Lobe Revisited.

Current neuroimaging, neurophysiological and behavioral investigations provide increasingly detailed insights into the functional neuroanatomy of the left temporal lobe.

Studies in cognitively intact and in brain-damaged populations converge in considering the left temporal lobe as critical for the recognition and processing of speech sounds; for the recognition, comprehension and retrieval of spoken and written nouns and verbs; for sentence comprehension; and for verbal memory skills.

The role of the left temporal lobe in the neural networks involved in language and language-related tasks will be discussed by cognitive neuroscientists from the perspective of neuroanatomy, neurology, neuropsychology, neuroimaging and neurolinguistics.

We look forward to a stimulating and pleasant conference!

The organizing committee of SoA2018

PROGRAMME

Monday 23rd September 2019

08.15 – 09.00 Registration

09.00 – 12.00 "Anatomical and functional overview"

Chair and Discussant: **R. Bastiaanse**

All paths lead to Broca's area - **M. Catani**

How the temporal lobe speaks to the frontal lobe - **D. Poeppel**

12.00 – 13.00 Break

13.00 – 15.00 ORAL PRESENTATIONS 1 - Chair: **A. Rofes**

13.00 – 13.15 The functional neuroanatomy of the left temporal lobe white matter – an interdisciplinary approach based on intraoperative and comparative studies.

J. Sierpowska, K. L. Bryant, M. Römkens, M. Mangnus, N. Janssen, R. Kessels, A. Roelofs, R. Mars & V. Piai

13.15 – 13.30 The Role of Arcuate Fasciculus on Severity of Language Impairments in Subcortical Stroke Patients.

J. S. Noh, S. Lee, Y. Na, M. Cho, Y.-M. Hwang, W.-S. Tae & S.-B. Pyun

13.30 – 13.45 White-matter bottleneck in small vessel disease: A lesion-symptom mapping study of executive-language functions.

I. Camerino, J. Sierpowska, N. Meyer, A. Tuladhar, R. Kessels, F. E. de Leeuw & V. Piai

13.45 – 14.00 Forests in the trees: Using conditional inference random forests on MEG data to explore 'what fires together' in a picture naming task.

E. Asp, A. Tremblay, G. Flick & A. Newman

14.00 – 14.15 What are the active ingredients in anomia therapy? A random forest analysis of anomia research from 2009–2018.

W. Ping Sze, J. Warren, S. Hameau & W. Best

14.15 – 14.30 Neural substrates associated with the recovery of verb anomia: the role of sensorimotor strategies in the improvement of naming abilities in aphasia.

E. Durand, P. Berroir & A. I. Ansaldi

14.30 – 14.45 Lexical Frequency, Lexical Semantics in interaction with Cognitive Reserve in healthy older adults.

S. Montemurro, G. Jarema & S. Mondini

14.45 – 15.30 Break

15.30 – 16.15 FLASH PRESENTATIONS POSTER SESSION 1 - Chair: D. De Kok

- 15.30 – 15.33** Inflecting regular and irregular verbs: neuroimaging and behavioural data from the three Italian conjugations.
M. De Martino, A. Mancuso, A. G. Russo, A. Elia, F. Di Salle, R. Saponiero, S. Vietri, F. Esposito & A. Laudanna
- 15.33 – 15.36** Confrontation-naming and connected speech production in early post-stroke aphasia.
J. Boucher, K. Marcotte, A. Brisebois, M. Désilets-Barnabé, A. Osa García, E. Rochon, C. Leonard, A. Desautels & S. Brambati
- 15.36 – 15.39** Investigating the potential of structural priming as a form of constraint-induced language therapy in post-stroke aphasia.
M. Garzon, F. Biddau, G. Arcara, F. Meneghelli, D. D'Imperio & G. Bencini
- 15.39 – 15.42** Adaptation of the Bilingual Aphasia Test to Lebanese Arabic.
N. Ezzeddine & B. Köpke
- 15.45 – 15.48** The Experiences of Aphasia Caregivers In Turkey.
H. Aslantürk, N. Tiryaki & B. Toğram
- 15.48 – 15.51** Public Awareness of Aphasia in Turkey.
B. Toğram
- 15.51 – 15.54** The subject-object-verb word order as a self-cueing strategy in aphasia: An exploratory study.
S. Malyutina, Y. Akinina & V. Zelenkova
- 15.54 – 15.57** Differences in semantic priming during lifespan and in aphasia.
G. Krethlow, G. Python & M. Laganaro
- 15.57 – 16.00** Speech and language therapy for acquired dysgraphia in neurological patients: a systematic review.
S. Nordio, C. Brisotto & F. Biddau
- 16.00 – 16.03** Neurofunctional correlates of auditory and visual sentence comprehension: Evidence from aphasia.
S. Beber, R. Capasso & G. Miceli
- 16.03 – 16.06** Characterising the Nature of Discourse Treatment in Aphasia Rehabilitation Research.
L. Dipper, M. Cruice, J. Marshall, N. Botting, M. Boyle, D. Hersh & M. Pritchard
- 16.06 – 16.09** In Time with the Beat: Entrainment in Patients with Phonological Impairment, Apraxia of speech and Parkinson's disease.
I. Aichert, K. Lehner, S. Falk, M. Späth, M. Franke & W. Ziegler
- 16.09 – 16.12** Impairment of switching attention in patients with fluent aphasia and temporal lobe damage.
S. Kuptsova, A. Ulicheva, O. Dragoy & M. Ivanova
- 16.12 – 16.15** Age-related differences in auditory semantic priming: the development of normative electrophysiological data

in the Dutch population.

E. M. Cocquyt, P. Santens, P. Van Mierlo, W. Duyck,
A. Szmalec & M. De Letter

16.15 – 17.00 **POSTER SESSION 1**

Tuesday 24th September 2019

09.00 – 12.00 “Auditory and music perception”

Chair and Discussant: **L. Nickels**

Singing in the brain revisited - **I. Peretz**

“People hearing without listening”:

The case of pure word deafness - **G. Miceli**

12.00 – 13.00 *Break*

13.00 – 14.15 **ORAL PRESENTATIONS 2** - Chair: **V. Fyndanis**

13.00 – 13.15 ‘A moderate global aphasia’: the pattern of language deficits in acute post-surgical tumor patients.

O. Dragoy, E. Stupina, A. Zyryanov, M. Chernova, E. Gordeyeva, N. Gronskaya, G. Gunenko, S. Chernov, D. Kopachev, I. Medyanik, N. Pedyash, I. Pronin, A. Sitnikov, K. Yashin, A. Zuev

13.15 – 13.30 Right-hemisphere density reduction in acute post-stroke aphasia.

K. Marcotte, A. Osa, J. Boucher, B. Houzé, C. Bedetti, A. Brisebois, A. Desautels & S. M. Brambati

13.30 – 13.45 Validation of the Aphasia Rapid Test in the Russian-speaking post-stroke population.

O. Buivolova, O. Vinter, R. Bastiaanse & O. Dragoy

13.45 – 14.00 Psychometric Properties of the Token Test App.

Y. Akinina, O. Buivolova, O. Soloukhina & R. Bastiaanse

14.00 – 14.15 Coupling language and executive functions for premanifest and early Huntington’s Disease follow up.

C. Jacquemot, C. Schramm, L. Lemoine, K. Youssouf & AC. Bachoud-Lévi

14.15 – 14.45 *Break*

14.45 – 15.30 **FLASH PRESENTATIONS POSTER SESSION 2** - Chair: **D. De Kok**

14.45 – 14.48 The role of the white matter pathways in spontaneous speech in aphasia.

S. Averina, O. Dragoy & R. Bastiaanse

- 14.48 – 14.51** Musical and linguistic syntactic processing in agrammatic aphasia: An ERP study.
B. Chiappetta, M. Walenski, E. Barbieri, A. Patel & C. Thompson
- 14.51 – 14.54** Brain metabolic correlates of errors on picture naming in Alzheimer's Disease.
C. Rosazza, M. Gazzotti, P. Urso, V. Impagnatiello, C. Crivellaro & V. Isella
- 14.54 – 14.57** When Trade-Offs in NeuroCognitive Resources Determine Word Production Efficiency in Aging.
Y. Joanette & I. Methqal
- 14.57 – 15.00** Written Language in Mandarin-dominant Older Adults with Hearing Loss.
L. Low, S. Rickard Liow, M. Yap, T. Siok Keng & R. Heywood
- 15.00 – 15.03** Determining the ideal length of spontaneous speech fragments for predictive analysis.
R. Ossewaarde, R. Jonkers & R. Bastiaanse
- 15.03 – 15.06** Short Term Memory and sentence processing in deep dysphasia.
X. Ansorena, M. Hernández, M. Carreiras, J. I. Quemada & S. Mancini
- 15.06 – 15.09** Language abilities in Aicardi Syndrome: A case study.
S. Georgiadou, S. Stavrakaki & V. Kimiskidis
- 15.09 – 15.12** Which word planning processes require attention? Evidence from dual-task interference in aphasia.
C. Demierre, G. Python, B. Glize & M. Laganaro
- 15.12 – 15.15** Contribution of acoustic analysis in the differential diagnosis of apraxia of speech.
M. Bourqui, M. Pernon, C. Fougeron & M. Laganaro
- 15.15 – 15.18** The investigation of paraphasias in speakers with fluent and non-fluent aphasia.
M. Vuković & I. Vuković
- 15.18 – 15.21** Positive effects of a treatment based on temporal information processing on language and non-language cognitive functions in individuals with aphasia: a pilot study.
M. Choiński, E. Szeląg, A. Bombińska & A. Szymaszek
- 15.21 – 15.24** The production of French consonant sequences in typically developing children and in people with aphasia
F. Chiu & T. Prince
- 15.24 – 15.27** Grammatical-gender effects in noun-noun compound production: Evidence from aphasia.
A. Lorenz, D. Pino, J. D. Jescheniak, F. Regenbrecht & H. Obrig
- 15.27 – 15.30** Investigating the Neural Correlates of Argument Structure Processing.
E. Delikishkina, A. Lingnau & **G. Miceli**

15.30 – 16.30 **POSTER SESSION 2**

Wednesday 25th September 2019

09.00 – 12.00 "Semantic representations"

Chair and Discussant: **W. Best**

Exploring abstract and concrete words in the brain - **C. Papagno**

Concepts, categories, and connectivity - **A. Martin**

12.00 – 13.00 Break

13.00 – 15.00 ORAL PRESENTATIONS 3 - Chair: **V. De Aguiar**

13.00 – 13.15 Impaired verb-related morphosyntactic production in Multiple Sclerosis: Evidence from Greek.

V. Fyndanis, L. Messinis, G. Nasios, E. Dardiotis, M. Martzoukou, M. Pitopoulou, K. Ntoskou & S. Malefaki

13.15 – 13.30 Semantic hyper-interference and hyper-facilitation in aphasia: Evidence for activation-based models.

R. Nappo, C. Romani, I. Bureca, & G. Galati

13.30 – 13.45 The influence of verbal short-term memory capacity on microlinguistic measures of word and utterance level content in discourse.

J. Obermeyer & N. Martin

13.45 – 14.00 Application of the Nonverbal Semantics Test (NVST) to persons with aphasia after stroke and persons with dementia.

K. Hogrefe, W. Ziegler, R. Glindemann, M. Klonowski, E. Wagner-Sonntag, G. Klingenberg, J. Diehl-Schmid, C. Roßmeier, A. Danek, J. Levin, C. Prix, S. Loosli, E. Wlasich & G. Goldenberg

14.00 – 14.15 Treatment of adjectives in aphasia: Two case-studies.

K. Renvall & L. Nickels

14.15 – 14.30 Investigating over-generalisation following word-retrieval treatment in Semantic Dementia.

L. Nickels, S. Savage, L. Lampe, O. Piguet & J. Hodges

14.30 – 14.45 Strategy, cognition, and communication partners: Maximizing treatment impact in progressive aphasia and Alzheimer's disease.

A. Whitworth, A. Beales, J. Cartwright, P. Panegyres & R. Kane

14.45 – 15.00 Effect of Type of Language Therapy on Language Improvement in Patients with Post-Stroke Aphasia.

J. Vuksanović, T. Milovanović, L. Konstantinović & S. R. Filipović

15.00 – 15.30 Break

15.30 – 16.15 FLASH PRESENTATIONS POSTER SESSION 3 - Chair: **S. Martinez Ferreiro**

15.30 – 15.33 Communicating and fixing communication breakdowns with people

- with aphasia: Speech-language therapists' (SLTs) and caregivers' perspectives.
Ö. Oğuz
- 15.33 – 15.36** Verbal and nonverbal fluency in presymptomatic carriers of the Huntington's disease gene.
J. Kobal & S. Šešok, N. Bolle
- 15.36 – 15.39** Exploring Phonological Deficits in French speakers with Acute stroke Aphasia: A Preliminary Study.
T. Prince
- 15.39 – 15.42** Neural tracking of semantics in natural speech.
J. Kries, M. Gillis, J. Vanthornhout, T. Francart & M. Vandermosten
- 15.42 – 15.45** Neuronavigated 1 Hz repetitive Transcranial Magnetic Stimulation (rTMS) in Chronic post-Stroke Aphasia.
M. Kambaranos & N. Karpathiou
- 15.45 – 15.48** Linking production and comprehension – Investigating the lexical interface.
A. Garg, V. Piai, A. Takashima, J. M. McQueen & A. Roelofs
- 15.48 – 15.51** The Effect of tDCS on Syntactic Processing in Aphasia.
D. Eroğlu Uzun, S. Şener & B. Metin
- 15.51 – 15.54** Linguistic parameters in an app-based assessment of German verbs and nouns in aphasia.
D. De Kok, S. Hanekamp & R. Bastiaanse
- 15.54 – 15.57** Understanding language recovery in stroke patients by including neuroanatomical and behavioural measures of learning potential.
M. Vandermosten, K. Schevenels, I. Zink & B. De Smedt
- 15.57 – 16.00** Assessing verb selection using MEG. A precise methodology for language presurgical mapping.
E. Salillas, D. D'Avella, G. Arcara, F. Piccione, S. Zago, S. Di Tomasso & C. Semenza
- 16.00 – 16.03** Investigating regular and irregular morphology in Parkinson's and Alzheimer's disease: evidence from Slovenian.
G. Roumpea, M. Blesić, D. Georgiev & C. Manouilidou
- 16.03 – 16.06** Semantic memory tasks for neurogenic disorders: Data on healthy elderly adults, Alzheimer's disease and stroke aphasia.
I. Luotonen, K. Renvall & P. Korpilahti
- 16.06 – 16.09** Frontotemporal dementia: a comparative case study of Greek-speaking individuals with the non-fluent and semantic variants of primary progressive aphasia.
N. Karpathiou & M. Kambaranos
- 16.09 – 16.12** The role of the uncinate fasciculus and inferior longitudinal fasciculus in healthy and disordered language production.
N. Janssen, M. Mangnus, A. Roelofs, J. Sierpowska, R. Kessels, V. Piai

16.15 – 17.00 POSTER SESSION 3

Presenters are indicated in boldface

Thursday 26th September 2019

09.00 – 12.00 "Language in the temporal lobe: Evolution, loss & recovery"

Chair and Discussant: **D. Howard**

Visual words in the temporal cortex - **L. Cohen**

The role of temporal lobe tissue in syntactic processing: Neurotypical and treatment-induced aphasia recovery - **C. K. Thompson**

12.00 – 13.00 Break

13.00 – 13.45 FLASH PRESENTATIONS POSTER SESSION 4 - Chair: **S. Martinez Ferreiro**

13.00 – 13.03 Effect of Type of Language Therapy on Fluency in Patients with Post-Stroke Aphasia.

S. Filipović, J. Vuksanović, T. Milovanović & L. Konstantinović

13.03 – 13.06 Effects of language therapies on receptive language recovery in post-stroke aphasia patients.

T. Milovanović, J. Vuksanović, L. Konstantinović & S. R. Filipović

13.06 – 13.09 RELEASE-ing the potential of a large, international, systematic review-based Individual Participant Data (IPD) aphasia after stroke database for meta- and network meta-analysis.

M. Brady, M. Ali et al.

13.09 – 13.12 Effects of orthographic depth on functional connectivity within reading pathways in proficient bilinguals.

M. J. Tainturier, P. Sorvisto & P. Mullins

13.12 – 13.15 Treating lexical retrieval using letter fluency in primary progressive aphasia – a single case study.

V. De Aguiar, A. Rofes, B. Ficek, K. Webster, H. Wendt & K. Tsapkini

13.15 – 13.18 Who does what to whom: the role of the I-IPS in the comprehension of reversible and irreversible sentences.

L. Vercesi, P. Sabnis, C. Finocchiaro, L. Cattaneo, E. Tonolli & G. Miceli

13.18 – 13.21 Using multi-word utterances more flexibly in non-fluent aphasia: Findings from a case series investigation.

C. Bruns, V. Zimmerer, C. Bruce, R. Varley & S. Beeke

13.21 – 13.24 Prosody perception by Slovene speaking individuals diagnosed with Parkinson's Disease.

M. Blesić, D. Georgiev & Ch. Manouilidou

13.24 – 13.27 Repeated item exposure effects in a verbal short-term memory treatment.

J. Schlesinger, J. Obermeyer & N. Martin

13.27 – 13.30 Do you prefer playing "with fire" or "with the flame"? Idiom comprehension in individuals with mild aphasic symptoms.

M. Sandmann, S. Weiss & H. Müller

- 13.30 – 13.33** Morpheme processing in the ventral temporal lobe: An MEG study of Japanese verbs.
S. Ohta, Y. Oseki & A. Marantz
- 13.33 – 13.36** Cortical and subcortical involvement during Object and Action Naming in healthy participants under nTMS.
A. K. Ohlerth, R. Bastiaanse, C. Negwer, N. Sollmann, S. Schramm, A. Schröder & S. M. Krieg
- 13.36 – 13.39** Spontaneous Speech Analysis in Spanish-Speaking Adults: Normative data in healthy adults, elderly adults and patients with brain lesions
S. Martínez-Ferreiro, C. Méndez-Orellana, C. Holme, K. Sandoval-León, B. Cortés-Rivera & P. Méndez-Orellana

13.45 – 14.30 **POSTER SESSION 4**

INVITED FACULTY

Marco Catani

David Poepel

Isabelle Peretz

Gabriele Miceli

Alex Martin

Costanza Papagno

Laurent Cohen

Cynthia K. Thompson

NatBrainLab, King's College, London, UK

New York University, New York; Max-Planck-Institut für empirische Ästhetik, Frankfurt

University of Montréal, Canada

CIMeC, University of Trento, and Centro Interdisciplinare Linceo, Rome

Section on Cognitive Neuropsychology, Laboratory of Brain and Cognition, National Institutes of Mental Health, Bethesda, USA

University of Trento, and University of Milan - Bicocca, Italy

ICM, Pitié Salpêtrière hospital and University of Paris, France

Department of Communication Sciences and Disorders, Northwestern University, Chicago, USA

GENERAL INFORMATION

REGISTRATION FEES

Rates include VAT

EARLY REGISTRATION - Within June 28th, 2019

Senior Researcher: Euro 450,00

Student: Euro 250,00

LATE REGISTRATION - After June 29th, 2019

Senior Researcher: Euro 500,00

Student: Euro 280,00

The registration fee includes

- Access to scientific sessions
- Congress kit
- Certificate of attendance

TERMS OF PAYMENT & REGISTRATION TOOL

Credit card / Paypal payment on www.balestracongressi.com, link available next to the Congress poster.

Registration form must be completed **online**

(available on www.balestracongressi.com).

CONGRESS VENUE

Accademia dei Lincei - Auditorio Villa Farnesina, Via della Lungara 230 - 00165 Rome

SOCIAL EVENT

Visit of Villa Farnesina and tour of Trastevere + social dinner € 45,00

The visit and the tour will take place on Tuesday 24 September starting at 17.30 from the Congress Venue.

The dinner will be held at the Accademia dei Lincei (via della Lungara, 10).

It is possible to book dinner on www.balestracongressi.com until September 15th 2019.

Organizing Secretariat & C.M.E. Provider



Piazza Roberto Malatesta, 16 - 00176 Rome

Phone +39 06 5743634

Mobile +39 3398319858

aphasiarome@balestracongressi.com

