

# Newsletter

**FEBRUARY 2023** 



Left Frontal White Matter Links to Rhythm Processing Relevant to Speech Production in Apraxia of Speech Rose Bruffaerts, Jolien Schaeverbeke, Ahmed Radwan, Manon Grube, Silvy Gabel, An-Sofie De Weer, Eva Dries, Karen Van Bouwel, Timothy D. Griffiths, Stefan Sunaert, Rik Vandenberghe

Neurobiology of Language (2022) 3 (4): 515–537.

The relationship between individual abilities at speaking and listening remains controversial and is particularly important when communicating with people who have brain injuries or



diseases that impair speech production. Patients with the non-fluent variant (NFV) of primary progressive aphasia often exhibit apraxia of speech, a motor speech disorder which causes their speech to become effortful and slow. Typically, their speech rhythm is abnormal, reflected by pauses between words and syllables combined with vowel lengthening. If these patients' speech has rhythmic abnormalities, what does this mean for their overall ability to process rhythmic information? Here we investigated whether rhythmic abnormalities during speech production were linked to abnormalities in perceptual rhythmic abilities. Perceptual rhythmic abilities were measured by testing whether patients could detect subtle rhythmic changes in meaningless acoustic stimuli. In our Dutch-speaking cohort, we observed a similar pattern of speech rhythm abnormalities in NFV as was previously documented in English and German. Interestingly, the patients who produced abnormal speech rhythms were also worse at discriminating acoustic rhythmic patterns. Worse perceptual rhythmic abilities correlated with white matter changes in the left frontal Aslant tract, which was previously linked to fluent speech production. Taken together, our findings suggest that the left frontal lobe is involved in the processing of rhythm and that a shared neural mechanism may exist to process the timing of perceptual input and speech output.

You can read the paper here:

https://direct.mit.edu/nol/article/3/4/515/112115/Left-Frontal-White-Matter-Links-to-Rhythm

Other papers in this issue of Neurobiology of Language as follows:

## Hierarchy, Not Lexical Regularity, Modulates Low-Frequency Neural Synchrony During Language Comprehension

Chia-Wen Lo, Tzu-Yun Tung, Alan Hezao Ke, Jonathan R. Brennan Neurobiology of Language (2022) 3 (4): 538–555.

## Can You Hear What's Coming? Failure to Replicate ERP Evidence for Phonological Prediction

Victoria R. Poulton, Mante S. Nieuwland Neurobiology of Language (2022) 3 (4): 556–574.

Event-Related Potential Correlates of Learning to Produce Novel Foreign Phonemes Henry Railo, Anni Varjonen, Minna Lehtonen, Pilleriin Sikka Neurobiology of Language (2022) 3 (4): 599–614.

The Musical Abilities, Pleiotropy, Language, and Environment (MAPLE) Framework for Understanding Musicality-Language Links Across the Lifespan

Srishti Nayak, Peyton L. Coleman, Enikő Ladányi, Rachana Nitin, Daniel E. Gustavson, Simon E. Fisher, Cyrille L. Magne, Reyna L. Gordon Neurobiology of Language (2022) 3 (4): 615–664.

You can read these papers here:

### https://direct.mit.edu/nol/issue/3/4

Next month's newsletter will promote papers from Volume 4 Issue 1. Matt Davis (SNL Publication Officer) would like to invite volunteers to write a lay summary of a forthcoming paper. This is a great opportunity for anyone wishing to gain experience of writing about Neurobiology of Language in an easily readable form. He will provide training and mentorship to guide them in contributing to a future newsletter. Anyone interested in volunteering should email Matt Davis (matt.davis@mrc-cbu.cam.ac.uk).

Neurobiology of Language is still keen to encourage submissions for a Special issue on **The Role of the Cerebellum in Language Comprehension and Production** edited by Julie Fiez and Catherine Stoodley. The deadline for submissions has been extended until 1st April 2023.

The editors are also keen to encourage proposals for special issues and other contributions to the journal. Anyone interested in proposing a special issue or who has any questions can contact the editors, Steven Small (<a href="mailto:small@utdallas.edu">small@utdallas.edu</a>) and Kate Watkins (<a href="mailto:kate.watkins@psy.ox.ac.uk">kate.watkins@psy.ox.ac.uk</a>).



**Neurobiology of Language** is the open-access journal sponsored by the Society for the Neurobiology of Language and MIT Press. Launched in March 2019, the journal provides a new venue for articles across a range of disciplines addressing the neurobiological basis of speech and language. To learn more about Neurobiology of Language and how to submit articles, go to

https://www.mitpressjournals.org/nol.





## **Job Postings and Announcements**

If you have a job posting, general announcement, or conference that you would like to include in the SNL





## **Job Postings**

## Post-Doctoral Research Position | University of Montreal in Quebec

The Language Acquisition and Processing lab of the School of Speech Language Pathology and Audiology (ÉOA) at the University of Montreal in Quebec, Canada, is offering a postdoctoral researcher position, available from winter 2023.

The successful candidate will be expected to co-lead a research project on Language Acquisition and Processing in Teen and Adult L1 and L2 (Phaedra Royle, with Karsten Steinhauer, et al, SSHRC Insight Grant). This position will involve supervision of graduation students with a main focus on EEG/ERP data processing. This is a two-year fixed term position. The two main foci of the project are

- 1. French L2-learning in teens focusing on agreement (gender and number) or syntax (noun-phrase and clitics)
- i. Environmental and individual characteristics affecting L2-acquisition
- 2. Interference effects in adult simultaneous Catalan-Spanish bilinguals focusing on gender interference in cognates (determiner agreement), in collaboration with Garcia Alcaraz, Universitat de les Illes Balears.
- i. Language dominance effects on interference.

This position also offers the opportunity to advance the candidate's profile in targeted interest domains where interests overlap with this lab and projects.

Requirements:

#### Essential:

- A PhD in cognitive neuroscience, cognitive science, computer science, linguistics, psychology or a related discipline.
- A track record of research in ERPs, including experience disseminating research through conference presentations and publications.
- Excellent written and spoken English. At least intermediate knowledge of written and oral French. The language of the University is French, but accommodations for learners can be made.
- Experience managing ERP labs, ERP data, and data processing using Matlab, EEGLab and ERPLab, and R.
- Experience managing confidential participant information, dealing with ethical and administrative issues, and efficiently managing and cataloguing data.

#### Desirable:

- Experience supervising or teaching undergraduate or graduate students.
- High level of French proficiency (depending on chosen area of research)
- High level of Spanish or Catalan proficiency (depending on chosen area of research)
- Conditions of employment:

required.

- The position is available from winter 2023. Start date is negotiable.
- Full-time position (35 hours per week) with a term of appointment of 2 years. Part-time applications are also welcome.
- The salary in accordance with the salary scales of the Université de Montréal. The salary offered is 42 996 \$ CAD, which includes health and dental coverage and one month vacation.
- month vacation.
  The researcher will have access to state-of-the art research and training facilities and a conference and travel budget pending availability. French-speaking or Spanish-speaking research assistants will be available to carry out local participant testing, if

Please apply directly to Dr. Royle (mailto:phaedra.royle@umontreal.ca. Applications should include:

- A (maximum 2-page) application letter that a) outlines how you fit essential and desirable requirements listed above, and b) includes a short description of your research profile and objectives.
- A CV, including a list of publications and funding history.
- Contact details for three referees (referees will not be contacted unless you are invited to interview).

Application open until filled



## First Neuroscience and Data Science Assistant Professor Cluster Search The University of New Mexico College and Arts and Sciences

The University of New Mexico College of Arts and Sciences is seeking to recruit a cohort of nine tenure-track Assistant Professors. The positions are part of the NIH funded Faculty Institutional Recruitment for Sustainable Transformation (FIRST) grant (https://commonfund.nih.gov/FIRST) awarded to the University of New Mexico (UNM). The UNM FIRST program goals are: (1) to recruit a cohort of diverse faculty who have a demonstrated strong commitment to promoting diversity and inclusive excellence in the biomedical fields of neuroscience and data science, and (2) to achieve sustainable culture change of inclusive excellence at the institutional level. The new hires will be part of one of the following six departments in the College of Arts and Sciences: Psychology, Biology, Chemistry & Chemical Biology, Physics & Astronomy, Speech & Hearing Sciences, and Mathematics & Statistics. The selected candidates will receive competitive startup packages to support salary and research start-up costs, and will be welcomed into a diverse and inclusive vibrant scholar community. The positions have 75% protected research time for the duration of the NIH FIRST award. Eligible candidates have not held a prior tenure-track Assistant Professor position but may have held a non-tenure track Research Assistant Professor position. Candidates must qualify as a NIH early-stage investigator (https://grants.nih.gov/policy/early-stage/index.htm), including not having already been the Principal Investigator or Program Director on a successfully awarded NIH independent research award comparable to an R01. Best consideration date is March 1, 2023. To learn more about the position, program, UNM and more, please visit https://unmfirst.unm.edu/



Funded Postdoctoral Positions at the BCBL Basque Center on Cognition Brain and Language San Sebastián, Basque Country, Spain, http://www.bcbl.eu

The Basque Center on Cognition Brain and Language (San Sebastián, Basque Country, Spain) offers the following positions:

FUNDED POSTDOCTORAL POSITION – Signal Processing in Neuroimaging Group FUNDED POSTDOCTORAL POSITION – Neurolinguistics and Aphasia Group FUNDED POSTDOCTORAL POSITION – Consciousness Group FUNDED POSTDOCTORAL POSITION– Brain Rhythms and Cognition Group

INFORMATION ABOUT THE POSITIONS IN https://www.bcbl.eu/en/join-us/job-offers



Postdoctoral Researcher
Vanderbilt University in Nashville, Tennessee

The Education and Brain Sciences Research Lab (ebrl.vkcsites.org) directed by Laurie E.

Cutting, PhD, of Vanderbilt University in Nashville, Tennessee, USA, seeks a highly motivated postdoctoral researcher interested in developmental and educational neuroscience. The position provides an opportunity to work in a multidisciplinary research environment studying the neuroscience of child development, from birth through adolescents. Ongoing research includes the Healthy Brain and Cognitive Development (HBCD) study, a national study recruiting women during pregnancy and following their infants through the first five years of their lives; studies of typical and atypical reading and math development; and studies of other developmental disorders. Individuals will have the opportunity to work on large ongoing NIH-funded projects, including longitudinal neuroimaging studies focused on academic, cognitive, behavioral outcomes in early childhood development (starting at perinatal period) through adolescence. Research opportunities will include analysis and writing manuscripts using already collected multimodal MRI datasets, travel and conference presentations, and support for writing mentored grant proposals. Former post-doctoral fellows have been highly successful, including attaining tenure-track positions at R1 universities and getting independent NIH funding.

Ideal candidates should be highly motivated to publish first-author papers and present at conferences, and should possess a background in advanced statistics, strong experimental and scientific writing skills, ability to work in a team environment, and be self-motivated. Experience working with children in a research setting is also desired. Additional desired strengths include competence in MRI and/or EEG data acquisition/analysis and/or assessment training, including programming skills (e.g., Matlab, R, and/or Python) and experience with multimodal neuroimaging (DWI, fMRI, and/or EEG) analysis.

This fulltime position is appointed in one-year intervals, with re-appointments anticipated in years 2 and 3 (contingent upon satisfactory performance). Compensation is in line with NIH postdoc salary guidelines.

Basic Requirements:

- PhD in Neuroscience, Biomedical Engineering, Bioinformatics, Computer Science, Neuropsychology or related discipline.
- Programming skills (e.g., Python, Matlab, R)
- Demonstrated record of innovative scientific research in neuroimaging
- Strong skills in the usage of one or more common neuroimaging packages (e.g., FSL, SPM, AFNI)
- Strong communication skills in spoken and written English
- Ability to work closely with an interdisciplinary team, providing training to students and researchers
- Authorized to work in the United States

If you are interested in the position, please email Laurie Cutting (Laurie.Cutting@Vanderbilt.Edu) a recent CV, a brief statement of research interests (1 page), and the contact information for 2 references. Applications will be considered on a rolling basis until position(s) are filled. Salary is highly competitive and reimbursement for moving expenses will be considered.



## Research Assistant/Post-doctoral Fellow The Hong Kong University of Science and Technology

The appointee will assist the project leader, **Dr. Zhen QIN**, in his research project about learning and memory consolidation of Cantonese tones. This is a 12-month position with the intended starting date on 01 July 2023 (or as soon as possible thereafter).

### Responsibilities

- Recruit human subjects and administer behavioral and EEG experiments;
- Perform statistical analysis using R and SPSS;
- Undertake other tasks assigned by the project leader or his/her delegates.

#### Qualifications

- Applicants for Research Assistant should have a master's degree in linguistics, psychology, or related disciplines (exceptional candidates with a bachelor's degree may also be considered). Applicants for Post-doctoral Fellow should have a Ph.D. degree.
- 2. They should have a strong background in psycholinguistics and/or phonetics, and experience in administering behavioral and EEG experiments to human subjects.
- 3. Applicants who are fluent in speaking Cantonese and have experience in testing older adults (above 60 years old) will be given priority.

## **Application**

You can view and apply for this job **here**. Applicants can contact Dr. Zhen QIN at **hmzqin@ust.hk** for questions.

#### Remuneration

A highly competitive remuneration package will be offered. The monthly salary will be commensurate with qualifications and experience. Fringe benefits including annual leave, medical and dental benefits will be provided.

#### **Deadline**

28 Feb 2023. Review of applications will continue until the positions are filled.



# Seeking Post-Doc for Auditory-Visual Speech Research using ECoG/sEEG and fMRI (In Person or Remote) Department of Psychology, University of Michigan

We are seeking a post-doctoral researcher to study auditory-visual speech perception in humans using intracranial recordings (iEEG/ECoG/sEEG) and fMRI. These individuals will contribute to our NIH R01 and NSF funded research and will have the freedom and support to develop their own research programs. As these positions focus on experimental design, analyses, and writing, it is possible for the researcher to live out of state and work remotely. Our lab acquires iEEG from 30-40 patients with epilepsy and 100+ individuals with brain tumors annually at the University of Michigan and UC San Francisco hospitals with the goal of understanding neurophysiology, sensory processing, and language. An additional goal of our lab's research (along with our collaborator Shawn Hervey-Jumper, herveyjumperlab.ucsf.edu) is to use iEEG to understand how brain tumors alter neuronal function and cognition, and to improve surgical outcomes and quality of life in those with a brain tumor. Salary is expected to be in the range of 60-65k.

## Preferred qualifications:

- \* A Ph.D. in psychology, neuroscience, or a related field
- \* Experience designing experiments and analyzing neurophysiological signals (EEG, ECoG, MEG, or neurophysiological recordings in animals)
- \* Strong computational skills (e.g., machine learning or other advanced oscillatory analyses) and programming experience
- \* One or more first-author publications

Please contact Dr. David Brang (dibrang@umich.edu) with guestions or to apply.



## Funded PhD Candidate Position at Anglia Ruskin University, Cambridge, UK

Applications are invited for a fully funded Vice Chancellor's PhD position to study the neuroscience of inner speech in post-stroke aphasia.

You will assess how and when inner speech is used, and how it is related to other language abilities, cognitive functions, and imagery. Through work with stroke survivors and stroke clinicians you will also assess how inner speech measurements can contribute to aphasia diagnosis and prognosis.

We invite applicants with a background in psychology, speech and language sciences, neuroscience, linguistics, computer sciences, or other related disciplines.

To apply, please follow this link: https://aru.ac.uk/research/postgraduate-research/vc-phd-scholarships/fse-2-inner-speech-in-post-stroke-aphasia

Application deadline is March 19th 2023.

We will interview on Wednesday 26th April 2023.

For further information, please contact Dr. Sharon Geva: sharon.geva@aru.ac.uk

FURTHER INFORMATION ABOUT THE POSITION CAN BE FOUND IN https://aru.ac.uk/research/postgraduate-research/vc-phd-scholarships



## Fully Funded, 4-year PhD Researcher Position University of Zurich

The research unit Developmental Psychology: Infancy and Childhood at the Department of Psychology, University of Zurich, invites applications for a fully funded, 4-year PhD researcher position associated with the Swiss National Science Foundation-funded Ambizione project "The ontogeny and physiology of sentence planning" (Principal Investigator: Dr. Sebastian Sauppe), commencing in September 2023. The aim of the project is to investigate (i) how incremental sentence planning mechanisms develop from childhood to adolescence, (ii) how neural oscillatory activity underpins sentence planning, and (iii) how ontogentic development and neurophysiological correlates of sentence planning and production differ between languages. For crosslinguistic differences, the project focuses on comparisons between German/English and Tagalog.

The PhD student will work closely with Dr. Sebastian Sauppe and Prof. Moritz Daum. Prof. Martin Meyer will also be part of the PhD committee.

\*\*\* Your responsibilities \*\*\*

You are expected to participate actively in project-related tasks in order to work towards a PhD degree in psychology or linguistics. This involves:

- \* Scientific qualification (cumulative PhD thesis) through conducting and disseminating behavioral and neurophysiological studies on sentence planning in children (approx. 4-12 years old) and adults
- \* Design and preparation of experiments using eye tracking and EEG (possibly fNIRS), in collaboration with the senior researchers
- \* Participant recruitment
- \* Communication with the project team and external international collaborators
- \* Active participation in national and international scientific conferences
- \* Producing and submitting / publishing scholarly articles in international, peer-reviewed journals

The topic and parts of the (cumulative) PhD thesis shall be determined upon commencement of the candidature in agreement with the Principal Investigator and shall consist of individual studies as outlined in the project proposal. These studies ideally also concern sentence planning in Tagalog and English, for which research stays with collaborators at the University of the Philippines - Diliman and at the University of Texas at Dallas are envisaged.

You are a highly motivated, committed, and creative candidate, who can work in a multidisciplinary team and who wants to build a strong profile as a researcher. You can work efficiently, self-organized and self-dependently and you have outstanding communication skills. You are child-friendly.

The ideal candidate holds a Master's degree in psychology, linguistics, cognitive science, cognitive neuroscience, or a related discipline (as relevant to the project) and has a strong background in at least one of the following (and an exceptional willingness to become fluent in the others): experiments on human cognition and language processing (eye tracking, neuroimaging), data collection with children, linguistics (especially morphosyntax of non-European languages), programming (in R, MATLAB, or Python), mixed-effects regression (Bayesian or frequentist).

The team and facilities at the research unit Developmental Psychology: Infancy and Childhood provide learning opportinuties for all required aspects of the research. A strong interest in research on language processing, the cognitive/neuroscience of language, and child development is essential.

Prior knowledge of Tagalog and/or German is not required, but an asset. The candidate is expected to acquire basic language skills and a theoretical knowledge of the grammar of the languages (based on the linguistic literature), to enable designing studies and collecting data in the Philippines and in Switzerland (together with local collaborators and assistants). You will stay in the Philippines and the USA for several weeks to work with our collaborators and to conduct studies.

What we offer

We offer varied and interesting work in an inspiring and socially relevant environment. Diversity and inclusion are important to us. Place of work

Department of Psychology, University of Zurich, Universität Zürich-Nord, Binzmühlestrasse, Zürich, Switzerland Start of employment

Employment should start on September 1, 2023 or as soon as possible thereafter as mutually agreed. The position remains open until filled. For full consideration please submit your application by March 17, 2023.

To apply for this position, compile the following documents into a single PDF with the file name "PhD TOPOS LASTNAME FIRSTNAME":

- \* cover letter (max. 2 pages: brief outline of academic background and outline of previous research experience, e.g., during Master's thesis research or other research-related work, motivation for joining this project as a PhD student)
- \* CV (listing relevant courses and grades, research experience if applicable)
- \* certificates
- \* one writing sample (e.g., Master's thesis)
- \* contact information for two referees.

Please submit your application to sebastian.sauppe@uzh.ch.

More information: https://t.uzh.ch/1qP



## Postgraduate Associate – Language Learning and Multisensory Brain Lab

Job Announcement, February 2023

Postgraduate Associate – Language Learning and Multisensory Brain Lab Project Directors: Drs. Richard Aslin, Sara Sanchez-Alonso and Nicholas Turk-Browne

Qualified individuals are invited to apply for a full-time Postgraduate Associate (PGA) position in the Child Study Center of Yale's School of Medicine. The successful candidate will work with the three project directors on a research study supported by a National Science Foundation grant entitled "Development of language-related neural networks using multimodal imaging." The NSF grant uses both fMRI and fNIRS, simultaneously and separately, to measure functional brain connectivity in infants and children ranging in age from 12 months to 7 years.

Drs. Aslin and Sanchez-Alonso are members of the Language-Learning and Multisensory Brain (LLAMB) lab, co-directed by Dr. David Lewkowicz (https://llamblab.haskins.yale.edu/). The LLAMB lab investigates the cognitive and neural bases of language learning and development using behavioral (eye-tracking) and neuroimaging (fMRI,EEG and fNIRS) techniques in typically developing infants, children, and adults, and in collaboration with Dr. Katarzyna Chawarska studies of toddlers with Autism. Dr. Turk-Browne is the Director of the Wu Tsai Institute (https://wti.yale.edu/) and uses cutting-edge neuroimaging methods to study learning and memory in adults and infants (https://ntblab.yale.edu/).

#### Mentorship

Under the primary mentorship of Dr. Richard Aslin, the PGA will be guided through project tasks which include: (1) all aspects of research such as data collection, analyses, writing, and academic presentations; (2) coordinating participant recruitment and human subjects protocols under the direction of Dr. Sara Sanchez-Alonso; (3) gaining knowledge about general aspects of neuroimaging techniques under the direction of Dr. Nicholas Turk-Browne, including the opportunity to sit-in on lectures and workshops, and (4) attending meetings with collaborators who assist the research team in carrying out their grant-support research.

## Training

The LLAMB lab has weekly meetings where participants discuss recent research articles on various aspects of behavioral and neural development. The Turk-Browne lab also has weekly meetings where students present their on-going research projects. The PGA will attend these meetings, learning from our colleagues, and have the opportunity to present their own research as they become engaged in specific projects. Past PGAs have been coauthors on joint publications and have presented their work as posters at scientific conferences. Opportunities to attend technical workshops and summer schools are also encouraged. The three co-directors offer informal seminars that cover many professional development topics, including (a) graduate school preparation and networking/professional engagement; (b) research design, methodology, and statistical analysis; and (c) diversity, equity, and inclusion in research and practice.

### Eligibility Requirements

The successful candidate will work with Drs. Aslin, Sanchez-Alonso, and Turk-Browne, their postdoctoral fellows, graduate students, and other staff members to plan and execute data collection for the NSF grant and other on-going projects in their labs. The position involves on-site data collection at both the LLAMB lab and the multi-modal imaging facilities in the Discovery Center of the Wu Tsai Institute (https://wti.yale.edu/resources/human-brain-discovery) using both fNIRS and fMRI methodologies. The LLAMB lab and the Discovery Center are in adjacent buildings connected by a skyway. Recruitment of infant and child participants is facilitated by the Yale Baby School (https://babyschool.yale.edu/), a collaboration with the Yale Child Study Centerand the Yale Psychology Department.

### Requirements for this position include:

- BA or BS in Psychology, Cognitive Science, Neuroscience or related fields
- Experience with neuroimaging techniques (EEG, fMRI, or fNIRS)

#### Additional relevant skills include:

- Experience with human research, particularly with infants or children
- Experience with neuroimaging data analysis software (e.g., FSL, Freesurfer, MNE, NeuroDot)

- Experience with statistical analysis (e.g., SPSS, R, Matlab)
- Experience with eye-tracking devices (Eye-Link, Tobii)
- Experience with experimental presentation software packages (e.g., E-Prime, Presentation, PsychoPy)
- Experience with on-line data collection platforms (Mturk, Prolific, Lookit)
- Experience with data management software (e.g., FileMakerPro, REDCap, Qualtrics)

The anticipated start-date is July 1, 2023. Please note that the university has a COVID vaccination and booster requirement for all students, staff & faculty which is described in the COVID-19 Vaccine Program. You are required to comply with the Vaccine Program prior to the first day of your Yale appointment. Should you not be eligible for the Booster at this time, you will be required to receive your booster within seven (7) days of your eligibility. Please see the Yale COVID-19 Vaccine Program for information on how to schedule a vaccination and/or how to Submit or Confirm your vaccination documentation. For up-to-date university information on COVID-19, please visit: https://covid19.yale.edu/.

### **Application Process**

Interested applicants should contact Dr. Richard Aslin by email with a cover letter, resume, copy of (unofficial) transcripts, and the names of three potential references (richard.aslin@haskins.yale.edu). Please note "PGA position", in the subject line of your email. Review of applications will begin on March 15 and the position will remain open until filled.

This is a 1-year position, but we expect funding to continue for at least 2 years and encourage applicants to commit to a 2-year appointment, which is advantageous for creating a strong resume for admission to PhD programs and further career development.

Compensation is commensurate with skills and experience. Yale University is an Equal Opportunity Employer.



## **Funded Predoctoral and Postdoctoral Positions at the BCBL**

The Basque Center on Cognition Brain and Language (San Sebastián, Basque Country, Spain) offers the following positions:

FUNDED Ph.D. CANDIDATE POSITION – Brain Rhythms and Cognition Group FUNDED POSTDOCTORAL CANDIDATE POSITION– Brain Rhythms and Cognition Group

FUNDED POSTDOCTORAL POSITION – Signal Processing in Neuroimaging Group FUNDED POSTDOCTORAL POSITION – Neurolinguistics and Aphasia Group

**FUNDED POSTDOCTORAL POSITION – Consciousness Group** 

FUNDED POSTDOCTORAL POSITION—Brain Rhythms and Cognition Group

INFORMATION ABOUT THE POSITIONS IN https://www.bcbl.eu/en/join-us/job-offers



## Two Postdoctoral Research Positions University of South Carolina

**Postdoctoral Fellows: Cognitive Neuroscience of Semantics.** Two post-doctoral research positions are available in the laboratory of Dr. Rutvik Desai at the University of South Carolina, Department of Psychology. The lab focuses on cognitive neuroscience of language and neural representation of concepts using neuroimaging, brain stimulation, patient studies, lesion-symptom mapping, and computational modeling. Excellent facilities for fMRI, TMS, tDCS, EEG, and eye tracking are available. The Fellow will have an exciting opportunity to

pursue collaborative and self-directed projects at the Institute for Mind and Brain (http://mindandbrain.sc.edu/). Opportunities to work on a large multi-modal neuroimaging dataset that includes fMRI of naturalistic language, as well as those for collaborations with computer scientists to develop cutting-edge analysis methods using machine learning methods, are available.

Candidates with a PhD in any of the cognitive sciences (e.g., Psychology, Neuroscience, Computer Science) are welcome to apply. A research background in cognitive neuroscience/cognitive science, relevant to semantic or language processing, is required. Expertise with fMRI (including MVPA; one of AFNI/SPM/FSL), or brain stimulation (TMS or tDCS) is required. Experience in one or more of lesion-symptom mapping, behavioral testing or imaging of patient populations, EEG, connectionist modeling, or machine learning is also a positive, along with skills in programming and statistics (e.g., Python, Matlab, R). A promising publication record is desirable. Salary will be commensurate with experience. Applications should include a CV, brief statement of research experience and interests, and names of three referees (who will be asked for a reference letter if necessary; actual letters are not required initially). Expected starting date is Summer 2023, but is flexible. Applications should be sent to rutvik@sc.edu and will be assessed as they arrive.

The University of South Carolina is an affirmative action, equal opportunity employer. Women and minorities are encouraged to apply. The University of South Carolina does not discriminate in educational or employment opportunities or decisions for qualified persons on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation or veteran status.



## Open postdoctoral position in language production Carnegie Mellon University

### General description

Dr. Nazbanou Nozari's laboratory in the Psychology Department at Carnegie Mellon University is accepting applications for a postdoctoral fellowship. The position is broadly defined, with opportunities to explore mechanisms of learning, monitoring and control in language production, as well as the relationship between perception and production. We are interested in big questions that not only further our understanding of the language production system, but also of cognition in general. Examples of such questions include: how do perception and action influence one another? How is a hierarchical task monitored and controlled? How does a system learn and how does such learning transfer to another system? As a complex, yet highly practiced, cognitive function, language production is an ideal tool for studying these and many other big-picture questions. We, therefore, encourage students from diverse backgrounds with expertise in language production, cognitive control, or learning to consider applying.

The position provides special opportunities for studying perception-production transfer in the acoustic-phonetic domain in collaboration with Dr. Lori Holt, and for the application of machine learning techniques to the analysis of EEG and fMRI data in language production, in collaboration with Dr. Leila Wehbe.

In addition to the opportunities listed above, CMU provides unique research resources, such as an in-house pool of 3-5-year-old children for longitudinal developmental research, as well as many opportunities offered by the Center for the Neural Basis of Cognition (CNBC) for professional development, geared specifically towards preparing postdoctoral fellows for a successful career.

Start date is flexible. August 15, 2023 is a desirable, but negotiable, target date. The position is offered for one year, with the possibility of renewal pending satisfactory performance. Applications are reviewed on a rolling basis until the position is filled. Salary is commensurate with NIH guidelines.

To learn more about our lab, please visit here: https://www.nozarilab.com/

#### Qualifications

The applicant must (1) hold a PhD in cognitive psychology, cognitive science, neuroscience,

or a related field, (2) have a background in language processing, learning and/or cognitive control research, (3) have a productive research record, (4) be highly motivated to pursue an independent research career in the future. Candidates with computational, EEG, neuroimaging, or eye-tracking skills may be prioritized, but these skills are not strictly necessary for applying.

### **Application**

If you are interested, please email Dr. Nozari at **bnozari@andrew.cmu.edu** with a copy of your CV and a brief description of the reasons for your interest in this position. More documents including letters of reference may be needed if your application is promoted to the next step.

CMU does not discriminate in admission, employment, or administration of its programs or activities on the basis of race, color, national origin, sex, handicap or disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status, or genetic information.



## Other

Frontiers in Human Neuroscience has launched a new Research Topic: Rising Stars in Speech and Language. The topic is now open for submissions.

Why publish in our Research Topic?

Alongside a top group of authors, your work will be published in Frontiers in Human Neuroscience, a leading journal in the field.

Please click the **link** to register your interest in submitting an article. As well as original research, we also accept reviews/mini-reviews, brief research reports, perspectives, case reports, and opinion articles.

Abstract submission deadline is 15 June 2023, manuscript submission deadline is 30 July 2023. However, Frontiers' fast-track review process, led by our editorial team, means each article is published online as soon as it's been successfully peer-reviewed and accepted (typically within 90 days).

As an open-access journal, publishing fees are applied to accepted articles. The team at Frontiers will be in touch after you registered your interest, to explain more about contributing to the collection. If you have any other questions in the meantime, please contact Dr Sharon Geva s.geva@ucl.ac.uk or Dr Magdalena

Łuniewska magdalena.luniewska@psych.uw.edu.pl



## The deadline for abstract submission to iWORDD is extended to February 12th!

iWORDD was created back in 2013 with the aim to bring together researchers interested in advancing our knowledge about how one becomes an expert reader and about the causes and manifestations of reading difficulties such as developmental dyslexia.

The fourth edition of iWORDD will offer the research community the opportunity to get a broad overview of the current theories underlying research in the field and of the methodological challenges faced, while helping outline future directions in the investigation of developmental dyslexia. Our aim with this workshop is to promote exchange of ideas between world-class dyslexia experts through talks and debates, and facilitate transfer of knowledge between practitioners and scientists. The ultimate goal is to understand the causes of dyslexia and improve detection protocols and remediation techniques. With it

limited size, iWORDD will encourage interactions among invited speakers and researchers.

The first two days (June 7-8) will be dedicated to the science and will be centered around three talks and a debate delivered by our keynote speakers, as well as around two invited symposiums. Since iWORDD aims to encompass the wide variety of theoretical views on developmental reading disorders, international experts will represent this diversity of approaches. Keynotes will be complemented by oral and poster presentations selected from abstract submissions.

Third day (From theory to Practice)

The aim of this third day (June 9th) is to promote the transfer of knowledge and interaction among researchers, parents, teachers and practitioners. /"iWORDD -- From Theory to Practice\\\" is centered around keynote lectures delivered by international experts and tailored to a broad audience, followed by a round-table discussion. For this part of the workshop, simultaneous interpretation in Spanish, English and Basque will be provided.

Speakers iWORDD 2023

Silvia Brem Anne-Lise Giraud Usha Goswami Charles Hulme Franck Ramus

For further information please visit https://www.bcbl.eu/events/iwordd/en/.



## **Language Circle 2023**

The Max Planck Research Group Language Cycles is launching the **Language Circle 2023** this week. This series of talks will be held virtually via zoom and in person at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig, Germany.

All information can be found on the attached poster and here: http://languagecycles.com/language-circle/



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