Save the Date
SNL 2022 | OCTOBER 6-8, 2022
Loews Philadelphia Hotel, Philadelphia, PA

Join Our Mailing List

Society's Journal

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 Newsletter, please send it to newsletter@neurolang.org.
Two-year postdoc in cognitive neuroimaging

The Department of Linguistics, Cognitive Science and Semiotics within the School of Communication and Culture at Aarhus University invites applications for a fully-funded postdoctoral position in cognitive neuroimaging. The postdoc position is affiliated with the research project Tonotopic and phonotopic brain function in the light of reading experience, which is funded by the Independent Research Fund Denmark.

The postdoc position is a full-time and two-year fixed-term position. The position begins on 01.05.2022 or as soon as possible thereafter.

The School of Communication and Culture is committed to diversity and encourages all qualified applicants to apply regardless of their personal background.

Project
Language and reading cause the brain and cognition to change. Part of this development is a sharpening of phonological awareness, which is thought to be a partly auditory process. In this project, we use neuroimaging to investigate structural and functional neuroplasticity associated with reading experience and proficiency in the auditory brain areas using functional magnetic resonance imaging (fMRI) and other relevant methods. The project is conducted in collaboration with the Center of Functionally Integrative Neuroscience at Aarhus University Hospital, which houses state-of-the-art neuroimaging equipment, including two 3T MR scanners and an MEG system.

Postdoc profile
The successful applicant will be expected to
- plan, run and analyze neuroimaging experiments to investigate the long-term effects of reading on the brain
- present results at conferences and publish in international journals.

As a postdoc, your position is primarily research based, but it will also involve a small amount of teaching and supervision. The successful applicant will be expected to take part in the department’s teaching and supervision activities and to teach and supervise on BA and MA levels.

Given the international focus of the degree programmes, the successful applicant will be expected to teach in English.

Qualifications
Applicants must have a PhD in the cognitive neuroscience of language processing or a related field. Applicants must be able to document, relevant to the position:
- a track record of research publications in esteemed international outlets, commensurate with the length of their academic career
- experience of fMRI acquisition and analysis or the documented ability to quickly acquire new methods and skills
- skills in programming and statistics for experimental research
- the demonstrated ability to work independently and in an interdisciplinary team
- excellent oral and written communication skills in English

Furthermore, it will be considered an advantage if applicants can document
- relevant teaching experience at university level
- experience of participation in national and international research networks
- time spent abroad working at one or more internationally recognized research institutions

In your application, please provide documentation showing how your profile and skills fit those required for the present project on neuroimaging and reading experience.
Please also include at least one idea for an experiment in this field, including a hypothesis and the tools and methods you would use for running and analyzing this experiment (maximum three pages in total).

Please note that applications that do not include uploaded publications (maximum five) will not be considered.

Although the Aarhus University application system includes an option to upload letters of recommendation, please do not include letters of recommendation or references with the application. Applicants who are invited to an interview may be asked to provide references.

Work environment
Active participation in the daily life of the department is a high priority, and we emphasize the importance of good working relationships, both among colleagues and with our students. In order to maintain and develop the department’s excellent teaching and research environment, the successful applicant is expected to be present at the department on a daily basis.

The Department of Linguistics, Cognitive Science and Semiotics offers:
- a well-developed research infrastructure, laboratories and access to shared equipment
- an exciting interdisciplinary environment with many national and international collaborators
- a research climate encouraging lively, open and critical discussion within and across different fields of research
- a work environment with close working relationships, networking and social activities
- a workplace characterized by professionalism, diversity, equality and a healthy work-life balance

We respect the balance between work and private life and strive to create a work environment in which that balance can be maintained. You can read more about family and work-life balance in Denmark.

Aarhus University also offers a Junior Researcher Development Programme targeted at career development for postdocs at AU.

International applicants
International applicants are encouraged to read about the attractive working conditions and other benefits of working at Aarhus University and in Denmark, including healthcare, paid holidays and, if relevant, maternity/paternity leave, childcare and schooling. Aarhus University offers a wide variety of services for international researchers and accompanying families, including a relocation service and an AU Expat Partner Programme. You can also find information about the taxation aspects of international researchers’ employment by AU.

The department
The place of employment is the Department of Linguistics, Cognitive Science and Semiotics, Jens Chr. Skous Vej 2, 8000 Aarhus C, Denmark. Prospective applicants are invited to view the department’s website.

School of Communication and Culture
The school is a part of the Faculty of Arts. You will find information about the school and its research programmes, departments and diverse activities on its website.

Contact
For further information about the position, please contact the principal investigator, Mikkel Wallentin, at mikkel@cc.au.dk

If you need help uploading your application or have questions about the recruitment process, please contact Arts HR support by email: hsi@au.dk.

Deadline: February 1, 2022
Read more
Data Manager at UofSC Aphasia Lab

The Aphasia Lab at the University of South Carolina (Columbia, SC) seeks a qualified REDCap Data Manager to support public health research projects mainly focusing on aphasia recovery. This full-time position requires quantitative, writing, research competencies, and communication skills. It is an ideal position for someone with a strong public health background who wishes to apply their knowledge to a range of research projects.

URL: https://uscjobs.sc.edu/postings/112414

Minimum Qualifications: Bachelor’s degree in Database Administration, Psychology, Health Services, or related field, and 5 years related database experience; or equivalency.

Preferred Qualifications: Experience working in research and with large, diverse data sets.

Knowledge/Skills/Abilities: Proficient in REDCap, have good oral and written communication skills, ability to design and execute data management plans, be innovative in approaches to data management. Be able to work independently with minimal supervision.

We are only accepting applications submitted by January 28, 2022.

For more information about this vacancy, please see the above link and/or contact Dr Leigh Ann Spell, the Associate Director for the UofSC Aphasia Lab (spelll@mailbox.sc.edu; 803-777-2693).

Post-doctoral position in Functional Neuroimaging of Language

The Center for Language and Brain at the HSE University (Moscow, Russia) invites applications for a postdoctoral research position in Functional Neuroimaging of Language. The postdoctoral fellow will work under the supervision of the Director of the Center, Dr. Olga Dragoy, and it’s Academic Supervisor Dr. Roelien Bastiaanse.

Research topics
Post-doctoral fellows are encouraged to pursue their own research in parallel with working on research projects of the Center for Language and Brain in the area of Functional Neuroimaging of Language. Depending on the candidate’s background, specific research methods and populations may involve scalp or intracranial EEG, MEG, fMRI in healthy adults, adults before neurosurgery, and typically and atypically developing children.

Requirements
- A recent PhD degree (awarded over the last 5 years);
- A strong theoretical background and practical experience in at least one functional neuroimaging method (scalp or intracranial EEG, MEG, fMRI), including paradigm programming, data collection, data processing and statistical analysis;
- The potential to pursue research that is publishable in leading peer-reviewed journals.

How to apply
Please see the position announcement for more details and the application procedure. The application deadline is January 31, 2022. Appointments are made for
The Hong Kong University of Science and Technology
Research Associate/Post-doctoral Fellow

The appointee will assist the project leader, Dr. Zhen QIN, in the research project – “The learning and consolidation of Cantonese tones by second-language learners”. This is a 12-month position with the intended starting date on 01 May 2022 (or as soon as possible thereafter).

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

Qualifications
1. Applicants should have a PhD degree in linguistics, psychology or related disciplines. Exceptional candidates with a MPhil or a master’s degree may also be considered for the Research Associate position.
2. They should have a strong background in psycholinguistic and/or neurolinguistics, and experience of administering behavioral and/or EEG experiments to human subjects.

Only Hong Kong residents are eligible for application. Applicants who are fluent in speaking Chinese (including Putonghua) and have experience of monitoring human subjects’ sleep and/or testing older adults (above 65-year-old) will be given priority.

Application
You can view and apply for this job (Job ID: 7002) here. Applicants can contact Dr. Zhen QIN at hmzqin@ust.hk for questions.

Remuneration
A highly competitive remuneration package will be offered. Fringe benefits including annual leave, medical and dental benefits will be provided.

Deadline
Review of applications will continue until the positions are filled.

Postdoctoral Fellow: Cognitive Neuroscience of Semantics

A post-doctoral research position is 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/).

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), 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 a plus. 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 early 2022, 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.

Assistant Professor in Neuroscience of Audition & Speech at The University of Texas Health Science Center at Houston

As part of our new and expanding Texas Institute of Restorative Neurotechnologies (TIRN), at the University of Texas Health Science Center at Houston (UTHealth – https://www.uth.edu), we invite applications for an Assistant Professor (tenure-track) position in the Neuroscience of Audition & Speech.

We are looking for candidates who are interested in questions regarding auditory processing, audio-motor transformations, and/or speech processing in cortical language regions using systems-level approaches and computational methods (e.g., machine learning). We are interested in individuals who currently use or are interested in multimodal integration approaches using fMRI, DTI, brain mapping by direct cortical stimulation, electro-corticography, and MEG. Access to a 3T research-only MRI scanner, a MEG scanner, and to a very busy epilepsy surgery program performing intracranial implants and resections on a regular basis, will be provided.

This position is part of an initiative at UTHealth focused on expanding expertise in language processing and computation. Collaborations with other auditory/language experts within UTHealth as well as with other institutions locally and around the country, will be encouraged.

The successful candidate will be situated in either the Department of Neurosurgery (https://med.uth.edu/neurosurgery) or the Department of Neurobiology and Anatomy (https://med.uth.edu/nba/), and may also be cross-appointed at Rice University.

Responsibilities: The successful candidate will be expected to create and sustain an independent research program, including planning, supervising and directing language-based research. This includes the development of study design, data collection, data analysis, results interpretation, manuscript writing and grant proposal preparation. The candidate will have the opportunity to train and supervise undergraduate, graduate and MD/PhD students at UTHealth and Rice University.

Qualifications: Candidates must possess a Ph.D. in Neuroscience or a related field (post-doctoral experience preferred). A record of verifiable and published research, the potential to obtain extramural, peer-reviewed funding, and excellent teamwork and communication skills are also required.

How to Apply: Please write to nitin.tandon@uth.tmc.edu with your curriculum vita, a cover letter describing qualifications and career goals, a research statement, and contact information for three referees.

Salary: Highly competitive, dependent upon qualifications and experience. Start-up packages will be provided commensurate with seniority level.
UTHealth Benefits: UTHealth offers a comprehensive and competitive benefits package. For more information on our benefits programs please refer to the UTHealth Office of Benefits Website: https://www.uth.edu/benefits/benefits-summary.htm

Equal Employment Opportunity Statement: UTHealth is committed to providing equal opportunity in all employment-related activities without regard to race, color, religion, sex, sexual orientation, national origin, age, disability, genetic information, gender identity or expression, veteran status or any other basis prohibited by law or university policy. Reasonable accommodation, based on disability or religious observances, will be considered in accordance with applicable law and UTHealth policy. The University maintains affirmative action programs with respect to women, minorities, individuals with disabilities, and eligible veterans in accordance with applicable law.

Postdoctoral Fellow in Cochlear Implants and Neuroimaging

Northwestern University McGaw Medical Center is hiring a postdoctoral fellow to study neural predictors of cochlear implant outcomes. The position is based in the Section of Otology & Neurotology within the Division of Otolaryngology at Lurie Children’s Hospital of Chicago. The research is part of an ongoing multicenter project to use pre-surgical magnetic resonance imaging to predict post-cochlear implant language outcomes in children funded by the NIH. The long-term goal of this research is to optimize language after implantation by providing the most effective language learning therapy informed by imaging data. This research, led by PI Nancy Young, MD at Lurie Children’s, involves an international collaboration with Multi-PI Patrick Wong, PhD and Northwestern’s Department of Communication Sciences and Disorders. English- and Spanish-learning children will be enrolled in the study. This is a multi-site, international study with plenty of opportunities to engage in interdisciplinary research with the support of an extensive clinical infrastructure. An auxiliary project will be to use functional near-infrared spectroscopy (fNIRs) to study neural changes post-implantation.

Individuals with a background in hearing, speech, language and/or cognitive science are encouraged to apply. Clinical experience in audiology is an asset but not required. Research experience with children is desirable. A research doctorate (e.g., PhD) is required at the time of appointment. The anticipated start date is summer or fall 2022 (earlier is possible). The anticipated end date of the project is in 2027. Candidates from underrepresented groups are especially encouraged to apply. To express interest, please email Dr. Patrick Wong (p.wong@cuhk.edu.hk) with CV. Applications are reviewed until the position is filled.

Postdoctoral Position, Aphasia Research Lab at Purdue University

We seek a post-doctoral researcher to join a multi-site NIH-funded project that investigates the role of structural priming on language learning and recovery in aphasia. The project integrates multiple theories of language learning to understand the trajectory of improvements in sentence production and comprehension abilities in persons with aphasia. The successful candidate will join a research team to design and conduct behavioral training and eye-tracking studies with healthy adults and adults with aphasia. The post-doc will be mentored by Dr. Jiyeon Lee at Purdue University, Dr. Nadine Martin at Temple University, and Dr. Victor Ferreira at the University of California-San Diego. The Aphasia Research Lab (https://www.purdue.edu/hhs/slhs/aphasia) is housed in the Department of Speech, Language, and Hearing Sciences at Purdue University (https://www.purdue.edu/hhs/slhs).

A doctoral degree in a related field (e.g., speech-language pathology, psychology,
linguistics, cognitive science, neuroscience) is required. A clear interest in behavioral language science should be demonstrated. Researchers with clinical training, experience working with participants with aphasia, or experience in eye-tracking studies are especially encouraged to apply. The position is for two years with a possible extension for up to four years. Deadline for application is February 21, 2022. The start date is anytime from March 1st 2022 and August 1st, 2022.

To apply, you will need to fill out an application here (https://careers.purdue.edu/job/West-Lafayette-Post-Doctoral-Research-Associate-IN-47906/832628800/) and upload a cover letter and CV. ***Please note*** You will also need to arrange for two letters of reference to be sent to Dr. Jiyeon Lee, lee1704@purdue.edu.

---

Research Fellow Position at the BCBL- Basque Center on Cognition Brain and Language (San Sebastián, Basque Country, Spain) www.bcbl.eu

The Basque Center on Cognition Brain and Language (San Sebastián, Basque Country, Spain) offers research fellow positions in seven main broad areas of research:

- **Language development across the life span**
- **Speech perception, productions and disorders**
- **Reading and dyslexia**
- **Multilingualism**
- **Neurodegeneration, brain damage and rehabilitation**
- **Language and other cognitive systems**
- **Advanced methods in cognitive neuroscience**

The Center promotes a rich research environment without substantial teaching obligations. It provides access to the most advanced behavioral and neuroimaging techniques, including 3 Tesla MRI, a whole-head MEG system, four ERP labs, a NIRS lab, a baby lab including an eyetracker, two eyetracking labs, and several well-equipped behavioral labs. There are excellent technical support staff and research personnel (PhD and postdoctoral students).

We are looking for cognitive neuroscientists or experimental psychologists with a background in psycholinguistics and/or neighboring cognitive neuroscience areas, computational modelers, and physicists and/or engineers with fMRI/MEG expertise.

These five year Fellowships are directed to promising young researchers; they are intended to offer a track towards a PI role and independent research. The selected Fellows should be able to acquire the necessary skills for a research leader role. Ikerbasque is committed to offer a long-term career to the research community: Fellows in their 5th year can be assessed for a permanent position.

The applicants must have their PhD completed between 1 1/1/2011 and 31/12/2019.

Applications from women are especially welcomed. The eligibility period will be extended under special circumstances such as maternity.

Support letter from the host group is mandatory.

To submit your application please follow this link: https://calls.ikerbasque.net/

Deadline: 15th March 2022

For further information about the fellowships, please contact the Director of BCBL,
Funded Predoctoral and Postdoctoral Positions at the BCBL- Basque Center on Cognition Brain and Language (San Sebastián, Basque Country, Spain), www.bcbl.eu

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

- Funded Postdoctoral Candidate Position - Computational Neuroscience Group- at the BCBL- Basque Center on Cognition Brain and Language (San Sebastián, Basque Country, Spain)

- Funded Joint Postdoctoral Candidate Position at the Neurobiology of Language Group, BCBL- Basque Center on Cognition Brain and Language (San Sebastián, Spain) and Combinatorial Optimization group, BCAM – Basque Center for Applied Mathematics (Bilbao, Spain)

- Funded Joint Postdoctoral Candidate Position at the Signal Processing in Neuroimaging group, BCBL- Basque Center on Cognition Brain and Language (San Sebastián, Spain) and Combinatorial Optimization group, BCAM – Basque Center for Applied Mathematics (Bilbao, Spain)

- Funded Joint Predoctoral Candidate Position at the Neurolinguistics and Aphasia Group, BCBL- Basque Center on Cognition Brain and Language (San Sebastián, Spain) and Laboratory of Neuroimaging and biomarkers of inflammation, Achucarro-Basque Center for Neuroscience (Bilbao, Spain)


Postdoctoral position on natural language processing

The Lise Meitner research group Cognition and Plasticity, led by Dr Gesa Hartwigsen at the Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany (MPI CBS) is offering

One Postdoctoral Position on Natural Language Processing

The post is funded by the German Research Foundation (DFG) and available for 3 years (TVöD). The project is conducted at MPI CBS in Leipzig, an internationally leading centre for cognitive and imaging neuroscience equipped with a 7.0 T MRI scanner, several 3.0 T MRIs, a Connectom ultra-high-field MRI scanner, a 306-channel MEG, several TMS laboratories, tDCS and several EEG systems. All facilities are supported by experienced IT and physics staff. You will be integrated into the interdisciplinary team of the Cognition and Plasticity group under the supervision of Dr Gesa Hartwigsen, in close cooperation with Prof Dr Jonas Obleser’s group at the University of Lübeck.

We will explore the role of domain-general networks in natural language comprehension under increased task demands. In a complementary multi-method approach, we plan to use a dual-task design that combines self-paced reading with an n-back task to provide insight into the behavioral, electrophysiological and neural correlates of natural language comprehension.

Applications are invited for experienced and highly motivated cognitive neuroscientists/experimental psychologists with strong computational skills. The
The project combines transcranial magnetic stimulation (TMS) with functional MRI, pupillometry / eye tracking and EEG. Candidates must have a PhD in psychology, cognitive neuroscience, computer science, or a related discipline. He/she is expected to be a talented and enthusiastic researcher who is willing to learn. The ideal candidate will have excellent programming skills and experience in acquisition and analysis of imaging data, preferably with multivariate approaches and connectivity analyses. Advanced English language skills are expected.

Starting date is 1st April 2022 or later and the duration of the post is three years. The Max Planck society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals. Furthermore, the Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.

Application is via our online system at [http://www.cbs.mpg.de/vacancies/open-positions](http://www.cbs.mpg.de/vacancies/open-positions) (subject heading: “PD 01/22”). Closing date for applications is 28th February 2022.

The application must include the following documents (in a single PDF file):
- Cover letter and personal statement
- Curriculum vitae and list of publications
- Contact details of two referees

Should you require any further information, please contact Dr Gesa Hartwigsen: hartwigsen@cbs.mpg.de
https://www.cbs.mpg.de/independent-research-groups/cognition-and-plasticity

---

**Master in Cognitive Neuroscience of Language – BCBL**

**Basque Center on Cognition, Brain and Language**

The Master's program aims to provide specialized, comprehensive, and rigorous training in the Cognitive Neuroscience of Language. The Master's program includes core courses (theoretical and methodological), advanced elective courses, and a research-based project at the end of the program. Students learn from the world-class scientists at the Basque Center on Cognition, Brain, and Language.

The Master’s program is aimed at university graduates with various degrees who are interested in the Cognitive Neuroscience of Language, including previous training in psychology or linguistics, as well as language-oriented training in cognitive science, computer science, or mathematics. The duration of the program is one academic year with 60 ECTS credits. Students will develop research skills through the mentorship of experts and by completing a Master’s Research Project at the end of the program. The language of instruction is English. Selecting the appropriate Masters program is the best way to start a successful research career, and in fact, several of our current PhD students began their research careers in our Master’s program.

In the 8 years that we have been running our Master’s program, graduates have gone on to PhD programs in places such as New York University, the Donders Center at Radboud University, UC San Diego, the Max Planck Institute for Psycholinguistics, Michigan State University, the University of Bielefeld, and our own PhD program at BCBL.


For more information about the BCBL, visit [www.bcbl.eu](http://www.bcbl.eu)

---

**Application Process**


**Application Periods**

ROUND 1:
Application sent by mail to mastercnl@bcbl.eu by February 25.
Notification of the Master’s admissions board’s decision: March 25.
Admitted students should confirm their intention to participate in the program by April 15.
Pre-enrollment must be submitted ONLINE along with the confirmation of participation.

ROUND 2:
- Application sent by mail to mastercnl@bcbl.eu by April 30. Rolling admissions until June 30 the latest. If slots are filled before, no more admissions will be accepted.
- Notification of the Master’s admissions board’s decision: Applications received by April 30 will receive notification by May 31.
- Admitted students should confirm their intention to participate within two weeks of being accepted into the program.
- Pre-enrollment must be submitted ONLINE along with the confirmation of participation.

Other Announcements

The Sixth Learning and Plasticity Meeting
Äkäslompolo, Finland | April 24-27, 2022

- A cross-disciplinary meeting that connects psychological and neuroscience research on the mechanisms of learning and brain plasticity
- The special theme of the LaP 2022 meeting is Videogaming and Cognitive Enhancement. However, most of the program will consist of free papers reflecting the broad spectrum of learning and plasticity research
- The LaP 2022 keynote speaker is Professor Simone Kühn (University Medical Center Hamburg-Eppendorf, Germany)
- Informal atmosphere and small size (maximum 60 participants) helps to connect participants and promotes discussion
- National regulations concerning the COVID-19 pandemic will be followed closely throughout the preparations and the meeting itself
- Excellent possibilities for winter sports and other outdoor activities
- Despite of its location way above the Polar Circle, the congress site is easy to reach by train or by flight

Due to the pandemic situation, we will enable digital presentations and remote participation for those participants that will be prevented from traveling due to Covid-related reasons. We will follow national authorities’ regulations with respect to, e.g., the European Digital Covid Certificate.

For further information, see the congress website at https://lapmeeting.fi/
Hope to see you at the Heart of Finnish Lapland in Spring 2022!

Call for Papers: "Strengthening Derivation Chains in Cognitive Neuroscience", a special issue of Cortex.

Building knowledge requires a sound connection between empirical observations and inferred scientific claims. This “derivation chain” (Meehl, 1990) links premises and auxiliary assumptions that are necessary for translating theoretical claims into empirical predictions (Scheel et al., 2021). Any weak element in the derivation chain
— e.g., a vague theoretical concept, an unreliable measure, an untested assumption about participant compliance — can invalidate the inference drawn from the data. To lay the foundation for strong inferences, scientists must establish concepts and methods, and examine auxiliaries. This Special Issue aims to stimulate and showcase foundational research that directly targets derivation-chain elements in cognitive neuroscience.

To provide focus and guidance for authors, we highlight three foundational research activities that we see as particularly important to the field: (1) definition and refinement of key concepts; (2) development and validation of key behavioral and neural measures, and experimental manipulations or paradigms; and (3) examination of preprocessing and analysis pipelines. Empirical articles (e.g., comparisons or meta-analyses of different methods or measures) should, in general, follow the Exploratory Reports guidelines, or Registered Reports format if authors wish to pre-register their study plans. Consensus or standardization articles from domain experts, adversarial collaborations on a controversial issue, or narrative reviews should follow the Review article guidelines. We will also consider Discussion Forum proposals on controversial topics that do not yet have a consensus.

Further information can be found on the journal website and the accompanying editorial. Preshubmission enquiries summarising the proposed article and explaining its fit to this Special Issue can be submitted until 31 March 2022 to the Cortex office <cortex@ed.ac.uk>. The deadline for manuscripts is 31 December 2022.