NATIONAL SCIENCE FOUNDATION
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ALEXANDRIA, VIRGINIA 22314

NSF 23-103

Dear Colleague Letter: Stimulating Diversification in Language Science Research (LangDiv)

May 10, 2023

Dear Colleagues:

The National Science Foundation (NSF) encourages submission of proposals that diversify and further deepen the study of language and communication. This is a collaborative initiative across several programs in the Division of Behavioral and Cognitive Sciences (Linguistics, Developmental Science, Perception, Action and Cognition, Cognitive Neuroscience, Dynamic Language Infrastructure-Documenting Endangered Languages and Science of Learning and Augmented Intelligence) with shared interests in the study of language. This is an effort to catalyze new collaborations that integrate knowledge across disciplines and/or levels of analysis. The goal is to advance more generalizable and replicable theories in the language and communication sciences via diversified sampling practices, language(s) of study, methodologies and theoretical perspectives.

The study of language and communication, especially its development, its neural basis and its cognitive architecture, has drawn disproportionately from learners of specific Indo-European languages, monolingual learners, narrow sociodemographic and socioeconomic groups, and US and Western European settings. Empirical studies within these communities have driven prevailing models and theories of language development, which in turn are constrained by narrow sampling practices.

To advance more generalizable and replicable theories in the language sciences, researchers are encouraged to develop new epistemic frameworks and to broaden the representation of learners, languages, cultures, contexts of learning and use, and locations sampled in language science research. In addition, we seek innovative use of multiple behavioral or neural methodologies and analyses (including proposals that incorporate computational modelling and artificial intelligence) to investigate basic principles of language development, language representation and processing, the neural basis of language and the relation of language learning to cognitive development over the lifespan. Foci of interest include understanding how language is structured, how it is acquired and learned, and

theories of the cognitive and neural processes involved in its comprehension and production.

Examples of possible topics suitable for this Dear Colleague Letter (DCL) include but are not limited to: language science in variable contexts (e.g., acquisition in bilingual/multilingual or bi-dialectical communities); effects of socioeconomic status on language development; effects of language, culture and experience on cognition; neuroscientific studies within diverse language communities; and effects of cross-linguistic variation on language processing. In their proposals, PIs should follow scientifically guided approaches to diversity (e.g., a cross-linguistic comparison study with well-founded scientific motivation) and clearly explain why the specific approaches to diversification or integration in the proposal will have an impact on developing more generalizable theories of language development, the mechanisms of language learning and processing or the neural basis of language.

This is not a special competition or new program; investigators should submit a proposal in response to this DCL directly to one of the participating programs, following their guidelines including deadlines/target dates. A proposal in response to this DCL should start the proposal title with "LangDiv." Primary and secondary units of consideration on the cover sheet should indicate the most relevant participating SBE program(s).

Participating programs in the Social, Behavioral and Economics Sciences Directorate include:

- Cognitive Neuroscience
- Developmental Sciences
- Dynamic Language Infrastructure-Documenting Endangered Languages
- Linguistics
- Perception, Action, and Cognition
- Science of Learning and Augmented Intelligence

Questions concerning this Dear Colleague Letter should be directed to the NSF Language Diversity Panel Team (langdiv@nsf.gov).

Sincerely,

Sylvia Butterfield, Acting Assistant Director
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