

Post-Doctoral Fellowship Opportunity

The Department of Linguistics and Languages in the Faculty of Humanities and The Department of Applied Linguistics at Brock University invite qualified candidates to apply for a 1-year Post-Doctoral Fellowship (renewable up to 2 years).

Job Title:	Post-Doctoral Fellowship
Posting Date:	May 6, 2017
Application Deadline:	Open until filled. Preference given to applications received by June 15, 2017
Position Start Date:	September 2017
Position End Date:	August 2018 (renewable up to two years)
Supervisors:	Dr. Victor Kuperman (McMaster), Dr. Gary Libben (Brock)
Remuneration:	\$41,000
Department:	Linguistics and Languages (McMaster), Applied Linguistics (Brock)

This position is included within the Canadian Union of Public Employees (“CUPE”) Local 3906 Unit 3, representing Post-Doctoral Fellows.

Description of Role:

Applications are solicited for a postdoctoral fellowship in the Cognitive Science of Language graduate program at McMaster University and the Department of Applied Linguistics at Brock University. The postdoctoral position is made open under the aegis of the Words in the World SSHRC partnership training grant and will also be supported by NSERC and other federal and provincial funding sources. The supervision will be conducted jointly by Dr. Victor Kuperman (McMaster) and Dr. Gary Libben (Brock). The supervisory team is looking for a postdoctoral research who can make substantial contributions to one or both of the following research projects:

1. Individual variability in visual and auditory processing of morphologically complex words.

Recent research reveals that many of the received theoretical accounts gloss over individual differences in morphological processing and only offer valid behavioral descriptions of very proficient, young readers. The goal of this project is to examine how visual and auditory comprehension of complex words in context is modulated by a wide range of individual-level variables – including cognitive and psycho-physiological

characteristics, personality traits, learning styles, age, and specific reading- and language-related skills. We envision parallel cross-linguistic multi-lab studies as the empirical base of this project. The aim is to advance models of morphological processing by accounting for interactions between individual variability and orthographic, phonological and semantic properties of inflected, derived and compound words. Main empirical methods will include eye-tracking and other behavioral experimentation, as well as the use of behavioral mega-studies and corpora.

2. Executive functions, serial fluency, and statistical learning as predictors of efficient reading comprehension

Much of research on predictors of reading success has concentrated on language-specific skills. Yet a very substantial share of variance in reading behavior is explained by domain-general abilities of a reader, including executive functions, the ability to plan and coordinate serial movements, and the ability to learn statistical patterns from a noisy environment. The need exists to quantify the influence of domain-general abilities on reading success across the lifespan and the range of reading proficiency. The aim is to advance theories of reading by highlighting the unique contribution of domain-general abilities and to develop training protocols for improving reading outcomes. We envision large-scale eye-tracking studies, coupled with extensive batteries of domain-general skill tests, to be conducted in both proficient and underperforming populations of readers of different ages. We also aim for cross-linguistic multi-lab experimentation, in collaboration with the Words in the World partners.

The selected candidate will be expected to take a lead in one of the two research projects. Primary responsibilities will include design and implementation of experiments; data collection and management; supervision of undergraduate and graduate research assistants; data analysis and interpretation; and dissemination of research outcomes in the academic community and public at large.

Applicants will have their primary affiliation and work location in the Department of Linguistics and Languages at McMaster University. A frequent communication with the Brock University team (secondary affiliation) is expected too. Both McMaster and Brock Universities are located in Southern Ontario at 70 km from each other, and are easily reachable by public transportation.

Qualifications:

A Ph.D. in psychology, linguistics, cognitive science, education, or statistics is required. Also required is experience with chronometric and eye-tracking experimentation, as well as a strong ability to conduct analyses of large multivariate data sets, using mixed-effects and additive multiple regression models, and machine learning techniques. The ability to develop independent projects is essential too.

Additional desirable qualifications include:

- Strong computer skills using Mac OS X and UNIX/Linux

- Programming Skills (Python, R, MATLAB, C/C++ and/or JAVA)
- Proficiency in corpus analyses

Application Procedure:

The successful applicant will join Dr. Kuperman's Reading Lab at the Department of Linguistics and Languages at McMaster University. The Department hosts a vibrant graduate program in the Cognitive Science of Language that has a strong research orientation and offers expertise in all major areas of Cognitive Science and Linguistics. The successful applicant will also be affiliated with and actively engaged in Dr. Libben's lab at the Department of Applied Linguistics.

Interested applicants should contact Dr. Victor Kuperman (vickup@mcmaster.ca) with a cover letter, statement of research interests, CV, and three letters of recommendation, and up to 3 representative publications reflecting expertise from the desired research areas. The appointment will be made for one year, and will be renewed for another year based on evidence of successful progress. The position will begin in September 2017. The application process will be ongoing until the position is filled. International applicants are welcome.

McMaster University is strongly committed to employment equity within its community, and to recruiting a diverse faculty and staff. The University encourages applications from all qualified candidates, including women, members of visible minorities, Aboriginal persons, members of sexual minorities and persons with disabilities.