

JOB DESCRIPTION

Job Title:	Senior Postdoctoral Research Fellow
Department / Unit:	Psychology
Job type	
Grade:	8
Accountable to:	Professor Kathy Rastle (Principal Investigator)
Accountable for:	

Purpose of the Post

To carry research activity in the field of language sciences in collaboration with an international research group based across the UK (Kathy Rastle), Belgium (Marc Brysbaert), and Italy (Marco Marelli). To lead development of computational models of language and language acquisition, to use these models to inform understanding of human language, and to disseminate findings in appropriate academic venues.

Key Tasks

• To lead the development of distributional semantic models based on a large corpus of children's reading material, travelling internationally to work with Marelli as necessary.

• To use distributional semantic models and their compositional counterparts to characterise the knowledge that children acquire through different types of reading experience, especially with regard to knowledge about the parts of words (morphemes).

• To develop new approaches and tools to analyse performance of the models, acquiring new skills independently as appropriate, and using a variety of statistical analyses.

• To use the models to develop hypotheses concerning the linguistic knowledge acquired through text that can be tested in behavioural experiments with children and adults.

• To develop and implement a web infrastructure for sharing vector representations derived from the models openly.

• To document all models and analyses using clearly-commented code and to share these tools openly on a platform such as the Open Science Framework.

• To contribute to the dissemination of findings to academic audiences through journal articles and conference presentations, travelling internationally as necessary

- To work closely with the investigators and other research staff on the project to ensure seamless delivery of objectives.
- To contribute to reporting, as required by the funding agency.
- To contribute to the overall activities of the research group, supervising and assisting colleagues as necessary.
- To contribute to the preparation of grant applications, research presentations and publications as requested.
- To undergo continued personal professional development

Other Duties

The duties listed are not exhaustive and may be varied from time to time as dictated by the changing needs of the College. The post holder will be expected to undertake other duties as appropriate and as requested by their manager.

The post holder may be required to work at any of the locations at which the business of Royal Holloway is conducted.

Internal and external relationships

The following list is not exhaustive but the post holder will be required to liaise with: Students, other members of staff within the school/department and College, academics in other institutions and, where relevant, industrial or professional contacts