

Research Role Profile				
Job Title:	Title: Research Fellow (1A)			
Responsible to:	Head of research group, or principal investigator			
Responsible for:	Not applicable			

Job Summary and Purpose:

To undertake research in accordance with the specified research project(s) under the supervision of the principal investigator.

Main Responsibilities/Activities

To undertake a range of research activities within a specified research area, assuming responsibility for specific areas of projects and making use of new research techniques and methods, in consultation with the research award holder or supervisor. This may include fieldwork, interviews, laboratory experimentation, critical evaluation and interpretation, computer-based data analysis and evaluation or library research.

Using initiative and creativity to identify areas for research develop new research methods and extend the research portfolio. Analysing and interpreting results of own research. Write up results and prepare papers for submission to appropriate journals and conferences, and other outputs as required and/or appropriate. Attend appropriate conferences for the purpose of disseminating research results of personal development. The post holder may also contribute to writing bids for research grants and will contribute to collaborative decision making with colleagues in areas of research.

Continually to update knowledge and develop skills, and translate knowledge of advances in the area into research activity.

To plan and manage own research activity in collaboration with others. To carry out administrative tasks associated with specified research funding, for example risk assessment of research activities, organisation of project meetings and documentation. Implementation of procedures required to ensure accurate and timely formal reporting and financial control.

To contribute to teaching in the Faculty by carrying out student supervision and/or demonstrating within the post holder's area of expertise and under the direct guidance of a member of departmental academic staff, as appropriate.

The post holder may occasionally be required to supervise more junior research staff.



Research Role Profile

Person Specification

The post holder must have:

A doctoral degree in a relevant discipline (although individuals who have almost completed a doctoral degree may be appointed). Consideration may also be given to individuals who do not hold a doctoral degree but have required skills based on a number of years experience in specified / relevant fields.

The post holder will have authority over some aspects of project work and must be capable of providing academic judgement, offering original and creative thoughts and be able to interpret and analyse results.

Relationships and Contacts

Direct responsibility to the principal investigator or academic supervisor. The post holder may be asked to serve on a relevant Faculty committee. There may be additional reporting and liaison responsibilities to external funding bodies or sponsors. The post holder may work on original research tasks with colleagues in other institutions.

Special Requirements

To be available to participate in fieldwork as required by the specified research project

All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities policy.
- Help maintain a safe working environment by:
 - Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand
 - Following local codes of safe working practices and the University of Surrey Health and Safety Policy
- Undertake such other duties within the scope of the post as may be requested by your Manager.



Research Role Profile

ADDENDUM

Job Title:	Research Fellow

Main Responsibilities/Activities

This information sheet should be read in conjunction with the accompanying generic Research Fellow (1A) Role Profile and will be used for shortlisting processes. More specifically the post holder will be expected to:

The Project

How do you know how to organise objects such as packing a bag or stacking a dishwasher? How do you know to put your clothes on the right way around and your shoes on the right feet? How do you find your way around a new school, and how do you know what to do when you get lost? These tasks rely on spatial abilities, skills core to everyday living. Despite their importance, spatial abilities in Down Syndrome are poorly understood. This is particularly surprising given that: 1) spatial thinking is one aspect of cognition that is particularly malleable through training in typically developing groups; and 2) the known impact of spatial ability on non-spatial domains, e.g., mathematics. In Study 1, we propose to establish cognitive profiles and developmental trajectories of spatial thinking in Down Syndrome for the first time. Furthermore, given the strong association between spatial thinking and mathematics skills in typically developing children, and the known weakness in mathematics in Down Syndrome, we will also investigate spatial-mathematical associations in this population.

In Study 2, we will optimise on the current digital revolution to investigate the prevalence of technology-use and gaming in the Down Syndrome community. This will complement Study 1 by identifying opportunities and limitations for designing technology-based training for individuals with Down Syndrome. These exciting and timely studies will provide important theoretical and practical knowledge on spatial thinking in Down Syndrome. The findings will be used to inform the design of future spatial training interventions for Down Syndrome groups.

The Role and its Responsibilities

You will be involved in each stage of both studies. (1) You will be involved in the preparation and design of cognitive tasks and questionnaires; (2) You will lead participant recruitment. This will include school-based recruitment, recruitment through support groups and lab contacts, and online recruitment. (3) You will lead data collection for both typically and atypically developing groups. (4) You will be responsible for data coding and analyses of the data. (5) You will also make a substantial contribution towards report writing, presentations, publications (at least one first author paper is envisaged) and dissemination to non-academic



parent-friendly publications

Familiarity with experiment-generation software.

Research Role Profile

audiences. You will be part of a strong team of experts in spatial and mathematical cognition and neurodevelopmental disorders.

Person Specification Qualifications and Professional Memberships Essential/ Desirable Essential A PhD (or near completion) or equivalent qualification in Psychology or a related subject Experience in conducting cognitive behavioural studies and Essential preparing data for analysis. The ability to write clearly and concisely with a good publication Essential record commensurate with the level of your career. Experience of statistical analysis (e.g. using SPSS or other Essential software) Experience in conducting standardised assessments and other Essential cognitive measures. The ability to work independently, as well as proven ability to Essential work collaboratively as part of a research team. Experience of working with children and schools. Essential Excellent organisation and communication skills. Essential Experience of recruiting and working sensitively with special Desirable populations and their families Experience reporting findings of assessments to parents and in Desirable

Desirable



Research Role Profile

Experience of using eye-tracking technologies and analysing eye-tracking data	Desirable
A background in spatial cognition and / or mathematical cognition.	Desirable
Familiarity with open science practices.	Desirable
Special Requirements	Essential/ Desirable
Eligible to work with children (a DBS will be required)	Е

Key Responsibilities

You will be required to

- 1. Contribute to the day-to-day management of the project, in line with the agreed objectives of the project to ensure that goals are achieved.
- Lead recruitment for the project. For individuals with Down Syndrome, this will involve contacting and visiting support groups, and contacting individuals who have previously participated in our research (via email and phone). For typically developing groups this will involve contact with primary schools.
- 3. Comply with ethical procedures and data protection requirements.
- 4. Administer experimental and standardised measures to collect research data.
- 5. Score, code and analyse data under supervision of the PI and Co-I.
- 6. Make a substantial contribution to report writing, presentations, and publications.
- 7. Support open science activities including pre-registration of studies and preparation of data for archiving.
- 8. To undertake such other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

N.B. The above list is not exhaustive.

Background Information

The post will be based in the Department of Psychological Sciences, within the University's School of Psychology, Faculty of Health and Medical Sciences.



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