Birkbeck
UNIVERSITY OF LONDON

JOB DESCRIPTION AND PERSON SPECIFICATION



JOB DESCRIPTION

Job title: Postdoctoral Researcher

Faculty/department: Psychological Sciences

Reports to: Professor Adam Tierney; Professor Denis Mareschal; Professor Elisa Ferré

Responsible for: Students working on the project as required

Grade: Research, Grade 7

PURPOSE OF THE JOB

This fixed-term postdoctoral fellowships will support work on an ESRC supported project entitled "Spontaneous movement to music in toddlers." Learning to align movement with sound is a crucial skill for social cognition, supporting conversational turn-taking and musical performance. Parents report that 90% of children dance to music by 12 months. The early emergence of dance to music, its cross-cultural ubiquity, and its absence in non-human primates suggests that it is a core element of what it means to be human. However, spontaneous dancing to music in toddlers has not previously been studied in the laboratory. As a result, we know little about the form and function of dance in toddlers. In this project, we will use optical motion tracking and EEG to investigate why and how toddlers dance to music.

The project will use a variety of methods, including EEG, optical motion tracking, and behavioural testing. The ideal candidate will have experience in both EEG and motion tracking, as well as experience with testing infants and/or young children. You will a) collaborate in the design and piloting of the experimental protocols and analysis techniques, b) recruit participants, c) conduct testing, d) preprocess and analyse data, and e) lead the write up of study results.

MAIN DUTIES

Research and Scholarship

To contribute to research under the supervision of Prof Adam Tierney, Prof Denis Mareschal, and Prof Elisa Ferré.

- To help develop and implement optical motion-tracking protocols for assessing spontaneous toddler movement to music, as well as EEG and behavioural protocols for investigating auditory, vestibular, and language development
- To facilitate academic impact via dissemination to other laboratories and to contribute to writing up research for publication

Teaching & Learning

- To provide supervision and/or training of students, interns and research assistants in the use of research methods, equipment, and project procedures
- To assist in the development of students' and others' research skills

Communication

- To communicate complex information and material of a specialist or highly technical nature orally, in writing, and electronically to participants, funders and the media.
- To take the lead in writing up research results and information about the project for lay-persons to use in leaflets, on the web site and in newsletters
- To give conference presentations about study results
- To take part in public dissemination/communication activities

WORKING RELATIONSHIPS AND CONTACTS

People Management and Teamwork

- To work with lab members and Co-Investigators as part of a team.
- To organize, attend, and/or contribute to relevant meetings
- To provide guidance to support staff and any students who may be assisting with the research as required
- To manage own research and administrative activities, with guidance if required
- To interact with academic colleagues on areas of shared research interest

Liaison and Networking

- To liaise with colleagues, collaborators, funders and relevant community organisations
- To build internal contacts, and participate in internal networks for the exchange of information and to form relationships for future collaboration
- To liaise with external bodies to share information and identify potential recruitment and funding sources

DIMENSIONS

Problem Solving and Impact

- To use creativity to develop and implement both standard and new optical motion tracking/EEG techniques

- To deal with problems, which may affect the achievement of research objectives and deadlines
- To contribute to collaborative decision making with colleagues in areas of research
- To use initiative and creativity to identify areas for research, develop new research methods, and extend the research
- To understand equal opportunity issues as they may impact on areas of research content and methods

Resource Management

- To contribute to the planning and running of the lab's research programme as part of a team
- To co-ordinate own work with that of others to avoid conflict or duplication of effort
- To plan and manage research activity in collaboration with others
- To use research resources, laboratories and equipment as appropriate

Working Environment

- To carry out tasks that require the learning of certain skills
- To be aware of the risks in the work environment and their potential impact on their own work and that of others
- To engage in continuous professional development
- To balance the competing pressures of research and administrative demands and deadlines

GENERAL RESPONSIBILITIES – universal to all Birkbeck roles

- To adhere to the College's Equal Opportunities policy in all activities, and to actively promote equality of opportunity wherever possible.
- To be responsible for your own health and safety and that of your colleagues, in accordance with the Health and Safety at Work Act (1974) and relevant EC directives.
- To work in accordance with Birkbeck's data protection policies, and relevant current data protection legislation.
- To undertake such other duties as may be reasonably required.

PERSON SPECIFICATION

Candidates will be able to demonstrate the following criteria within the areas of : Knowledge/ Technical Skills/ General Skills & attributes/ Experience/Qualifications.

Criteria:

1.	Strong developmental neuroscience/psychology background
2.	Experience using EEG, optical motion tracking, and behavioural testing methods with infants and/or young children
3.	Strong skills in EEG and behavioural study design, analysis, and interpretation
4.	Effective oral and written communication skills, to write up complex research findings and to convey specialist-technical material
5.	Relevant knowledge in music perception, auditory perception, motor control, developmental science, and the vestibular system
6.	Proficiency with EEG/behavioural analysis software, including Matlab
7.	Programming expertise
8.	PhD (or equivalent) in a relevant subject area
9.	Organisation and administration skills

FURTHER INFORMATION

Salary:

G7 sp 31 £45,132 rising to £51,387 per annum.

The salary, as shown above, is on the College's London pay scale, which includes a consolidated weighting/allowance, which applies only to staff whose normal contractual place of work is in the Greater London area.

Hours:

35 hours per week (1.0 FTE)

Working pattern:

Tbc

Probation period:

6 months

Duration of post:

24 months

Reason for fixed-term contract:

The appointment is paid for by external funds and this money is only available for the period stated (subject to extension if there is a consequent extension of funds).

Career pathway:

Research and Teaching

Safeguarding :

Please note that this appointment will be conditional on satisfactory clearance of an enhanced check with the Disclosure and Barring Service (DBS).

HOW TO APPLY

Closing date:
11.59 PM on 1 December 2026

Interview arrangements:

Interview date on 11 January 2027

The selection process will involve:

- A panel interview
- A task: candidates will be asked to give a fifteen minute presentation on a research project of their choice.

Start date:

1 February 2027.

To apply for this position please go to our online recruitment portal.

Please ensure your application includes full details of your employment history, education and qualifications, and recent development. For some roles, this will be collected in the application form, for others you will be asked to include this in a professional CV, which can be uploaded.

If you would like to know more about the role, please contact Adam Tierney at a.tierney@bbk.ac.uk.

RIGHT TO WORK IN THE UK

Applications from candidates who require sponsorship to work in the UK will be considered alongside other applications. Applicants who do not currently have the right to work in the UK will need to satisfy UK Visa & Immigration regulations before they can be appointed.

Further information about Sponsorship and eligibility to work in the UK, can be found on the gov.uk immigration webpages.

HELP AND ASSISTANCE

If you are having difficulties accessing the recruitment portal, please email jobs@bbk.ac.uk.

OUR COMMITMENT TO EQUALITY AND DIVERSITY

The College is committed to providing the highest quality academic and working environment where all staff, students, visitors and contractors are welcomed respected and treated in a fair, consistent and non-discriminatory manner. The College is proud of its diversity and welcomes applications from all sections of the community. No one will be treated unfairly because of their sex, race, disability, sexual orientation, age, religion or belief, carer status, political belief, pregnancy/maternity, social class, gender identity or marital/civil partnership.

Birkbeck is a member of the 'positive about disability' Disability Confident scheme and will interview all candidates who both declare a disability within the meaning of the Equality Act 2010 and meet the minimum essential criteria for the post, subject to any limits on the overall number of interviews.

Birkbeck is a member of Advance HE, holds an institutional Bronze level Athena SWAN award, is a Mindful Employers Charter signatory and subscribes to Stonewall's Diversity Champions.