

The School of Electronic Engineering and Computer Science invites applications for a

**QM Principal's PhD Studentship in Social Interaction, Health and Wellbeing  
on the research project  
Metaphors we share: Leveraging cross-sensory associations in communication**

Scientific understanding of the function of cross-sensory associations in communication is still in its infancy. This 3-year PhD project involves research in the areas of communication acoustics, cognitive linguistics, and crossmodal perception applied to modelling the dynamics of emergent communication systems in the form of a novel experimental paradigm, going beyond existing research by assessing cross-sensory associations in a dyadic communication game, tasking participants with creating an emergent communication system using sound and visual signals.

The PhD position will be jointly supervised by Dr Charalampos Saitis (QMUL), Dr Christine Cuskley (Newcastle University), and Prof Massimo Poesio (QMUL). The research project builds upon the 'Seeing Music' exhibition and game (<https://www.seeingmusic.app/>), developed by Dr Saitis and Dr Cuskley. It also relates closely to the QMUL strategic research theme of 'Social Interaction, Health and Wellbeing' (<https://tinyurl.com/muunysf5>), and to research around citizen science and games-with-a-purpose.

We will aim to explore several open questions with this new paradigm, simultaneously hitting upon new ways of exploring cross-sensory associations, exploring the dynamics of emergent communication systems, and testing the role of fully continuous vs discrete meaning and form spaces in communication. The communication game will be developed from in-lab controlled experiments to a fully digital online tool that can be used for crowdsourcing large-scale behavioural data via public engagement.

Queen Mary is interested in developing the next generation of outstanding researchers and decided to invest in specific research areas. **The successful applicant** should be curious, self-motivated, and hold, or is expected to obtain an MSc in Psychology, Cognitive Science, Electronic Engineering, Computer Science, or a closely related discipline. A masters level distinction or first class degree is highly desirable.

The 3-year position will start in September 2022 and is **limited to home applicants** only (see below). The student will be based in the **Centre for Digital Music** research group (<https://c4dm.eecs.qmul.ac.uk/>). The PhD studentship will cover tuition fees and offer a London stipend of £17,609 per year.

We strive for gender equality and diversity. Queen Mary has been recognised as the most inclusive Russell Group university (The Times and Sunday Times Good University Guide 2021) and as the best university for social mobility in the country (Sutton Trust 2021). It is also ranked in the top 20 institutions in the world for international outlook (THE 2020). We are also committed to increasing the number of individuals with disabilities in our workforce. Therefore, applicants of all backgrounds are welcome.

The deadline for applications is the **15th of April, 2022**.

Applicants should submit their application following the instructions at:

<http://eecs.qmul.ac.uk/phd/how-to-apply/>

The application should be marked 'Social Interaction, Health and Wellbeing', and include:

- CV (max 2 pages)
- Cover letter (max 4,500 characters) stating clearly in the first page whether you are eligible for a scholarship as a UK resident (see below)
- Research proposal (max 500 words)
- 2 References
- Certificate of English Language (for students whose first language is not English)
- Other Certificates

In order to qualify as a home student you must have no restrictions on how long you can stay in the UK and have been ordinarily resident in the UK for at least 3 years prior to the start of the studentship. For more information please see:

<https://epsrc.ukri.org/skills/students/guidance-on-epsrc-studentships/eligibility>

Applicants are encouraged to contact Dr Saitis ([c.saitis@qmul.ac.uk](mailto:c.saitis@qmul.ac.uk)) before submitting their application—please send an email with your CV and draft research proposal.

For administrative enquiries contact Mrs. Melissa Yeo ([m.yeo@qmul.ac.uk](mailto:m.yeo@qmul.ac.uk)).

The Social Interaction, Health and Wellbeing research theme:

<https://tinyurl.com/muunysf5>

Research in the School of Electronic Engineering and Computer Science:

<http://www.eecs.qmul.ac.uk/research/>

The Centre for Digital Music:

(<https://c4dm.eecs.qmul.ac.uk/>)