# **Michael Robert Smith**

07123 456789

michael.r.smith@abdn.ac.uk www.linkedin.com/in/michealrobertsmith

#### **EDUCATION**

## 2022 - 2025 PhD Neuroscience, University of Aberdeen

- BBSRC Funded PhD Studentship
- Thesis title: "Neural correlates of age differences in anger and sadness recognition within multiple sensory modalities". Supervisors: Professor Jerry Brown and Dr Xavier Bouvier.
- See Appendix A for a detailed synopsis.

#### 2018 – 2022 First class BSc (Hons) Neuroscience with Psychology, University of Aberdeen

- Thesis title: "Age differences in visually-evoked event-related potentials when viewing emotional stimuli". Applied EEG techniques to uncover biological markers of age-related discrepancies in facial emotion recognition. Received First class grade.
- Courses included: Biological Psychology, Perception and Cognitive Neuroscience.
- Subsidiary passes include: Chemistry and Physics.

#### RESEARCH EXPERIENCE

#### 2022 – 2025 **Doctoral Researcher, University of Aberdeen**

- Recruited and tested young and older participants in a timely and efficient manner and in accordance with university ethical approval.
- Administered the Montreal Cognitive Assessment (MoCA) to screen older adults for mild cognitive impairment.
- Programmed experiments, conducted signal processing and data analysis in MATLAB.
- Applied EEG techniques to investigate the effects of ageing on anger and sadness recognition.
- Extracted event-related potentials (ERPs) associated with the display of visual and auditory emotional stimuli.

#### Summer 2022 Research Assistant, University of Aberdeen

- Assisted a PhD student in research on the brain activation correlates of engaging in risk-seeking behaviours.
- Tested participants using Functional Magnetic Resonance Imaging (fMRI) techniques and analysed results in MATLAB.
- Applied working knowledge of extracting and analysing BOLD signal data.

## Summer 2021 Research Assistant, University of Aberdeen

- Assisted Dr Bouvier in their cutting-edge research on using Transcranial Magnetic Stimulation (TMS) techniques to investigate aspects of human cognition, namely working memory and attention.
- Welcomed participants and explained consent and ethical processes prior to undertaking testing using TMS.
- Developed knowledge of designing appropriate control conditions to address the limitations associated with TMS methodology, including the interference of concurrent auditory and somatosensory stimulation that may influence task performance.

## **GRANTS AND AWARDS**

- Grindley Grant (£750) | Awarded by Experimental Psychology Society (2024) to support conference attendance.
- British Neuroscience Federation (£300) | Awarded to support conference attendance (2023).

#### **PUBLICATIONS**

- Smith, M.R., Dr Bouvier, Dr Zangelidis & Professor Brown. (2024). Age differences in the neural correlates of anger and sadness recognition. *Journal of Neuroscience Research, Vol* (Issue Number), Page Numbers.
- Smith, M.R., Dr Bouvier., Dr Zangelidis & Professor Brown. (2024). The neuroscience of emotion: how EEG techniques can inform affective science. *Neuroscience & Behavioural Reviews, Vol* (Issue Number), Page Numbers.
- Dr Bouvier., Professor Brown, Smith, M.R. & Dr Zangelidis. (2022). Supressing activity in the dorsomedial prefrontal cortex via TMS influences risk taking behaviour among young adults. Frontiers in Neuroscience, Vol (Issue Number), Page Numbers.

#### **ORAL AND POSTER CONFERENCE PRESENTATIONS**

- Smith, M.R., Dr Bouvier., Dr Zangelidis & Professor Brown. (2024). Age differences in the neural correlates of anger and sadness recognition | Oral presentation conducted in the Geneva Ageing Series, Geneva, Switzerland.
- Smith, M.R., Dr Bouvier., Dr Zangelidis & Professor Brown. (2023). Age differences in the neural correlates of anger and sadness recognition | Poster presentation conducted in the Psychology Postgraduate Affairs Group (PsyPAG), University of York, York.
- Smith, M.R., Dr Bouvier., Dr Zangelidis & Professor Brown. (2024). Exploring age discrepancies
  in auditory-evoked event related potentials following the display of emotional stimuli |
  Experimental Psychology Society, University College London, London.

#### PROFESSIONAL MEMBERSHIPS

- The British Neuroscience Association: Member since 2022
- Experimental Psychology Society: Member since 2021
- British Psychological Society (BPS): Member since 2018

## **TEACHING EXPERIENCE**

#### 2023 - Present Postgraduate Demonstrator, University of Aberdeen

Tutor for the following courses: Introductory Psychology 1 and 2 and Neurophysiology Research Topics.

- Running Level 1 and 3 tutorials, enhancing students' knowledge gained from lectures and teaching students how to perform advanced statistical analyses using EEG techniques.
- Provided constructive feedback on formative assignments using Turnitin software in the University of Aberdeen's VLE, MyAberdeen (Blackboard).

#### 2023 – 2024 Undergraduate Thesis Supervisor, University of Aberdeen

Secondary supervisor for a Level 4 undergraduate thesis student.

- Provided training on data collection, research design, statistical analyses.
- Provided constructive advice on the thesis.

## **PUBLIC ENGAGEMENT**

- "Exploring brain activity associated with processing emotions in young and older adults" |
   Public engagement talk presented at the Café Scientifique seminar series organised by the University of Aberdeen (2024).
- "Explore the Brain" workshop: included fun interactive activities designed to enhance learning among primary school aged children organised by TechFest, Aberdeen (2022).

#### **KEY SKILLS**

#### **Data Analysis:**

Advanced knowledge of programming and analysing data in MATLAB as a result of my PhD. Skilled at extracting ERP data from conducting a series of EEG studies. Working knowledge of identifying BOLD signals from fMRI data and using TMS. Experienced at conducting complex statistical tests as a result of my educational background and research roles.

#### **Communication:**

Skilled in preparing and presenting written and verbal communications tailored to a range of audiences, including academics, students of mixed abilities/levels and the general public. Enhanced oral presentation skills from presenting project findings in an inter-disciplinary environment within both local and European conferences.

#### Leadership:

Experienced in supervising undergraduate thesis students, including delivering on-going training on data collection, research design and statistical analyses to undergraduate students as a result of my experience as an Undergraduate Thesis Supervisor and Postgraduate Demonstrator (University of Aberdeen).

#### **Time Management:**

Excellent time management skills: during my PhD research experience and research roles, I ensured that participants were tested in a timely and efficient manner. Skilled at meeting project deadlines and submitting revisions to peer-review manuscripts and grant applications within a predefined timescale.

#### Collaboration:

Experienced in working within a highly collaborative team for group projects both during my undergraduate and postgraduate degrees. Due to the interdisciplinary nature of my PhD topic, I have worked in consultation with academics from both Neuroscience and Psychology disciplines.

#### **INTERESTS & ACHIEVEMENTS**

**STEM Ambassador:** Help to organise various activities, including talks and workshops, designed to engage young people in Science, Technology, Engineering and Mathematics.

**Sport:** Member of the University of Aberdeen's Rugby Team.

#### REFERENCES

Available upon request

## **APPENDIX A**

#### **PhD Abstract**

Prior research has established age differences in the ability to recognise emotions: older adults are particularly worse at recognising facial expressions of anger and sadness. However, previous studies have primarily examined age-related discrepancies in labelling facial expressions of emotion using behavioural methods. Furthermore, most studies to date have investigated age differences in recognising emotions by asking participants to label static images of facial expressions. The studies presented in this thesis applied EEG methods to investigate whether there are age differences in neural correlates associated with anger and sadness recognition. Both auditory and visual stimuli were presented in separate studies. Visually and auditory evoked event-related potentials (ERPs) were recorded from the scalp over cortical regions associated with visual and auditory processing, respectively. Findings are discussed in relation to previous research findings. Implications of the results are presented and suggestions for future work provided.