

Department of Psychology: RES Supervisor List (Summer Term 2019)

Email your application to Dr Kevin Dent (kdent@essex.ac.uk, RES organiser).

Your email must include:

1. a one page CV in Word or PDF format attached to the email;
2. a list of any members of staff you would like to work with, in order of preference, with your preferred choice at the start of the list (you can list as many of the staff as you like from the list below);
3. FOR EACH MEMBER OF STAFF ON YOUR LIST OF PREFERENCES, attach a separate short letter (in Word or PDF format) in which you explain your interest in the research project and motivation for working with the researcher.

Please send your application as soon as possible and no later than **12:00pm Thursday 18th April (Week 29)**.



Kathryn Buchanan

My research involves investigating factors that lead to desirable societal outcomes, such as pro-environmental behaviour, pro-social behaviour and happiness. Currently, I'm focusing my research efforts on two questions: (1) Can witnessing kindness vicariously improve people's happiness? (2) Which categories of faces inspire generosity and moral behaviour – cute babies, sweet looking elderly people or attractive adults? Students interested in either one or both of the projects will get a range of hands-on-experience including assisting with: identification of relevant literature; the design of the study including sourcing appropriate materials and measures, participant recruitment and testing (including collecting observational data) and data analysis.



Nicholas Cooper

Future thinking and decision-making in adolescence

In everyday life we are often faced with a choice between competing options that differ both in objective value and availability in time. For example, to achieve healthy weight (delayed positive health outcome), I must resist eating a chocolate (small immediate pleasure). Adolescence is one crucial period when young people make important decisions that may have long-lasting impact on their adult life. Research suggests that imaging personally-relevant events or states that might occur in the future, which is called episodic prospection, may help us make better decisions. The benefits of engaging in episodic future thinking are stronger for individuals who usually are more prone to short-sighted behaviour. This highlights the potential importance of episodic prospection in supporting decision-making in adolescence, a period stereotypically perceived as characterized by risk-taking and short-sightedness. As a RES student you will have the opportunity to help me find out more about psychological and neural mechanisms that underlie future thinking and decision-making in adolescence. In addition to helping with EEG data collection, you will learn how to administer psychometric and behavioural assessments that are often used not only in research but also in clinical practice. This project is being run in collaboration with King's College London and the University of East London.



Kevin Dent

I'm interested in how in such a busy world, people stay focused on what is relevant and avoid distraction from irrelevant objects and events. RES projects in the Summer Term will explore, two issues: 1) The effects self-relevance on visual attention. Why is it that stimuli associated with ourselves (e.g. our own names) appear to capture our attention? 2) The after effects of inattention blindness. Do unattended and unseen objects never the less affect our behaviour unconsciously? Students will participate in aspects of study design, participant recruitment and testing, and data analysis.



Tom Foulsham

My research investigates how people perceive and pay attention to the things around them. In particular, I am interested in the neural, visual, cognitive and social processes that determine where people look and what people notice and remember when they look there. Current projects include investigating where people look in art, comics, movies and computer games.



Helge Gillmeister

My research is about body representation and how this shapes our sense of self. I'm also interested in eating behaviours / disordered eating. This term's RES project is a study that measures behaviours around food. You would learn to collect computerised survey responses and behavioural measures (response speed / accuracy). We will attempt to train people's impulsivity (inhibitory tendencies) to see if we can change those behaviours. A separate project investigates links between emotional difficulties (anxiety, alexithymia) and the mirror neuron system in an automatic imitation task involving finger movements in the lab. Finally, a third project involves data collection on the perception of physical disability (specifically, persons with missing limbs). For this, you would learn how to use eye-tracking equipment to measure attention to body parts, surveys, and the implicit-association test (IAT). In your application please indicate which of these projects you would like to be involved in and why. I look forward to hearing from you.



Megan Klabunde

I am a social/affective neuroscientist that examines the typical neurodevelopment and the development of psychopathology in children. My research examines the how one senses their body cues (interoception) and its role in emotion processing, empathy and the development of psychiatric symptoms. Additionally, I also examine early life social interactions, specifically parent-child attachment and empathetic interactions on interoceptive neurodevelopment. To conduct my research, I use functional Near Infrared Spectroscopy (fNIRS), functional and structural Magnetic Resonance Imaging (fMRI and sMRI) and a variety of physiological measures and behavioural tasks. I am looking for students who can help me 1) pilot new strategies for examining interoception in children and (outside of the scanner) 2) help me examine the brain synchrony that occurs during empathetic interactions across people with fNIRS and 3) examine brain activation during empathy accuracy with fNIRS and eye tracking studies.



Rick O'Gorman

What is the role of disgust in social settings? Does it help us make moral decisions? Can we use pupil dilation to know when something is more significant in meaning for us? Do we care more about family or friends? Do people look more at men or women, older or younger (are older women 'invisible')? These are some of the questions that I will be looking to study with assistance from a Research Experience Student (or two or three!). My general research interest is in studying human behaviour as a functionally adaptive system; that is, evolutionary psychology--the study of human behaviour and cognition from an evolutionary perspective. Which project is worked on depends on what I need to prioritise, and from discussion with RES applicants.



Steven Samuel

One of the most interesting aspects of our cognition is the ability to represent in our minds what is going on in other people's. There is clear evidence that we can take other people's visual and mental perspectives; we can imagine what a visual scene looks like from somewhere other than where we are, and we can take into account what we know about other people when we make judgments about what we think they think. What is less well understood is how we do this, when we do this, and what the scope and limitations of these abilities are. As an RES student, you would collaborate with me on a behavioural study to investigate aspects of our ability to take other visual and/or mental perspectives.



Loes van Dam

The Mystery of the Raddlesham Mumps: the interaction between immersive media elements. Have you ever experienced the situation in which you find yourself completely captivated by a story-book that you are reading to the extent that you become unaware of your immediate surroundings? This experience is called immersion and is something that can happen when reading a story-book, looking at a movie or theatre play, playing a computer game etc. The Mystery of the Raddlesham Mumps is a unique project in that it uses a range of such different media elements for its story-telling, each of which may result in a level of immersion. The research that I will be doing over the summer term will be looking at the interaction between these different types of immersive media in the context of the Raddlesham Mumps package. For instance, I will be investigating whether the level of immersion increases the more a person interacts with the different media elements. For this project I am looking for enthusiastic students who are willing to help me with data entry and data analysis of questionnaire results. If time permits, students can also be involved in projects relating to Virtual Reality content.



Abigail Webb

A main focus of my research is the way in which our visual system responds to and interprets fearful facial expressions. Evolutionary theories tell us that the ability to rapidly detect fearful facial expressions is crucial to our survival. According to such theories, it may be possible for the human visual system to respond to these facial expressions involuntarily, perhaps even unconsciously. Psychophysical methods including saccadic latency, continuous flash suppression, and expression matching tasks are useful candidates to measure the extent that we detect and respond to expressions of fear. Saccadic latency measures rapid eye movements that shift across a visual scene, and is used to assess how quickly we look toward a visual stimulus. Continuous flash suppression allows us to present images to observers outside of conscious awareness, and to measure the time it takes for their conscious detection. Expression matching tasks require observers to detect and match the location of barely visible facial expressions- the point at which observers are correct 75% percent of the time gives us an idea of an expressions' associated detection thresholds. These psychophysical techniques allow us to adopt a controlled approach to measuring both low and higher-level aspects of visual perception.
