

**Alasdair Clarke:**

I have research interests in visual search, psychophysics, and decision making. The visual search project aims to understand the strategies people make when searching for a difficult to find target (for example, looking for your keys on a messy desk). The psychophysics study aims to resolve an open question in the literature regarding visual crowding, the results of which will tell us whether the way the brain is organised directly affects our perception. In decision making, I am interested in simple tasks and puzzles in which naïve participants perform poorly in, despite the existence of simple optimal strategies.

**Marcello Costantini:**

I'm interested the role of the physical and the biological body in making sense of the external world. In this I refer to the physical body as the structural and morphological features of the body while the biological body refers to its inner state (e.g. the activity of the immune system). To study this topic I use different techniques such as psychophysics, eye-movements, brain stimulation (TMS), neurophysiology (EEG) and neuroimaging (fNIRS).

**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 Spring Term will focus on the relationships between memory and attention. In particular projects will explore, two issues: 1) how the history of what you were just doing, affects your ability to deploy attention now, and 2) when is it difficult to both hold things in memory and search for an object, and when is it easy to combine these two activities. Students will participate in aspects of study design, participant recruitment and testing, and data analysis

**Helge Gillmeister:**

I use electroencephalography (EEG) and brain stimulation (tES) techniques to investigate the cortical processes associated with perception and mood, and I'm interested in the body and the bodily self. My current projects explore (a) the perception of the human body and how this differs in people with body image disturbances, disordered eating (over- and under-eating), body builders etc. (b) EEG signatures of food perception, and (c) low-level attentional, executive, and multisensory processes in disordered eating. I am also presently running experiments on self-perception. Finally, I am interested in the cortical mechanisms of how brain stimulation affects mood and creativity, and would be happy to hear from keen students with similar interests.



Marie Juanchich:

It is not that I don't want to help, but...

Should charities solicit donations politely, using phrases like "would you like to donate", instead of the direct "donate!"? On the one hand, our results suggest that they do not have to: polite requests do not affect the likelihood of a donation. But our results identify a subtler problem: Solicited individuals adjust their perception of the request to match their decision to donate, a phenomenon we call the Polite Wiggle Room.

Individuals who do not donate rationalize their decision by judging the request as impolite or intrusive, however it is phrased. Charities must manage the long-term threat of the Polite Wiggle Room to maintain a positive image among people who do not donate.

Research goals: (1) Testing who exactly benefits from the effect (people who say yes and who can therefore maximise the psychological benefits of the donation "I donated because I wanted" or people who did not donate: "I did not donate because they were rude"). (2) Testing whether the polite wiggle room affects the perception of the charity that is making the request.

Relevant references:

Chance, Z., & Norton, M. I. (2015). The What and Why of Self-Deception. *Current Opinion in Psychology*, 6, 104-107. doi: <http://dx.doi.org/10.1016/j.copsy.2015.07.008>

Pavey, L., Greitemeyer, T., & Sparks, P. (2012). "I Help Because I Want to, Not Because You Tell Me To": Empathy Increases Autonomously Motivated Helping. *Personality and Social Psychology Bulletin*, 38, 681-689.



Dominique Knutsen:

You probably have noticed that you don't talk in the same way depending on who you are talking to. For instance, when trying to explain what you have learnt in a cognitive psychology class, you won't explain things in the same way depending on whether you are talking to a fellow student or a friend who doesn't study psychology. For instance, you might use more scientific jargon when talking to your fellow student, because you know that he or she is capable of understanding the terms you use. This illustrates the idea that human language is highly adaptive - this idea is at the centre of my research.

All my current projects seek to understand how people manage to adapt to each other as they interact, and what happens when they fail to do so. As a RES student, you would be involved in participant testing and data analysis. This should be a great opportunity for you to learn more about dialogue research and to develop your research skills further!



Vanessa Loaiza:

My research interests primarily concern the interaction between working memory and long-term memory. What are the processes underlying your ability to maintain and update information from moment to moment (working memory)? Do these processes have anything to do with your ability to retrieve that information much later on (long-term episodic memory)? Moreover, do aspects of long-term memory influence working memory processes? Just how similar are working memory and long-term memory, anyway? All of the projects concern these principal research questions, and would involve testing participants on programmed experiments administered on a computer. Participants will be young (18-35) and older (63-80) adults recruited from the local community and university. All RES students for this project will be involved in participant recruitment and testing, but based on your further research interests, you may also enjoy the opportunity to learn more about programming experiments and conducting and reporting statistical analyses.



Bundy Mackintosh:

My general research interest focuses on emotion, the cognitive biases that cause anxiety and depression and how these can be modified with the aim of ameliorating these symptoms. The cognitive biases that I am interested, at the moment, are attentional and interpretive threat biases (although others interest me). Recent work includes focusing on examining potential relationships between these biases, and further developing cognitive theoretical accounts of how they function. One project I am doing, uses musical instruments, and assesses how much they alleviate anxiety when you play inspiring music. I use questionnaires and computer studies to focus on how participants modify their mood.



Rick O’Gorman:

Do we care more about family or friends? Do women find intelligent men more attractive at some times of the menstrual cycle? Do the eyes reveal insights into how people feel about taboos? Do people look more at men or women, older or younger (are older women ‘invisible’)? These are some of the questions that I have studied recently with assistance from a Research Experience Student (or two or three!). This coming term, my focus will turn to two main areas, 1) altruism toward family and friends, and 2) further work on who people look at. 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.



Silke Paulmann:

It has been said that 10% of misunderstandings are due to differences in opinion while 90% are due to wrong tone of voice. I am interested in the 90%. My research thus explores how we communicate emotions and social attitudes via speech. I look at both the perception of tone of voice and the way we produce it. Projects with me will focus on exploring which variables can influence how emotional and attitudinal language processing works. For instance, recent studies have explored how personality, history of alcohol abuse, language and culture background, or state of mind (e.g., stress, motivation) influence how social communicative intentions are processed.



Miroslav Sirota:

In my research, I am trying to understand how people estimate, judge, reason and make decisions in situations of uncertainty and risk, how people perform these processes “on their own” and “in the presence of the others”, and how people perform these processes “in the lab” and “in the wild”. My basic research interests include perceptions of verbal probabilities, statistical reasoning, and intuitive and deliberative processing. My applied research interests include uncertainty and risk communication (e.g., climate change communication, communication between patients and doctors), and diagnostic and management decision-making of doctors. The research project proposed here will focus on statistical reasoning. Students will gain experience in participants recruitment, data collection and data analysis.



Jonathan Rolison:

A major focus of my research is risk taking behaviours across adulthood. Some of my research is aimed at explaining why people become more cautious in older age and whether age changes in risk taking behaviours are beneficial or harmful. My research also explores people's understanding of information about risk, and in particular, health-related risks, such as cancer risks. One of my aims in this area is to develop methods for overcoming barriers to effective risk communication. As a RES student, you would work with me on one of these topics, which would include recruiting and testing participants from the local community. You would learn about how to conduct psychology studies to answer psychological questions and how to interpret the findings of psychology studies.



Elia Valentini:

My research investigates how people perceive negative valence information, how they interpret both physical and psychological events as threatening. Some keywords in my projects are therefore "threat", "pain", "anxiety", "emotion", "attention". Current projects would involve measuring subjective reports (i.e. from sensory ratings to personality questionnaires), cognitive and behavioural performance in a multisensory setting and mostly using the EEG. Students will undergo a progressive induction process from literature search and databasing, through design, data collection, analysis, and interpretation.



Loes van Dam:

I'm interested in multisensory perception and goal-oriented behaviour. When we interact with our direct surroundings, e.g. picking up a cup of coffee, we appear to do so seemingly effortlessly. Yet, even such simple every-day tasks involve sensing the 3D position and orientation of the cup (sensory processing), making an educated guess whether it is currently full or empty to estimate its weight (cognitive processing), and having an idea of our own limb position and where it needs to go next (movement planning). My research investigates how the human perceptual system sorts and combines relevant pieces of both sensory and cognitive information for performing such simple goal-oriented tasks. As a RES student you would work with me on this topic and for instance recruit and test participants. You would also have the chance to learn about how to analyse and interpret behavioural data and to have a look at the programming of such experiments.
