DISSERTATION TOPICS AVAILABLE 2019/2020

This document lists staff available to supervise MSc dissertations for the 2019/2020 academic year, along with a brief statement of research interests, and a description of topics that each staff member is willing to supervise. In some cases, specific projects may be described; in others, a more broad description of a research area is given. In addition to the specific topics suggested, it is possible for you to suggest your own topic to a potential supervisor.

Arranging supervision
It is up to you to approach supervisors to discuss topics (*not relevant for Philosophy students – see below*). Your dissertation topic will be negotiated with your supervisor and must be agreed by both parties. Any student can be supervised by any academic staff member, provided that the topic is approved by your taught Programme Director as a topic relevant to your MSc programme; this includes staff members external from the School of Philosophy, Psychology and Language Sciences.

Please note:

- Some programmes may produce specific topic lists in January so please ask your Programme Director to confirm whether this is the case.
- Supervisors may have limited places, so you should not necessarily expect to be accepted for your first choice of project.

Once you have agreed upon a dissertation topic with a supervisor, the Programme Director must be informed, and asked to approve the topic. Only then will your project with that supervisor be confirmed.

Timing
Your dissertation topic should ideally be confirmed by the end of February, and considerably earlier if the project is complicated or likely to involve special populations (e.g. children, neuropsychological patients) or requires NHS approval.

Word length and deadline
The recommended word limit for the dissertation is 8,000 words for taught MSc students (check your programme handbook for any specifics).

The submission deadline for the dissertation is **4pm, Thursday 13th August 2020**. Details of how to format the dissertation will be made available online.

Philosophy
Students in Philosophy programmes are advised to check the staff webpages for information on the academic staff's areas of research.

PHILOSOPHY

Students in Philosophy programmes are recommended to check the staff webpages for information on the academic staff's areas of research.

Thomas Baker

Office: 5.11 Dugald Stewart Building

Email: Thomas.Baker@ed.ac.uk
Web: https://www.ed.ac.uk/profile/tom-baker

Damian Caluori

Office: 6.07 Dugald Stewart Building

Email: DCaluori@ed.ac.uk
Web: https://www.ed.ac.uk/profile/damian-caluori

Alix Cohen

Office: 4.13 Dugald Stewart Building

Email: Alix.Cohen@ed.ac.uk
Web: http://www.ed.ac.uk/profile/alix-cohen

James Collin

Office: 5.11 Dugald Stewart Building

Email: James.Collin@ed.ac.uk
Web: https://www.ed.ac.uk/profile/dr-james-collin

Jonathan Cottrell

Office: 5.11 Dugald Stewart Building

Email: J.Cottrell@ed.ac.uk
Web: https://www.ed.ac.uk/profile/jonathan-cottrell

Guy Fletcher

Office: 4.03 Dugald Stewart Building

Email: Guy.Fletcher@ed.ac.uk
Web: https://www.ed.ac.uk/profile/guy-fletcher

Jade Fletcher

Office: 6.03 Dugald Stewart Building

Email: Jade.Fletcher@ed.ac.uk
Web: https://www.ed.ac.uk/profile/jade-fletcher

Alistair Isaac

Office: 6.08 Dugald Stewart Building

Email: A.M.C.Isaac@ed.ac.uk
Web: https://www.ed.ac.uk/profile/alistair-isaac

Inna Kupreeva

Office: 5.02 Dugald Stewart Building

Email: Inna.Kupreeva@ed.ac.uk
Web: https://www.ed.ac.uk/profile/inna-kupreeva

Suilin Lavelle

Office: 5.07 Dugald Stewart Building

Email: J.S.Lavelle@ed.ac.uk
Web: https://www.ed.ac.uk/profile/suilin-lavelle

Andrew Mason

Office: 6.10 Dugald Stewart Building

Email: A.S.Mason@ed.ac.uk
Web: https://www.ed.ac.uk/profile/andrew-mason

Elinor Mason

Office: 6.06 Dugald Stewart Building

Email: Elinor.Mason@ed.ac.uk
Web: https://www.ed.ac.uk/profile/elinor-mason

Aidan McGlynn

Office: 6.12 Dugald Stewart Building

Email: AMcGlynn@staffmail.ed.ac.uk
Web: https://www.ed.ac.uk/profile/aidan-mcglynn

Filipa Melos Lopes

Office: 4.05 Dugald Stewart Building

Email: Filipa.MeloLopes@ed.ac.uk
Web: https://www.ed.ac.uk/profile/filipa-melo-lopes

Katie Monk

Office: 4.02 Dugald Stewart Building

Email: K.Monk@ed.ac.uk
Web: https://www.ed.ac.uk/profile/katiemonk

James Openshaw

Office: 5.04 Dugald Stewart Building

Email: James.Openshow@ed.ac.uk
Web: https://www.ed.ac.uk/profile/james-openshaw

Research Interests
My principal research interests are in philosophy of mind and philosophy of language. I'm also interested in epistemology, metaphysics, and the philosophy of cognitive science. In particular, I've worked on issues like singular thought, reference, perceptual experience, and propositional attitude reports.

Anna Ortin Nadal

Office: 6.03 Dugald Stewart Building

Email: AOrtinN@ed.ac.uk
Web: https://www.ed.ac.uk/profile/dr-anna-ortin-nadal

Pauline Phemister

Office: 6.04 Dugald Stewart Building

Email: P.Phemister@ed.ac.uk
Web: http://www.ed.ac.uk/profile/pauline-phemister

Bryan Pickel

Office: 4.04b Dugald Stewart Building

Email: Bryan.Pickel@ed.ac.uk
Web: http://www.ed.ac.uk/profile/bryan-pickel

Brian Rabern

Office: 4.04c Dugald Stewart Building

Email: Brian.Rabern@ed.ac.uk
Web: https://www.ed.ac.uk/profile/brian-rabern

Indrek Reiland

Office: 4.02 Dugald Stewart Building

Email: Indrek.Reiland@ed.ac.uk
Web: https://www.ed.ac.uk/profile/ireiland

Alasdair Richmond

Office: 6.11 Dugald Stewart Building

Email: A.Richmond@ed.ac.uk
Web: http://www.ed.ac.uk/profile/alasdair-richmond

Michael Ridge

Office: 6.09 Dugald Stewart Building

Email: M.Ridge@ed.ac.uk
Web: https://www.ed.ac.uk/profile/michael-ridge

Debbie Roberts

Office: 4.12 Dugald Stewart Building

Email: D.Roberts@ed.ac.uk
Web: https://www.ed.ac.uk/profile/debbie-roberts

Wolfgang Schwarz

Office: 6.02 Dugald Stewart Building

Email: Wolfgang.Schwarz@ed.ac.uk
Web: https://www.ed.ac.uk/profile/wolfgang-schwarz

Paul Schweizer

Office: Dugald Stewart Building

Email: Paul@inf.ed.ac.uk
Web: https://www.inf.ed.ac.uk/people/staff/Paul_Schweizer.html

---

Martin Smith

Office: 5.08 Dugald Stewart Building

Email: Martin.Smith@ed.ac.uk
Web: http://www.ed.ac.uk/profile/martin-smith

Patrick Todd

Office: 4.04a Dugald Stewart Building

Email: ptodd2@staffmail.ed.ac.uk
Web: https://www.ed.ac.uk/profile/patrick-todd

Nick Treanor

Office: 6.07 Dugald Stewart Building

Email: Nick.Treanor@ed.ac.uk
Web: https://www.ed.ac.uk/profile/nick-treanor

Tillmann Vierkant

Office: 5.06 Dugald Stewart Building

Email: T.Vierkant@ed.ac.uk
Web: https://www.ed.ac.uk/profile/tillmann-vierkant

Jo Wolff

Office: 6.03 Dugald Stewart Building

Email: Jo.Wolff@ed.ac.uk
Web: https://www.ed.ac.uk/profile/jo-wolff

I specialise in philosophy of science and contemporary analytic metaphysics. I'm happy to supervise dissertation topics in either area, including topics in the philosophy of particular sciences.

PSYCHOLOGY

Tom Booth

Office: F17, 7 George Square

Email: Tom.Booth@ed.ac.uk
Web: https://www.ed.ac.uk/profile/tom-booth

Research Interests
My research interests sit at the intersection of personality, health and organisational psychology. Much of my work is longitudinal, and all is quantitative. I am happy to supervise projects within this broad area, and would invite potential students to come and discuss their ideas. Currently I have a specific interest in:

- Investigating the stability of personality-criterion associations through close consideration of item content
- Use of experience sampling methodology to investigate the degree to which situations change individuals personality manifestations, and whether any such differences are deliberate - in other words, do we present differently in different situations and how consistently.
- Using experience sampling to validate other reports of personality
- Impact of retirement on mental and physical health (secondary data projects)

Neil Bramley

Office: S2, 7 George Square

Email: Neil.Bramley@ed.ac.uk
Web: https://www.ed.ac.uk/profile/bramley

Research Interests
I am interested in the cognitive mechanisms that underpin many facets of human higher-level cognition including learning, reasoning, problem solving, planning and control. I am happy to discuss projects related to any of these topics but below are two more specific possibilities:

Projects

Dealing with a changing world
The world behaves in predicable ways much of the time, allowing us to learn how to get what we want from it. But the world also changes such that a strategy or behaviour that used to be effective might gradually or abruptly stop working? This project will involve setting up a control task in which participants have to learn how to control a system, e.g. how to keep a power plant from overheating by controlling the levels of several inputs (cf. Berry & Broadbent, 1987). Once they have learned a successful control strategy, we will change the relationship between the inputs and the outcome either gradually or abruptly and test how and when participants are

able to adapt their behaviour.

Balancing social and active learning
When we don't know much about something, it is often sensible to copy others until we get the hang of it. For example, you might copy your friend's order at their favourite cafe if you have never been before. However, this strategy is only useful if (a) they have more domain expertise than you (i.e. know the cafe better), (b) have the same goals (i.e. like the same foods), and (c) the time horizon is short (i.e. if you do not expect to visit the café many more times). No one has yet studied how people balance these factors in choosing when to rely on imitating another vs. selecting an option oneself. This project will utilise a bandit task methodology (Steyvers et al, 2009) in which participants repeatedly choose one of several doors to open. The doors may contain prizes (i.e. stickers or money) and the participants' goal is to win as many prizes as possible. The twist is that participants get to first observe a virtual "teacher" select a door and can choose to either copy the teacher or choose their own door to open. A good project will manipulate factors such as the success rate, number of alternatives, learners' goals, and success rate of the "teacher" to explore the determinants of active and social learning.

Berry, D. C., & Broadbent, D. E. (1987). The combination of explicit and implicit learning processes in task control. Psychological Research, 49(1), 7-15.

Steyvers, M., Lee, M. D. & Wagenmakers, E.-J. (2009). A Bayesian analysis of human decision-making on bandit tasks. Journal of Mathematical Psychology, 53 168-179.

Nicolas Chevalier

Office: S28, 7 George Square

Email: Nicolas.Chevalier@ed.ac.uk
Web: http://www.ed.ac.uk/profile/nicolas-chevalier

Research Interests
While working on a project or assignment, you may need to prevent mind wandering and ignore the temptation to check your emails and Facebook page. Efficient control over your thoughts, actions and emotions will help you stay on task and get it done. In contrast, children tend to be "all over the place", not exerting cognitive control (also referred to as executive functioning) as well as do adults. Yet, emerging cognitive control during childhood is one of the best predictors of academic achievement and later life outcomes such as health, income, or criminal records. Given the key role of cognitive control in child development, the study of its development has become one of the "hottest" topics in developmental science. My work uses behavioural, eye-tracking, and neuroimaging (EEG, fNIRS) measures to address how pre-schoolers and school-age children process environmental information to determine how and when to engage cognitive control.

Projects on cognitive control development will give you the opportunity to learn how to design and conduct an experiment with children of various ages, and to familiarize yourself with the collection and analysis of behavioural (reaction times, accuracy), eye-tracking (e.g., gaze time, pupillometry), and neuroimaging (EEG, fNIRS) data.

Students are advised to contact Dr Chevalier as soon as possible in the academic year for availability

---

Martin Corley

Office: G8, 7 George Square

Email: Martin.Corley@ed.ac.uk
Web: https://www.ed.ac.uk/profile/martin-corley

The little voice inside your head
How much detail is there in the cognitive plan that links what we want to say to the motor movements that produce speech? Oppenheim & Dell (2008) have argued that the speech plan is underspecified at the phonetic level. Corley et al (2011) found evidence that suggested that the speech plan was, in fact, fully specified; but Oppenheim (2012) begged to differ. It's time to revive this argument: Using paradigms in which participants produce tonguetwisters without speaking aloud, we will investigate whether the little voice inside your head is, in fact, a fully specified "voice" or is an underspecified "idea of what to say". (Techniques range from EEG to typewritten tonguetwisters, to be discussed.)

Oppenheim, G. M., & Dell, G. S. (2008). Inner speech slips exhibit lexical bias, but not the phonemic similarity effect. Cognition, 106, 528-537.

Corley, M., Brocklehurst, P. H., & Moat, H. S. (2011). Error biases in inner and overt speech: Evidence from tongue twisters. Journal of Experimental Psychology: Learning, Memory, and Cognition, 37, 162-175.

Oppenheim, G. M. (2012). The case for subphonemic attenuation in inner speech: Comment on Corley, Brocklehurst, and Moat (2011). Journal of Experimental Psychology: Learning, Memory, and Cognition, 38, 502-512.

Catherine Crompton

Email: catherine.crompton@ed.ac.uk
Web: https://www.ed.ac.uk/profile/dr-catherine-crompton

Research interests
Autism, neurodiversity, neurodiverse social interactions, social cognition, executive function.

Projects
I am interested in supervising students on the following topics, but also welcome student-led proposals relating to my research interests:

- Autistic attitudes towards, and experiences of, peer support services
- Coding interactions between autistic and neurotypical peers for indicators of interactive rapport

- understanding the experiences neurotypical peoples' social interactions with autistic people, including the experiences of autism professionals

---

Rachael Davis

Office: 5.79 Kennedy Tower

Email: RDavis3@ed.ac.uk

Research Interests
Cognitive development, autism, social cognition, developmental trajectories, visual field biases, handedness.

Projects
I am interested in supervising students on the following projects, but also welcome student-led proposals relating to my research interests:

- Associations between visual field biases for social stimuli and cognitive development in preterm and term infants.

The project uses data from innovative eye tracking studies to understand the early differences between preterm and term infants in terms of how social and non-social aspects of cognition develop over time.

- Using observational play data to assess handedness and the relationship to cognitive development in preterm and term infants.

Sergio Della Sala

Office: F6, 7 George Square

Email: Sergio@ed.ac.uk
Web: https://www.ed.ac.uk/profile/sergio-della-sala

Projects

How do we forget?
Forgetting is an integral part of memory, not simply the opposite to learning, and is crucial for successful cognitive functioning.

Possible MSc theses:
- Does rate of forgetting depend on modality of presentation, encoding load, age, immediate performance, prejudices, semantic frames, number of presentation, material integration, level of processing?
- Do the same rules apply to both long- and short term forgetting? Is there an age effect in modulating short and long term forgetting?

Aim of these project is to study aspects of forgetting in healthy people with a view of

better understanding the causes of pathological forgetting.

References
Della Sala, S. (2010). Forgetting. Hove: Psychology Press.

Sadeh, T., Oxubko, J. D., Winocur, G., & Moscovitch, M. (2014). How we forget may depend on how we remember. Trends in Cognitive Science, 18, 26-36.

Chris Egan

Office: S29, 7 George Square

Email: C.Egan@ed.ac.uk
Web: https://www.ed.ac.uk/profile/chris-egan

Research interests
I am interested in visual attention during active tasks.

Topics

Gaze behaviour as a function of expertise
Perceptual expertise is typified by the ability to recognise complex patterns that are common in their field of expertise. Chess has often been used to study perceptual expertise as it provides a complex task and skilled participants typically have an official score indicating their level of expertise. Studies that have looked at the gaze behaviour of chess players frequently use a simplified version of the chess board and have reported experts make shorter and fewer fixations before making a move than less experienced players do. In this study you will investigate the gaze behaviour of experienced and novice chess players when attempting to solve a series of chess related puzzles (they will see a chess board with pieces in a variety of positions and decide on the best move). This project could focus on adults or children, if you wanted to collect data from children I would advise starting work on the project early.

Sheridan, H. & Reingold, E. (2017). Chess players' eye movements reveal rapid recognition of complex visual patterns: Evidence from a chess-related visual search task. Journal of Vision 2017;17(3):4. DOI: 10.1167/17.3.4

Does gaze behaviour observed in laboratory setting represent gaze behaviour in the real world?
Most research investigating gaze behaviour comes from laboratory settings in which the participants view images or films on a computer screen. Only a few studies have investigated whether the findings from laboratory-based studies actually elicit gaze behaviour similar to that found in the real world (typically they do not). Students will be able to influence the direction of the project in terms of what activities the participants will perform in the real world and laboratory but these could include gaze behaviour when watching a magic trick, social interactions or navigating traffic.

Macdonald, R. G., & Tatler, B. W. (2018). Gaze in a real-world social interaction: A dual eye-tracking study. Quarterly Journal of Experimental Psychology, 71(10), 2162–2173. https://doi.org/10.1177/1747021817739221

Visual illusions and motor performance
Movements that require online control such as manual aiming and grasping are typically unaffected (in terms of movement speed and grasp aperture) by visual illusions of target size. Such findings have been used to support the two-visual systems theory. Under certain parameters motor behaviours that rely mostly on visual information from the motor planning stage such as golf putting are affected by visual illusions in terms of gaze fixation on the target and putting accuracy (Witt et al., 2012; Wood et al., 2013). You will design a study to investigate the effect of context-induced illusions on the speed and accuracy of motor tasks that require less online control than manual aiming tasks (e.g. dart throwing, hitting a ball).

Witt, J. K., Linkenauger, S. A., & Proffitt, D. R. (2012). Get me out of this slump! visual illusions improve sports performance. Psychological Science, 23, 397-399.
Wood, G., Vine, S.J., & Wilson, M. R. (2013). The impact of visual illusions on perception, action planning, and motor performance. Attention, Perception, & Psychophysics, 75, 830-834.

Other related topics
I am happy to discuss other topics related to gaze behaviour, attention, perception or motor control.

Sue Fletcher-Watson

Email: Sue.Fletcher-Watson@ed.ac.uk
Web: https://www.ed.ac.uk/clinical-brain-sciences/people/principal-investigators/dr-sue-fletcher-watson

Research Interests
Autism; social cognitive development; infant cognitive development; technology based support and education; participatory methods.

Projects
I am interested in supervising students on research relating to the work of the Salvesen Mindroom Centre (http://www.mindroom.org/). In 2019/20, student projects embedded in the work of this direct help & support organisation may be possible.

Other topic ideas include:
- Development and validation of a large battery of “social” images depicting not just human content but other forms of social information - e.g. culturally or emotional significant items and locations - via eye-tracking or verbal descriptions.
- Synthesis of recommendations for the design of clinical trials and research studies with populations with learning disability from stakeholder input: qualitative analysis of an existing data set
- Comparison of how different groups define “challenging behaviour” - including autistic adults, parents with and without autism, and autism professionals in health and education settings.

Elena Gherri

Office: S41, 7 George Square

Email: Elena.Gherri@ed.ac.uk
Web: https://www.ed.ac.uk/profile/elena-gherri

Projects

Target-distractor competition in a tactile search task
While the electrophysiological correlates of target selection in search tasks have been widely investigated in the visual domain (see Eimer, 2014; Woodman, 2013 for recent reviews), still very little is known about attentional selectivity in other sensory modalities, such as touch. In particular, the neural mechanisms underlying tactile selectivity remains almost completely unexplored. Recently, a lateralised ERP component, labelled N140cc, was suggested to reflect the correlates of target selection, similar to that observed during visual search tasks (Foster, Tziraki and Jones, 2016).

Recent evidence from our lab (Ambron, Mas-Casadesus & Gherri, 2018) has suggested that the amplitude of the N140cc is modulated by the distance between target and distractor in external space. Target-distractor discriminations were less accurate when the hands were close together, that is when the distance between stimuli was reduced. Crucially, we observed that the amplitude of the N140cc component was reduced in the hands near condition as compared to the hands far. This suggests that when competition between stimuli is increased (their distance is reduced) the target selection process is degraded, in line with evidence from the visual domain (e.g. Hilimire, Mounts, Parks & Corballis, 2010).

The aim of the present study is to investigate whether an analogous effect of distance can be also mediated by the somatotopic distance between target and distractor. In this study participants will keep their hands in the same position throughout the task. The tactile search array will include six stimuli (three on the left and three on the right hand): one target, one salient distractor and four homogeneous distractors will be randomly presented on each trial. Participants will be asked to localize the target while ignoring all distractors. Both behavioural and ERP data will be measured. We will investigate the target-salient distractor distance effect by comparing trials in which completion between these stimuli is highest (when they are next to each other on the same side) and lowest (when they are separated by an homogeneous distractor on the same side).

If the competition between target and the salient distractor hinders target selection we expect to observe a reduced N140cc when it is highest (target and salient distractor next to each other on the same side) as compared to when there is no competition (no salient distractor) or when competition is lowest (increased distance between target and salient distractors).

Movement planning and Plasticity of Body Representation
Consistent evidence shows that the body representation in the brain is highly flexible and quickly adapts following apparent or real changes to the body (e.g. Farne et a.,

2000; Graziano et al., 2000; Pavani et al., 2000) as well as following active tool-use that extends reachable space (e.g. Iriki et al., 1996; Maravita et al., 2002).

Recent ERP evidence has shown that areas as early as the secondary somatosensory cortex is modulated by these plastic changes of body representation (e.g. Forsberg, O'Dowd & Gherri, 2019; Miller et al., 2019). However, in these studies the effect of tools and the movement performed with those tools was measured off-line, that is after the movement was completed. The aim of this project is to investigate whether movement planning (on-line effect of movement) directly modulates body representation. Evidence from behavioural studies suggests that this might be the case (e.g. Brozzoli et al., 2010; Berger, Neumann & Gail, 2019), but no ERP study to date has explored this question.

Paul Hoffman

Office: S9, 7 George Square

Email: P.Hoffman@ed.ac.uk
Web: https://www.ed.ac.uk/profile/paul-hoffman

Research interests
I am principally interested in how the brain codes semantic knowledge about the world and how executive processes regulate our access to this knowledge. My research includes some psycholinguistic-type experiments, some work investigating speech in more natural settings, and studies of how all of these processes change as a function of healthy ageing.

Projects

How do people choose and regulate topics when they speak, and what situational and individual factors influence this?
There are number of possible projects in this area, building on recent work in the lab:

Hoffman, P., Loginova, E., & Russell, A. (2018). Poor coherence in older people's speech is explained by impaired semantic and executive processes. *eLife, 7*, e38907. doi:10.7554/eLife.38907

Do we use the same control mechanisms to regulate our retrieval of episodic and semantic memories?
This is a really interesting and unresolved question about how these apparently distinct memory systems are managed. For an idea of the kind of experiments that could be done in this space, see the following (though we would explore this in healthy people rather than patients):

Stampacchia, S., Thompson, H. E., Ball, E., Nathaniel, U., Hallam, G., Smallwood, J., Jefferies, E. (2018). Shared processes resolve competition within and between episodic and semantic memory: evidence from patients with LIFG lesions. *Cortex, 108*, 127-143.

Quantitative meta-analysis of published neuroimaging studies probing aspects of

language or semantics
This would not involve collection of new data but rather re-analysis of published brain imaging data to identify regions consistently associated with a particular function. For an example of this kind of work, see:

Hoffman, P., & Morcom, A. M. (2018). Age-related changes in the neural networks supporting semantic cognition: A meta-analysis of 47 functional neuroimaging studies. *Neuroscience & Biobehavioral Reviews, 84*, 134-150.

I am also happy to discuss other ideas relating to my research interests. All of my projects are suitable for two students working as a pair.

Elizabeth Kirkham

Email: Elizabeth.Kirkham@ed.ac.uk
Web: https://www.ed.ac.uk/profile/dr-elizabeth-kirkham

Research Interests
I have research interests in the following areas: mental health; human neuroscience; early life stress (such as abuse and neglect), and its effect on the adult brain; and human processing of emotional stimuli (e.g. facial expressions).

Projects
- Relationships between early life stress and adults' current psychological health and functioning.
- How do experiences of mental health conditions and early life stress interact with people's processing of emotional stimuli?

I am also happy to discuss students' ideas for projects which fall within my areas of research.

Billy Lee

Office: S40, 7 George Square

Email: B.Lee@ed.ac.uk
Web: https://www.ed.ac.uk/profile/billy-lee

Research interests
I am interested in Phenomenological Psychology and use experience-near qualitative methods to explore and to understand people's lived experiences. I welcome proposals for projects to explore gender, identity, sexuality, relationships, mental health, well-being, therapy and counselling, and other areas of marginal or different experience. I am currently exploring understandings of the talking therapies and the development of therapeutic talking and listening in counsellors.

Projects

- Gender, identity and sexuality
- Mental health, relationships and well-being
- Psychotherapy, counselling and social communication

Robert Logie

Office: F9, 7 George Square

Email: rlogie@staffmail.ed.ac.uk
Web: http://www.ed.ac.uk/profile/robert-logie

Research interests
Research and teaching interests lie in the cognition of human memory in the healthy brain across the lifespan, focused on experimental behavioural studies of working memory.

Projects
I am available to supervise MSc projects using cognitive, behavioural, experimental approaches to the study of any area of memory in healthy human adults.

Steve Loughnan

Office: S25, 7 George Square

Email: Steve.Loughnan@ed.ac.uk
Web: https://www.ed.ac.uk/profile/steve-loughnan

Research interests

The Psychology of Eating Animals
These MSc projects will examine various aspects of the psychology of eating meat, and associated beliefs, attitudes, and behaviours. Meat-eating is a curious phenomenon which entails numerous psychological processes (for a review, see Bastian & Loughnan, 2016, Personality and Social Psychology Review; or Loughnan et al., 2014, Current Directions in Psychological Science). These projects may explore any aspect of the meat paradox.

Michelle Luciano

Office: S26, 7 George Square

Email: Michelle.Luciano@ed.ac.uk
Web: https://www.ed.ac.uk/profile/michelle-luciano

Projects

Non-syndromic intellectual disability and normal cognitive function
This project will investigate the role of genes implicated in non-syndromic intellectual disability in normal cognitive functioning. It will do so using two main techniques, polygenic prediction in existing cohorts and biological pathway analysis using published genome-wide summary statistics for cognitive ability. The project could be extended to include genes associated with autism.

Further reading
Kaufman, L., Ayub, M., & Vincent, J. B. (2010). The genetic basis of non-syndromic intellectual disability: a review. Journal of neurodevelopmental disorders, 2(4), 182–209. doi:10.1007/s11689-010-9055-2

Wray NR, Lee SH, Mehta D et al. Polygenic methods and their application to psychiatric traits. J Child Psychol Psyc 2014;55:1068–87. 11.

Zhenwei Liu, Na Zhang, Yu Zhang, Yaoqiang Du, Tao Zhang, Zhongshan Li, Jinyu Wu, and Xiaobing Wang Prioritized High-Confidence Risk Genes for Intellectual Disability Reveal Molecular Convergence During Brain Development , Front. Genet., 18 September 2018 | https://doi.org/10.3389/fgene.2018.00349

Mediterranean diet and brain ageing
This is an extension of a previous study which showed an association between adherence to a Mediterranean type diet and less brain volume loss over time. The original study was based on two time-points, three are now available and these will be used in growth curve modelling to test whether diet has a protective effect on brain health over a longer timeframe.

Further reading
Luciano, M., Corley, J., Cox, S. R., Valdés Hernández, M. C., Craig, L. C., Dickie, D. A., … Deary, I. J. (2017). Mediterranean-type diet and brain structural change from 73 to 76 years in a Scottish cohort. Neurology, 88(5), 449–455. doi:10.1212/WNL.0000000000003559

Multivariate genetic analysis of brain endophenotypes and personality
This project will use summary statistics from genome-wide association studies of brain MRI, personality and psychiatric traits to identify genomic regions that overlap between these traits. Pairwise GWAS and multivariate GWAS meta-analysis methods will be used.

Further reading
GWAS of brain volume on 54,407 individuals and cross-trait analysis with intelligence identifies shared genomic loci and genes. Philip
R Jansen, Mats Nagel, Kyoko Watanabe, Yongbin Wei, Jeanne E Savage, Christiaan A de Leeuw, Martijn P van den Heuvel, Sophie van der Sluis, DaniellePosthuma bioRxiv 613489; doi: https://doi.org/10.1101/613489

Stratifying depression by neuroticism: revisiting a diagnostic tradition using GWAS data. Mark James Adams, David M Howard, Michelle Luciano, Gail M Davies, William David Hill, 23andMe Research Team, Major Depressive Disorder Working Group of the Psychiatric Genomics Consortium, Daniel J Smith, Ian J Deary, David JPorteous, Andrew M McIntosh. bioRxiv 547828; doi: https://doi.org/10.1101/547828

Sarah MacPherson

Office: S11A, 7 George Square

Email: Sarah.MacPherson@ed.ac.uk
Web: http://www.ed.ac.uk/profile/sarah-e-macpherson

Projects

Goal maintenance and fluid intelligence in aging
Age is associated with a decline in the ability to hold task rules in memory, particularly when rules must be maintained for long periods. However, the rate at which individuals neglect task rules is also strongly linked to individual differences in fluid intelligence, leading to suggestions that age-related reductions in fluid intelligence underlie poor goal maintenance. In the present study, we will examine the performance of younger and older adults on a test of fluid intelligence and the Stroop task where the goal maintenance duration between trials is manipulated by varying the Response-Stimulus Interval (RSI). The study attempts to replicate a previous PhD study where larger age-related differences in Stroop accuracy interference were observed at longer (i.e., 2000ms and 800ms) than at shorter (e.g., 200ms) RSIs. However, age effects in longer RSIs were further moderated by fluid intelligence.

References
De Jong, R. (2001). Adult age differences in goal activation and goal maintenance. European Journal of Cognitive Psychology, 13(1/2), 71-89.

Duncan, J., Parr, A., Woolgar, A., Thompson, R., Bright, P., Cox, S., Bishop, S., and Nimmo-Smith, I. (2008). Goal neglect and Spearman's g: Competing parts of a complex task. Journal of Experimental Psychology: General, 137(1), 131-148.

Spieler, D. H., Balota, D. A., & Faust, M. E. (1996). Stroop performance in healthy younger and older adults and in individuals with dementia of the Alzheimer's type. Journal of Experimental Psychology: Human Perception and Performance, 22(2), 461-479.

Cognitive estimation and self-monitoring
The Cognitive Estimation Test (CET) is widely used by clinicians and researchers to assess the ability to produce reasonable cognitive estimates to items that individuals would not know that the exact answer (e.g., "How fast do race horses run?"; MacPherson et al., 2014; Shallice, & Evans, 1978). Producing appropriate responses is thought to rely on the ability to select an appropriate cognitive plan, carry out the selected plan, and check any putative answer obtained (Shallice & Evans, 1978). Checking the appropriateness of CET responses is likely to involve self-monitoring, the cognitive process by which individuals evaluate their responses in the moment to ensure their response is appropriate. Individuals who lack self-insight into the appropriateness of their response are likely to perform more poorly on the CET. This project will examine the relationship between self-monitoring and CET performance.

References

MacPherson, S.E., Wagner, G.P., Murphy, P., Bozzali, M., Cipolotti, L., & Shallice, T. (2014). Bringing the cognitive estimation task into the 21st century: Normative data on two parallel forms. PLOS-ONE, 9(3), e92554.

Shallice, T., & Evans, M.E. (1978). The involvement of the frontal lobes in cognitive estimation. Cortex, 14, 294–303.

Cognitive reserve and social cognition in aging

The study of social cognition is concerned with the higher-order cognitive processes that allow individuals to interpret the behaviors of others and includes abilities such as theory of mind, emotion recognition, empathy, moral judgments and the understanding of social norms. Some studies examining age-related differences in social cognition have shown that older adults perform more poorly than younger adults on social cognitive tests, while others have shown no differences across age groups. When examining cognitive performance in older people, it is essential to consider the impact of cognitive reserve, which accounts for individual differences in the ability to respond and adapt to brain damage and pathology, in order to maintain cognitive functioning. Studies have shown that older adults with higher cognitive reserve (i.e., education, occupation, premorbid IQ and leisure activities) display better general cognitive performance and have lower risk for dementia (Stern, 2012). However, relationships between cognitive reserve with social cognition are less clear. Some studies have reported that older adults with high cognitive reserve display better emotion recognition and cognitive ToM (Li et al., 2013), whereas others have shown that social cognition appears unaffected by cognitive reserve (Lavrencic et al., 2015). The current study will examine the relationship between cognitive reserve and social cognition in older adults using our recently devised Edinburgh Social Cognition Test (ESCoT; Baksh et al., 2018).

References

Baksh, R.A, Abrahams, S., Auyeung, B. & MacPherson, S.E. (2018). The Edinburgh Social Cognition Test (ESCoT): Examining the effects of age on a new measure of theory of mind and social norm understanding. PLOS-ONE, 13(4), e0195818.

Lavrencic, L.M., Kurylowicz, L., Valenzuela, M.J., Churches, O.F., & Keage, H.A.D. (2016). Social cognition is not associated with cognitive reserve in older adults. Aging, Neuropsychology, and Cognition, 23(1), 61-77.

Li, X., Wang, K., Wang, F., Tao, Q., Xie, Y., & Cheng, Q. (2013). Aging of theory of mind: The influence of educational level and cognitive processing. International Journal of Psychology, 48, 715–727.

Stern, Y. (2012). Cognitive reserve in ageing and Alzheimer's disease. The Lancet Neurology, 11, 1006–1012.

Cristina Marinho

Office: S29, 7 George Square

Email: Cristina.Marinho@ed.ac.uk
Web: https://www.ed.ac.uk/profile/cristina-marinho

Research interests
I am interested in investigating traditional social psychological topics as discursive actions using a rhetorical/discursive psychology approach. Topics of interest: political ideology/practices, manipulation/persuasion, dilemmas of identity, extreme forms of prejudice/discrimination, rhetorical/discursive psychology

Possible projects:

Ethnicity and race in new far-right groups/movements
Dr Sue Widdicombe and I are happy to co-supervise projects that aim at understanding from a rhetorical / discursive psychology perspective how leaders of new far-right groups / movements talk about ethnicity and race. Projects under this topic will be looking in detail at how these categories are constructed and used in interaction. The data for these projects will be naturally occurring (for example, from televised interviews). We are equally interested in supervising how leaders or members of such groups construct and use gender in their talk-in-interaction.

Emotions and language
How do people describe / invoke, display and use emotions in natural settings? I am interested in supervising projects that aim at understanding the social nature of emotions from a discursive psychology perspective. Data for the projects will be naturally occurring (e.g. televised reality shows, televised stand-up comedy programmes, televised interviews with politicians, internet chatrooms/websites, students' conversations with friends / housemates in shared accommodation or their conversations with romantic partners).

Social practices in reality shows
I am also interested in supervising projects that aim at investigating common discursive and interactional practices and their consequences in reality shows. Projects under this topic will take a discursive psychology approach and the data will be naturally occurring.

I am also happy to discuss other ideas related to my research and interests.

Rob McIntosh

Office: UF36, 7 George Square

Email: R.D.McIntosh@ed.ac.uk
Web: https://www.ed.ac.uk/profile/robert-mcintosh

Research interests

I work on perception, attention and action in the damaged and healthy brain. I am director of the human movement lab, which has a range of cutting-edge facilities for motion tracking or hand, body and eye movements. I'm open to discussion of projects that intersect with any of my research interests.

Project

Modelling parietal lobe reaching deficits in the healthy brain
Damage to the posterior parietal lobe can cause a disorder known as Optic Ataxia. Patients with Optic Ataxia make characteristic spatial errors when reaching for visual targets. This is classically described as being independent of any problems in visual perception or attention; but this traditional understanding is beginning to be questioned. Recent work suggests that, if stringent tests are used, almost all patients with Optic Ataxia show some attentional impairment. This implies a close relationship between the control of visual attention and the ability to make accurate visually-guided movements. We have studied this functional link by attempting to simulate Optic Ataxia in healthy adults, using a dual-task to place additional load on visual attention whilst people make reaching movements to targets throughout their visual field. Our studies suggest that attentional depletion can cause healthy people to make reaching errors reminiscent of those seen in Optic Ataxia, but smaller in magnitude. This project will seek ways to further probe and understand the nature of these errors, illuminating the functional interdependent of attention and action in humans. The experiments will be designed with the student, and you will learn about eye-tracking and the kinematic analysis of movement.

McIntosh, R. D. (2010). Optic Ataxia. Encyclopedia of Perception. Goldstein, E. B. (ed.). Sage Publications Inc., p. 706-708. [pdf]

McIntosh, R. D., Mulroue, A., Blangero, A., Pisella, L., & Rossetti, Y. (2011). Correlated deficits of perception and action in optic ataxia. Neuropsychologia, 49(1), 131-137. https://doi.org/10.1016/j.neuropsychologia.2010.11.017

Decision-making in the eye-movement system
For several years, we have been studying an interesting eye-movement phenomenon, known as saccadic inhibition. This is a low-level oculomotor response, whereby ongoing behaviour is paused as an immediate response to any unexpected event within the visual scene. The response is very fast and automatic; and the more salient the event, the more likely the system is to pause. We recently published evidence that this inherent distractibility of the eye movement system plays an adaptive role in behaviour, by providing more scope for a rapid change of plan when unexpected events arise. This project will use eye-tracking to ask follow-up questions to our recent paper establishing this functional advantage of saccadic inhibition. The experiments will be designed with the student and with Dr. Antimo Buonocore. You should have a taste for psychophysics. You will learn about the study of attentional performance analysis of human eye-movements, and some of the basics of programming in MATLAB.

Buonocore, A., Purokayastha, S., & McIntosh, R. D. (2017). Saccade reorienting is facilitated by pausing the oculomotor program. Journal of cognitive neuroscience, 29(12), 2068-2080. https://doi.org/10.1162/jocn_a_01179.

Two sides to every story
I have a long-standing interest in spatial neglect, a symptom that arises after right brain damage. Neglect is a bias of attention away from the left, and towards the right side of space. If you ask a person with neglect to mark the middle of a horizontal line, they will tend to mark far to the right of centre. Healthy adults also show spatial biases, but these are much more subtle, and tend to be towards the left side (this has sometimes been called 'pseudoneglect'). I have introduced a new way of analysing the line bisection task that makes it more sensitive to biases of attention in neglect. I would like to apply this new analysis of line bisection behaviour to healthy adults, to re-examine some phenomena that have been reported for bisection behaviour. For instance, a change in line bisection error, between near and far space, has been used to estimate the size of a person's 'near' extrapersonal space. Does our new analysis of bisection behaviour shed any new light on such phenomena? This is just one example idea – there are many other studies that we could run to investigate this general topic.

McIntosh, R. D. (2017). The end of the line: Antagonistic attentional weightings in unilateral neglect. *Cortex*. https://doi.org/10.1016/j.cortex.2017.07.011

McIntosh, R. D., Ietswaart, M., & Milner, A. D. (2017). Weight and see: Line bisection in neglect reliably measures the allocation of attention, but not the perception of length. *Neuropsychologia*, *106*, 146-158. https://doi.org/10.1016/j.neuropsychologia.2017.09.014

Longo, M. R., & Lourenco, S. F. (2007). Space perception and body morphology: extent of near space scales with arm length. Experimental brain research, 177(2), 285-290. https://doi.org/10.1007/s00221-007-0855-x

---

Dan Mirman

Office: F31, 7 George Square

Email: Daniel.Mirman@ed.ac.uk
Web: https://www.ed.ac.uk/profile/dr-daniel-mirman

Research interests: neuroanatomy of spoken language processing, particularly acquired language disorders; organization of semantic knowledge; the role of cognitive control in spoken language.

Projects:
- Relationship between narrative language production deficits in post-stroke aphasia and the primary systems of language and cognition (phonology, semantics, cognitive control)
- Spatio-temporal coherence in intracranial EEG during picture naming
- Role of prediction in event segmentation and its relationship to language and social cognition

---

Adam Moore

Office: S32, 7 George Square

Email: amoore23@exseed.ed.ac.uk
Web: https://www.ed.ac.uk/profile/adam-moore

Research interests

- Moral judgement, particularly the cognitive mechanisms that underpin this; the psychology of corruption
- Motivation and the desire for power; influence of individual differences in desire for power on decision making
- Logical reasoning; mental models and probability heuristics models of reasoning

Projects

I am happy to discuss any ideas related to my research or research interests.

René Mõttus

Office: S4, 7 George Square

Email: Rene.Mottus@ed.ac.uk
Web: http://www.ed.ac.uk/profile/rene-mottus

Recent research indicates that personality differences between people can be described with many more narrow traits ("facets", "nuances") than we have previously thought, besides a few broad traits (e.g., the Big Five). Currently, we have almost no instrument to simultaneously measure them, but work on this is in progress. You can join our efforts to create and validate a new generation personality test that allows measuring both the Big Five and several dozens of narrower traits.

You can help with:

- establishing the psychometric aspects of the test (stability of scores over time, correlation between self-reports and ratings of friends/partners/parents, understandability of items)
- studying the underlying mechanisms of the new traits (e.g., heritability, developmental trends)

McCrae, R. R., & Mõttus, R. (in press). A New Psychometrics: What Personality Scales Measure, with Implications For Theory and Assessment. Current Directions in Psychological Science.

Mõttus, R., Sinick, J., Terracciano, A., Hrebickova, M., Kandler, C., Ando, J., … Jang, K. (2018). Personality characteristics below facets: A replication and meta-analysis of cross-rater agreement, rank-order stability, heritability and utility of personality nuances. Journal of Personality and Social Psychology.

Eva Murzyn

Office: G10, 7 George Square

Email: Eva.Murzyn@ed.ac.uk
Web: https://www.ed.ac.uk/profile/eva-murzyn

Research interests
I'm interested in how people play video games. Potential topic areas include individual differences in personality and game play, moral choices in games, and collaboration and competition in multiplayer games. I use both quantitative approaches (questionnaire and experimental methods) and Thematic Analysis.

Projects

- Toxic and collaborative behaviours in MMO and MOBA games
- Individual predictors of moral choices in video games
- E-sports performance
- Serious and educational games

Martin Pickering

Office: S12, 7 George Square

Email: Martin.Pickering@ed.ac.uk
Web: http://www.ed.ac.uk/profile/martin-pickering

Research interests
I am interested in language production, comprehension, dialogue, bilingualism, and reading. At the moment, I am particularly interested in studying interactive language as a form of "joint action" (whereby the use of prediction and covert imitation appears to make "smooth" dialogue possible), and in the question of whether interlocutors represent their partners' utterances in the same format as their own. However, I am also interested in "traditional" psycholinguistic questions, particularly as relating to syntax, semantics, and discourse.

Projects

- Joint production of utterances
- Structural priming and language production
- Language switching in bilinguals
- Prediction, imagination and inner speech

Helena Radke

Office: F32, 7 George Square

Email: Helena.Radke@ed.ac.uk
Web: https://www.ed.ac.uk/profile/helena-radke

Projects

- Establishing and overcoming barriers to women engaging in collective action for greater gender equality (two separate student projects)
- The role of allies in collective action (two separate student projects)

Ed Silson

Office: 7 George Square

Projects

How does visual field position effect face, scene and object recognition? – Most Psychology experiments on visual recognition present stimuli at the centre of the visual field, asymmetries in visual field biases exist at every stage of the visual hierarchy. Indeed, it is suggested that the optimal position for certain stimuli is not the centre of gaze, but rather where those stimuli occur in the real-world. Here, we would systematically compare recognition performance for multiple classes of stimuli as a function of visual field position.

Visual field asymmetries for motion detection? – Is are ability to detect certain types of motion equal across the visual field? Previous work has identified asymmetries in motion discrimination in the periphery versus the centre of the visual field, but has not tested for differences above or below fixation. In non-human primates, motion sensitive V5/MT shows a clear lower visual field bias, but whether this exist in humans or not is less clear.

The effect of encoding position on subsequent recall – Does the position of stimuli during encoding influence our ability to later recall that information? Several pieces of evidence suggest that structures that project to the hippocampus contain an upper visual field bias, offering the possibility that subsequent recall performance can be modulated based on the encoding position of the stimulus.

Can you imagine in the periphery? – When we imagine something or someone, how much of our 'imaginary visual field' is taken up by that target? It is possible that how we experienced that stimulus influences how we later imagine it. Here, we will test this prediction parametrically, by controlling participants' experiences with novel stimuli and relating that to subsequent mental imagery of those stimuli.

Sarah Stanton

Office: S27, 7 George Square

Email: Sarah.Stanton@ed.ac.uk
Web: http://www.ed.ac.uk/profile/sarah-stanton

Broadly, my research focuses on the cognitive and affective aspects of romantic relationships and their effects on behavior, physiology, and health and well-being. I use a variety of quantitative methods, including questionnaire measures, video recording, cardiovascular assessments, and behavioral tasks.

For the 2019-2020 academic year, I am particularly interested in pursuing projects topics related to partner responsiveness, perceived and actual self-expansion in relationships, and relationship correlates of healthy versus unhealthy eating behaviour. However, I am happy to discuss other projects related to relationship science with students if they have their own ideas. Please bear in mind that I am a quantitative psychologist and do not have qualitative skills (so I could not supervise a qualitative project).

Patrick Sturt

Office: G29, 7 George Square

Email: Patrick.Sturt@ed.ac.uk
Web: https://www.ed.ac.uk/profile/patrick-sturt

Research interests
I am interested in language comprehension, and specifically in the moment-by-moment processes by which people integrate the words of a sentence into its interpretation. I am also interested in eye-movement control during reading.

Projects
I am able to supervise projects on a wide range of topics in human language processing. If you have a project in mind, please send me an email and we can discuss details. I include two specific suggestions below, but these should not be interpreted as exhaustive.

Regressions in reading
It is well known that readers often make regressions to look back at earlier words in a sentence, particularly when experiencing processing difficulty. However, existing models of eye-movement control in reading provide very little explanation of regressions, and in fact, currently very little is known about the purpose of regressions, how people select the target of the regression, or what information is processed during regressions. This project will answer one of these questions using eye-movement techniques, possibly involving a contingent change method. It would be particularly suitable for two students to undertake as a pair.

Sturt, P. and Kwon, N. (2018). Processing information during regressions: An

application of the reverse boundary-change paradigm. Frontiers in Psychology (Language Sciences) , 9. Article 1630

Comprehension of pronouns and memory retrieval
This project will use reading time measures to investigate the comprehension of pronouns, concentrating on how this process is affected by known properties of memory retrieval (for example interference). The project will use either self-paced reading or eye-tracking, and would be suitable for students to undertake as a pair.

Cunnings, I. and Sturt, P. (in press). Coargumenthood and the processing of pronouns. *Language, Cognition and Neuroscience*, 33, 1235-1251

Anne Templeton

Office: S33, 7 George Square

Email: A.Templeton@ed.ac.uk
Web: https://www.ed.ac.uk/profile/dr-anne-templeton

Research interests
My research revolves around applying the social identity approach to intra and intergroup processes. I am particularly interested in collective behaviour and using social identity principles to improve crowd safety in emergencies and at mass events. I do this through exploring a) the role of social identity on feelings of safety, empowerment, and well-being, b) processes underlying communication between crowd members and safety personnel, and c) empowerment in crowds.

For the 2019-2020 academic year, I am interested in quantitative research exploring collective experiences in crowds, such as effervescence, empowerment, perceptions of safety, and well-being. I am also interested in exploring relations between crowds and safety personnel, such as with First Responders in emergencies, or management at mass events.

Caroline Watt

Office: S39, 7 George Square

Email: Caroline.Watt@ed.ac.uk
Web: https://www.ed.ac.uk/profile/caroline-watt and
https://koestlerunit.wordpress.com/

Research interests
I'm interested in methodological and replication issues in parapsychology, and on research testing the claimed role of altered states of consciousness in extrasensory perception (ESP) task performance using the so-called 'ganzfeld' method.

Bem, D. J., & Honorton, C. (1994). Does psi exist? Replicable evidence for an anomalous process of information transfer. *Psychological Bulletin, 115,* 4–18.

Hyman, R., & Honorton, C. (1986). A joint communiqué: The psi ganzfeld controversy. *Journal of Parapsychology, 50*(4), 351-364.

Storm, L., Tressoldi, P.E., & Di Risio, L. (2010). Meta-analysis of free-response studies, 1992-2008: Assessing the noise reduction model in parapsychology. *Psychological Bulletin, 136*, 471-485.

Watt, C., & Kennedy, J. E. (2017). Options for prospective meta-analysis and introduction of registration-based prospective meta-analysis. *Frontiers in Psychology,* 7:2030.

Projects
I'm happy to meet to discuss possible projects in these areas.

Sue Widdicombe

Office: UF35, 7 George Square

Email: S.Widdicombe@ed.ac.uk
Web: https://www.ed.ac.uk/profile/sue-widdicombe

Research interests
I am interested in self and identities, interaction, culture, discursive psychology and conversation analysis, and interviews as interaction.

Projects
I am willing to supervise projects related to any of the topics above (e.g. particular identities, how they are constructed and used as resources in and for interaction); or projects designed to show how some particular business (of making decisions, formulating clients' problems, developing relationships) gets done through interaction (e.g. in meetings, therapy, internet interaction). I am happy to supervise projects that take a discursive psychological approach to youth culture, culture and self, national or religious identities, or self-descriptions. I also have an interest in research interactions and knowledge production, including interviews as a vehicle for social scientific research.

Maria Wolters

Office: 4.32a Informatics Forum

Email: Maria.Wolters@ac.uk
Web: https://www.inf.ed.ac.uk/people/staff/Maria_Wolters.html

Research Interests
My main research goal is to investigate how technology can support people with chronic illness in living rich and meaningful lives.

Projects

- Computational modelling of semantic and phonemic fluency data
- Technology as a cognitive prosthesis - techniques for helping people remember tasks, facts, and words
- Cognitive aspects of the usability of computer systems
- The effect of depressive states and dysphoria on people's interaction with technology or social media

---

LINGUISTICS & ENGLISH LANGUAGE

Peter Ackema

Office: 2.05 Dugald Stewart Building

Email: Peter.Ackema@ed.ac.uk
Web: https://www.ed.ac.uk/profile/peter-ackema

Research interests
Theoretical syntax and morphology

Topics
Happy to supervise any project within my research area, which broadly speaking is theoretical syntax and morphology. I am especially interested in topics that concern the interaction between these two modules of grammar (such as agreement, incorporation, correlations between the inflectional make-up of a language and its syntactic behaviour, lexical integrity effects, phrasal derivation) but any topic that concerns syntax or the 'syntactic side' of morphology is suitable. A lot of my own work is focused on Germanic languages, but I'm certainly happy to supervise topics on other languages as well.

Laura Arnold

Office: 1.13 Dugald Stewart Building

Email: Laura.Arnold@ed.ac.uk
Web: https://www.ed.ac.uk/profile/laura-m-arnold

Research interests
I document and describe little-known Austronesian languages, focussing on word-prosodic systems (tone and stress). Recently I've started historical and comparative work on a subbranch of Austronesian spoken in east Indonesia; and doing typological and areal work, looking at possessive constructions and systems of spatial deixis in the Austronesian and the non-Austronesian languages of east Indonesia.

Topics
I'd be happy to supervise any of the following areas: word-prosodic systems and their development; classification and reconstruction of little-known subgroups; typological and / or areal approaches to linguistic phenomena (especially systems of spatial deixis or possessive constructions); analysis of any aspect of the phonology, morphology, or syntax of an unfamiliar language.

Claire Cowie

Office: 1.11a Dugald Stewart Building

Email: Claire.Cowie@ed.ac.uk
Web: https://www.ed.ac.uk/profile/claire-cowie

Research interests
I usually supervise dissertations related to the Global Englishes course. I am particularly interested in supervising dissertations on all aspects of English in South Asia and South East Asia, including the relationship of English to other languages in those areas. I am running a number of projects on the perception and production of Asian Englishes, and I can work with students to design projects using existing data and/or methods from this work.

Chris Cummins

Office: 1.11 Dugald Stewart Building

Email: ccummins@staffmail.ed.ac.uk
Web: https://www.ed.ac.uk/profile/chris-cummins

Research interests
I work on topics including implicature, presupposition, number, and dialogue, and also have a particular interest in medical communication.

**On sabbatical in semester 2.

Jennifer Culbertson

Office: 1.14 Dugald Stewart Building

Email: Jennifer.Culbertson@ed.ac.uk
Web: http://www.ppls.ed.ac.uk/lel/people/jennifer-culbertson

Research interests
Language acquisition and change, learning biases, typology, (morpho)syntax, computational models of cognition, artificial language learning, grammaticality judgments.

Topics
- Language universals
- Cognitive biases
- Language change / historical linguistics
- Language acquisition

Lauren Hall-Lew

Office: 2.04 Dugald Stewart Building

Email: Lauren.Hall-Lew@ed.ac.uk
Web: http://www.ed.ac.uk/profile/lauren-hall-lew

Research interests
Sociolinguistics; phonetic variation and change in English

Topics
- Sociolinguistics

Caroline Heycock

Office: 2.10a Dugald Stewart Building

Email: Caroline.Heycock@ed.ac.uk
Web: https://www.ed.ac.uk/profile/caroline-heycock

Research interests
Syntax; the syntax of Germanic languages, particularly Faroese; the syntax of copular constructions; syntactic variation and change; and syntactic variation in Scots.

Topics
Anything that falls within my research interests. I am also always happy to co-supervise with another member of staff with complementary interests / expertise.

E Jamieson

Office: 2.15 Dugald Stewart Building

Email: E.Jamieson@ed.ac.uk
Web: https://www.ed.ac.uk/profile/ejamieson

Research interests
Syntax, dialect syntax, Scots, syntactic variation and change, syntax/discourse interface

Topics
I am happy to supervise any topics in dialect syntax, especially variation and change in Scots or English dialects. I am also happy to supervise topics more broadly in speech act syntax (e.g. clause typing, discourse particles) and the syntax of negation.

Bettelou Los

Office: 2.07 Dugald Stewart Building

Email: B.Los@ed.ac.uk
Web: https://www.ed.ac.uk/profile/bettelou-los

Research interests
Diachronic syntax, in particular English diachronic syntax, and language change. I also welcome dissertations on early and present-day Germanic languages. I will also be happy to supervise other topics that relate to English grammar, such as corpus work, usage, and style (including data-driven methods).

Suggestions for possible topics include:

- The historical development of writing styles (science writing)
- Diachronic morpho-syntactic changes affecting referent tracking in discourse
- Cross-linguistic study using *The Quest* database
- V2-relative clauses in Old English

Warren Maguire

Office: 3.07 Dugald Stewart Building

Email: W.Maguire@ed.ac.uk
Web: https://www.ed.ac.uk/profile/warren-maguire

Research interests
Dialectology, varieties of English/Scots, phonetic and phonological variation and change

Topics:

- Documenting dialects of English and Scots
- Variation and change in dialects of English and Scots
- Historical phonology of English and Scots
- Irish English: origins, language contact, variation, ethno-religious differences
- Dialectological methods
- Dialect in literature
- Northern English dialects

Alexander Martin

Office: 1.17 Dugald Stewart Building

Email: Alexander.Martin@ed.ac.uk
Web: https://www.ed.ac.uk/profile/alexander-martin

Research interests

I am interested in the way linguistic systems change over time and in understanding the different pressures that shape language change. I was trained as an experimental phonologist, but am currently working on a project considering word order and learning. My work focusses on understanding which social, cognitive, and grammatical aspects constrain linguistic systems.

Topics
I am happy to supervise any topic in experimental phonology or any project that uses artificial language learning generally. I am happy to meet with potential students to discuss projects.

Mits Ota

Office: 2.21 Dugald Stewart Building

Email: M.Ota@ed.ac.uk
Web: https://www.ed.ac.uk/profile/mitsuhiko-ota

Research interests
First and second language acquisition of speech, phonology and lexicon.

Topics
I am happy to supervise topics related to language development, particularly in relation to phonetics/phonology and the lexicon. More specific topics I can supervise include: the role of input in early language development, the effects of phonology on the learnability of words, prosodic development, and music and language learning.

Rebekka Puderbaugh

Office: 2.13 Dugald Stewart Building

Email: R.Puderbaugh@ed.ac.uk
Web: https://www.ed.ac.uk/profile/rebekka-puderbaugh

Topics
Acoustic phonetics, phonetics of endangered or under-described languages, phonetics of glottal stops and non-modal phonation.

Michael Ramsammy

Office: 3.03 Dugald Stewart Building

Email: M.Ramsammy@ed.ac.uk
Web: http://www.ed.ac.uk/profile/michael-ramsammy

Topics

Laboratory and theoretical approaches to phonology, experimental phonetics, sociophonetics, sign-language linguistics (BSL), language change/historical phonology in Romance or Germanic languages, Caribbean Creoles.

Kenny Smith

Office: 1.08 Dugald Stewart Building

Email: Kenny.Smith@ed.ac.uk
Web: http://www.ed.ac.uk/profile/kenny-smith

Research interests
I am interested in the evolution of communication, human language, and the human capacity for language. I use computational models and experiments with human participants to investigate these questions, simulating (in the computer or in the lab) the processes of language learning, language transmission, and communicative interaction. I'd be interested in supervising dissertations involving these techniques individually (e.g. looking at language learning or language use during communication) or in combination (e.g. how do languages evolve as a result of their learning and use). I can suggest specific research questions and experiments.

Alice Turk

Office: 2.12 Dugald Stewart Building

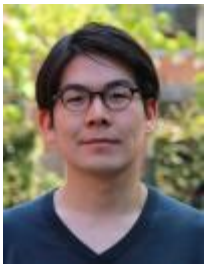
Email: A.Turk@ed.ac.uk
Web: https://www.ed.ac.uk/profile/alice-turk

Research interests
Phonetics: Speech production, speech perception; prosodic structure; timing.

Topics
I am happy to discuss topics in any of the above areas, but am currently particularly interested in:

- Explaining patterns of systematic variability in speech
- The relationship between prosodic structure and contextual predictability
- Are speech articulations coordinated temporally or spatially?
- Timing variability in speech movements as evidence for phonological representations and theories of speech motor control
- The possible role of periodicity in speech motor control

Wateru Uegaki



Office: 2.10 Dugald Stewart Building

Email: W.Uegaki@ed.ac.uk
Web: https://www.ed.ac.uk/profile/wataru-uegaki

Research interests:
- Formal Semantics and Pragmatics
    - Semantics and pragmatics of interrogatives and their responses
    - Semantics and pragmatics of sentence-final particles
    - Constraints on lexical denotations
- Syntax-Semantics Interface
    - Semantics of attitude predicates and their selectional properties
    - wh-indeterminates
    - disjunctive constructions
- Morpho-phonology of Japanese dialects

Topics:
I am happy to supervise any topic in formal semantics, pragmatics, or syntax-semantics interface. Currently, I am particularly interested in the distinction between 'logical' words (such as every and or) and 'non-logical' words (such as walk and bird). Is there a fundamental distinction between how these two kinds of word meanings are represented in our mind? I try to address this question by investigating the manifestation of this distinction in syntax-semantics interface (i.e., the relationship between meaning and grammar) and cross-linguistic universals in word meanings (i.e., what kind of common properties hold for word meanings across languages).

Linda Van Bergen

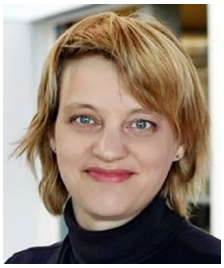
Office: 3.02 Dugald Stewart Building

Email: L.VanBergen@ac.uk
Web: http://www.ed.ac.uk/profile/linda-van-bergen

Research interests
English historical syntax (especially word order and negation), old and middle English language

Topics
I am happy to supervise most topics that focus on an aspect of the history of the English language.

Maria Wolters



Office: 4.32a Informatics Forum

Email: Maria.Wolters@ac.uk
Web: https://www.inf.ed.ac.uk/people/staff/Maria_Wolters.html

Research Interests
My main research goal is to investigate how technology can support people with chronic illness in living rich and meaningful lives.

Projects

- Computational modelling of semantic and phonemic fluency data
- Technology as a cognitive prosthesis - techniques for helping people remember tasks, facts, and words
- Cognitive aspects of the usability of computer systems
- The effect of depressive states and dysphoria on people's interaction with technology or social media

---

Sumin Zhao

Office: 2.03 Dugald Stewart Building

Email: Sumin.Zhao@ac.uk
Web: https://www.ed.ac.uk/profile/sumin-zhao

I am a discourse analyst with a specialisation in Critical and Multimodal Discourse Analysis. My research looks at how people use language together with other types of semiotic modes (e.g. images, music & gestures) in different social settings, with a particular focus on digital and social media contexts. I also supervise projects using linguistic ethnography/ethnography of communication.

This year, priority will be given to the following two topics:

- how people tell and respond to personal stories on social media using language and digital photography (e.g. selfies)
- how people use visual resources such as emojis, GIFs & memes in text and social media messaging

---