

**Messages to Potential Thesis Students for the 2024-25 Academic Year**

**Arnell, Karen**

Phone: 3225

E-mail: karnell@brocku.ca

I am hoping to accept one or two undergraduate thesis students next year. In my lab we investigate attention – its limits in dual-task situations, what captures our attention, how attention is influenced by emotion, and individual differences in attention. We are also currently examining the characteristics of heavy media multitaskers who regularly use multiple forms of media simultaneously. Ideally, students will have taken Cognition (PSYC 2P20).

Students will work with me one-on-one with weekly meetings. My goal is to involve my thesis students in all aspects of a study including experiment design, creation, data collection, and analysis, with the potential to co-author a conference poster and/or journal article.

**Ashton, Michael**

Phone: 3993

E-mail: mashton@brocku.ca

My students usually work on research questions about the relations between personality characteristics and other variables of interest. Some of my students choose topics that I'm already studying, and some students choose their own topics to study. I prefer to work with students who have taken PSYC 2P25.

**Book, Angela**

Phone: 5223

E-mail: abook@brocku.ca

The goal of my research is to examine the relationship between psychopathy and victim selection. Students who are interested in completing a thesis under my supervision can contact me by email and we can meet to discuss specific research interests.

**Busseri, Michael**

Phone: ext. 4798

E-mail: mbusseri@brocku.ca

I am a social/personality psychologist who studies well-being. My current research activities are focused primarily on how individuals view their well-being through time, that is, their personal evaluations of recollected past, present, and anticipated future well-being. I am interested in supervising Honours theses, particularly with students who have excelled in the following Psychology courses: 2P25 or 2P30; 2F23, 3P39, and 3F40. Typically, thesis students work closely with me on an original empirical project reflecting both their and my interests, with the goal of producing a high-quality (and publishable) study. Additional information can be found at the following URLs:

<https://brocku.ca/social-sciences/psychology/people/michael-busseri/>

<https://wellbeingresearchlab.weebly.com/>

**Campbell, Karen**

Phone: 4281

E-mail: [kcampbell5@brocku.ca](mailto:kcampbell5@brocku.ca)

For the first time in Canadian history, there are now more people over the age of 65 than children aged 0 to 14 years. Given this demographic shift, it is now more critical than ever that we gain a clearer picture of how the mind and brain change with age. My lab focuses on the cognitive and neural changes that accompany normal (i.e., non- pathological) human aging, with a particular focus on age-related declines in attention and the effect this has on memory performance. To this end, we use a variety of research methods, including behavioural testing, eye-tracking, and neuroimaging (for more information, please visit my website <http://www.brockcnalab.com/> or send me an email).

Honours students will work with me one-on-one and gain experience designing an experiment, testing participants, and analyzing data. Projects can either be strictly behavioural or involve an imaging component (most likely EEG). Ideally, students will also get the opportunity to co-author a conference poster and/or journal article.

**Cote, Kimberly**Email: [kcote@brocku.ca](mailto:kcote@brocku.ca)

My students and I conduct research on "Sleep, Performance, & Cognition". In the past, undergraduate and graduate students have worked together on studies of sleep deprivation, daytime napping, the role of sleep in memory, and attentional mechanisms at sleep onset and during sleep. My students gain highly specialized skills in the field of sleep and electrophysiology, including recording and analysis of sleep, waking EEG, and evoked brain potentials. It would be helpful, but not essential, if students have taken Sleep and Wakefulness (PSYC 3P68) and Brain and Behaviour (2P36/37).

**Dane, Drew**

Phone: 4805

E-mail: [adane@brocku.ca](mailto:adane@brocku.ca)

If you are interested in completing a thesis under my supervision, please contact me by e-mail and we can set up an appointment to discuss your research interests. Students completing their thesis with me would be able to analyze data from one of several databases, all of which address bullying and peer victimization amongst children and adolescents, often from an evolutionary perspective. Major research questions include considering why some adolescents choose to bully instead using cooperative social strategies, given that both strategies can yield social benefits with respect to popularity, social status, dominance, dating relationships, and other cooperative relationships like friendships and alliances.

**Paula Duarte-Guterman**

Phone: 3109

Email: pduarteg@brocku.ca

My lab is accepting thesis students interested in examining how biological sex and life experiences regulate behaviour and adult neuroplasticity in rodent models. Learning and experience reshape the brain at a cellular level throughout the adult lifespan. The hippocampus is involved in learning and memory and is distinguished by remodelling involving the addition of entirely new cells (i.e. adult neurogenesis). My research examines how biological sex and major life history events such as parenthood affect hippocampal remodelling throughout the lifespan. Some of the questions we are asking are: (1) What controls the birth and death of new neurons in the adult hippocampus and how do new neurons contribute to behaviour in male and female adults? (2) How does parental experience affect adult neuroplasticity and behaviour? (3) How do the endocrine and metabolic systems regulate neuroplasticity? (4) How does parental experience affect brain aging and Alzheimer's risk? To address these questions, we are developing a novel rodent model, the common degu, with unusual traits of long lifespan and biparental care (i.e., both maternal and paternal care). We also complement this animal work with analyses of human databases. Highly motivated students should have a good background in neuroscience (e.g. 2P36, 3P87). Knowledge of statistics or computer programming (e.g. in R) is desired but not required.

**Dwivedi, Veena**

Phone: 5389

E-mail: vdwivedi@BrockU.ca

Dr. Dwivedi's research programme is designed to understand how the human brain perceives language, using both EEG and behavioural methods. Currently, her work focuses on sentences that exhibit semantic anomaly in terms of world knowledge (Jai spread the warm bread with #socks/butter) and how sentence perception is modulated by traits such as dispositional affect. She also has research interests in the processing of Hindi, as well as the role of structure in processing language and music. See also <https://brocku.ca/dwivedi-brain-and-language-lab/>

**Emrich, Stephen**

Phone: 6181

E-mail: semrich@brocku.ca

I conduct research in the area of visual cognitive neuroscience. I employ both behavioural and neuroimaging (EEG, fMRI) methods to examine how the brain selects (attention), maintains (visual working memory) and creates (imagery) ultimately perceives (consciousness) visual

information. I am also interested in questions such as how personality or aging affect these different processes.

I anticipate that I will accept one or two undergraduate thesis students to conduct a study in my lab. Ideally, students will have taken either perception (PSYC 2P49) or cognition (PSYC 2P20). Additional knowledge of statistics, neuroscience, or computer programming will be helpful but not necessary. Students will be involved in all aspects of a study (either behavioral or with a neuroimaging component), including experiment design, data collection and analysis. My goal is to work closely with thesis students with the aim of completing a project that will provide students an opportunity to co-author a conference poster and/or journal article.

**Evans, Angela**

**\*Not taking students for 2024-25 academic year**

Phone: 5367

E-mail: aevans@brocku.ca

~~I will be taking one thesis student in my Social-Cognitive Development Lab next year.~~ My research examines honest and deceptive behaviors across the lifespan with a current focus on children and adolescents. I am also interested in issues related to child eyewitness testimony such as how we question child witnesses, children's competency and credibility, and our biases in detecting their lies. I am interested in supervising Honours thesis students who have completed and excelled in PSYC 2P12 (It would also be an asset to be taking/or have taken the Development of Deception - PSYC 3P32). If you are interested in completing a thesis under my supervision, please contact me via e-mail and we can set up an appointment to discuss your research interests.

**Hall, William**

905 688 5550 x 4005

Email: whall@brocku.ca

I'm broadly interested in the psychology of work. The majority of my research explores how to create workplaces where people feel included and safe. I have done several studies focused on the experience of women in male-dominated tech-workplaces. In this line of research, I am trying to understand how to create more gender-inclusive tech organizations. Students who complete a thesis with me typically work on designing and implementing a lab study. You can learn more about my research at these websites:  
<http://www.will-hall.ca/> <https://successinstem.ca>

**Hodson, Gordon**

Phone: 5127

E-mail: ghodson@brocku.ca

My research interests involve stereotyping, prejudice, and discrimination, with a particular focus on personality differences (e.g., political ideology; personality) as causes of prejudice, and intergroup contact and friendship as solutions for reducing intergroup bias. I also study dehumanization of outgroups, and I am interested in emotions such as empathy and disgust as they relate to prejudice. We are interested in prejudices toward a wide range of social groups (e.g., immigrants, sexual minorities, the homeless, and nonhuman animals), and also generalized prejudice (i.e., being prejudiced across a range of groups). I am typically interested in supervising students who have completed and excelled in Psyc 2P25 and 2P30 courses.

For more details, please visit the following websites:

<http://brocku.ca/psychology/people/hodson.htm> <http://www.hodsonlab.com/>

**Mahy, Caitlin**

Phone: 6151

E-mail: Caitlin.mahy@brocku.ca

My research examines changes in memory and thinking in early childhood. In my lab, we are interested in how young children remember future intentions (prospective memory), how children reason about the future, and how procrastination emerges and develops in early childhood. Currently, some of the questions we are asking are: (1) what factors contribute to forgetting in children? (2) what are the types of ways children save for the future? and (3) why and when do children start to put off necessary tasks? Please see my lab website for more information about these lines of research and our research outputs: [www.brockdmclab.com](http://www.brockdmclab.com)

I am interested in supervising academically serious students who have done well in PSYC 2F23 and PSYC 2P12 and have taken other developmental psychology courses relevant to our lab's interests. If you are interested in completing a thesis in my lab, please contact me via e-mail and include a current resume and unofficial transcript. I am happy to meet with students to discuss research interests and to share more about current research projects in my lab.

**Martini, Tanya**

Phone: 3086

E-mail: tmartini@brocku.ca

Skills-based learning is an important part of what is being fostered during your degree, but for many undergraduates it is not "front and centre". Instead, students tend to focus their attention on the subject matter when they take courses; that is, they're much more concerned with

course content (what's written in the textbook or presented in lecture) than they are with transferable job-related skills.

Unfortunately, the reality is that when students have to apply for jobs questions related to course-related material rarely come up, and a good understanding of course content is almost never the basis for someone deciding to hire you. Instead, employers are much more interested in your skill set – Do you know how to solve problems? Are you a good communicator? Are you a team player? Do you have leadership potential?

My research examines how undergraduates think about the skills that are being fostered during university experiences, both inside and outside the classroom. I am interested in what students know about job-related skills, and how they connect those skills with their university experiences. I'm also interested in how we can improve students' understanding of career-related skills so that they are in a better position to leverage them when they apply for jobs or post-graduate programs.

**McCormick, Cheryl**

Phone: 3700

E-mail: [cmccormick@brocku.ca](mailto:cmccormick@brocku.ca)

My research interests are in the fields of behavioural neuroscience and developmental neuroendocrinology using primarily animal models. Examples of research topics that the people in my lab are working on are: the relationship between stress and drugs of abuse and the relevant neural systems underlying this relationship; the long-term effects of stress on the brain; sex differences in stress systems; age differences in the neural and behavioural effects of drugs of abuse. Students should have taken some courses in neuroscience or equivalent offerings from the Psychology department as preparation for thesis research with me. Students are encouraged to seek some experience in my lab before senior year as preparation for thesis.

**Mondloch, Cathy**

Phone: 5111

E-mail: [cmondloch@brocku.ca](mailto:cmondloch@brocku.ca)

Faces convey a lot of important social information and have enormous impact on daily social interactions. In my lab we investigate children's and adult's ability to perceive various social cues (e.g., identity, traits, attractiveness, emotions). Here is one example. Two pictures of the same person can look very different (i.e., perceived as belonging to different people) and pictures of two different people can look very similar. What factors contribute to our ability to accurately recognize faces? This work has implications for the security industry and eyewitness testimony. Other research questions include: How do children learn to recognize facial expressions of emotion? Why do some people look honest and others dominant? What happens to face perception as we age? How do facial race and age influence allocation of attention and subsequent memory when we encounter faces in a crowd?

Students doing an Honours thesis in my lab develop a new project, providing an opportunity to create stimuli, design an experiment, test participants, and analyze data. Students are encouraged to learn more about our work by visiting <http://www.brocku.ca/psychology/research/faceperceptionlab.htm>

**Muir, Cameron**

Phone: 4681

E-mail: [cmuir@brocku.ca](mailto:cmuir@brocku.ca)

I am interested in supervising thesis students who would like to learn about hormones and behaviour. Specifically, I have been investigating the role of several steroid hormones in aggression, sex and stress. I have developed an immunological measuring technique for screening and measuring steroid content in biological fluids such as urine, perspiration and saliva. This non-invasive method can be employed to measure ongoing behaviours associated with hormonal changes. Some specific projects include: the investigation of steroid hormones acting as pheromones in human perspiration, the role of cortisol and testosterone in people living in close quarters such as in a space flight simulation.

**Murphy, Tim**

Phone: 4639

E-mail: [tmurphy@brocku.ca](mailto:tmurphy@brocku.ca)

Ever pull an “all-nighter”? How did you feel? I am interested in performance under various adverse conditions (e.g. sleepiness) and how this relates to brain function as measured by the electroencephalogram and event-related potentials. Of special interest is performance and associated event-related potentials (ERPs) relating to attention, risk assessment, error detection and cognitive control. Students in this line of research will learn how to apply electrodes, collect and analyze EEG and relate these measures to performance. Because half of the data is collected very late at night students usually work in pairs on one project; however, each student will obtain their own independent data set to analyze. I typically meet with honours students on a weekly basis. I also have a couple other smaller lines of research involving daytime only EEG collection examining perfectionism and EEG as well as some pedagogical interests. If you have any questions feel free to drop by my office (MCB335) or call me (ext 4639).

**Neufeld, Scott**

E-mail: [sneufeld@brocku.ca](mailto:sneufeld@brocku.ca)

I hope to accept 1-2 honours students to work with me in Fall 2024 (though we would likely start planning your project over the summer). I typically take a community-engaged and qualitative approach to my research. A major focus in my research in the past few years has been critical analyses of interventions to address substance use-related stigma in the context of the deadly overdose crisis in Canada. I am broadly interested in the intersections of classism,



racism and sexism with substance use related stigma, how anti-stigma campaigns may often do more harm than good for marginalized people who use drugs, and examining how drug policies and other structural factors shape the experiences of people who use drugs with exclusion, discrimination and group-based inequities. Because community-based and qualitative (e.g. interview-based) studies take a very long time to develop, my preference is to work with honours students on pre-existing qualitative data sets or close reviews of a subset of my anti-stigma campaigns database (the Anti-Stigma Archive: [www.antistigma.info](http://www.antistigma.info)).

Ideally, I would co-develop a thesis project with an honours student that combines my interests, priorities and expertise with your own interests and unique expertise possibly leading to a conference poster/oral presentation or co-authored published article. Some experience with qualitative research (e.g. taking my intro qualitative course, PSYC 3P62) would be an asset but this is not expected and my past approach with honours students has been to provide training in how to undertake a basic analysis of qualitative data. My preference is to work with students who have taken PSYC 2P30 and ideally my PSYC 3P25 or 2P90 (and/or PSYC 3P62) but these courses are not a requirement and I heavily weight a prospective student's personal interest in the subject matter. Please contact me by email ([sneufeld@brocku.ca](mailto:sneufeld@brocku.ca)) if you are interested in working with me and review some of my past and recent work here:

<https://brocku.ca/social-sciences/psychology/people/scott-neufeld-2/#1594700988195-ab283a3e-6c59> or here:

[https://scholar.google.ca/citations?hl=en&user=oCuQIXYAAAAJ&view\\_op=list\\_works&sortby=pupdate](https://scholar.google.ca/citations?hl=en&user=oCuQIXYAAAAJ&view_op=list_works&sortby=pupdate)

### **Pickering, Gary**

Phone: 4715

E-mail: [gpickering@brocku.ca](mailto:gpickering@brocku.ca)

My research is focused around two diverse themes: the psychophysics of taste perception, and environmental psychology. In the first we study individual differences in smell and taste perception and how these affect our preferences for and intake of food and beverages, especially alcohol. The second theme investigates the psychological barriers that prevent us from engaging effectively in climate change mitigation through our personal actions/behaviors, and how communications/messaging can be optimized to address that. I would welcome students interested in doing an empirical thesis in either of these areas.

### **Raineki, Charlis**

Phone 6282

E-mail: [craineki@brocku.ca](mailto:craineki@brocku.ca)

My laboratory uses primarily animal models to examine how our unique experiences across development have profound impacts on our brains and behavior. Our primary research interest is to uncover biological mechanisms underlying neurobehavioral deficits induced by pre- and/or early postnatal adverse experiences, with a special focus on understanding the increased vulnerability to develop psychopathologies such as depression and anxiety.

Honours students will work as part of the research team, directly with me and/or with other graduate students in the lab to gain experience in all aspects of the research process, including experiment design, data collection, and analysis, with the potential to become a co-author for conference abstracts/posters and/or journal articles. For more information about our research, you can visit the Raineke Lab website (<https://www.rainekilab.com>) or send me an e-mail. Please include a CV and unofficial transcript as well as a short description about your research interests.

**Sirianni Molnar, Danielle**

Phone: 6127

E-mail: [dmolnar@brocku.ca](mailto:dmolnar@brocku.ca)

At least 1 in 3 young people are highly perfectionistic (i.e., demand perfection from themselves or others) and rates of perfectionism are continuing to increase. Given that perfectionism contributes to poorer mental and physical health along with relationship problems, it is critical to gain a deeper understanding of perfectionism among young people. To this end, my lab is eager to understand how adolescents, parents, and educators understand, express, and experience perfectionism. My lab takes a multidisciplinary approach, and we use a variety of methods, including surveys, daily diaries, interviews, photo elicitation, experiments, and observational techniques, to gain new insights into how perfectionism is experienced adolescents' everyday lives. For more information, please visit my lab website: <https://brocku.ca/dphwb/>. I am interested in supervising students who have done well in PSYC 2P12 and/or PSYC 2P25. If you are interested in completing a thesis in my lab, please contact me via e-mail and we can set up an appointment to discuss your research interests and the current research being conducted in my lab.

Honours students will work with me one-on-one and be a part of my broader lab that includes graduate students and undergraduate RAs. Honours students will gain experience designing studies, collecting data, and analyzing data and will have the opportunity to focus on quantitative and/or qualitative methodology. Ideally, students will also have the opportunity to be a co-author on conference presentation and/or a journal article.

**Thai, Sabrina**

Office Phone: 4112

Lab Phone: 4680

Email: [Sthai@brocku.ca](mailto:Sthai@brocku.ca)

My research interests involve social cognition and close relationships, with a particular focus on social comparisons that occur in the context of close relationships. How do people compare their romantic partner, friends, parents, and children to other people? How do people compare their relationship to other relationships? What impact do these comparisons have for the relationship? I am also interested in who responds positively to these comparisons and who responds negatively to these comparisons by examining personality traits or relationship quality. I also study comparisons influence unconscious and conscious evaluations of the romantic

partner and others who may pose a threat to the relationship (attractive alternative romantic partners). We are interested in a wide range of close relationships (e.g., parent-child, close friendships, and romantic relationships), and how psychological processes influence and unfold in daily life. I am typically interested in supervising students who have completed and excelled in Psyc 2P25 and 2P30 courses.

Students are encouraged to learn more about my work by visiting <http://individual.utoronto.ca/sthai>

**Willoughby, Teena**

Office Phone: 4281

Lab Phone: 5474

E-mail: [twilloug@brocku.ca](mailto:twilloug@brocku.ca)

My research interest is in adolescent development, with a focus on two main questions: (1) What predicts the individual differences found among adolescents with regard to health-risk behaviors, mental health, peer sensitivity, etc., and (2) Is adolescence a sensitive period for development, resulting in unique vulnerabilities and opportunities for both negative (e.g., health-risk behaviors,) as well as positive behaviors (e.g., engagement in structured activities, academic achievement)? As a student in my lab, you will be analyzing data from a large longitudinal survey database. Students who are interested in statistics are a particularly good match for my lab. Students are encouraged to learn more about my work by visiting <http://www.brockadolescentdevelopmentlab.ca/>

**Volk, Tony**

Phone: 5368

E-mail: [tvolk@brocku.ca](mailto:tvolk@brocku.ca)

My research involves studying child and adolescent development using a multidisciplinary lens. In particular, I generally use an evolutionary developmental viewpoint to focus on three primary areas: bullying, parenting, and antisocial personality (e.g., HEXACO or psychopathy). I'm therefore open to a wide range of students and currently have both CHYS students and PSYC students (mostly social or developmental) working in my lab.

It's really important to remember that a thesis should be a labor of love, not just labor! So all Honours students should make sure that they pick a topic they are passionate about and a supervisor they would enjoy working with. The two best ways to learn more about my research and my style of supervision are to visit my lab web page at: [brocku.ca/volklab](http://brocku.ca/volklab) and to meet with me or my current students (see lab page for contact info).