Psychology at U of T Scarborough: A Research Powerhouse

The Department of Psychology at University of Toronto Scarborough is a prolific hub of psychology and neuroscience research. Most of our professors not only teach, but lead research teams. Their chief areas of scientific interest include:

**Behavioural Neuroscience**: How the nervous system produces thought, emotion, and behaviour, both in humans and in other animals

**Clinical Psychology**: The biological and contextual causes of psychological and neurological disorders, and treatments for these disorders

**Cognitive Neuroscience**: The biological processes related to attention, memory, learning, decision making, and perceiving and interacting with the world

**Developmental Psychology**: How people learn, develop, and grow—from conception throughout the entire lifespan

**Social Psychology**: The nature of interpersonal interactions and relationships, and the individual (personality) and socio-cultural differences among people

Who are our researchers?

- **40+** Faculty members
- **70+** Master's/doctoral students
- **13** Postdoctoral fellows
- **100+** Bachelor's students

Community Members Are Vital Research Partners!

Research is a team sport!

Research in psychology at U of T Scarborough is a group effort involving not only our scientists and students, but also members of our local community. To answer questions about human nature, our researchers regularly seek volunteer research participants who represent a wide range of ages and life experiences.

If you are 18 or older, we warmly invite you to join our **Adult Volunteer Panel**. It’s a registry of adults who are willing to be invited to come to take part in research studies at U of T Scarborough from time to time. We especially seek participants aged 40 to 80.

When you take part in a study as a research volunteer, our researchers typically pay you a nominal fee for this service. You also have the satisfaction of knowing that your participation contributes to society’s knowledge of human behaviour and of ways to promote well-being. If you think this might interest you, please visit our Adult Volunteer Panel information page: [http://uoft.me/AVPInfo](http://uoft.me/AVPInfo)

Want to take part in our research? For more information, visit [http://uoft/me/AVPInfo](http://uoft/me/AVPInfo) or email [psychadultresearch.utsc@utoronto.ca](mailto:psychadultresearch.utsc@utoronto.ca)
Highlights of Psychology Research at U of T Scarborough

ANDY LEE
Associate Professor

Andy Lee’s research in cognitive neuroscience seeks to unlock the mysteries of the *medial temporal lobe*, a brain area critical to memory, perception, and emotion. Lee studies patients with brain damage and uses techniques such as functional magnetic resonance imaging and eye-tracking to explore processes related to memory and the way these interact with perception and decision making. One of the goals of his recent research is to better understand how certain thought processes that go awry in those with neurodegenerative diseases (such as Alzheimer’s disease) may relate to irregularities in the medial temporal lobe.

CENDRI HUTCHERSON
Assistant Professor, Canada Research Chair

Anyone on a diet can attest to the apparently willpower needed to bypass a pint of ice cream in the freezer and reach for a leafy green vegetable instead. But while making a “healthy choice” often feels onerous, Cendri Hutcherson points out that self-control may have surprisingly little to do with it.

Hutcherson’s research involves building computational models that can accurately predict individuals’ behaviour and brain activation. Her work has shown that we can dramatically improve our chances of making appropriate decisions by simply changing the way we think about or “frame” our options.

ADRIAN NESTOR
Associate Professor

Adrian Nestor uses neuroimaging techniques such as functional magnetic resonance imaging and electroencephalography to record activity in specific brain areas. Among other things, he and his colleagues have developed a technique that makes it possible to reconstruct images of what people are perceiving, based on their brain activity as they visualize objects in their mind’s eye.

This line of research could eventually have wide-ranging clinical application. “It could provide a means of communication for people who are unable to verbally communicate. Not only could it produce a neural-based reconstruction of what a person is perceiving, but also of what they remember and imagine, of what they want to express,” says Nestor.

VINA GOGHARI
Associate Professor

Vina Goghari’s research aims to uncover how structural differences in brain regions, and the connections between them, may give rise to the cognitive and mood-related problems experienced by people with schizophrenia or bipolar disorder. Her lab also investigates other mental health conditions often associated with cognitive deficits, such as addictive disorders and mood disorders.

One of Goghari’s research methods is family studies (also known as behavioural genetics). This involves studying individuals who have been diagnosed with psychotic disorders, the relatives of those diagnosed, and healthy community members. This approach enables comparisons to be made between these groups, in order to better understand the interplay of biological and environmental factors that may increase a person’s risk of psychosis.

Want to take part in our research? For more information, visit [http://uoft.me/AVPInfo](http://uoft.me/AVPInfo) or email [psychadultresearch.utsc@utoronto.ca](mailto:psychadultresearch.utsc@utoronto.ca)