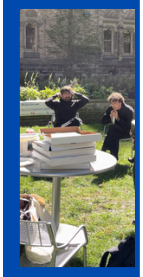
CASA

C A S A U o f T P R E S E N T S

CogSci Monthly

01 October 2026 | Issue 2







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Designed by Alex
CogSci & Linguistics

DID YOU KNOW:
For a printed copy of CogSci monthly, come to the CASA office (UC F301)!

CASA Prof Social, 23 September 2026

Letter from the Editor

Hello, fellow Cog-Sci students!

As the assignments and readings slowly increase,
the warm weather seems to begin to cease

The crawlers and spookiness seem to come out of the side
The pumpkin lattes and apples appear far and wide

The midterms and essays seem to be near
Have no Fear!
For CASA office hours begin to appear!

For curiosity that begins to spark
Can be showcased through a colloquium remark!

Continue to be involved and come to events
So that your academic misery doesn't cement!

Written by Ibukun
CogSci & English & Philosophy



Events of the Month

October Colloquium
- Learn about undergraduate research in cognitive science! **Thursday, October 15, 4:00pm-6:00pm** at **OISE room 3311**

General Meeting
- Tell us what you want to see this year at CASA! **Friday, October 16, 6:00pm-7:00pm** at **University College room 177**

Pub Night
- Meet new people and have an amazing night! **Friday, October 16, after General Meeting -** *exact time and location TBD*

COG250 Test Prep Workshop
- Get extra help and pro tips for your COG250 test! **Monday, October 19, 4:00pm-6:00pm** at **Sidney Smith room 2101**

Professor Spotlight: Non-Academic Topics
- Hear from a professor about what they usually *don't* cover in class! **Friday, October 25 -** *exact time and location TBD*

To stay updated on these and future CASA events, follow our Instagram! @casa.uoft

More Events!

Buddhism and Psychology and Mental Health Student Union
- Dr. Elise Levi will be talking on "Place Matters: Indigenous Ways of Knowing and Healing Environments" on **October 5th, 4:00pm** at the **Health Sciences Building: HS734**. Click here to RSVP!

Temerty Medicine Graduate Program Fair
- **Wednesday, October 14, 4:00pm-7:00pm** on the **2nd Floor, Multi-Purpose Room, Schwartz Reisman Innovation Campus**. There will be a free photo booth and food! Click here to register!

The Human Variable: Psychology for the AI Age
- Special guests include David Chalmers, Karina Vold, and more! **Wednesday, October 28, 2026, 9:00am-5:00pm**, at **East Winter Gardens (7th Floor), Schwartz Reisman Innovation Campus**. Click here to register!

Other Clubs

Secondary School Interactive Crisis Simulation (SSICSIM)
- Looking for a break from your courses? Apply to join **SSICSIM**! Applications remain (unofficially ;)) open! Go to: ssicsim.ca/apply

Clinical Psychology Students' Association (CPSA)
- CPSA is hosting a Breaking into Clinical Psychology event for all those interested! On **October 5th from 5 p.m. to 8 p.m.** in the **Cat's Eye Student Lounge.**

Opportunities

Curated by Ibukun
CogSci & English & Philosophy



Casa Colloquium

CASA is hosting its first undergraduate colloquium. Are you interested in presenting an interesting cog-sci-related idea you have, or any of your own research? Apply using this form here before October 7th!

Laidlaw Scholarship

Details about the application process for the 2026-2027 Laidlaw scholarship cycle will be made available in October! So keep an eye on that!

Call for Editors:

Are you interested in becoming an editor for Mentis, UofT's very own journal for cognitive science and philosophy? Contact jonah.stein@mail.utoronto.ca for more details.

PSA (Psychology Student Association) is hiring!

They are hiring general volunteers, and the application closes October 13th. Check on their Instagram for more details @psauoft

Research: A How-to Guide for Cognitive Science Students



Written by Andrew
CogSci & Psychology



UofT offers a wide range of research opportunities to pick up alongside your undergrad, ranging from work study courses to volunteer positions. Although breaking into research may seem intimidating, there is a breadth of advice given out by professors and students alike, all of which can guide you into more academic opportunities. Here are a few examples:



- Samantha Yammine, alum science communicator, created a short and sweet blog post which outlines the process of attaining research positions, specifically for UofT students.
- Paul Bloom, our resident cognitive scientist, has written a list of 'non-obvious' advice for (grad) students, which means the advice must have been obvious to undergrads.
  - (Also, aside from advice, Bloom has an interesting article on interdisciplinary conversations, which finds itself very relevant to the study of cognitive science.)





- Thomas Anderson, a UofT psychedelics researcher, created a small digital guide for academic psychology students, with contents including a discussion about the replication crisis, and further insights into what it means to be a scientist.

As a parting note, I'll share that my good friend, Paul Whissell, once told me–*cough*, through email–that undergrads encounter many experiences and opportunities, but the key is to stay engaged at all times, if possible. Hopefully some of this advice comes in handy. For now, good luck!

The Topical



Written by Dama
CogSci & Sociology

Spiking Neural Networks

We are constantly trying to recreate the computing power of the human brain. Despite our advancements in systems such as language models and neural networks, we seem to be reaching a plateau in progress due to a lack of efficiency. Although neural networks are capable of incredible feats at an incredible cost, they also require hundreds of thousands of processors and hundreds of megawatts of power. This excess raises the question of how humans accomplish so much more while using a fraction of the energy. I believe that this question brings us to the next big problem in AI computing, replicating human efficiency. Spiking neural networks (SNNs) are a first step. Unlike traditional artificial neural networks (ANNs), which process information in parallel across many nodes, SNNs are event-driven and only process relevant information, mimicking our attention-driven brains. This method changes the structure of the networks in exciting ways.

Due to sparse computing in SNNs, the timing of their neuron firings become a form of information themselves. While ANNs communicate through a continuous floating point number whose magnitude contains information, SNNs utilize binary firing events where information is conveyed through the timing and frequency of these firings. In SNNs, information is coded in multiple ways: rate coding where the frequency of firings relay the magnitude of information, temporal coding where the time at which a neuron fires conveys a unique computational piece of information, population coding where representations are determined by groups of neurons, and finally, rank order coding where the first neuron fired has the primary information, with subsequent firings updating said model. With these developments, the next step is to utilize the efficiency and organization of the brain so that neural networks are not only capable of responding to information, but predicting and understanding it as well.

Further Reading:
https://pmc.ncbi.nlm.nih.gov/articles/PMC9313413/
https://medium.com/@nsrl6/spiking-neural-networks-explained-5952c739eeb2



"I taught an octopus piano then played guitar with him" - https://www.youtube.com/watch?v=PcWnQ7fYzwI



Curated by Alex
CogSci & Linguistics

Bonus CogSci Fun

See you next month!



-Casa Lit & Editorial