



**BRIGHT LIGHTS IN THE LAB - THE SCIENCE OF THE BRAIN**  
**Presented by University of Toronto Schools and Firefly Foundation**  
**SummerUp 2021**  
**Program Description**

**Program Name**

Bright Lights in the Lab – The Science of the Brain

**What**

Learn about the brain while taking care of it!

In order to offer students a safe and stimulating environment our Labs have moved online. With a continued focus on neuroscience and understanding the brain, we will offer students the opportunity to develop their lab skills through the use of a virtual animal model to learn about lab design and experimentation.

Our campers will develop their lab techniques, to develop an appreciation for the research process and develop critical thinking and design skills for a greater understanding of how science is applied.

Campers will have the opportunity to collaborate and design an ethical neuroscience research project. They will be co-learning neuroscience concepts, conducting experiments, participating in brain training games in breakout rooms to further extend their learning. In addition to our daily programming, students will also be learning about the impact of mindfulness techniques and finding ones that they can incorporate into their daily routine.

**Why this Matters**

Have you ever wondered how your brain works?  
How does your memory get stored or filtered?  
How do you perceive the world?

If you want answers to those questions and more, then this camp is for you. In this camp, you will learn about neuroscience concepts that first year neuroscience and psychology students learn. It will give you a greater insight into how amazing the brain is and how much care it needs in order for you to reach your full potential. In addition, you will have the opportunity to experience what it is like to be a science researcher. By going through the ethical review process and collaborating with peers, you will produce a sound research project that will have your teachers in awe at the end of this camp.

**Admission Details**

**Who:** You are a Black youth, Ontario resident, and are enrolled in Grades 8 to 11 during the 2020-21 academic year. You are keen to advance your knowledge in science and to do so with other like-minded students. You have a reliable computer and the ability to consistently access learning online. You are willing to commit to attending all scheduled learning sessions (see dates and times below).

**Start/Stop Dates:** SummerUp will offer two sections of *Bright Lights in the Lab- The Science of the Brain*.

**Section 1** (for Grades 8-9 students): Starts Monday, July 26 and ends Friday, July 30, 2021. This section is one-week duration. Classes run Monday to Friday and each class begins at 10.00 a.m. and ends at 2.00 p.m. Breaks will be included.

**Section 2** (for Grades 10-11 students): Starts Monday, August 9 and ends Friday, August 13, 2021. This section is one-week duration. Classes run Monday to Friday and each class begins at 10.00 a.m. and ends at 2.00 p.m. Breaks will be included.

**Meeting Pattern:** Each section will meet five consecutive days (Monday to Friday). Each day, class begins at 10.00 a.m. and ends at 2.00 p.m. Breaks will be included.

**Mode:** Online. Students must have a suitable computer device and internet access.

**Admission:** To be considered for admission, candidates must attend a program orientation at 5.00 p.m., June 29, 2021. This orientation will be co-hosted by the Leadership by Design program and University of Toronto Schools.

**Register** for the orientation using the following

link: [https://us02web.zoom.us/webinar/register/WN\\_yQfJXKpVS5S0JRvf9idQFQ](https://us02web.zoom.us/webinar/register/WN_yQfJXKpVS5S0JRvf9idQFQ)

### **Isabella Liu – Program Leader**

[Isabella Liu](#) is a chemistry teacher with a demonstrated history of working in the secondary education and non-profit sectors. She currently teaches at University of Toronto Schools (UTS), Toronto, and has taught students with diverse backgrounds in three different countries. As a recognized Apple Distinguished Educator and Google for Education Trainer, she is skilled in educational technology, curriculum design and assessment delivery.



### **About University of Toronto Schools**

[University of Toronto Schools](#) (UTS) is an independent, merit-based university preparatory school, affiliated with the University of Toronto. Our home is located on the University's St. George Campus. Founded in 1910, the school provides a transformative education program of academic distinction to approximately 670 students in grades 7 through 12. UTS graduates love learning, take initiative, and innovate as socially responsible global citizens and go on to attend many of the most selective universities around the world.

The SummerUp program is funded by the Ontario Ministry of Education

