Welcome!

- We welcome you to the Twelfth Annual CIHR Canadian National Brain Bee (CCNBB) and hope that you will enjoy your stay at McMaster University!
- Our first event on Friday will involve laboratory presentations in the Department of Psychology, Neuroscience & Behaviour beginning at 4pm. We expect to finish the competition on Saturday by 4:30pm. If you have questions about anything, please do not hesitate to contact us!
  - Dr. Ellen MacLellan (event coordinator): maclele@mcmaster.ca Mobile: 289-775-0560
  - Dr. Ayesha Khan (faculty coordinator): akhan@mcmaster.ca
  - Dr. Nikol Piskuric (faculty coordinator): piskurn@mcmaster.ca
  - Dr. Judith Shedden (chair): shedden@mcmaster.ca Mobile: 905-902-4096

Release Forms

- There are two release forms that we need you to sign. One is a permission form and the other is a photo release form. They can be found on our web site. Please print and sign the forms and bring them with you to the competition: http://brainbee.ca/students/preparing-for-the-national/

Accommodations

- Competitors and other guests will stay in Les Prince Residences. You can read about this residence (built in 2006) here: http://housing.mcmaster.ca/Residence_Admissions/Buildings/lesprince.html.
- This video (https://youtu.be/0OiEwhD-Xs4) is a tour through Les Prince Residences. Some of the info in the captions is not relevant for summer rentals so use the video for the visuals only.
- Les Prince Hall features single (single bed) or double (two single beds) occupancy guest rooms with a desk, bureau, and ensuite washroom. **Bed linens, towel, face cloth and soap are provided.** In addition, each guest room is equipped with a Wi-Fi internet connection. For those who prefer to plug in, an RJ-45 cable is required to connect to the network. A limited number of
RJ-45 cables are available upon check-in. Guest MACIDS (to access the wireless) will be provided to each guest upon check-in and/or at Registration.

- This year the CCNBB will pay for accommodation for 2 people from each local brain bee for the nights needed.
- Some of our competitors are travelling from distant locations and may need to stay extra nights. **We will gather your travel information through an online survey** (link available at [http://brainbee.ca/students/preparing-for-the-national/](http://brainbee.ca/students/preparing-for-the-national/)) and we can make special arrangement if you need additional rooms/nights.
- If you will be bringing additional family members we can arrange for them to stay in Les Prince Residences (use the online survey to tell us). We will work with you to collect payment for the additional people (approximately $78 per night per person).
- When you arrive at McMaster, you will check in at the Housing & Conference Service Centre in the Commons Building which is open 24 hours. Campus maps with driving and walking directions:
  - [http://brainbee.ca/students/directions-and-maps/](http://brainbee.ca/students/directions-and-maps/)
- Check-in time is 4pm and check-out time is 10:00am.
- You will be very busy on Saturday, so if you are not staying over Saturday night it would be a good idea to check out BEFORE walking to the Psychology Building for breakfast. Luggage can be stored at the check in location in the Housing and Conference Service Centre in the Commons Building, or alternatively we can store luggage in the Psychology Building (contact Ellen maclele@mcmaster.ca with any questions).

**Travel**

- If possible, plan to arrive on Friday by 3pm. Check in time at the residences is 4pm and we have lab presentations beginning at 4pm. Dinner will be served in the Psychology Building at 6pm. The events should be finished by 4:30pm on Saturday.
- For those traveling from distant locations, you can fly into Hamilton International Airport or Toronto Pearson International Airport. For those coming from the airport, directions to McMaster and various maps can be found here:
  - [http://www.mcmaster.ca/welcome/findus.cfm](http://www.mcmaster.ca/welcome/findus.cfm).
- Campus maps showing driving directions through campus to the Commons Building, the location of campus buildings you will be visiting, and walking directions from residences to the Psychology Building: [http://brainbee.ca/students/directions-and-maps/](http://brainbee.ca/students/directions-and-maps/)

**Food**

- Visitors will experience an authentic undergraduate university experience, staying in residence. The CCNBB will cover the cost of Friday dinner, Saturday breakfast, and Saturday lunch to all brain bee visitors.
- **Friday Arrival:** Coffee and cookies will be available at 3:00 pm (Psych 205)
- **Friday Dinner:** 6:00 pm (Psych 205).
- **Saturday Breakfast:** 7:30 to 8:30 am. A hot breakfast buffet will be served in the Psychology Building, room 205, at 7:30 am on Saturday morning. The walk across campus from residences will take about 15 minutes. If you are checking out on Saturday (check out time is 10am) allow enough time to do that (see below for check-in and out details).
- **Saturday Lunch:** 12:00 noon (Psych 205).
• **Other meals**: There is a list of on-campus dining locations in the McMaster Conference & Event Services Guest doc: https://housing.mcmaster.ca/conDocs/mac_pre_arrival_guide.pdf. You may also search online for “Hamilton Restaurants around McMaster University”.

## Schedule of Events

**PLEASE NOTE:** Some details and timing may change; we will update this section as the details are finalized. We will highlight changes in yellow.

### Friday, May 24

#### Arrival of Contestants

- Check in opens at Housing & Conference Service Centre in the Commons Building is 4pm (if you arrive before your room is ready, they will store your luggage for you). The registration desk is open 24 hours; they will direct you to Les Prince Hall (building 53). At check-in you can collect your parking permits and MacID for internet access. Please make sure when you check in that you receive the items you need. Contact us if you have any questions (see contact numbers on the first page of this document; don't hesitate to phone from the check-in desk at the residences if there are any problems). Check out time is 10am; if you are checking out on Saturday, allow enough time to do that before walking to the Psychology Building for breakfast on Saturday morning, because there won't be any time to walk back to residences after breakfast.

- **4:00pm** Psychology Building (coffee available at 3pm)
  - Orientation, introductions, lab tours: meet on the second floor, room 205
    - Take elevators to 2nd floor, turn right, and immediately right again. Psych 205 is the lounge area with floor to ceiling windows and outdoor balconies along both sides.

- **6:00pm** Psychology Building
  - Dinner at approximately 6:00pm (Psych 205).
  - Back to the residences for a good night’s sleep!

### Saturday Morning, May 25

- **7:30 - 8:30am** Breakfast buffet
  - A hot breakfast will be served in the Psychology Building, room 205, at 7:30am.
  - Remember: if you are checking out on Saturday, leave yourself enough time to do that in the morning BEFORE walking across campus for breakfast (check out time is 10am). Walking across campus to the Psychology Building is about a 15 minute walk, and there won't be enough time to walk back to residences to check out before the events of the morning start. **You may be able to arrange for a parent/guardian to check out after breakfast while competitors are engaged in morning tests (which are neuroanatomy and patient diagnosis, which parents cannot watch anyway).**
8:30am  Competition Starts
- Meet in the Psychology Building 205 (we’ll already be there for breakfast).
- Competitors will receive lab coats, clipboards, and other materials required for the competition.
- Unfortunately, family members and other visitors cannot observe the neuroanatomy bell-ringer or patient diagnosis tests. You are free to relax in room 205 of the Psychology building, or explore campus on your own.

9:00am  Neuroanatomy Bell-ringer
- Education Program in Anatomy, Health Sciences Centre
- The neuroanatomy bell-ringer competition consists of approximately 20 or 25 stations where brains, brain slices, or pictures of brains will be presented. Each station will have 2 questions worth approximately 2 points each. Please see our web site (http://brainbee.ca/students/preparing-for-the-national/) for more details about the format of this test and how to prepare.

10:30am  Patient Diagnosis
- The Centre for Simulation-Based Learning (CSBL), Health Sciences Centre. We may use a temporary “clinic” in the Psychology building instead; rooms TBA, you will have a guide.
- There will be Standardized Patients who are professionally trained to portray neurological disorders. Please see our web site (http://brainbee.ca/students/preparing-for-the-national/) for more details about the format of this test and how to prepare.

12:00 Lunch
- A hot buffet lunch will be served (Psych 205). All brain bee competitors, all the brain bee guests, and all of the brain bee volunteers are welcome to join us for lunch.

Saturday Afternoon, May 25
All afternoon events will take place in room 155, Psychology Building

1:00pm  Photos, main lobby
- Group photos will be arranged in the main lobby. Please be on time and and wear your lab coats. More photos will be taken during the competition and during the awards ceremony at the end of the competition.

1:15pm  Introductions
- Please be in room 155 by 1:15 pm sharp! Brain Bee competitors will be introduced. There will be Introductory remarks by the organizers and by the CIHR representative. We will introduce the volunteers and the competition judges.
1:30 pm    Oral Competition

- This part of the competition will take place over several successive phases. All questions will come from "Neuroscience: Science of the Brain", published by the European Dana Alliance for the Brain and from "Neuroscience: Exploring the Brain, chapters 2, 7, 7A, 15, and 22 (Bear, Connors & Paradiso, 3rd Edition). Download these documents from our website: http://brainbee.ca/students/preparing-for-the-national/

Phase 1: Open Multiple Choice

- All competitors compete in this phase; there will be 50 multiple choice questions.
- The questions will be presented on the screen one at a time. Each question will be read aloud and the competitors will have TEN seconds to select their response using iClickers.

Phase 2: Open Written

- All competitors compete in this phase; there will be 30 short-answer questions.
- Each free-response question will be read aloud and the competitors will have TWENTY seconds to write down their response.

Short Break

- Scores from the open multiple choice phase and the open written phase will be combined with the scores from the morning competitions to determine who will advance further. In the event of a tie, a tie-breaker will consist of written answers to a long answer question which will be graded anonymously by the two neuroscience judges.

Phase 3: Final Showdown

- The top three competitors face off to become CIHR Canadian National Brain Bee champion.
- Oral rounds of questions (competitors answer at the microphone).
  - There will be 20 questions; all three competitors get the same questions.
  - There will be SEVEN MINUTES to provide oral answers to all 20 questions.
  - While one competitor answers the questions, the other two are sequestered.
  - Each question will be read aloud. The competitor can answer or pass. Each passed question will be repeated at the end of the list until all questions are answered or the time is up.
- In the event of a tie, one or more of the following events will happen:
  - Another round of Final Showdown questions will be completed.
  - The entire day's performance will be used to determine a winner.
  - In the unlikely event that a winner is still not decided, a tie-breaker will consist of written answers to a long answer question which will be graded anonymously by the neuroscience judges.

4:00 pm    Awards Ceremony

- Prizes and trophies will be awarded
- Congratulations from PNB, McMaster, and CIHR representatives
- Please remain for group photos.
We gratefully acknowledge the following groups for their support

We are supported nationally by
CIHR-Institute of Neurosciences, Mental Health and Addiction
http://www.cihr-irsc.gc.ca/e/8602.html

With additional support from

Faculty of Science, McMaster University
http://www.science.mcmaster.ca/
Department of Psychology, Neuroscience & Behaviour (PNB)
http://www.science.mcmaster.ca/Psychology/
Educational Program in Anatomy, McMaster University
http://fhs.mcmaster.ca/anatomy/index.html
The Centre for Simulation-Based Learning (CSBL), McMaster University
http://simulation.mcmaster.ca/

In addition, the Local Brain Bees across Canada are supported by their local institutions.

If you would like to support the CIHR Canadian National Brain Bee
or any of our local brain bees across Canada, please let us know!