

# **CIHR Canadian National Brain Bee**

Funded Nationally by CIHR-IRSC Hosted by

Department of Psychology, Neuroscience & Behaviour Faculty of Science, McMaster University
May 9<sup>th</sup> and 10<sup>th</sup>, 2008

## **WELCOME!**

- We welcome you to the First Annual CIHR Canadian National Brain Bee (CCNBB) and hope that you will enjoy your stay at McMaster University!
- We have provided a lot of information in this document but we might have missed something. If you have questions about anything, please do not hesitate to contact us and we will do our best to help.
  - o Contact Professor Judith Shedden: Cell phone number: 905-902-4096. Home number: 905-627-2496. Office number: 905-525-9140 x24345. Email: <a href="mailto:shedden@mcmaster.ca">shedden@mcmaster.ca</a>.

## **Coordination of Travel and Accommodation plans**

- CCNBB will pay for 1 night's accommodation at Les Prince Hall (described below) and 2 meals at Commons Marketplace (also described below) for 2 guests from each local brain bee.
- We will also offer a pizza lunch on Saturday for all our visiting brain bee guests.
- We need to know some of your travel plans so that we can coordinate with McMaster Conference Services. With this information we can pay ahead of time for 2 of your party, so that you only have to pay for your extra people and extra nights. Please send the following information to Professor Judith Shedden by email to shedden@mcmaster.ca:
  - Names of ALL the people in your party
  - o Please indicate which names are the Brain Bee competitor and guardian
  - Arrival and departure dates
  - o Number of single and double rooms requested by your party
  - o Cell phone numbers or other contact information while in Hamilton, if you have them
  - Home contact information (phone, email addresses)
  - Finally, if your departure date is Sunday or later, will your party be interested in breakfast on Sunday morning in the Commons Marketplace (7:30am buffet, about \$8 per person)?

#### **Accommodations**

- Competitors and other guests will stay in Les Prince Hall residence on McMaster campus (see campus map on last page). You can read about this lovely new residence (built in 2006) here: http://housing.mcmaster.ca/Residence\_Admissions/Buildings/lesprince.html.
  - o **Important!** All visitors should make their own reservations as soon as possible.

- o The reservation form can be found here (look for the link to Canadian National Brain Bee): http://conference.mcmaster.ca/conf\_accom\_forms.html.
- Although the registration form has a deadline of April 11<sup>th</sup>, McMaster Conference Services knows that our Brain Bee visitors will be registering later than that, so don't worry about this deadline. Just try to make your reservations as soon as possible, and let me know some travel information (see the section call "Coordination of Travel and Accommodation Plans" at the top of this document).
- The CCNBB will pay for one night's accommodation for 2 people from each local brain bee.
  - Those 2 people do not have to pay for their accommodation when making reservations (unless they are staying for more than one night), but they still need to make the reservations. They should make a note on the registration form that one night is already paid for by CCNBB.
  - o If you will be staying longer than one night and/or if you are travelling with additional guests please pay for the extra people and extra nights when you reserve your rooms.
  - The completed reservation form can be faxed or mailed to McMaster Conference Services (FAX number is on the form). Please make your reservations as soon as possible (faxing is preferred over regular mail).
  - o When you arrive at McMaster, you will check in at the Housing & Conference Service Centre in Commons Building which is open 24 hours (see map on last page).

#### Travel

- Air Canada and WestJet will offer us 10% discount on flights. You can find information about making reservations and asking for the discounts at this web site: <a href="http://brain.mcmaster.ca/brainbee.organizers/">http://brain.mcmaster.ca/brainbee.organizers/</a>
- For those travelling from far away, you can fly into Hamilton International Airport (<a href="http://www.flyhi.ca/index.shtml">http://www.flyhi.ca/index.shtml</a>), or Toronto Pearson Airport (<a href="http://www.torontoairport.com/">http://www.torontoairport.com/</a>).
- For those driving or travelling from the airport, directions to McMaster and various maps can be found here: http://www.mcmaster.ca/welcome/findus.cfm.
- **Campus Map:** For your convenience, we have also included a campus map with important building locations indicated (see map on last page):
  - Les Prince Hall (accommodations), Commons Building (Commons Marketplace for meals), Psychology Building, and Health Sciences Centre.

#### **Food**

- Visitors will experience an authentic undergraduate university experience, staying in residence and eating in the **Commons Marketplace** in the Commons Building.
- **Friday Dinner**: A buffet dinner will be served in the **Commons Marketplace** between 5:00 and 6:30pm on Friday evening. This is a large hall, and visitors from other conferences on campus will also be dining there.
- Saturday Breakfast: A buffet breakfast will be served in the Commons Marketplace between 7:30 and 8:30am on Saturday morning.
  - o The CCNBB will cover dinner (Friday), and breakfast, and lunch (Saturday) for two people from each local brain bee. Meal cards will be provided when you check in.
  - Additional guests can pay cash at the cafeteria (approximately \$15 for dinner buffet and \$8 for breakfast buffet).
- **Saturday Lunch**: A pizza lunch will be served in the Psychology Building Piano Lounge, on the 2<sup>nd</sup> floor of the Psychology Building (Room 205A and 205B), on Saturday at about 11:30am.
  - We offer this lunch to all Brain Bee guests (including the extra guests). There will be signs in the Psychology Building pointing the way.

• Other meals: If you are staying longer, you will be on your own for meals (for Saturday evening and beyond). We will provide a list of local restaurants for you. It is possible to have breakfast at Commons Marketplace on Sunday morning, as long as you let me know ahead of time (see the section call "Coordination of Travel and Accommodation Plans" at the top of this document).

## Other events on campus on Saturday

The CIHR Canadian National Brain Bee will be held on the same day as May@Mac, which is a
university-wide event attended by Ontario high school students and their parents. That means
that there will be a lot of activity on campus that day! The CCNBB will be one of the best
attractions of the day, and the afternoon events should be well attended by people from the local
community.

### Contact numbers while in Hamilton

- We have a number of volunteers who will be available at any time while you are in Hamilton to provide directions and help you if you are lost, to meet with you and show you the way, and to answer (or find the answers to) any questions you might have while you are here.
  - o Ashna Patel, Cell phone number: 905-906-0601. Email: patela29@mcmaster.ca
  - o Ayan Dey, Cell phone number: 905-928-7392. Email: ayan110@gmail.com
  - o Bailee Dyck, Cell phone number: 905-906-7009. Email: dyckba@mcmaster.ca
  - o Sanket Ullal, Cell phone number: 905-973-7264. Email: ullals2@mcmaster.ca
  - o Professor Judith Shedden: Cell phone number: 905-902-4096. Home number: 905-627-2496. Office number: 905-525-9140 x24345. Email: <a href="mailto:shedden@mcmaster.ca">shedden@mcmaster.ca</a>.
  - o Professor Joe Kim: Email: kimjoe@mcmaster.ca

# **CCNBB Schedule**

## Friday May 9th

#### **Anytime Arrival of contestants**

• Check in at Housing & Conference Service Centre in the Commons Building which is open 24 hours (building 28 on map on last page). They will direct you to your room in Les Prince Hall (building 53 on map on last page).

#### 5:00-6:30pm Dinner buffet

Commons Marketplace, Commons Building

## 7:00pm Psychology Building

- Meet organizers and other contestants in the building lobby
- Orientation and introductions, Lecture Hall 155 (just off the lobby)
- Lab Tours in the Psychology Building
- Lecture and electronic clicker demonstration and practice, Lecture Hall 155

# Saturday Morning May 10th

#### 7:30-8:30am Breakfast buffet

- Commons Marketplace, Commons Building
- Please try to finish breakfast as early as possible so that you will have time to walk across campus to the Psychology Building by 8:45am.
- Allow about 10 to 15 minutes to walk from Les Prince Hall to the Psychology Building

#### 8:45am Competition Starts

Meet in the lobby of the Psychology Building

#### 9:00am Patient Diagnosis

- Clinical Learning Centre, Health Sciences Centre HSC/1M1
- We will walk over to the clinic as a group from Psychology to the HSC
- There will be six or seven actors who are professionally trained to portray neurological disorders. Each patient will be waiting in their own room in the clinic. Students will be required to diagnose the neurological disorders by asking the patients questions. Students will have about 5 minutes with each patient to ask questions. The questions must be of the type that can be answered by "yes", "no", or "I don't know". The patients will not be allowed to provide any other answers than these. At the end of the 5 minutes, the student will record the diagnosis for that patient, and move on to the next room to interview the next patient.
  - There will be 12 possible disorders to choose from: bipolar disorder, epilepsy, Parkinson's disease, addiction, Alzheimer's disease, Huntington's disease, schizophrenia, stroke, Tourette Syndrome, neurological AIDS, chronic pain, and autism.
  - To study for this part of the competition, you can access information about these disorders from the Medical Encyclopedia of Medline Plus which can be found at the National Library of Medicine website: <a href="www.nlm.nih.gov">www.nlm.nih.gov</a>.

#### 10:30am Neuroanatomy Bell-ringer

- Education Program in Anatomy, Health Sciences Centre HSC/1R1
- This location is right across the hall from the Clinical Learning Centre; we will walk over as a group from HSC/1M1 to HSC/1R1.
- The neuroanatomy bell-ringer competition consists of approximately 20 or 25 stations where brains, brain slices, or pictures of brains will be presented. The brains will have pins stuck in a particular part of the gross anatomy, and there will be questions posted at each station that ask for the name of the structure, or the function of that structure indicated by the pin. Students will have approximately 2 minutes at each station to write down their answers. When time is up, a bell will ring, and each student will move to the next station.
  - To prepare for this part, study a human brain atlas and a textbook covering basic gross neuroanatomy.

#### 11:30am Pizza lunch

- Psychology Building Piano Lounge, 2<sup>nd</sup> floor, Room 205A/B.
- Pizza and beverages will be served for brain bee competitors and all the brain bee quests.

# Saturday Afternoon May 10<sup>th</sup>

- All events on Saturday afternoon will be held in the Psychology Building lobby, and in Lecture Hall 155 (just off the lobby).
- It is a little hard to predict exactly how long things will take in the afternoon, so the following times are guidelines, and may shift somewhat over the course of the afternoon.

#### 1:00pm Introductions

- Video presentation of mornings patient diagnosis and neuroanatomy bell-ringer events
- Formal introduction of contestants
  - Psychology, Neuroscience & Behaviour representatives, Judith Shedden and Joe Kim
- Introductory messages and welcome
  - o McMaster University, Dean John Capone, Faculty of Science
  - o CIHR representative, Astrid Eberhart

## 1:30pm MC Test Questions – Session One

- Multiple-choice (MC) questions, answers selected using electronic clickers
- All competitors will answer the same MC questions
- Each contestant will have an electronic "clicker" that is registered to their own name. The clickers have buttons that allow selection of MC alternatives.
- Audience members will also have electronic clickers (so that they can participate in a fun, unevaluated competition)
  - Multiple-choice questions will be presented on the display screen. Contestants will have a limited time to select their preferred answer using the electronic clickers. During this period, the question and the alternatives will be read aloud.
  - When the time to respond has expired, the correct answer will be provided.
  - o A summary of competitor responses and audience responses will be displayed.
- All questions will come from "Neuroscience: Science of the Brain", published by the European Dana Alliance for the Brain. It can be purchased from the website of the British Neuroscience Society: <a href="http://www.bna.org.uk/publications">http://www.bna.org.uk/publications</a>. It is also available for no cost in PDF format in 16 different languages from the IBRO web site at <a href="http://www.ibro.org">http://www.ibro.org</a>. From that site, go to "Brain Campaign" where you will find links to all the language versions of the book. You can also try this link to access the Brain Campaign page: <a href="http://www.braincampaign.org/Pub/Pub\_Front.asp">http://www.braincampaign.org/Pub/Pub\_Front.asp</a>?
- At the Brain Campaign site, the book has to be downloaded chapter by chapter. For your convenience, we have made the English version available as one large PDF document (with all the chapters in one document). English version:
   <a href="http://brain.mcmaster.ca/BrainBee/Neuroscience.Science.of.the.Brain.pdf">http://brain.mcmaster.ca/BrainBee/Neuroscience.Science.of.the.Brain.pdf</a> (5 Mb)

   http://brain.mcmaster.ca/BrainBee/about.the.book.pdf
   (900k)

## 2:15pm Cookie Break

Cookies and refreshments in the lobby

## 2:30pm MC Test Questions – Session Two

This part will be the same format as described in Session One above.

### 3:15pm Cookie Break

- Cookies and refreshments in the lobby
- Judges will tally points from all parts of the competition

## 3:30pm Final Oral Elimination Rounds

- The top 5 competitors from the previous parts of the competition will advance to the Final Oral Elimination Rounds
  - Five chairs will be placed at the front of the room. The names of the 5 students who
    have won the most points will be announced. Those students will each take a chair at
    the front of the room as their name is called.
  - Oral questions and oral answers; a different question for each competitor
  - o All questions will come from "Neuroscience: Science of the Brain" (described above).
- On each round, each student will stand and go to the microphone to receive their question.
  The question will be read twice. The clock will then start and the student will have 15
  seconds to answer. When an incorrect answer is given, the correct answer will be read out.
  If the correctness of an answer is ambiguous, the judges will be called on to make the
  decision.
- If the 3<sup>rd</sup> and 4<sup>th</sup> place students are eliminated in the same round, they will participate in a round-off to determine 3<sup>rd</sup> place.
  - During a round-off, two students field questions. If both students answer correctly or incorrectly, another set of questions is asked. The rounds continue until one correct and one incorrect answer is provided.
  - The student with the correct answer wins the round off.
- When there are 2 students left, a round-off will determine 2<sup>nd</sup> and 1<sup>st</sup> place winners.
  - o The final round-off follows the same format as above.
- The CIHR Canadian National Brain Bee winner will be the last one standing!

#### 4:00 or 4:30pm Awards Ceremony

- Prizes and trophies will be awarded
- Congratulations from PNB, McMaster, and CIHR representatives
- Group photos will be taken in Room 155 and in the Lobby.

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We gratefully acknowledge the following groups for their donation of prizes and other financial support.

We are supported nationally by CIHR-IRSC: <a href="http://www.cihr-irsc.gc.ca/">http://www.cihr-irsc.gc.ca/</a>

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/

McMaster Institute for Neuroscience Discovery and Study (MiNDS): http://neuroscience.mcmaster.ca/MiNDS%20Homepage.html

Clinical Learning Centre, McMaster University: <a href="http://fhs.mcmaster.ca/clc/">http://fhs.mcmaster.ca/clc/</a>

Educational Program in Anatomy, McMaster University: <a href="http://fhs.mcmaster.ca/anatomy/index.html">http://fhs.mcmaster.ca/anatomy/index.html</a>

Telecom Computer: http://www.telecomcomputer.com/

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

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

