Our Canadian Brain Research Strategy (CBRS) is an initiative that has emerged in the last 5 years. The objective is to gather researchers and together identify priorities and ways on how we can move forward. Canada, we have a real strength in neuroscience. We have a stand on the international scene. We have distinguished ourselves in various cross-cutting themes (e.g., neuroimaging, neuroethics, and neurostimulation).

Mission
To build on Canada’s strengths and current investments in neuroscience to transform neurological and mental health for Canadians.

Vision
Innovative and collaborative brain science driving policy, social, health and economic advancement for Canada and the world.

Enabling Principles
Collaborative. Transdisciplinary. Open.

Pillars of the Strategy
Going from Understanding (how the brain works), to Addressing (health understandings through prevention and treatment), to Applying (brain research to improve individual brain health, education, and societal and cultural well-being), and to Building (better artificial intelligences via brain-inspired computational approaches).

Central Organizing Question
How does the brain learn, remember, and adapt?

Neuroethics is at the heart of CBRS. We want Neuroethics to be the underlying backbone for our initiative.

On the CBRS website, there is a publication page where readers can find articles that discuss the orientation of CBRS in language that is easily understandable by the general public.

Major Initiatives
- National Transdisciplinary Training Platform
- Distributed Technology Development & Dissemination Platforms
- International Neuroscience Open Date Platform

The overall objective is to not drive funding into CBRS and redistribute it. There are large investments/major neuroscience networks in Canada already, and we need to recognize and capitalize on these projects and continue building as an initiative.
Organizational structure and staff, Executive/International Advisory Board

The CBRS has received funding from CIHR to structure the initiative. We will be hiring a Secretariat to help build the CBRS agenda. There is also a Steering Committee and a number of collectives (e.g., Funders Collective, Research Leaders Group, Stakeholders Collective, Early Career Researchers [ECRs] Collective).

The CBRS mission: Raising Awareness, Raising Issues, Raising Engagement.

Our short-term agenda:
- Engaging ECRs
- Engaging stakeholders (e.g., patients, patient organizations, and communities)
- Continue shaping the vision and priorities – These will be discussed at the upcoming CBRS retreat
- Engaging decision makers and funders to build a board-based consensus

CBRS Retreat

A retreat will be held and a wide invitation will be sent to the Neuroscience community. ECRs present at the workshop are encouraged to share this information to attract a maximum number of participants.

Next steps

ECRs are asked to spread the word and engage the discussion among their peers. We need to continue this discussion at all levels.

CJNS Editorial

If anyone interested in an editorial in Canadian Journal of Neurological Sciences (CJNS) that highlights our ECRs and the CBRS, please let Drs. Judy Illes or Caroline Menard know.
Summary of suggested action items for the CBRS Early Career Researchers Task Force

On Collaborations
- Capitalize on and promote the friendly/collaborative nature of the Canadian neuroscience community
- Build a platform/map of different experts and have this resource easily accessible
- Identify and reward social/ethical/mentoring contributions of scientists, to motivate people to work better together
- Increase awareness and advocacy regarding the successes of interdisciplinary research
- Explore Principle Investigators’ (PIs) experiences and perspectives on research culture
- Build more of interdisciplinary programs and virtual (remote-work) collaborations within Canada
- Help break the barriers between clinical and fundamental research
- Help improve national coordination of population-level data
- Seek initiatives to reduce academic capitalism and competitiveness
- Help make Canada a hub of projects involving researchers outside Canada
- Brainstorm on how we can represent ourselves to the international community

On Networking Opportunities
- Create networking opportunities to work and build relationships with experts that want to use or apply ECRs’ ideas and work together
- Provide an accessible platform where ECRs can host more open discussion of ideas
  - For the upcoming CBRS Retreat, a networking opportunity (e.g., coffee-breakout sessions) for ECRs and Research Leaders is being considered

On Trainee Retention and Recruitment
- Actively highlight young labs in Canada
- Include a division for training opportunities across ECR labs at the CBRS website
- Create a database/inventory of investigators who are willing to train trainees on specific topics, experimental and data analysis expertise
- Foster a formal mentorship program between ECRs and Senior PIs within and/or across different institutions
- Build opportunities for trainees that offer a more enriching experience (e.g., lab exchanges, multi-institute bootcamp)
- Create more fellowship opportunities, graduate/undergraduate scholarships for foreign trainees that are already in Canada to encourage diversity
- Establish dedicated resources to recruit international post-doc fellows
- Gather and compare international trainee retention/recruitment strategies from other international/local funding agencies
- Advertise schools and positions more aggressively
- Leverage the expertise of Canadian Institute for Advanced Research to help guide the CBRS on trainee management

On the Structuring of Neuroscience Programs
- Help lobby for a possible joint curriculum across universities
- Provide guiding documents that can help PIs convince departments that are hesitant to update their programs
- Create a mixed artificial intelligence/neuroscience program

On Funding Structure
• Lobby to encourage that team grants should include less established ECRs in the application
• Help increase the percent of grants funded for ECRs across all funding agencies
• Lobby for more funding mechanisms that are project-based than CV-based
• Assist in promoting and creating more opportunities for funding projects that cross from basic to clinical research
• Help extend the length of funding period for grants students secure from funding agencies
• Continue to lobby for increased trainee stipends
• Continue lobbying with the government to increase CIHR funding

On Innovation and the Private Sector
• Have Canadian neuroscience innovations shift into the commercial sphere by helping create opportunities where researchers can build their own companies
• If we can decrease the gap between the government, the academia and the private sector, we can maybe start to change the mindset in Canada

On Science Communication
• Work with a professional media consultant to enhance public awareness of the value of neuroscience
• Provide a Knowledge Translation Specialist to assist researchers in creating press releases and in communicating about science to the public
• Host an ECR training about knowledge translation
• Work on building and communicating CBRS’ unique identity
• Decide on a Canadian branding to carry the ideas/suggestions from ECRs
Suggested action items for Early Career Researchers

- Submit two-liner testimonials/positive messages centred around the questions below to Dr. Caroline Menard:
  - Why is the CBRS important?
  - How do ECRs envision the CBRS?
  - How do we distinguish ourselves as Canadians?
  - What is the potential of the CBRS?
  - Why are foreign ECRs choosing to do research in Canada?
- Contact Dr. Caroline Menard if attendees are interested in writing an editorial in the Canadian Journal of Neurological Sciences
- Attendees are encouraged to consider joining the ECR Task Force that will be created once the CBRS Secretariat is established
- Help disseminate details about the upcoming Retreat
- Spread the word among peers; continue the discussion at all levels
### List of Meeting Participants

#### Program Leaders

- Dr. Yves de Koninck, Laval University
- Dr. Judy Illes, University of British Columbia
- Dr. Caroline Menard, Laval University

#### Early Career Researchers

**August 27, 2020**

- Dr. Rose Bagot, McGill University
- Dr. Corey Baron, Western University
- Dr. Mark Cembroski, University of British Columbia
- Dr. Annie Ciernia, University of British Columbia
- Dr. Tamara Franklin, Dalhousie University
- Dr. Erez Freud, York University
- Dr. Wei-Hsiang Huang, McGill University
- Dr. Yun Li, SickKids
- Dr. Julien Muffat, SickKids
- Dr. Wiltten Nicola, University of Calgary
- Dr. Rosanna Olsen, Baycrest
- Dr. Aaron Phillips, University of Calgary
- Dr. Julie Robillard, University of British Columbia
- Dr. Eugenie Roudaia, Baycrest
- Dr. Ravi Rungta, University of Montreal
- Dr. Scott Ryan, University of Guelph
- Dr. Tabrez Siddiqui, University of Manitoba
- Dr. Greg Silasi, University of Ottawa
- Dr. Aparna Suvrathan, McGill University
- Dr. Gabriel Xiao, McMaster University

**September 22, 2020**

- Dr. Mark Brandon, McGill University
- Dr. Blake Butler, Western University
- Dr. Craig Chapman, University of Alberta
- Dr. Katrina Y. Choe, McMaster University
- Dr. Jonathon Ditlev, SickKids
- Dr. Jodi Edwards, University of Ottawa
- Dr. Chelsea Ekstrand, University of Lethbridge
- Dr. Jessica Esseltine, Memorial University
- Dr. Nader Ghasemlou, Queen's University
- Dr. Bjorn Hermann, Baycrest
- Dr. Yasser Iturria-Medina, McGill University
- Dr. Arkady Khoutorsky, McGill University
- Dr. Anand Krishnan, University of Saskatchewan
- Dr. Baptiste Lacoste, University of Ottawa
- Dr. Robert Laprairie, University of Saskatchewan
- Dr. Julie Lefèvre, SickKids
- Dr. Ben Lindsey, University of Manitoba
- Dr. Yalda Mohsenzadeh, Western University
- Dr. Matthew Parsons, Memorial University
- Dr. Kaspar Podgorski, SickKids
- Dr. Masha Prager-Khoutorsky, McGill University
- Dr. Blake Richards, McGill University
- Dr. Derya Sargin, University of Calgary
- Dr. Taylor Schmitz, Western University
- Dr. Jill Stobart, University of Manitoba
- Dr. Sébastien Talbot, University of Montreal
- Dr. Jeffrey Wammes, Queen's University
- Dr. Galen Wright, University of Manitoba