BIC
1985-2015

LE CENTRE D'IMAGERIE CÉRÉBRALE
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BRAIN IMAGING CENTRE

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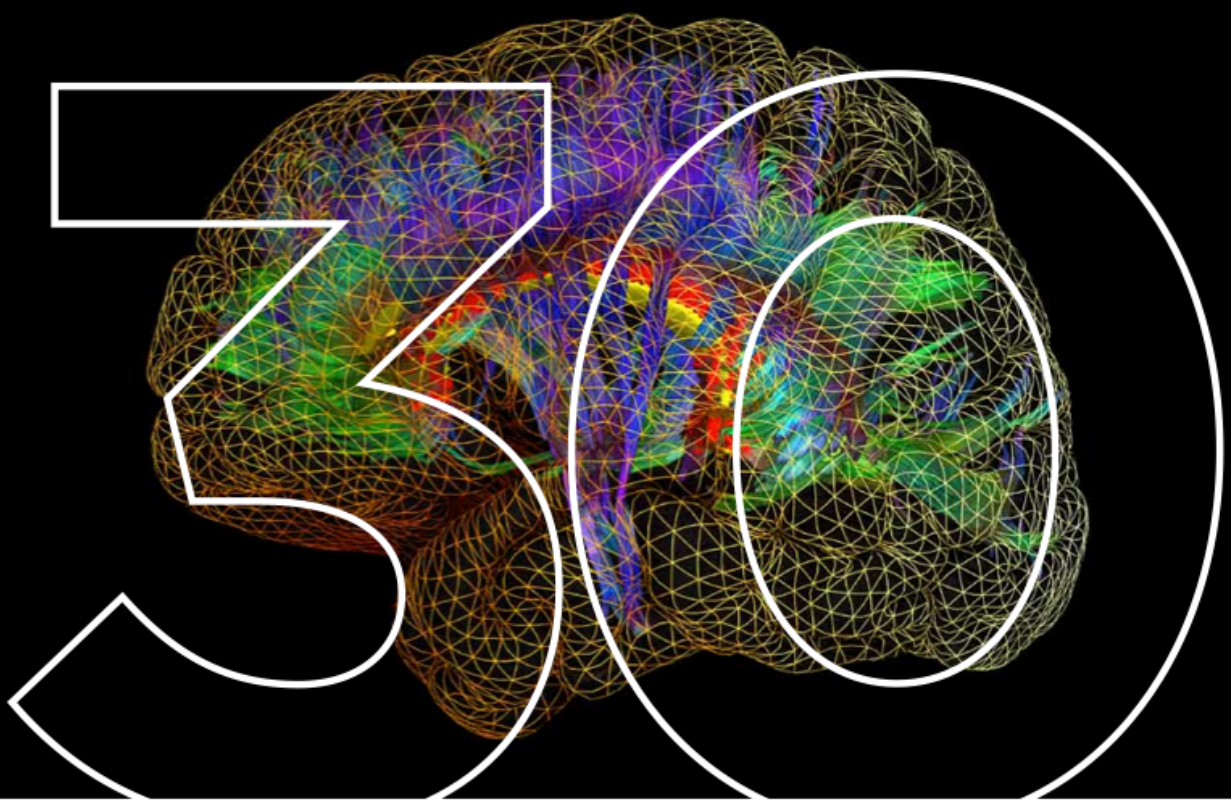

ANNÉES DE CERVEAU EN IMAGES / YEARS OF NEUROIMAGING

MERCREDI 11 FÉVRIER 09H30 – 18H
Institut et hôpital neurologiques de Montréal, Université McGill

WEDNESDAY, FEBRUARY 11 9:30 AM – 6 PM
Montreal Neurological Institute and Hospital, McGill University

Free registration required:

Visit http://mcgill.ca/bic

neuro 80
Institut et hôpital neurologiques de Montréal
Montreal Neurological Institute and Hospital

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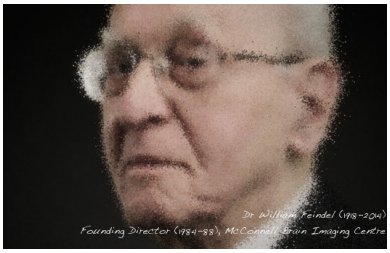
The McConnell Brain Imaging Centre is everything about neuroimaging

The McConnell BIC is the world largest research centre entirely dedicated to neuroimaging, all integrated to a flagship institute for neuroscience research and a neurological/neurosurgical hospital: the Montreal Neurological Institute at McGill University, a top research-intensive university.

A productive research centre - The neuroimaging research performed in the BIC's core laboratories covers all aspects of neuroimaging: from instrumentation to acquisition to analysis methods and practical software solutions. Our researchers and trainees have published more than 1,000 journal articles and have raised several $100'sM in research grants so far. The BIC continues a long tradition of innovation in cutting-edge instrumentation: the first nuclear-imaging scanner, the first CT scanner, the first MRI scanner in Canada, were all premiered at the BIC.

A large service platform - We provide neuroimaging services to one of the largest community basic and clinical scientists interested in brain, neurology, neuropsychiatry and neurosurgery (about 120 principal investigators over the past 5 years). Our scanners generate >3,500 image volumes every year with high-field MRI (1.5T, 3T and small-bore 7T), high-resolution PET and micro-PET, and real-time MEG/EEG. Our radiochemistry lab and cyclotron can produce the longest catalogue of tracers for nuclear imaging in Canada. The BIC's computing backbone offers considerable data storage capacity and distributed grid-computing solutions to all BIC users. Our research production is shared with >20,000 international registered users through software and reference datasets. Finally, current and previous BIC members created multiple successful spin-off biomedical companies over the past 30 years.



A landmark event - This year marks the 30th anniversary of this unique research platform in Canada. The BIC was named after the McConnell Family Foundation in 1984, at the initiative of our founding Director, Dr. William Feindel, who passed away in January 2014. We will celebrate his vision and the past and next 30 years of neuroimaging research at McGill. On behalf of the BIC's 150 faculty, core staff and trainees, we are happy to invite you to participate and to contribute to this major event: we have prepared an outstanding program, featuring major international speakers and program leaders in Canada, Europe and the USA.

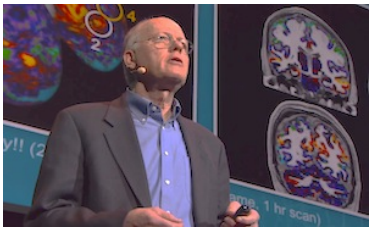
We are certain your participation and contribution will make this event a day to remember.

Free registration required:

Visit http://mcgill.ca/bic

McConnell Brain Imaging Centre 30th anniversary – Highlights

Keynote speakers



David Van Essen, Ph.D. – Washington University (St Louis, USA)
Principal Investigator, Human Connectome Project

Dr. Van Essen is the Edison Professor of Neurobiology and Department Head of Anatomy and Neurobiology at Washington University. He is a Principal Investigator (PI) for the Human Connectome Project, which primary objective is to map anatomical and functional connectivity in the brain of a large number of normal adults. The data collected is made freely available to the scientific community using a powerful, user-friendly informatics platform. Dr. Van Essen is responsible for overall management of the consortium's efforts as a whole. He has more than two decades involvement in mapping structure and function of the primate cerebral cortex.

While his background is in anatomical and physiological studies on nonhuman primates, his research over the past decade has focused increasingly on: development of brain-mapping software; development of neuroinformatics tools and promulgation of their use through outreach efforts; studies of human brain structure in health, disease, and development; development and promulgation of surface-based atlases that facilitate comparisons across individuals and across data types; tractography, functional connectivity, and cross-modal comparisons.

Henry Markram, Ph.D. – Ecole Polytechnique Fédérale de Lausanne (Switzerland)
Director, The Blue Brain Project, and Coordinator, The Human Brain Project

Henry Markram is the director of the Blue Brain Project and coordinator of the Human Brain Project at the Swiss Federal Institute for Technology in Lausanne (EPFL), where he is a professor of neuroscience. He is a founder of the Brain Mind Institute at EPFL. The Human Brain Project aims to construct a computerized simulation of the brain. The HBP was selected in January 2013 as one of the European Commission's Future Emerging Technologies Flagship projects, with a grant of more than 1 billion euros over the next 10 years. The initiative involves researchers in 80 institutions across Europe - from biologists, neurobiologists and biochemists to computer scientists and engineers. Markram believes the HBP may lead not only to a paradigm shift in our understanding of the brain and its illnesses but also to innovative concepts for designing computers and robots. Markram also aims for the Human Brain Project to spur a new approach to mental health globally.

Robert J Zatorre, Ph.D. – Montreal Neurological Institute, McGill University

Robert Zatorre is a cognitive neuroscientist at the Montreal Neurological Institute of McGill University. His research explores the functional and structural organization of the human brain, with special emphasis on two complex and characteristically human abilities: speech and music. He and his collaborators have published over 200 scientific papers on topics including structure and function of the human auditory cortex, pitch perception, auditory spatial processing, musical imagery, music and emotion, and brain plasticity in the blind and deaf. He has held a James-McGill chair in Neuroscience since 2005. In 2006 he became the founding co-director of the international laboratory for Brain, Music, and Sound research (BRAMS). In 2011 he was awarded the IPSEN foundation prize in neuronal plasticity and in 2013, he won the Knowles prize in hearing research. He plays the organ when time permits.

McConnell Brain Imaging Centre 30th anniversary – Program

08:30 – 09:00	**Doors open & Breakfast**
09:00 – 09:30	**Welcome addresses** **Principal Suzanne Fortier**, McGill University **Dean David Eidelman**, McGill Faculty of Medicine **Dr. Guy Rouleau**, Director, Montreal Neurological Institute **Dr. Sylvain Baillet**, Acting Director, McConnell Brain Imaging Centre
09:30 – 10:00	**A tribute to Dr. William Feindel, founding Director of the McConnell BIC** **Dr. Rolando F. Del Maestro**, McGill University **Dr. Mark Pruel**, Barrow Neurological Institute, Phoenix AZ, USA **Everything neuroimaging in Montreal: 30 years of brain imaging at the MNI and McGill** **Dr. Richard Leblanc**, McGill University
10:00 – 11:00	**The Directors hour: McConnell BIC Directors look into the past, into the future** **Dr. Anthony Hakim** (U Ottawa; 1986-90) **Dr. Albert Gjedde** (U Copenhagen, Denmark; 1990-94) **Dr. Alan C. Evans** (McGill; 1994-99) **Dr. G. Bruce Pike** (U Calgary; 1999-2013) **Dr. Sylvain Baillet** (interim, 2013-present, McGill)
11:00 – 11:30	**Coffee break & Posters**
11:30 – 12:30	[Keynote] Imaging in action **Music Perception and Pleasure: interactions between neocortical and striatal systems** **Dr. Robert Zatorre** (MNI, McGill) Introduced by **Eva Chadnova** (graduate student, Baillet & Hess Labs)
12:30 – 13:30	**Lunch, Posters**
13:30 – 14:30	[Keynote] Imaging in action **Deconstructing the brain in vivo: the Human Connectome Project** **Dr. David Van Essen** Washington U; Principal investigator, Human Connectome Project Introduced by **Jennifer Goldman** (post-doc fellow, Evans Lab)
14:30 – 15:30	**Highlights of BIC Research: speed-dating with BIC Principal Investigators** Arnold, Baillet, Bedell, Bernasconi A., Bernasconi N., Collins, Dagher, Ducharme, Evans, Hoge, Kostikov, Massarweh, Narayanan, Reader, Shmuel, Soucy, Thompson
15:30 – 16:00	**Coffee break & Posters**
16:00 – 17:00	[Keynote] **Building a brain in silico: the Human Brain Project** **Dr. Henry Markram** Director, European Union's Human Brain Project Ecole Polytechnique Fédérale de Lausanne (Switzerland) Introduced by **Dr. Rose Goldstein** (Vice-Principal Research & International Relations) **Ian Gerard** (graduate student, Collins Lab)
17:00 – 18:00	[Panel discussion] Moderated by **Dr. Rémi Quirion** (Chief Scientist, Quebec Research Funds) **Beyond pretty pictures: the next 30 years of neuroimaging** All Keynote Speakers with BIC Directors
18:30 – +++++	[Dinner & Party] **After pretty pictures: let's celebrate!** (McGill Faculty Club)

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