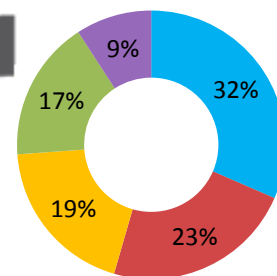




THE MONTREAL NEUROLOGICAL INSTITUTE AND HOSPITAL FACULTY AND STAFF CAMPAIGN

PUTTING OUR HEADS TOGETHER REPORT 2010 - 2011

neur



■ Research ■ Clinical Care ■ Directed Priorities ■ Capital Campaign ■ Greatest Needs

Last year's Annual Faculty and Staff Campaign Co-Chairs Dr. Alyson Fournier and Dr. François Dubeau would like to thank all of the volunteers and donors for your participation in the campaign. Thanks to our combined efforts, we were able to raise **\$109,932** for The Neuro. Another successful year!

HERE IS HOW YOU HAVE CHOSEN TO SUPPORT OUR NEURO:

Greatest Needs: Helping The Neuro meet its most pressing needs and pursue the most promising opportunities

Clinical Care: Improving the quality of patient care

Capital Campaign: Contributions to our \$40 million "Thinking Ahead Campaign" are helping us to realize goals such as building and equipping the new North Wing Pavilion and funding our new Animal Care Facility

Advancing Research: Encouraging advances in neuroscience research

Directed Priorities: Supporting programs such as Nursing Education and our Wayfinding initiative

THE MANY WAYS THAT YOUR GIFTS HELP OUR PATIENTS

Your support of our Clinical Care programs has allowed us to make great strides in furthering the personalized care that we offer our patients. Your gifts, combined with the community's support through our Annual Fund, have truly made a difference in our patients' lives. Thank you for:

- Allowing us to make important renovations to our Intensive Care Unit (ICU), improving the quality of care we can provide to our most critically ill patients. The new design has revitalized and reorganized the space to create a quieter, more efficient environment for staff and patients. The ICU now has a new central workstation designed to reduce noise levels and ameliorate patient monitoring and confidentiality. And, to better serve our patients, the space beside beds is now large enough to accommodate state-of-the-art computerized medical equipment.
- Purchasing key medical equipment such as the Hemedex Cerebral Blood Flow Monitoring System. This system is indispensable for monitoring changes in pressure in the brain and is vital for the rapid diagnosis of meningitis and other neurological conditions.

Thank you for all that you do for The Neuro each and every day and for your support of our Faculty and Staff Campaign year after year. Our combined dedication and commitment make this a unique and extraordinary institution. The Neuro continues to lead the world in understanding how the brain works and in developing and delivering treatments and cures for neurological disease. Thank you for making this all possible.

For further information regarding this report please contact Josée Della Rocca at 514 398-1851

www.theneuro.com

TOP

RESEARCH
SCIENCE
JOURNALS

Throughout the year, we invite members of the community to visit The Neuro to meet our researchers and learn about their exciting work to unlock the

mysteries of the brain. While each of you is hard at work on your own important projects, not everyone is aware of the fascinating initiatives underway throughout The Neuro. It is our pleasure to take this opportunity to present five exciting discoveries made this year at The Neuro that are making headlines across the globe:

DON'T FORGET!

The Neuro's 2011 – 2012 Faculty and Staff Campaign begins October 19 and wraps up on November 11. Be sure to make your donation before November 4 in order to have your name entered in a draw to win one of our fantastic prizes!

Thank you to AstraZeneca Canada and Merck Frosst Canada for their generous corporate matching contributions to our campaign!



Musical thrills give you chills! Dr. Robert Zatorre and colleagues have found that the pleasurable experience of listening to music releases dopamine, a neurotransmitter in the brain important for more tangible pleasures associated with rewards such as food, drugs and sex. The results of this new study, published in the journal *Nature Neuroscience*, suggest why music, which has no obvious survival value, is so significant across human society.



A new study by Dr. Ted Fon and colleagues is the first to discover a molecular link between Parkinson's disease and defects in the ability of nerve cells to communicate. These findings provide new insight into the mechanisms underlying Parkinson's disease, and could lead to innovative new therapeutic strategies.



Scientists in the Colman Lab and colleagues have made a remarkable discovery of how tumour cells invade normal tissue, which should lead to vital diagnostic tools and will help in the development of strategies to stop the spread of cancer cells. The study reveals that the surface of aggressive tumour cells lack the strong molecular 'glue' responsible for binding normal cells together, allowing tumour cells to break away, detach from their neighbours, and spread to other regions of the body.



Dr. Ed Ruthazer is a mapmaker but his landscape is the developing brain - specifically the neuronal circuitry, which is the network of connections between nerve cells. His innovative research at The Neuro – consistently published in the most prestigious journals and recently submitted to *Québec Science* as one of the top discoveries of the year – reveals the brain as a dynamic landscape where connections between nerves are plastic, changing and adapting to the demands of the environment. His laboratory uses the most advanced microscopy systems to chart the changes that take place in brain circuitry during neural development. The hope is to use this work to advance treatments for injuries to the central nervous system and for developmental disorders such as autism and schizophrenia.



Nearly one-third of epilepsy patients suffer from seizures that do not respond to drug treatments, making surgery the only effective treatment for these individuals. Dr. Andrea Bernasconi and colleagues are using new advances in brain imaging to help reveal hard-to-detect brain lesions, which facilitates surgery and drastically improves patient outcomes.

Congratulations to each of you on all of your successes and thank you for your important support!