



THE BRAIN IS THE PERSON





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The brain is to the body what the conductor is to his orchestra. It is what controls every part of the organism. If it stops working, even partially, the whole of the individual is affected neurologically and physically.

Anyone may some day suffer from a traumatic brain injury or a concussion and have to bear with the after-effects:

- whether the person is the driver or the passenger of a vehicle
- whether the person is an amateur or a professional sportsman or sportswoman
- whether the person falls down the stairs or onto the sidewalk
- whether the person is a child that has been shaken severely
- the list could go on ...

... and this person may even be you or one of your loved ones !

WHAT IS A TRAUMATIC BRAIN INJURY?

A traumatic brain injury is the destruction or dysfunction of the cerebral parenchyma (tissue) due to a penetrating object or a violent blow to the head causing a sudden contact between the brain and the skull.

Only some of the damage may be caused on impact, more may occur in minutes, hours or days following a simple concussion or serious trauma.

A traumatic brain injury may give rise to after-effects such as aphasia, serious memory problems, psychomotor troubles, alteration to senses and paralysis, just to name a few.

"A Craniocerebral trauma is the term used when a patient experiences "minor confusion to a deep coma".

Because many of these accidents occur to young people, traumatic brain injury is the first cause of death and the main cause of the loss of productive years of life."

Dr Judith Marcoux — Neurosurgeon at the Montreal General Hospital – McGill University Health Centre.

USEFUL LINKS

- www.saaq.gouv.qc.ca/publications/victime/trauma_cranio_fr.pdf (French only)
- www.fecst.gouv.qc.ca/en/liens/index.php

THE MARIE-ROBERT NEUROTRAUMA FOUNDATION

Established in 1993, the Marie-Robert Foundation for Head Trauma Research, now known as the Marie-Robert NeuroTrauma Foundation, aims to contribute to the development of knowledge on head trauma.

And with the financial support of very promising projects, treatments may be discovered; which will lead to the end of the series of destructive biochemical reactions which can be caused by a blow to the head.

The Foundation thus wishes to improve the quality of life for survivors and to develop new techniques of early evaluation and therapeutic action in order to ensure better reinsertion into society.

The Foundation is concentrating its efforts on advancing knowledge about the first 15 days following trauma, as it is during this time that the future of the injured person is determined.

THE ADVANCEMENT OF KNOWLEDGE, A PRIORITY !

"However severe the head trauma is, the mechanism of deterioration is the same. It is an evolutionary process. The worst part does not necessarily occur at the moment of impact, but during the days following it. That is why this mechanism needs to be better understood and treated."

*Dr Léo Cantin – Neurosurgeon
CHA – Hôpital Enfant-Jésus and Past President of
the Association des neurochirurgiens du Québec.*

"But in practice we, in the Tertiary Trauma Centres, are not equipped to pursue this type of research. We must therefore first bring our knowledge up to date, and make feasibility studies and experiments through bringing to Quebec the best treatments and technology in use in the world."

*Dr Jean-François Giguère – Neurosurgeon
Hôpital du Sacré-Cœur de Montréal.*

Since 1993, we have acquired almost 90 % of our current knowledge about the brain and enormous progress has been made. However, large areas remain unexplored regarding the treatment to be given in the period immediately following the blow to the head.

Although recent discoveries enable a better understanding of the metabolic and immunological processes of the brain, there remains a long road to travel before its workings can be fully understood or known.



OBJECTIVES OF THE MARIE-ROBERT NEUROTRAUMA FOUNDATION

- To advance knowledge about the first 15 days following a trauma, as it is during this time that the future of the injured person is determined
- Develop new techniques of early evaluation and therapeutic surgery
- Thereby increase the chances of survival
- Improve the quality of life

EVERY YEAR IN QUEBEC:

Approximately 5,000 people are hospitalized following a head trauma.

Of these, almost 200 do not survive and about 100 remain in a vegetative state.

More than 400 persons are permanently affected by the after-effects of their accident, profoundly altering their own lives as well as those of their family.

About 30 people will require public support for the rest of their lives at an average cost of **1 MILLION \$ EACH.**

AN UNEXPECTED TURN IN LIFE

A HUSBAND'S TESTIMONY

February 1st, 2009 - The shock that is felt when a loved one suffers a head trauma makes us feel very weak, even when we wish at all costs to remain strong and confident. We are overcome by a profound feeling of pain and helplessness when the health of someone dear to us is in a precarious state. Yet we have to keep hoping; this is essential for giving support to children and everybody else affected, and we must avoid giving up and sinking into despair.

If, as in the case of my wife Lorraine, an excellent lawyer and a devoted mother, the victim is in a coma, then you are completely helpless and forced to rely on others who are strong, confident and full of energy.

Today, Lorraine is still in a wheelchair, she speaks with difficulty and her right arm is paralysed, but the essential thing is that Lorraine is still alive, that her children aged 6 and 11 can enjoy the presence of their mother, and that she is fully aware. She is receiving various therapies and exercises in an ongoing search to improve her motor skills with the help of an attendant or of a devoted relative.

THE ACCIDENT

February 26th, 2006, on a fine sunny Sunday, we went skiing with a couple of friends and their two children. On the way home, I slowed considerably when approaching a bend which was covered in snow and "black ice". I made two attempts to keep the car on track but could not avoid hitting an SUV approaching fast from the opposite direction. There was a terrible crash and my car was a total loss. When I

regained consciousness, I saw that Lorraine was unconscious and that her head was bent over. Our 8-year-old son William was already outside the car trying to open my door. I turned to 4 year-old François who was still asleep in his seat. My friend Robert tried to reassure me by saying: "Louis, I'll look after the children".

The SQ recommended that Robert should take the children, who were apparently unhurt, to the hospital at St-Jérôme, while Lorraine and I were on our way to Lachute. Lorraine was hovering between life and death: her pulse was very weak. They stabilized her condition on the spot and told me they had to take her to the Hôpital du Sacré-Cœur de Montréal, but that there was no room for me in the ambulance. At that time I didn't know I had a ruptured spleen.

At last, I found myself in the next room to where Lorraine was. As soon as I was able to get up I went in a wheelchair to see her. She was in a deep coma, intubated and connected to several machines that were keeping her alive and measuring her vital signs. That was both reassuring and frightening at the same time. When I left her, on the fifth day, she had still not woken up. I visited her each day during the two months she remained in a coma.

After Lorraine had been in a coma for about a month, the head nurse told me that the neurosurgeon wanted to speak to us. His announcement was brutal and devastating: "You can forget the Lorraine you knew. If she comes off the respirator and wakes up, she will probably be in a vegetative condition." We were completely devastated. The same day, I decided to trust my instincts: We will get Lorraine back !

Then, less than three weeks after the meeting with the doctor, when I was leaving after spending the day with Lorraine and was saying goodbye to her, she opened her left eye wide, raised her left arm and put her hand on my cheek, while giving me a broad smile: I was overcome with joy ! I wanted everyone to be there, but there were just the two of us ! This was a moment just for us. Then I left only after she had closed her eyes to rest. Lorraine relapsed into a deep sleep which lasted almost 10 days. I was the only one who believed Lorraine had woken up during those few brief minutes.

THE AWAKENING

On Sunday April 23rd, 2006, when I had no energy left, she gave me her wonderful broad smile once more. She looked at us with intensity and smiled showing her teeth; we were literally overwhelmed with joy. She remained awake throughout our visit: this time she really was awake for good !

We must now proceed to the next step: rehabilitation. Physiotherapy and ergotherapy began at the Hôpital du Sacré-Cœur de Montréal. And on Sunday June 3rd, Lorraine attended William's First Communion, her first trip outside the hospital.

REHABILITATION

Lorraine left for the rehabilitation hospital on June 6, 2006; she followed a programme of physiotherapy, ergotherapy and speech therapy; she saw a neuropsychologist, a social worker, she was taught to relearn how to accomplish everyday tasks, in short, a whole range of activities necessary for her rehabilitation. She remained there until March 16th, 2007, before coming to our new bungalow which we were finishing off adapting for her. Since she woke up, Lorraine has made considerable progress thanks to all the wonderful therapists she has had. She has shown remarkable courage and strength of will, and she won't stop there !

To all those who are living through such an ordeal, I wish them courage, patience, and above all, never to give up hope !



SOME ACHIEVEMENTS OF THE MARIE-ROBERT NEUROTRAUMA FOUNDATION

SINCE ITS CREATION, THE FOUNDATION HAS SUPPORTED MANY IMPORTANT RESEARCH PROJECTS AND FINANCED THE PURCHASE OF SOPHISTICATED EQUIPMENT.

The Foundation has also set up, at the Faculty of Medicine of the Universities of Montréal and Laval, a research and training scholarship fund for developing an international stature relief team specializing in head trauma research.

1996 - CRANIOCEREBRAL TRAUMA RESEARCH PROJECT

A provincial project involving the Société de l'assurance automobile du Québec (SAAQ), the Association des hôpitaux du Québec and the Fédération de la réadaptation en déficience physique du Québec.

2001 - Financing of the project: MOTOR SKILLS OF CHILDREN SUFFERING FROM LIGHT TRAUMATIC BRAIN INJURIES

carried out at the Montreal Children's Hospital - McGill University Health Centre.

Creation of the RESEARCH AND TRAINING SCHOLARSHIP FUND of the Marie-Robert Foundation at the UNIVERSITÉ DE MONTRÉAL.

2002 - Purchase of an essential DEVICE for completing the FUNDAMENTAL RESEARCH PROJECT ON HEAD TRAUMA, carried out at the research centre of HÔPITAL ST-LUC which is affiliated to the Centre Hospitalier Universitaire de Montréal.

2004 - Official announcement of a MAJOR PARTNERSHIP between the FOUNDATION and UNIVERSITÉ LAVAL - HÔPITAL ENFANT-JÉSUS, the SOCIÉTÉ DE L'ASSURANCE AUTOMOBILE DU QUÉBEC and the INSTITUT DE RÉADAPTATION EN DÉFICIENCE PHYSIQUE DU QUÉBEC.

2005 - Official launch of the RESEARCH FUND on head trauma at UNIVERSITÉ LAVAL.

2009 - WITH THE SUPPORT OF THE MONTREAL AUTOMOBILE DEALERS CORPORATION FOUNDATION, FINANCING OF THE PROJECT ON: "THE STUDY OF THE CEREBRAL METABOLISM AND CEREBRAL ELECTRICAL ACTIVITY DURING ACUTE PHASES OF SEVERE TRAUMATIC BRAIN INJURIES IN HUMANS, IN A PROGNOSTIC AND THERAPEUTIC PERSPECTIVE"

carried out at the Montreal General Hospital - McGill University Health Centre.

RESEARCH FUNDS

AT THE UNIVERSITÉ DE MONTRÉAL

Research and Training Scholarship Fund of the Marie-Robert Foundation. This fund of more than \$200,000 aims to support scientists and students who excel in the academic field and who specialize in head trauma research. <http://www.chir.umontreal.ca/fonds.html#trauma>

AT THE UNIVERSITÉ LAVAL

Head Trauma Research Fund of the Marie-Robert Foundation. This fund of more than \$100,000 aims to support research and teaching on head trauma in order to train a relief team of high quality in this field of research. http://www.detouteslesrevolutions.com/trouvez_votre_cause/projets/index.html?UL_NO_FONDS=0342

HOPE...

On July 6, 1991, the lawyer Marie Robert was involved in a serious road accident. She suffered severe head trauma which plunged her into a coma for several days. She was given a 30% chance of survival.

But against all odds, Marie came through exceptionally well.

Rapid response at the site of the accident, stabilization of her condition in hospital and her integration in a neurological research project enabled her to benefit from the essential specialized care needed for her to recover.

Marie resumed her place in society as only 10-15% of head trauma victims can do. That is why she has chosen to involve herself in helping those who did not or will not have that opportunity.

Marie is still practicing, but she is working on just one very well-filled file for advancing medical knowledge that provides better treatment for victims of head trauma.

IMPROVING THE FUTURE OF YOUNG AND OLD

EACH DOLLAR BRINGS US A LITTLE CLOSER TO THE SOLUTION TO THE PUZZLE CAUSED BY TRAUMATIC BRAIN INJURIES.

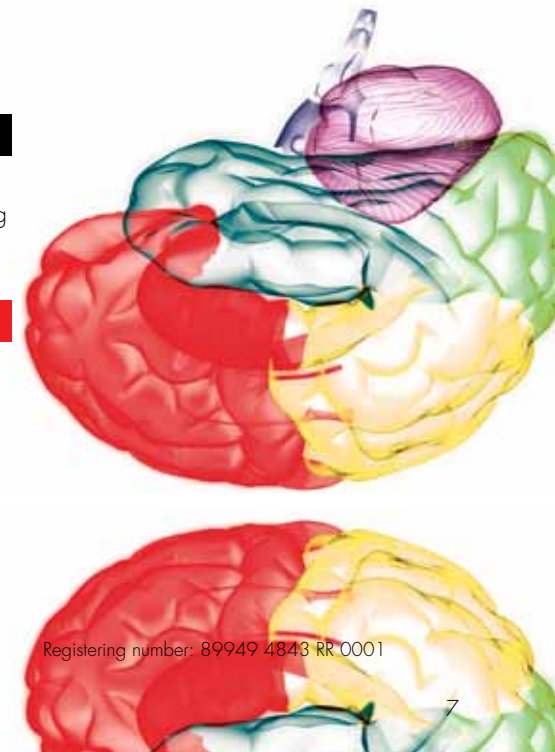
Thank you for making a gift, by cheque or credit card and for taking part in our Benefit Events !

The Governors' Wine and Cheese Evening Golf Tournament

SPRING

Public Evening Show Corporate Evening Show

FALL



Registering number: 89949 4843 RR 0001

**COLLABORATING
FOR THE FUTURE...**

The Marie-Robert NeuroTrauma Foundation and Quebec's five large trauma Centres have agreed to collaborate. They will pool their knowledge and group their fundraising efforts in order to allow head trauma research to advance as much as possible.

The trauma Centres support the Foundation's mission wholeheartedly. They participate in its efforts to inform the public, in preventive action and fundraising.



OUR SCIENTIFIC PARTNERS



OUR SPONSORS





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