N°17 – JUNE 2019

ICM
Brain & Spine Institute

FOR YOU & WITH YOU

The Brain and Spine Institute's donors Journal

PAGE 4

SPECIAL REPORT

HOW THE BRAIN WORKS

CONTENTS

Nearly nine years ago, the Brain and Spine Institute came to life. We never imagined it would become as successful as it is now! ICM today represents numerous scientific discoveries, as well as attractiveness and international recognition as illustrated by the recent visit by Mr. Ray Chambers, World Health Organisation Ambassador for international strategy. We should be proud of what we have achieved, but this is just the beginning of our fight for those living with nervous system diseases.

Our brain is home to great mysteries. Understanding how a healthy brain works is essential to understanding and treating altered function in nervous system diseases, and to preserve the organ that truly makes us who we are.

Since the founding of ICM, researchers have achieved many major breakthroughs in the field. However, so many questions remain to better grasp how our brain works, as well as understand the underlying mechanisms and interactions within it.

ICM's innovative and unique model, which brings together patients, doctors, researchers and entrepreneurs, is up to the challenge. With time, it has proven to be a powerful accelerator for discovery and innovation.

Daily advances in science are made possible thanks to your trust and generosity. These are your advances, too, and I wish to extend my sincerest thanks.

Jean Todt
Founding Member and Vice-President of ICM

BRAIN WEEK 2019

Over 350 participants attended Brain Week's 21st edition (March 11 to 17) at ICM to learn about how important research on the brain can be. Conferences, workshops, and guided visits for donors and the general public gave participants the opportunity to discover the Institute's secrets as well as the daily activities of researchers, technicians, doctoral students, and postdoctoral researchers on site for the event. Interesting discussions and great hopes and dreams followed!
Learn more at **www.semaineducerveau.fr**

A NEW RESEARCH TEAM AT ICM

The new unit, directed by Inserm Research Director Nathalie Cartier, is geared towards developing clinical applications with a special focus on clinical trials in Huntington's Disease, spinocerebellar ataxia, Alzheimer's disease, and hereditary leukodystrophy. The team will develop techniques and instruments to allow treatment to enter the brain. To be continued!

FIRST CATHY LEITUS GRANT AWARDED

This grant was created in 2018 in memory of Cathy Leitus, international reporter and Sciences Po Alumni administrator. It supports ambitious research programs focused on brain tumours within the Institute. On February 19, GlioTex laboratory researcher Maïté Verreault was the first to receive the grant. If you wish to participate in the grant's funding and contribute to research to fight brain tumours, donations are accepted: **www.icm-institute.org/actualite/bourse-cathy-leitus/**

RUN FOR RESEARCH

The 10th edition of the Heroes Race at Saint-Cloud Park will take place this next June 23. Lace up your running shoes and don the ICM logo or encourage runners raising funds for the Foundation. A fun-filled, friendly event!
More information available at **www.coursedesheros.com**

PARTNERSHIP NEWS:
WATCHMAKER RICHARD MILLE SUPPORTS ICM

The adventure began in 2016, with a Red RM 011 Quartz TPT timepiece up for auction during the ICM's first benefit gala. Richard Mille and the ICM Foundation share a taste for excellence, which is why the watchmaker donated another timepiece, RM 35-02 Rafael Nadal edition, for the ICM Gala held on May 31, 2018. This year, Richard Mille has announced continued support for ICM through the donation of a third timepiece: proceeds from the sale will benefit ICM in full to support future research. ICM will also be featured in the next edition of Richard Mille magazine. The Institute is delighted by this partnership and extends warm thanks to Richard Mille for his generous support and visibility he has offered.

JOINING A CLINICAL STUDY HELPS RESEARCH GO FURTHER!

Join ICM research projects as a healthy volunteer!
Each ongoing project was approved by a Personal Protection Committee, is insured, and has been filed with the National Drug and Healthcare products Agency when it aims at assessing new treatments.

If you wish to volunteer as a healthy participant (no diagnosed neurological disease), to learn more, contact:
c.bourasseau@icm-institute.org or by phone +33(0)1 4216 5766

ARTICLES IN PARTNERSHIP WITH LE FIGARO

World Parkinson's Day: what is the current status of research?
http://sante.lefigaro.fr/dossier/institut-du-cerveau

For you & with you is the newsletter sent by the ICM to its donors. **N° 16 – March 2019**. Editor-in-chief: **Axelle de Chaillé**. Editorial board: **Jean-Louis Da Costa, Astrid Crabouillet, Nicolas Brard et Claire Pennelle**. Production: **Louis**. Printing: **BB création**. Print run: **88 000 copies**. © ICM – J.P. Pariente – Publicis – Gérard Saillant – INSERM – Michel Thiebaut de Schotten

ICM on the web

- **The first full mapping of brain function lateralisation**
- **Inside the visual cortex of the visually impaired**

VIDEOS
icm-institute.org/videos
- Brain Week 2019: conference on "Research at ICM" and round table on "3 projects that give us hope" from March 12, 2019
- Donor conference from April 25, 2019 on neuroinformatics

PODCAST
icm-institute.org/fr/actualites
- Open Brain Bar #11 from April 11, 2019: "Technology and neuroscience: a marriage of convenience"

Every month, discover ICM news and research breakthroughs by signing up to our website or newsletter.
Sign up at: icm-institute.org

EVENTS

●●● June 23, 2019
– Heroes Race
Info at www.coursedesheros.com

●●● July 2, 2019
– Donor conference on how the brain works
Available online at www.icm-institute.org

●●● October 12, 2019
– A Track for the Brain
Learn more and sign up at www.ucplc.fr

HOW THE BRAIN WORKS

MAIN FACTS ABOUT THE BRAIN

WEIGHT
Roughly 1.3 kg.

ANATOMY
- **2 hemispheres**, each with 6 lobes, joined by the corpus callosum (fiber network), plus the cerebellum and brain stem.

- **For each hemisphere, simplified:**

  > Frontal lobe: reasoning, planning, language, voluntary motor coordination.
  > Temporal lobe: hearing, memory, emotions...
  > Parietal lobe: tactile sensitivity, programming of movements, spatial representations...
  > Occipital lobe: visual message integration...
  > Limbic lobe: processing of emotions, feelings, and memory.
  > Insular cortex: vegetative nervous system, pain, smell and taste.

- **Cerebellum**: balance and movement coordination.

- **Brain stem**: pathway between brain hemispheres and the spinal cord. Controls vital functions including breathing, heart rate as well as head, neck, eye and tongue movements...

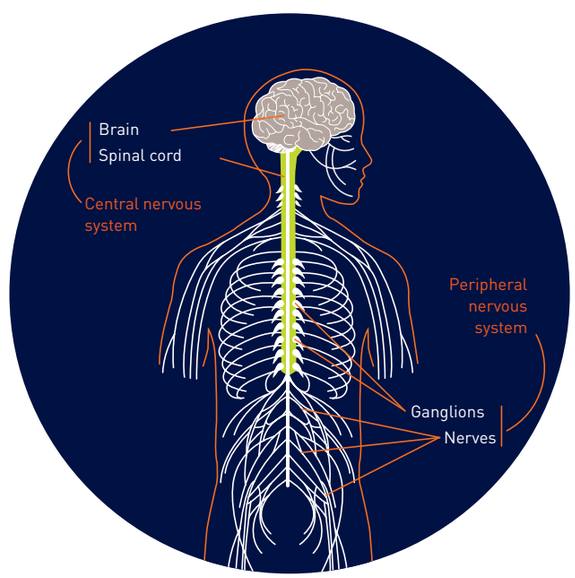
ENERGY USE
15-20% of all energy produced by the human body, essentially glucose, a monosaccharide provided through food. The brain is also highly vascularised and therefore has a high oxygen consumption.

ENVIRONMENT
The brain floats in cerebrospinal fluid, which plays a protective role as well as providing nutrition and waste management. It is surrounded by three layers called meninges, that protect the brain.

CONSTITUTION
- 100 billion neurons, the brain's "communication units", that create a precise network.
- 1.9 billion cells assist neurons:
  > Oligodendrocytes coat axons with a protective sheath called myelin, which allows for rapid transfer of nerve impulses.
  > Astrocytes contribute to the production of neurotransmitters and provide energy for neurons through saccharides and lipids.
  > Microglia defend the central nervous system.

- These cells make up:
  > The cortex, or grey matter: the most superficial layer of the brain, containing the neuron cell bodies.
  > White matter: the deepest layer, with axons coated in myelin sheaths.
  > 4 brain ventricles: cavities where cerebrospinal fluid flows.
  > In the center, the basal ganglia involved in movement control and learning.

Don't forget the spinal cord! Along with the brain, it makes up the central nervous system. After the brain via the brain stem, it is directly connected to muscles by the body's nerves. It helps information move from the brain towards muscles and organs (motor information) and from the body (organs, muscles, skin...) to the brain (sensory information).



OVERVIEW OF THE BRAIN'S MAJOR ABILITIES

MOVEMENT CONTROL

Brodmann's motor area located in the frontal lobe is in charge of sending commands to every muscle in the body via very long neurons called motoneurons that follow the spinal cord and transfer messages to muscles. The cerebellum coordinates movement and basal ganglia make movements more precise.

— Related pathologies: Parkinson's disease, dystonia, amyotrophic lateral sclerosis, multiple sclerosis, etc.

CREATIVITY

Creativity in neuroscience is defined as the ability to produce something new and adapt it to a given context. Creative thinking is founded on the interaction between various brain areas organised in a network, especially in the frontal lobe.

DECISION-MAKING

Decision theory postulates that making a choice means placing the various options on a scale of different values in order to select the best possible option. Our brain is capable of attributing values to the various alternatives when we are faced with a decision. Decision-making involves the orbitofrontal cortex (located right under the forehead, behind our eyes) and deeper areas such as the ventral striatum.

— Related pathologies: depression, apathy (loss of motivation), as well as many neurological and psychiatric diseases, etc.

EMOTIONS

An emotion is a subjective mental state generally caused by an external stimulus. Joy, sadness, fear, anger, disgust surprise are considered the basic emotions. They involve areas in the center of the brain, mainly the hypothalamus, nucleus accumbens, amygdala, insula as well as the ventral striatum and the orbitofrontal cortex. These regions as a whole process sensory and affective information, help plan actions in time, and plan behaviour according to context and social environment.

— Related pathologies: depression, apathy, bipolar disorders, etc.

CONSCIOUSNESS

One of the necessary conditions for consciousness - the ability to formulate subjective relationships between conditions such as "I see X, I remember Y, I am doing Z, etc." - is wakefulness. However, this condition is not sufficient, as illustrated by certain epileptic seizures or, more dramatically, minimally conscious states. Being conscious specifically requires activity in a vast frontoparietal cortical network.

— Related pathologies: coma, non-communicating patients, epilepsy.

MEMORY

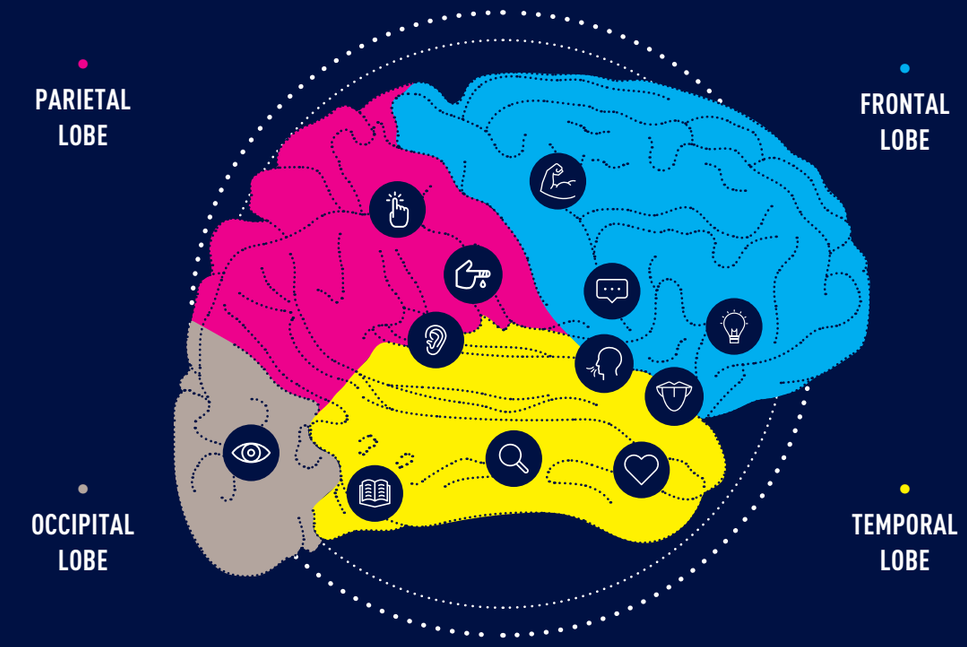
Memory is a complex aspect of our brain. There are several types of memory: short-term and long-term memory. Memories are first stored in areas involved in the initial experience, and are consolidated during sleep where they are recovered by frontal lobe neurons. The building of memories involves a network including the hippocampus and grey matter structures located deep within the brain.

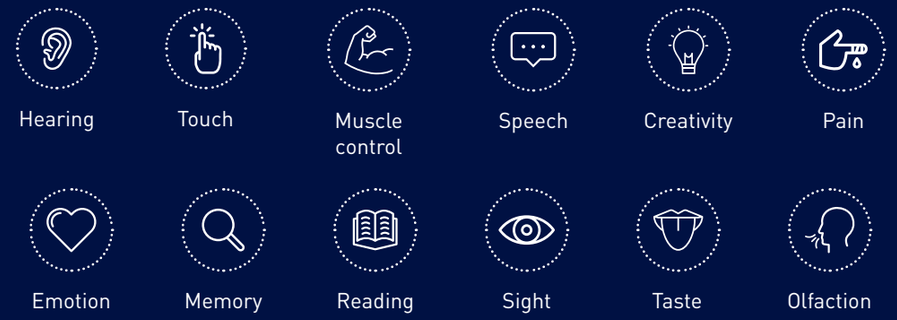
— Related pathologies: Alzheimer's disease, dementia.

LANGUAGE

Humans are the only species with cortical areas dedicated to language, that allow us to understand and produce speech and writing. Language results from the collaboration between various areas that communicate with one another, located in the left hemisphere, and that allow us to manipulate sounds, words, meanings, etc.

— Related pathologies: aphasia, including primary progressive aphasia.





SLEEP

Sleep has a number of roles: consolidating memory and learning, digesting negative emotion, increasing creativity and eliminating proteins that are toxic for the brain. During sleep, children grow by producing growth hormones only during deep sleep, in the beginning of the night (the hours before midnight that get "double credit"). During sleep, adults lose weight with the secretion of leptin during the night: those who do not sleep enough tend to gain weight.

— Related pathologies: certain specific sleep disorders can be markers for pathologies such as Parkinson's disease.

ATTENTION

Attention is the ability to detect and respond to meaningful signals from the outside world. We see the world through our eyes, but attention is what makes us truly aware of it. Attention involves extensive networks ranging from the posterior parietal region to the anterior frontal region of the brain. Large bundles of nerve fibres connect these regions and allow for quick and efficient communication.

— Related pathologies: strokes, brain lesions, etc.

ICM TAKES YOU TO THE HEART OF THE BRAIN

Perceiving, acting, thinking, reflecting, memorising, deciding, speaking, feeling, walking, dreaming... All of these are impossible without our brain. Understanding how our brain works under normal conditions is essential to understanding and treating altered functionalities in nervous system diseases, as well as preserving it in its normal state. Since its founding, ICM researchers have been at the forefront of major discoveries about how our brain works, its development, and underlying mechanisms. All these discoveries are the breeding ground for scientific progress. Understanding these mechanisms in the healthy brain shapes the hypotheses in pathologies that disrupt it. They are also essential to understanding our brain in a normal context to improve our daily life.

OUR BRAIN'S DYNAMICS

How does our brain develop?
What underlying mechanisms govern our brain's development? How is such a complex system set up? The team led by Bassem HASSAN is focused on the generation of neurons and neural networks during brain development, mainly transcriptional regulation of embryonic neural stem cells. Their research recently brought to light essential mechanisms in the regulation of neuron production via precise temporal control of the activity of specific proteins.

Brain plasticity at all ages
The team led by Nicolas Renier aims at studying the mechanisms that regulate neural extension dynamics in the adult brain, generating new knowledge about neural interaction and the vascular system in relationship with plasticity, and mapping neural markers and connections in the entire brain. Our brain's connections are dynamic, constantly evolving in order to integrate our life experiences and what we have learned. Studying this "brain plasticity" is a field ICM researchers are pioneers in. Alberto Bacci's team studies microcircuits within the cerebral cortex, specifically synapses between various types of neurons leading to distinct circuits in the cortex. The team managed to decipher a very precise cellular mechanism that controls the sensory cortical plasticity at the basis of our ability to learn new skills, which is very active during childhood before decreasing. Processing sensory information is a fundamental characteristic of our brain that is crucial to performing daily tasks. This relies mainly on the performance of its main functional unit, the neuron and its synaptic connections. The goal of Nelson Rebola's team is to study cellular and molecular mechanisms that influence our brain's processing of sensory information and ultimately drive our behaviour.

COGNITION

Complex cognitive functions
The team led by Laurent Cohen, focused on how we learn to read, deciphered how connections between the areas dedicated to recognising words and language are organised. They also highlighted how visual areas reorganise themselves to accommodate distinct fields of expertise such as reading words and reading music. In the field of visual perception, the team also highlighted major cerebral reorganisation in congenital blindness, where the visual cortex becomes responsible for cognitive functions unrelated to vision. From a more global perspective, the team led by Laurent Cohen, Lionel Naccache and Paolo Bartolomeo focuses on the underlying mechanisms of complex cognitive functions including consciousness, attention, visual perception, and language.

The frontal lobe: the brain's conductor
Studying frontal functions is a gateway to understanding how our most complex behaviours including decision-making, planning, reasoning, creativity, moral judgement, and social interactions are developed and regulated. Deeper understanding of the frontal lobes is also essential to improve treatment of the many neurological and psychiatric illnesses that affect this area (Alzheimer's disease, strokes, head injuries, depression, schizophrenia, etc.). The team led by Richard Levy is attempting to understand the role and organisation of the prefrontal cortex in controlling, activating, and inhibiting voluntary behaviour, its modulating effect on creative thought, and how it interacts on a structural and functional level with other areas in the brain. The team's research has deciphered essential activities of the frontal lobe, how some of these areas play a major role in different functions, from simple activities such as movement to more complex activities including social behaviour, creativity, and organising what we know.

Decision-making
What is the mechanism behind motivational processes in our brain? The team led by Mathias Pessiglione, Jean Daunizeau and Sébastien Bouret combines complementary methods to identify how cost and reward are represented in the brain, how cognitive control arbitrates between the two, how it is biased by emotions, fatigue, pathology and treatments. They found that mental fatigue has an impact on impulsive decision-making and identified the initial processes rolled out in our brain when we assess several options and compare them when making a decision.
The team led by Liane Schmidt and Philippe Fossati aims to understand how cognitive control mechanisms integrate external and internal signals and how this integration impacts behaviour in healthy subjects as well as patients with depression or obesity. They recently found a link between certain anatomical areas in the brain and the ability to control healthy or unhealthy food choices.

DOC FEELING: PROFESSIONAL EXPERTISE HELPS IMPROVE DIAGNOSIS IN PATIENTS WITH ALTERED CONSCIOUSNESS

In the case of severe brain injury, a patient can go from initial coma to a state of altered consciousness such as a minimally conscious state. Determining the level of consciousness is important both to measure the patient's state, prognosis, and to explain the situation to close family. However, level of consciousness can be difficult to assess and requires a multimodal approach that blends clinical expertise and neuroimaging. Researchers and professionals from ICM and APHP have decided to add an extra source of information to this multimodal approach: the expertise of professionals in constant contact with patients throughout their hospital stay.
The method, named "DoC-feeling" (DoC stands for Disorders of Consciousness), uses a visual analogue scale, similar to the one used to assess pain, to measure perception of professionals of patient consciousness in a quick and easy manner. The compilation of scores collected throughout a week generates a "collective" score between 0 and 100.
Forty-nine patients were included and nearly 700 assessments by over 80 professionals were collected. The study was supervised by two coordinating nurses and found that the median value of individual assessments was closely correlated to thorough clinical assessments. Another advantage of this approach is that it improves the number of patient observations, especially since their state of consciousness tends to fluctuate with time. Used in addition to clinical medical assessment and electrophysiology and imaging, it should help make the diagnosis of consciousness more precise.

IN THE DEPTHS OF CHARCOT LIBRARY

In 1907, explorer Jean-Baptiste Charcot donated works from his father, famed neurologist Jean-Martin Charcot's, library to the Salpêtrière hospital. This donation was the starting point of an adventure that still continues today. Learn more about our treasure, located within the Brain and Spine Institute!

The library was first used by the department's interns, and expanded throughout the 20th century with new acquisitions and donations. It was moved a first time in 1968, and a second time in 2011 into the ICM building.

At the heart of the library are Charcot's books. They tell us the story of the inspiration behind the work of a major figure in the field of neurology. The topics explored by the famed physician are impressive in their diversity: books on neurological research in the 1860-1890 era, on the history of medicine, insanity, and its representations. The library is a special witness to the multidisciplinary aspects of Charcot's philosophy.

The oldest book in his library is a good illustration of his wide-ranging interests: the Malleus Maleficarum, a handbook for use by inquisitors in witch hunts. It dates back to before 1520 and shows us Charcot's interest in this part of history where he considered symptoms of pathologies to be found in the supposed signs of witchcraft.

Later works are also worth taking a look at: journals, for example, illustrate the evolution of neurology research from Charcot's death to the 1930s. Little by little, neuroscience comes to life and the library reflects these changes.

The Charcot library is an exceptional place. It is open to all, and not only ICM and Sorbonne Univeristy researchers: patients, foreign researchers, the general public... Visitors can either visit on their own or during exhibits organised by the library: work of the month, brain week, heritage days, and more.

Upcoming events (open to the public):

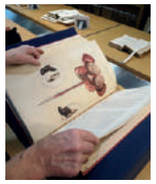
- Presentation of the works of Bourgery (June)
- Works of the month on the history of speech therapy (Cycle begins in September 2019)
- European Heritage Days on "Art and Entertainment" (September 21)

Charcot Library
47 boulevard de l'Hôpital
75013 Paris

Email :
bibcharcot@sorbonne-universite.fr

Open from 2 to 6 PM,
Monday through Friday.

INTERVIEW WITH AN ICM DONOR



You recently visited the Charcot Library. Tell us about your passion for reading!
I've always loved to read. When I was younger, I didn't have many options to enjoy myself. I got used to reading...and never stopped.

Can you tell us about yourself?
I am 72 years old and worked for 40 years as a nurse. Why a nurse, you ask? When I was 7 years old, I got surgery for an appendicitis. My parents were just as worried as I was. I was so scared of the trolley that was supposed to take me to the operating room... but a nurse arrived, reassured me, and carried me in her arms to the door of the operating room. I was so touched and it was something I will never forget... I said to my mother, "When I'm older, I'll be just like the lady." Her gentle demeanour helped my choose my path. I stayed on it and life proved that I was right to!

And after that...
I met my husband on vacation. We were both 16 and got married when we were 20, right after his accounting studies. We had a wonderful life for 15 years. When he turned 32, he was diagnosed with a severe form of multiple sclerosis. We tried everything to make him feel better but nothing worked. Despite his immense bravery, he passed away when he was 38. I also supported my mother-in-law, father, mother, and single aunt in the end of their lives. I've had difficult times.

How did you learn about ICM?
I first read about ICM in a news article. I learned more, read up on the Institute and on research on neurological diseases.

Can you tell us how you decided to add ICM to your will?
I don't have any close family members and wanted the inheritance I received from my parents to be put to good use. The fact that Professor Saillant (President of the ICM) is one of the Founders of the Institute played an important role: I have great admiration for his work.

What would you recommend to those thinking about future bequests?
I think that when you've seen people affected by these diseases - and we have all witnessed close friends or family's suffering - we shouldn't even hesitate. I found the whole process very simple. I wrote my will and filed it with a notary, and of course you can always change your mind! We need to help stop these terrible diseases, even for future generations, which is why we need to help researchers..

SUPPORT FORM

Thank you for sending us the completed form today with your donation to the address:
ICM – Hôpital Pitié-Salpêtrière 47 boulevard de l'Hôpital 75013 Paris

☑ **Yes, I support the ICM in defeating diseases of the nervous system**

I am making a donation of: ..... €

Check payable to **ICM**

You can also make a donation online at:
www.icm-institute.org

☐ **I wish to receive complimentary information on bequests and donations.** (Free of charge and obligations)

Your contact details

☐ Mrs ☐ Mr ☐ Mr & Mrs
First name: .....
Surname: .....
Address: .....
.....
.....
Zip Code: |_|_|_|_|_|
City: .....
Email: .....
.....
Phone: .....

BSNL46GDP

DON en CONFIANCE comitecharte.org

Your donation to the ICM is deductible up to 66% of income tax (limited to 20% of your taxable income), or up to 75% for the Real Estate Wealth Tax (up to a limit of € 50.000 deducted).

The information on this form will be recorded in a digital file and placed under the responsibility of ICM, and used to send you a tax receipt, explain how your donation is used, invite you to conferences and events, contact you for further fundraising and to get to know you better, to ask for your opinion and improve our actions. Data is intended for use by ICM and can be transferred to third parties mandated by ICM to assist with fundraising campaigns and surveys. You have the right to access, rectify, remove, oppose, or limit the transfer of personal information that concerns you by contacting the Bureau of Circle of Friends of ICM: ICM Hôpital Pitié-Salpêtrière - 47, boulevard de l'Hôpital - CS 21414 - 75646 Paris Cedex 13. You may also file a claim with a supervisory authority. Protection of your personal data and respecting your wishes is of the utmost importance for ICM and ICM will not transfer or exchange data pertaining to major benefactors.

WITH YOU

DIRECT DEBIT DONATIONS?

ATTRACTIVE FOR YOU AND FOR RESEARCHERS!

3 BENEFITS FOR RESEARCHERS

+ visibility
By knowing their available budget in advance, researchers can think long term.

+ security
Thanks to recurrent donations, projects are less likely to be interrupted.

+ savings
Fewer management costs means more money for research.

3 BENEFITS FOR YOU

Freedom and practicality
You are free to change or suspend your recurrent donation by contacting us.

Economical and ecological
Less mail means saving paper.

Quick and easy
Easy to implement with a donation that is spread out through the year!

Your direct debit donation is a sign of long-term commitment to research and your special bond with ICM to overcome, together, nervous system diseases. By supporting us on the long term, you will give researchers time and means for discoveries. To set up your recurrent donation, simply send us back the dedicated form, signed, along with your bank details (RIB-IBAN).

Please feel free to contact the Donor Department at ICM if you have any questions.

YOUR PERSONAL CONTACT:
Lucie Moutier
+33 (0)1 57 27 40 32
cercle@icm-institute.org

ANOTHER WAY TO SUPPORT RESEARCH: BEQUESTS TO ICM

HOW DOES A BEQUEST WORK?

Bequests require writing a will in which you indicate your wishes in terms of inheritance. You may transfer all or part of your assets to ICM by indicating the Institute's name and precise details in your will.

Your will must be fully handwritten, signed, and dated. You can also contact your notary directly, who will write the will for you after hearing your wishes.

Important:

- You can amend your testament at any time;
- Bequests take effect only when the estate is administered, meaning that you remain the owner of your assets throughout your life.

ICM is a public-interest Foundation and can therefore receive bequests, donations, and life insurances with an exemption from inheritance law.

If you wish to receive our brochure or speak to someone, please contact:
Carole Clément
+33(0)1 5727 4141
carole.clement@icm-institute.org

MY RECURRENT DONATION

Please fill out and return this form with your contribution and your bank identification details to
ICM – Hôpital Pitié-Salpêtrière – 47, boulevard de l'Hôpital, 75013 Paris

☑ **Yes,** I will provide long-term support for ICM researchers with a donation of:

☐ 50€ ☐ 100€ ☐ 200€ ☐ 500€

☐ Other amount ..... €

☐ Monthly ☐ Quarterly

Starting on 05 / ..... / 2019*

*Actual date may be one month later, depending on when the first withdrawal is authorised

IMPORTANT
Please remember to include your bank details (BIC-IBAN)

By signing this form, you authorise the ICM to instruct your bank to debit your account according the instructions of the ICM. You can be reimbursed by your bank according to the conditions that you have established together. A request for reimbursement must be presented within 8 weeks of the date of an authorised withdrawal, and without delay or at the latest within 13 months of a non-authorised withdrawal. Your rights concerning the present authorisation are explained in a document you can procure from your bank.

SEPA WITHDRAWAL AUTHORIZATION

Type of payment: Recurrent – Unique authorization reference [1]: .....
[1] *You will receive the reference when the authorization is recorded*

Beneficiary : INSTITUT DU CERVEAU ET DE LA MOELLE EPINIERE
N°ICS : FR25 ZZZ 535582

I hereby authorize my bank to debit the indicated amount in the frequency that I specified. These regular debits will take place on 5th of each month or each quarter following the date of authorization.

MY INFORMATION

Last name : ..... First name : .....

Address : .....

.....

Post office code : ⌊_____⌋ City : .....

MY BANK ACCOUNT INFORMATION

⌊_____⌋⌊_____⌋⌊_____⌋⌊_____⌋⌊_____⌋⌊_____⌋⌊_____⌋
international identification number of the account (IBAN)

⌊_____⌋
International code of your bank (BIC)

Date [2] : __ __ / __ __ / 2018

Location [2] : .....

Signature [2]

[2] *Required*