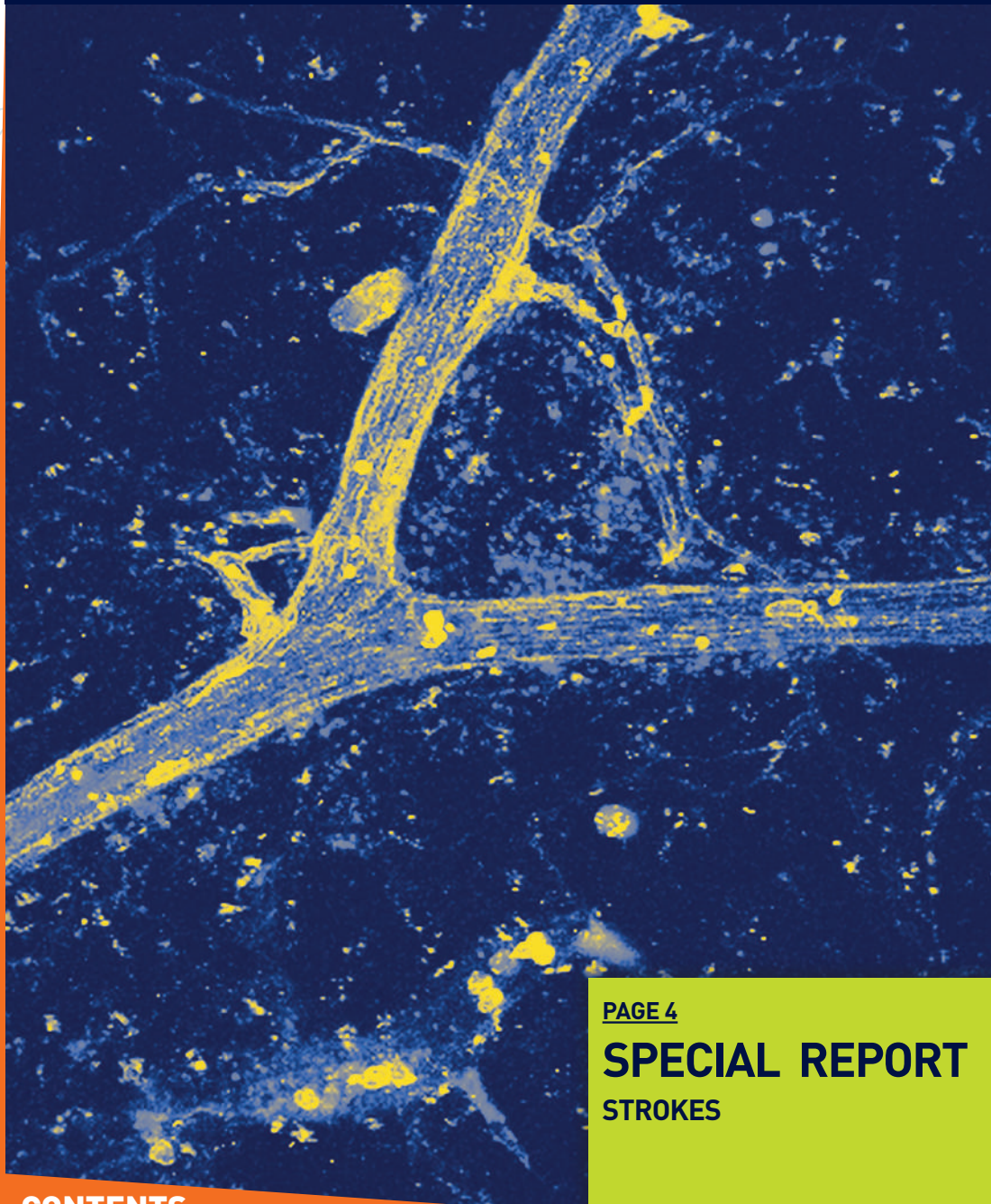


FOR YOU & WITH YOU

The Brain and Spine Institute's donors Journal



PAGE 4

SPECIAL REPORT
STROKES

CONTENTS



P. 2 News

ICM in "Vivement Dimanche"



P. 4 Special report

Strokes



P. 8 Discover

A new treatment target for spinocerebellar ataxia?



P. 10 First person

Taking an extra step to help the Brain and Spine Institute Grow



ICM, at first a dream, came to life nearly 10 years ago. Every day, the researchers and clinicians working at the Institute dedicate their efforts and energy to understanding our nervous system and treating nervous system diseases.

This year, once again, the Brain and Spine Institute was at the forefront of important breakthroughs: on the diagnosis of Alzheimer's Disease, consciousness, the improved understanding of brain functions including sleep and decision-making, as well as complex neural and cellular mechanisms. The work of researchers at the Institute was also highlighted through numerous prestigious awards that help increase international visibility and develop new collaborations, the basis of major discoveries to come.

ICM's 700 researchers and clinicians are working tirelessly to understand how our brain functions and dysfunctions to accelerate the development of new treatment strategies.

I would like to extend an invitation to join us in this venture. I know many of you already do, and I thank you for your involvement. The challenge ahead is so immense, however, that I would like to ask for even more: your loyal support towards ICM in the next decade of its life, to help researchers continue their work and to allow the Brain and Spine Institute to meet its goals.

Thank you.

Maurice Lévy
Founding Member of ICM

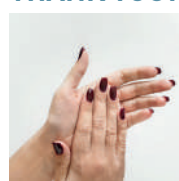
ICM IN "VIVEMENT DIMANCHE"



On September 1st, actor Guillaume de Tonquédec, ICM ambassador for the "Discoverers of Hope" campaign, was invited to Michel Drucker's show on France 2, on French television. He discussed his support for ICM, and

explained that the Institute is the "key" to solving the brain's many mysteries and treating diseases that affect it. Professor Alexandra Durr, neurogenetics researcher and team leader at ICM, was featured and gave an overview of the Institute's most recent breakthroughs and hopes for the future. A wonderful opportunity to put ICM in the spotlight! The show's replay is available on www.france.tv/france-2/vivement-dimanche/1064407-professeure-alexandra-durr-de-l-institut-icm.html

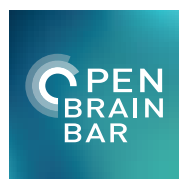
THANK YOU!



In this back-to-school season, numerous events were held to benefit ICM. In September, the following events help raise money for ICM: the 13th edition of Féerissime, Les Echos Golf Trophy,

Course de la Diversité, Circuit pour le Cerveau, Classic Festival, and more. The Institute is thankful for all these generous events involving both volunteers and donors.

OPEN BRAIN BAR (OBB) IN PARTNERSHIP WITH HEC HEALTH



The last OBB of the year will cover the topic of neuromanagement. If you would like to learn more on how neuroscience can be applied to your daily life and corporations, join us on December 17th at MAIF Social

Club (37 rue de Turenne, 75003, Paris). Additional information and registration (required) on <https://icm-institute.org/fr/obb/>

15TH EDITION OF THE CHARITY DAY



This past September 11th, in memory of the 658 employees of brokerage firm BGC Partners who lost their life in the 2001 attacks, 60 celebrities teamed up for an international day for charity. Claire Chazal, Nathalie Lannetta, Paul

Belmondo and Philippe Candeloro, ICM ambassadors for this year's edition, became stock exchange brokers for a day to benefit ICM. We thank them for their ongoing support towards ICM researchers.

PARTNERSHIP NEWS: UPCOMING 2019 HOSPICES DE BEAUNE WINE SALE TO BENEFIT ICM



The Hospices de Beaune Wine auction, hosted by the medical center that owns a large vineyard, is one of the most important charity events in the world and is highly anticipated by wine professionals on the 3rd Sunday in November. Each year, the auction benefits the Hospices de Beaune charity as well as one or several other organisations, represented by celebrities, through the sale of a barrel of wine called the "President's Barrel".

The Brain and Spine Institute is proud to be supported by the exceptional event that will take place on Sunday, November 17th. The Institute is honoured to be represented by Gérard Depardieu and Tony Parker for this edition.



ARTICLES IN PARTNERSHIP WITH LE FIGARO

Survey: How brain diseases affect you
<http://sante.lefigaro.fr/article/enquete-les-maladies-du-cerveau-et-vous/>

For you & with you is the ICM magazine sent to its donors. N° 19 – november 2019. Editor-in-chief: Axelle de Chaillé. Editorial board: Jean-Louis Da Costa, Astrid Crabouillet, Nicolas Brard and Claire Pennelle. Completion: Louis. Printer: BB création. Print run: 2,300 copies. © ICM – J.P. Pariente – Publicis – Gérard Saillant – INSERM – Inserm/U919



ICM on the web

- Prof. Catherine Lubetzki receives the 2019 Charcot Award
- Multimodal approach to optimise brain-machine interfaces

VIDEOS

www.youtube.com/user/BrainSpineInstitute

- Donor Conference on 19/09/19 dedicated to Alzheimer's Disease
- Science, Art & Culture conference on 19/09/19: "Outlooks for Alzheimer's and Parkinson's Disease"
- Open Brain Bar #13 on 29/10/19 in partnership with Pariscience: "New technologies used in Neuro-genetics: perspectives and limitations"



Every month, discover ICM news and research breakthroughs by signing up to our website or newsletter.

Sign up at: icm-institute.org

EVENTS

- December 17th
 - Open Brain Bar #14 with HEC HEALTH on neuromanagement
 Additional information and registration from December 2nd at icm-institute.org/fr/obb/
- December 18th
 - Donor conference on brain tumours
 Available online at www.icm-institute.org

2020
– The Brain and Spine Institute celebrates its 10 years with a special event
Learn more and sign up at icm-institute.org/fr/obb/

LEARN MORE ABOUT STROKES

Strokes affect close to 150,000 individuals per year in France. Considerable progress has been made in recent years in treating the acute stage of stroke and for post-stroke care. Strokes, however, remain the leading cause of acquired physical disability in adults, the 3rd highest cause of death in France, and the leading cause of death in women. Despite an average age of onset of 73 years, 30,000 stroke patients each year are under 45. ICM is here to help you understand, prevent, and recognise stroke symptoms as well as get an overview of ongoing research in this field at the Institute.

UNDERSTANDING STROKES

What is a stroke?

In 80% of cases, a stroke is the consequence of an obstruction of a cerebral artery by a blood clot that halts blood flow. This is called an ischemic stroke.

The main cause is cholesterol build-up on the inner lining of blood vessels, leading to a decrease in the diameter of the artery and a greater risk of obstruction. This shrinking is called atherosclerosis and can be located inside the brain, but a fragment of cholesterol build-up can also be present outside of the brain and migrate towards a brain artery with blood flow.

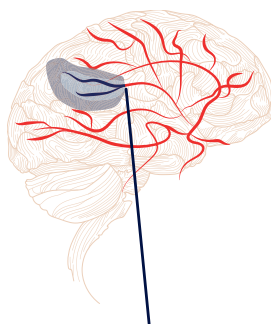
In 20% of cases, a stroke is said to be hemorrhagic, meaning that it is caused by a ruptured brain vessel and leads to bleeding within the brain. A ruptured blood vessel can be due to weakness caused by high blood pressure (leading cause), vascular abnormalities, or certain medications. In the case of ischemic stroke, affected brain cells are in a state of hypoxia and no longer receive enough the necessary oxygen and sugar generally obtained

through blood flow. If this situation persists, cells die, leading to the loss of brain function associated with the affected areas of the brain.

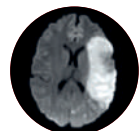
At first, cellular death takes place only in a small area close the obstructed artery. Around this perimeter is a penumbra where damage is reversible

is blood flow is restored quickly, fewer than 6 hours after the first symptoms of the stroke appear. Halted blood flow in an cerebral artery entails the death of 1.9 million neurons per minute (a human has on average 100 billion neurons). Ischemic stroke in the right hemisphere of the brain can leads to paralysis on the left side fo the body (left hemiplegia), vision disorders and a deficit in spatial orientation. Patients can present a disorder named "hemineglect", where they are no longer conscious of the left side of their body and act as if it no longer existed. If the stroke is located in the left hemisphere of the brain, patients tend to exhibit right hemiplegia and speech disorders.

STROKE ISCHEMIC

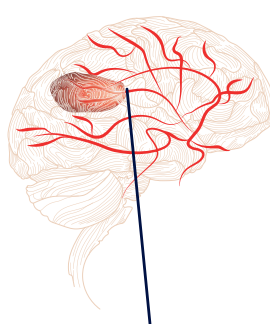


Obstruction of an artery

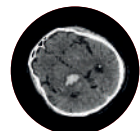


Consequences of ischemia on tissue visible on MRI

STROKE HEMORRHAGIC



Rupture of an artery



Consequences of haemorrhage on tissue visible on scanner

PREVENTING STROKES

The following are risk factors associated with strokes

- **High blood pressure** is the main risk factor associated with strokes. Monitoring blood pressure on a regular basis is recommended and you should seek medical advice for systolic pressure over 140 and diastolic pressure over 90 at resting state on several occasions. blood pressure is the force exerted by blood on blood vessels as it flows. High blood pressure means that this force is too strong and could harm the blood vessels
- **Cholesterol levels**, especially LDL-Cholesterol. LDL and HDL are two molecules in charge of transporting cholesterol. LDL transfer cholesterol to cells and HDL recover the cholesterol and transfer it to the liver. If the LDL transports more cholesterol than is needed by the body's cells, unused LDL will accumulate on the inner walls of blood vessels, creating plaques that reduce the diameter of blood vessels and increase the risk of a stroke. HDL, on the contrary, "clean up" blood vessels. To reduce the risk of stroke, monitoring these levels every 5 years is recommended.
- **Tobacco use** multiplies the risk of an ischemic stroke two-fold.
- **Diabetes**.

WHAT ARE THE SIGNS OF A STROKE?

A stroke is a neurological condition with brutal onset of symptoms. **An array of symptoms is possible:** motor deficit, deviation of the mouth to one side, difficulty raising an arm, falls, trouble expressing oneself, visual deficit, or numbness in a limb. Symptoms are often lateralised, meaning that they appear on one side of the body. It is essential that everyone knows how to react quickly faced with these symptoms. When talking about strokes, we often hear that "time is brain". Early diagnosis and care help reduce the mortality rate by 30% and help limit the severity of lesions. If a person experiences sudden onset of symptoms, they or a loved one must immediately call emergency services. An emergency team will take the patient to a specialised facility called a Neurovascular Unit.

WITH A STROKE, "TIME IS BRAIN".

Every minute counts. You must act FAST.

Face



Mouth is slanted, a sign of facial paralysis. **The person cannot smile.**

Arm



An arm or leg can no longer be moved. **The person cannot raise both arms.**

Speech



Speech is muddled. **The person cannot repeat a simple sentence.**

Time

The person cannot execute **1 of these 3 categories. CALL EMERGENCY SERVICES IMMEDIATELY!**

WHAT IS STANDARD CARE FOR A STROKE?

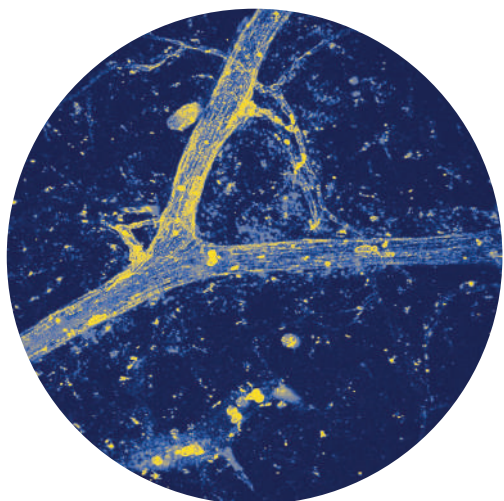
In the first 6 hours following a stroke, **two types of treatment** help reduce the subsequent level of disability:

- Thrombolysis using medication delivered through an IV drip;
- Thrombectomy, where a catheter is inserted in the femoral artery up to the cerebral arteries to capture the blood clot.

A stroke is an emergency, and patient care in the acute stage of a stroke must be as efficient as possible. As soon as the patient or their relative calls emergency services, the fire department or SAMU (medical emergency teams) pick them up at their home. They are taken to the nearest hospital with the technical equipment necessary to care for stroke patients. The patient is taken to the neuroradiology unit and is joined by the neurovascular team. The patient undergoes an MRI scan and doctors decide on a treatment.

In the following days, the most important is preventing another stroke: the risk is highest in the 7 days after the first stroke and declines in the following days.

Next is the **post-stroke rehabilitation phase**, where various practitioners care for the patient depending on the remaining deficits and symptoms. In the case of a motor deficit, for example, the patient will spend time with physical and occupational therapists. Motivation is an important factor in ensuring proper recovery. New strategies including therapy games or "serious games" as well as robots can be paired with rehabilitation to improve recovery.



RESEARCH AT ICM

ICRIN (ICM Clinical Research Infrastructure) is dedicated to strokes and aims at developing clinical research between units at Pitié-Salpêtrière Hospital and ICM. Stroke research is divided into three fields:

Clinical trials on acute phase treatment and secondary prevention for relapsing strokes

The doctors in the neurovascular and neuroradiology units are taking part in several international studies. One of these is dedicated to thrombectomy in strokes with few symptoms in the acute stage. The aim of this study is to assess the benefit of this type of invasive treatment on patient recovery.

ICRIN is also part of a French nation-wide register implemented by Foch Hospital in Paris that tracks all thrombectomies to assess the benefit of the surgery in real-life clinical conditions. This database will be shared and will help carry out nation-wide stroke studies.

Understanding the key areas of the brain to determine stroke prognosis

A study coordinated by Charlotte Rosso on data acquired by a national consortium highlights several specific brain areas that are associated with poorer patient recovery when they are affected by a stroke. Identifying these zones has shown how important it is to preserve them during acute phase care by medical teams. Study findings show that when these areas are affected by a stroke, surgery beyond the recommended 6 hours may also lead to better patient recovery.

Raphaël Le Bouc, a member of the team led by Mathias Pessiglione, is carrying out a study on brain correlates of motivation and apathy post-stroke (supported by France AVC). The aim of the study is to map out which areas of the brain are more highly correlated to severe apathy following a stroke. Apathy is a frequent symptom after a stroke and is a major challenge in patient rehabilitation as well as leading a normal daily life.

ATTACK-AVC is a project coordinated by Charlotte Rosso (team Vidailhet/Lehéricy) and Fabrizio De Vico Fallani (team Colliot/Durrleman) with support from the Circle of Friends of ICM donors in 2018.

It aims at creating patient recovery profiles post-stroke using parameters including magnetic resonance imaging (MRI) and electroencephalography (EEG). The goal is to identify predictive biomarkers for individual recovery potential and develop tailored rehabilitation strategies.

Developing innovative therapy

SPAST is a study coordinated by Jean-Charles Lamy and Charlotte Rosso in collaboration with start-up company Pathmaker, aimed at treating deficits in walking due to hypertonia (involuntary muscle contractions) of leg muscles. It is based on the idea that pairing non invasive spinal cord stimulation with muscular stimulation could improve walking.

GAIN is a project created from a partnership between ICM and Mindmaze, a start-up incubated at the Institute. It is focused on developing and assessing the effects of virtual reality physical therapy for post-stroke recovery. Physical therapy resources in France are currently lacking, making it impossible to deliver the right level of rehabilitation for stroke patients. The level of rehabilitation is essential in recovery: the more rehabilitation patients undergo, the better the recovery. The goal of the study is to find out if physical therapy done in individual sessions using virtual reality has good recovery results.

The PAS-AVC study ended at the end of 2018 and was focused on transcranial magnetic stimulation of the cerebellum to improve hand grip. Results are undergoing analysis.

A trial coordinated by Laurent Cohen and Charlotte Rosso is testing the effects of mepivacaine, a local anaesthetic, on various stroke symptoms: motor, language, and visual deficits. The medication has displayed very encouraging effects on visual disorders in a stroke patient. This project is supported by ICM's Neurocatalyst project and aims at studying the effect of this anaesthetic on a larger patient cohort.

A collaboration between a clinical team in the physical medicine and rehabilitation unit at Pitié-Salpêtrière Hospital and ICM LivingLab has led to the development of new and innovative post-stroke rehabilitation instruments including the BRO robot that can assist patients in their daily cognitive rehabilitation program.



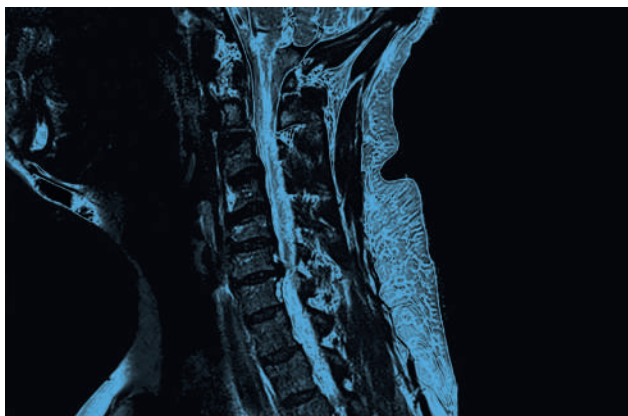
To listen to the Open Brain Bar podcast dedicated to post-stroke rehabilitation with 6 ICM and APHP experts, go to the ICM channel on soundcloud.com

LOOKING BACK ON THE BRAIN TO MARKET SUMMER SCHOOL DEDICATED TO POST-STROKE REHABILITATION

This year, ICM's Open Brain School held a unique 5 day training program in neuroscience and entrepreneurship. The content, in English, aims at developing skills and the necessary mindset to innovate in the field of healthcare and research.

This past September, over 36 students and young professionals with varied backgrounds (scientists, engineers, sales staff and designers) took part in the Brain to Market Summer School program focused on post-stroke rehabilitation. After two intensive training and workshop days, participants presented their project. This year, the winners presented a project based on an interactive wall.

Congratulations!



EARLY SPINAL CORD DAMAGE IN INDIVIDUALS AT-RISK FOR FTD/ALS

Fronto-temporal lobar degeneration (FTD) and amyotrophic lateral sclerosis (ALS) are two neurodegenerative illnesses that in some cases share a genetic cause, most frequently a mutation in gene *c9orf72*. PREVDEMALS is a study coordinated by Dr. Isabelle Le Ber at Pitié-Salpêtrière Hospital with a cohort of 80 asymptomatic individuals, all carriers of the *c9orf72* mutation and therefore at risk of developing FTD or ALS in the coming years. The study aims at detecting anomalies preceding symptom onset in these diseases. A collaborative study coordinated by Doctors Giorgia Quérin and Pierre-François Pradat from the Biomedical Imaging Laboratory at Sorbonne University, Pitié-Salpêtrière Hospital and ICM highlighted selective white matter atrophy from 40 years onwards in the corticospinal tract in the cervical spinal cord, the part of the spinal cord located in the cervical vertebrae, in these asymptomatic carriers of the mutation. 18 months after the first set of measurements, researchers also found diffusion anomalies in the same area, a consequence of the neurodegenerative process.

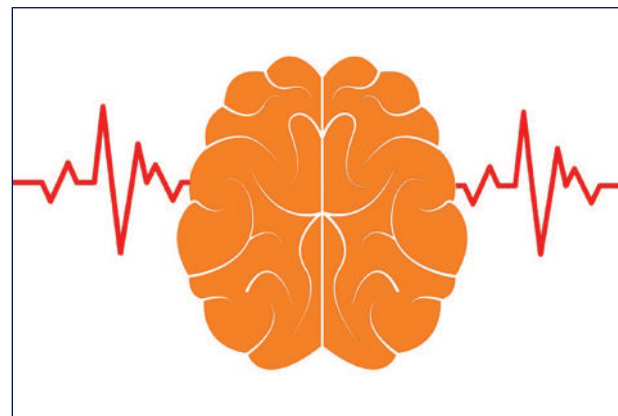
Additionally, these diffusion anomalies were greater in subjects with family history of ALS compared to FTD. Early brain damage before the age of 40 was found in a previous study conducted with the same cohort. This additional damage to the spinal cord, visible only after the age of 40, may suggest primary damage within the brain with diffusion towards subsequent spinal structures. These results provide important information on the pre-symptomatic phase of the disease and are an extra step towards developing early treatment. The long-term goal is to identify a treatment window and the best time to administer treatment on an individual and personalized level.



A NEW TREATMENT TARGET TO TREAT SPINOCEREBELLAR ATAXIA?

Spinocerebellar ataxia is a genetic and neurodegenerative disease of the cerebellum and brain stem that leads to large-scale motor deficits. The most frequent form of the disease is SCA3, also called Machado-Joseph disease. The disease affects 1 to 2 out of every 100,000 individuals; a protein named Ataxin-3 mutates and aggregates in neurons, leading to neural death and subsequent motor deficits.

The team led by Nathalie Cartier-Lacave at ICM found a metabolic imbalance of cholesterol and decrease in enzyme CYP46A1 in mice with SCA3. These preliminary results led researchers to test whether restoring enzyme expression could have beneficial effects. To do so, they administered a gene therapy vector with gene CYP46A1 and observed a decrease in neural degeneration specifically in Purkinje neurons in the cerebellum, improvements regarding motor deficits, and a decrease in Ataxin-3 aggregates. Autophagy, the process enabling the degradation and recycling of deformed or mutated proteins, does not function properly in the disease, which may in turn lead to Ataxin-3 aggregation. Researchers found that reinstating normal CYP46A1 levels helps restore autophagy, thereby decreasing toxic Ataxin-3 aggregates and alleviating disease symptoms. Interestingly, researchers also found that Ataxin-2 aggregates are more efficiently degraded and recycled with enzyme overexpression: this provides hope for future treatments as one single product may have an effect on several rare and severe diseases. A European program (Erare) is currently in place and coordinated by Inserm at ICM (N. Cartier, A. Durr) to confirm these results in other models of ataxia and to assess feasibility and tolerance of a potential medical application in patients affected by these illnesses.



PRECLINICAL DIAGNOSIS OF ALZHEIMER'S DISEASE USING ELECTROENCEPHALOGRAPHY

Diagnosing Alzheimer's Disease as early as possible is crucial in offering early treatment options; however, there currently is no simple diagnostic tool for Alzheimer's disease before symptom onset.

In a study coordinated by Sinead Gaubert, Federico Raimondo and Stéphane Epelbaum at ICM and Pitié-Salpêtrière Hospital, researchers compared electroencephalography recordings (EEG) from 318 subjects with a memory complaint but normal cognitive performance from the Insight-PreAD cohort. They found modifications of cerebral electrical activity in subjects with Alzheimer's lesions compared to those spared by the disease. EEG modifications were primarily found in anterior brain regions, especially in the frontal lobe, suggesting that compensation mechanisms may allow for stable intellectual and memory performance. Researchers highlighted the existence of a non-linear relationship between amyloid load severity and EEG recordings, with an increase in cerebral brain activity for an intermediate amyloid load and a slowing of EEG activity for a very high amyloid load. This suggests that initial compensation mechanisms are then surpassed when the amyloid load exceeds a certain threshold. This study is the first on a worldwide level to show electroencephalography modifications in preclinical Alzheimer's disease. Electroencephalography is non-invasive and inexpensive, and represents a very promising technique to identify subjects in the early phase of Alzheimer's disease. The next step will be developing a high-performance diagnostic tool that can be used in daily clinical practice.



APATHY: A COMMON YET LITTLE-KNOWN SYMPTOM IN NEUROLOGICAL AND PSYCHIATRIC ILLNESSES

Apathy is illustrated as a lack of motivation, of desire, of emotions, and a deficit in abilities allowing individuals to perform and initiate useful behaviour. It is the most commonly observed symptom in patients with Alzheimer's disease, Parkinson's disease, schizophrenia, and depression. Up until now, this symptom was poorly understood and subject to subjective assessment. Bénédicte BATRANCOURT (INSERM), researcher in the team led by Richard LEVY (AP-HP/Sorbonne University), coordinated the ECOCAPTURE project at ICM with financial support from MMH-Malakoff Médéric Humanis to measure the level and type of apathy in patients with fronto-temporal lobar degeneration (FTD). The study, conducted with 14 healthy subjects and 14 FTD patients, took place at the PRISME platform at ICM dedicated to studying human behaviour.

The methodology was the following: a scenario was implemented combining "waiting" periods and periods of activity in a waiting room where patients could read or enjoy a coffee. Patients in a situation resembling their daily life were observed, with video and motion detection recordings. Results show that patients with FTD display a deficit in exploring a new environment. This behaviour is illustrated by decreased activity and a longer period of time to explore the room, pick an activity such as reading a magazine, and maintaining the same activity compared to healthy subjects. For the first time, analysis of recordings paired with standard neuropsychological test results allowed researchers to achieve precise and objective quantification of apathy observed in patients. This new method for measurement is both simple and objective and provides new opportunities for studies correlating level of apathy with evolution of neurological and psychiatric diseases and those measuring the effects of various treatments on this symptom.

TAKING AN EXTRA STEP TO HELP THE BRAIN AND SPINE INSTITUTE GROW

The Heroes Race is both a sports and charity challenge that is filled with meaning. The 10th edition of the race held this past June 23rd in Paris was a success, with 14,100 € raised for ICM. Among these Heroes is Juliette Roussille who rounded up 12 fundraising loved ones for over 5,500€ raised for Pr. Alexandra Durr's team focused on "Fundamental and translational neurogenetics". This interview was our way of thanking her for her amazing commitment to the Institute.



How was the race on the morning of June 23rd?
The race is a fun, family-friendly, and supportive event. ICM had a booth where participants all met up and the heat wave didn't deter us! After the race, we had a picnic under the trees in the shade. Our goal was also to extract the disease from a hospital setting and gather somewhere else.

A word for our donors?
The work carried out at ICM is crucial for research as a whole. We need to provide financial support for it as well as talk about the breakthroughs around us. Thank you all for your involvement and support.

Thank you to all the race participants and donors. Thank you to the teams at ICM and especially to Astrid Crabouillet for setting up the Heroes Race this year. Thank you to Alexandra Durr and her team for their invaluable work.

Juliette, could you tell us about what motivated you to participate in the Heroes Race?

I was aware of the Heroes Race and how it works because I took part in it with an organisation in the past. I feel it is a good way of getting the word out, standing up for, and raising money for a cause during a fun event.

Why did you choose to support ICM?
There are many reasons to support ICM: the Institute focuses on all nervous system diseases and these affect many individuals. We all know someone with one of these diseases. My family is affected by Huntington's Disease. Participating in the Heroes Race for ICM was my way of helping research on an individual level.

How did you get your relatives to support this cause?
The race was a project we shared as a family and with my friends. Our loved ones were already very involved and informed when it comes to the disease, research around it, and ICM. We also worked on getting the word out about our fundraising, how the race works, and recent research breakthroughs to get as much support as we could around us and make this event as fun as possible.

●
If you wish to organize an event or raise money for ICM (concert, sporting event, birthday, etc.), please feel free to contact our Communication Department for more information: contact@icm-institute.org or +33(0)1 5727 4022
 ●

MEMOWAVE PROJECT: CALL FOR SUPPORT

Consolidating memory in patients with mild cognitive impairment

Despite its name, mild cognitive impairment is illustrated by memory, language, thought, and judgement impairment that is much more severe than what one would expect in healthy ageing. These disorders affect roughly 17% of individuals over 65 and are often an initial sign of more severe diseases such as Alzheimer's.

Sleep plays a key role in memory consolidation and, therefore, in preventing these disorders. Building on this idea, the Memowave project, developed by several teams at ICM in partnership with the sleep disorders unit at Pitié-Salpêtrière Hospital (AP-HP) and start-up Bioserenity, hopes to initiate one of the first clinical trials worldwide to assess efficacy of an in-ear device that would increase slow waves in the brain during sleep to improve memory consolidation in patients.



“With Memowave, we hope to offer patients and their loved ones a preventive instrument in a field where we currently have no available treatment.”
 Dr. Stéphane Epelbaum, neurologist at AP-HP, ICM researcher, and Memowave coordinator.



Memowave is a project led by Dr. Stéphane Epelbaum and Pr. Isabelle Arnulf. It was selected in the Neurocatalyst program, an ICM initiative to support clinical proofs of concept for innovative medical technology or drug repositioning.

Support Memowave through a donation today:

- By cheque payable to ICM
- Online on icm-institute.org/fr/projet-memowave
- By bank transfer or, for foreign residents, via TGE by contacting the Circle of Friends Office: cercle@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 to 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-authorized 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⁾: Beneficiary : INSTITUT DU CERVEAU ET DE LA MOELLE EPINIÈRE
⁽¹⁾You will receive the reference when the authorization is recorded
 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⁾ : ____ / ____ / 2019
 Location⁽²⁾ :

⁽²⁾ Required

Signature⁽²⁾

TURN YOUR TAXES INTO A POWERFUL TOOL TO SUPPORT ICM RESEARCHERS.

By making a donation to ICM before **December 31st 2019**, deduct:



66%

OF THE **AMOUNT** OF YOUR DONATION FROM YOUR **INCOME TAX**

FOR EXAMPLE

A DONATION OF

€10,000



WILL LEAD TO A DEDUCTION OF

TAXES
€-6 600



AND WILL ONLY COST YOU

€3 400



To make a tax-deductible donation, use the form below or make a donation online on our secure website at www.icm-institute.org
Thank you for your generous support!



Watch our video for everything you need to know about 2020 advance payments, available on our website: www.icm-institute.org



YOUR PERSONAL CONTACT:

Lucie Moutier

+33(0)1 5727 4032 - cercle@icm-institute.org



WITH YOU



I recently received an inheritance from my brother. He mentioned a few times that he wanted to donate to ICM, but he did not write a will. I would like to follow his wishes, how should I proceed?

You may bequeath all or a part of your inheritance to ICM.

For example, you may choose to bequeath real estate property and keep all other assets, or donate part of the inherited assets. **You will not pay any inheritance tax on bequests.** This type of donation is called "on inheritance" and must be made in the **6 months following the person's death.** Discuss it with your notary and contact us to organize the donation before the 6-month date has passed.

If you wish to speak to a staff member to learn more or receive our bequests, donation and life insurance information pamphlet, contact Carole Clément at +33(0)1 5727 4141 or carole.clement@icm-institute.org

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 FRANCE



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 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).

Your contact details

Mrs Mr Mr & Mrs

First name:

Surname:

Address:

.....

.....

Zip Code: [][][][][][]

City:

Email:

.....

Phone:

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 - 75644 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.

BSNL48GDP