

FEBRUARY 2025 - YOUR DONATIONS IN ACTION

THANK YOU FOR HELPING FIGHTING MULTIPLE SCLEROSIS



Dear Donor, Dear Friends of the Belgian Charcot Foundation,

Thanks to your constant support, we are reaching a new milestone in the fight against multiple sclerosis. In 2024, your generosity enabled seven Belgian cutting-edge research projects to be financed and contribute to significant progress in the understanding and treatment of this complex condition.

This year, we have the great pleasure to be able to support eight new projects. This was made possible by your donations and by exceptional sponsorships. This innovative research explores avenues in diverse yet essential areas, in particular:

- · the role of immune cells and lipids in the repair of the nervous system,
- inflammation regulation mechanisms,
- · advanced human models for the study of myelin,
- and new therapeutic avenues in connection with the Epstein-Barr virus and promising molecules.

These projects were rigorously selected by our scientific jury and showcase the dynamism and excellence of the researchers we support. Without your support, such work would not be possible.

We thank you for your trust and generosity, which enable us to make further progress towards a future in which MS will be better understood, treated, and – let us hope – overcome.

With all my gratitude and warmest regards,



Prof. Em. **Christian Sindic**PRESIDENT

FONDATION CHARCOT STICHTING

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A non-profit organisation

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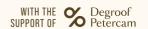
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PROGRESS IN THE AREA OF NEUROBIOLOGICAL PROCESSES

This year, the research funded by the Belgian Charcot Foundation targets the basic processes that underlie multiple sclerosis (MS). How do immune cells affect the repair or deterioration of the central nervous system? How can therapeutic targets be identified that convert such discoveries into actual treatments?

Such complex issues require innovative and ambitious research performed by committed academic teams. Your generosity has enabled the Charcot Foundation to finance **eight projects** with a total budget of €323,222, and explore promising avenues such as remyelination, immune regulation and the role of the Epstein-Barr virus in MS.

This year's eight projects comprise a total of 12 scientists, who will be joining the 14 researchers financed last year and whose two-year projects continue to be supported. This means that in 2025 we shall be financing a total of 26 talented researchers and supporting a dynamic of research and innovation.

Your support is essential: not only does it guarantee the continuity of this research, it also gives MS patients real hope. This year's two-year projects are presented in the following pages.

Jury of the Belgian Charcot Fund (2025)

Belgian Charcot Foundation

Prof. Dr **Christian Sindic** (President)
PROFESSOR EMERITUS OF NEUROLOGY
UCLOUVAIN

Scientific Committee of the Belgian Charcot Foundation

Dr Pierrette Seeldrayers
NEUROLOGIST, MS EXPERT

Prof. Dr **Alain Maertens de Noordhout** HEAD OF NEUROLOGY DEPARTMENT CHR CITADELLE, LIÈGE

Prof. Dr **Alex Michotte** HEAD OF NEUROLOGY CLINIC UZ BRUSSEL

Guest Experts

Prof. Dr **Gilles Edan** PROFESSOR EMERITUS OF NEUROLOGY

PROFESSOR EMERITUS OF NEUROLOGY CHU PONTCHAILLOU, RENNES (FRANCE)

Prof. Dr Sarah Laurent NEUROLOGIST, MS EXPERT CHU ST PIERRE, BRUSSELS



BECAUSE EVERY BREAKTHROUGH STARTS WITH YOU

Don't forget to provide us with your national number (found on the back of your ID card) by email at **privacy@fondation-charcot.org** or by phone at **02 426 49 30**



CHARCOT FUND 2025 LAUREATES



Prof. Bieke Broux & Prof. Inge Mertens

Mapping Immune Attacks in MS Brains



UHASSELT VITO



€ 50,000



2 YEARS

SUPPORT GIVEN BY THE FUND JEAN AND MARIE HENKENS-LECLOUX. MANAGED BY THE KING BAUDOUIN FOUNDATION

This project aims to uncover how immune cells behave in different regions of the brain in people with multiple sclerosis (MS). By studying the interaction between proteins and immune cells, the researchers hope to identify what triggers these cells to attack the brain. The findings could help develop new, more effective treatments to slow or stop the progression of MS, improving the lives of those affected.

Prof. Jennifer Vandooren

Understanding how immune cells both harm and heal in MS



KULEUVEN



€ 33,000



2 YEARS



In MS, immune cells called macrophages play a key role by breaking down myelin, the protective layer around nerves, while also helping with repair. Our research deals with specific enzymes these cells produce when they interact with myelin. These enzymes can both cause damage and healing. By understanding their role, we hope to uncover new insights and potential treatments for MS.

Prof. Jeroen Bogie & Prof. Werend Boesmans

Can a Tiny Molecule Help MS Recovery?



UHASSELT



€ 39.700



2 YEARS





In multiple sclerosis (MS), the body struggles to repair nerve damage over time. Researchers are studying miRNA146a, a small molecule that could help immune cells clear damage and support repair. This discovery might lead to new treatments, offering hope for better recovery in MS.

Prof. Bénédicte Dubois, Prof. Graciela Andrei & Dr Dries De Wit

Could a Common Virus Help Diagnose MS?



KULEUVEN



€ 41,000



1 YEAR

SUPPORT GIVEN BY THE FUND JEAN AND MARIE HENKENS-LECLOUX, MANAGED BY THE KING BAUDOUIN FOUNDATION

Scientists are exploring how the Epstein-Barr virus (EBV), linked to mononucleosis, might play a role in multiple sclerosis (MS). While EBV is necessary to develop MS, not everyone exposed to the virus gets the disease. This study investigates whether unique viral markers in the blood and spinal fluid of people with MS could improve diagnosis and treatment, offering new hope for better care.







Prof. Tim Vanmierlo, Prof. Antonio Luchicchi & Dr Melissa Schepers

Building Better Models to Study Myelin Repair in MS









UHASSELT Amsterdam umc

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€ 34,500



2 YEARS

This study aims to create an innovative human-based model to better understand how myelin is damaged and repaired in multiple sclerosis (MS). By closely mimicking the human nervous system, this model will help researchers study cell behavior and test potential treatments, paving the way for new therapies that can be applied more effectively in clinical practice.

Prof. Pietro Maggi

Targeting Aggressive Brain Lesions in MS: A New Approach



UCLOUVAIN



€ 46,872



2 YEARS



In multiple sclerosis (MS), some types of brain lesions are linked to more aggressive disease progression, even without relapses. This study looks at whether current MS treatments can effectively target these lesions. By using advanced MRI techniques, researchers aim to better understand these lesions and find ways to improve treatment strategies.

Prof. Nathalie Cools & Drs. Mats Van Delen

Harnessing Cell Particles to Combat MS



UANTWERPEN



€ 29,250



1 YEAR





This research focuses on tiny particles naturally released by cells that help control the immune system. These particles can reduce harmful inflammation, and researchers are studying how parts of the cell's energy source, the mitochondria, play a role in this process. The goal is to understand how these particles work in multiple sclerosis (MS) and explore new ways to treat the disease.

Dr Sanne Verberk, Prof. Jerome Hendriks & Prof. Gijs Kooij

How Lipids Could Hold a Key to MS Repair



UHASSELT Amsterdam umc



€ 49.500



2 YEARS

SUPPORT GIVEN BY THE FUND LÉON AND MIRIAM VELGE, MANAGED BY THE KING BAUDOUIN FOUNDATION

Progressive multiple sclerosis (MS) needs better treatments, as the central nervous system (CNS) struggles to repair itself. This research focuses on how immune cells regulate fats (lipids), which influence inflammation and repair. Using advanced techniques, scientists aim to guide these cells to support CNS repair, identifying new targets for improved MS therapies.



