





Any answer to a global challenge lies in science without borders.

Brian Lau Scientific Director of Paris Brain Institute



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Still today, the brain remains one of the greatest mysteries in modern medicine.

Despite decades of scientific and therapeutic progress, neurological and psychiatric diseases are the leading cause of disability and the second cause of mortality worldwide. They are a stark reminder of just how much still needs to be done.

It is urgent to take action today to train the generations of scientists and doctors who have been called on to take up this major challenge. At Paris Brain Institute, we prepare these talented individuals to help pave the way for a brighter future by giving them the means they need to become scientific leaders capable of devising and developing innovative diagnostic and curative solutions for millions of patients all around the world. Our founding values: scientific excellence, multidisciplinary collaboration, collective intelligence and daring.

Convinced that science must extend beyond borders to tackle any global challenge, Paris Brain Institute makes openness and international partnerships essential pillars of its work. In practical terms, this involves regularly issuing international calls for applications for the creation of new research teams, hosting foreign researchers wanting to collaborate or continue their work in France, and drawing on the rich profiles that make up our scientific community.

The International PhD program perfectly embodies this ambition. Supporting this programme as an act of generosity means contributing to the emergence of scientific and medical talent who will address the most complex questions in neuroscience and design innovative treatments eagerly awaited by both patients and their families.

Thank you in advance.

PhDprogram

Attracting young international talent to support innovation in neuroscience

The International PhD program is a programme of excellence that provides neuroscience students who have trained abroad with the opportunity to continue their doctoral studies at Paris Brain Institute. Every year, up to five merit scholarships are awarded after an application review process.



Attractive conditions in a stimulating environment

Committed to open and collaborative science, Paris Brain Institute gives top profiles the opportunity to develop their skills. Over a three-year period, every doctoral student benefits from competitive compensation, a settling-in grant and a research allowance. In addition to high-level teaching, they receive personalised support combining mentoring, targeted training and weekly meetings with internationally renowned scientists. All this takes place in a multidisciplinary setting conducive to the emergence of new ideas.

THE INTERNATIONAL PHD PROGRAM is in line with the French and European initiatives **Choose France for Science** and **Choose Europe**, which aim to make France and the European area more attractive to scientific talent.



Since 2023, 11 selected international PhD students have taken up the challenge.

- Kishalay Ghosh India
- Chen He China
- Esther Kozlowski France and United Kingdom
- Carlo Leto Netherlands
- Cibele Martins Pinho Brazil
- Eleni Ionna Moysiadou Sweden and Greece
- Marta Navarro Bernad Spain
- Mathias Nordbeck Germany
- Andrés Pordomingo Gonzales Spain
- Thai Moc Tran Germany
- Edisona Tsakani Greece



€500,000

still needs to be raised to ensure the sustainability of the International PhD program Initiated to build the future of neuroscientific research, the International PhD program has not yet been fully funded.

Your philanthropic commitment is essential for the emergence of a new generation of researchers who have been called on to provide millions of patients worldwide with new therapeutic solutions.



Contribute to the emergence of one of tomorrow's international scientific leaders

Donate €75,000 or more to support a year of doctoral studies for a student in Paris Brain Institute's International PhD program.

With a multi-year commitment, you can fully finance a merit scholarship and monitor its real-life impact by holding regular discussions with the student and their director.

For a list of thesis topics, contact the Circle of Friends Office.

Being a doctoral student at Paris Brain Institute 190
PhD projects in progress

25
nationalities

60% women

Average age of 27 years

Our international talents: focus

Impulse-control disorders





Thesis topic

Identifying a diagnostic marker
for impulse-control disorders

Under the guidance of Hilke Plassmann,
Thai Moc Tran is undertaking her research
in the "BEND: Belief and decisionmaking" team with the goal of exploring
the biological foundations of impulsivity.
Characterised by a tendency to choose
immediate rewards instead of delayed
gratification, impulsivity varies from
individual to individual and increases with
certain pathological conditions such as
obesity, addiction and certain psychiatric
disorders.

Multiple sclerosis





Mathias Nordbeck Germany

Thesis topic
Characterising cellular
and molecular players in the repair
of multiple sclerosis lesions

Under the guidance of Violetta Zujovic, Mathias Nordbeck is carrying out his research in the "MIND: Metabolism, Immunity and Neurodegeneration" team. His doctoral project aims to identify the causes of failure in the spontaneous repair, i.e. remyelination, of multiple sclerosis lesions in the progressive form of the disease. All the RNA produced by the various cell types, as well as their interactions within demyelinated brain regions, will be analysed using innovative mathematical algorithms.

OBJECTIVE

Use machine learning algorithms applied to functional MRI data to evaluate and validate the predictive power of a brain biomarker of impulsivity to develop personalised treatments.

OBJECTIVE

Decipher the temporal dynamics of the molecular and cellular factors that underlie remyelination failure in order to identify targets for remyelination therapies.

on four research projects

Brain tumours





Andrés Pordomingo Gonzalez Spain

Thesis topic
Understanding the origin
of tumour development

Under the guidance of Emmanuelle
Huillard, in the "NOVA: Neurovascular
interfaces in tumours and vascular
malformations of the brain" team, Andrés
Pordomingo Gonzalez is researching the
poorly understood cellular and molecular
mechanisms involved in the initiation
and development of low-grade gliomas.
These primary brain tumours are caused
by the proliferation of myelinating
oligodendrocytes with an IDH1 gene
mutation.

OBJECTIVE

Determine the consequences of the IDH1 gene mutation for oligodendrocyte function in 3D co-cultures called organoids mimicking the human brain.

Autism





Cibele Martins Pinho Brazil

Thesis topic
Identifying the cerebral
mechanisms responsible
for autism spectrum disorders

Under the supervision of Nelson Rebola, leader of the "CENSOR: Cellular mechanisms of sensory processing" team, Cibele Martins Pinho is seeking to determine the consequences for neuronal function of the mutations associated with autism spectrum disorders. The aims of the thesis project include testing the innovative assumption that the varying arrangements of synapses – areas where nerve signals are transmitted – determine the specific functions of a single neuron.

OBJECTIVE

Establish a connection between gene mutations, the spatial organisation of synapses and the alteration of neuronal function to identify new treatment options.



BRAIN DISEASES HAVE NO BORDERS. Neither do their solutions.

Let's work together to create a global community of researchers to take up the challenge.



YOUR CONTACT AT THE CIRCLE OF FRIENDS OFFICE

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This call for generosity is part of The Brain Challenge, Paris Brain Institute 2023-2028 capital campaign.

