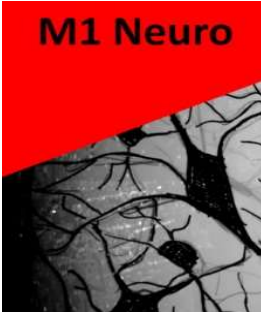




**M1 Neuro**



**M2 FCN**



**M2 SNA**



**1) General information about the Master's program**

**2) Master 1 Neurosciences : curriculum**

**3) Master 2 paths : curriculum and job openings**

**3a) Master 2 Fundamental and Clinical Neurosciences (FCN)**

**3b) Master 2 Sensory Neurosciences and Analysis (SNA)**

**4) How to apply ?**

**5) Your questions**

## A 2-year master program in English



Université Claude Bernard



Lyon 1

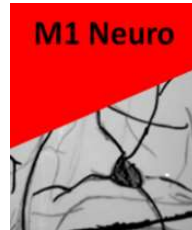
- ✓ This highly **interdisciplinary program** covers topics ranging from basic research in human and animal models to applied and translational Neurosciences.
- ✓ The Master allows students to specialize in their field of interest and includes extensive **practical activities** in laboratories.

# MASTER OF NEUROSCIENCES

University Claude Bernard Lyon 1

<https://masterneuro.univ-lyon1.fr>

## A 2-year master program in English



Université Claude Bernard



Lyon 1

- ✓ The training is anchored in a rich research environment (about 700 scientists/researchers working in **4 large research institutes** in Neurosciences)
- ✓ The program encourages **international mobility**.

### Neurograduate program (UCBL – ANR)

- o Exchange fellowships (internships abroad)
- o Individual mentoring program
- o Project-based training on research platforms (state of the art techniques)

<https://neurograduate.univ-lyon1.fr>



## A dense laboratory network in Neuroscience in Lyon



Internship abroad are also possible and encouraged

### Stem Cell and Brain Research Institute

<http://www.sbri.fr>



### Lyon Neuroscience Research Center

<http://cnrl.univ-lyon1.fr>



### NeuroMyoGène Institutue

<http://www.inmg.fr>



### Cognitive Sciences Institute Marc Jeannerod

<http://www.isc.cnrs.fr>



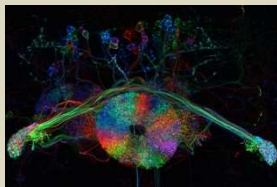


## A dense laboratory network in Neuroscience in Lyon

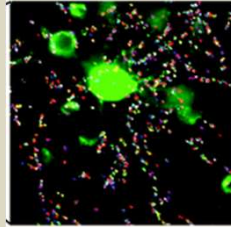
Research from cellular and molecular scale to clinical applications

Multiple methods to study the brain structure and function

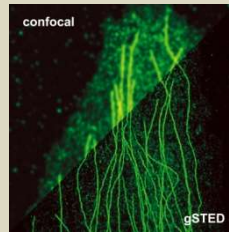
### Live or high resolution microscopy



Bi-photon



Quantum dot



STED

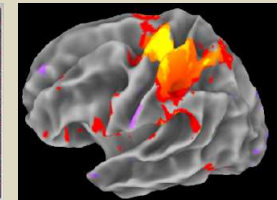
### Brain imaging in primates



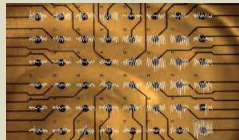
Structural MRI



EEG



fMRI



Multi-electrodes



Optogenetics



Behavior

### Electrophysiology in behaving animals



Rehabilitation



Brain-machine interface

### Applications



## Studying in Lyon

- ✓ Lyon 1 university is one of the largest universities in France ( ~47000 students) in the fields of science and technology, health and sport.
- ✓ The Rhône-Alpes area is an extremely dynamic economic and academic environment (chemical and environment, digital and biotech domains).
- ✓ 2h train to Paris, 2h drive to the French Alps and 3h drive to the Mediterranean sea !!

# MASTER OF NEUROSCIENCES

University Claude Bernard Lyon 1

7

<https://masterneuro.univ-lyon1.fr>

## A 2-year master program

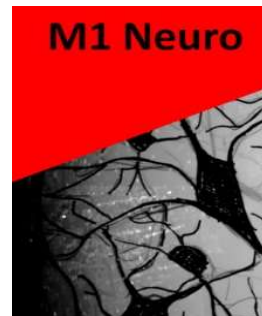
Université Claude Bernard  Lyon 1

<http://offre-de-formations.univ-lyon1.fr/mention-819/neurosciences.html>



Since 2022-2023

36 students



C. Amat

M. Richard

I. Cristofori

+ Engineers, psychologists...

+ Medical students,  
engineers...



**Fundamental  
and Clinical  
Neurosciences**

36 students



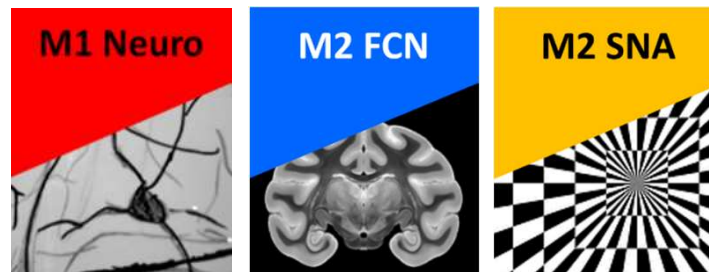
**Sensory  
Neurosciences  
and Analysis**

12 students

Possible work-study training  
called « alternance »



## Funding opportunities for internships abroad



### Support from UCBL

<https://etu.univ-lyon1.fr/etudes/etudier-a-letranger>

### Mobility fellowships from UFR Biosciences

<https://ufr-biosciences.univ-lyon1.fr/vie-etudiante/infos-pratiques>

### Mobility fellowships from Région Auvergne-Rhône-Alpes

<https://www.auvergnerhonealpes.fr/aides/me-former-letranger-avec-la-bourse-region-mobilite-internationale-etudiants>

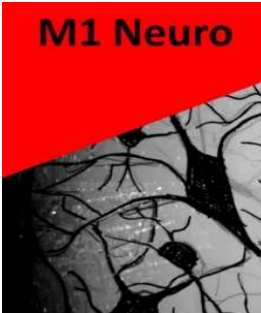
### Mobility fellowships from G+ Neurograduate

<https://neurograduate.univ-lyon1.fr/opportunities/>





**M1 Neuro**



**M2 FCN**



**M2 SNA**



**1) General information about the Master's program**

**2) Master 1 Neurosciences : curriculum**

**3) Master 2 paths : curriculum and job openings**

**3a) Master 2 Fundamental and Clinical Neurosciences (FCN)**

**3b) Master 2 Sensory Neurosciences and Analysis (SNA)**

**4) How to apply ?**

**5) Your questions**

M1 Neuro

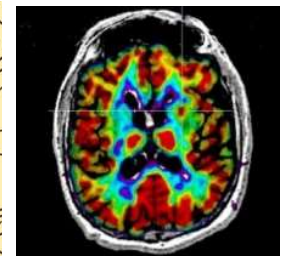
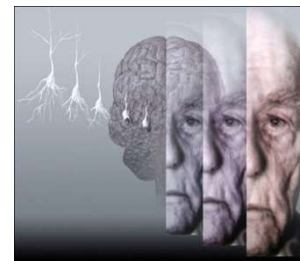
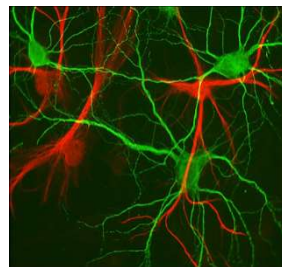
Université Claude Bernard  Lyon 1

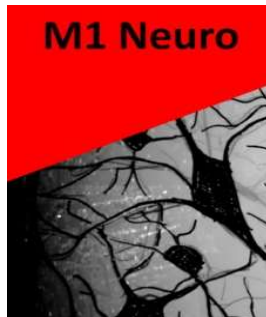
**Semester 1 30 ECTS**

**Semester 2 30 ECTS**

- ✓ Disciplinary Courses (Cellular Neuroscience, Integrative Neuroscience, Cognitive Neuroscience, Clinical Neuroscience)
- ✓ Scientific tools (Methodology, Statistics, Bibliography, Communication, Internship)
- ✓ Transversal skills (English, Insertion into a professional environment)

**Semester 2 : Optional disciplinary teaching  
units help you choose your M2 path**





## First Semester

### DISCIPLINARY COURSES

Properties of  
Neuronal cells  
**(Neuron)**  
6 ECTS

Behavioral  
Neurosciences  
**(Behavior)**  
6 ECTS

Cognitive  
Neurosciences and  
Neuroimaging  
**(NeuroCo)**  
6 ECTS

### SCIENTIFIC TOOLS

Methodology &  
Statistics  
**(Methodex)**  
6 ECTS

Techniques for  
empirical research  
**(TechnEx)**  
6 ECTS

## Second Semester

### DISCIPLINARY COURSES

Clinical Neurosciences  
**(Clinical)**  
6 ECTS

Physiology of neural networks  
**(Networks)**  
6 ECTS

### SCIENTIFIC TOOLS

**English**  
3 ECTS

Professional skills  
**(ProSkills)**  
3 ECTS

**Neurosciences internship**  
6 ECTS

7 weeks

### OPTIONAL UNITS

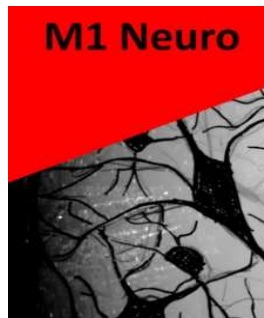
Block 1

- Sensory Measures **(Sensory)**
- Neural trace of memory **(Trace)**
- Computational Neurosciences  
**(NeuroComp intro)**

Block 2

- Development, Disease and Regeneration  
**(DDR)**
- Neuropsychologie **(Neuropsych)**
- Immunité

2 units from block 1 or 1 unit in each block



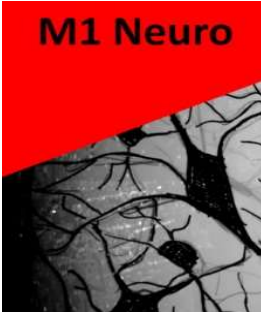
Questions so far ?







**M1 Neuro**



**M2 FCN**



**M2 SNA**



**1) General information about the Master's program**

**2) Master 1 Neurosciences : curriculum**

**3) Master 2 paths : curriculum and job openings**

**3a) Master 2 Fundamental and Clinical Neurosciences (FCN)**

**3b) Master 2 Sensory Neurosciences and Analysis (SNA)**

**4) How to apply ?**

**5) Your questions**

## Objectives & job openings for each path

Université Claude Bernard  Lyon 1



### M2 Fundamental and Clinical Neurosciences

36 students



Researcher (after a PhD)  
Engineer...



### M2 Sensory Neurosciences and Analysis

12 students

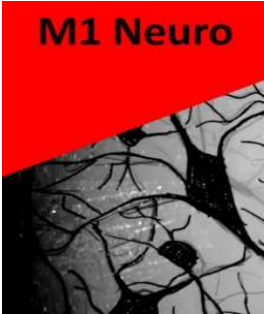


Project manager in  
Sensory Analysis

Possible work-study training  
called « alternance »



**M1 Neuro**



**M2 FCN**



**M2 SNA**



**1) General information about the Master program**

**2) Master 1 Neurosciences : curriculum**

**3) Master 2 paths : curriculum and job openings**

**3a) Master 2 Fundamental and Clinical Neurosciences (FCN)**

**3b) Master 2 Sensory Neurosciences and Analysis (SNA)**

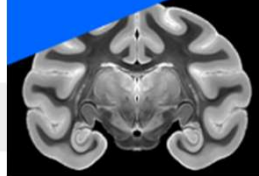
**4) How to apply ?**

**5) Your questions**

## M2 Fundamental & Clinical Neurosciences

Université Claude Bernard  Lyon 1

M2 FCN



### First Semester

#### DISCIPLINARY COURSES

Neuroconferences  
(**NeuroConf**)  
6 ECTS

#### SCIENTIFIC TOOLS

Statistics  
(**Stats**)  
3 ECTS

Project Management  
(**Project**)  
6 ECTS

English  
3 ECTS

#### OPTIONAL UNITS

12 ECTS

Neural Basis of Cognition  
(**Cognition**)  
6 ECTS

Neuroimmunology  
(**A2I**)  
3 ECTS

Molecular and Cellular  
Neurosciences  
(**Neurobiology**)  
6 ECTS

Advanced Clinical  
Neurosciences  
(**Advanced Clinical**)  
3 ECTS

Computational  
Neurosciences  
(**Neuro Comp**)  
6 ECTS

### Second Semester

Full Time Neurosciences **Laboratory Internship**  
30 ECTS





## M2 Fundamental & Clinical Neurosciences

Université Claude Bernard  Lyon 1

### Selected topics covered in fundamental, clinical and applied Neurosciences

CONFERENCES with focus made on hot topics in Neurosciences research and new methodologies.

#### Neuroconferences *e.g. topics since 2017*

- Neurobiology of depression
- Cellular Basis of circadian rhythms
- Neural Basis of social interactions
- Neuroimaging and brain stimulations applied to psychiatric pathologies
- Oscillations and Brain rhythms
- Language in the sensory motor brain
- Learning, memory consolidation and (local) sleep
- Naturalistic neurosciences

.....

#### OPTIONS for specialization

##### **Molecular and Cellular Neurosciences:**

Synaptic plasticity ; Brain development ; Glia; Brain repair

##### **Neural Basis of Cognition :**

Perception, Action, Plasticity, Attention, Social Cognition

##### **Advanced Clinical Neurosciences:**

Neurological and psychiatric diseases, interventions

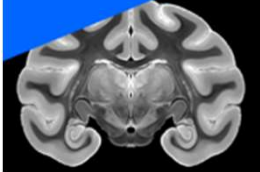
##### **Computational Neurosciences :**

Modeling, machine learning, artificial intelligence

##### **Neuro-immunology :**

Autoimmunity, Infection, Inflammation

## M2 FCN



## M2 Fundamental & Clinical Neurosciences

Université Claude Bernard



Lyon 1

### Job opportunities after the M2 FCN

#### 1) **PhD program** >70% since 2018

- PhD program « Neurosciences et Cognition » in Lyon:

<http://nsco.universite-lyon.fr>

- other PhD programs worldwide (USA, Canada, England...)

#### 2) **Additional training for dual skills** =>

- Administration, management, business, big data... => mixed positions in private companies
- Research legislation => Clinical Research Coordinator

#### 3) **Other opportunities**, such as :

- R&D in private companies
- Research engineers in academia
- Scientific publishing, editing, writing ...

For more ex (in French), see

<https://www.univ-lyon1.fr/universite/organisation/observatoire-de-la-vie-etudiante#.YinVRnrMI2w>

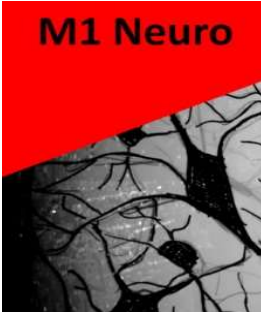


Questions so far ?





**M1 Neuro**



**M2 FCN**



**M2 SNA**



**1) General information about the Master's program**

**2) Master 1 Neurosciences : curriculum**

**3) Master 2 paths : curriculum and job openings**

**3a) Master 2 Fundamental and Clinical Neurosciences (FCN)**

**3b) Master 2 Sensory Neurosciences and Analysis (SNA)**

**4) How to apply ?**

**5) Your questions**



# MASTER OF NEUROSCIENCES

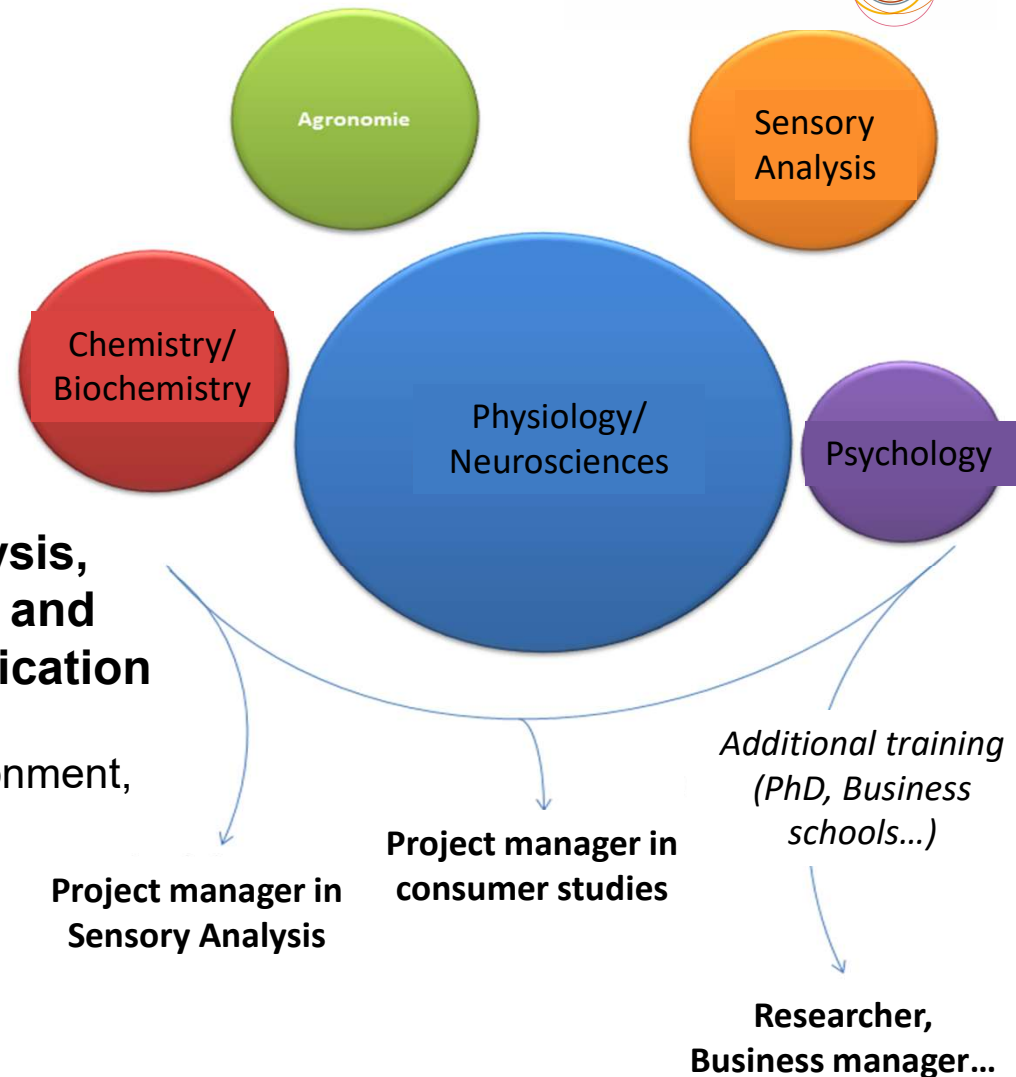
University Claude Bernard Lyon 1

<https://masterneuro.univ-lyon1.fr>



## M2 Sensory Neurosciences & Analysis

Université Claude Bernard  Lyon 1



### Objective :

**To train specialists in Sensory Analysis, able to use the Neurosciences tools and knowledge in different fields of application**

(food, cosmetics, perfumes, clothing, environment, car, video games...).

M2 SNA

## M2 Sensory Neurosciences & Analysis



### First Semester

#### DISCIPLINARY COURSES

Psychophysiology of perception  
**(PsychoPhy)**  
6 ECTS

Sensory Analysis and consumer  
studies  
**(Sensory Analysis)**  
6 ECTS

Business Applications  
**(BusinessApp)**  
3 ECTS

Data Processing  
**(Data)**  
3 ECTS

#### SCIENTIFIC TOOLS

Statistics  
**(Stats)**  
3 ECTS

Project Management  
**(Project)**  
6 ECTS

English  
3 ECTS

### OPEN to work-study training

Teaching is project-based  
and involves professionals  
from the industry.

### Second Semester

Full Time **Professional Internship**  
30 ECTS



## M2 Sensory Neurosciences & Analysis

Université Claude Bernard  Lyon 1

### Job openings

Immediate professional insertion : 80-100%  
PhD : 0-10%

For more details (in French), see

<https://www.univ-lyon1.fr/universite/organisation/observatoire-de-la-vie-etudiante#.YinVRnrMI2w>

✓ **Jobs:** Project manager in R&D departments (sensory design; sensory impact of manufactured products on consumers)



<https://www.linkedin.com/groups/8571955/>

✓ **Application fields:**

Cosmetic, perfumes, car industry, clothing, food, medical devices, video game...).

✓ **PhD opportunities,** often in collaboration with an industry (ex. CIFRE contract in France).

✓ **Complementary training programs:** Business, management or marketing schools, big data

# MASTER OF NEUROSCIENCES

University Claude Bernard Lyon 1

24

<https://masterneuro.univ-lyon1.fr>

M2 SNA

## M2 Sensory Neurosciences & Analysis

Université Claude Bernard  Lyon 1

Ex of companies who hosted interns



**LVMH**  
MOËT HENNESSY • LOUIS VUITTON



Techni'Sens  
Quanti • Quali • Senso

**eurosyn**  
consumer science

**SANOFI**

**my Brain**  
Technologies

**IFV**  
INSTITUT FRANÇAIS  
DE LA VIGNE ET DU VIN

**MANE**

**soup' idéale**

**PEUGEOT**

**Johnson & Johnson**

**Givaudan**

**Valeo**

**essilor**

**IFF**  
International Flavors & Fragrances

**CHANEL**

**NUTRICIA**  
Advanced Medical Nutrition

**DANONE NUTRICIA**  
Early Life Nutrition

**symrise**  
always inspiring more...

**L'OCCITANE**  
EN PROVENCE

**LABORATOIRES CLARINS**





Questions so far ?





- 1) General information about the Master's program
- 2) Master 1 Neurosciences : curriculum
- 3) Master 2 paths : curriculum and job openings
  - 3a) Master 2 Fundamental and Clinical Neurosciences (FCN)
  - 3b) Master 2 Sensory Neurosciences and Analysis (SNA)
- 4) How to apply ?
- 5) Your questions



## General Application rules

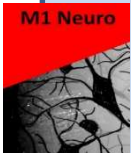


Application process depends on your country of origin and your current administrative situation

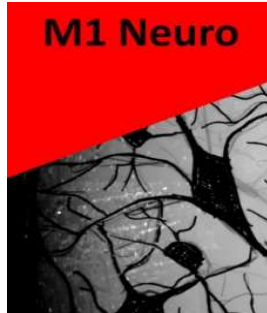
French citizen ➡ <https://www.monmaster.gouv.fr>

Other citizen

- European Union ➡ <https://www.monmaster.gouv.fr>
- 67 countries listed on EEF procedure ➡ <https://www.campusfrance.org>  
*EEF = Etudes en France*
- Other countries not listed on EEF ➡ <https://www.monmaster.gouv.fr>



These general rules may change if you are currently residing in France, please contact the Sclarité UFR Biosciences or International Students office to enquire about your specific situation. In any case, you are responsible for obtaining a visa if required to study in France.



## Application for Master 1st year

- ✓ **EEF procedure** now closed (usually opens in Fall of year N-1)
- ✓ **MonMaster procedure** : <https://www.monmaster.gouv.fr>

### Calendar

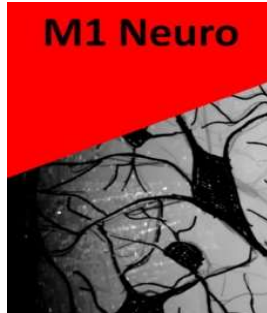


- Application procedure opening: **26<sup>th</sup> February 2024**
- Application procedure closing: **24<sup>th</sup> March 2024**
- Results publication: **4<sup>th</sup> June 2024**
- Confirm your acceptance on MonMaster: **quickly** (see instructions on MonMaster)
- From June 25<sup>th</sup> : complementary phase

Note 1 : A detailed instruction document is available in English on <https://masterneuro.univ-lyon1.fr>

Note 2 : Questions related to the administrative procedure should be addressed to [candidatures.biosciences@univ-lyon1.fr](mailto:candidatures.biosciences@univ-lyon1.fr)





## Application for Master 1st year

Université Claude Bernard



### Who can apply?

Students having a **deep interest in Neurosciences** and

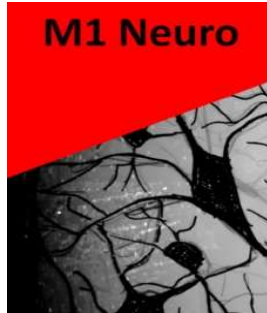
- ✓ Holding a **Bachelor of Sciences** in Life Sciences or scientific disciplines related to Neurosciences (Cognitive Sciences, Mathematics / Informatics / Physics applied to Biology...) including

- ☐ a minimum of 12 ECTS or equivalent in Neurosciences and/or Cognitive Sciences

**AND**

- ☐ a minimum of 12 ECTS or equivalent in Physiology, Biology and/or Mathematics / Informatics / Physics applied to Biology...

- ✓ Holding a B2 level in **English**
- ✓ Showing **scientific skills** (scientific questioning and reasoning, ability to synthesize, to communicate...)



## Application for Master 1st year

### Selection criteria

Université Claude Bernard  Lyon 1

**Be careful, specific documents  
asked by Master Neuro  
to be deposited on  
[monmaster.gouv.fr](https://monmaster.gouv.fr)**



1. Academic results
  - ✓ *Evaluated on your grade certificates*
2. Acquired scientific and methodological knowledge and practical skills
  - ✓ *Grades of your previous project defense and written reports*
  - ✓ *A personal statement summarizing a scientific project that you developed during a course or an internship*
3. Motivation & personal project (being aware of the training program, being able to define your expectations and the adequacy of the training program with your professional project)
  - ✓ *CV, cover letter, support letter(s) from previous teachers or internship supervisor*



## Application for Master 2nd year

Université Claude Bernard  Lyon 1

- ✓ **EEF procedure closed** (open Fall of year N-1)
- ✓ **eCandidat procedure** : <https://ecandidat.univ-lyon1.fr/>

Select : Département de Biosciences / Master LMD /  
M2 Neurosciences – prcs Fundamental and Clinical Neurosciences  
or M2 Neurosciences – prcs Sensory Neurosciences and Analysis

### Calendar



- Application procedure opening : **6<sup>th</sup> May 2024**
- Application procedure closing : **13<sup>th</sup> June 2024**
- Results publication : **5<sup>th</sup> July 2024**
- Confirm you acceptance on eCandidat **before 12<sup>th</sup> July 2024**
- From mid-July : calling on complementary list

Note 1 : Priority is given to students holding a M1 Neurosciences from UCB Lyon1 (French law)

Note 2 : A detailed instruction document is available in English on eCandidat

## Application for Master 2nd year

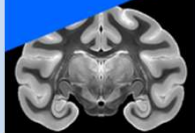
Université Claude Bernard



### Who can apply?

- ✓ Students holding a **1st year Master of Sciences** in Neurosciences or scientific disciplines related to Neurosciences (Cognitive Sciences, Mathematics / Informatics /Physics applied to Biology...).
- ✓ Students with a B2 level in **English**
- ✓ Students with **scientific skills** (scientific questioning, scientific reasoning, capacity to synthesize, to communicate...)

#### M2 FCN



- ✓ M2 FCN is also open to medical and engineer students
- ✓ Students with a deep interest for **Research in Neurosciences**

#### M2 SNA



- ✓ SNA is open to engineer students
- ✓ Students with a deep interest for **applied neurosciences in the field of sensory analysis and consumer studies in non academic organizations**





## Application for Master 2nd year

### Selection criteria

1. Academic results
2. Acquired scientific and methodological knowledge and practical skills
3. Motivation & personal project (being aware of the training program, being able to define your expectations and the adequacy of the training program with your professional project)



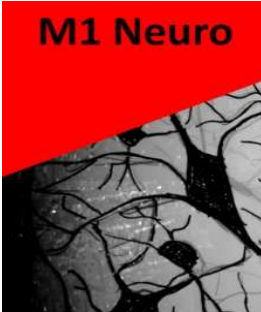
- ✓ Letter of acceptance from a qualified research lab (5-6 months internship)



- ✓ Interview of short-listed applicants (June 20<sup>th</sup>-29<sup>th</sup>)



**M1 Neuro**



**M2 FCN**



**M2 SNA**



**1) General information about the Master's program**

**2) Master 1 Neurosciences : curriculum**

**3) Master 2 paths : curriculum and job openings**

**3a) Master 2 Fundamental and Clinical Neurosciences (FCN)**

**3b) Master 2 Sensory Neurosciences and Analysis (SNA)**

**4) How to apply ?**

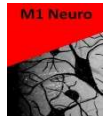
**5) Your questions**

## Contacts :

### Master Neurosciences (coordinator) :

Corine Amat : [corine.amat@univ-lyon1.fr](mailto:corine.amat@univ-lyon1.fr)

#### M1 Neurosciences



Corine Amat : [corine.amat@univ-lyon1.fr](mailto:corine.amat@univ-lyon1.fr)

#### M2 Fundamental & Clinical Neurosciences (FCN)



Marion Richard: [marion.richard@univ-lyon1.fr](mailto:marion.richard@univ-lyon1.fr)

#### M2 Sensory Neurosciences & Analysis (SNA)



Irene Cristofori : [irene.cristofori@univ-lyon1.fr](mailto:irene.cristofori@univ-lyon1.fr)

### + for administrative questions

Scolarité UFR Biosciences  
[candidatures.biosciences@univ-lyon1.fr](mailto:candidatures.biosciences@univ-lyon1.fr)

International Relations  
Department of UCB Lyon 1

<https://www.univ-lyon1.fr/en/education>

G<sup>+</sup> Neuro

<https://neurograduate.univ-lyon1.fr>

Emiliano Macaluso [emiliano.macaluso@univ-lyon1.fr](mailto:emiliano.macaluso@univ-lyon1.fr)

