

- 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



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

MASTER OF NEUROSCIENCES

University Claude Bernard Lyon 1

3

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

A dense laboratory network in Neurosciences in Lyon



Internship abroad are also possible and encouraged

Stem Cell and Brain Research Institute

<http://www.sbri.fr>



Lyon Neuroscience Research Center

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



NeuroMyoGène Institut

<http://www.inmg.fr>



Cognitive Sciences Institute Marc Jeannerod

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



A dense laboratory network in Neurosciences in Lyon

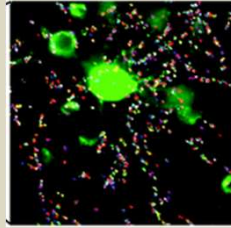
Research from cellular and molecular scale to clinical applications

Multiple methods to study the brain structure and function

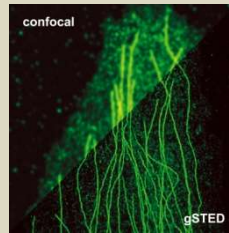
Live or high resolution microscopy



Bi-photon



Quantum dot



STED

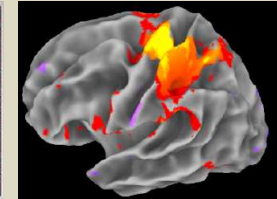
Brain imaging in primates



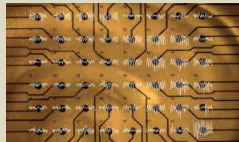
Structural MRI



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).

MASTER OF NEUROSCIENCES

University Claude Bernard Lyon 1

6

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

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

Université Claude Bernard  Lyon 1

HOME

PATHS ▾

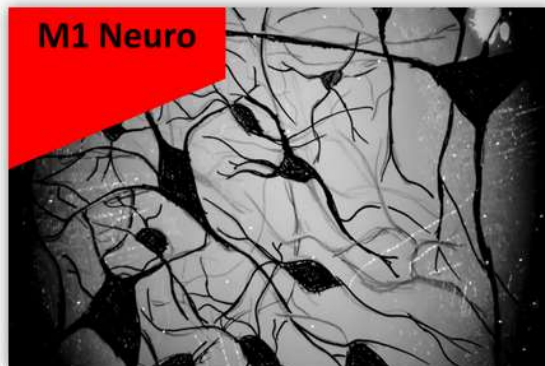
ADMISSION

INTERNATIONAL

LABS

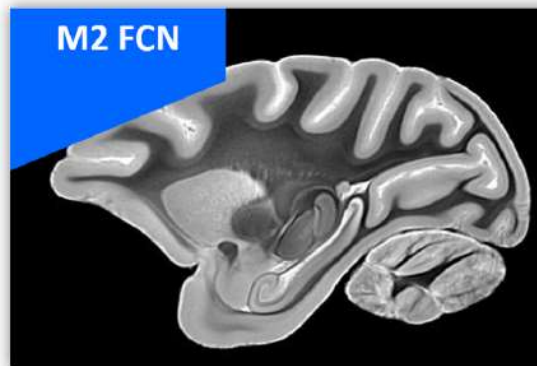
CONTACTS

M1 Neurosciences



A common first year to provide a strong Neuroscience background to all the students

M2 Fundamental and Clinical Neurosciences



A research-oriented path with emphasis on advanced methods in Neuroscience

M2 Sensory Neurosciences and Analysis



Neurosciences knowledge and tools applied to sensory analysis

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

MASTER OF NEUROSCIENCES

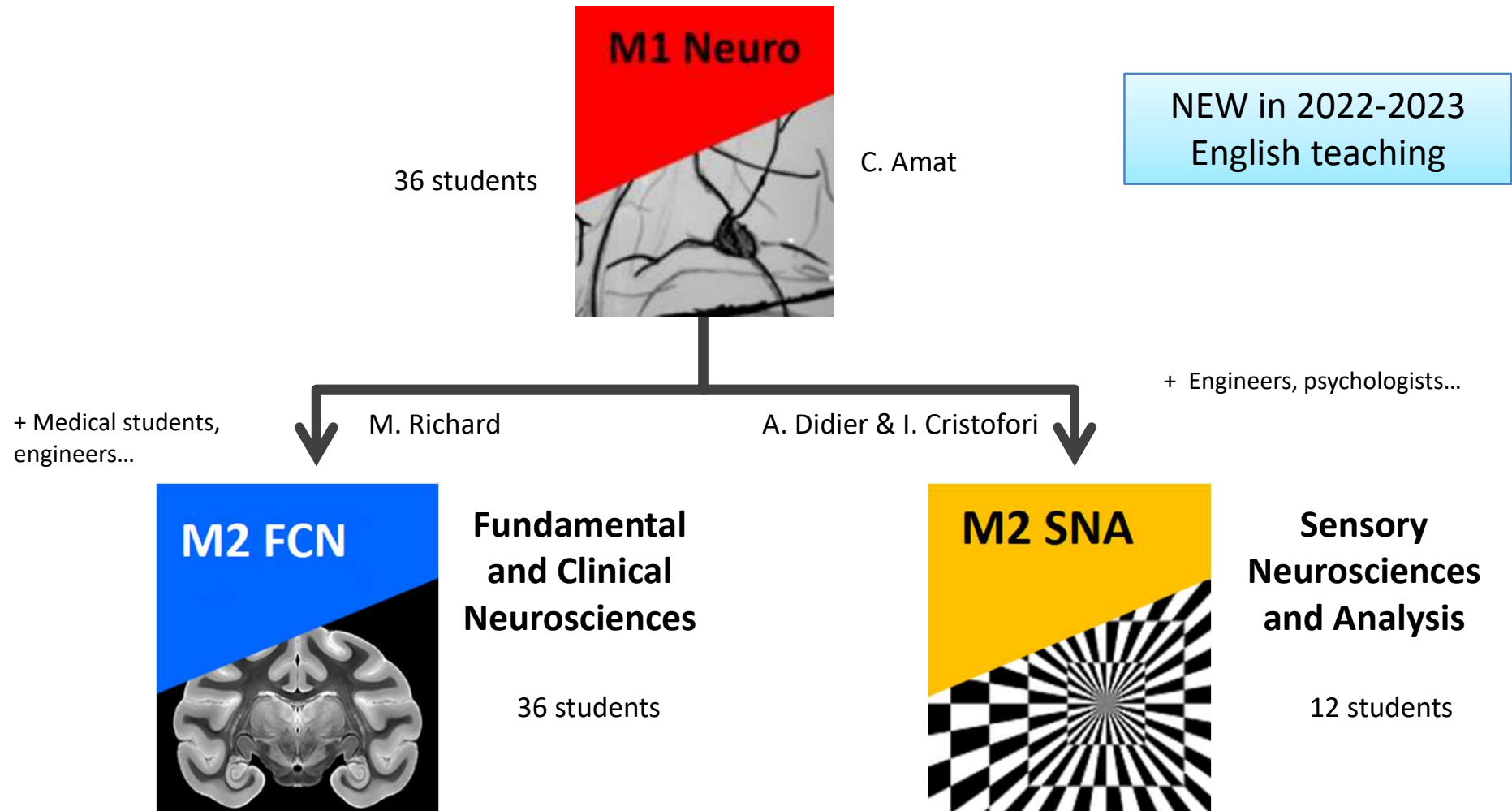
University Claude Bernard Lyon 1

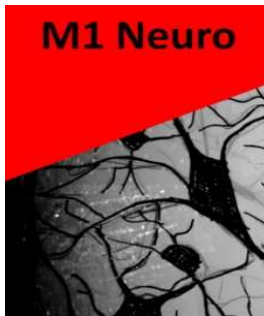
7

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

A 2-year master program

Université Claude Bernard  Lyon 1





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

9

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

M1 Neuro

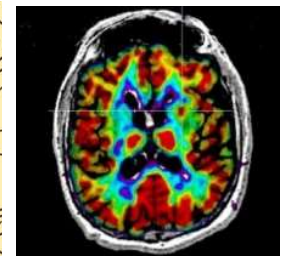
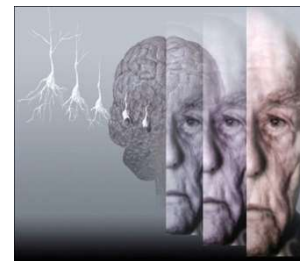
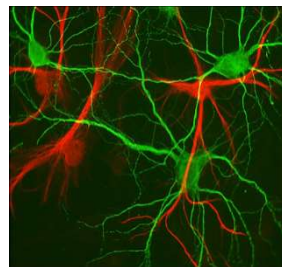
Université Claude Bernard  Lyon 1

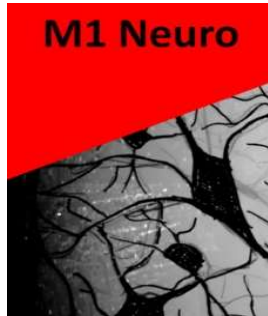
Semester 1 30 ECTS

Semester 2 30 ECTS

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

**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

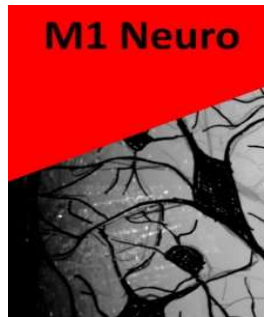
Block 1

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

Block 2

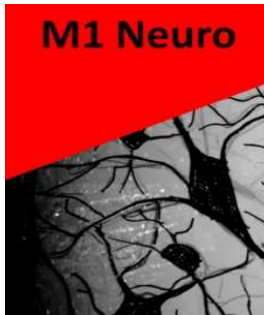
- Development, Disease and Regeneration **(DDR)**
- Neuropsychologie **(Neuropsych)**
- **Immunité**

2 units from block 1 or 1 unit in each block



Questions so far ?





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 FCN

**M2 Fundamental and
Clinical Neurosciences**

36 students



Researcher (after a PhD)
Engineer...



M2 SNA

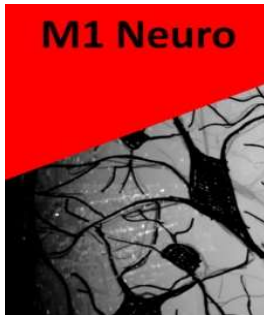
**M2 Sensory Neurosciences
and Analysis**

12 students



Project manager in
Sensory Analysis

Possible work-study training
called « alternance »



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

MASTER OF NEUROSCIENCES

University Claude Bernard Lyon 1

15

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

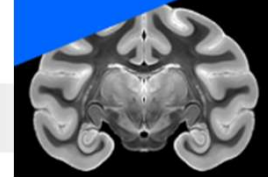
M2 Fundamental & Clinical Neurosciences

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

Molecular and Cellular
Neurosciences
(Neurobiology)
6 ECTS

Computational
Neurosciences
(Neuro Comp)
6 ECTS

Neuroimmunology
(A2I)
3 ECTS

Advanced Clinical
Neurosciences
(Advanced Clinical)
3 ECTS

Second Semester

Full Time Neurosciences **Laboratory Internship**
30 ECTS

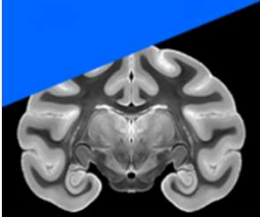
M2 Fundamental & Clinical Neurosciences

Université Claude Bernard



Lyon 1

M2 FCN



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*

- Cellular Basis of circadian rhythms
- Neural Basis of social interactions
- Neuroimaging and brain stimulations applied to psychiatric pathologies
- Oscillations and Brain rhythms
- Changing scales in Neural Stem Cells research
- Pathophysiology of Parkinson's disease
- Language in the sensory motor brain
- Learning, memory consolidation and (local) sleep

OPTIONS for specialization

Molecular and Cellular Neurosciences:

Synaptic plasticity ; Brain development ; Brain repair

Neural Basis of Cognition :

Perception, Action, Plasticity, Attention, Social Cognition

Advanced Clinical Neurosciences:

Neurological and psychiatric diseases, interventions

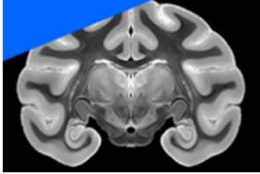
Computational Neurosciences :

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

3) Other opportunities, such as :

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

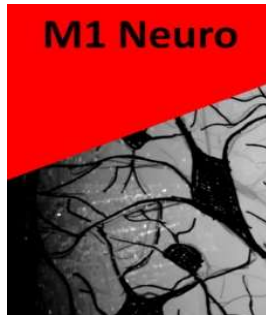
For more ex (in French), see

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



Questions so far ?

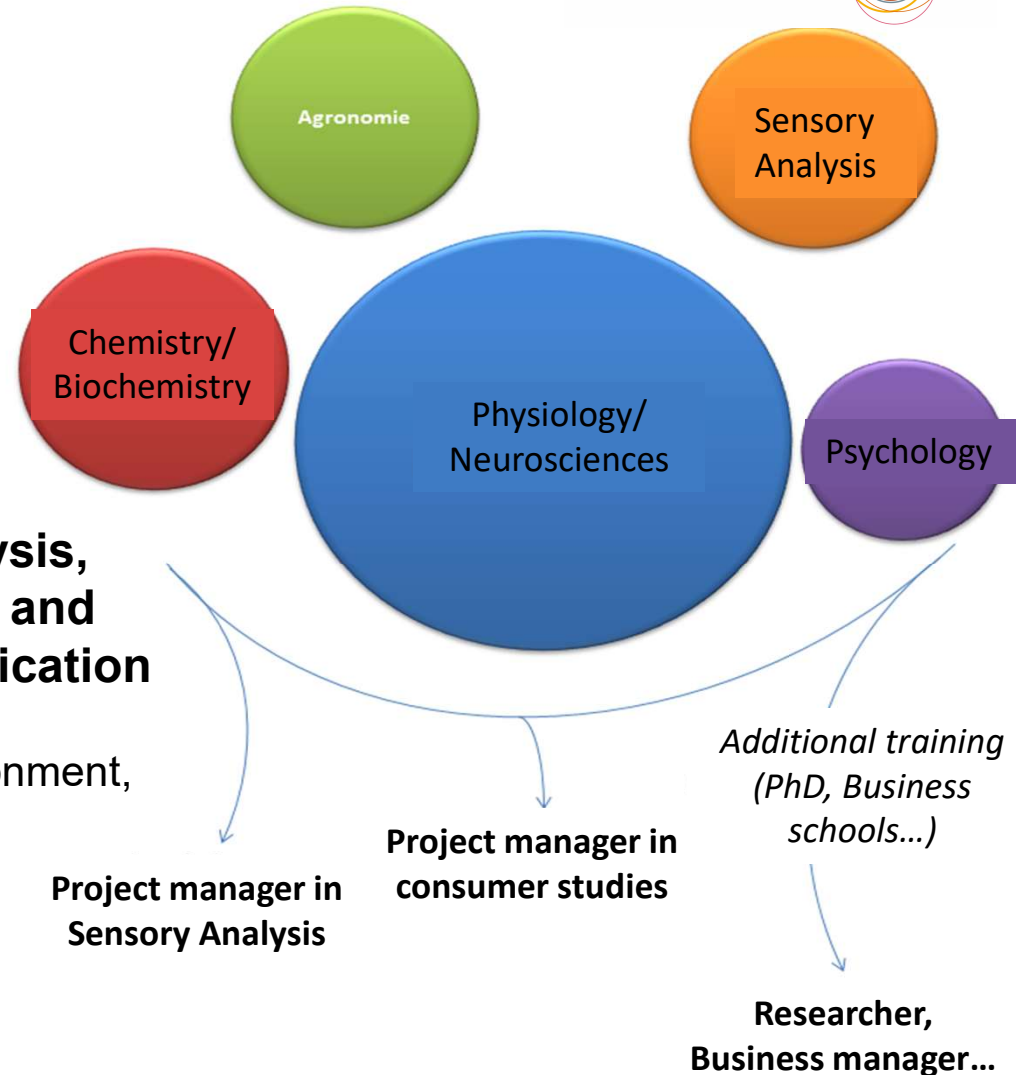




- 1) General information about the Master's program
- 2) Master 1 Neurosciences : curriculum
- 3) Master 2 paths : curriculum and job openings
 - 3a) Master 2 Fundamental and Clinical Neurosciences (FCN)
 - 3b) Master 2 Sensory Neurosciences and Analysis (SNA)
- 4) How to apply ?
- 5) Your questions



M2 Sensory Neurosciences & Analysis



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 Sensory Neurosciences & Analysis

OPEN to work-study training

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

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

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)

✓ **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



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



M2 Sensory Neurosciences & Analysis

Ex of companies who hosted interns

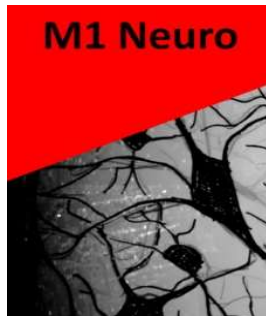
Université Claude Bernard  Lyon 1





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



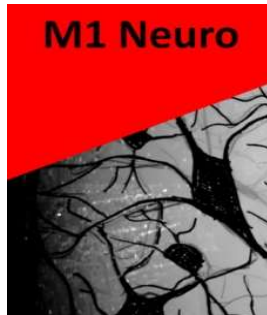
Application process depends on your country of origin and your current administrative situation

French citizen → <https://ecandidat.univ-lyon1.fr/>

Other citizen

- European Union → <https://ecandidat.univ-lyon1.fr/>
(+ Switzerland, Norway, Island, Liechtenstein)
- 65 countries listed on EEF procedure → <https://www.campusfrance.org>
EEF = Etudes en France
- Other countries not listed on EEF → <https://ecandidat.univ-lyon1.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)
- ✓ **eCandidat procedure** : <https://ecandidat.univ-lyon1.fr/>

Select : Département de Biosciences / Master LMD / M1 Neurosciences

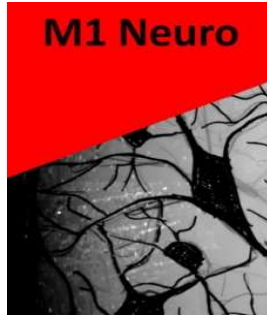
Calendar



- Application procedure opening: **24th April 2022**
- Application procedure closing: **24th May 2022**
- Results publication: **24th June 2022**
- Confirm you acceptance on eCandidat: **before 8th July 2022**
- From 8th July : calling on complementary list

Note 1 : A detailed instruction document is available in English on eCandidat

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



Application for Master 1st year

Université Claude Bernard  Lyon 1

Who can apply?

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

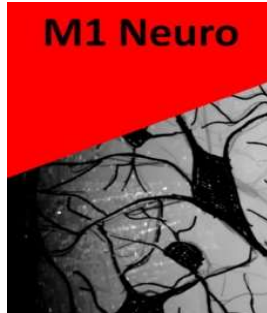
- ✓ Holding a **Bachelor of Sciences** in Life Sciences or scientific disciplines related to Neurosciences (Cognitive Sciences, Mathematics / Informatics / Physics applied to Biology...) including

- a minimum of 6 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

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 : **13th May 2022**
- Application procedure closing : **15th June 2022**
- Results publication : **4th July 2022**
- Confirm you acceptance on eCandidat **before 11th or 15th July 2022**
- From mid-July : calling on complementary list

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

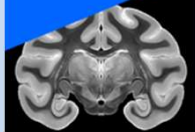
Note 2 : A detailed instruction document is available in English on eCandidat

Application for Master 2nd year

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

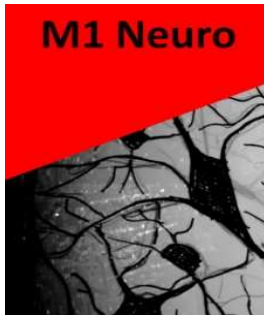
1. Academic results
2. Acquired scientific and methodological knowledge and practical skills
3. Motivation & personal project (being aware of the training program, being able to define your expectations and the adequacy of the training program with your professional project)



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



- ✓ Interview of short-listed applicants (June 24th-29th)



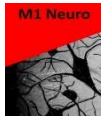
- 1) General information about the Master's program
- 2) Master 1 Neurosciences : curriculum
- 3) Master 2 paths : curriculum and job openings
 - 3a) Master 2 Fundamental and Clinical Neurosciences (FCN)
 - 3b) Master 2 Sensory Neurosciences and Analysis (SNA)
- 4) How to apply ?
- 5) Your questions

Contacts :

Master Neurosciences (coordinator) :

Corine Amat : corine.amat@univ-lyon1.fr

M1 Neurosciences



Corine Amat : corine.amat@univ-lyon1.fr

M2 Fundamental & Clinical Neurosciences (FCN)



Marion Richard: marion.richard@univ-lyon1.fr

M2 Sensory Neurosciences & Analysis (SNA)



Anne Didier : anne.didier@univ-lyon1.fr

Irene Cristofori : irene.cristofori@univ-lyon1.fr

+ for administrative questions

Scolarité UFR Biosciences
candidatures.biosciences@univ-lyon1.fr

International Relations
Department of UCBLyon 1

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