

Bordeaux International Neuroscience Master 1 memoir

The defense should take place on Friday June 23, 2023, but might be anticipated by one day, according to the availability of the jury members (actual timing will be provided ASAP). It will include a 15 min-talk based on a Power Point presentation followed by questions by the jury (3-4 faculty members from the University of Bordeaux) for 15 minutes.

The examination oral and written language is English.

Weighting: manuscript 0.25; talk: 0.25; answers to questions from the Jury: 0.50. The full range of grading, from zero to 20/20, can be used.

2 printed manuscripts of the dissertation (for students in Bordeaux only) **+ 1 pdf version** (for all students) should be provided to the **Master secretariat** by **Thursday June 15, 2023, 12:00** (French time).

Cyril Lançon

Secrétariat Master

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Also send a pdf version to daniel.voisin@inserm.fr

You do not have to provide bound manuscripts, staple(s) is (are) OK. Please, make sure your manuscript is easy to read (fonts...).

What is expected from the student

- Should have a broad knowledge of the scientific context of his subject;
- Should be able to identify and ask clearly an experimental question; objectives should be limited and reachable by the end of the traineeship;
- Should describe experiments which aim at answering the experimental question that is asked;
- Should be able to explain and describe the following steps: problem - experimental question - experiments;
- Should be able to justify, explain the experimental procedures and how they were applied; a limited number of well mastered experiments;
- Should be able to present the results objectively;
- Should give a critical discussion of the data with respect to the question asked and literature;
- Should be able to summarize the main findings and provide some significance to the work.

The lack of positive results at the end of the traineeship is not a problem *per se*, provided the student is able to explain the reasons of such a situation.

Manuscript

Substance

- The abstract should be clearly written and readily comprehensible to the broad readership of the Neuroscience community. It should provide a concise summary of the objectives, methodology (including the species studied), key results, and major conclusions of the study. It should be written in complete sentences, without subheadings.
- The Introduction should briefly indicate the objectives of the study and provide enough background information to clarify why the study was undertaken and what hypotheses were tested.
- The Materials and methods section should be brief but sufficient to allow other investigators to repeat the research; technical approaches should be described and procedures explained.
- Results: this section should present clearly but succinctly the experimental findings, with explicit references to figures. Numerical data should be analyzed using appropriate statistical tests. Detailed information for each statistical test applied should be provided.
- The Discussion section should include a brief statement of the principal findings, a discussion of the validity of the observations, a discussion of the findings in light of other published work dealing with the same or closely related subjects, and a statement of the possible significance of the work.

- References: the essential ones, without oversight or mistake. The student is supposed to have read references.
- A legend must be supplied for each illustration.

Form

- Should look like a submitted or published (as you wish) J Neurosci paper (but for the figures, see below) and must be written in English. Do not number lines of text.
- The entire text should be spaced at least by 1.5 line, including references (min font: 10).
- The figures should appear with their legend at the appropriate place in the paper as in a published J Neurosci paper and not at the end of the dissertation, after the legends, as in a submitted paper

The main differences with J Neurosci instructions to authors are the following:

- ✓ Abstract: should be provided in English (250 words maximum);
 - ✓ Introduction: 800 words maximum, including citations;
 - ✓ Discussion: 1800 words maximum, including citations;
 - ✓ References: 30 maximum;
 - ✓ Figures: 10 maximum;
 - ✓ There is no need to provide a significance statement of your work as in J Neurosci.
 - ✓ Maximum length of the manuscript: 25 pages including title page.
- Quality of writing: precise, easy to understand: clarity of thought.
 - Appropriate vocabulary, no abbreviations unless absolutely necessary, no slang.
 - No spelling mistakes.
 - Illustrations should be easy to read.
 - No more than 30 references
 - References should be cited in the text.
 - Figures should be cited in the text.

Talk

No more than 15 minutes.

To be evaluated:

- Structure
- Content
- Quality and effectiveness of slides
- Time management
- Speech: fluency, prosody
- Non-verbal communication
- Concision, precision, clarity (take-home message)

Answers to questions

- The President of the jury will take care that no more than 15 minutes are allowed for questions for each student.
- Ability to answer questions and argue points in the discussion: the examiners will make sure that the student understands the questions well, answers with precision and concision too. The examiners will test how much the student is able to critically discuss his work and summarize the main findings.
- Usually the first referee starts asking questions, then the second one goes on, then the other examiners. The President takes care that questions are not too long, that the student has time to answer but is still concise and that all examiners have the opportunity, within the time limit, to ask questions.
- Questions are related to the student's dissertation but can address general knowledge in relation with the topic. For instance, a student who is studying synaptic plasticity in cerebellum Purkinje cells should have some basic knowledge about the anatomy and the physiology of the cerebellum.