

Application instruction for LIMMS internship FY 2025
Electronic Control Card for a Neurocardiac Bio-hybrid System
at Agnès Tixier-Mita laboratory,
LIMMS/CNRS-IIS, The University of Tokyo

1. Internship description

- **Location:** LIMMS/CNRS-IIS (IRL 2820), Tokyo, Japan
- **Internship title:** **Electronic Control Card for a Neurocardiac Bio-hybrid System**
- **Internship duration:** 1 to 6 months
- **Accommodation support:** 70 000 yens / month for maximum 6 months (420 000 yens max. per person)
- **Expenses:** Airplane tickets and incidental expenses are NOT covered by LIMMS.
- **Contract:** Up to 6 months. An internship contract between IIS-UTokyo and the French school will be finalized, which will define the rules and obligations (both overseas travel accident insurance and liability insurance) during the stay at LIMMS/CNRS, IIS UTokyo.
- **Starting & Ending dates:** The internship should start on the 1st of February 2025 or beyond and finish before the 31st of March 2026.
- **Visa:** Students who will participate in the program for more than 90 days must have a visa. An administrative procedure takes about 3 months.

Job Duties

- The purpose of the research is to recreate the neurocardiac system on a chip and to manage the neuron cells/heart cells interactions in an artificial way.
- Design, fabricate and characterize a circuit card to amplify and manage signals from the bio-hybrid system.
- Perform experiments of controlled and automatized stimulation of heart cell culture using the bio-hybrid system and the control card.

Skills and Experience

- Background in electronics (circuit design, fabrication)
- Interest in biology (eventually, experience in biology)
- Eventually some knowledge in programming (Python, VHDL...)

2. Please send the following items to LIMMS direction <limmsadm@iis.u-tokyo.ac.jp>

1. CV

2. Motivation letter

- Candidates are kindly advised to send LIMMS direction the requested documents with an e-mail **subject “internship title” FY2025 followed by the candidate’s full name.** Sending documents with a different e-mail subject might be at risk of being overlooked.

3. Submission Deadline (Closing date) for applications is **30 November 2024.**

- Please note that due to our administrative procedure, we cannot accept your applications AFTER the deadline.
- Due to a large number of applications, it is not possible to reply to you if you are not shortlisted. If you have not heard from us within one month of the closing date, please assume that your application has not been successful on this occasion.

4. Notification of results

After approval by the screening committee in LIMMS, notification of the acceptance will be sent both to the intern and the host professor of LIMMS.