



## Agreement for international joint supervision of a thesis

between

The University Claude Bernard LYON 1, represented by the President, **GILLY, François-Noël**

and

**Chiang Mai University**, represented by the President, **NANTACHIT, Niwes**

relating to the joint supervision of the PhD thesis of **Ms HADPECH, Sudarat**

The agreement for joint thesis supervision concerning **Ms HADPECH, Sudarat** enrolled at the Chiang Mai University on a doctorate course in compliance with the procedure of joint thesis supervision. (in application of the decree dated 6 January 2005 concerning the creation of a procedure for joint supervision of theses for institutions of higher education in France and abroad and *the decree concerning the educational cooperation between Chiang Mai University and higher educational institutes*).

### Title 1 – Administrative procedure

- 1-1 The enrolment in the jointly supervised doctoral thesis of **Ms HADPECH, Sudarat** in the doctoral school of the University Claude Bernard - LYON I and in Chiang Mai University will be valid for the academic year 2013/2014. It will be renewed each year during the jointly supervised research work in both institutions.
- 2 Enrolment fees will be paid to Chiang Mai University by **Ms HADPECH, Sudarat** who will be exempted from the fees of the other contracting institution according to the chosen regulations
  - 2-1 For her registration, the doctoral student will have to produce all the written proof of address, income, social security and civil liability coverage in each of these countries.
  - 2-2 Time spent preparing the thesis will be divided between the University Claude Bernard - LYON I and Chiang Mai University with alternate periods depending on the research progress.
  - 2-3 For the time spent in France and for the defence, the doctoral student will benefit from the decree dated 7 august 2006 and the thesis regulations of the University Claude Bernard - LYON I.



## Title 2 Teaching:

2-1 Thesis work will be jointly supervised by:

- Mrs (name, first name) HONG, Saw See of the University Claude Bernard - LYON I

Title and function: PhD, HDR, Chargée de Recherche INSERM

Laboratory: Rétrovirus et Pathologie Comparée, UMR-754 UCBL-INRA

- Mr (name, first name) TAYAPIWATANA, Chatchai of Chiang Mai University

Title and function: Associate Professor; Head of Clinical Immunology Division

Laboratory: Division of Clinical Immunology, Department of Medical Technology, Faculty of Associated Medical Sciences (AMS) under the Franco-Thai Scholarship Program.

And will be focused on: **Development of antivirals against HIV-1 targeting the Integrase and Gag SP1 domain.**

**Working hypothesis and methodologies.** Ankyrins and alpha-Rep repeat proteins will be selected using a phage-display screen with two viral targets, the integrase enzyme and the Gag-SP1 structural domain. **Expected results.** We expect that ankyrins and alpha-Rep proteins selected as integrase-binders will inhibit the viral integration process at the early step of the virus life cycle. Those selected as SP1-binders are expected to negatively interfere with the viral assembly and budding pathway at the late steps. **Perspectives.** Our project is aimed (i) at investigating a new class of intracellular antivirals against HIV-1 and their potential therapeutic applications; (ii) in terms of fundamental virology, it is aimed at elucidating, at the molecular and cellular levels, some of the mechanisms of viral hijacking of the host cell machinery.

2-2 When the doctoral student has to validate complementary trainings (scientific or professional), the institutions will specify the mutual recognition procedures, in agreement with the thesis supervisors and the doctorate students.

## Title 3 –Oral examination

3-1 The jury for the oral examination will consist of equal number of scientists from both institutions and include members external to both institutions. It must consist of at least four people and eight at the most and include both thesis supervisors.

3-2 The thesis will be written in English, followed by a substantial summary in French.

3-3 A single oral examination of the thesis will be required in English and will take place at Chiang Mai University. Both institutions will recognize the validity of the examination.

The University Claude Bernard - LYON I and Chiang Mai University simultaneously will award the candidate a Doctor's degree, as proposed by the jury.

The jury chairperson will write a defence report, signed by all the jury members.

The subject of the thesis must be protected, as well as its submission, identification and reproduction in compliance with the specific procedures applicable in each country involved in joint supervision of the doctorate.



3-4 After the oral examinations, the contracting institutions award the student simultaneous Doctor's degree from each country.

3-5 The diploma(s) will bear the mention of speciality or subject, thesis title or title of the main works, international joint supervision, names and titles of jury members and date of the oral examination

**For the University Claude Bernard Lyon 1**

The President, GILLY, François-Noël

(Date 21/03/2014)

Doctor HONG, Saw See  
Joint thesis supervisor

(Date 8 Jan 2014)

Doctor BORNETTE, Gudrun  
Head of the doctoral school

(Date 10/03/2014)

Ms HADPECH, Sudarat  
The doctoral student

Sudarat Hadpech  
(Date 8 Jan 2014)

**For the Chiang Mai University**

The President, NANTACHIT, Niwes

N. Nantachit

(Date Dec 22, 2013)

Assoc. Prof. TAYAPIWATANA, Chatchai  
Joint thesis supervisor

(Date 20 Dec 2013)

Assist. Prof. Dr. SIRIRUNGSI, Wasna  
Dean, Faculty of Associated Medical Sciences

W. Sirirungsi

(Date 22 Dec 2013)