

PHD COOPERATION AGREEMENT

Between

Université Paris-Saclay, located at 3, rue Joliot Curie, bâtiment Breguet, 91190, Gif-Sur-Yvette, France

Represented by its president, Prof. Estelle IACONA

And

Northeastern University, located at 360 Huntington Avenue, Boston, MA 02115, United States

I. Introduction

This PhD Cooperation Agreement, which shall be effective from the date of the last signature ("Effective Date"), is a general agreement for the cooperation between Université Paris-Saclay, France ("UPSaclay") and Northeastern University ("NU") in relation to a dual PhD Program. The parties are referred to herein individually and collectively as the "Institution(s)." Other capitalized terms used herein are defined in Section VI (Appendix: Definitions).

Both UPSaclay and NU have mutual interest in research and the research training of PhD and research-based Doctoral students, and this agreement builds on existing collaborations between faculty across both Institutions. The scope of this agreement is to enable and to allow identified students to pursue a research-based doctorate level degree at both UPSaclay and NU.

This PhD Cooperation Agreement is intended to develop a system of academic exchanges that will allow a student to perform coordinated doctoral studies at both Institutions by spending similar periods at both sites, to write a dissertation jointly guided by faculty members from both Institutions, and to obtain the doctoral degree or comparable academic level from each University (the "Dual PhD Program").

II. Basic Requirements for Dual PhD/Doctoral Study

This PhD Cooperation Agreement describes the basic requirements for a student to participate in the Dual PhD Program. Each student who qualifies for study in this Dual PhD Program will be required to complete an Individualized Plan of PhD Study (IPPS) developed by the student's research advisors and approved by the required graduate committees and authorities at UPSaclay and NU, the form of which is attached to this Agreement as Section VII (Appendix).

1. Admissions: The UPSaclay applicant must have completed a relevant Master's degree or equivalent, while the NU applicant must have reached a suitable milestone in an NU

doctoral program. The admission of a student to the UPSaclay and NU PhD programs will be in accordance with the separate processes and the respective regulations of each Institution. It is also expected that all students admitted into the Dual PhD Program of study will be funded (through the applicable home Institution by research or teaching awards or through external fellowships) for the duration of their PhD studies.

2. Language: The student must have sufficient knowledge of the English language to meet the NU and UPSaclay English language admission standard, based on TOEFL or IELTS scores. Northeastern and UPSaclay will provide opportunities to improve French/English language ability.
3. Starting Date: The starting date for a PhD student in the Dual PhD Program is the date that the student is enrolled in PhD programs at both UPSaclay and NU and the IPPS is completed.
4. Duration of Study: The duration of study should meet the expectations of both Institutions and will be described in the IPPS and approved by the PhD programs and departments at UPSaclay and NU.
5. The thesis duration at UPSaclay is 3 years and can be extended by addendum with the doctoral school approval and execution by both Institutions. This duration cannot exceed 6 years.
6. Residency: The research and study activities will occur during alternated or consecutive periods respectively at UPSaclay and NU (minimum stay of 12 months). Students must meet the residency requirement for each Institution. The total duration of terms spent at each of the two Institutions, as determined by the faculty advisors, will be based on research requirements. The time at each Institution should be appropriate to the research, and when possible, approximately equal. Deviating significantly from the above would require the mutual agreement of the PhD student's respective departments or equivalent academic units. While a student is attending a particular institution they must comply with the same academic and disciplinary regulations as other students attending that Institution.
7. Enrollment, Tuition, and Fees: Registration and tuition fees will be paid to the home Institution and be waived by the host Institution, subject to a condition of reciprocity. The doctoral candidate will pay registration and tuition fees for each academic year to only one of the Institutions, as set forth in Section 8 below. Costs for enrollment shall be determined by the regulations of the respective Institutions. Each Institution shall seek to minimize these costs to the extent permitted under their respective Institutional regulations.

8. Cost of Education; Candidate Responsibility: The student will maintain full-time enrollment status at both Institutions, and either Institution may provide funding for these fees in accordance with its standard practices for supporting PhD students. If only one student is scheduled each year under this program or if reciprocity cannot be ensured, the student will pay tuition for at least one year to UPSaclay if the duration of the thesis is three years.

The following costs will be the responsibility of the candidate.

- a. The costs and expenses related to obtaining the appropriate visas to enter, study and work in France or the U.S; and
 - b. Any other costs not explicitly promised to be covered by one of the Institutions including accommodation expenses, insurance costs and other living expenses.
9. Research Costs: The cost of research such as equipment and travel funds will be managed by the co-advisors at both Institutions and paid through the Institution at which the research is being performed.
10. Fellowship, Research Assistantships, and Teaching Assistantships: When the student is in residency at one Institution, the student shall be eligible for financial support following that Institution's guidelines and those of the funding programs. Specific funding plans for each student are to be described in the IPPS Schedule described in Section III.
11. Advisors: Each Institution will appoint a professor as the dissertation advisor (or chair of the PhD committee, or equivalent), who together will serve as **co-advisors**. The student is expected to follow the guidance of the dissertation advisor at each Institution. The two dissertation advisors will both oversee the Candidate's research and will collaborate to ensure that the student receives consistent and constructive guidance.
12. Program Requirements: The student shall fulfill all requirements and regulations relevant to the PhD degree at both Institutions. This includes all required coursework, residency, research activity, and PhD Milestones. The specific requirements at each Institution will be documented in an IPPS as described in Section III below. Any waiver of usual requirements or PhD Milestones at each Institution must be approved at all levels of graduate oversight at the Institution waiving the requirement. Further, each Candidate is required to apply and/or obtain a valid visa or study permit as required to be resident at each Institution.
13. Annual Evaluation for Progress to Degree: Each Institution will annually, or with a prescribed frequency defined in the IPPS, separately examine and evaluate the progress of the students engaged in the Dual PhD program. As part of the evaluation, the student will provide a progress report. This evaluation will be performed by each Institution, following established policy and in coordination with the advisor at the partner Institution.

14. Composition of Final Evaluation Committee: The final evaluation committee, also referred to as the dissertation committee, must meet the applicable requirements of both Institutions. The NU dissertation advisor and the the UPSaclay dissertation advisor cannot be part of the final evaluation committee, although they may observe the final evaluation. In view of the thesis defense, the work of the Candidate will be reviewed beforehand by at least two rapporteurs/reviewers, each of whom is qualified to supervise research and is external to both Institutions and to their doctoral schools. The reviewers will be jointly nominated by the relevant department heads at both Institutions following the usual procedure in each of the Institutions. The permission to defend will be requested in each Institution, after a favorable opinion of both rapporteurs/reviewers. The thesis jury will be jointly appointed by the Institutions at least two months before the date foreseen for the defense. The thesis jury will comprise between 5 and 8 members. The thesis jury is composed of personalities selected for their scientific and technical competences, nominated on an equal basis by both Institutions, comprising: thesis directors (who attend the thesis defense without taking part in the decision); at least two members external to both Institutions, who will serve as rapporteurs/reviewers and will be recognized experts in the field of the doctoral project; and one employee from each of UPSaclay and NU who are not the thesis directors or part of the supervision of the doctoral project. A professor will be the president of the thesis jury.
15. Dissertation and Final Evaluation: The student will write one dissertation that will be evaluated and approved by the Final Evaluation Committee. There will be one final dissertation defense that will take place at either UPSaclay or NU. The defense must meet, at a minimum, the practices of both Institutions with specific requirements defined in the IPPS.
16. Dissertation Language: The doctoral dissertation will be written in English.
17. Award of the Degree: The PhD (or doctoral) degree will be awarded by each Institution only after all requirements for receipt of the degree have been met as determined by the practices of each Institution and the approved IPPS. The Dual PhD Candidate will receive two diplomas, one from each Institution. It is expected that the two degrees will be awarded simultaneously. Each Institution will include a notation on the transcript noting that the PhD is issued through this dual degree partnership.
18. Maintaining and Sharing Student Records; Personal Data Protection: Each Institution will maintain the student records in compliance with its policies for all PhD students to ensure that all degree requirements and PhD Milestones are met. The two Institutions will share information about the Candidate's academic progress as needed to ensure that the Dual PhD Program is administered appropriately, to the extent permitted by applicable law.

Each Institution will comply with all applicable personal data and privacy laws and regulations, including (without limitation) the U.S. Family Educational Rights and Privacy Act (FERPA) and Regulation (EU) 2016/679, i.e. the General Data Protection Regulation (GDPR) (the "Data Protection Legislation"). The parties undertake to adopt all measures necessary to ensure that personal data is collected and processed in conformity with the provisions of the applicable Data Protection Legislation. If required, the parties will execute an addendum to this PhD Cooperation Agreement or enter into a separate agreement regarding their obligations with respect to the processing of personal data.

Each party shall appoint a Data Protection Officer. In order to facilitate communication each party shall provide the other party with the name and contact details of the appointed Data Protection Officer.

The Institutions acknowledge that they each have robust privacy and data protection obligations under the Data Protection Legislation and Institutional policies. The Institutions agree to only utilize personal data to perform their obligations under this agreement (the "Purpose") and for no other purpose. The Institutions agree to follow respective Institutional privacy and data protection agreements which may be determined in the future. Each Institution agrees that at all times it shall comply with its obligations under the Data Protection Legislation in relation to the processing of personal data, including:

- a) keeping appropriate records of the processing of personal data carried out under this PhD Cooperation Agreement and providing the other Institution with the information reasonably necessary to demonstrate its compliance with the Data Protection Legislation, including evidence of the technical, administrative and/or organizational measures implemented by that Institution;
- b) implementing appropriate technical, administrative and/or organizational measures so as to ensure an appropriate level of security is adopted to mitigate the risks associated with the processing of personal data, including against unauthorized or unlawful processing, accidental or unlawful destruction, loss, alteration, unauthorized disclosure of or damage or access to the personal data;
- c) appropriately disposing of the personal data per applicable legal standards so the Purpose has been achieved and minimum retention requirements imposed by applicable law have been met;
- d) generally providing, where requested, such reasonable assistance to the other Institution to ensure compliance with that Institution's obligations under applicable data protection laws;
- e) limiting access to personal data to those of its employees who need access for the Purpose and ensuring that such employees only have access to such part or parts of the personal data as is strictly necessary for performance of their respective duties and ensuring that such employees are aware of the obligations of the Institution that employs them under the Data Protection Legislation;

- f) ensuring that any agent or subcontractor that processes any personal data on its behalf has agreed in writing to be bound to restrictions, conditions and requirements for robust privacy and data protection as required by applicable law;
- g) not further transferring any personal data processed or created pursuant to this PhD Cooperation Agreement to another state/country without the consent of the other Institution.

Each Institution acknowledges and agrees that a data subject shall, as a third party beneficiary, have the right to enforce the obligations set out above in this Section 18 against either Institution for their respective breach of their contractual obligations. Each Institution acknowledges and agrees that the data subject may enforce these rights in the jurisdiction of the Institution from which the personal data was originally transferred.

Each Institution will promptly (and, in any event, no later than twenty-four hours after becoming aware of a breach or suspected breach) inform the other Institution in writing of any breach or suspected breach of any of its obligations under this Section 18 and of any other unauthorized or unlawful processing, accidental or unlawful destruction, loss, alteration, unauthorized disclosure of or damage or access to personal data. Any agents or subcontractors that process any personal data on behalf of a Institution will likewise be required to notify the Institution of any breach or suspected breach of personal data no later than twenty four (24) hours after becoming aware of the breach or suspected breach, or according to the notification provisions contained within the current agreement with the Institution in such cases as the Institution is already currently engaged in an agreement which such agent or subcontractor at the time of signing this PhD Cooperation Agreement. Such notification shall specify (at a minimum, to the extent known) the nature of the personal data breach or suspected breach; the date and time of occurrence; the extent of the personal data and data subjects affected or potentially affected; the likely consequences of any breach or suspected breach (should it have occurred) for data subjects affected by it and any measures taken or proposed to be taken by the Institution who has suffered the breach or suspected breach to contain it; and any other information that the other Institution shall reasonably require in order to discharge its responsibilities under Data Protection Legislation in relation to such breach or suspected breach. The Institution who has suffered the breach or suspected breach shall thereafter promptly, at the other Institution's expense if out-of-pocket costs are required (i) provide the other Institution with all such information as the other Institution reasonably requests in connection with such breach or suspected breach; (ii) take such steps as the other Institution reasonably requires it to take to mitigate the detrimental effects of any such breach or suspected breach on any of the data subjects and/or on the other Institution; and (iii) otherwise cooperate with the other Institution in investigating and dealing with such breach or suspected breach and its consequences.

19. Financial Matters: The student is expected to receive financial support while in residence at each Institution by applying to different funding programs, as described elsewhere in this PhD Cooperation Agreement. The funding plan for each student and how it will be shared across Institutions and potential external fellowship support will be described in the IPPS.
20. Protection of Research Results and Intellectual Property: The protection of the dissertation subject, and the publication, exploitation and protection of the results of the research, will be subject to the regulations and policies of both Institutions. If required, specific agreements will be arranged for the protection of intellectual property. Publications will acknowledge that the research was carried out during the course of the Dual PhD Degree Program and the Candidate's affiliation with both Institutions is to be acknowledged. Terms governing confidentiality and intellectual property are set forth in section VIII below.
21. Health Insurance: The student will be required to show proof of health insurance before assuming residency at each Institution. Social security cover and civil liability of the doctoral candidate while in France will be ensured under the following conditions: During the student's stay at UPSaclay, the doctoral candidate will be given a social security cover in France, subject to either having complied with the existing procedures for membership and contributions to the French social security scheme (for Candidates or voluntary), or owning a European health insurance card.
22. Special Situations: The Graduate Oversight Committees of the two Institutions shall resolve any disputes arising from this PhD Cooperation Agreement and the status of the Student/Candidate. In the case of non-resolution, the dispute will be mediated by the Vice Provost (or equivalent) responsible for Graduate Education at each Institution.

III. Individualized Plan of PhD Study

To complete the admissions process for each Candidate in the Dual PhD Program, an Individualized Plan of PhD Study will be jointly developed describing how the Candidate will meet the requirements at UPSaclay and NU. The IPPS will provide the Candidate with a schedule outlining requirements and funding plans and will include a basic education plan for the two degrees. More information as required by the particular PhD program may be added. The IPPS and Student IPPS Schedule must be signed by both co-advisors, the PhD Program Directors at each Institution, and Unit Director or Department Chair with notification to other Institutional offices as appropriate.

The IPPS template developed as part of this agreement between UPSaclay and NU outlines areas that require agreement. In the event that the Candidate or the Candidate's co-advisors

deem that a waiver of program requirements is appropriate, all applicable doctoral program, departmental, College, and Institution procedures must be followed to grant the waiver.

After the above information has been documented for each PhD Program / Institution, an IPPS Schedule for the student must be developed describing the anticipated funding plan and demonstrating how and when the requirements for each PhD Program / Institution are met.

IV. Final Matters

23. Governing Law; Compliance: The Institutions agree that they shall attempt, in good faith, to resolve any dispute, misunderstanding, controversy or claim arising out of or relating to this PhD Cooperation Agreement, or the breach, termination or invalidity hereof, informally through consultation with each other. If the matter cannot be resolved informally, then the Institutions agree to appoint an independent arbitrator. In the event that an arbitrator is appointed, the dispute shall be settled under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules and this PhD Cooperation Agreement.
24. Limitation on Damages: Neither Institution shall be responsible to the other for, nor be entitled to receive from the other, any indirect, consequential (including lost profits), special, incidental or punitive damages, regardless of whether the theory giving rise to such damages is in tort, contract or otherwise and regardless of whether an Institution has or gains knowledge of the possibility of such damages.
25. Program Coordinators: The Institutions will each designate a faculty / staff member to serve as a program coordinator under this agreement. As of the signing of this PhD Cooperation Agreement, the two program coordinators are:

For Northeastern University:

Dr. Jason Sidman
Director of Partnership Relations, PhD Network
360 Huntington Avenue
340 Renaissance Park
Boston, MA 02115
j.sidman@northeastern.edu

For Université Paris-Saclay

Maison du doctorat
Axe international -doctorat-
4. avenue des Sciences
91190, Gif-Sur-Yvette
Cotutelles.internationales@universite-paris-saclay.fr

26. Duration and Expiration of PhD Cooperation Agreement: This Agreement will be effective for 5 years from the Effective Date. If UPSaclay or NU wishes to terminate the agreement before that time, they will notify the other Institution at least 12 months in advance and a review of activities will be performed by both Institutions. Neither Institution will accept new students to the Dual PhD Program pending termination and the Agreement will remain in effect, only with respect to existing students, for no more than five years after the Dual PhD Program start date of each student approved to pursue the PhD under this Agreement prior to termination. Reasonable efforts will be made to minimize the disruption to any students currently in good standing in or accepted to the the Dual PhD Program. Following the termination of the PhD Cooperation Agreement, any use of the other party's logos, other trademarks, and promotional materials, whether available on the web or otherwise, will cease and be removed from the web.
27. Amendments: This PhD Cooperation Agreement may be amended by mutual written agreement of the parties, signed by an authorized representative of each. This PhD Cooperation Agreement may be renewed for subsequent terms as mutually agreed in writing by the parties.
28. Relationship: The relationship of the Institutions under this agreement is that of independent contractors and they are not agents, employees, partners or joint ventures of one another. Neither Institution has the authority to bind the other Institution in contract or to incur any debts or obligations on behalf of the other Institution.
29. Execution: This PhD Cooperation Agreement may be executed in counterparts, each of which shall be deemed to constitute an original, and it shall not be necessary in making proof of this Agreement to produce or account for more than one such original.
30. Beneficiaries: There are no express or implied third party beneficiaries of this agreement.

[Signature page immediately follows]

V. Signature Page: PhD Cooperation Agreement

This PhD Cooperation Agreement is legally binding and the parties agree to comply with the terms hereof. This PhD Cooperation Agreement contains the entire agreement between UPSaclay and NU concerning its subject matter, and supersedes any prior oral and written agreements, commitments, understandings or communications with respect to its subject matter.

IN WITNESS WHEREOF the Institutions have hereunto set their hands the day and year first above written.

SIGNED by
for and on behalf of
Université Paris-Saclay



Name: SYLVIE POMIÈRE
Title: VICE PRÉSIDENT

Date: 22/11/2023

SIGNED by
for and on behalf of
Northeastern University

Name: David Madigan
Title: provost

Date: 11/8/23

VI. Appendix: Definitions

Term	Definition
PhD Program	Research program at the highest degree level offered by the Institution
Student or student	The student pursuing the Dual PhD program
Institution	One of the two Institutions engaged in this PhD Cooperation Agreement
PhD Milestones	Includes qualifying exam, candidacy requirements, research proposal, dissertation defense.
PhD Degree	Research-based degree at the highest level offered by the Institution.
Doctoral Degree	Refers to the research-based PhD Degree
Final Evaluation Committee	A Student's dissertation committee, to consist of an equal number of academics from both Institutions and shall comprise at least four members and meeting all applicable requirements of both Institutions
Candidate	The student pursuing the Dual PhD Program after taking qualifying exams
IPPS Schedule	A supplement to the IPPS which describes the anticipated funding plan for the Student and demonstrates how and when the requirements for each PhD Program / Institution will be met

VII. Appendix: Template for the Individualized Plan for PhD Study (IPPS)
Complete one for each student participant.

A.	Candidate:	Student #1 (UPSaclay#: and NUID#:)	
B.	Institutions:	UPSaclay	Northeastern University
C.	PhD Degree Programs:		
D.	Research Advisors:		
E.	Payment of tuition and administrative fees	Around 480 euros	
F.	Date Enrolled into Programs:		
G.	Summary of PhD graduation requirements¹		
G.a.	Course requirements:	150 points	
G.b.	Additional requirements:		
G.c.	Required PhD Milestones (please note expected dates and members)		
H	Qualifying Exam:		
I	PhD Committee:	Between 5 and 8 members : At least 2 reviewers who are external to both Institutions, one member from each Institution. The chairperson and at least half of the members must be professors.	
J	Research Proposal and thesis subject		

¹ This IPPS is a summary of requirements. Coursework selections, etc. must follow guidelines specified in the Graduate Catalogs. Waivers of the requirements at each Institution will not normally be considered. Waivers when necessary require program / department / college / university procedures to be followed.

K	Dissertation Defense:	Public common unique defense	
L	Dissertation Approvals:		
M.	Duration of Study	3 years, which can be extended by addendum	
N.	Funding Plan		

Individualized Plan of PhD Study Anticipated Schedule and Funding: Student #1

AY	Fall Term	Spring Term	Summer Term	Notes
YR 1	< Enter Location >	< Enter Location >	< Enter Location >	
	< Funding Source >	< Funding Source >	< Funding Source >	
	< List Milestones >	< List Milestones >	< List Milestones >	
YR 2	< Enter Location >	< Enter Location >	< Enter Location >	
	< Funding Source >	< Funding Source >	< Funding Source >	
	< List Milestones >	< List Milestones >	< List Milestones >	
YR 3	< Enter Location >	< Enter Location >	< Enter Location >	
	< Funding Source >	< Funding Source >	< Funding Source >	
	< List Milestones >	< List Milestones >	< List Milestones >	
YR 4	< Enter Location >	< Enter Location >	< Enter Location >	
	< Funding Source >	< Funding Source >	< Funding Source >	
	< List Milestones >	< List Milestones >	< List Milestones >	
YR 5	< Enter Location >	< Enter Location >	< Enter Location >	
	< Funding Source >	< Funding Source >	< Funding Source >	
	< List Milestones >	< List Milestones >	< List Milestones >	

In addition to specifying when the student will complete coursework, research, and qualifying exams, it should specify residency (UPSaclay vs. NU) and funding source in each semester.

Approvals: This IPPS plan and schedule is approved by:

UPSaclay

Thesis Supervisor

Northeastern University

Research Advisor

Date:

<< Name >>
<< Title >>

Date:

<< Name >>
<< Title >>

PhD Program Director

Date:

<< Name >>
<< Title >>

Date:

<< Name >>
<< Title >>

Unit Approval (required for funding)

Unit Approval (required for funding)

Date:

<< Name >>
<< title >>

Date:

<< Name >>
<< title >>

Notifications:

UPSaclay

Doctoral School

Northeastern University

College-Level Notification

Date:

<< Name >>
<< Title >>

Date:

<< Name >>
<< Title >>

University-Level Notification

University-Level Notification
PhD Network

Date:

<< Name >>
<< Title >>

Date:

<< Name >>
<< Title >>

VIII. Appendix: Confidentiality and Intellectual Property.

- i. Confidentiality
 - a) Background knowledge, including, but not limited to, industrial property, know how and patentable subject matter, belonging to an Institution or held by it before the beginning of the doctoral candidate's thesis work, exchanged between the Institutions, in any form, in the context of the thesis work, will be treated as Confidential Information. Consequently, each Institution will use all reasonable efforts to ensure the confidentiality of such information. "Reasonable efforts" means that the Institutions will take all actions necessary to maintain the confidential nature of the Confidential Information and to protect it with as much care and precaution as if it were their own confidential information of the same value.
 - b) The doctoral candidate undertakes not to disclose Confidential Information, in any form, without prior written authorization by the thesis co-directors, during thesis work and five (5) years following the defense.
 - c) Any plan for publication or disclosure of new knowledge by one of the Institutions must, during the term of the Agreement and for the five (5) years following its termination, be approved in writing by the other Institution. If the other Institution does not respond to a written request for approval within 30 days following receipt, approval shall be deemed to have been given.
 - d) The Institutions may:
 1. agree on the publication or disclosure, or
 2. delay the publication or disclosure for a period not exceeding eighteen (18) months from the date of request if information contained in the publication or disclosure has to be subject to protection as industrial property or patentable subject matter, or
 3. delete or amend certain details the disclosure of which would prejudice the industrial or commercial use, under proper conditions, of the new knowledge, without jeopardizing the scientific value of the publication.
 - e) Any plan for publication or disclosure of new knowledge by one of the Institutions must be subject to a written information in order to notify the other Institution, which has not contributed to the achievement of this new knowledge, of the plan for publication or disclosure. Receiving authorization from the other Institution will not be necessary except if the plan for publication or disclosure of new knowledge discloses confidential information of the other Institution.
 - f) Each Institution, in as much as permitted to do so, shall disclose to the other Institution and/or to the doctoral candidate solely the confidential Information which it deems to be needed for the performance of the thesis work.
 - g) The Institution receiving the Confidential Information may disclose confidential Information for which it is able to provide proof that:

1. it was in the public domain prior or subsequent to its disclosure to it, and without any negligence being attributable to the receiving Institution;
 2. it was already in its possession and such prior awareness can be proven through the existence of appropriate documents in its files;
 3. it was legally received from a third party authorized to disclose it, without restrictions or infringement of the present provisions;
 4. its use or disclosure was authorized in writing by the Institution from which it originated.
- ii. Intellectual Property
- a) Each Institution remains the owner of its Background knowledge.
 1. The other Institution receives no rights over the corresponding patents and know-how by virtue of the present Agreement.
 - b) New knowledge shall be jointly owned by the Institutions, in proportion to their human, intellectual, material and financial contributions.
 1. For new knowledge possibly generated by the staff of the joint research unit hosting the doctoral candidate at UPSaclay, the supervising bodies of this joint research unit are considered as a sole co-owner Institution, in accordance with French laws and regulations. These supervising bodies of this joint research unit shall be responsible for the share of ownership assigned to them, as stipulated in the agreement governing this joint research unit.
 2. The Institutions undertake to protect moral rights of the doctoral candidate through designating them as inventor or co-inventor when they contribute to the conception of an invention leading to filing a patent application.
 3. The doctoral candidate undertakes to assign the rights of industrial property related to new knowledge they would obtain or would contribute to obtain in the framework of their thesis. Therefore the doctoral candidate may in no case file in their own name and on whatever territory a patent application arising from new knowledge, unless expressly authorized by the co-owner Institution.
 - c) The co-owner Institutions shall decide whether a joint new knowledge shall be subject to patent applications filed in their joint names, hereafter referred to as "New patent".
 1. The expenses relating to filing, obtaining and maintaining the New patents in force in France and abroad shall be borne by the co-owner Institutions according to their share of ownership.
 2. Should a co-owner Institution waive its entitlement to file, continue with a registration procedure or maintain one or several joint New patents in force either in France or abroad, it shall inform the other co-owner Institutions in due time so that the latter may file in their own names, and continue with the procedure for registering or maintaining said New patents in force at their own expense and for their own benefit.

- d) Each Institution may freely and without charge use new knowledge for its own research purposes, including in research collaboration with third parties, to the exclusion of any direct and/or indirect use for commercial purposes.
- e) In case of obtaining new knowledge possibly leading to industrial and commercial exploitation, directly or indirectly, the co-owner Institutions will meet to determine the conditions of the exploitation. An agreement specifying the conditions, including financial, of this exploitation will be signed before the start of any exploitation procedure.
 - 1. The Institutions agree that any direct or indirect use by a co-owner Institution of the joint new knowledge shall be subject to financial compensation being paid to the other co-owner Institutions; the nature and the remuneration calculation method shall be defined with reference to the intellectual, human, material and financial contribution of the co-owner Institutions to the new knowledge.
 - 2. Should the use of new knowledge by a co-owner Institution require the use of know-how or prior patents partly or totally owned by the other Institution, the latter undertakes to facilitate this use, subject to the rights granted to third parties. The terms of use of the background knowledge shall be negotiated in a licensing agreement on a case by case basis.