

Ecole Doctorale « Structure et Dynamique des Systèmes Vivants »

Doctoral School « Structure and Dynamics of Living Systems »

December 1, 2021

- 1. Who are we?**
- 2. The Paris-Saclay Context**
- 3. The SDSV Doctoral School**
- 4. Questions / Answers**

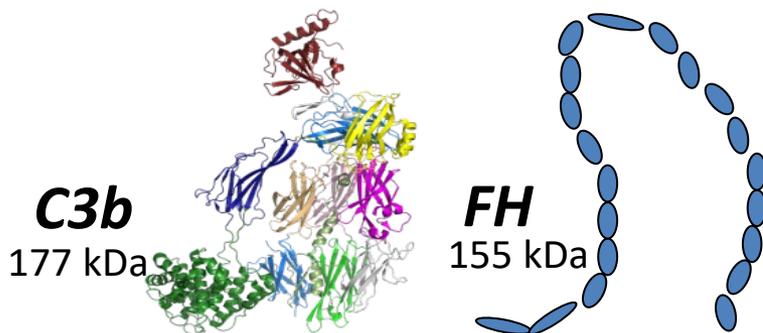
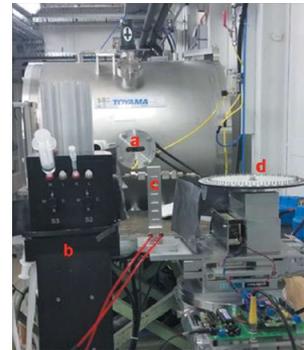
Florence GONNET

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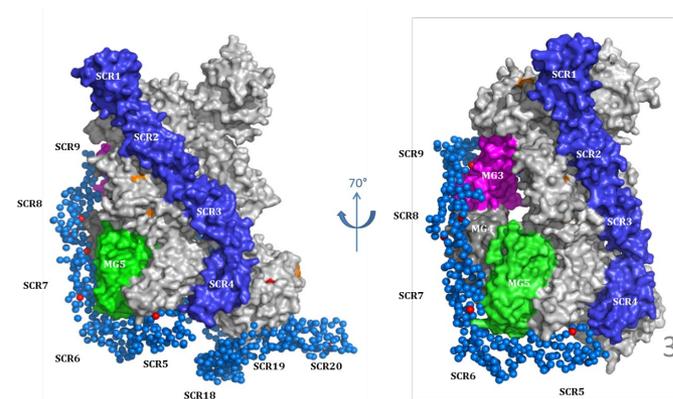


The World of structural analysis of biomolecules

- Proteomic and PTM (S-S bonds, glycosylation, sulfation...): *role of HSulf2 endosulfatase in cancer*
- Glycomic (gagosylation): *mucopolysaccharidoses*
- Structure and dynamics of the formation of biomolecular complexes: *Hemolytic uremic syndrome (HUS), C3b/FH*



Synchrotron
→
Footprinting



Pierre CAPY

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The World of transposable elements (selfish DNA)

- Structural impact on genomes
- Impact on genome expression and regulation
- Regulation of their activity through small RNA (epigenetics)
- Relationship between stress and TE activity
- Dynamics in genomes, populations and species

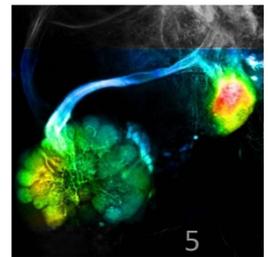
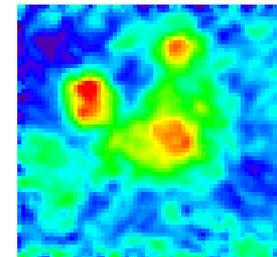
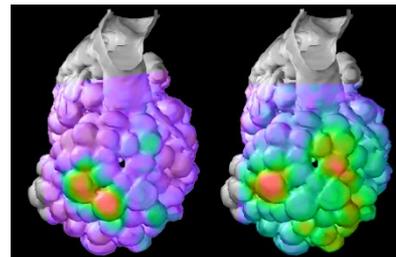
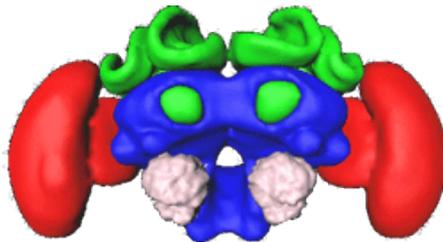
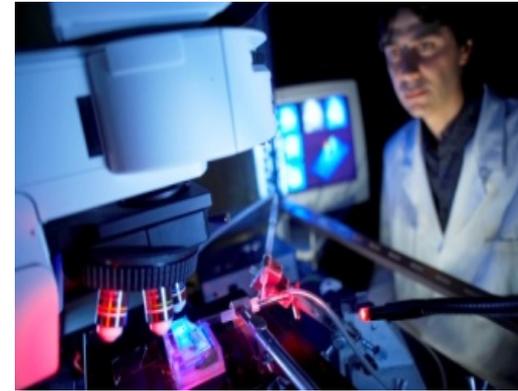


Jean-Christophe SANDOZ

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Evolution of insects' neural systems and behavior

- Chemical senses (olfaction, gustation) and adaptation
- Comparative analysis of brain anatomy (bees, ants, wasps)
- Roles and diversity of olfactory receptor proteins
- *In vivo* imaging of brain responses to odorants
- Olfactory learning, memory and plasticity



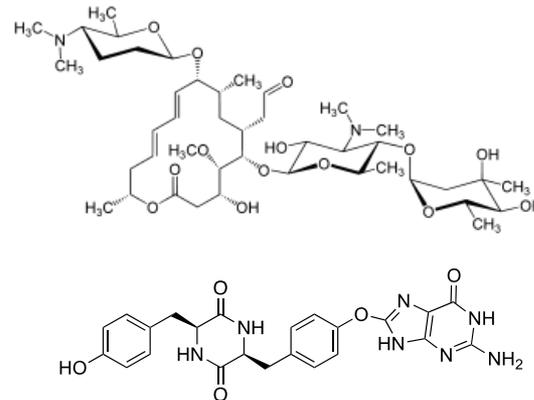
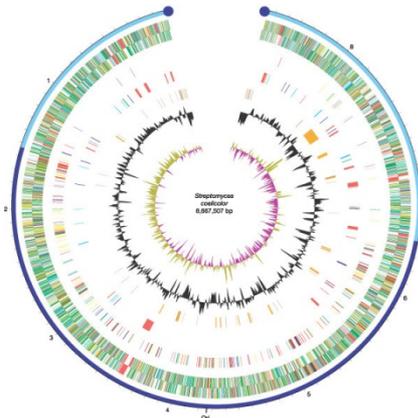
Jean-Luc PERNODET

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Microbial specialized metabolites (antibiotics)

- Elucidation of biosynthetic pathways
- Regulation and evolution of the specialized metabolism
- Genomics of Actinobacteria
- Mobile genetic elements and gene transfer in Actinobacteria



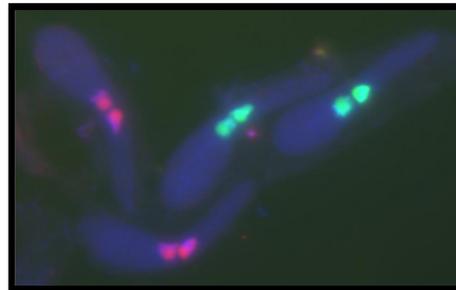
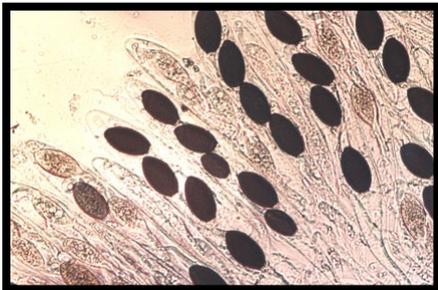
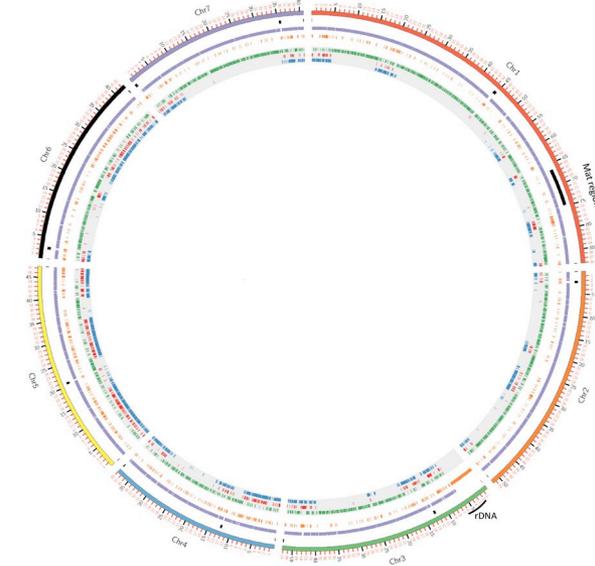
Fabienne MALAGNAC

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Epigenetic modifications & chromatin structure

- ✧ **genome stability and dynamics**
- ✧ **gene regulation during developmental processes (sexual reproduction)**

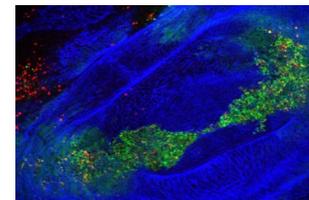
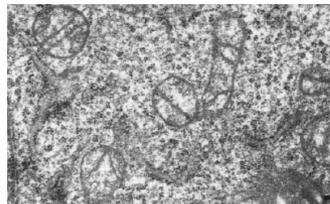
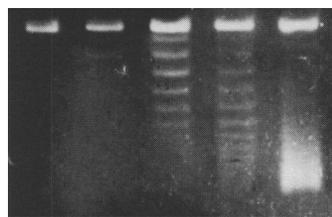
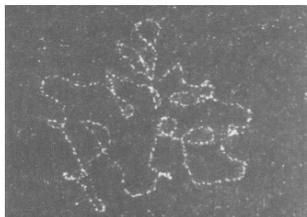
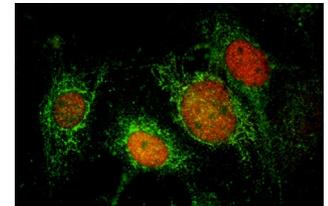


Bernard MIGNOTTE

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The World of mitochondria, cell death and senescence

- Mitochondrial biogenesis
- Structure and replication of mitochondrial nucleoids
- Tumor suppressors in apoptosis and senescence
- Mitochondria in cell death process
- Reactive oxygen species and cell death

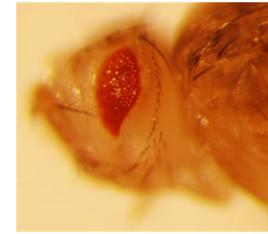
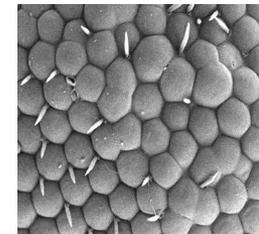
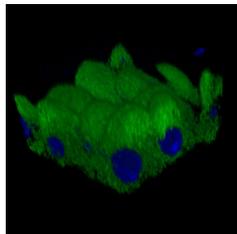
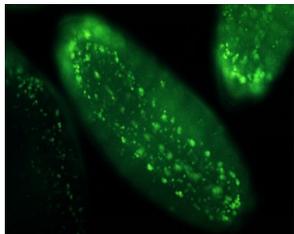
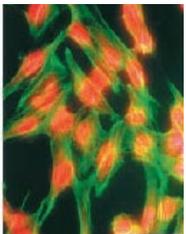
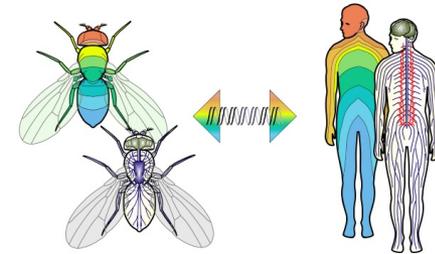


Isabelle GUENAL

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Cell stress and mitochondria

- Cell stress and tissue homeostasis
- Tumor suppressors and cell death
- Bcl-2 family proteins and apoptosis
- Mitochondrial quality control and stress
- *Drosophila* models of human pathologies



1. Who are we?

Pierre CAPY



Jean-Luc PERNODET



Bernard MIGNOTTE



Florence GONNET



Jean-Christophe SANDOZ



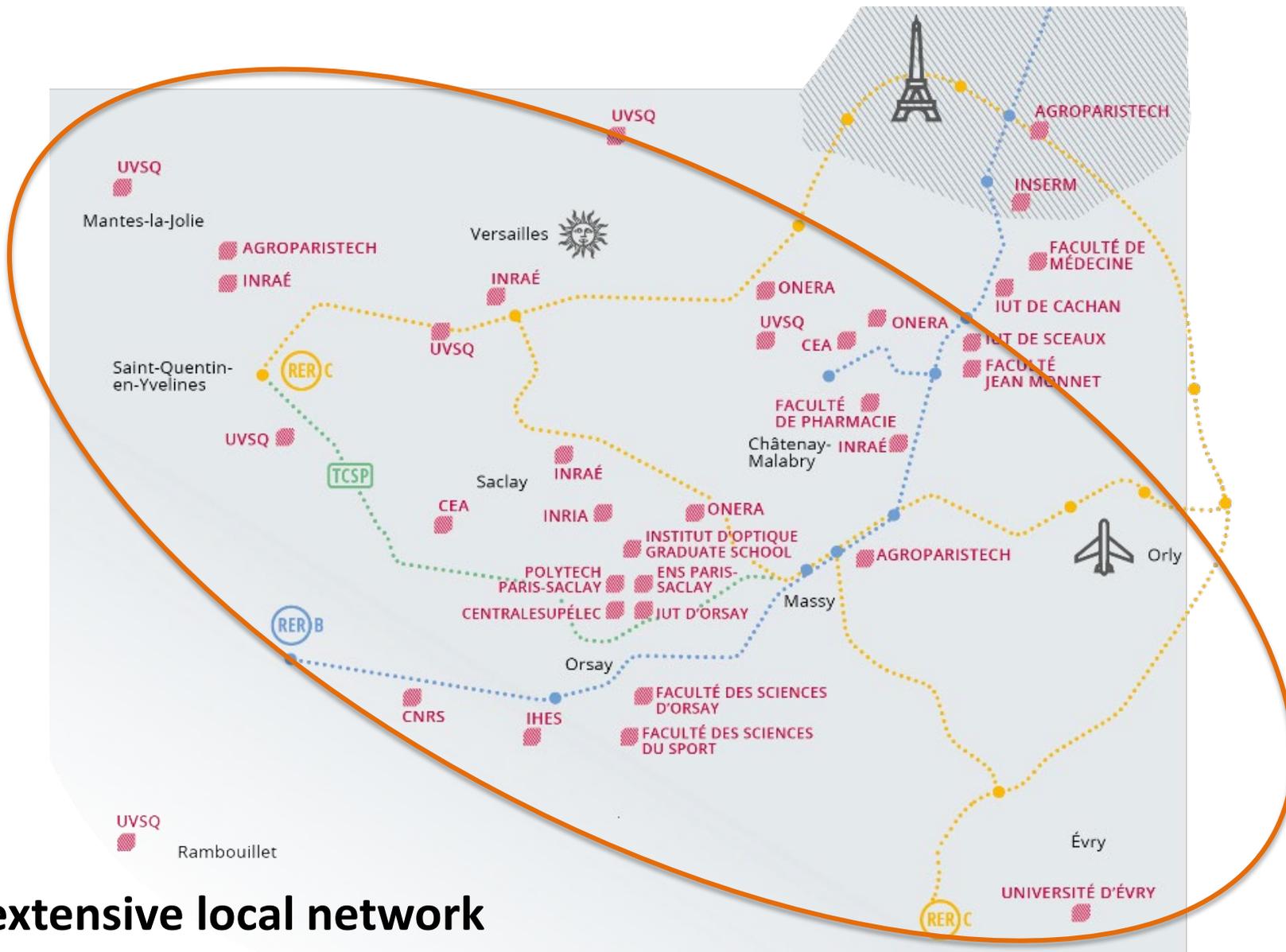
Fabienne MALAGNAC



Isabelle GUENAL



The Paris-Saclay context



An extensive local network

The Paris-Saclay context



FORMATION AND RESEARCH

48 000

étudiants



24 000

en premier
cycle



12 000

en master

4 600

en doctorat

18 graduate schools
et institut



8 100

chercheurs et
enseignants-chercheurs



13 000

publications par an

8 500

administratifs et
personnels techniques



275

LABORATOIRES



de la
recherche
française

500

plateformes
expérimentales



Paris-Saclay University in figures

PhD

4,600 
PhD students

21 
Doctoral schools

 45%
International PhD students

4,700 
Supervising
researchers and
academic staff

18 Graduate schools
and Institute

Paris-Saclay University in figures

Academic Ranking of World Universities



Global Ranking of Academic Subjects

All Subjects

Life Sciences

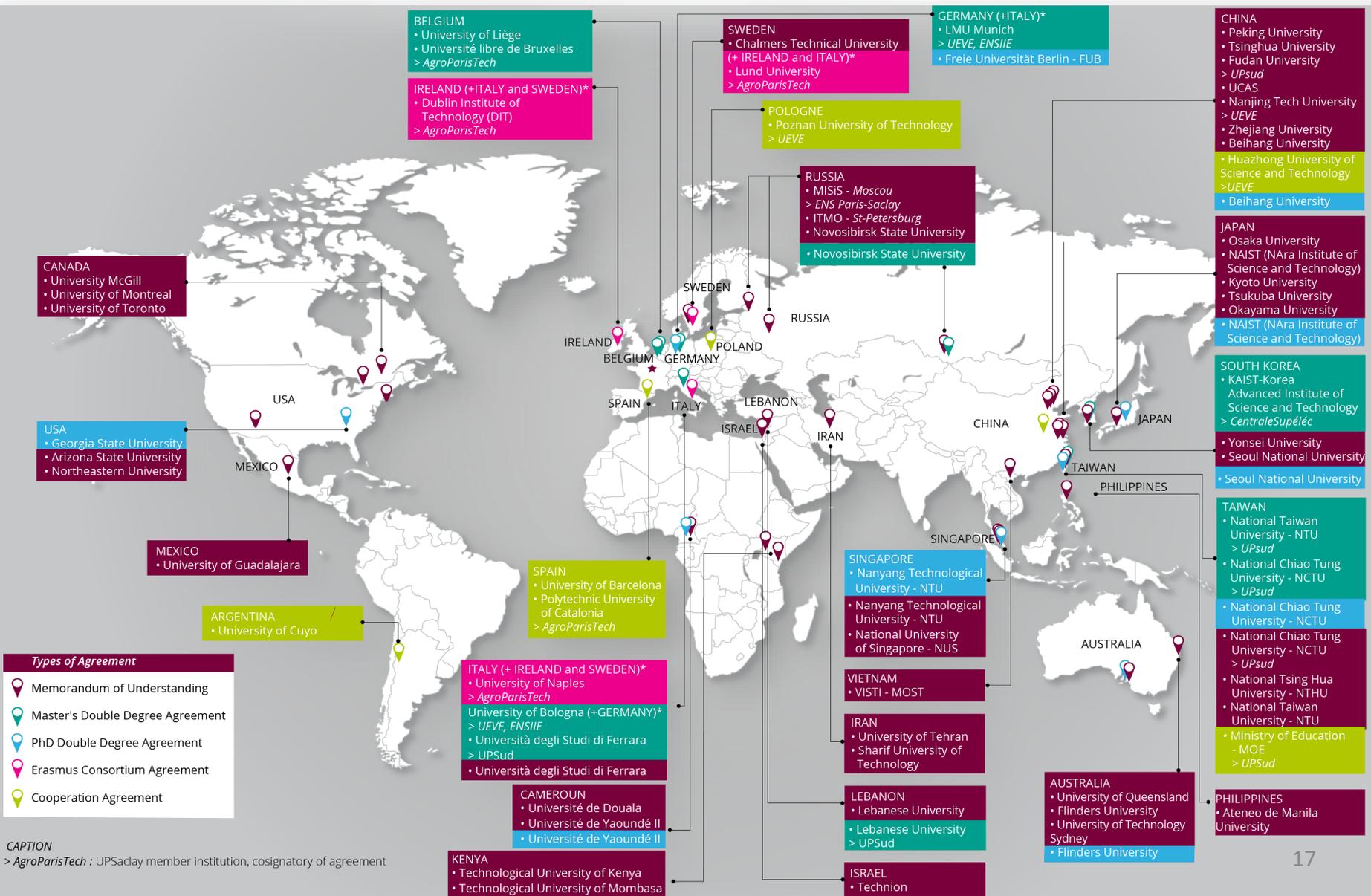
Subject	Rank
Biological Sciences	76-100
Human Biological Sciences	76-100
Agricultural Sciences	12
Veterinary Sciences	76-100

Best Ranked Subjects

Subject	Rank
Mathematics	1
Physics	9
Agricultural Sciences	12
Clinical Medicine	22
Telecommunication Engineering	29
Statistics	29
Biotechnology	30
Pharmacy & Pharmaceutical Sciences	30

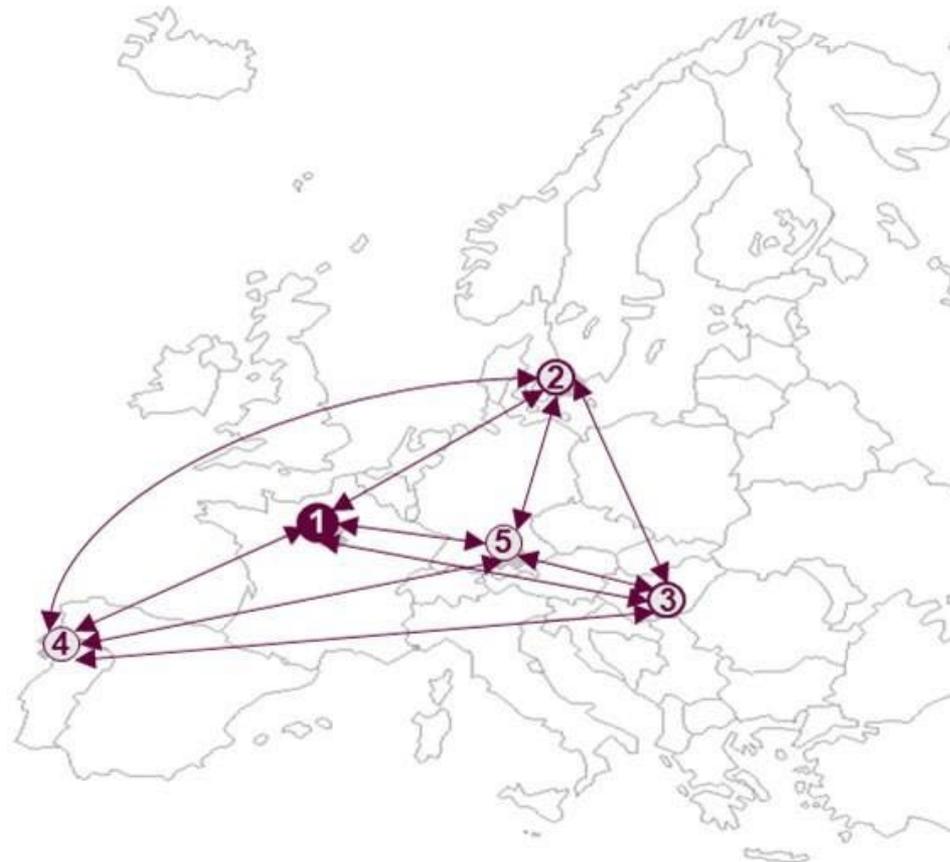
First in continental Europe
(UK: Third: Cambridge, Seventh: Oxford)

- **Over 60 UPSaclay** active international **partnerships** (and more than **400** through UPSaclay's members)
- Master's tracks **taught in English**: 15 %
- International **Master's** Students: 38 %
- International **PhD** students : 42%
- Approx. **45** CNRS International Associated Labs (more than 25 % of all French « IALs »)



CAPTION
> AgroParisTech : UPsaclay member institution, cosignatory of agreement

EUGLOH



- | | | |
|----------|--|----------|
| | | France |
| 1 |
université (Coordinateur)
PARIS-SACLAY | |
| 2 |
LUND UNIVERSITY | Sweden |
| 3 |
University of Szeged | Hongary |
| 4 |
U. PORTO
UNIVERSIDADE DO PORTO | Portugal |
| 5 |
LMU
LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN | Germany |

<https://www.universite-paris-saclay.fr/collaborations/international/universite-europeenne-eugloh>



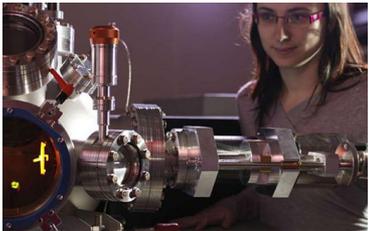
EUGLOH offers you training opportunities and events on a variety of topics: **seminars, workshops, training courses, meetings with industrials, mobility opportunities...** Discover the five campuses of the alliance, meet with experts, develop cross-cutting skills and benefit from European diversity! **YOU can SUBSCRIBE to receive INFORMATIONS!**

3 main areas

Life and health science



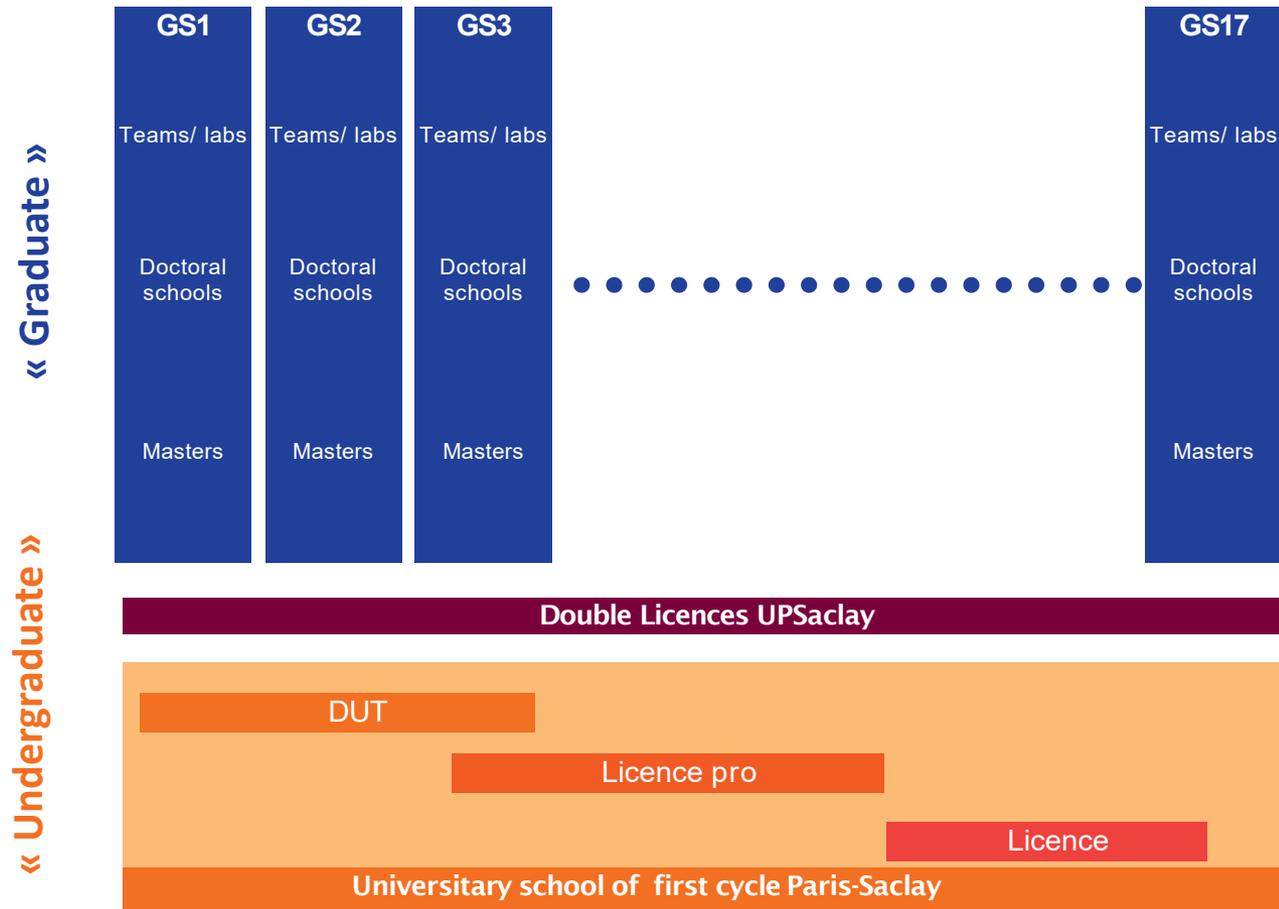
Science and engineering



Social sciences and humanities



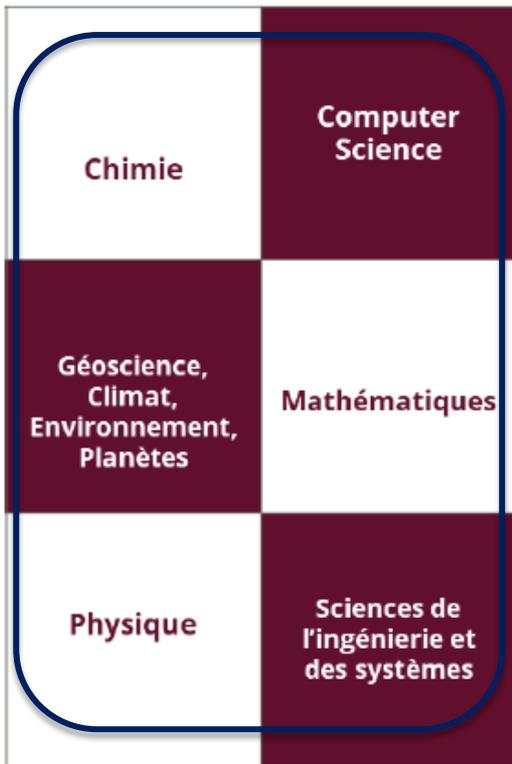
15 disciplinary GS + 2 transversal GS + 1 institute



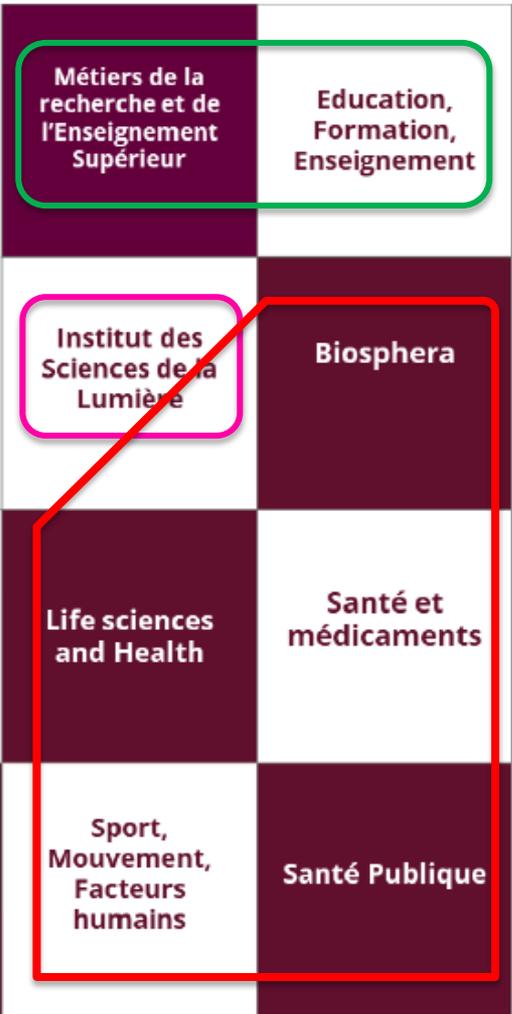
GS organisation in the Paris-Saclay University

15 disciplinary GS + 2 transversal GS + 1 institute

Science and engineering

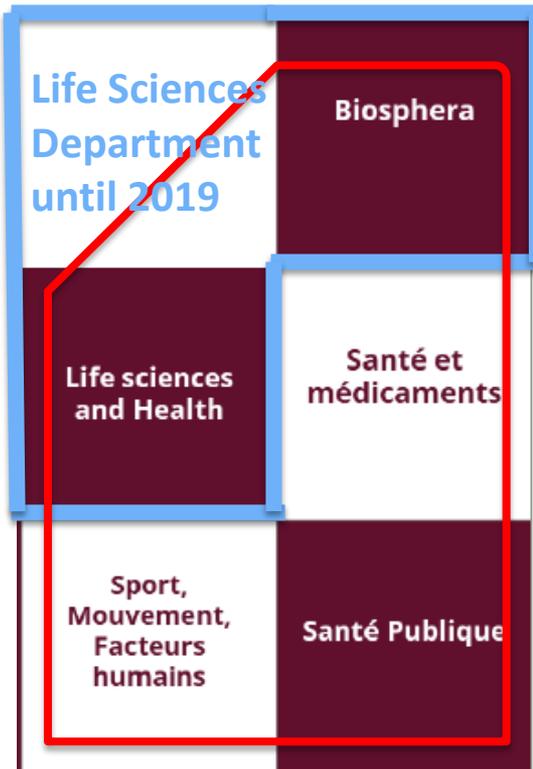


Social sciences and humanities



Life and health science

AREA: *Life and health science*



PhD students of SDSV doctoral school are in:

- **LSH (Life Sciences and Health)**

Coordinator = Faculty of Sciences

- **BioSphERA (Biologie, Société, Ecologie & Environnement, Ressources, Agriculture & Alimentation)**

Coordinator = AgroParisTech

Graduate School Life Sciences and Health



ED 582 Cancérologie, Biologie, médecine,
santé (env. 200 doctorants)

ED 568 Signalisation et réseaux intégratifs en
biologie (env. 100 doctorants)

ED 581 Agriculture, Alimentation,
Biologie, Environnement (env. 230
doctorants)

ED 567 Sciences du végétal : du
gène à l'écosystème
(env. 100 doctorants)

ED 569 Innovation thérapeutique : du
fondamental à l'appliqué
(env. 250 doctorants)

ED 577 Structure et dynamique des
système vivants (env. 250 doctorants)

BioSphERA

EUR SPS – GR (Saclay Plant
Sciences)

Santé Médicaments

Sciences du médicament et
des produits de santé
(env. 400 étudiants)

Nutrition et sciences des aliments
(env. 120 étudiants)

Biologie intégrative et physiologie
(env. 50 étudiants)

Chimie

Chimie
(env. 250 étudiants)

Master Biologie-Santé
(env. 750 étudiants)

STAPS: activité physique adaptée
et santé (env. 70 étudiants)

Sport, Mouvement, Facteurs
Humains

Master Bioinformatique
(env. 70 étudiants)

Sciences de la Vision et prise
en charge de l'acuité visuelle
(env. 150 étudiants)

Computer Science

Ergonomie
(env. 40 étudiants)



Life Sciences and Health: from understanding the fundamental mechanisms to applications in Biotechnology and Medicine

Partners

université
PARIS-SACLAY

FACULTÉ DE
MÉDECINE

MANAGEMENT

AgroParisTech

université
PARIS-SACLAY

école
normale
supérieure
paris-saclay

université
PARIS-SACLAY

université
PARIS-SACLAY

FACULTÉ
DES SCIENCES
D'ORSAY

COORDINATION

université
evry
val-d'essonne

université
PARIS-SACLAY

UVSQ

UNIVERSITÉ PARIS-SACLAY

université
PARIS-SACLAY

FACULTÉ DE
PHARMACIE

Partner NRO



INRAE
la science pour la vie, l'humain, la terre

Inserm
La science pour la santé
From science to health

Associated NRO

ONERA
THE FRENCH AEROSPACE LAB

Associated Operators

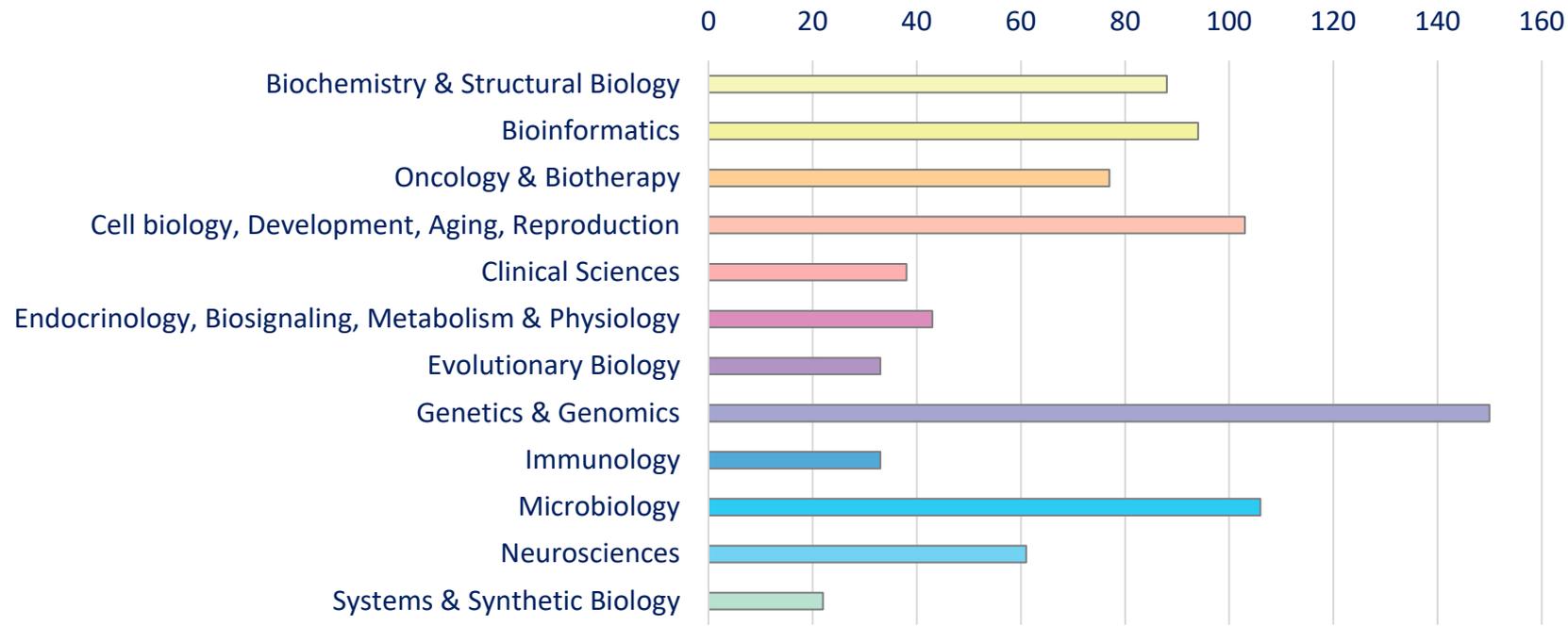
CentraleSupélec
université
PARIS-SACLAY

Inria

Structuration into Graduate programs in the GS LSH

> 330 research teams
> 70 laboratories

Number of research groups per Graduate Program



6 Doctoral Schools, > 600 Students

ED1 : Structure et dynamique des systèmes vivants

ED3 : Cancérologie, Biologie, Médecine, Santé

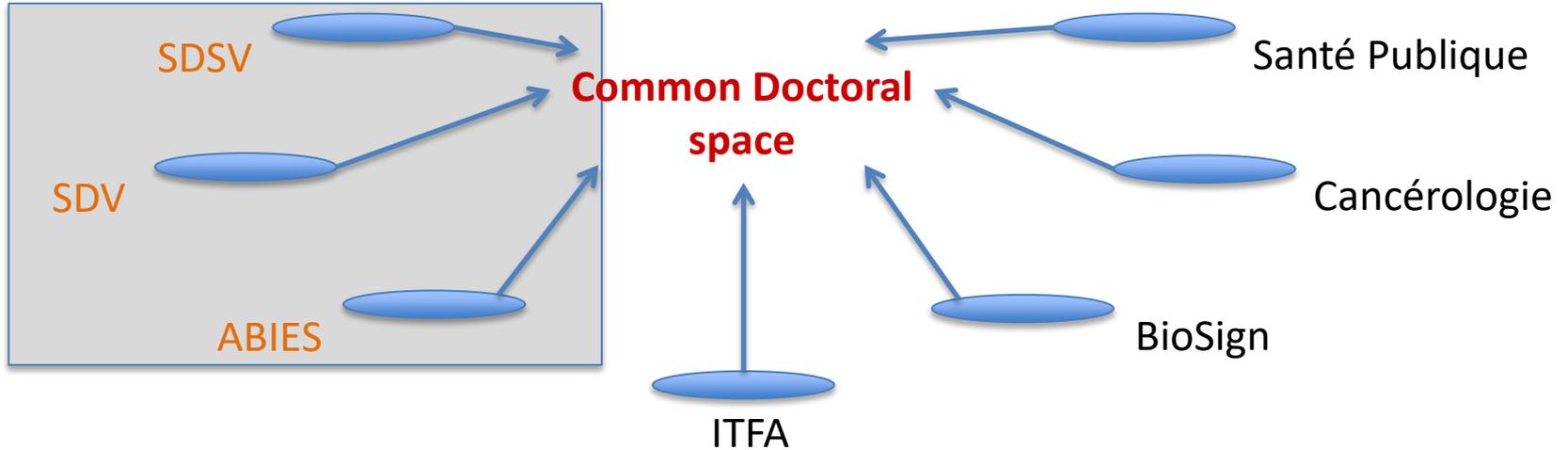
ED5 : Agriculture, Alimentation, Biologie, Environnement, Santé

ED2 : Signalisation et réseaux intégratifs en biologie

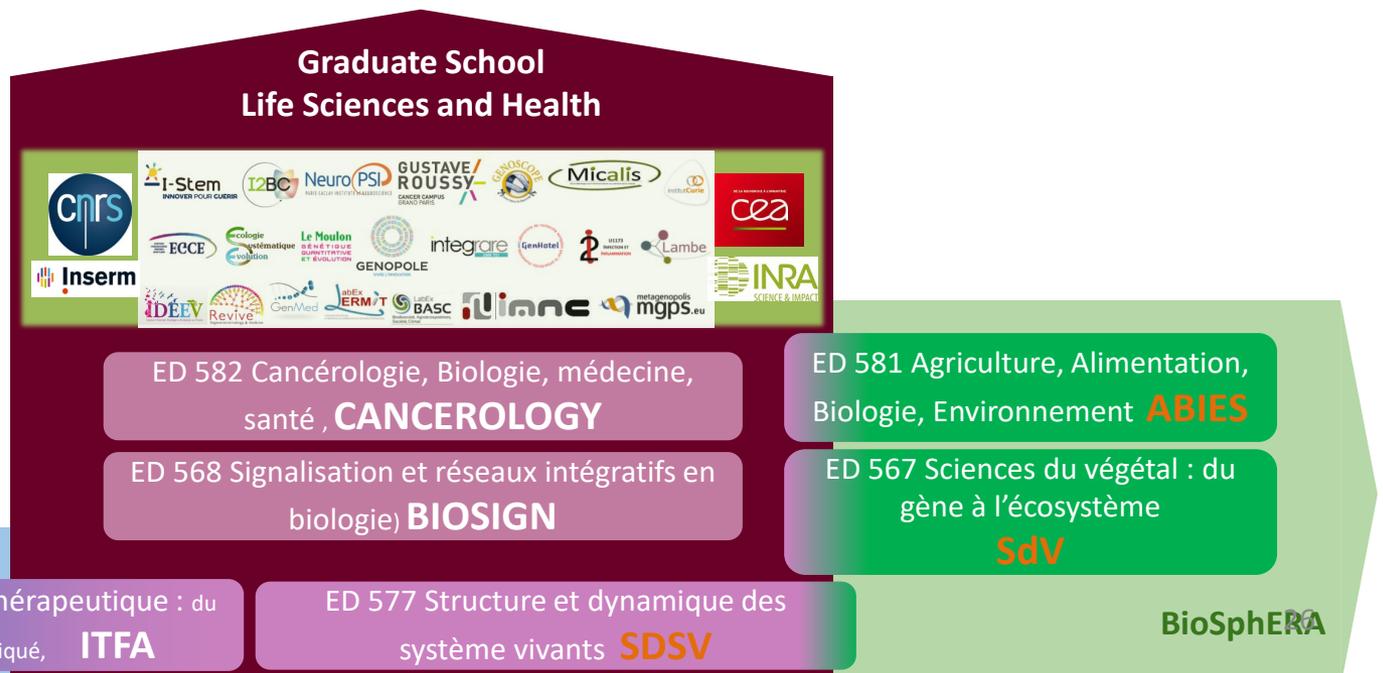
ED4 : Innovation Thérapeutique : du Fondamental à l'Appliqué

ED6 : Sciences du végétal: du gène à l'écosystème

Old relationships with others doctoral school



Now,
relationships
inside the GS LSH



Management team

- * Florence GONNET, Director
- * Pierre CAPY, Vice-director,
- **transition with** J.C. SANDOZ
- * Bernard MIGNOTTE, Vice-director,
- **transition with** I. GUENAL
- * Jean-Luc PERNODET, Vice-director,
- **transition with** F. MALAGNAC

Scientific board

- 1) 26 members including:
 - Director and Vice-directors (4 members)
 - 4 members of local units
 - 6 scientific experts from S DSV
 - **5 representatives of PhD students**
 - 6 scientific experts outside SDSV (academic research, private companies, socio-economic world)
 - 1 engineers / technicians
- 2) Executive committee :
 - 7 members of scientific board

Administrative assistance

- Sandrine LE BIHAN, 150 PhD students + overall administrative management
- Noémie MOUTTY/Jessica SAME, 90 PhD students

Web site - Communication

- Sandrine LE BIHAN

Administration

For all administrative points: registration, PhD defense, ADUM problems

- Jessica SAME for all UEVE, UVSQ and ENS-Paris Saclay units, with IPS2 Lab, INRAE units except GABI Lab.

jessica.same@univ-evry.fr

- Sandrine LE BIHAN for all the others UPSaclay units, including PSL units and GABI Lab., without IPS2 Lab.

ed.sdsv@universite-paris-saclay.fr

Direction

For all other points: annual interviews, specific problems...

- Florence Gonnet for all UEVE units, ENS-Paris-Saclay units and IPS2 Lab.
- Bernard Mignotte, Isabelle Guéna, for all UVSQ units, including BREED and VIM units
- Pierre Capy, Jean-Luc Pernodet, Fabienne Malagnac, Jean-Christophe Sandoz, for UPSaclay and PSL units, and GABI Lab.

Scientific direction and representatives of institutions (executive committee)

- Florence Gonnet, PR Université Évry-Val d'Essonne, directrice de l'ED
- Pierre Capy, PR Paris-Saclay, directeur adjoint
- Bernard Mignotte, PR Université Versailles-St-Quentin, directeur adjoint
- Jean-Luc Pernodet, DR CNRS, Paris-Saclay, directeur adjoint
- Graça Raposo, DR CNRS, PSL, teaching at Institut Curie
- ENS Paris-Saclay (**waiting for a new representative**)
- *Jean-Christophe Sandoz, DR CNRS, transition with P. Capy*
- *Fabienne Malagnac, PR Paris-Saclay, transition with J.-L. Pernodet*
- *Isabelle Guénal, PR Université Versailles-St-Quentin, transition with B. Mignotte*

Representatives of Engineers, Technicians and Administrative staffs

- Sandrine Le Bihan, ITA CNRS, GQE-Le Moulon
- Gilles Lemaitre, Research engineer HDR UEVE, ISTEM

Representatives of Research Units (inside Paris-Saclay))

- Ana BujBello, DR INSERM, Généthron, UEVE
- Marie-Noëlle Dieudonné, PR UVSQ
- Henri-Jean Garchon, PR UVSQ
- Agathe Guilloux, PR UEVE
- Nathalie Bonnefoy, DR CNRS, pour Frédéric Boccard, Directeur de l'I2BC, UPSaclay
- Charbel Maroun : CR INSERM, pour David Pastré, PR UEVE
- Fabienne Le Provost, DR INRAE, UPSaclay
- Delphine Sitterlin, MC-HDR, UVSQ
- Julie Soutourina, CEA, UPSaclay

Representatives of research units (outside Paris-Saclay)

- Jean-Charles Cadoret, MCF à Paris-Diderot, Institut Jacques Monod
- Institut Pasteur (**waiting for a new representative**)

Representative of Industry (executive committee)

- Tamara Smokvina, Danone Nutricia Research - DANONE

Invited members for the entrance examination

- Stéphane Aymerich, DR INRAE, UPSaclay
- Olivier Lespinet, PR UPSaclay
- Elisabeth Petit-Texeira, DR, GenHotel, UEVE
- Jean-Michel Rossignol, PR-EM, UPSaclay, expert in Virology
- François Rouyer, DR INSERM, UPSaclay
- Dominique de Vienne, PR-EM UPSaclay, expert in quantitative Genetics

Representatives of PhD Students, since 2018

- Gina Cosentino, 2IC, UVSQ
- Luisa Ferreira Dos Santos, I2BC, UPSaclay
- Marion Hoareau, LGBC, UVSQ
- Charlotte Mallart, I2BC, UPSaclay
- Mohammed Seba, I2BC, UPSaclay

In 2022: Election of representatives of PhD students

- Electronic voting - using Balotilo
- Open on January, 2022
- Vote per site
 - UEVE (Evry)
 - UVSQ (Versailles St Quentin)
 - Paris-Saclay, ENS, PSL
- Application in December 2021

UEVE (Number of seats = 1)

~~Julie Lê Hoang~~

~~Génomscope~~

UVSQ (Number of seats = 2)

Marion Hoareau (defense in the year)

LGBC

Gina Cosentino (defense in the year)

2IC

Paris-Saclay (Number of seats = 2)

~~Thomas Denecker~~

~~I2BC~~

Mohammed Seba

I2BC

~~Laura Belot~~

~~I2BC~~

Charlotte Mallart (12/2022)

I2BC

Luisa Ferreira dos Santos (defense in the year)

I2BC

**In January 2022, there will be other elections.
Do not hesitate to submit your application!**

Scientific domains

- Structure and spatial organization of macromolecules
- Structural and functional dynamics of genomes
- Environmental genomics and transcriptomics
- Molecular, cellular and developmental processes
- Molecular evolution (structural and functional)
- Gene and cell therapies
- Microbiology, virology
- Immunology, hematology
- Population genetics and genomics and quantitative genetics
- Chemistry, physics, mathematics and bioinformatics for systems understanding in an integrative approach (Living Systems Modeling, Systems Biology, Synthetic Biology)

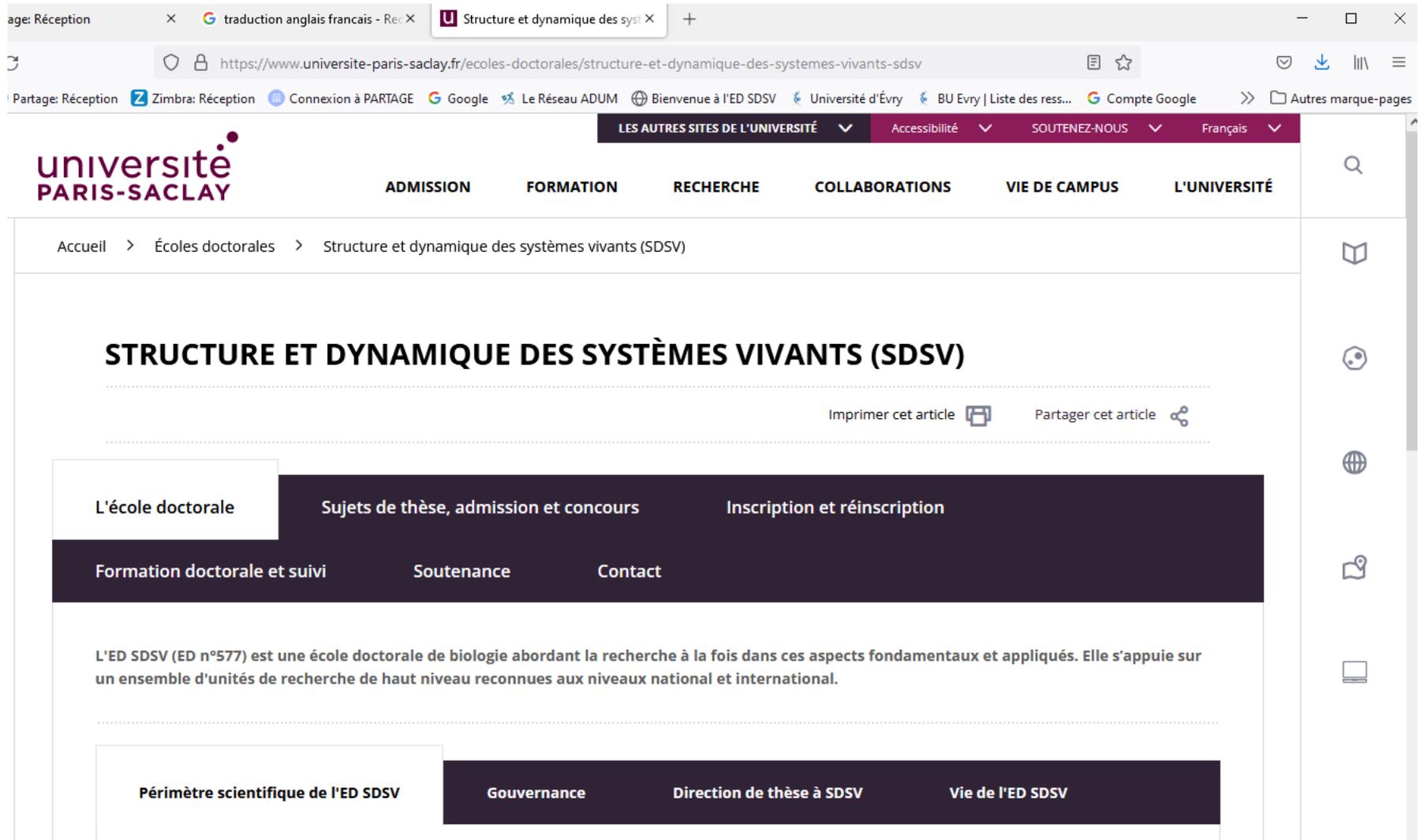
Scientific units

- Universities and Research organisms :
 - UPSaclay (with ENS UPS), UVSQ, UEVE,
 - CNRS, INRAE, CEA, INSERM,
 - ENS Paris, Curie Institute, Pasteur Institute, Jacques Monod Institute, several hospitals...

Data of SDSV doctoral school

- 64 research units
- 518 supervisors and co-supervisors, whose 344 HDR
- Approximately 250 PhD students :
 - 60% of women, more than 10 nationalities
- 37 defenses in 2021 and 18 to come
- 140 PhD students registered in 2021-2022
- **BUT**: 111 files to be processed

<https://www.universite-paris-saclay.fr/ecoles-doctorales/structure-et-dynamique-des-systemes-vivants-sdsv#edit-group-international>



The screenshot shows a web browser window displaying the SDSV website. The browser's address bar shows the URL: <https://www.universite-paris-saclay.fr/ecoles-doctorales/structure-et-dynamique-des-systemes-vivants-sdsv>. The website header includes the University of Paris-Saclay logo and navigation menus for 'LES AUTRES SITES DE L'UNIVERSITÉ', 'Accessibilité', 'SOUTENEZ-NOUS', and 'Français'. The main navigation bar contains links for 'ADMISSION', 'FORMATION', 'RECHERCHE', 'COLLABORATIONS', 'VIE DE CAMPUS', and 'L'UNIVERSITÉ'. The breadcrumb trail reads: Accueil > Écoles doctorales > Structure et dynamique des systèmes vivants (SDSV). The main heading is 'STRUCTURE ET DYNAMIQUE DES SYSTÈMES VIVANTS (SDSV)'. Below the heading are links for 'Imprimer cet article' and 'Partager cet article'. A dark navigation bar contains the following menu items: 'L'école doctorale', 'Sujets de thèse, admission et concours', 'Inscription et réinscription', 'Formation doctorale et suivi', 'Soutenance', and 'Contact'. The main content area contains the text: 'L'ED SDSV (ED n°577) est une école doctorale de biologie abordant la recherche à la fois dans ces aspects fondamentaux et appliqués. Elle s'appuie sur un ensemble d'unités de recherche de haut niveau reconnues aux niveaux national et international.' At the bottom, another dark navigation bar contains: 'Périmètre scientifique de l'ED SDSV', 'Gouvernance', 'Direction de thèse à SDSV', and 'Vie de l'ED SDSV'.



<http://www.adum.fr/>

English version

Ask if you are lost....

ESPACE PERSONNEL

Ce site est optimisé pour Google Chrome, Mozilla Firefox et Safari.
Merci d'utiliser un de ces navigateurs

Vous entrez dans une zone réservée

Votre adresse email :

Mot de passe :

[SE CONNECTER](#)

[J'ai oublié mon mot de passe](#)

[CRÉER UN COMPTE](#)

[CREATE AN ACCOUNT](#)

[Intranet >>](#)

Votre espace personnel est l'espace unique dédié à toutes vos démarches d'inscription, de réinscription et de soutenance de thèse.

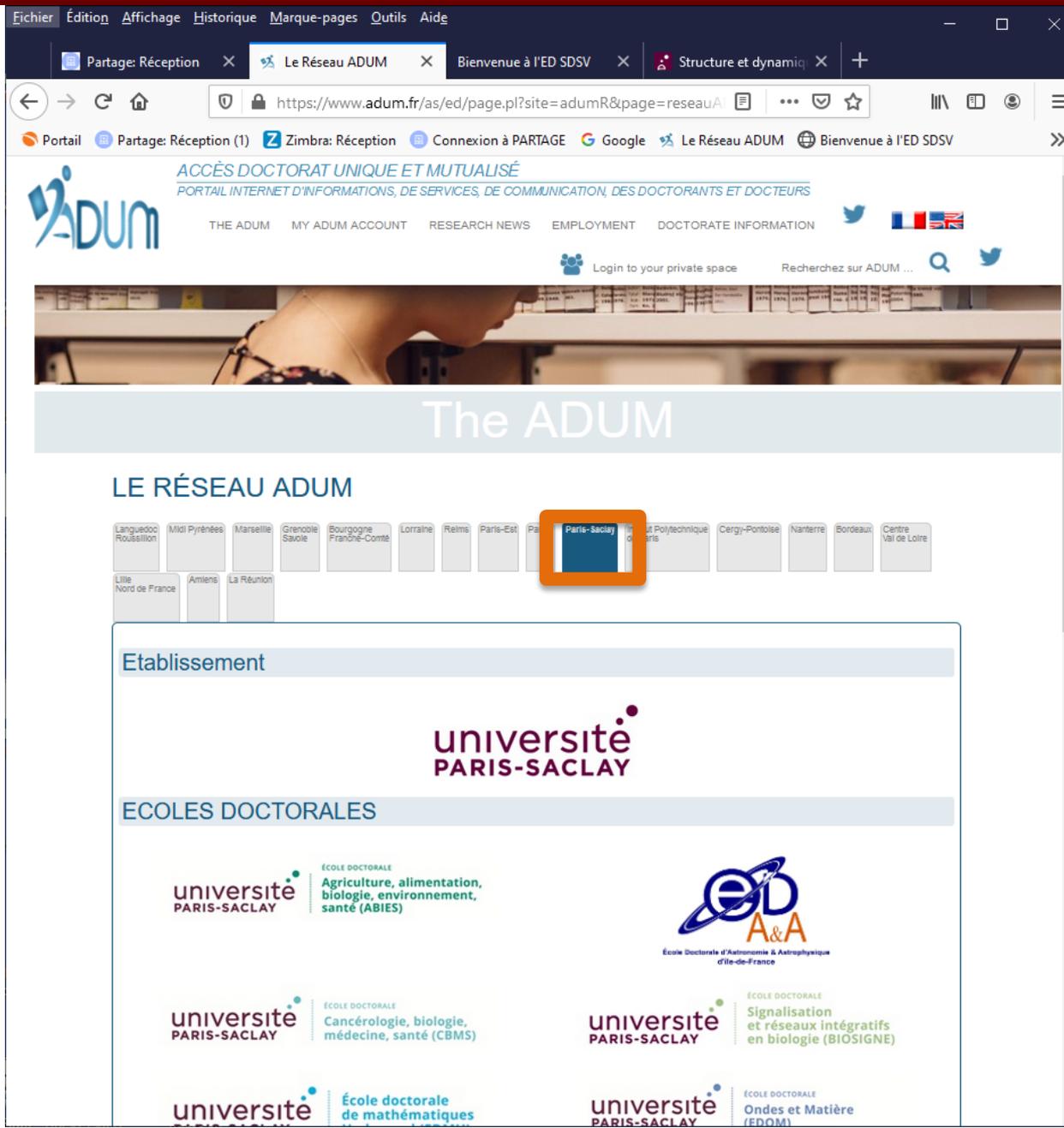
Il vous permet :

- d'accéder à votre dossier qui regroupe toutes vos informations
- d'effectuer votre actualisation annuelle
- de déposer les pièces administratives demandées
- d'accéder aux services du réseau ADUM :
 - offres d'emploi
 - réseau des doctorants et docteurs
- de gérer votre présence dans les annuaires
- de mettre en ligne votre profil de compétences
- de vous inscrire aux formations
- d'assurer la diffusion en ligne de votre thèse sur des plateformes dédiées
- d'imprimer votre formulaire d'enregistrement de thèse soutenue

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Ces cookies ne sont pas conservés et ne sont pas exploités et ne servent qu'à gérer les sessions, ils sont détruits au redémarrage du navigateur.

REGISTRATION on ADUM



The screenshot shows a web browser window displaying the ADUM website. The browser's address bar shows the URL: <https://www.adum.fr/as/ed/page.pl?site=adumR&page=reseauA>. The website header includes the ADUM logo and navigation links: THE ADUM, MY ADUM ACCOUNT, RESEARCH NEWS, EMPLOYMENT, DOCTORATE INFORMATION. Below the header is a search bar and a login button. The main content area is titled "The ADUM" and "LE RÉSEAU ADUM". A grid of regional buttons is shown, with "Paris-saclay" highlighted in an orange box. Below this grid is a section titled "Etablissement" featuring the "université PARIS-SACLAY" logo. The "ÉCOLES DOCTORALES" section lists several doctoral schools: "Agriculture, alimentation, biologie, environnement, santé (ABIES)", "Cancérologie, biologie, médecine, santé (CBMS)", "École doctorale de mathématiques", "École Doctorale d'Astronomie & Astrophysique d'Île-de-France (A&A)", "Signalisation et réseaux intégratifs en biologie (BIOSIGNE)", and "Ondes et Matière (EDOM)".

ACCÈS DOCTORAT UNIQUE ET MUTUALISÉ
PORTAIL INTERNET D'INFORMATIONS, DE SERVICES, DE COMMUNICATION, DES DOCTORANTS ET DOCTEURS

THE ADUM MY ADUM ACCOUNT RESEARCH NEWS EMPLOYMENT DOCTORATE INFORMATION

Information

My ADUM account

PROFILE

Only doctoral students or doctors who are part of one of the [partner institutions](#) or [doctoral schools](#) may create an account in order to apply and register to a doctorate.

Before creating your account and in order for you request to be valid, you must have contacted your future thesis supervisor, the laboratory and have chosen a research subject.

Once you have requested an account, the administrative agent in charge who was selected by the institution that will award the doctorate will have full authority to activate, or not, your profile and make it visible on the web (if you chose to do so).

To create your account [CLICK HERE](#). Your browser must accept cookies.

To access your personal account [CLICK HERE](#). Your browser must accept cookies.

DISPLAY OPTIONS

Every doctoral candidate and doctor who owns an ADUM profile can decide what information is available on the Internet.

By default, and if you have agreed to be visible online when you created your profile, only the information relating to your thesis and to the diploma you obtained before will be available.

You will be able to add your CV and your photo to your profile, indicate your on-going work and your work experience.

In order to choose your display options, [login](#) and go to the "Display management" tab in your ADUM profile.

ADUM - Important reminders

- The ADUM file must be completed with as much details as possible, in terms of name, contact (phone, email, etc.), affiliation, etc..
- Registration files must be completed carefully so as not to be rejected. **The PDF must contain all the supporting documents requested and in the order requested** to facilitate the work of managers. Any incomplete file will be rejected and the duration of its processing will therefore be extended.
- Registration is totally **dematerialised**: you must finalise your registration, then your thesis **director must sign, then your unit director, then the doctoral school, before the UPSaclay presidency.**
- The training courses taken must also be filed in ADUM with the appropriate certificate, number of hours and other things that we will see soon.
- **ADUM is a Database**
 - Must be **up-dated** during the PhD and during (at least) 3 years after the PhD defense
 - Many informations / survey ... will be sent *via* ADUM

- **Annual interview for first and all other registrations**
 - With one member of the direction team
 - Florence Gonnet for all UEVE units, ENS units (LBPA) and IPS2 Lab.
 - Bernard Mignotte for all UVSQ units, including BREED and VIM units
 - Pierre Capy , Jean-Luc Pernodet, Fabienne Malagnac, Jean-Christophe Sandoz, for UPSaclay and PSL units, and GABI Lab.
 - Presentation of the doctoral school:
 - Structure, rules, right and duty of PhD students

- **PhD Committee : compulsory 6 MONTHS AFTER the first registration**
 - First year in january-February
 - Second year
 - Third year
 - **Every year before the next registration (no derogation)**

PhD Committee: Planning to keep in mind

- One meeting of the committee **each year**
- Planning of the experiments for the **coming year**



PhD Committee

Objectives

The aim of the thesis committee is to review the scientific aspects (on the programming and progress of the work), on the supervision, on the training courses and the professional project of the PhD student. It allows too to specify objectives for the following year.

Composition

The thesis committee consists of **at least** two scientific experts chosen outside the doctoral laboratory (including the tutor) and the thesis supervisor(s). The experts are proposed by the PhD student in consultation with the thesis supervisor(s) and submitted to the Direction of the Doctoral School for approval.

PhD Committee

The meeting organization is entirely managed by the PhD student, who must contact the persons concerned sufficiently in advance to respect the deadlines.

The proposed sequence of the meeting is as follows:

- Presentation of the work by the PhD student and then scientific discussion
- Discussion on the professional project and the trainings
- Separate interview of the thesis supervisor(s) by the external experts
- Separate interview of the student by the external experts.
- At the end of the meeting, a short report is written by the experts and the tutor, and **DEPOSITED ON ADUM after being signed.**

In particular, this report must give the opinion of the committee on the progression of the thesis project, the achievements at the time of the meeting, the difficulties encountered (scientific or personal) and whether the thesis can be pursued.

What is requested before the PhD defense?

- **Your thesis in 3 years**
 - Possible derogation for a 4th year, if there is a financial support
 - **No 5th year**
 - Possibility of European PhD
- **At least 100h of trainings and 25 points in terms of skill blocks**
- **A least one paper in first author**
 - International Journal (rank A with peer review)
- **Maintain your file with up to date informations during 3-5 years after the defense**

- **Master Courses (second or first year)**
 - Check on the web site of the university
 - You do not have to take the exam
- **Doctoral School courses – check in all Doctoral Schools**
 - Compulsory:
 - Training in Ethics and Scientific Integrity – (Poletis Paris-Saclay, FUN-MOOC)
 - Training in Open Science issues
 - Training in the challenges of durable and sustainable development
 - Curie Orsay Courses, Statistiques with R, Introduction to Biopython ...
 - Big Data training (M2 Gen2Ev)
 - Training in the field of imaging
 - Learn a new technics outside the PhD lab
 -
- **Check the list proposed by Paris-Saclay, IRTELIS program, Collège de France**
 - General trainings
 - Languages, how to write a scientific paper, Doctoriales....
- **Congress, workshop, ...**
- **Training to teach and teaching**
- **SPECIAL EVENTS OF SDSV**
 - Particular events
 - The annual day of the doctoral school (10h)

Ask for a certificate to the person in charge of the training and put it on ADUM

For each training, you must on ADUM:

- **Deposit the certificate**
- **Choose an objective from the list:**
 - ✓ useful for carrying out personal research work
 - ✓ research ethics and scientific integrity
 - ✓ useful for writing the thesis or for the written or oral presentation of research work
 - ✓ training in open science
 - ✓ reinforcing the scientific culture of doctoral students
 - ✓ training in sustainable and sustainable development
 - ✓ promoting international openness
 - ✓ preparation for professional development in both the public and private sectors
- **Choose a single sub-block of skills in a block, for each training**
- **We will send you a procedure in January to help you complete ADUM for your trainings**

Trainings

Number	BLOCK	SKILLS	BLOC
1	Design and development of a research and development, studies and prospective	Have both general and specific scientific expertise in a specific field of research and work	Conception et élaboration d'une démarche de recherche et développement, d'études et prospective
		Take stock of the state and limits of knowledge within a given sector of activity, at the local, national or international scales	
		Identify and solve complex and new problems involving a plurality of fields, mobilizing the most advanced knowledge and know-how	
		Identify the possibilities of conceptual breakthroughs and design axes of innovation for a professional sector	
		Make innovative contributions in high-level exchanges, and in international contexts	
		Constantly adapt to the needs of research and innovation within a professional sector	
2	Implementation of a research and development, studies and prospective	Implement research methods and tools related to innovation	Mise en œuvre d'une démarche de recherche et développement, d'études et prospective
		Implement the principles, tools and procedures for evaluating the costs and financing of an innovation or R&D process	
		Guarantee the validity of the work as well as its ethics and confidentiality by implementing the appropriate control systems	
		Manage the time constraints of study, innovation or R&D activities	
		Implement the factors of engagement, risk management and autonomy necessary for the finalization of an R&D project, studies or	
3	Valuation and transfer of the results of an R&D, studies and prospective	Implement transfer issues for exploitation and promotion of results or products in economic or social sectors	Valorisation et transfert des résultats d'une démarche R&D, d'études et prospective
		Respect the rules of intellectual or industrial property related to a sector	
		Respect the principles of professional conduct and ethics in relation to the integrity of the work and the potential impacts	
		Implement all the publication systems at the international level to promote new knowledge and knowledge	
		Mobilize open data communication techniques to promote approaches and results	
4	International scientific and technological watch	Acquire, synthesize and analyze cutting-edge scientific and technological data and information on an international scale	Veille scientifique et technologique à l'échelle internationale
		Have an understanding, perspective and a critical eye on all the cutting-edge information available	
		Going beyond the boundaries of available data and knowledge by crossing over with different fields of knowledge or other	
		Develop international scientific and professional cooperation networks	
		Have the curiosity, adaptability and openness necessary to train and maintain a high-level general culture	
5	Training and dissemination of scientific and technical culture	Report and communicate in several languages scientific and technological work for different audiences or publications, both written and oral	Formation et diffusion de la culture scientifique et technique
		Teach and train diverse audiences in advanced concepts, tools and methods	
		Adapt to a varied audience to communicate and promote avant-garde concepts and approaches	
6	Supervision of teams dedicated to research and development, studies and	Lead and coordinate a team within the framework of complex or interdisciplinary tasks	Encadrement d'équipes dédiées à des activités de recherche et développement, d'études et prospective
		Identify missing skills within a team and participate in the recruitment or solicitation of service providers	
		Build the necessary steps to stimulate the entrepreneurial spirit within a team	
		Identify key resources for a team and prepare for changes in terms of training and personal development	
		Evaluate the work of people and the team with respect to projects and objectives	
7	Personal qualities ; Know-how ; Social abilities	Adaptation; Perseverance ; Resilience; Management of change and failure; Commitment	Qualités personnelles ; Savoir-être ; Compétences sociales
		Creativity, ability to imagine and formulate original ideas; Flexibility of mind and openness to novelty	
		Knowledge and control of oneself and one's behavior = Ability to self-assess and question oneself; Knowledge of own limits; Dosage	
		Rigor / flexibility	
		Independence ; Autonomy; Initiative and decision-making	
Inter-relational skills = Sense of communication; Ability to listen and empathize, benevolence; Relationship to the other; Ability to work in a team and sense of collective responsibility.			

Day attendance counts as 10h of PhD training

2015



2016



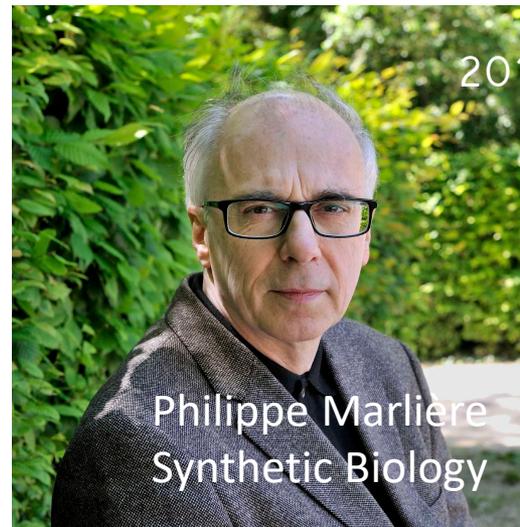
2017



2018



2019



2021



- International Journal (rank A with peer review)
- Before to defend your PhD
 - If you have not yet published your results, you must request an exemption (**on the website of SDSV**) and argue why no results have been published and when you plan to publish them.
 - The exemption will only be accepted if a full draft is ready and submitted to a journal or at least deposited on a platform such as *HAL*, *BioRxiv* or others.
 - PCI (peer community in) recommendations are accepted as regular paper
 - No possibility for your supervisor to have a new student before the publication of your results.

Administrative process completely dematerialized BUT:

- **4 months before:**
 - discuss with your director concerning the jury composition: you must follow the rules which can be found on the ED website
- **6 months before:**
 - discuss with your director concerning the confidentiality of your thesis manuscript
- **24-30 months before (just at the beginning of your thesis):**
 - discuss with your director concerning the possibility to obtain the European Doctorate Label

- Recognition of the European dimension of a doctorate
- The “European Doctorate”, or “Doctor Europaeus” is a label awarded by Université Paris-Saclay and applies to the national doctorate diploma, already internationally recognised under the European Undergraduate-Graduate-Post-Graduate framework, and which enables recognition of the European dimension of the PhD project.
- It is open to PhD students from European Community member countries, and extended to other states of the European Free Trade Association (Switzerland, Iceland, Norway, Lichtenstein).
- All European Community institutions authorised to deliver a doctorate can also deliver the “European Label” upon completion of the oral thesis presentation, subject to the following conditions:

- The doctorate must, in part, have been prepared during a **research internship period of at least three months in another European country.**
- Oral thesis presentation authorisation is granted on the basis of reports submitted by **at least three professors** comprising at least two from higher education institutions **from two European countries other than the country** in which the oral thesis presentation is to be held. The host laboratory representative cannot submit this report.
- At least one member of the jury should belong to a European higher education institution from a different country to that in which the oral thesis presentation is held.
- **Part of the oral thesis presentation should be conducted in an official language of the European Community which is not the language of the country in which the presentation is held.**

Welcome to The Doctoral School « Structure et Dynamique des Systèmes Vivants »

Questions?

Pierre CAPY



Jean-Luc PERNODET



Bernard MIGNOTTE



Florence GONNET



Jean-Christophe SANDOZ Fabienne MALAGNAC



Isabelle GUENAL

