A unique doctoral studies programme that offers real visibility: the University of Paris-Saclay is home to 10% of doctoral candidates in France,

A common doctoral training policy, a shared aspiration and efforts to achieve the visibility, clarity and attractiveness worthy of a unique institution, the University of Paris-Saclay.

A single doctoral thesis charter, implemented through a quality assurance approach drawing upon a shared ADUM information system. Sharing best practices, taking advantage of the wide range of experiences and cultures teeming in the institutions and people who work in them,

A common doctoral candidate selection and admission process, built on transparent and explicit criteria, and comprehensive procedures in line with the highest standards in recruiting young researchers,

A common training and progress monitoring policy for all doctoral candidates, making the doctoral studies programme a stand-out professional experience in research. A catalogue of cross-cutting training programmes, so as to give doctors the best possible preparation for their professional future.

International outreach activities (agreements for international joint supervision of thesis, papers, etc.), build the international visibility of the doctoral studies programme at the University of Paris-Saclay, doctors' international careers, doctoral candidates' opportunities for international experience and hiring of new doctors.

Activities and events to build doctors' careers and heighten recognition for the University of Paris-Saclay's doctoral degree (graduation ceremony, forums, trade shows, web site, etc.)

KEY FIGURES

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>5,000</td>
<td>doctoral candidates</td>
</tr>
<tr>
<td>1</td>
<td>common doctoral degree, 1 doctoral thesis charter</td>
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<tr>
<td>1</td>
<td>college of doctoral studies</td>
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<td>20</td>
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<tr>
<td>23</td>
<td>partner institutions</td>
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<td>12,000</td>
<td>researchers and faculty researchers</td>
</tr>
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<td>300</td>
<td>research laboratories</td>
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</table>

Structure

The doctoral studies programme is structured into 20 doctoral schools, under a College of Doctoral Studies, where the University of Paris-Saclay's doctoral studies policy is developed and implemented, in line with a quality assurance approach.

The College of Doctoral Studies is also an operational structure in charge of coordinating and pooling the activities of its twenty doctoral schools and partner institutions.

What Paris-Saclay Offers

- An outstanding research environment where doctoral candidates are able to produce top-tier research and secure recognition for it as much at the national as at the international level.
- A technological cluster, facilitating relations with companies (SATT, incubator, etc.) and good integration into the corporate and business world,
- International visibility naturally arising from the project's magnitude, that of its member establishments and the cooperation between them,
- A regional development outlook attentive to the tie between science and society and the construction of a university town open onto the world.
Admission of Doctoral Candidates

Each year, some 1,500 young scientists come join us to prepare a doctoral thesis in one of the University of Paris-Saclay's 300 research laboratories, having come through a demanding, open and explicitly stated selection process applied equally to all.

Selected candidates receive financing to prepare their doctoral studies through a variety of channels (doctoral contracts offered by institutions with Ministerial financing, research contracts, via CIFRE, etc.)

Nearly 350 of them will be hired as contractual doctoral candidates via a competitive examination common to all University of Paris-Saclay and Campus Saclay Foundation institutions. 10% of the financing is specifically dedicated to interdisciplinary doctoral projects.

Doctoral Missions

Contractual doctoral candidates wishing to enrich their professional experience may engage in activity alongside their research, including:

- teaching, as part of a faculty team
- scientific mediation through the projects run by Diagonale Paris-Saclay, and Maison d'Initiation et de Sensibilisation aux Sciences (the Centre for Initiation and Awareness-Raising in the Sciences, MISS) ...
- expertise, consulting in companies,
- promoting research results,

Foreign Doctoral Candidates

The University of Paris-Saclay opens its doors to foreign doctoral candidates with the assistance of:

- The Police Prefecture and its "Administrative One-Stop Shop" on campus during the enrolment period.
- Science Accueil, an association founded to ensure that foreign students receive a personal welcome: www.science-accueil.org
  6, boulevard Dubreuil – 91400 Orsay, contact@science-accueil.org

My thesis in 180 seconds

Doctoral students in a race against the clock!

In the competition My Thesis in 180 Seconds, doctoral students are invited to present the focus of their research, in simple, straightforward French to a diverse community of laymen.

Each doctoral student is given three minutes to deliver a clear, concise yet still convincing summary of their research project. All with only one slide to lean on!

Each year, some twenty doctoral students from the University of Paris-Saclay take part in preparation for the competition. They receive training about spoken communication and scientific mediation techniques.

Doctoral Studies Programme

This is the programme that most closely intertwines research and training. Each individual programme is unique: doctoral students are expected to present original scientific work in defence of their thesis.

The personalised studies programme, based on laboratory research gives each doctoral candidate the opportunity to gain professional experience in research. It also enables doctoral candidates to develop knowledge and skills in their field of expertise or which can be transferred, by engaging them in research or supplementary activities with the support of training programmes offered by the College of Doctoral Studies: written and verbal communication, the ability to analyse and summarise, critical thinking, creativity, strategic analysis skills, etc.

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About
The Doctoral School offers physicians and mathematicians the opportunity to train in and through research, in the vast interdisciplinary field of astronomy and the observation, measurement and computation methods used therein. It covers a field currently in constant and sweeping development: from the discovery of extra-solar planets to a new cosmology at the interface with particle physics, the development of astrochemistry, in situ exploration of the solar system, spatial navigation and planetology at the interface with the Earth sciences. Power observation tools are being prepared, both for Space and on the ground, asserting Europe’s place and making use of a wide variety of advanced technologies (optics, metrology, cryogenics, automatics, etc.)

In addition to being able to vie for positions in research across Europe and beyond, students having completed the doctoral programme boast solid skills that qualify them for any variety of career opportunities: higher education, cutting-edge industries, advanced computer sciences, scientific communication, etc. The School develops interfaces with other doctoral schools or programmes, for instance in mathematics, computer sciences, optics, plasma physics, particle physics, Earth sciences, etc.

Each year, the doctoral school opens its doors to some 50 new students from Master’s programmes, regardless of nationality or university of origin. Over a three-year period, and receiving remuneration through a variety of contracts, they prepare their doctoral thesis at laboratories across the Ile-de-France Region and in some cases abroad. At any given time, the School has some 150 doctoral candidates, under the guidance of their thesis supervisors.

Entry into the Working World
Students having earned a doctorate have gained skills in the field of research, which also qualify them for a wide variety of career paths: the most obvious are research and teaching, but their opportunities also include cutting-edge industries, advanced IT, scientific communication, etc.

KEY FIGURES

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
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<tbody>
<tr>
<td>162</td>
<td>doctoral candidates</td>
</tr>
<tr>
<td>45</td>
<td>theses defended per year (on average)</td>
</tr>
<tr>
<td>225</td>
<td>researchers accredited to supervise theses</td>
</tr>
<tr>
<td>32</td>
<td>hosting laboratories or units</td>
</tr>
</tbody>
</table>

Opportunities for International Experience
The doctoral candidates, with the support of the doctoral school, may earn academic credits at foreign institutes of higher learning or research centres. Depending on the host country, the training provided can come in various forms (courses, workshops, conferences, etc.), and in all cases is an opportunity to open up to different cultures. Some theses may be prepared under international joint supervision of thesis arrangements, with a co-supervisor from a partner university abroad, giving rise to a double degree.
Thesis

The doctoral thesis is to be prepared over a three-year period. Doctoral students from Master's or comparable programmes, regardless of nationality or previous background, are offered the choice amongst some 40 thesis topics. The range of topics reflects the school's scientific policy and both national and international priorities. The thesis is prepared at one of the laboratories (or in one of the teams) operating under the doctoral school.

The thesis may be financed by doctoral contract (e.g., grants from the Ministry of Higher Learning and Research), granted by the DS or contracts with private and public organisations, the Regions or Foundations.

The Degree

The Doctoral Degree is conferred by one of five co-accredited establishments. (Observatoire de Paris, Universities of Paris6, Paris7, Paris11, UVSQ). It is awarded following successful defence of thesis and completion of supplementing coursework.

Aims of Supplementing Coursework

During their 1st and 2nd years, doctoral students are required to follow a curricular track. The aim of this supplementary track is to round out and diversify the teaching received in the Master's programmes, with innovative, in-depth programmes, using highly-specialised techniques, so as to better prepare PhDs to enter the working world.

Contact

Jacques Le Bourlot, Director of ED 127

Jacqueline Plancy, Administrative Head of ED 127

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E-mail: ecole-doctorale.astro@obspm.fr

Partners
Agriculture, Food, Biology, Environment, Health (ABIES)

About

The ABIES Doctoral School promotes a doctoral studies policy of the highest standard in life, food and environmental sciences. It encourages interdisciplinarity, which enables to fully understand the complexity of the materials studied.

More precisely, the specific areas of the ABIES Doctoral School are the following:

- Life sciences and health;
- Agricultural, ecological and landscape sciences;
- Environmental sciences;
- Food processing and bio-product sciences;
- Engineering sciences, mathematics, computer sciences and physics applied to environmental and life sciences;
- Economic, social and management sciences applied to agriculture and environmental sciences as well as to developmental issues.

ABIES has taken special care to develop a training offer aimed at enabling research of the highest standard, as well as including company and public policy dimension.

ABIES is jointly co-accredited by the University of Paris-Saclay, by IAVFF (the French Agricultural, Veterinary and Forestry Institute) and by the University of Paris-Est. INERIS is an associated institution.

Professional Outcomes

ABIES Doctoral School has a particular interest in the professional outcome of its doctors, by offering a personalized support program which facilitates the post-doctoral transition.

The last survey conducted in 2013 among doctors, three to five years after their thesis, showed that 97% were in employment: 50% were working in higher education and research, 40% in the private sector, and 10% in the civil service outside higher education and research. 35% of the doctors are employed abroad.

KEY FIGURES

- 380 enrolled in doctoral studies:
  - 60% women
  - 40% foreign doctoral candidates
  - 10% in international joint supervision of their thesis
- 90 theses defended per year
- 50 research teams
- 310 HDR

A Word from the Director

The ABIES Doctoral School offers its guidance to future doctors in environmental and life sciences and engineering.

It helps them to acquire and develop multiple professional skills. It orients them in a research arena of international dimension.

It promotes multi-disciplinarity that stimulates innovation.

Ultimately, ABIES doctors has learned to grasp the full complexity of the major issues in agriculture, food and environment, through a variety of different approaches.

Alexandre PERY
Director
Testimonials

Suzanne Lutfalla
2014 L’Oréal-UNESCO scholarship winner

Now an AgroParisTech doctor, I entered the ABIES DS in 2012. I greatly appreciated the contact with the management team, which was always attentive, available and responding warmly.

Having an unusual background and thesis organization, I found myself right at home within the range of doctoral profiles.

The training offer is wide and of high-quality, and the fact that outside training can be recognized for credit is positive and gives candidates the opportunity to personalize their training program - an option of which I made great use.

Another program specific to the ABIES DS, namely international mobility for doctoral candidates, made it possible for me to establish a scientific cooperation program with a team in Zurich, where I will soon undertake a post-doc!

Pierre Larraufie

After graduating from École Polytechnique, I wanted to start my career with a PhD. I was attracted by the stimulating and intellectually rewarding offered research opportunities, on a new topic (intestinal bacteria-host dialogue) and the career opportunities offered by the doctor degree.

ABIES gave me the chance to broaden my professional skills through transversal programs in addition to my thesis project, and offers a rich framework, with doctoral candidates from many different backgrounds, working on a variety of topics.

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Partners

Co-Accreditations
Signaling and Integrated Networks in Biology (BIOSIGNE)

Presentation

Teams of the Doctoral School "Biosigne" (DS 568) of University Paris-Saclay belong to University Paris-Sud (Faculty of Medicine and Faculty of Science) in partnership with University Paris Sciences and Letters (PSL), the French National Institute of Health and Medical Research (Inserm), the National Centre for Scientific Research (CNRS), the National Institute for Agricultural Research (INRA) and the Office of Atomic and Alternative Energies (CEA).

Researchers and PhD students of our teams are exploring mechanisms of signaling and communication in biology and medicine, specifically in the fields of neurosciences, endocrinology, neuroendocrinology, reproduction and immunology. The scientific disciplines include biochemistry, biophysics, cell and molecular biology, behavioral sciences as well as all those necessary for studying signaling mechanisms and processes in a broader sense. All levels of analysis are covered, ranging from molecules to behavior.

Entry into the Working World

Over a three-year period

140 PhD students
160 researchers eligible to supervise PhS students
45 Host research teams
2 The mean number of scientific articles

A Word from the Director

If you are interested in signaling mechanisms at the molecular, cellular, organismal or behavioral level, we welcome you to our Doctoral School "Biosigne" (DS 568). Our goal is to provide support throughout your thesis and to help you developing your professional project in biology or medicine. All our host teams enjoy international renown and offer excellent conditions for successful research. We also encourage you to take courses that will facilitate your professional integration, and we want to promote interactions among PhD students through the organization of an annual meeting day and the welcome of new entrants. The assistant of our DS, Mr Laurent Surdi, will help you with your administrative problems.
Organisation

The management of Doctoral school "BIOSIGNE" is provided by a director, who is assisted by two deputies. They define the policy of the Doctoral school, federate the host teams and supervise the recruitment of doctoral candidates as well as the progress of the thesis work and training. The director of BIOSIGNE is assisted by an assistant who is responsible for the educational and administrative secretariat. All actions of the doctoral school are validated by a Council, which comprises 26 members, including 5 PhD students. The Bureau of the DS, consisting of 10 members of the Council, allows a rapid and efficient management of current affairs and prepares the meetings of the Council.

Activities

Each year, we organize the "Day of the Doctoral School", which brings together PhD students and researchers, supervisors and members of the Bureau. Scientific presentations as posters or oral communications allow our PhD students to discuss their work with their peers and researchers. Plenary lectures on innovative topics or those being debated by the scientific community are also organized. The Doctoral school is pleased to invite its first year PhD students and their supervisors for a half-day welcoming. During this event, we explain the operation of the Doctoral school, the progress of a thesis, and we present associations of PhD students and discuss current scientific or societal topics during a round table. The Doctoral school Biosigne also organizes specific training for PhD students and is a partner of training programs of University Paris-Saclay.

Testimonies

Laura Fontenas
I joined the Doctoral School BIOSIGNE after a Master's degree in Neuroscience. In 2012, I was awarded a PhD fellowship after successfully passing the competition of the Doctoral School, allowing me to realize my research project. I am very interested in the mutual communication between neural cells during development, resulting in the organization of a complex mature nervous system. To do so, I take advantage of the zebrafish, an excellent and compelling model for the live study of developmental mechanisms.

I am a member of the DS BIOSIGNE's council, and I had the chance to give some courses at University Paris Sud, which gives me an advantage for my career plans.

Charly Abi Ghanem
After studying biology at the Lebanese University and obtaining a Master's degree in reproduction and development at the University of Paris-Diderot, I joined the BIOSIGNE Doctoral School thanks to a PhD fellowship provide by the interdisciplinary Doctoral Initiative at IDEX Paris-Saclay. The aim of my PhD project is to study the effects of steroid hormones on the nervous system and, particularly, their role in myelination process. After my PhD, I would like to pursue a career in the field of neuroendocrinology. I wish to pursue my career in the field of neuroendocrinology. Special thank you to Mr Laurent Surdi, Assistant of the BIOSIGNE DS, for his availability and administrative help at all times.

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Partners

Co-Accreditation
Cancerology, Biology, Medicine and Health (CBMS)

About
The Doctoral School of oncology (CBMS) is monothematic school that covers all aspects of cancerology.

The Doctoral School in oncology (CBMS) operates thanks to the scientific and medical activity of the Doctoral Candidate Hosting Teams (EAD) at several different sites and is structured around four main thematic hubs:

- the fundamentals of cancerology
- genetics and epidemiology
- pharmacology and new therapeutic approaches
- new biological and clinical investigation methods (including imaging)

The Doctoral School of oncology (CBMS) is part of the University of Paris-Saclay, and operates under the Paris-Sud School of Medicine, which operates it in conjunction with ENS Cachan. It is headquartered at the Gustave Roussy Campus.

Entry into the Working World
The CBMS Doctoral School, working in conjunction with the Institute of Higher Training in Biomedicine (IFSBM) and Biosigne DS Paris-Saclay, conferences on "Working in the Life Sciences" to help doctoral students put together a long-term career plan, looking ahead to the time when they will have earned their degree. The doctoral students discuss with managers from the biomedical sector, academic researchers and industrial players, heads of major organisations and hiring specialists.

The Employment 2014 - PhDs 2013 Survey conducted by Interceptum - Adoc showed that:

- 77% had a stable job
- 19% were looking for work
- 4% were planning to start their own firm

KEY FIGURES
- 230 doctoral candidates, including
  - 49 women (65%)
  - 81 men (35%)
- Each thesis student has financing
- 43 theses defended in 2014
- 84 EADs
- 195 HDRs (2.5 HDRs on average, per EAD)

A Word from the Director
The Doctoral School of Oncology brings together the majority of France's research structures working in this area. Its thesis students hail from different educational backgrounds and are scientists, doctors, pharmacists or engineers by training. The teams dedicated to hosting them span the full range of research in cancerology. This diversity is a strength in a field that is, by essence, multidisciplinary, both in terms of clinical practice and research, and which is continually extending its reach. It is thanks to that same diversity that each student is given the chance to choose an area of interest and gain from the interaction offered with other doctoral students and with the guidance teams. The career opportunities for new PhDs are many in number and, in an area as innovative as this one, can only become greater.
Structure
The Doctoral School’s priority is to promote multiple areas of research, including:
- molecular biology
- cellular biology
- genetics as related to cancerogenesis
- pharmacology
- new therapeutic areas, such as targeted therapies, gene therapy, cell therapy and immunotherapy, including vaccine-based approaches.

The doctoral school’s scientific aims are in large part structured around two areas:
- radiobiology, insofar as it relates to cancerogenesis and radiotherapy
- medical imaging and new approaches in diagnostics

Activities
The Doctoral School of Oncology (CBMS) holds its annual Scientific Days in Roscoff (3-day event), every month of May.

The event brings together 2nd- and 3rd-year doctoral candidates, who present their research through posters or oral presentations.

In addition, at least one thematic seminar is held each year (on 17 April 2015, the theme was Immunology and Cancer).

Testimonials
Anna Gueiderikh
I applied after three years of medical school and a Master’s 2 in Biochemistry. For me, it was an amazing opportunity to be part of this experience! It is very impressive to have so many outstanding physicians and researchers together in one place. Having the hospital nearby we are also very much in touch with patient realities. Once I earn my PhD, I would like to work in the field of oncology or anatomopathology. I am in best possible environment to achieve that goal – it’s a dream life.

Bertrand Routy
What are the three reasons that made me apply? The oncology research centre's excellent reputation — it is one of the world's best. The 100% bilingual environment, which is a real plus for a native English speaker like me! Lastly, the aspiration for Research, with personalised medicine and programmes in immuno-oncology. I am fortunate enough to work at Pr Laurence Zitvogel's laboratory, the ideal setting for studying the relationship between intestinal bacteria and cancer.

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Partners

Co-Accreditations
Hadamard Doctoral School in Mathematics (EDMH)

About

The Hadamard Doctoral School in Mathematics (EDMH) aims at bringing together all doctoral training programmes in mathematics within the University of Paris-Saclay perimeter, from the most fundamental mathematics to the most applied ones, including interface mathematics (in particular with economics, computer sciences, mechanics, physics, engineering sciences, and the life sciences).

The EDMH enjoys the strong support of the Jacques Hadamard Foundation for Mathematics (FMJH) and the Hadamard Mathematics Labex (LMH), through PhD fellowships, administrative personnel and financial support.

EDMH was born of the restructuring of several doctoral schools, including ED 142 (Mathematics Paris-South Region), ED 447 (EDX École Polytechnique), ED 285 (EDSP ENS Cachan), ED 539 (STV Versailles), ED 511 (EDSI Evry), and ED 130 (EDITE), ED 287 (Centrale).

The three topic areas and key words connected with them are:

- **Fundamental mathematics**: algebra, analysis, geometry, logics, probability, statistics
- **Applied mathematics**: applied algebra, applied analysis, numerical analysis, scientific computation, applied geometry, mathematical engineering, financial mathematics, modelling, optimisation, applied probability, applied statistics

Entry into the Working World

EDMH is particularly attentive to ensuring a smooth transition into the working world for its doctoral students. The opportunities available after possible post-doctoral jobs include careers in:

- higher education and research: lecturer, work at major public research institutions (CNRS, INRIA, INRA, etc.), faculty researcher abroad,
- teaching in secondary schools and preparatory classes,
- major State agencies and public corporations,
- employment in the private sector (R&D for major private corporations, start-ups, etc.).

KEY FIGURES

<table>
<thead>
<tr>
<th>Total</th>
<th>Count</th>
</tr>
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<tr>
<td>Doctoral candidates</td>
<td>319</td>
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<tr>
<td>HDR</td>
<td>203</td>
</tr>
<tr>
<td>Hosting laboratories</td>
<td>17</td>
</tr>
</tbody>
</table>

Applications

Should you require any further information about the application process at EDMH (any types of financing), please consult the website [http://www.universite-paris-saclay.fr/en/education/doctorate/edmh](http://www.universite-paris-saclay.fr/en/education/doctorate/edmh), and fill out the online registration form provided for pre-application processes.
Structure
The first scientific contacts of both the future doctoral candidates and future thesis supervisors, in particular regarding thesis grants (see also the EDMH website) are the representatives of the EDMH partner institutions:

- AgroParisTech: Stéphane ROBIN
- CEA: Jérémie BOUTTIER
- CentraleSupélec: Erick HERBIN
- ENS Ulm: Raphaël CERF
- ENS Cachan: Agnès DESOLNEUX
- ENSAE: Pierre ALQUIER
- ENSTA: Frédéric JEAN
- École Polytechnique: Thierry BODINEAU
- HEC: Gilles STOLTZ
- IHES: Emmanuel ULLMO
- INRA: Sophie SCHBATH
- Telecom SudParis: Wojciech PIECZYNSKI
- Telecom ParisTech, HEC: François ROUEFF
- University of Evry: Pierre-Gilles LEMARIE
- University of Paris-Sud: Frédéric LAGOUTIERE
- University of Versailles: Vincent SECHERRE

Coordination and official signatures are to be received from the EDMH Executive Committee composed of the EDMH Director and 7 deputy directors, each representing a division of EDMH: R. Cerf (ENS Ulm), A. Desolneux (ENS Cachan), T. Bodineau (X), F. Jean (CEA, ENSTA, CentraleSupélec) F. Lagoutière (IHES and Univ. Paris-Sud), F. Roueff (AgroParisTech, ENSAE, INRA, Telecom SudParis and Telecom ParisTech), V. Secherre (UEVE and UVSQ).

Activities
Each October, the EDMH holds at the IHES a mandatory one-day back-to-school session (short scientific presentations, overview of the EDMH, its progress monitoring system, its procedures, its trainings etc.). The progress monitoring actions are described on the EDMH website and include:

- an annual report on the thesis progress and trainings (over a three-year period, at least 56 hours of mathematical training and 56 hours of transverse or complementary trainings are required),
- a first-year (planning subsequent thesis progress) and third-year (preparing for the PhD defense, discussing possible directions for future employment) juries,
- scientific presentation with support from guidance team mid-way through thesis preparation.

Testimonials
Adrien Le Boudec
Preparing a doctoral thesis at what will soon be known as the Hadamard Doctoral School in Mathematics was a very enriching experience. The scientific environment at the University of Paris-Saclay is like none other. I focused on the large-scale geometry of specific spaces. The way you gradually become infused by the mathematical objects you study and the way you learn to tame them is an exhilarating experience.

Valérie Robert
I am currently in my second year as doctoral candidate in mathematics, specialising in statistics.
My work is focused on developing statistical models for pharmacovigilance, the aim being to detect, using co-clustering, associations between undesired effects and drugs, subsequent to market release. The way I see it, a thesis offers a real chance to develop sophisticated skills in a given area and, at the same time, have frequent contact with the scientific, educational and corporate worlds. I feel like the Hadamard Doctoral School in Mathematics (EDMH) offers a scientific environment and supervision of the highest quality, making for an environment that is very enriching, both intellectually and socially.

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EDMH Assistant
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About

EDOM offers programmes in the fields of quantum physics, atomic and molecular physics, plasmas, nanosciences and the fields at their interfaces.

In all of these fields, the School has produced essential fundamental research, from quantum information to astrophysics, nanosciences to attosecond laser as well as many other applications, ranging from imaging of live organisms to optical telecommunication, and from power lasers to optical sensors.

EDOM enjoys a unique environment on the Saclay Plateau, amidst numerous institutes of higher learning, a large number of top-tier laboratories, multiple large-scale facilities dedicated to use at the national level and high-technology companies. Within this setting, the doctoral school is dedicated to training doctoral candidates for and in research, so that they can become active contributors to the scientific and economic development of the future.

Entry into the Working World

EDOM recruits many physicists and engineers, half of them from the University of Paris-Saclay. One-third of our students come from foreign countries.

Half of our PhDs find employment in academic research or at a major research institution (CNRS, CEA, ONERA, etc.).

Industry is also a major draw for our students. The vast majority of our PhDs enter technical fields in which they are able to put their skills to valuable use. They go to major corporations (Thales, Saint Gobain, etc.), SMEs and technological start-ups.

KEY FIGURES

- **22** hosting laboratories
- **3** major organisations (CEA, ONERA, CNRS) leading structures (SOLEIL, Centrale de Nanotechnologie C2N, LULI laser servers, CLUPS, LUCA, CLIO)
- **200** HDR
- **55** doctoral candidates per year

A Word from the Director

Preparation a thesis at the EDOM means working on topics at the cutting edge of science, in an extraordinarily stimulating environment, in the knowledge that less than 2 km away is an expert who can answer your questions. It is also an opportunity to uncover new fields and fascinating professions, because, in our focus areas, the frontier between physicians and engineers, and between fundamental and applied research are fading.
Structure

Doctoral candidates prepare their thesis under the responsibility of a thesis supervisor, within a host team. As they may choose two scientific courses from the campus' offering of M2 courses, attendance at summer school or Collège de France is mandatory.

Cross-cutting professional skills-building is also required. Each year, doctoral candidates take stock of their progress with a deputy director from the doctoral school and set out a work programme.

Activities

The Doctoral School works with students throughout their three years of thesis training. It ensures that all of the students receive a comprehensive education, blending the scientific with the trans-disciplinary.

Each year, a one-day scientific event organised by EDOM brings together all the doctoral candidates. It is an opportunity to orally present research in progress and gain a comprehensive view of the scientific field they research.

EDOM provides financial assistance to doctoral candidates wishing to attend national and international conferences.

Testimonials

Perrine Berger
After graduating from ESPCI, I wrote my thesis at Thales Research and Technology in cooperation with Aimé Cotton laboratory. I studied slow and rapid light in semiconductor optical amplifiers for radar applications. Today, I work as engineer-researcher at Thales, and continue to work between the world of academic research and Thales' units. It is very motivating to be involved in work that will enable the technological breakthroughs resulting from fundamental research to one day be used in the embedded systems of the future. It is a fascinating field that taps all of the skills I was able to gain over the course of my academic training.

Valentina Krachmalnicoff
After graduating from the University of Florence in Italy, I did my thesis at Charles Fabry Laboratory, at the Optics Institute, working on quantum atom optics on metastable helium ultra-cold gases. After that, I wanted to go further broaden my understanding during my post-doctoral studies, by changing topics. This turned out to be extremely enriching for me. Since October 2012, I have been working as researcher at CNRS, at Institut Langevin. I continue to do the research I started during my post-doctoral period, using a fluorescent nano-probe to measure the interaction between an emitting source and its environment, with nanometric resolution.

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edom@universite-paris-saclay.fr
About

EDSP is one of three doctoral schools specialising in public health in France. It encompasses the research laboratories specialised in public health in southern Ile-de-France as well as other laboratories in the region.

This extensive network offers significant potential for supervision with some forty hosting laboratories or teams and nearly 100 faculty researchers accredited to supervise research (HDR).

It is fundamentally multi-disciplinary with 5 specialities: Epidemiology, Biostatistics, Clinical Research, Statistical Genetics and Economic and Social Health Sciences. The theses produced require a solid culture in multiple disciplines. These may include biostatistics and medicine, or epidemiology and economics.

Through the coursework offered to doctoral candidates, they gain the methodological, clinical and biological keys needed to bring their project to a successful close and, more broadly speaking, a culture in public health.

Entry into the Working World

Demand is high for top-tier specialists in the areas in which instruction is offered at the Doctoral School. It comes from hospital wards, national health agencies (InVS, ANSES, etc.) or the local authorities. Recent PhD holders from EDSP show an excellent track record when it comes to entering the workplace (86% of them find work immediately after their thesis, and 100% do so within three years).

KEY FIGURES

- 175 doctoral candidates enrolled in 2014-2015
- 200 advisors accredited to supervise theses
- 38 hosting laboratories
- 70 doctoral contracts
- 82 theses engaged concurrent to professional activity
- No more than 3 doctoral candidates per thesis supervisor
- At least 2 scientific articles published following each thesis

A Word from the Director

With half of its enrolled doctoral candidates involved in professional work, most often in clinical hospital wards, EDSP is firmly rooted in medical practice. As such, it is able to combine research on pathological risk factors with patient treatment and improvements to the healthcare system.

This gives our doctoral candidates remarkable scientific expertise and a broad perspective encompassing all issues in public health.

EDSP’s size enables individual guidance for participating doctoral candidates – a key ingredient to a successful thesis.
Structure
Supplementing its Council, EDSP has established an educational team composed of 36 researchers hailing from different disciplines in Public Health. They review all applications and provide guidance to the doctoral candidates throughout the preparation of their theses.

Activities
At EDSP, the doctoral studies programme is interspersed with 8 to 10 scientific seminars each year, on a variety of topics.

Each year, the doctoral school holds a special one-day event “Journée annuelle de l’ED”; in 2015 its theme was "One Day for One Life".

Monitoring Doctoral Candidates' Progress
EDSP places great emphasis on closely monitoring doctoral candidates’ progress throughout their thesis preparation, offering:
- an orientation meeting for new doctoral candidates
- a written appraisal (in June) on which authorisation to re-enrol is conditional
- thesis progress monitoring conferences, where 2nd-year doctoral candidates present the state of their research to the entirety of the doctoral school team and faculty.
- post-doctorate surveys

The Association Doc 4’20
Doc 4’20 is dedicated to providing financial assistance to doctoral candidates, organising scientific assessments (Books and Coffee Time, Franglish Coffee Time) and extra-scientific activities (outings, sporting and cultural activities, etc.) so that doctoral candidates can connect with one another. It also takes part in planning the annual Journée de l’Ecole doctorale.

- asso.doc420@gmail.com
- Facebook: www.facebook.com/AssociationDoc420

Testimonials
Fanny Artaud
3rd-year epidemiology student
Thanks to the multi-disciplinary education offered by EDSP, I was able to take part in courses on a wide variety of topics and interact with doctoral candidates and researchers working on other aspects of Public Health. This helped me gain a greater understanding and broaden my perspective on my future after the doctorate.

I was also fortunate enough to help prepare the first “Journée de l’AD”, which will bring all of the doctoral candidates together in late-May to build a sense of togetherness between them. While working on the day, I was able to learn more about what it means to organise an event, as well as enjoy an outstanding experience with the other doctoral candidates involved in the project.

Laurent Rigal
EDSP PhD
I wanted to get involved in epidemiological research without having to give up the clinical experience of working as a general practitioner in my office. The doctoral school helped me reconcile these two highly-demanding undertakings.

Earning my doctorate then opened up professional prospects for me in academic general practice.

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Partners

Co-Accreditation
Physics and Engineering: Electrons, Photons and Life Sciences Doctoral School (EOBE)

About
The EOBE Doctoral School (DS) is positioned in along a physics-engineering continuum in the fields of:
- electronics-nanoelectronics,
- electrical engineering and electromagnetism,
- optics/photonicsoptoelectronics,
- imaging and measurement methods (sensors, measurement chains), in particular for life sciences.

Site Policy (University of Paris-Saclay)
Operating within a tightly-woven fabric of educational programmes in the field of engineering (both universities and engineering schools) in the southern Ile-de-France Basin, the EOBE doctoral school aims at building greater national and international visibility for engineering at the Université of Paris-Saclay.

EOBE DS’ Positioning:
- along the fundamental research-engineering-technology continuum
- building systems, from concepts and basic technologies, in connection, in all possible situations, with the industrial environment.

Entry into the Working World
In the public as well as the private sector:

Public:
- Researcher at university and research institutes (CNRS, CEA, etc.),
- Faculty-researcher at university or engineering schools (CentraleSupélec, IOGS, Telecom ParisTech, etc.),
- Research engineer at any of the same institutions

Private and corporate:
- Research and Development engineer,
- Expert engineer,
- Scientific consultant in private research centres, high-technology companies, major corporations, start-ups, or innovative SMEs

- The doctoral degree is, furthermore, highly-prized at the international level, denoting sophisticated skills and the ability to bring a three-year project to a successful close.

A Word from the Director
The doctoral experience consists in three years managing a project in a research-based learning environment in contact with research teams that are amongst the best in their fields. Doctoral studies at our doctoral school takes different forms, from preparation in a university setting on purely academic topics, to research conducted in close cooperation with industrial players (CIFRE thesis).

In any case, they are all driven by the sheer motivation shown by the doctoral student, and turn out extremely fruitful experiences!

Our students’ employment rate three years after PhD is over 95%. Experience abroad is also possible, through international joint supervision of PhD programmes and, even within our laboratories, thesis are conducted in multi-national groups, thus already paving the way for doctoral students to work internationally.
Partners

Research units and teams

Testimonials

Jean-François BRYCHE
Doctoral Candidate - Instructor
NanoBioElectronics (IEF, UMR 8622)
and NanoBioPhotonics (LCF, UMR CNRS 8501) groups

I am working on plasmonic nanobiosensors, sharing my activities between producing biochips, characterising them and simulating their response. My work proceeds from a multi-disciplinary approach to research, combining micro-nanotechnologies with nano-level plasmonics and biodetection. The final aim of my doctoral project is to improve the sensitivity of the biosensors I study by nanostructuring the surface of the biochip. An industrial partner (Horiba-Jobin-Yvon) is also involved in the project, so that the advances and discoveries made can be promoted. It is involved in the design of the new measurement instrumentation in cooperation with the academic groups working on the project.

Structure

The doctoral school is structured into 4 main topical domains:

1. Electrical Engineering and Electromagnetism
2. Electronics, Spintronics and Photonics
3. Micro-nano-bio-technologies, micro-systems, sensors, instrumentation
4. Imaging systems, bio-medical imaging, medical physics.

Activities

Each doctoral student’s progress is monitored by a member of the executive bureau, and includes:
- annual meetings and follow-up on the PhD thesis defence procedures,
- responses to questions from doctoral students and supervisory staff all along the PhD progress.

Doctoral Trainings:
- scientific: supporting the doctoral project or in accordance with post-thesis plans,
- Professional : project management, intellectual property rights, PhD thesis promotion, etc.

Doctoral School Day:
- welcome for new doctoral students
- orientation day: post-thesis pathways, sessions with doctors.

International relations at the doctoral school:
Thesis financing for joint projects with international units at CNRS (UMI) and within CNRS GDRI research networks

Website
http://www.universite-paris-saclay.fr/fr/formation/doctorat/ed-eobe

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- Micro-nano-bio-technologies, micro-systems, sensors, instrumentation
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- Imaging systems, imaging for the bio-medical sector
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About

The INTERFACES Doctoral School is aimed at fostering the development of scientific research of the highest standard, at the interface between different disciplines, offering students an environment conducive to gaining a truly interdisciplinary culture.

The INTERFACES Doctoral School operates thanks to laboratories across the Saclay Plateau.

The number and quality of these laboratories ensures the INTERFACES Doctoral School a diversified, high-quality course offering, in step with the individual needs of doctoral candidates and those of the socio-economic community.

Entry into the Working World

The INTERFACES Doctoral School offers its doctoral candidates access to the support services provided by partner institutions to future job-seekers.

With that strong backing, our doctoral candidates are able to successfully enter the public as well as the private sector.

To date, they have gone into:
- 35% Higher Education and Research
- 58% Private Sector
- 3% Public Sector, not including higher education and research
- 2% Post-Doctoral Contracts

KEY FIGURES

- 200 researchers accredited to supervise theses
- 24 laboratories in a wide variety of disciplines

A Word from the Director

The INTERFACES Doctoral School is home to teams working on research positioned by principle at the crossroads between different disciplines: physics, chemistry, biology, mechanics, applied mathematics or IT.

The DS is structured along three thematic lines:
- "Innovative Materials and Applications"
- "Life Sciences"
- "Complex Systems Engineering"
Structure

The INTERFACES Doctoral School is headed by an Executive Committee, flanked by a Council of 9 internal and 9 external members (including 3 doctoral candidates).

The INTERFACES Doctoral School is structured along three thematic lines, each with its own head:

"Life Sciences"
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"Innovative Materials and Applications"
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"Complex Systems Engineering"
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Adriana Tapus
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Supplementary Programmes

- Back-to-School Day
  - About the DS
  - About the coursework and programmes
  - Meet-Up with "Alumni"
  - For "alumni": opportunities to present thesis work

- Individual interview sessions

- Doctoral studies pathway
  - PhDs for the Corporate World
  - Academic Research
  - Innovation and entrepreneurship

Partners

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- École CentraleSupélec
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Today, significant advances in the field of therapeutics must increasingly come at the interface between scientific disciplines, hence the need to produce a new generation of researchers with multi-disciplinary training. The scientific training offered by the doctoral school in therapeutic innovation addresses this aim in that it covers a very wide spectrum, from identifying new therapeutic targets to implementing health products.

The doctoral school encompasses research teams, most often working across multiple sites in the southern Ile-de-France Region: the Sciences Department (Orsay), The Pharmaceuticals Department (Châtenay-Malabry), the Medicine Department (Le Kremlin-Bicêtre), CEA (Saclay and Fontenay aux Roses), CNRS (Gif-sur-Yvette), INRA (Jouy en Josas), UVSQ (Montigny-le-Bretonneux), Genethon (Evry), and Institut Pasteur (Paris). It is also a partner to the Excellence Laboratory dedicated to Research on Drugs and Therapeutic Innovation (LERMIT).

The doctoral school has made it its mission to train future researchers for the EPSTs as well as future University and Hospital supervisors in the field of medicine, but also strives to integrate future PhDs who will go on to work in the pharmaceutical, cosmetic and agro-foods industries. Since 2005, over 96% of out PhDs are in employment, 40% in the public sector, including higher education and research, 30% in the private sector and approximately 30% in post-doctoral programmes (over 40% abroad).

The doctoral school is structured into 7 thematic clusters, which cover the drug chain from end to end:
- Molecular and Cellular Physiopathology
- Microbiology and Anti-Infectious Therapies
- Protein Engineering and Therapeutic Targets
- Pharmaceutical Chemistry
- Pharmacology - Toxicology
- Pharmacotechnique and Pharmaceutical Physico-Chemistry
- Immunology and Biotherapies

Fostering innovation in the field of drug innovation today means not only integrating the process by which a health product is developed, from understanding the physio-pathological mechanisms involved to putting them in therapeutic form, but also bringing out innovative approaches to working at the interfaces between disciplines.
“[…] there is no such thing as pure science and applied science: there is science and there are applications of science”.
Paul Bert

Testimonials

Marie De Bourayne
The ITFA Doctoral School offers an extensive range of course modules and scientific events.
It attentively monitors the progress of its doctoral candidates, always at their disposal to address questions, requests for advice or problems should they arise. Through the scholarships it offers, the DS contributes to participation in congresses or training programmes. Every effort is made so that doctoral candidates enjoy the smoothest possible path forward.

Benjamin Targa
The ITFA Doctoral School takes care of its doctoral candidates, for instance by offering mobility scholarships (for congresses or partnerships abroad). The DS also offers a broad selection of modules covering a wide range of themes, giving students a well-rounded education that will be highly-appreciated down the road!

Partner
Chemistry: molecules, materials, instrumentation and biosystems (2MIB)

About

The Doctoral School of Chemistry: Molecules, Materials, Instrumentation and Biosystems (2MIB) are all offered by the Université Paris-Saclay. The aim of the Doctoral School is to offer PhD students a space in which they can conduct fundamental research in chemistry and its applications that address social challenges such as the environment, sustainable development, materials, health, etc. Numerous cross-cutting research themes have been developed in particular at the interface of physics, biology and pharmacology.

The 2MIB Doctoral School offers extremely high quality training through research at the end of which students can obtain a PhD in Chemistry or Physics from the Université Paris-Saclay.

The 2MIB DS comprises the following Université Paris-Saclay educational institutes:

- DS partners:
  - Université Paris-Sud (UPSud)
  - Université d'Evry Val d'Essonne (UEVE)
  - Université de Versailles Saint-Quentin (UVSQ)
  - École Polytechnique (X)
  - École Normale Supérieure de Cachan (ENS Cachan)
  - CEA
- members of the DS:
  - CNRS
  - INSERM
  - Synchrotron SOLEIL
- associated member:
  - Institut Curie

Career prospects

The PhD in Chemistry offered by the Université Paris-Saclay offers career prospects in all chemistry disciplines in a wide range of public and private organisations:

- Public research organisations: CNRS, CEA, INSERM, Institut Curie, IFP EN, etc.
- Universities
- Research Centres within industrial groups: Solvay, Sanofi, Galapagos, etc.
- R&D departments: SMEs, SMIs, innovative start-ups, etc.

Key figures

<table>
<thead>
<tr>
<th>300</th>
<th>enrolled PhD students</th>
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</thead>
<tbody>
<tr>
<td>90</td>
<td>enrolled per year</td>
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<tr>
<td>260</td>
<td>researchers authorised to manage research</td>
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<td>3</td>
<td>universities (UPSud, UEVE, UVSQ)</td>
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<td>2</td>
<td>schools (X, ENS Cachan)</td>
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<tr>
<td>5</td>
<td>postgraduate schools</td>
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<tr>
<td>4</td>
<td>research organisations (CEA, CNRS, INSERM and Synchrotron Soleil)</td>
</tr>
<tr>
<td>24</td>
<td>laboratories and host research units</td>
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</tbody>
</table>

A word from the Director

The creation of the Université Paris-Saclay and its Doctoral Space in 2015 was the first of its kind among French universities. It is within this context that the 2MIB Doctoral School provides, through its PhD in Chemistry, excellent research training on the scientific, human and materials front. Why not join us and be part of this wonderful adventure at the Université Paris-Saclay!
Organisation

The 2MIB Doctoral School has 3 clusters managed by Assistant Directors:
- Organic and Biomolecular Chemistry (OBC)
- Physical, Biophysical and Analytical Chemistry (PBAC)
- Inorganic and Materials Chemistry (IMC)

The Director is supported by an executive team comprised of the Director, a teaching assistant and local partners from 2MIB DS member institutions. The DS Assistant Directors are chosen from among local partners.

The Office is supported by a committee comprised of representatives from educational institutions and research units, administrative staff, PhD students and external experts with experience in the relevant scientific, industrial and socio-economic sectors.

Actions

Each year the 2MIB DS organises events and actions for PhD students that aim to help the students with their theses:
- The "Open Day" for PhD students is organised to introduce new students to the main actors and explain how the DS works.
- The Doctoral School Days (DSD), are a key event in the life of the school: general interest conferences, oral presentations, PhD student posters and a prize for the best presentation.
- The thesis advisory committee is made up of members working outside the research unit. Each PhD student must attend a yearly interview with the committee (more if necessary).
- The Thematic Schools, offered by the clusters, allow PhD students to deepen their knowledge of certain subjects (theoretical chemistry, large-scale instruments, etc.).

Testimonials

Laura Luna (Mexican)
LCP – Université Paris-Sud

The PhD programmes offered by the University are excellent in terms of research and deepening one’s knowledge and capacity to innovate. The technology available at the University is truly cutting-edge and being able to access techniques and work with innovating and specialised teams really increased my motivation and willingness to participate. Completing my doctoral studies at the Université Paris-Sud was a really great experience.

Sacha Abadie
LAMBE - Université d’Evry Val d’Essonne

Once I’d completed my Masters at the Université d’Evry Val d’Essonne, I decided to continue my studies by focusing on research and doing a thesis in theoretical and computational chemistry. I choose LAMBE because its a multidisciplinary laboratory and I love mixing different disciplines on the border of chemistry, physics and biology. I particularly liked the fact that our team regularly invited French and overseas collaborators, which helped broaden my knowledge as well as enabling me to forge new relationships and contacts that may be useful in the future.

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Partners
About

The PHENIICS doctoral school is the leading school in the Paris region focusing on subjects related to subatomic physics. Its specialty lies in bringing together research domains combining fundamental physics and applied physics. To do this, it relies on a unique and far-reaching network comprised of research units within Paris-Saclay’s scope. The main PHENIICS subjects are:

- Astroparticle physics and cosmology
- Nuclear astrophysics and nucleosynthesis
- Back-end nuclear cycle, radiation protection and radiochemistry
- Nuclear energy
- Medical imaging and radioactivity
- Space instrumentation
- Accelerator physics
- Particle physics
- Hadron physics
- Nuclear physics
- Radiotherapy and Hadron therapy
- Subatomic physics detection systems

Careers opportunities

The PHENIICS Doctoral School is attentive to the career prospects of its students and offers short- to medium-term support (5 years after thesis completion) for all its doctors.

97% of doctors secure long-term employment 3 to 5 years after completing their thesis of which 50% are in higher education and research. Career opportunities are in a wide range of companies and industries (Areva, EDF, Thalès, consultancy, etc.)

The Doctoral School also works with associations of doctors (such as PhD students and Doctors studying physics of the two Infinities) in order to develop longer-term support for PHENIICS DS doctors and create long-term relationships that add value to the research training carried out within the Doctoral School.

Key figures

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<tr>
<td>200</td>
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<td>70</td>
<td>laboratories</td>
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<tr>
<td>50%</td>
<td>of Nobel Prize Physics subjects, awarded since 1950, are taught at PHENIICS'</td>
</tr>
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</table>

A word from the Director

The PHENIICS Doctoral School examines major physics questions related to physics of the two infinities and the origin of the mass of elementary particles forming the large-scale structures in the universe. It also contributes to key technical innovations such as new radiotherapy and particle acceleration methods.
Organisation

PHENIICS works with six Université Paris-Sud laboratories, two École Polytechnique laboratories, four CEA departments and two IRSN research units. In this way, the Doctoral School is able to unite all the Université Paris Saclay laboratories working on physics of the infinitely large and the infinitely small and their applications.

The Université Paris Sud, CEA and the École Polytechnique are both partners of the Doctoral School.

Actions

The PHENIICS Doctoral School offers wide-ranging training including advanced courses on all its subjects - given by the best laboratory specialists in the Paris region - and company and industry internships.

PHENIICS is also a pioneering doctoral school in terms of delivering MOOCs, which are accessible to anyone via the France Digital University platform; these online courses present current physics challenges and research.

What do our PhD students do?

PHENIICS PhD students and research teams are involved in all aspects of the Doctoral School's subjects.

They recently played a major role in discovering the Higgs Boson at CERN. This highly collaborative research project is conducted by national and international teams.

Numerous research teams are involved in highly interdisciplinary activities such as those combining physics and medicine (e.g. radiotherapy and imaging) and activities with a social vocation (e.g. nuclear energy).

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About

The multi-site EDPIF (DS 564) Doctoral School is coordinated by the ComUE Paris Sciences et Lettres (PSL) and is co-accredited by the Université Pierre et Marie Curie (UMPC), the ComUE Sorbonne Paris Cité and the ComUE Paris-Saclay.

Its field of scientific study mainly covers the following areas:

- fundamental interaction
- condensed matter and diluted matter quantum physics
- statistical physics
- mol and biological physics
- optics, acoustics and hydrodynamics

The scientific position of the DS focuses on fundamental, theoretical and experimental physics and their naturally arising applications.

EDPIF benefits from a unique and far-reaching network comprised of high quality laboratories located on the various Paris-Centre and Paris-Saclay sites. It also benefits from an exceptional pool of high quality students trained by Universities and Grandes Ecoles (prestigious French schools) and is able to attract the very best international students.

Careers opportunities

The EDPIF is keen to support its PhD students during their theses by regularly offering them careers advice whether this is in academia or the corporate world.

Over 90% of our doctors secure long-term employment a few years following completion of their thesis; 50% in academia (higher education and research) and 50% in companies and industries (Thalès, Saint-Gobain, start-ups, big data, consultancy, etc.).

Key figures

- 520 PhD students
- 850 researchers
- 500 researchers authorised to conduct research
- 45 laboratories
- 60% of Nobel Prize Physics subjects, awarded over the last 50 years, are taught at EDPIF

A word from the Director

The aim of the EDPIF Doctoral School is to unite the Physics community working within the Paris region i.e. going beyond institutional boundaries in terms of recruiting, training and supporting the careers of its PhD students. Our aim is to train young physics researchers at the very highest international level. We also want to build a doctoral school, which is robust, effective and well prepared in order to promote postgraduate studies in all socio-economic sectors.
Organisation
EDPIF brings together laboratories based on the Paris-centre and Paris-Saclay sites. On the Paris-Saclay it is present at the Université Paris-Sud, the CEA and the École Polytechnique, the CNRS/Thalès Photonics and Nanostructures Unit and at SOLEIL. It maintains a continuous dialogue with laboratories, researchers and PhD students. It recruits around 150 PhD students per year 50 of whom it finances.

Activities
EDPIF offers diverse research training combining advanced lectures given by leading specialists working on relevant subjects in laboratories in the Paris region as well as professional training to help students secure employment in companies and industry. The diversity of this training benefits from the DS’ partnerships with several universities and Grandes Écoles (prestigious French schools).

The PhD students receive personalised support, which includes permanent contact with DS managers, who are available to offer advice on their theses and choice of career.

The DS organises a Welcome Day and Scientific Days providing an opportunity for the PhD students to meet with colleagues and meet young doctors already working in professional, academic and corporate environments. The PhD students are all involved in organising these days.

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www.edpif.org

3 doctors from EDPIF have won the 2014 Prize for Young Researchers from the Bettencourt Schueller Foundation. Fred Etoc, Edouard Hannezo and Hervé Turlier have all received prizes allowing them to carry out post-doctoral internships in some of the best international laboratories. They have secured internships at the Rockefeller University (New York), the Gordon Institute (Cambridge) and the European Molecular Biology Laboratory in Heidelberg.

The “Springer Thesis” programme honoured François Landes for his work on visco-elastic interfaces in disordered medium and Cécile Grèzes for her work on superconducting qubits at the Université Paris-Sud.

Hélène Dupuy received the L’Oréal "For Women in Science" award for her work on cosmology and the formation of large-scale structures in the Universe.

Olivier Gazzano was awarded the Perrissin-Pirasset Prize for his thesis entitled: “Entangling Quantum-Logic Gate Operated with an Ultrabright Semiconductor Single-Photon Source” at the Université Paris-Diderot.
Plant sciences: from genes to the ecosystem

Presentation

The Doctoral School “Plant Sciences: from genes to ecosystems” trains the best doctoral candidates in the discipline, and prepares them for a bright scientific future in an increasingly competitive world. Being the only Doctoral School in France devoted entirely to plant sciences, we strongly defend the interests and particularities of this field.

The scientific coherence of our programme encourages constructive and cooperative interactions among our doctoral candidates, our member teams and labs and our international partners. Our member teams carry out research at different scales (genes to ecosystems, as stated in our title) and in different sub-disciplines of plant sciences (cellular and molecular biology, ecology and eco-physiology, evolution, genetics, genomics, physiology and metabolism, etc.). Therefore, despite the communality that all work on some aspects of plant biology, the Doctoral School includes a plurality of approaches and sub-disciplines, exposing our doctoral candidates to a broad range of ideas, approaches and techniques inherent to state-of-the-art research in modern biology, thereby ensuring them mind-expanding, quality training.

Beyond your doctorate

The Doctoral School “Plant Sciences: from genes to ecosystems” organises a committee for “Reflection on Professional Career Development” that offers each doctoral candidate an annual meeting. This encourages our doctoral candidates to reflect on their career goals and to consider how best to pursue their doctoral training to help them attain these goals.

We send regular announcements for jobs and post-doc opportunities to our final year doctoral candidates and to all alumni who wish to receive them.

For doctoral candidates interested in a career in research and higher education we organise a “Post-Doc Grant Writing Workshop”. This training starts with an information day, about various sources of post-doc funding and continues with regular meetings during which candidates present the current state of their projects and help each other improve them.

At our annual PhD-Days, the scientific meeting of the Doctoral School, we organise a half-day “Careers” session, where our alumni present their stories and explain how their doctorate helped them get where they are today, either in the public or in the private sector.

Key figures

<table>
<thead>
<tr>
<th>120</th>
<th>Doctoral candidates</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>Foreigners (Europe, China, North Africa, India, etc.)</td>
</tr>
<tr>
<td>132</td>
<td>Officially qualified supervisors</td>
</tr>
</tbody>
</table>

Key Activities

Each autumn we hold the PhD-Days and General Assembly, organised by the doctoral candidate’s Association “Doc’en Herbe”. This is an enjoyable 3 days that combines science, fun and career planning.

We organise “Postdoc grant writing workshops” each month from October to June, to help you write your scientific project for your future.

Every summer we take part in the European Plant Science Retreat, an international scientific meeting organised by doctoral candidates for doctoral candidates. We are the organisers for 2015!

Our “skills portfolio” helps you identify the skills you have and those you need to reinforce during your doctoral training and beyond. This is a useful tool that should accompany your professional development throughout your career and help you update your CV;
Organisation

The doctoral school “Plant Sciences: from genes to ecosystems” is run by a team of directors on the advice of the scientific council, which includes, as full members, elected representatives of the doctoral candidates. The directors are helped by a full-time secretary.

We have a very active association of doctoral candidates who help the direction team a lot, serving as intermediaries between doctoral candidates at the different sites of the doctoral school and the directors and letting us know about problems before they become too major.

The team:
- Jacqui SHYKOFF, director,
- Marianne DELARUE, vice director, doctoral advisor and “HDR co-ordinator”
- Ariane GRATIAS-WEILL helps us as doctoral training co-ordinator.

Doc’ en Herbe Association

The doctoral candidates who volunteer their time and effort to the association Doc’ en Herbe help make the doctoral experience rich and enjoyable for all our doctoral candidates. They organise social and scientific events and meet regularly with the direction team to exchange information and discuss important topics that come up, about the general running of the doctoral school, any problems at the various sites, the organisation of the annual scientific days or particular activities of the doctoral school such as the European PhD Retreat in Plant Sciences.

The representatives for each site discuss inform the direction of any problems and suggest topics that need to be discussed at the regular Scientific Council meetings.

Doc’ en Herbe organises the annual scientific days of the doctoral school, the PhD Days. This is three very exciting and fun days that include the general assembly, a scientific talk by at least one invited dignitary, oral and poster presentations of the doctoral candidates, a careers session with graduates of the doctoral school currently working in the public or private sector, which presents a broad palette of possible futures for which our doctoral programme prepares its candidates, and last but not least, a great party.

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Partners
About

SDSV is a Doctoral School specialising in biology. It combines experimental approaches, in silico approaches (i.e. simulations) and theoretical approaches (modelling) including species sequence alignment and even ecosystems using biological models from all the major living groups. Its scientific activity covers the following thematic fields:

- Structure and spatial organisation of macromolecules
- Structural and functional dynamics of genomes
- Environmental genomics and transcriptomics
- Molecular, cellular and developmental processes
- Molecular evolution (structural and functional)
- Gene and cellular therapies
- Microbiology and virology
- Immunology and haematology
- Populations genomics and quantitative genetics
- Chemistry, physics, mathematics and bioinformatics are also applied to understand systems in an integrative approach (modelling living systems, systems biology and synthetic biology).

Career opportunities

The aim of SDSV is to train PhD students to conduct research by giving them the very best opportunities in terms of securing careers in academia or in a corporate environment. Therefore, the aim of the DS is to enable our PhD students to showcase their skills at national and international levels by conducting fundamental and applied research. The majority of SDSV doctors start their researcher careers by securing post-doc jobs, which allow them to broaden their skills sets in a highly competitive environment as well as enabling them to confirm their potential.

Key figures

<table>
<thead>
<tr>
<th>PhD students</th>
<th>175 PhD students enrolled between 2014 and 2015</th>
</tr>
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<tbody>
<tr>
<td>doctors per years</td>
<td>55 doctors per years</td>
</tr>
<tr>
<td>women</td>
<td>55% women</td>
</tr>
<tr>
<td>overseas PhD students</td>
<td>40% overseas PhD students</td>
</tr>
<tr>
<td>Supervision</td>
<td>270 researchers authorised to conduct research</td>
</tr>
<tr>
<td>research units</td>
<td>60 research units</td>
</tr>
</tbody>
</table>
Organisation
Created from a merger of three doctoral schools: "Genes, Genomics and Cells" at Paris-Sud and "From Genomes to Organisms" at Versailles-Saint-Quentin and Evry-Val-d’Essonne, the "Structure and Dynamics of Living Systems" Doctoral School still partners with these three founding universities. The SDSV has a management team and administrative team in each educational institute.

Actions
The SDSV management team places great importance on supporting its PhD students. Each enrolment and re-enrolment is preceded by a personal interview with one of the Directors. The progress of PhD students' work is also monitored by annual thesis committees. The PhD students' training in the host teams also includes training required for thesis preparation but also cross-cutting training to prepare the students for post-doc life. Thematic workshops and prospective seminars on the evolution of different research domains are organised to enhance the students' skills. An annual seminar held at the Doctoral School provides an occasion for the PhD students to present their work, meet fellow students and talk to the management team. The participation of the PhD students in conferences, thematic schools and summer schools is strongly encouraged and facilitated by partial funding.

Testimonials
Cyril Denby Wilkes
PhD student, I2BC, Paris-Sud
The DS really supported me with my thesis. The DS members really get to know the PhD students. They make you feel special.

Laura Laencina
PhD student, I2C, UVSQ
DS? Helping, supporting and bringing together PhD students, the DS Day enables us to share our views and learn about the research being conducted by fellow PhD students.

Contacts
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Partners

Co-accreditation
Photographs: ED SDSV (R. Le Guyader), IDEEV (M. Falque), I2BC (C. Largeau), CNRS Photothèque (H. Raguet, V. Brodu)
Environmental Science in the Paris Region (SEIF)

About

The SEIF Doctoral School is the only school in the Paris region to specifically study the “climate system” (atmosphere, oceans, continental surfaces and the cryosphere) and their physical, chemical and biochemical interactions. The school works with actors from the Paris region and in particular (but not exclusively) laboratories of the Institut Pierre Simon Laplace (IPSL) and the CNRS research federation. The research favoured by the DS covers the processes in each component of the climatic system including impact studies on different climatic variation modes (natural and anthropic), including interdisciplinary studies within a same climatic system: ocean/atmosphere combinations, combinations of physics and chemistry, the atmosphere and the ocean, the study of major geochemical or biochemical cycles for example. Research also covers different natural living systems (e.g. continental vegetation and marine biodiversity) and systems that evolve in relation to climate variations.

As of September 2015, the SEIF DS has been co-accredited by the Université Pierre et Marie Curie (UPMC), the Université Paris-Saclay, the Université Sciences Paris Cité (USPC), and Paris Sciences Lettres (PSL).

Careers opportunities

The SEIF Doctoral School is highly attentive to the career prospects of its doctors and provides information during the thesis on possible careers in and outside academia. The last three annual surveys show that on average 97% of doctors secure employment 3 to 5 years after completing their thesis: 35 to 45% in higher education and research (depending on the year), 15 to 20% in the private sector in France or overseas, 20 to 40% in a post-doctoral capacity in France or overseas and 10% working in the public sector not in higher education and research.

Key figures

<table>
<thead>
<tr>
<th>200</th>
<th>PhD students of whom:</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>are women</td>
</tr>
<tr>
<td>20%</td>
<td>are overseas students</td>
</tr>
<tr>
<td>5%</td>
<td>international joint supervision of theses</td>
</tr>
</tbody>
</table>

| 55 | thesis defences per year |
| 18 | host laboratories |
| 200 | authorised to conduct research |

A word from the Director

Managed by the UPMC and co-accredited by three groups of universities, the SEIF Doctoral School supports future climate and environmental science PhD students from the Paris region.

The PhD students can access an international network of the highest level laboratories, which for the last 20 years have been united under the umbrella of the IPSL.

The SEIF DS offers PhD students research training on varied disciplines and techniques leading to employment in academia and the corporate world.

In particular, it helps the students acquire the skills required in climate sciences, practical skills (experimenting, modelling and analysing), the ability to work in a team, and interfacing fundamental research and social research in a very international context.

Hervé le Treut
Director
Organisation

The management of the Doctoral School is supported by a 25-member scientific committee of whom are PhD students, which manages the DS and awards PhD contracts. A pedagogical team completes the committee. Its job is to monitor teaching and the thesis committees.

The SEIF DS offers a range of subjects completing the Masters offer.
PhD students can also follow Masters 2 courses in their area of study as well any language courses that will help their career prospects.

Each year, the SEIF DS organises a discussion day for PhD students showing them what careers can be followed upon completion of their PhDs.

PhD student follow-up activities

The SEIF DS places great importance on supporting its PhD students.
In addition to the thesis advisor(s), the thesis is supervised by a thesis committee. This committee comprises the thesis advisor(s), a researcher or a teacher-researcher from the same laboratory but not the same team, and an external researcher who is experienced in the field of the thesis. This is an occasion for the PhD student to present and discuss his/her work and its progress and to plan the student’s work up to the thesis defence.

Monitoring (thesis committee, training and post-thesis) is managed via an original online platform where the PhD students can indicate the courses they have completed, the content, the dates and reports of their thesis committee and what they did after their thesis. Surveys complete the follow-up after the thesis is completed.

Testimonials

While studying at a non-specialised engineering school, ENSTA, Nathaëlle B. became increasingly interested in the environment: “For a long time, I have been very interested in nature and the environment. In my third year, I decided to study oceanography while also doing a Masters degree on the climate”. Nathaëlle B. started her theses at UPMC, which she completed un 2009: “The questions that fascinate me resulted in fundamental research. So it seemed logical to do a PhD. I also got the chance to experience research in my second and third of school when I did internships in overseas research laboratories”. Nathaëlle B. was awarded the 2009 L’Oréal France national prize for “For women in Science”.

Guillaume L. did his thesis at the the SEIF DS between 2009 and 2012. With a degree in Geosciences from the Université Paris-Sud XI, he orientated his thesis at UVSQ on climate modelling after meeting a climatologist at CNRS and after completing an internship that confirmed his choice: “I was also very interested in climate modelling as IT is my second major interest”.
Guillaume chose the University and PhD for its close links with research and teaching, links between subjects and life skills training: "Personally, I was able to develop (at the University) my ability to work alone or in team, to step back to gain perspective, to find information and to develop my critical thinking skills."
In terms of career prospects “academia is not the only option once I have completed my PhD. After participating in many forums and round tables with PhDs working in the corporate world, this is what I am planning to do at the moment."

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Co-accreditation
About

The aim of the HSS Doctoral School is to be the leading school for all PhD students studying Human and Social Sciences (HSS). Consequently, its spectrum of disciplines is very broad:
- Arts
- Economics
- Management
- Law
- Sociology
- History
- Education
- Languages and literature
- Philosophy, etc.

The HSS Doctoral School wants to become a leading doctoral school in the field of human and social sciences thanks to its internationally recognized excellence in many areas, the high standards offered by Université Paris-Saclay, the breadth and wide scope of disciplines it encompasses, and its emphasis on interdisciplinary research.

Career opportunities

The HSS Doctoral School promotes the job placement of its PhD graduates in all disciplines whether it is in academia or in the corporate world.

It helps PhD graduates find employment in line with their academic qualification and it works closely with all host research units in order to share information about job vacancies in France and abroad. Supervisors and the Doctoral School help PhD students to forge relationships with different players and institutions nationally and internationally that create enhanced career opportunities.

The training and support on offer contribute to making a wide range of career choices possible.

Key figures

<table>
<thead>
<tr>
<th>900</th>
<th>PhD students</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>host research units</td>
</tr>
<tr>
<td>558</td>
<td>Researchers currently supervising PhDs</td>
</tr>
<tr>
<td>313</td>
<td>Researchers qualified to supervise PhDs</td>
</tr>
</tbody>
</table>

A word from the Director

Working together to make Human and Social Sciences and Society central within Paris Saclay is a key ambition. The three scientific clusters of the Doctoral School help make this joint ambition a reality and 5 mission officers work on behalf of the entire DS.

The participation of the PhD students in the life of their DS is also key to its success. They are involved in the training policy and all events that contribute to making the thesis an initial successful professional experience.

Sandra Charreire-Petit
Organisation
The HSS Doctoral School has a management committee comprising the Director of the Doctoral School and her Assistant Directors. It is organised into three clusters: each cluster is managed by a pair of Assistant Directors.

- Director of the HSS DS, Sandra CHARREIRE PETIT
- Assistant Directors of the "Economics and Management" cluster, Hubert KEMPF and Ulrich HEGER
- Assistant Directors of the "Law" cluster, Emmanuelle SAULNIER-CASSIA and Boris BERNABE
- Assistant Directors of the "Social science, political science, humanities, education and culture" cluster, Jean-Pierre DURAND and Jacques POTHIER

Training
The Doctoral School HSS offers a well-structured PhD training programme commensurate with the ambition of our PhD as an internationally recognized flagship degree. The training programme includes highly diverse, up-to-date, top-quality and personalised offerings in line with the research needs of PhD students and the demands of the academic and professional world after completion of the thesis. The programme is based on three major pillars:

- research training delivered by the thesis supervisor and his/her research unit,
- additional scientific training at the PhD level in the discipline of the thesis offered by the HSS DS (courses, summer schools, etc.),
- training on preparing a professional or academic career after the PhD (teaching, research management, innovation, industrial R&D, entrepreneurship, etc).

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About

The aim of the SMEMaG Doctoral School is to support - in the framework of training its PhD students - the Université Paris-Saclay teams and research units wishing to push the boundaries of knowledge in the fields of Mechanical and Energy sciences, and Materials and Geosciences.

The DS works with research team applying a permanent approach that combines modelling, digital simulation, experimentation, design and optimising systems in an industrial, environmental and social context where numerous challenges must be addressed from both a fundamental and applied standpoint.

The PhD projects also address societal problems such as energy, the environment, transport, biotechnologies and nanotechnology.

The coexistence of several disciplines within the DS makes it possible to develop innovative and original research at the interface of these disciplines and subjects.

Careers opportunities

The PhD students prepare their professional project throughout their thesis. An annual assessment interview with the Thesis Advisor helps identify any additional training required by the student to prepare his/her professional project.

The DS strongly recommends that PhD students follow training in the following areas:
- oral communication, time management and interpersonal skills
- creating opportunities in the corporate world
- training on higher education and research jobs
- training on intellectual property
- scientific, oral and written English
- writing workshops

Key figures

- 450 PhD students
- 8 member institutions
- 12 PhD programmes
- 19 research units
- 175 researchers authorised to conduct research

A word from the Director

The aim of the Doctoral School is to train doctors to conduct and manage original and innovate research projects. It also aims to encourage imagination, critical thinking and citizenship values allowing the doctors to face the various challenges faced by our societies.
Organisation
Although personalised, the PhD training is formalised in order to ensure its recognition and guarantee the quality of the PhD qualification at the 'Université Paris Saclay. To make this ambition a reality, the following organisational structure has been implemented; it is based on three clusters and one mission:

- "Solids, structures and materials" cluster
- "Fluids, energy and procedures" cluster
- "Geosciences" cluster
- "Training, international relations and relations with the socio-economic world" mission.

The Doctoral School is run by a management committee supported by a committee representing the different partner research units; it is completed by academic members from other universities and schools, PhD student representatives as well as by members of major DS partner companies.

The Doctoral School committee, the management committee and the cluster committees are all renewed every 5 years.

PhD student follow-up activities
- Welcome Day for new PhD students
- Appointing an external advisor for each PhD student
- Setting up an evaluation committee at the end of the first year
- Evaluating the annual progress of work
- Organising annual PhD Student Days
- Support in choosing training
- Supporting in securing employment
- 5 years of support after gaining a PhD

Testimonials
Claire Limoge Schraen
Winner of a L'Oréal-UNESCO grant, Claire Limoge Schraen, a PhD student in civil engineering and architecture, is doing her thesis at the SMEMaG DS. Her goal is to implement methods for analysing and processing architectural, mechanical and geographical data based on simplified digital models applied on a large scale. This provides an initial evaluation of the seismic vulnerability of historical structures by determining and prioritising damage methods. The medium-term objective is to provide forecasting tools to carry out preventive actions in order to safeguard historical buildings in at-risk regions.

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Partners
Science of sports, motricity and human movement (SSMMMH)

About
The SSMMH is multidisciplinary, thematic doctoral school of human movement. The following scientific domains are included in its research on sport and human movement:

- Psychology
- Neuroscience
- Motor control
- Physiology
- Biomechanics
- Economics
- Marketing
- Sociology
- Robotics

The SSMMH DS is co-accredited with the universities of Paris-Ouest Nanterre, La Défense and Paris-Descartes.

Career opportunities
Since its creation in 2002, the SSMMH Doctoral School has always been highly attentive to the careers prospects of its PhD students. The students are offered specific training and a book, outlining the skills they have acquired, is presented to them during the thesis defence period. The latest survey carried out in 2013 among doctors, 3 to 5 years after completing their thesis, shows that 97% of them had secured long-term employment. 50% of the doctors have found jobs in higher education and research, 20% in the public sector (not in higher education and research), 30% in the private sector (e.g. head of a unit for analysing gait and movement, head of sports, etc.)

Key figures

<table>
<thead>
<tr>
<th>100</th>
<th>enrolled PhD students</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>doctors per year</td>
</tr>
<tr>
<td>20%</td>
<td>women</td>
</tr>
<tr>
<td>35%</td>
<td>overseas students</td>
</tr>
<tr>
<td>50%</td>
<td>of secondary level teachers (EPS teacher), doctors and professionals from the domain of human movement (notably manual therapy: physiotherapists, chiropractors, osteopaths) as a PhD.</td>
</tr>
<tr>
<td>150</td>
<td>teacher-researchers, 83 researchers authorised to conduct research</td>
</tr>
</tbody>
</table>

A word from the Director
Since its creation in 2002, the SSMMH DS has remained faithful to its objectives i.e. multidisciplinary and mono-thematic research on sport and human motricity. It has 3 co-authorised universities, 13 laboratories and numerous partnerships in the field of life sciences, engineering, social sciences, etc. The DS offers specific scientific and professional training to PhD students wishing to optimise their career prospects in the field of sport and human movement. Every year at the beginning of December it organises a seminar for PhD students, which showcases the diversity of their work through posters.
Actions

The SSMMH designs projects involving numerous other disciplines: life sciences, engineering sciences, human and social sciences, IT, communication, signal processing, automation and robotics.

The ICTS DS is also associated with the school of “Sports science and human movement” at the Université Paris-Saclay. The laboratories that constitute the DS (including CIAMS and GRCTH) are active in the Life Sciences working group of the Paris-Saclay Idex.

The SMMH DS is also associated with the Institut Demenÿ-Vaucanson des Sciences du Mouvement (DVIMS), which brings together the communities of human movement and engineering working in the perimeter of Paris-Saclay in order to launch long-term multi-partner research programmes to address major social issues such as indoor and outdoor mobility, sport and physical activity under constraint (internal – stress, fatigue, disability – or environmental), rehabilitation of deficient human movements, robotics and humanoid robotics/bio-inspired artificial companions, gestural perception and communication (sign languages, co-verbal and non-verbal) whether real or virtual. This project involves several partner institutions: Université Paris-Sud, UVSQ, ECP/Supélec, CEA, and CNRS.

Testimonials

Servane Le Clinche
ICTS doctor since December 2012

I am currently in my third year of my PhD at the Université Paris Sud. I’m working in the fields of marketing in sports science. The SSMMH DS thanks to its multidisciplinary approach, its members and internal conferences offered me real diversity in terms of my research. These three years have enabled me to strengthen my knowledge and skills in particular in project management as well as creating academic and professional opportunities for future collaborations.

Christophe Bazile
ICTS doctor since December 2012

He was immediately recruited as a Head of Department in an organisation working with adults with autism. He is currently acquiring new responsibilities in his role as assistant director in another establishment in the sector. Thanks to his PhD, his profile was very attractive to employers as well as his multi-disciplinary approach i.e. ability to manage and to develop innovative practices notably involving man-machine interactions (humanoid robot and expressive virtual agents) in the context of people with autism.

In the care sector, (disability, healthcare, etc), the knowledge acquired during the “STAPS” programme (physiology, anatomy, Biomechanics, psychology, etc.) were clearly relevant in the “disability” sector.

Partners

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About

The ICTS Doctoral School covers a thematic continuum unique in France in the domain of digital technology and science. It includes four thematic clusters:

1. Automation, Signal Processing, Image Processing and Robotics
2. Networks, Information and Communication
3. Data, Knowledge, Learning and Interaction
4. Programming: models, algorithms, languages and architecture.

The ICTS offers students original research projects combining theory and experimentation.

These projects cover a wide range of fields of application: aeronautics, e-science, transport, smart homes, energy, training, culture, biotechnology, information security, etc.

The ICTS DS offers a diverse research environment:

- **3 universities**: Université Paris Sud, Université Versailles Saint-Quentin, and the Université Evry Val d’Essonne
- **5 grandes écoles (prestigious French schools)**: Centrale Supélec, ENS Cachan, Télécom ParisTech, Télécom SudParis, and École Polytechnique
- **3 major research organisations**: CEA, CNRS and INRIA
- **IRT SystemX**
- and numerous **companies** working with PhD students in their laboratories and R&D departments (on a CIFRE contract or temporary employment contract basis).

The ICTS DS operates in a highly dynamic environment and works on innovative and cross-cutting ICTS multidisciplinary projects e.g. in Mathematics, Engineering, Mechanics and Materials, Biology, Human and Social Sciences, Movement Science, etc.

Careers opportunities

The most recent survey showed that after 3 years over 85% of doctors had secured a long-term job; around a third in academia and two-thirds in companies.

The ICTS DS is also actively involved in the academic world in France and overseas and in major corporate groups (e.g. Thalès, Orange, Google, etc.) as well as start-ups.

Key figures

- 900 PhD students
- 410 Potential supervisors (professors & researchers)
- 5 research organisations
- 13 research units
- 12 research teams (outside above research units)

A word from the Director

The ICTS DS invites Masters students and engineers to develop projects on digital challenges facing the world today and in the future.

Data sciences, the Internet of the things, interactive robotics, high performance calculations, cloud data, mobility, augmented reality, multimedia security, energy networks, virtual networks, software security, 5G, ubiquity, social networks, wireless communication, etc.
Organisation

The four thematic clusters of the ICTS DS are all managed in the same way; each is supported by a committee made up of elected and nominated HDR representatives (researchers authorised to conduct research), a representative from the socio-economic world and a PhD student. The coordination of actions and the running of the ICTS DS is ensured by the management committee, which includes the directors of the four clusters and the three mission officers on training, international relations and relations with the socio-economic world.

Actions

The ICTS DS, supported by the Université Paris Saclay, implements an ambitious training programme for its PhD students in order to support them in terms of their thesis and developing their professional project. Four types of training are on offer:

- Specialised scientific training enabling the PhD students to deepen their knowledge in their thesis subjects
- Scientific training designed to widen the field of knowledge of the PhD students by pushing the boundaries of their experience.
- Cross-cutting training designed to improve career prospects: teaching, steering research, innovation and entrepreneurship.
- Specific training in social issues related to ICTS: epistemology, ethics, laws of data privacy, etc.

The ICTS DS creates the conditions necessary to welcome overseas students (joint supervised theses for example). The mobility of PhD students is also strongly encouraged.

The ICTS DC benefits from multiple partnerships with companies allowing students to work on their theses on CIFRE contracts and to help doctors with their future careers. The IRT SystemX association at the ICTS DS is just one example of our links with industry.

The ICTS DS develops multi-disciplinary programmes with the other DSs at the Université Paris Saclay

Testimonials

Can Liu
PhD student at the Paris-Saclay ICTS DS (LRI, INRIA, LTCI)

Doing a thesis is a real opportunity to focus on a key issue for a long period of time. It’s really different from working on short-term projects. I can follow my own ideas. At the end, we are supposed to have a vision based on study and understanding current knowledge. I find that really interesting and it is training me to think in a more independent and in-depth manner,. I have also learned methods that encourage creativity. I love having the freedom to do what I want. The international community is full of really intelligent people working on similar questions. It’s really motivating to talk to your peers and more experienced researchers from around the world.

Salim Perchy
PhD student at the Paris-Saclay ICTS DS (LIX, LSV, INRIA)

Two things made me decide to do my PhD. I wanted to immerse myself in a creative process by developing useful ideas (for me that’s what science is all about) and to be part of the research community. It has given me several insights into how ideas and knowledge are created, conceived and developed for major purposes. I joined the LIX due to their technical approach to research, which I find very significant. It was a really rewarding environment. I was able to share ideas with colleagues not working in my areas and discover their very different points of view.

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Partners