Museum of the History of Medicine at Paris Descartes
A WORD FROM THE DEAN

Paris Descartes University Medical School offers a unique combination of innovative education and research to serve high quality Healthcare. This is the result of a long-term tradition of academic excellence which places our Medical School in a leading position in France and among the very best in Europe.

Our overall goal is to continuously upgrade our skills through ambitious educational programs and highly selective recruitment.

We are widely open to international exchanges for students and faculty members and keen to intensify our international relations.

Gérard FRIEDLANDER, MD, PhD

« Wherever the art of medicine is loved, there is also a love of Humanity »

Hippocrates

c. 460 BC - c. 370 BC
UNIVERSITÉ SORBONNE PARIS CITÉ
AT THE HEART OF EUROPE’S PREMIER UNIVERSITY CITY

A UNIQUE CLUSTER OF FRENCH HIGHER EDUCATION INSTITUTIONS

Université Sorbonne Paris Cité - USPC is a federation of 8 self-governing higher education institutions and 5 research centers, all with outstanding world-class reputation. USPC is France’s premier research university in Modern Languages, Social Sciences, Medicine and Biological Sciences. USPC educates 120,000 students. Nationally, 1 PhD in 10 is awarded by USPC. Paris Descartes University is a member of USPC.

PARIS DESCARTES
A LEADING UNIVERSITY FOR HUMAN AND HEALTH SCIENCES

With its nine training and research departments and its Institute of Technology, Paris Descartes University encompasses all the fields of knowledge in human and health sciences.

Paris Descartes University is the only Parisian university offering medical, pharmaceutical and odontological studies.

Our health department is internationally renowned for the high quality of its training and the excellence of its research.

FRANCE’S PREMIER MEDICAL SCHOOL

In 2004, the three medical schools at Necker, Cochin - Saint Vincent de Paul and Broussais - Hôtel Dieu merged to create the largest and most prestigious Medical School in France, both in terms of student enrolment and research output. The Paris Descartes Medical School is located in the center of Paris in the former Cordeliers monastery where the Royal College of Surgery was created in 1763. Recognized and engaged internationally, the Medical School offers competitive education and research thanks to a newly-reformed curriculum and internship opportunities in more than 200 different university hospital departments.
LEARNING AT THE MEDICAL SCHOOL

Our curriculum provides a solid scientific background, practical training at the patient’s bedside, and an introduction to clinical research.

MD Curriculum

**FIRST YEAR**

At the end of the first year a highly-selective entrance exam takes place. Only 15% pass this exam and are admitted to Paris Descartes Medical School.

**SECOND AND THIRD YEAR**

Intensive basic science learning.

**FOURTH, FIFTH AND SIXTH YEAR**

Hospital internships and clinical training in the morning are followed by small-group class sessions in the afternoon at the Medical School.

**FOLLOWING SIXTH YEAR**

After taking a national competitive exam (ECN), students opt for a specialty and region. For the following 3-5 years, as residents, they will be trained primarily in clinical departments. Students acquire the status of Doctor of Medicine after writing and defending their dissertation at the end of their studies.

PhD Curriculum

Accessible to students in their 2nd year, a dual degree in medicine and sciences (MD-PhD program) opens the door to careers in university hospitals and research.

Three prestigious options are offered within a research curriculum:

1. Either from l’École de l’INSERM, l’École Normale Supérieure de Paris or the Paris Descartes Medical Sciences Program;
2. *Medicine-Humanities* in collaboration with Sorbonne Nouvelle - Paris 3 University

An average of 20 outstanding students complete their PhD curriculum each year.
LEARNING AT THE MEDICAL SCHOOL

CLINICAL TRAINING IN HOSPITALS

LEARNING ALONGSIDE PROFESSIONALS

The Paris Descartes Medical School offers a full range of clinical training opportunities in more than 212 departments and units including all the major medical specialties within the Assistance Publique-Hôpitaux de Paris (AP-HP).

L’HÔPITAL COCHIN

Cochin Hospital is the second largest hospital in Paris and covers most of the major medical and surgical specialties (maternity and neonatal units, pneumology and thoracic surgery, hepatogastroenterology and digestive surgery, rheumatology and orthopedics, endocrinology, internal medicine, gynecology, urology, cancerology, hematology, geriatrics, emergencies and ICU, etc.).

http://www.aphp.fr/contenu/hopital-cochin

L’HÔTEL DIEU

Open in 651 A.D., it is the oldest hospital in Paris. Dedicated to outpatient services with a broad range of medical specialties like cardiovascular and infectious diseases, Hôtel Dieu is also a Paris reference center for refugee and migrant care, legal medicine and psychiatry. Hôtel Dieu is a national reference center for clinical research and public health, with the national Cochrane database.

http://www.aphp.fr/contenu/hopital-hotel-dieu
L’HÔPITAL NECKER - ENFANTS MALADES

The largest children’s hospital in Paris with all general and specialized medical and surgical pediatric services, emergency units and maternity, Necker hospital also offers specialized sectors for adult care (hematology, transplantation, nephrology, urology, infectious diseases, dermatology, etc.).

http://hopital-necker.aphp.fr

L’HÔPITAL EUROPEEN GEORGES POMPIDOU

Open in 2001, it is the newest hospital in Paris. It specializes in cardiovascular disease, cancerology, internal medicine and emergencies. This hospital works in partnership with the Corentin-Celton Hospital (geriatrics and psychiatry) and Vaugirard Hospital (geriatrics).


THE MEDICAL SCHOOL HAS COOPERATION AGREEMENT WITH 11 OTHER HOSPITALS

SAINTE-ANNE HOSPITAL: Treatment of psychiatric and neurological disorders as well as emergencies. www.sainte-anne.fr


RESEARCH CENTERS
EXCELLENCE AT THE SERVICE OF TEACHING AND PATIENT CARE

The Paris Descartes Medical School is committed to clinical and epidemiological research through constant interaction with basic research laboratories.

The Paris Descartes Medical School is affiliated with 7 research units covering all fields of basic and clinical research in one of the largest medical research centers in Europe. Most of them are located within Paris Descartes-affiliated hospitals, thus fostering transnational research and innovation for patient care.

INSTITUTE IMAGINE

The Imagine Institute is located within the Necker campus. With some 19,000 sq. m dedicated to genetic diseases, it pioneers a new consultation paradigm adapted to children’s disabilities, designed to provide support for their families. It brings together specialists in the research and treatment of genetic diseases. 15,000 msq. m are dedicated to research, with 48 research labs and 23 teams while 4,000 sq. m are dedicated to innovative care. Any attempt to cure a genetic disease first requires defining the responsible genes, characterizing their mutations and finally understanding the way they cause vital cells to malfunction. These three stages lie at the heart of The Imagine Institute’s research and are decisive in the initiation of a treatment. Over the last twenty years, we have identified the genetic and molecular bases of over 200 diseases, contributing to cellular and genetic therapies, as well as to the development of prenatal and pre-implantation diagnoses. The Institute’s teams have developed the first test in the world for gene therapy, treating hereditary immune deficiency, a historical breakthrough.

http://instituteimagine.org/fr
INSTITUT NECKER-ENFANTS MALADES (INEM)

INEM is an international research Center in Molecular Medicine. INEM's mission is to combine insights obtained through basic and clinical research and to develop innovative therapeutic and diagnostic strategies focused on Necker Hospital medical specialities. These include immune disorders, hematological diseases, infectious diseases, kidney diseases, cystic fibrosis and endocrinological disorders. Thirteen research teams are founding members of the Necker-Enfants Malades Institute.

The teams are grouped into 2 departments: a department of Cell Biology (Growth and Signalling) and a Department of Immunology, Infectiology and Hematology (I2H). The Necker-Enfants Malades Institute is home to 60 senior scientists, 30 of which are medical doctors, 60 technicians, 70 postdoctoral fellows and 50 PhD students. Among the 13 teams, 4 have already obtained an award from the European Research Council.


CRESS
(Center for Epidemiological and Statistical Research
Paris Sorbonne Cité)

Created on 2014 from 4 research units within the National Institute for Health and Medical Research (INSERM), and an additional research center. Seven research teams are dedicated to epidemiology, obstetrics, perinatal and pediatric health applied clinical epidemiology for rheumatic and musculoskeletal diseases, using methods of therapeutic evaluation for chronic diseases and nutritional epidemiology.

http://cress-umr1153.fr
The Cordeliers Research Center is home to 45 scientists working in 16 teams and 2 departments, « Physiology and Pathophysiology » and « Cancer, Immunity, Immunopathology ». These teams explore the major functions of the body: metabolism, circulation, excretion, vision, immunity and the organs involved, teeth, kidneys, immune cells, blood vessels, liver, adipose tissue, the endocrine pancreas, the eyes and the intestine. Associated pathologies such as vascular and immune diseases, cancer, drug resistance, diabetes, obesity, dental and skeletal malformations are studied in animal models and in humans in cooperation with numerous university hospital researchers.

http://www.crc.jussieu.fr

PARCC (Paris Centre de Recherche Cardiovasculaire)

The PARCC has succeeded in bringing together an important critical mass of basic and clinician scientists, who share a vision and common objectives in the field of cardiovascular diseases, in a single location equipped with laboratories, office space and core facilities, occupying a surface of 4,200 m². For the 2014-2018 period, 14 research teams have been approved by Inserm and Paris Descartes University, including one AVENIR team. Bringing together cardio-vascular scientists with complementary expertise (cell and molecular biology, physiology/pathophysiology, pharmacology, genetics, epidemiology) creates an environment of scientific integration conducive to scientific breakthroughs.

http://www.parcc.inserm.fr
The Cochin Institute is home to 620 staff in 35 teams and 3 departments. Ten core facilities provide the scientists with the most efficient technological support. The Cochin Institute is located on a campus of the Cochin Hospital on a facility of 14,000 m². The Development, Reproduction, Cancer Department (8 teams) works on molecular and cellular mechanisms that regulate proliferation, differentiation, morphogenesis, both in development and in specific pathological conditions, especially cancer. The Endocrinology, Metabolism, Diabetes Department (10 teams) deciphers the role of membrane receptors and signal transduction pathways in tissue and body homeostasis following developmental, nutritional, hormonal, and microenvironment cues and their implications in endocrine and metabolic disorders. The Infection, Immunity, Inflammation Department of the Cochin Institute (17 teams) develops research in the field of basic and clinical Immunology, host-interactions with bacteria and parasites and host-retrovirus interactions. http://www.cochin.inserm.fr

CENTER FOR PSYCHIATRIC AND NEUROSCIENTIFIC RESEARCH

The decision to create a research center within Sainte-Anne hospital results from the strategic goal of integrating basic and clinical research in psychiatric and neurosciences. The Center’s resources provide an innovative setting facilitating scientific and medical breakthroughs in psychiatry, neurology, and neurosciences. http://cpn.paris5.inserm.fr/index.php
LEARNING AT THE MEDICAL SCHOOL
POST-GRADUATE
LIFE-LONG TRAINING

Paris Descartes Medical School offers numerous additional training programs for post-graduate students and professionals.

◆ **180 University Diplomas and Inter-University Diplomas**, for example:
  - University Certificate in Obstetric Ultrasound (Midwifes);
  - University Diploma in Auto-Immune and Systemic Diseases (MD, PharmD);
  - University Diploma in Implantology (DDS).

◆ **8 Sub-specialities Diplomas in:**
  - Addiction, Allergology, Angiology, Pain Evaluation and Care, Gerontology, Disaster Medicine, Prison Healthcare and Medical Practices.

*Live as if you were to die tomorrow.*
*Learn as if you were to live forever.*

Mahatma GANDHI
INTERNATIONAL PERSPECTIVES AT THE PARIS DESCARTES MEDICAL SCHOOL

Permanently immersed in an international environment, The Paris Descartes Medical School is looking forward to increasing exchanges with institutions willing, like us, to expand partnerships abroad.

SUMMER CLINICAL ROTATIONS ABROAD

- Through this flexible scheme, over the last decade, we have been able for to send 1,000 Paris Descartes’ Medical School students to almost 100 different countries, enabling them to learn and practice in foreign hospitals in a wide range of services and units.

- Summer rotations take place every year in July and August. In 2015, 186 students from our Medical School left for rotations abroad and 36 of them are now working in Departments of Excellence thanks to special agreements.

- Among many others, we are proud to have special relationships with Medical Schools at the:
  - University of Jiao Tong in Shanghai,
  - The Holy Family Hospital at Bethlehem,
  - The Sackler Faculty of Medicine in Tel-Aviv,
  - The Federal University of Rio de Janeiro,
  - The Children’s Hospital in Buenos Aires,
  - The King’s College Hospital in London,
  - The Hanoï Medical University,

- Thanks to a brand new online application system available on our website (www.medecine.parisdescartes.fr), we are committed to encouraging students to take advantage of this opportunity at least once in their curriculum.
EUROPEAN INITIATIVES

ERASMUS PROGRAM

Building on the attractiveness of Europe as a territory, this program aims to take advantage of the academic and clinical talents of our 27 neighbours.

- The Erasmus program is central to the policy of internationalization of Paris Descartes’ Medical School. It is one of our faculty’s priority to deepen links with our European partners. For us, Erasmus programs above all are a human adventure, a defining moment in the life of our students both personally and professionally when students experience different ways of learning and caring.

- For ten years, our Medical School has been working to promote these exchanges. Each year, nearly a hundred European students, through our 27 European Medical Schools Partnerships, take the opportunity to come and complete their training with us. This program allows European students to integrate our school for 3, 6, 9 or 12 months. Whether cooperating with Rome, Madrid, Berlin, Stockholm, or Manchester, we are thrilled to send and host students and professors and benefit from this outstanding tool of learning and sharing.

EUROPEAN PROJECTS

The Paris Descartes Medical School is involved in European projects.

- The International Intensive Infectious Disease Courses (I3DC) were created in 2013 through financial investment from the European initiative, Med-Motion, which brings together three universities, the Catholic University of Sacred Heart in Rome, Edinburgh University and Paris Descartes University. Thanks to this program, over 90 students per year benefit from intensive courses on infectious diseases taught by renowned specialists.

- We are now working on the implementation of a European Union funded strategic partnership dedicated to infectious diseases as an extension of the I3DC program: this new project aims at developing innovative teaching activities through the creation of an intensive program combining academic work and practical teaching. This project will favour academic excellence, international cooperation and exchange of good practices.

- On a long-term basis, the project also aims to grow and expand to other medical fields, involving more partners in Europe, but also in the rest of the world, thus strengthening the excellent international reputation of Paris Descartes Medical School.

- Today, the Medical School is strengthening this initiative by working with partners to develop and foster cooperation across medical disciplines.
DALLAS PROGRAM

- The Paris Descartes Medical School has developed strong partnership with UT Southwestern Medical School in Dallas. UT Southwestern Medical School is one of the nation’s top medical schools in the US. UT Southwestern admits approximately 230 students each year. UT Southwestern Medical School is looking for the best and the brightest, the most intellectually curious, and the most caring and compassionate future physicians. UT Southwestern Medical School has won six Nobel Prizes and has 21 members in the National Academy of Sciences.

This collaboration mainly focuses on student exchanges. Each year, our Medical School receives UT students which will do clinical rotations in our affiliated hospitals in Paris for 6 months and then will be sent overseas in two developing countries where our faculty closely collaborates.

Highly-motivated and distinguished Paris Descartes students have the privilege to spend 6 months at UT Southwestern Medical School as fully registered MS3 students, and therefore be immersed in a North American medical environment.

GLOBAL HEALTH

- Our Medical School is committed to providing our students with the keys to better understand other realities in our global environment. We believe that future medical practitioners need to be fully aware of new global health issues as a part of their training.

- We are firmly convinced that medical education takes place not only in classrooms and at the patient’s bedside but also beyond, where public health issues are surging and need to be addressed.

- This is why we encourage our students to get experience on the field in less developed and emerging countries on the one hand, and are also committed to receiving students from these countries to our Medical School, on the other hand. This year, we had the privilege to receive students from Columbia, Algeria, Egypt and Bangladesh.

- In 2015, out of the 186 students that did summer clinical rotations abroad, 112 chose to go to Lebanon, Sri Lanka, Uganda, Morocco, China, Togo, Vietnam, India, Indonesia, Ethiopia, Benin, Peru, Bolivia, Equator or Madagascar.
For over 20 years, The Paris Descartes Medical School has been working very closely with the prestigious Jiao Tong University School of Medicine in Shanghai where a long-standing tradition of French medical teaching has been going on for almost a century.

Twenty of the most distinguished Chinese medical students are selected each year to receive scientific and medical training à la française. Once they complete their 1st year of Master’s degree in Shanghai, they can pursue their education in France.
iLumens is a Medical Teaching University Laboratory using Digital Technologies and Simulations, multidisciplinary and targeted medical training, specialized training and continuing education, offered at the University of Paris Descartes and its School of Medicine.

This laboratory aims to meet health care professionals’ growing demand for virtual learning. We also contribute to the improvement in the quality and the safety of health care through the use of the new digital technologies and simulations. A prolific scientific literature has demonstrated the advantages of such innovative and structuring learning approaches, which are already widely developed abroad in medicine schools as is the case in North America or in Scandinavian countries, but very little in France so far (a preliminary experiment in Nice began in 2010).

The University of Paris Descartes and Assistance Publique - hôpitaux de Paris (first healthcare player in Europe) are willing to bring those ambitions to the highest level.

http://ilumens.fr
BUSINESS INCUBATOR PARIS BIOTECH SANTÉ

Paris Biotech Santé backs entrepreneurial projects in drug development, medical facilities and patient care.

- Dedicated exclusively to innovative businesses in the field of human health, this incubator is housed at the Paris Descartes Medical School. It was set up in 2000 with the support of Paris Descartes University, ESSEC business school, the French National Institute for Medical Research INSERM and the Ecole Centrale de Paris engineering school.

- Paris Biotech Santé provides with counselling services from partners for business development, market and capital risk insight for the healthcare industry, contacts with industries and continuous education and experience sharing.

- Since 2000, Paris Biotech Santé has supported 118 projects, created 108 spinoffs. 1159 jobs were created. Paris Biotech Santé was awarded M€ 43 in subsidies and loans with a success rate of 79.6%.

- The Paris Biotech Santé experience helped build the Paris Santé Cochin Incubator in 2007. It is dedicated to the development of healthcare spinoffs and located on the campus of the Cochin Hospital, on 3,500 m². A 2,000 m² extension is to be opened in 2017.

http://parisbiotech.org
The CARMAT artificial heart transplantation

The first heart transplantation into a patient was conducted in December 2013 at the Hospital George Pompidou for the first time in medical history.

With almost 15 years of development, this project was made possible by the use, by Professor Alain Carpentier, of advanced biomaterials and technologies applied to the artificial heart.

Professor Alain Fischer, Director of The Imagine Institute, together Marina Cavazzana, used hematopoietic stem cell gene therapy to treat children with a fatal genetic disorder called X-linked severe combined immunodeficiency, or X-SCID, and has clinically demonstrated the efficacy of gene therapy with dramatic effectiveness, for the first time in the world – leading to what was once thought to be a miracle cure.

Professor Philippe Ravaud is a Senior lecturer at Paris Descartes University and at Columbia University (Mailman School of Public Health). Director of the USPC Research and Clinical Epidemiology Center at the Hôtel Dieu, he also serves as Director of the French Cochrane Centre. His primary research has been evaluating and developing methodological solutions to assess treatments in patients in patients with chronic diseases using various methods (e.g., methodological systematic reviews, simulations, analytical methods, development of sham trials). His publication records include more than 280 peer-reviewed papers, including more than 28 papers in the « big 6 journals » (New England Journal of Medicine, Lancet, JAMA, Annals of Internal Medicine, British Medical Journal and PLoS Medecine).
MEDICAL SCHOOL FIGURES
2014 - 2015

• 11,600 Students
• 800 Professors
• 334 Administrators
• 7 Research Centres
• 221 Hospital Departments
• 800 Masters and PhD students
• 400 Preparing Dissertations
• Continuing Medical and Specialist training,
  University Diplomas : 5,300

TEACHING PERSONNEL
2014 - 2015

• 334 University Professors / Hospital Practitioners
• 129 University Assistant Professors / Hospital Practitioners
• 318 Heads of University Clinics, Hospital Assistants and University Hospital Assistants
• 20 University Hospital Practitioners
• 7 Associate Teachers of General Medicine
• 15 Accredited Teaching Researchers

INTERNATIONAL EXCHANGES

In 2014-2015, the Medical School welcomed 123 foreign students:
• 78 from Erasmus + Program
• 45 from other bilateral partnerships outside Europe

For 2015-2016, the Medical School plans to educate around
250 students from their 3rd through 6th years of study

• Summer rotations abroad
In 2015, 186 students participated
• 36 Departments of Excellence
USPC FACTS

6 Nobel Prize laureates (Literature, Medicine, Physics)

1 Fields Medal : Artur Ávila

1 Japan Prize (2015) : Alain Fisher (Gene Therapy)

45 European Research Council grants

16 CNRS medals (Gold and Silver)

50 Institut Universitaires de France laureates