

EDITORIAL ●●●●●●●●●●



Professor Roberto Bruzzone
Co-director of the Hong Kong-
Pasteur University Research Pole

Teaching and education have always been at the heart of our mission and the establishment at the Institut Pasteur of Paris. The [Center for Global Health Research and Education \(CGH\)](#) offers the opportunity to further promote an innovative educational program that will meet the new challenges posed by global health. We took the first significant step in this direction by organising a workshop on Global Health Education at the end of June (see article by Jennifer Fatni on [page 5](#)). The meeting allowed conversation with other global health education leaders. The main discussion topic was the recent evolution in teaching programs, which integrate animal and environmental health dimensions, and explore new learning methods to train scientists with an interdisciplinary curriculum (spanning medical anthropology, epidemiology, genetics), and which will rely on new evolving technologies. Our goal is to develop a Global Teaching Program that will be uniquely positioned to implement educational initiatives in geographical regions where the Institut Pasteur International Network has an in-depth understanding of the specific needs due to its long-term presence and activity. ●

CONTENTS

PRESENTING THE TUTORING PROGRAM MISSION P2
 NOBEL-PRIZE WINNER BARRE-SINOSSI TO SPEAK AT
 3RD GRADUATION CEREMONY P3
 PROFILE: EDUCATION CENTER TEAM & ACTIVITIES P4
 TRAINING FUTURE GLOBAL HEALTH SCIENTISTS P5
 INSIDE THE CENTER FOR RESEARCH AND
 INTERDISCIPLINARITY (CRI) P6
 THE INTERNATIONAL TRAINING PROGRAM P8
 UPDATE ON EDUCATION CENTER RENOVATION P10
 LETTERS P11
 CALENDAR P11
 COURSES AND WORKSHOPS P12
 ANNOUNCEMENTS P13



The Education Center renovation project strides forward. An architectural rendering of the expanded greenhouse interior planned for the Education Center. See story on [page 10](#).



The mission and process of a key educational support

by Olivier Cassar, PhD, Head of Tutoring Team

As part of the reorganization of the [Executive Direction for Education \(Direction Déléguée à l'Enseignement, DDE\)](#) that occurred in January 2015 under the supervision of Monica Sala, Christian Bréchet wished to make Tutoring one of his priorities. Thus, a new Tutoring team was appointed; its mission is to follow and support the Institut Pasteur PhD students throughout their thesis until their defence.

Upon arrival on Campus, each PhD student will have a Tutor assigned. The Tutor is a scientist present on campus, who has been appointed by the Tutoring team in agreement with the directors of the scientific departments and with the Dean of the PPU at the Institut Pasteur, in the case of students

Tutors play an essential role in the following of the PhD student by:

- Following the progress of the thesis and helping the student solve potential difficulties (supervising, integration, ...), in consultation with the doctoral student and the Tutoring team.
- Surveying the financing conditions of the thesis.
- Committing to meet the student at least once a semester; additional meetings might occur upon justified request from the student.
- Submitting an annual report on the research progress and the situation of the doctoral student.
- Informing the Tutoring team

and September), the student should contact his or her Tutor to schedule a meeting. During these meetings, the student will inform the tutor about the progress of his work, his projects, and present the difficulties he might have encountered. Moreover, before the meeting scheduled in September, the student should fill in the Tutoring report ("[Rapport de Tutorat](#)") form and send it to the Tutor. After the meeting with the student, the tutor should then complete the document, pointing out any difficulties encountered by the student. In order to facilitate the exchanges between the PhD student, the Tutor and the Tutoring team, a new informatics platform is in progress and will be hopefully available during the academic year 2015-2016.

It is important to note that the relationship between the Tutor and the student must be established in a climate of mutual trust and under the seal of confidentiality. In this spirit, the Tutoring team, in consultation with the Legal Department, drafted a [Confidentiality Charter](#) that establishes the duties and responsibilities of students and tutors.

The main objective of the Tutoring team is to help solve any problem experienced by the student during his PhD, notably relational difficulties (especially with the supervisor or the other members of the research group). The Tutoring team will pay particular attention to foreign students, to ascertain that they can adjust to the new environment.

Through the [Tutoring team](#), the Institut Pasteur and the Executive Direction for Education wish to help students, who might undergo difficul-



Indispensable members of the Tutoring team: From left to right, Karin Eiglmeier, Olivier Cassar, and Sylvie Malot.

following the [Pasteur - Paris University International Doctoral Program \(PPU\)](#). To ensure the independence of the Tutors, the Tutor and the student belong to different departments. Tutors should also have no direct professional interaction with the head of the entity and the thesis supervisor of the PhD student.

and the DDE about any problem encountered by the student (publications, thesis, ...) as soon as they arise.

Once the tutor is assigned, the student should provide a [status summary](#) and a [CV](#) to the Tutoring team. In addition, twice a year (in February

ties, to stay motivated, and complete their PhD in the best environment possible.

The Tutoring team is entirely mobilized on the side of the students, ready to support and assist them until their thesis defence. To fulfill this mission, the Tutoring team is in close contact with the

representatives of doctoral students who have been elected in every scientific department. •

More information on the Tutoring Program

If you have access to *webcampus*, the Institut Pasteur of Paris intranet site, you can find information on the [tutoring page](#).

Or, contact Olivier Cassar, PhD, Head of Tutoring Team at olivier.cassar@pasteur.fr



Nobel-Prize Winner Barré-Sinoussi Invited to Speak at 3rd Annual Graduation Ceremony



Professor Françoise Barré-Sinoussi

Professor Françoise Barré-Sinoussi, Nobel-Prize Winner and former director of the "Regulation of Retroviral Infections" unit of the Virology Department of the Institut Pasteur Paris, has been invited to speak at the [3rd Annual Pasteur Graduation Ceremony](#) on December 11.

Françoise Barré-Sinoussi was deeply involved in retrovirology research starting in the early 1970's and is widely recognized for her contributions to HIV/AIDS research, in particular in the discovery of HIV.

Françoise Barré-Sinoussi has been strongly implicated in promoting integration between HIV/AIDS research and actions in resource limited countries, in particular through the Institut Pasteur International Network and the coordination of the ANRS research programs in Cambodia and Vietnam, according to her strong commitment in building capacity, training and technology transfers on sites in Africa and Asia.

Françoise Barré-Sinoussi is author and co-author of more than 280

original publications. Through her career, she received numerous national and international awards, including the Nobel Prize for Medicine in 2008 for her contributions to HIV/AIDS. In February 2009 she was elected member of the National Academy of Science and honored with the rank of *Grand Officier* of the Legion of Honor in France in 2013. She is the Immediate Past President of the International AIDS Society (IAS). She is chairing the IAS « Towards an HIV Cure » initiative.

Graduation guest speakers at IP are known to share their reflections on their careers, especially the beginning phases, with the graduating class. At the Institut Pasteur speakers additionally participate in a question and answer session with students, making an already student-centered ceremony even more interactive.

Additionally, to honor Professor Françoise Barré-Sinoussi's exceptional scientific career, a [half-day workshop](#) will be organized at the Institut Pasteur on October 13th (before the annual scientific symposium of the Institut Pasteur International Network). •



Team and Activities

by Hervé Waxin, Manager of the Education Center, Institut Pasteur of Paris

The Education Center of the Institut Pasteur of Paris is not only 600m² of laboratories, 120 computers, 300m² of reserve of equipment or even 450 pipetmans. It is first and foremost a team of 13 people very involved in the implementation of the courses.

Each year, more than 2,000 hours of practical classes are organized in the Education Center, in numerous fields and at high technical levels. The students, working alone or in pairs, are given opportunities to do hands-on manipulations that are equivalent to those performed in a research laboratory. These activities require the mobilization of a vast amount of equipment and more importantly the entire team of the Center.

Four administrative managers organize the coming of more than 600 lecturers and 550 students a year, prepare programs and distribute educational materials to students.

On the lab side, a team of five technicians, two lab assistants, and one specialized worker collaborate closely with the teaching teams (Pasteuriens and external parties) to create the best conditions for practical classes and provide all the lab and teaching equipment on time.

Integrated at the heart of the Paris campus, the technical teams serve as a link between various technology platforms, the scientific teaching teams and the students.

The new building project for the Education Center (see [page 10](#)) is a new challenge that will bring even more improvements to conditions in the labs and classrooms. It will also create new space for training and innovation, both valuable aspects of education at the Institut Pasteur. •

THE EDUCATION CENTER IN NUMBERS

120 computers

300m³ of reserve equipment

450 pipetmans

550 students

600+ lecturers

600m² of laboratories

2,000+ hours of practical classes



The Education Center Team in June 2015 during a visit to the CRI (Centre de recherche Interdisciplinaire)

From left to right : Isabelle Lequeutre (Education Center, EC) – Monica Sala (Director, Executive Direction for Education; Directrice, Direction Déléguée à l'Enseignement, (DDE) – Gautier Puime (EC) – Brigitte Clairet (EC) – Sylvie Malot (Registrar Office, RO) – Lisa Riffaud (DDE) – Françoise Ducoté (RO) – Angélique Godfin (EC) – Sophie Robert (EC) – Mariannick Govindin (EC) – Christine Vauthier (EC) – Hervé Waxin (EC) – Isabelle Di Martino (EC) – Fabienne Courmarcel (EC) – Dominique Franco (DDE) – Murielle Almoussa (EC) – Guylène K'Ouas (EC) – Corinne Fayolle (EC)

Insights from the International Workshop on Global Health Education

by Jennifer Fatni, Education and Training Project Officer, Centre for Global Health (CGH)

On 25-26 June 2015, the Center for Global Health Research and Education (CGH), the Executive Direction for Education, the Department of International Affairs and the IPIN held an international workshop on Global Health Education designed to bring together leading global health universities, research institutes and funding institutes to discuss recent evolutions in their respective teaching programs.

The first day was dedicated to institutional presentations and experience feedback. During the second day, participants split into three working groups focusing on the following themes:

- The Curriculum of a Global Health Scientist/Practitioner
- Innovation in Education and Training
- Training in Low and Middle Income Countries

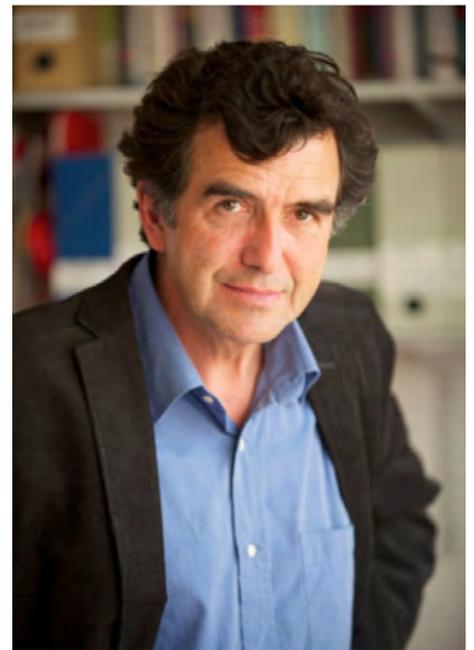
The workshop allowed exploration of the main opportunities and challenges for global health education, which include:

- The need to integrate **animal and environmental health dimensions** to the traditional human-centered public health approach, and to understand the major public health challenges worldwide;
- The increasingly **interdisciplinary** nature of biomedical and public health research and practice, which requires future scientists to have background knowledge across a diverse range of disciplines from medical anthropology to ecology, translational medicine or genetics and cell biology;

- The availability of **new technologies for biological studies**, and the direct applications of this technology to biomedical and public health research such as high throughput sequencing or proteomics, all of which requires training of new specialists in bioinformatics and big data analysis;

- The development of **new long distance learning methods** (e.g. e-learning, MOOCs), which will contribute to reshaping the way teaching is provided and diplomas are delivered.

- The need to **equip a critical mass of highly qualified scientists and public health leaders** with the necessary skills and professional experience in low and middle-income countries. Discussions



Professor Arnaud Fontanet, Director of the Centre for Global Health

Participants

INTERNATIONAL WORKSHOP OF GLOBAL HEALTH EDUCATION MEETING
AT THE INSTITUT PASTEUR, PARIS
25-26 June, 2015

The following leading institutions were represented during the workshop:

- The Fogarty International Centre
- The Global Fund
- The Wellcome Trust
- The Karolinska Institute
- The University of Texas at Austin
- EMBO
- Agence Française de la Francophonie
- EHESP
- Cambridge Institute of Public Health
- Gillings School of Public Health
- The University of Oxford
- London School of Hygiene and Tropical Medicine
- University of Heidelberg
- University of Hong Kong
- The Institut Pasteur International Network
- The Executive Direction for Education
- The Department of International Affairs
- The Institut Pasteur Center for Global Health



International Workshop on Global Health Education Meeting Participants



focused on Africa, in alignment with the Pan-African Coalition for Training (PACT) in Research and Public Health, a programme which is currently developed in the African Institut Pasteur (see the box to the left for more information on the PACT). •

For more information on the International Workshop on Global Health Education contact:

Jennifer Fatni
Education and Training Project Officer
Centre for Global Health
jennifer.fatni@pasteur.fr

The Pan-African Coalition for Training (PACT) in Research and Public Health is a multi-partner, multi-country initiative currently developed by the Institut Pasteur in Africa, the Department of International Affairs, the Teaching Center and coordinated by the Centre for Global Health, in collaboration with African and international partners willing to engage in this initiative, to ensure a comprehensive strengthening of biomedical research and public health capacities in Africa. Building on the strengths of the Institut Pasteur International Network, this Coalition will be designed to equip a critical mass of highly qualified African scientists and public health leaders with the necessary skills and professional experience through enhanced inter-African training programmes. Not only will PACT increase access to the highest standards of biomedical and public health education but it will also strengthen national education and health systems and the employability of researchers and public health leaders. Through this Coalition, we would like to build additional partnerships with universities and academic research institutes to form stronger links and unity between the Anglophone, Francophone and Lusophone academic institutions across the African continent.



For more information on the Pan-African Coalition for Training (PACT) in Research and Public Health contact:

Sarah Vozlinsky
Programme Development Coordinator
Centre for Global Health
sarah.vozlinsky@pasteur.fr

Inside the Center for Research and Interdisciplinarity (CRI)

Open Research and Education



**by Laura Ciriani,
General
Secretary, CRI**

Founded in 2005 by two Inserm researchers, Ariel Lindner and François Taddei, [the Center for Research and Interdisciplinarity \(Centre de Recherches Interdisciplinaires\)](#) aims to train and support

the creators of tomorrow - whether researchers, students or people from all walks of life - to reinvent ways to learn, to teach and do research. To address the interdisciplinary challenges of the 21st century, at the interface between life sciences and education, the CRI brings together innovators in open science, education, arts and technology, and helps them develop their projects in a stimulating environment that fosters exchange and creativity.



**François Taddei, cofounder
and director of the CRI**

The CRI promotes open science and open source technologies to advance our understanding of the living and new ways of learning. Citizen science is among its development priorities, with scientific discovery games involving Internet users and researchers ([Citizen Cyberlab](#)), participatory medicine involving patients in research on diseases. The CRI has within its walls a



**Ariel Lindner, cofounder of
the CRI**

collaborative fablab, start-ups accelerator, open to citizens ([L'OpenLab](#)).

An innovative Campus, the CRI encourages its students – coming from various scientific, cultural and geographic backgrounds – to create individual and collective projects at the frontiers of disciplines in a caring environment where they can undertake



them with the help of mentors and CRI network partners. The CRI encourages innovative initiatives made by its students, allowing them to define and develop themselves collaborative research projects of their choice. Thanks to this freedom and entrepreneurial spirit during their studies, CRI students have created scientific clubs (Synthetic Biology, In Vitro Artificial Intelligence, Art & Science, DrawMeWhy ...), student associations ([Wax science](#), [Fabelier](#), [Gamelier](#), Open Science School) innovative projects (the innovative startups competition [Hello Tomorrow Challenge](#), scientific educational games competition [iGAM4ER](#), team [iGEM Paris Bettencourt](#) world champion in 2013 at MIT ...) and even companies ([Eligo Bioscience](#), [Abolis Biotechnologies](#), [iSommeil](#), [SynBio Consulting](#), [Rhizi...](#))

The CRI teams also train teachers how to teach through research, face-to-face or via digital tools, for primary and secondary schools as well as universities, in order to provide new ways of learning to everyone including the youngest ([Les Savanturiers](#) l'école de la recherche, MOOC Factory ...)

Acrossroads for interesting encounters, each year the CRI hosts scientists and experts from different fields, guests for temporary residences, conferences and workshops, on its own initiative and through its students. The CRI now hosts 280 students in training (bachelor, master, doctorate, university degrees) and more than 350 graduates, who have benefited from hundreds of interactions with French and international experts at the highest level (including Nobel Prize, Abel Prize and Fields Medal).

Since the beginning, the CRI activities have grown rapidly. In recent years, CRI education and research facilities gradually moved from a small coffee room to a hallway in the Faculty of Medicine of Université Paris Descartes in Cochin and then 3000 m² in the Marais. This development has brought to the CRI institutional recognition from international partners ([Unesco Chair](#) for Learning Science, Harvard CRI Summer

school in Paris), from President François Hollande himself (with the « [La France s'engage](#) » label), the Ministry of Education, Higher Education and Research, The ANR (French National Research Agency with the Initiatives d'Excellence grant), the Mayor of Paris, Universcience ... and media.

One of the future challenges of the CRI is how to spread these successful initiatives around the world : the CRI has awakened the interest of a growing number of partners wishing to develop "CRI-like" centers in France and abroad (in Shenzhen China, in Bogota Colombia, in Sydney, Australia, in Santiago, Chile, and so on.) •

Go to the [CRI website](#)

Or see the CRI website [contacts page](#)

Or follow them on Twitter : @criparis



The innovative campus of CRI Paris is in the Marais. The CRI fosters students' initiative and freedom to learn, teach and do research.

by **Eliane Coëffier, PhD, Department of International Affairs - Institut Pasteur International Network**

The Institut Pasteur International Network (RIIP) links 33 research and public health institutes located on five continents. The Network's different activities stem from the Institut Pasteur's three missions: scientific research, public health and training. The RIIP plays a significant role by enhancing scientific capacity and human resources through training worldwide.

Training programs are provided for this purpose, in partnership with national scientific and medical universities and local research partners. The training designed for the RIIP institutes' local staff, researchers, technicians and external students helps upgrade professional profiles and skills that are recognised by all regional, national and international institutions.

The Institut Pasteur's Calmette and Yersin fund is devoted to the RIIP's training activities. It allows an ambitious training program for international



Eliane Coëffier and Marie-Annick Matagrin manage the Calmette & Yersin international training program.

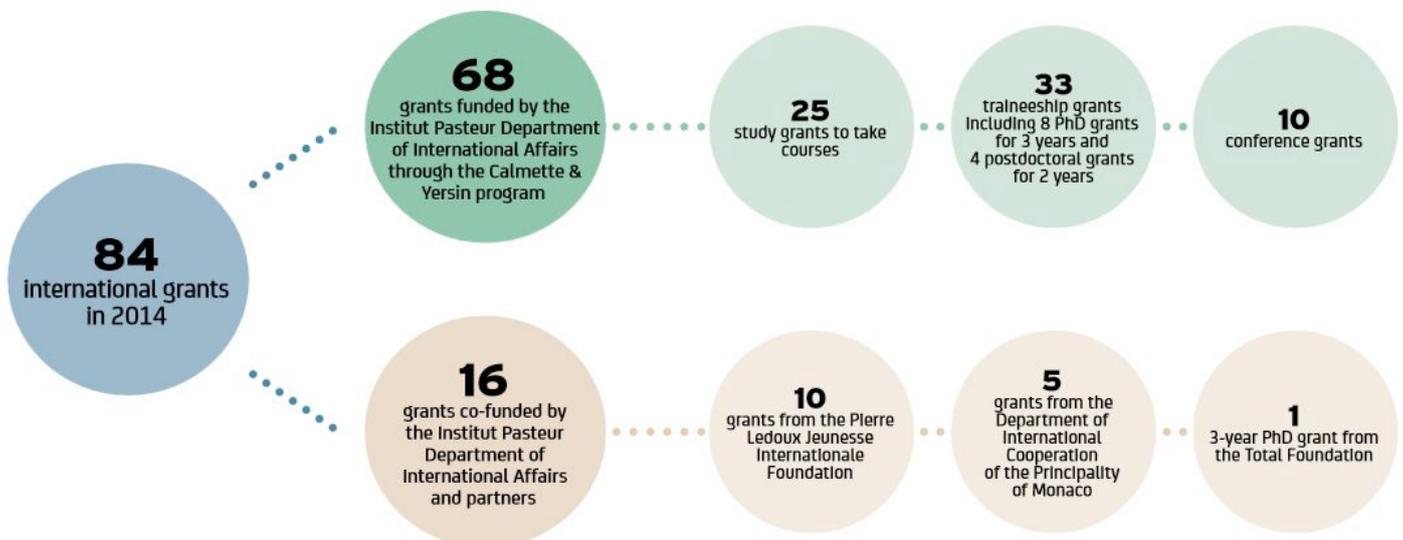
scientists and offers a unique opportunity of training through scientific research.

The international training program Calmette & Yersin Supporting training by research

The grants from the Calmette and Yersin Program, funded by the Institut Pasteur's Department of International Affairs, support an ambitious

training program for international scientists within the RIIP for initial and further training to enable scientists to learn the Pasteurian methods.

Each year, through international fellowships, the Institut Pasteur provides support to scientists (students, researchers, engineers and technicians) from the South who wish to follow a course or participate in an internship in Paris, an institute from



International fellowships set up by the Institut Pasteur's Department of International Affairs



the RIIP or another research institute (Study grants and Traineeship grants). The traineeship grants also facilitate the mobility within the RIIP. The training supplements the scientist's initial training, enhances their skills in their research field, and strengthens the capacity of their home institutes.

The Conference Grants are designed to facilitate the participation of young scientists from the RIIP in major international conferences. The fellowships enable scientists to present their work as oral communication and thus increase the outreach of the Institut Pasteur International Network.

Discovering the Institut Pasteur International Network

Training programs offers researchers the possibility to prepare their thesis and undertake postdoctoral internships in the RIIP, in countries situated in endemic areas and/or with limited resources.

Doctoral and postdoctoral fellowships

The Institut Pasteur's Department of International Affairs awards doctoral and postdoctoral fellowships to promote and facilitate thesis and related work by researchers from Institut Pasteur International Network. The objective is to attract young scientists to lead research projects in the RIIP.

Pierre Ledoux-Jeunesse Foundation

For more than 15 years, the Pierre Ledoux Jeunesse Internationale Foundation, under the auspices of Fondation de France, has supported training for young researchers, enabling them to gain a better understanding of

the international environment. Through a partnership with the Institut Pasteur, the fellowships enable French students to undertake internships in biomedical research in the RIIP in developing countries.



In 2014 there were 468 candidates for the Calmette & Versin fellowships.

Doctoral fellowships program to attract young scientists

- Benjamin Bailly, IP Shanghai
- Anne-Claire Andries, IP Cambodia
- Elisabeth Streit, IP Guadeloupe
- Valentine Duru, IP Cambodia
- Aude Zimmerman, INRS-A. Frappier (cofounding INRS-AF)
- Lanjao Wang, IP French Guiana
- Jessy Marlène Goupeyou Yousmi, IP Madagascar
- Lucie Bracq, IP Shanghai (cofounding UCAS)
- Marie Cresson, IP Shanghai (cofounding UCAS)
- Diallo Alpha Oumar, IP Cambodia (cofunding CIRAD)

Postdoctoral fellowships program: promising results

- Benoît Witkowski, IP Cambodia
- Fanny Balique, IP Dakar
- Wei Huang, IP Shanghai
- Amélie Vantaux, IP Cambodia
- Yann Reynaud, IP Guadeloupe
- Heidi Auerswald, IP Cambodia
- Maria Francia, IP Montevideo

The Pierre Ledoux Jeunesse Internationale Foundation and Institut Pasteur Department of International Affairs jointly fund ten fellowships per year. •

For more information see the [website](#) or contact Eliane Coëffier and Marie-Annick Matagrín at bourses-international@pasteur.fr

To find a traineeship within the RIIP: consult the [RIIP DATABASE](#)



Discover the RIIP with the Calmette & Yersin Program

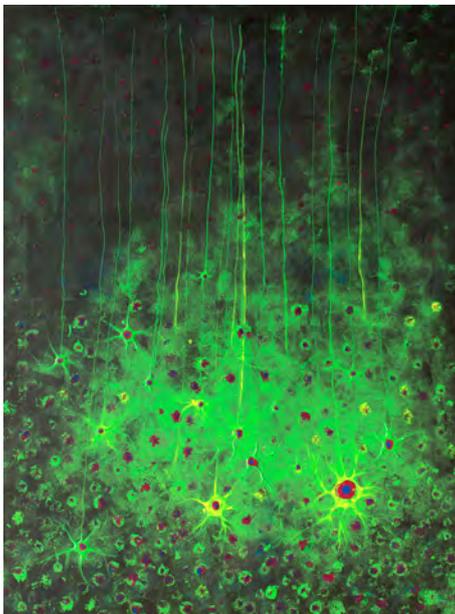
FELLOWSHIPS/GRANTS	CALL FOR APPLICATIONS	DEADLINE
Doctoral program	One call each year in January	September 15 th
Postdoctoral program	One call each year in January	May 31 st
Traineeship grants	Two calls each year in January and September	March 31 st and October 15 th
Study Grants	Open all year round	No deadline
Conference Grants	Open all year round	No deadline

Update on the Education Center Renovations

Blueprints chart the path for expansion, innovation and more

by Eliza Jones

Outshining five other finalists, AFE Architecture was selected in May 2015 as the architecture firm to undertake the Education Center renovations. Education Director Monica Sala, and



An acrylic painting, entitled "Nébuleuse" (Nebula) by [Alicia Lefebvre](#), an artist interested in neuroscience, who is slated for interdisciplinary collaboration in the new Education Center innovation space.

other education leaders, have conferred closely with the agency, who are currently refining blueprints. At present they are homing in on the optimization of interior space, which is crucial considering the ambitious list of features.

The project, expected to be complete in September 2017, will transform Pavillons Louis Martin and Emile Roux into a dedicated, vanguard Education Center that gathers all Education Center employees in one location and provides optimal spaces for the rich and diverse array of educational activities.

Features

A P3 Fictif, a dedicated bioinformatics classroom, a film studio for producing MOOCs, an expanded zone for microscopy courses, and an enlarged greenhouse (whose structure marries the historic foundation with undulating contemporary arches) are some of the highlights of the modernized center. Possibly the most anticipated element of the Education Center is an innovation space that will be "a cross between FabLab, Hacker Space and Atelier

Arts-Sciences," according to the three co-coordinators, Guillaume Dumas, Roberto Toro, and Sébastien Wagner. An arena for collaboration, improvisation and cross-pollination, the site will be on par with similar spaces across France and the world.

Innovation Space

The coordinators are joining forces with the architects to ensure the building will be well-suited for this collaborative concept. A far-cry from any standard formula – an office space or even a laboratory set-up – the architectural plan will require the same "outside the box" thinking that the space is meant to engender.

Fabrication and exhibition space, mobile tables with electric plugs, writable walls, good ventilation, and the strength to bear the weight of heavy equipment are some of the physical requirements. Different kinds of human interactions and activities also need to be considered. The space will need to host "mind jazz" (free-flowing conversations on a constrained topic with

participation by a varied group of disciplines), promote participation in open science, and enable collaboration and fruitful chance encounters, exploration, and play. If this sounds like a rather exhaustive list, rest assured there will indeed be a nap room, too.

Get Involved!

This space will be open to the entire community. People will have access to a series of tools such as 3D printers, laser cutters, CNC routers, electronics workshop; to allow them to quickly prototype pieces or design from scratch new tools for their research, automate processes using micro-controllers, or build 3D models or new representations of their data. From students working on open projects (e.g. iGem) to

visiting researchers from the Pasteur international network, the space will welcome any person willing to develop open, collaborative, and inter-disciplinary approaches.

You can already start helping form the innovation space. A first challenge is indeed to choose a name for the innovation space. Everyone is invited to step right up and **make a suggestion by emailing the co-or-**

dinators Guillaume Dumas, Roberto Toro, and Sébastien Wagner (guillaume.dumas@pasteur.fr; rto@pasteur.fr; and sebastien.wagner@pasteur.fr). •

CONTENTS



Letters

Readers Respond

E-learning Scoreboard

In light of the IP MOOC developments and the general interest in MOOCs and e-Learning, I have a very interesting website to share.

The OpenEducationEuropa agglutinates most (free) MOOCs and courses done in Europa:

[OpenEducationEuropa European MOOCs Scoreboard, June](#)

As you can see, France is at the top of such courses. A more interactive view can be found in [this link](#).

So, do not hesitate and visit them to find the [latest information in MOOCs produced in Europe](#).

Happy e-Learning!

Antonio V. Bordería Giner PhD.

*International Group for Data Analysis
International Network for Data Analysis
Institut Pasteur*

Letters to the editor: Please send letters to eliza.jones@pasteur.fr and include your full name and title. Letters may be edited for length and clarity.



Guillaume Dumas, Roberto Toro and Sebastien Wagner, co-coordinators of the innovation space. Email them (addresses above) to get involved.

Calendar: Education Events

OCTOBER 9 Le Club des Belles Souris •

**13 Workshop in honor of
Françoise Barré-Sinoussi** •

14-16 RIIP Network Workshop •

**DECEMBER 11 The Third Annual Institut Pasteur
Graduation Ceremony** •

Check for updates on the [thesis ceremony website](#) or contact the organizers at ipgraduation@pasteur.fr

**18 Pasteur Education Advisory Board
1st Meeting** •

Key to Listings

• Symposium or Workshop • Annual Event • Leadership Event (by invitation only)



COURSES OPEN FOR ENROLLMENT

Review the many courses now open for enrolment on the [Education Website!](#)

[▶ Go to all courses](#)



WORKSHOPS OPEN FOR ENROLLMENT

Vaccination and Public health October 12-13

IN FRENCH

Master information about the efficacy and adverse effects of vaccines, examine legal decisions in a public health context, and explain indirect protection's role in a vaccine strategy, while refine your communication to convince.

[Read full description online](#)

Introduction to the Relationship Between Science and Society

2016 : Wednesdays March 16, 24, 30, April 6, 2016 and additionally a half day TBD

IN FRENCH

Examine and reflect upon recent developments in science and society. Explore possible answers to the issues raised. Aimed primarily at doctoral and post-doctoral students and young researchers but is open to anyone with interest.

[Read full description online](#)

Cryo-conservation Partnership - Japan (IP-CARD)

IN ENGLISH

This one-week course combines lectures and hands-on sessions to teach the most recent CARD methods in mouse cryopreservation. It is taught by Prof. Naomi Nakagata (CARD-Kumamoto University, Japan) and his team who instigated the latest developments in mouse line cryopreservation.

[Read full description online](#)



COURSES IN SESSION

[▶ Go to all courses](#)

Selected Courses in Session

Fundamental Virology

IN FRENCH

This eleven-week theoretical course permits students to gain basic knowledge about viral families and their interactions with host cells.

[Read full description online](#)

Microbiology

IN ENGLISH

This nine-week theoretical and practical course presents the latest advances in molecular and cellular microbiology. Training is provided through lectures, bench works and discussion sessions and is organized into four parts.

[Read full description online](#)

Development and Plasticity of the Nervous System

IN ENGLISH

This five-week intensive laboratory and lecture course covers the main cutting-edge topics in neuroscience research.

[Read full description online](#)

Human Population Genomics and Genetic Epidemiology

IN ENGLISH

This two-week course presents theoretical lectures, research examples and hands-on computer training on concepts and tools used in the study of human population genomics and genetic epidemiology.

[Read full description online](#)

Read about all of the courses in session online [here](#).

For more information about courses offered by the Education Department click on links to course descriptions or [click here](#).

2015 International Scientific Symposium. Institut Pasteur International Network

From 14 to 16 October 2015, the Institut Pasteur will host the Scientific Symposium of the Institut Pasteur International Network in Paris—a three-day scientific conference bringing together scientists from the 33 institutes of the network as well as from other research organizations and international partners. It is a unique opportunity for scientists worldwide to showcase their research on Global Health and One health issues.

Do not miss this event! For further information and registration see [the website](#) •

Club des Belles Souris (The Beautiful Mouse Club)

The 7th symposium of the Club des Belles Souris will take place from 8:45am to 6pm at the Institut Pasteur on Friday the 9th of October,.

For further information contact Xavier Montagutelli at: xavier.montagutelli@pasteur.fr •

Le Club des Belles Souris
- 7^e Colloque -

Vendredi 9 Octobre 2015
8h45-18h00

à l'Institut Pasteur
PARIS
25 rue du Dr Roux
75015 Paris
Amphithéâtre DUCLAUX

Intervenants
Denis DUBOULE EPFL, Lausanne, Suisse
Mathilde LATIL IZB, Bruxelles, Belgique
Laurent MESNARD UPMC, Hôpital Tenon, Paris
Thomas BOURGERON Institut Pasteur, Paris
Isabelle SCREPANTI Institut Curie, Orsay
Francine LANGA Institut Pasteur, Paris
Aurélien MARJIN, Oryza, Saint-Quentin en Yvelines
Jean-Christophe MARINIE Université Leuven, Belgique
Véronique DELMAS Institut Curie, Orsay
Marina GUKHOVA Institut Curie, Paris
François LEVILLER IZFL, Lyon
Bernard DE MASSY IZM, Montpellier

Organisateurs
Michèle Cohen-Tanoudji, Yann Héroult,
Martin Holzenberger, Lionel Loriau, Laurent Le Com, Xavier Montagutelli et Jean-Jacques Panthier

Information & inscriptions gratuites
mais obligatoires :
www.fr/CBS2015

Vaccinology MOOC Launched in September



The [Vaccinology MOOC](#) is the second MOOC produced by the Institut Pasteur with the CNAM. It is directed by Frédéric Tangy and Armelle Phalipon with the same objectives and teachers as the Pasteur course. It was recorded last spring at the CNAM studio and is hosted on the FUN platform. The MOOC has been available on-line since the beginning of September! •

Filming of DPSN MOOC in Process



The filming of the DPSN course will take place at the Education Center in order to create a MOOC of the course between September 14 and October 14.

This neuroscience course is dedicated to the molecular, cellular and system mechanisms of brain activity. Our brain function governs our every thoughts and every action. This course will be devoted to how the brain develops and then functions to perceive the world and learn from our experiences. Thus, this course aims for a causal and mechanistic explanation of brain function that depends on the external world or our internal states, of which the microbiota is an important component. •

Education Advisory Board Established at Institut Pasteur

The Institut Pasteur has established a high-level, multidisciplinary Educational Advisory Committee, with profound expertise in diverse areas of education. This Board will meet annually to discuss the general orientations of the Institut Pasteur's education policy and to provide advice on our programs. The Pasteur Education Advisory board will meet for the first time December 18, 2015.

Among the six members, four continents are represented: Ogobara Doumbo from Mali, Elizabeth Blackburn and Stephen Friend from the United States, Mathias Fink from France, Jean-William Pape from Haiti and Gabriel Leung from Hong-Kong). •

The Pasteur Education Advisory Board will regularly examine the educational program of the Institute, to determine if the Institute has fulfilled its objectives in terms of education, to highlight critical issues and emerging trends in the field of education and to provide advice on the development of new educational projects.



First Tripartite Fiocruz-IP-USP Hands-on Course Bioinformatics and Biostatistics 19-30th October, Ribeirão Preto, Brazil

The course aims to provide students with theory and practical tools to analyze Next Generation Sequencing (NGS) data. The course is composed of theory and practice lessons. In the first week theory sessions will cover the main kind of HTS analyses (re-sequencing and variant analysis, de-novo sequencing, transcriptomics, ChIP-Seq, metagenomics), in addition to some general bioinformatics tools and Biostatistics. The second week is dedicated to practice, in which the students work with their own data in small groups with a mentor who guides them. The practice week is designed so the course



is of immediate use to each student. We expect the students to go back to their countries with the necessary knowledge to continue working on their own data. Lastly, this course will also promote interactions through bioinformatics between Fiocruz, the Institut Pasteur International Network (RIIP) and the University of Sao Paulo.

Please note that registration for the course is now closed.

For more information visit the [course website](#) •

Introducing the RIIP Database!

To improve the visibility and update information about each Institute from the Institut Pasteur International Network (RIIP), Eliane Coëffier has managed the creation of a RIIP Database as an extranet site.

This site is a unique reference base by institutions, scientific staff and projects accessible to all scientific and institutional partners wishing to contact each institute.

Database RIIP



All institutes supply and update the information in this [RIIP Database](#) •

Art Credits

Painting page 10 by An acrylic painting, entitled "Nébuleuse" by [Alicia Lefebvre](#).

Video camera icon on page 14 courtesy of Loic Poivet of Noun Project.

Photo last page © Colombe Clier - MCC.

All other images © Institut Pasteur

For information about The Institut Pasteur Education Newsletter contact Eliza Jones at eliza.jones@pasteur.fr



Reportage au musée Pasteur, Institut Pasteur Paris. © Colombe Clier - MCC