Pasteur-Paris University International Doctoral Program (PPU)

2009 - 2018: 10 YEARS !!!
In 2009, the Institut Pasteur created the Pasteur-Paris University International Doctoral Program (PPU) to attract motivated students from all over the world and train them in life sciences. Since the start of the program, in partnership with four major Parisian Universities, 62 students have graduated and 55 are currently on campus, for a total of 117 students enrolled. Our institution is proud to support such a program that reinforces some key characteristics of our campus, such as its dynamism and openness to multicultural interactions. For the Institut Pasteur, education is a crucial mission, since it allows scientific knowledge and Pasteur’s values to spread. Along this line, the PPU is part of the 2019-2023 strategic plan of our institution.
When I became President of the Institut Pasteur, it struck me that in this beautiful international research institution, we had calls to recruit international scientists but not PhD students. The energy, culture diversity and enthusiasm that young students could bring and the experience that they could gain from being trained at the Institut Pasteur were missing. This is what prompted us to initiate the PPU program. I am most grateful to the presidents of universities in Paris, Paris Descartes, Paris Diderot, Sorbonne Université, and later on Paris Sud, who were immediately convinced and have been, with the professors of their universities, very involved in the program from the beginning. I would also like to thank the numerous colleagues at the Institut Pasteur who enthusiastically got involved and were so generous with their time, with special thanks to Isabelle Saint-Girons who was responsible of the Education Department. We started modestly, with 5 students, and with the help of generous donors who got convinced, in 10 years, the program has trained 117 students from all over the world. Now, as when the program was initiated, when I have a chance to meet and have a conversation with some of the students, I am delighted to see all these young talents gathered and to witness their creativity and independence developing. Happy birthday and long life to the PPU program!
10 years, a very good story! It is a pleasure to consider the PPU steady growth and count the students' awards. Both illustrate that the program is fulfilling its goals: to welcome bright students from all over the world, grow their talents and bring them to excellence. The recipe for this success is not a mystery: a strong and transparent selection process, innovative teaching methods, and of course, the stimulating and dynamic environment of Institut Pasteur. In this context, the PPU students acquire a deep knowledge, diverse technical skills and an independent thinking. For me, it is an honor and a pleasure to manage this program. I feel highly gratified to support our students’ development during their PhD years and to work for a program that further spreads the reputation of Institut Pasteur internationally. My deepest wishes go to the PPU for many more years of a successful journey.

The Education Department is strongly involved in creating an appropriate environment for the professional development of PhD students on the campus, for example with the implementation of high-level courses in all areas of life sciences in a teaching center specialized in teaching practical and theoretical science. As Director of Education, I have always strongly supported the PPU program, which is one of the major strengths of our training activities in scientific research. In addition to the scientific skills of these students, we could always greatly appreciate their energy, enthusiasm and strong involvement in campus life.
I would like to deeply thank all the people that agreed 10 years ago to serve in the Graduate office at a time when the PPU only existed on paper and who contributed to construct the program as it is today: Carmen Buchrieser, Deshmukh Gopaul, Paul Lazarow, Melissa Laird Smith, & Paulo Vieira, with a special thank to Isabelle Saint-Girons and Lisa Riffaud.
Evolution

<table>
<thead>
<tr>
<th>Classes</th>
<th>Student number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018 Trefouel</td>
<td>14</td>
</tr>
<tr>
<td>2017 Nicolle</td>
<td>20</td>
</tr>
<tr>
<td>2016 Wollman</td>
<td>18</td>
</tr>
<tr>
<td>2015 Metchnikoff</td>
<td>14</td>
</tr>
<tr>
<td>2014 Yersin</td>
<td>10</td>
</tr>
<tr>
<td>2013 Jacob</td>
<td>14</td>
</tr>
<tr>
<td>2012 Lwoff</td>
<td>9</td>
</tr>
<tr>
<td>2011 Canetti</td>
<td>7</td>
</tr>
<tr>
<td>2010 Monod</td>
<td>6</td>
</tr>
<tr>
<td>2009 Pasteur</td>
<td>5</td>
</tr>
</tbody>
</table>

In 2016 two satellite programs were created:
PPU - CNBG (China)
PPU – EMHE (Latin America countries)
PPU in numbers

117
TOTAL PPU STUDENTS

104
PPU

6
PPU-EMHE

7
PPU-CNBG

55
STUDENTS ON PARIS CAMPUS

33
REPRESENTED NATIONALITIES
Mission: train talented international students

1) ATTRACT AND SELECT CANDIDATES FROM ALL OVER THE WORLD

Each year the PPU call is broadly diffused through more than 300 institutions, 31 embassies, and various websites.

The program has a very rigorous selection process articulated in three steps:

- September-October:
  - Scientific projects are posted online by hosting labs
  - Candidates contact the laboratories
  - Host laboratories select a candidate and prepare an application

- November-December:
  - Two committees evaluate the applications to establish a list of candidates for the final interviews on campus
  - Each application is evaluated by 4 committee members, two of each committee

- January-February:
  - During an interview week at the Institut Pasteur, the candidates are evaluated by:
    - Admission Committee
    - HR department Committee
    - Two individual scientists

* The External committee is composed of international scientists, while the admission committee is composed of Pasteurian scientists and members of associated universities.
Mission: train talented international students

2) STUDENT TRAINING TO THE EXCELLENCE

Several training courses and close follow up of PhD progression are organized for the student.

<table>
<thead>
<tr>
<th>Workshop on Ethics</th>
<th>Robotics in Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible conduct in research Ethical use of animals in research Clinical research ethics</td>
<td>How to use and program a robot</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oral presentation workshop</th>
<th>Journal club</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to organize a talk</td>
<td>Critical reading and data analysis</td>
</tr>
<tr>
<td>Which skills to use while talking</td>
<td></td>
</tr>
<tr>
<td>How to deal with stress</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual 3-day retreat</th>
<th>PPU Thematic Club</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interdisciplinary scientific exchanges</td>
<td>Created, organized and managed by the students around a scientific theme, it is a great opportunity to develop managerial capabilities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>One-to-one meeting with the Dean</th>
<th>Annual Thesis Advisory Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a year after the TAC meeting</td>
<td>mandatory each year</td>
</tr>
</tbody>
</table>

Practicals are organized after the workshops to allow the students to complete their theoretical knowledge.

NEW IN 2019
Mission: train talented international students

3) STUDENT CARE

Student care is a priority for the program. We want the students to be well integrated on the campus and in french society: French classes are offered to learn French language and culture.

Social events are organized to facilitate networking among the students and contacts with different cultures.

<table>
<thead>
<tr>
<th>French language classes</th>
<th>Luncheons social events</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the campus, Classes of four different levels</td>
<td>to facilitate the creation a network</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduation Ceremony</th>
<th>Support for administrative Bottlenecks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now organized for all the students on campus</td>
<td>(now MAASCC)</td>
</tr>
</tbody>
</table>

Over the years, these initiatives and some activities were extended to all the students on campus.

A video was recently made to show the spirit of the program: https://youtube/sCBLRyRCAVg
PPU provides …

Creativity
Scientific exchanges
Soft skills improvement
Scientific collaborations
Interactions with a multicultural environment
Personal network development
Implementation of new teaching methods
Interdisciplinarity
Student Testimonies

Reid Oldenburg  
PPU student - Jacob class (2013-2016)

I spent an enlightening and exciting three years in Paris studying host-pathogen interactions, investigating the immunomodulatory effects of mycobacterial phenolic glycolipids on the macrophage. Being in the PPU program offered me exposure to a diverse group of bright minds, which allowed me to cultivate my knowledge and love for immunology. I even spent part of my thesis learning about Hansen’s disease in Nepal, which ultimately influenced my decision to pursue my residency and post-doc in Dermatology at UC San Diego. Reid is currently a resident physician at the Olive View-UCLA Medical Center, UCLA, USA

Ai-Ing Lim  
PPU student - Jacob class (2013-2016)

I like a lot the international aspect of this program. We have fellows coming from different countries with very diverse background, and we interact a lot during meeting and retreat. I think the scientific and cultural interaction broaden our thinking. Ai-Ing is currently a post-doctoral fellow at NIH, Bethesda, USA

Anand Kumar  
PPU student - Metchnikoff class (2015-2018)

PPU is a dynamic program. What’s so great about it is the emphasis on knowledge transfer. We have regular social events where the scientific community at our institute has a platform to meet, exchange ideas and build long lasting professional contacts. Anand is finishing the PhD at the Institut Pasteur
Awards 2017-2018

Loredana Puca  
(Pasteur class 2009)  
Conquer Cancer  
Foundation Award 2017  
American Society of Clinical Oncology

Chak Hon Luk  
(Wollman class 2016)  
Croucher Foundation  
Doctoral Scholarship (2017-2019)

Fani Koukouli  
(Lwoff class 2012)  
Unafam Biomedical Science Research Award 2017  
Boursière L’Oréal-UNESCO Pour les Femmes et la Science 2017

Ai-Ing Lim  
(Jacob class 2013)  
Boursière L’Oréal-UNESCO Pour les Femmes et la Science 2017  
‘International Rising Talent’ L’Oreal-UNESCO 2018  
HFSP 2018 Human Frontier Science Program, Long term fellowship

Katherine Siddle  
(Monod class 2010)  
CHFSP « 67th Lindau Nobel Laureate Meeting » 2017

Jian Bay  
(Metchnikoff class 2015)  
Award of excellence Chinese Government  
Students not funded by CSC
Alumni

With 62 students already graduated, we have created a network of the “PPU Alumni”. Thirty-one alumni have responded to a recent survey. Please note that most of our alumni have graduated recently.*

* Data from May 2018 – 31 participants

Current job position

- Post-Doct: 52%
- Team Leader: 18%
- Manager: 7%
- Teacher: 3%
- Just graduated: 10%
- CEO: 3%
- Clinician: 14%

Countries of work

- USA: 25%
- France: 14%
- European Countries: 10%
- Germany: 3%
- South America: 3%
- South Africa: 7%
- Australia: 38%
Likelihood to recommend the PPU from 1 (none) to 10 (very high)

- 10% rated it 1
- 6% rated it 2
- 23% rated it 3
- 61% rated it 4 or higher

Obtained Fellowship after the PhD
- 55% No
- 45% Yes

Publications after the PhD
- 62% No
- 38% Yes
Steering Committee

The PPU program has a Steering Committee that meets once a month. The committee actively collaborates with the Dean for program management.

The Steering Committee is composed by scientists of the campus who participate on a voluntary basis.

The members of the committee are responsible for various activities.

The 2018-2019 committee

A. Alcover  European CoFund
S. Gribaldo  Selection process
F. Jönsson  Journal Club
M. Hamon  Journal Club
M. Ingersoll  Workshop Oral presentation
P. Vieira  Annual Retreat TAC Evaluation
The PPU thanks its precious sponsors !!!

Andres Alcover
Member of the PPU Steering Committee
Coordinator of EU-funding at the PPU

The PPU has been a perfect environment to host doctoral fellows funded by the E.U. Marie Sklodowska-Curie Actions, and a great opportunity to build EU-funded training programs.
The PPU program thanks:

- **For administrative issues, and career development**: the MAASCC (Mariana Mesel-Lemoine, Hajar Guedira, Marc Chevalier); the HR department (Hélène Reynier-Legeron, Stéphanie Meric, Muriel Robert, and Camille Baussy).

- **For the European CoFund**: Ksenia Bagrintseva, Olivier Schaetzle.

- **For the Ethics Workshop**: Nathalie Jolly, Sonia Kuhn, Noelia Lopez Montero, Xavier Montegutelli, Samira Ouchhi, Virginie Pirard, Fabrizia Stavru.

- **For Communication**: Sabine D’Andrea, Alban Orsini, Valérie Zeitoun, Agnès Bourdet.

- **For involvement during the interview week**: Jean Jaubert (Animal Facility), Magali Boissier (CRT), Francina Langa Vives (Mouse Genetics Engineering Center), Valentina Libri et Sophie Novault (Cytometry and Biomarkers UTechS), members of the associated universities.

- **For issue in education**: Olivier Cassar, Karin Eiglmeier, Dominique Franco, Deshmukh Gopaul, Oumaima Ibrahim-Granet, Thierry Lang, Geneviève Milon.

- **For the PPU-EMHE**: Vincent Brignol, Javier Pizzarro-Cerda, Daniel Scott-Algara, Pamela Palvadeau.

- **For help in the past years**: Pierre Bruhns, Carmen Buchrieser, Isabelle Saint- Girons, Nicholas Malmquist, Melissa Laird Smith, Paul Lazarow, Michaela Muller-Trutwin, Lilliana Radoshevich, Lisa Riffaud.

- **A special thanks** to Catherine Fayolle and Marie-Laure Goupil for conception of this booklet, and to Béatrice de Cougny for designing steps.
Notre Institut sera à la fois un dispensaire pour le traitement de la rage, un centre de recherche pour les maladies infectieuses et un centre d’enseignement pour les études qui relèvent de la microbiologie.

Louis Pasteur
Inauguration Institut Pasteur November 14, 1888

We wish the PPU program a successful future in the footsteps of Louis Pasteur’s tradition.

www.pasteur.fr/en/education/ppu
Video: https://youtube/sCBLRyRCAVg