



# Frontiers in Biological Psychiatry Course

July 6-10, 2015



**fondation  
fonda**mental****  
Réseau de  
coopération scientifique  
en santé mentale

**ENP**  
École des  
Neurosciences  
Paris Île-de-France



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For information and registration:

[www.pasteur.fr/course/FBP](http://www.pasteur.fr/course/FBP)

This course is a joint effort between the Pasteur Institute Teaching department and the Bio-Psy Laboratory of Excellence (Labex)\* and its partners to promote cutting-edge scientific training in Biological Psychiatry.

Exciting advances in Neurosciences and Genomics are transforming research in Psychiatry into a highly dynamic and fast-moving field. The next 10-year period is likely to be *“the decade of psychiatric disorders as research on mental illness is reaching an inflection point where insights from neuroscience and genetics will transform our understanding of psychiatric disorders”* (Peter Campbell, Nature Editor). These developments should allow better understanding of the origins and biological mechanisms of complex diseases such as depression, schizophrenia, addiction, and other disorders. Ongoing progress is also leading to the redefinition of the borders between disorders and is opening novel prospects for treatment and prevention. The aim of the *Frontiers in Biological Psychiatry (FBP)* Course is to give the participants\*\* an opportunity to get acquainted with and hopefully participate in the exciting development of the field.

The FBP Course gathers a team of international experts in both clinical psychiatry and basic research in neuroscience, genetics, and development. During this intense week, a combination of lectures and tutorial sessions will guide the participants through the most up-to-date openings in psychiatry, through the methodological approaches that have made them possible.

Beyond the training sessions, on-site visits and discussions with experts will be organized to foster exchanges and convey curiosity for research among clinicians as well as understanding of the challenges facing clinicians among scientists.

*\*\*Expected attendants are clinicians and researchers in their early training. International applications are encouraged. Language of the course is English.*

*\*Registration fees for members of Bio-Psy teams and of FondaMental Expert Centers accepted to the course will be supported by the Labex. In order to encourage the participation of young clinicians and fellows, applicants will be considered even in the absence of recommendation letters.*

**Patricia Gaspar, Marika Nosten-Bertrand, Stéphane Jamain**

Course organizers

**Uwe Maskos**

Course coordinator

**Jean-Antoine Girault**

Bio-Psy Director

**Brigitte Bouchard**

Bio-Psy Executive Director

## Frontiers in Biological Psychiatry

### Monday July 6th

- 9:00 – 9:30            **Welcome and introduction to the course**  
Jean-Antoine Girault (Inserm, UPMC, Labex Bio-Psy), Course organizers
- 9:30 – 11:00        **What is the future of nosography in Psychiatry?**  
**David Kupfer** (Pittsburgh University)
- 11:00 – 12:30      **Contributions and challenges of genetics in Psychiatry**  
**Paul Lichtenstein** (Karolinska Institute)
- 12:30 – 13:30      Lunch
- 14:00 – 16:00      **Tutorial 1**  
- How to identify phenotypes common to different disorders?  
- Use of neuropsychology tests and behavioral scales  
*Richard Delorme (Robert Debré Hospital, Fundamental)*  
*Andrei Szoke (Inserm, Fundamental), Psychologists from Expert Centers*
- 16:00 – 18:00      - How to identify and confirm the role of a mutation?  
*Stéphane Jamain (Inserm), Thomas Bourgeron (Pasteur Institute)*

### Tuesday July 7th

- 9:30 – 11:00        **How can Rodents be used as translational models in psychiatric disorders?**  
**Pier-Vincenzo Piazza** (Bordeaux, Inserm)
- 11:00 – 12:30      **From cellular and animal models to gene therapy**  
**Stéphane Palfi** (Henri Mondor Hospital)
- 12:30 – 13:30      Lunch
- 13:30 – 14:00      Article presentation by students
- 14:00 – 18:00      **Tutorial 2**  
- Scoring animal behavior/ analysis in humans, conductance tests, evoked sensory potentials  
*Marika-Nosten-Bertrand (Inserm), Philippe Faure (CNRS), Uwe Maskos (Pasteur Institute)*  
- Analysis of optogenetics experiments  
*Eric Burguière (Inserm), Luc Mallet (Inserm)*

## Wednesday July 8th

- 9:30 – 12:30      **Functional imaging: neuronal circuits in action** (lecture held at Neurospin)  
**Mary Phillips** (Pittsburg University)
- 12:30 – 13:30      Lunch
- 13:30 – 14:00      Article presentation by students
- 14:00 – 18:00      **Site visit and Tutorial 3**  
Identification of areas of interest on brain images  
*Josselin Houenou (Inserm, Fondamental) and members of CEA Neurospin*

## Thursday July 9th

- 9:30 -11:00      **Environment and psychiatric disorders: a focus on childhood trauma**  
**Bruno Etain** (Inserm, Fondamental)
- 11:00- 12:30      **Long-time effects of infantile stress**  
**François Tronche** (Institut Biologie Paris-Seine, CNRS)
- 12:30 – 13:30      Lunch
- 13:30 – 14:00      Article presentation by students
- 14:00 – 18:00      **Tutorial 4:**  
- Epigenetic modifications  
*Stéphane Jamain (Inserm), Lucile Marion-Poll (Inserm)*  
- Connectomics and neuronal networks  
*Patricia Gaspar (Inserm)*

## Friday July 10th

- 9:30 – 11:00      **Treatable autoantibodies-mediated psychiatric disorders**  
**Jérôme Honnorat** (Lyon, Inserm)
- 11:00 – 12:30      **Primal threats: the neural circuitry of social and predator fear**  
**Cornelius Gross** (EMBL, Monterotondo)
- 12:30 – 13:30      Lunch
- 13:30 – 14:00      Article presentation by students
- 14:00 – 16:00      - Presentation and visit of the Center for Human Immunology (CIH, immune phenotyping)  
*Milena Hasan, CIH manager, Pasteur Institute*
- 16:00 – 18:00      - General discussion