

11-13 September 2024
Bordeaux School of
Neuroscience
France

Target audience:

ECNP members and non-members.
PhD students, early career, clinician
researchers, senior scientists etc.

Some **prior knowledge of the program-
ming language R** is recommended (ele-
mentary knowledge and onwards).

Application requirements:

- CV and motivation letter
- Recommendation (head of department)
- Application form (website Bordeaux
School of Neuroscience)

Send your application to
sekre.baune@ukmuenster.de
Deadline: 15.07.2024

Registration follows after notification
from the selection committee.

Registration fee:

300€ per participant.
All fees & Accomodation included.
Transportation not included (travel
award available)

More information:

[https://www.bordeaux-school-of-
neuroscience.eu](https://www.bordeaux-school-of-neuroscience.eu)

**Bordeaux School of
Neuroscience
France**



Organizing Committee

Bernhard Baune
Marie-Claude Potier
Giuseppe Fanelli
Alessandra Minelli
Anjali Sankar
Mara Dierssen
Alessandro Serretti
Evelien Van Assche
François-Xavier Lejeune
Júlia Perera Bel
Patrick Fisher

Bordeaux School of Neuroscience

Christophe Mulle
Antonella Caminiti



**WIN A 500€
TRAVEL AWARD**

Summer School:

**Clinical, -omics and
imaging biomarkers
of complex psychiatric
disorders**

Chairs:

Marie-Claude Potier
Giuseppe Fanelli
Alessandra Minelli
Anjali Sankar
Bernhard Baune

11-13 September 2024

Bordeaux School of Neuroscience, France

By the
**ECNP Network on
Pharmacogenomics and
transcriptomics**
&
**ECNP Network on Suicide
Research and Prevention**

Psychiatric disorders and suicidal behavior are the result of complex interactions between genomic variations, epigenetic modifications, and other regulatory mechanisms that affect gene expression. Understanding the mechanisms underlying gene expression may not only help in diagnosis and prediction of treatment response but also provide valuable insights into the molecular mechanisms of drug's action.

Using, for example, co-expression network analysis-based methods, disease-relevant clusters of co-regulated genes can be identified and further integrated with genetic and epigenetic data for a comprehensive investigation of biological underpinnings of mental illness and for predicting psychiatric disorders and suicide risk.

Speakers:

Bernhard Baune, Francesco Benedetti, Mara Dierssen, Giuseppe Fanelli, Patrick Fisher, Lalit Kaurani, François-Xavier Lejeune, Alessandra Minelli, Júlia Perera-Bel, Claudia Pisanu, Marie-Claude Potier, Anjali Sankar, Alessandro Serretti, Alessio Squassina, Evelien Van Assche

This summer school will focus on the **integration** of clinical, imaging, and genetics/omics biomarkers to diagnose and improve pharmacological treatment of psychiatric disorders and related conditions including suicidal behaviors.

It aims to blend clinical psychiatry with molecular genetics and transcriptomics through **theoretical sessions** and **practical workshops**, data management, analysis, and interpretation for psychiatric conditions and traits, including major depression, bipolar disorder, schizophrenia and suicidality...

... all in the inviting and beautiful city of Bordeaux

Overarching themes for the theoretical and practical sessions include:

- ◇ Comprehensive state-of-the-art of the basics and new developments in neuropsychopharmacology and suicide research.
- ◇ Introduction to relevant methodologies with the most advanced techniques of analysis for suicide research: research on clinical, neuroimaging, and genetic aspects of suicide and related phenotypes, and for pharmacogenomics: genetics, transcriptomics and epigenetics.
- ◇ Exploring pharmacogenomics and related concepts in psychiatric disorders with an overview of its use in diagnosis, patient stratification and treatment response prediction.
- ◇ The use of pharmacogenetic testing in clinical practice: the available evidence regarding clinical strengths and limitations.

PROGRAMM

Theoretical Sessions

◇ Understanding psychiatric disorders in clinical psychiatry - Chair: Bernhard Baune

Psychopathology, clinical presentation and risk factors of mental illness. - *Alessandro Serretti*

Psychological and psychotherapeutic approaches to mental illness. - *Alessandra Minelli*

Psychiatric management and psychopharmacological treatments of patients. - *Bernhard Baune*

◇ Neuroimaging insight into psychiatric disorders and suicidality - Chair: Giuseppe Fanelli

The neuroimaging correlates of suicidal thoughts and behaviors in mood disorders. - *Anjali Sankar*

Role of neuroimaging in understanding the biological basis of psychiatric disorders. - *Francesco Benedetti*

◇ Introduction on genetics and the use of polygenic models in evaluating risks - Chair: Marie-Claude Potier

Psychiatric genetics, that sounds complex. - *Evelien Van Assche*

From genes to drugs: are we ready for pharmacogenetics implementation in bipolar disorder? - *Alessio Squassina*

Decoding the Molecular Echoes of Early Life Stress: Unraveling the miR-99b-5p and Zbp1 Pathway in Schizophrenia and Neuroinflammation. - *Lalit Kaurani*

◇ Introduction to pharmacogenomics in major psychiatric disorders and suicidal phenotypes - Chair: Mara Dierssen

Pharmacogenomics of psychiatric disorders/suicide phenotypes and treatment resistance. - *Mara Dierssen*

Utility of pharmacogenomics-guided testing to optimise antidepressant treatment in major depressive disorder: limitations and future opportunities. - *Alessandra Minelli*

Gene expression regulation in the blood: can we detect biomarkers of psychiatric disorders? - *Marie-Claude Potier*

Extracellular vesicles as a novel source of biomarkers of response to treatment in psychiatric disorders. - *Claudia Pisanu*

Practical Sessions

◇ Understanding psychiatric phenotypes in clinical psychiatry.

A) molecular and genomic principles

B) imaging of psychiatric phenotypes in clinical psychiatry

o In small groups

o Hands-on session on morphological and functional brain MRI (MRI) traits relevant to suicidal behavior imaging

o Analyzing genetic and transcriptomics datasets including polygenic score analyses.

... and more

◇ Keynote lecture by **Pier-Vincenzo Piazza**

Translating basic research in the pathophysiology of addiction to a new pharmacological class and a potential new treatment of cannabis addiction.

◇ Presentations of student projects

◇ Awards ceremony

◇ Social events



what to bring

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