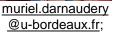




# « Psychoneuroimmunology: Body-Mind interactions » 3 ECTS

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### 1. Learning Outcomes

Training students to the basics concepts of psychoneuroimmunology and to more advanced research on bidirectional communication among the nervous, the endocrine and the immune systems. Upon completion of this course, students will be able to understand multidisciplinary research approach in neurosciences integrating psychology, neurobiology, endocrinology, neurology or psychiatry disciplines.

### 2. Topics

Microbiota-gut-brain axis; Neuroimmunology; Stress; Perinatal environment; Nutrition and metabolism; Integrated experimental neuroscience

## 3. Teaching

- Seminars by researchers experts in the field of psychoneuroimmunology
- Participation to an International Symposium "Early life adversity and (mental) health: how does early environment get under the skin?"
- Journal clubs on symposium lectures

#### 4. Exams

Continuous assessment. 3 grades based on 1 oral presentation and 2 written tasks, spread along the semester

# 5. Speakers/topics

- . Agnes Nadjar (neuroinflammation)
- . Jan Pieter Konsman (psychoneuroimmunology)
- . Julie Lasselin: (psychoneuroimmunology)
- . Muriel Darnaudery: (early life adversity)

- . Jean-Christophe Delpech: (inflamamtion aging)
- . Charlotte Madore: (neuroinflammation)
- . Carmelo Quarta (hypothalamus, autonomic nervous system, metabolism, obesity)
- . Jonathan Scholl (Philosopher, microbiota, metabolic flexibility)