**Post-doctoral fellowship:**

**Endospanin 1, a new regulator of the leptin receptor and obesity development**

Obesity is a major public health problem associated with the development of type 2 diabetes (T2D). Leptin targets specific receptors (OB-R) expressed in the hypothalamus to regulate energy balance and glucose homeostasis. Leptin induces decrease of food intake and increase of energy expenditure in normal people but does not function in obese people, indicative of a leptin resistance state. Prevention and reversal of leptin resistance is the current challenge in obesity research. We characterized a new family of OB-R regulators, the endospanin family composed of endospanin 1 and 2 which are ubiquitously expressed. We previously showed that endospanin 1, regulate OB-R trafficking and signaling. Silencing of endospanin 1 in the hypothalamus prevented and reversed the development of obesity in mice fed a high fat diet. The post-doctoral fellow will study the function of endospanin 1 in total knockout mice and unravel the mechanism underlying the effect of endospanin 1 on the development of obesity in both cellular and animal models.

The position is funded for 2 years (national ANR funding) and can start asap.

**Skill requirements:**

- The postdoctoral fellow must hold a PhD in physiology or neuroendocrinology. Knowledge in endocrinology and energy metabolism is required.
- Experience in animal experimentation is required.
- Experience in Cell Culture, Receptor Signaling, qPCR will be appreciated.
- The candidate should be capable of working in a team, but able to plan and work independently.
- The candidate should have good communication skills in spoken and written English.
- Candidates should be highly motivated and committed.

**The Cochin institute, Paris, France**

The Cochin Institute is a Research Center (INSERM, CNRS, University ParisV) located in the campus of the Cochin Hospital, one of the most active Hospitals downtown Paris. Ten core facilities provide the scientists of the Institute with the most efficient technological support. Our team is part of the department of »Endocrinology, Metabolism and Diabetes ». We use pharmacological and endocrinological approaches to understand the function of the leptin receptor, to decipher its involvement in obesity and evaluate its therapeutic potential. In this perspective, we combine studies at the molecular and cellular levels which are complemented with animal models. Our team is international of about 18 staff members with researchers, post-doctoral researchers, PhD students, master students, engineers/technicians.

**Key Words**: Obesity, Knock-out mice, Physiology, Metabolism, Endocrinology, Cell Biology

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