

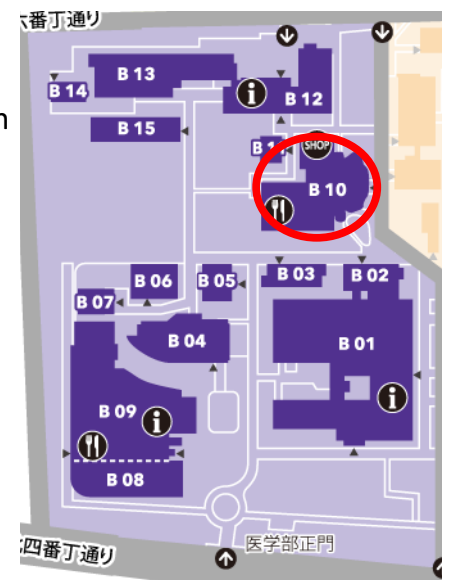


# NEURO GLOBAL Seminar

## Does the gut-brain axis control the reward system? Lessons from human food reward studies

### 腸-脳軸は報酬系を調整する？—ヒトでの食欲・報酬研究

The gut-brain axis, the complex bidirectional neurohumoral communication system between the gastrointestinal tract and the central nervous system, plays a key role in the regulation of appetite and food intake. More specifically, it is becoming increasingly clear that interoceptive signals reflecting the body's nutritional and energy resources, including neural signals reflecting gastric distension and metabolic hormones produced by the GI tract, not only impact on homeostatic neurocircuitry in the brain, but also on the brain's reward system. While the former system, including hypothalamic and brainstem nuclei, regulates feeding based on current or long-term energy and nutritional needs of the body, the latter system includes midbrain projections to striatal and extrastriatal regions and regulates feeding by representing the motivational and hedonic properties of food-related stimuli. In this lecture, I will give an overview of recent mechanistic human research by my own group and others on the role of the gut-brain axis in appetite and feeding control, and outline the implications of this work for obesity and eating disorders



#### Speaker

**Associate Professor, Lukas Van Oudenhove**

Katholieke Universiteit Leuven, Belgium

#### Date

**April 23 (Mon.) 17:00 – 19:00**

#### Venue

**星陵オーデトリウム**

(星陵キャンパス、生協2階)

Seiryō Auditorium, Seiryō Campus

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主催: 日本学術振興会学術システム研究センター学術研究動向等に関する調査研究  
心身医学専門調査班・平成30年度調査研究(主任研究員・福土審)