



Biomedicine Seminar

Guillaume Bogaerts, PhD cand.
Institute of Veterinary Physiology



Role of hypothalamic AgRP neurons in the control of glucagon secretion by amylin

The pancreatic hormone amylin reduces nutrient-stimulated glucagon and is therefore recognized as a valuable option for diabetic patients with hyperglucagonemia. While the mechanism by which amylin inhibits glucagon secretion remains largely unexplored, evidence suggests that the brain may be involved. Interestingly, agouti-related peptide (AgRP) neurons, located in the arcuate nucleus of the hypothalamus (ARC), respond to peripheral signals and have been linked to glucagon release in response to hypoglycemia. In a first step to understand whether AgRP neurons are required for amylin's glucoregulatory action, we defined the spatial distribution of amylin receptor components within the rat ARC. In parallel, we are refining a model to investigate amylin's glucagonostatic action in vivo, eventually providing insights into amylin's central action and its intricate interplay with glucoregulatory hormones.

**Monday, April 22, 2024, 17:00 h, seminar room Y23 K52,
Institute of Physiology, UZH Irchel - and by Zoom:**

<https://uzh.zoom.us/j/65110053450?pwd=RVRBVWZ0cW4wTlIaZnpNR213eFo1dz09>