



Institute colloquium

Hungry brains and clever guts

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Imperial College London

Host: Simon Hippenmeyer

We are interested in the plasticity of adult organs: how and why organs that we commonly regard as fully developed change in size and/or function in response to environmental or internal challenges. We mainly use the *Drosophila* intestine and its neurons because they allow us to explore organ plasticity from an integrated perspective. We investigate how an organ senses its internal milieu and the environment (e.g. nutrients, microbiota), how its adult progenitors respond by either maintaining or resizing the organ, and how its different cell types (epithelial, muscle, neural) communicate to achieve coordinated, organ-level remodelling. I will present some of our recent work, which has uncovered unexpected sexual dimorphisms, as well as intestinal contributions to food intake and reproductive success. Intriguingly, the intestine's three-dimensional arrangement within the body cavity may be relevant to how it communicates with other organs. I may also discuss our ongoing attempts to explore how broadly applicable our findings might be using mouse and human models.

Monday, April 26, 2021 04:00pm - 05:00pm

Online



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

Please find a schedule of the ISTA Shuttle on our webpage:

<https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.