# The gut is not just the gut



## Covering it all

Gubra is an abbreviation of GUt and BRAin – and we are of GUt course experts. The gut is the largest endocrine organ in the human body and may even in rodent models challenge histologists by its size.

### Stereological analyses of gut morphometry

Considering the gut as homogeneous "tube" is a major bias – so we have taken another approach. Using stereological sampling methods, we have investigated total volumes, surface areas and number of cells from duodenum to colon.

### **Bariatric surgery**

We have investigated the plasticity of the gut in mice, rats, pigs and humans and revealed marked adaptations to different types of gastric bypass.

#### The misconceptions on "L-cells"

For years, research on preproglucagon expressing "L-cells" have been restricted to the distal ileum and colon. However, our unbiased methods have demonstrate that a large part of "L-cells" are actually confined to the proximal small intestine.

#### Short Bowel Syndrome and Intestinal Bowel Disease

At Gubra, we have a lot of experience with preclinical models of SBS and IBD and used immunohistochemistry or in situ hybridization to access key features of tissue inflammation Mannose recptor ISH and MCH class II IHJC.



Stereological probes for assessment of voume, surface area and numbers



The effect of RYGB on gut Hypertrophy in a rat RYGB model



Gut histology in DSS mouse models of inflammatory bowel disease

