

## Press Release

### HUB Announces Collaboration with Merck to Develop Organoid Models for Toxicology

**Utrecht, Netherlands, June 29, 2018 - HUB today announced a collaboration with Merck that aims to determine the applicability of the HUB Organoids to study and predict non-clinical drug safety.**

The collaboration between Merck and HUB seeks to study intestinal toxicity using adult stem cell derived Organoids from different species, including human. HUB Organoids are an in-vitro cell culture system derived from patients or animals that are genetically and phenotypically stable and faithfully recapitulates characteristics of the tissues from which they were derived.

#### Toxicology

A major cause of the high attrition rate in drug development can be attributed to the inability to predict toxicity prior to entering the clinical phase. Clinical data collection, genetic data, and in silico modeling have improved our understanding of the toxicity of treatments. However, most preclinical research still depends on animal models and traditional cell lines. Preclinical models of primary human tissue would greatly help early assessment of the toxicity of new drugs. Merck and HUB have started a collaboration to develop the Intestinal Organoid models for both animal species as well as humans for the study and prediction of intestinal toxicity.

#### About HUB

Hubrecht Organoid Technology (HUB) is an organization founded by the Royal Netherlands Academy of Sciences and the University Medical Center Utrecht. HUB exploits the pioneering work of Prof. Hans Clevers, who discovered methods to grow stem cell-derived human 'mini-organs' (HUB Organoids) from tissues of patients with various diseases. The organoids, which are part of the HUB biobanks, are characterized by genome sequencing, expression profiling and sensitivity to known and experimental drugs to establish a database linking genetic and transcriptional information to drug responsiveness. HUB offers licenses to its patented HUB Organoid Technology for drug-screening and access to organoids in the HUB biobanks for preclinical drug discovery and validation. In addition, HUB is performing clinical studies to validate the technology's use as a companion diagnostic. More info at [www.hub4organoids.eu](http://www.hub4organoids.eu)

For further inquiry into this topic, please contact HUB's Managing Director, Dr. Robert Vries ([r.vries@hub4organoids.nl](mailto:r.vries@hub4organoids.nl)) or HUB's Head Business Development, Dr. Bahar Ramezanzpour ([b.ramezanzpour@hub4organoids.nl](mailto:b.ramezanzpour@hub4organoids.nl))