

**Press release – for immediate publication**

**MIMETAS, Galapagos, and University of Sheffield, to develop organ-on-a-chip model for Inflammatory Bowel Disease**

**Leiden, The Netherlands, August 24, 2016**

MIMETAS, a company developing human tissue models in microfluidic chips, Galapagos, (Euronext & NASDAQ: GLPG), a drug development company, and University of Sheffield, have embarked on a collaboration to develop an Inflammatory Bowel Disease (IBD) model in MIMETAS' OrganoPlates®. IBD, covering both Crohn's disease as well as ulcerative colitis, is an inflammatory condition of the gastrointestinal tract with loss of integrity of the intestinal barrier playing a key pathogenic role. Over 3.5 million suffer from the disease in Europe and the US, resulting in a global death toll of 51,000 in 2013.

The IBD disease model will be developed using human organoid technology, OrganoPlates® and CRISPR/Cas9 gene editing techniques. Recently, MIMETAS has presented small intestinal gut organoids in OrganoPlates® at the International Society for Stem Cell Research Conference ISSCR 2016 in San Francisco. "Our OrganoPlate® platform is ideally suited for tackling the IBD modeling problem, as it allows us to assess intestinal barrier function with high sensitivity under a wide range of conditions in parallel, including microbiome exposure and co-cultures.", says Dr. Jos Joore, Managing Director of Mimetas, "As such, this project has a strong potential to lead to improved therapeutic options for IBD."

The research work is partly backed by a 1 million euro EU contribution through the MIMIC project in collaboration with Dr. Kai Erdmann of the University of Sheffield (UK), who is an expert in membrane trafficking and signaling in polarized epithelia. "This consortium hits the ground running," says Erdmann, "as my group and MIMETAS are already collaborating in an EU project named BIOPOL, while MIMETAS and Galapagos have a long-standing collaboration."

**About MIMETAS**

MIMETAS BV (Leiden, The Netherlands) is a privately owned biotechnology company developing human organ-on-a-chip tissue models for testing drugs, chemicals and food components in OrganoPlates®. The company develops and validates customized disease, toxicology and transport models and ultimately will make its technology available for personalized therapy selection. Mimetas' unique microfluidic technology and model development know-how enables testing of compounds in high-throughput, showing better predictivity as compared to laboratory animals and conventional cell culture models. The OrganoPlate® culturing platform supports 3D cell culture under continuous perfusion, with membrane-free co-culture and epithelial and endothelial tubules. More information at [www.mimetas.com](http://www.mimetas.com).

### **About Galapagos**

Galapagos (Euronext & NASDAQ: GLPG) is a clinical-stage biotechnology company specialized in the discovery and development of small molecule medicines with novel modes of action. Our maturing pipeline comprises Phase 2, Phase 1, pre-clinical and discovery studies in cystic fibrosis, inflammation, fibrosis, osteoarthritis and other indications. We have discovered and developed filgotinib: in collaboration with Gilead we aim to bring this JAK1-selective inhibitor for inflammatory indications to patients all over the world. Galapagos is focused on the development and commercialization of novel medicines that will improve people's lives. The Galapagos group, including fee-for-service subsidiary Fidelta, has approximately 400 employees, operating from its Mechelen, Belgium headquarters and facilities in The Netherlands, France and Croatia. More information at [www.glp.com](http://www.glp.com).

### **About University of Sheffield**

With almost 27,000 of the brightest students from over 140 countries, learning alongside over 1,200 of the best academics from across the globe, the University of Sheffield is one of the world's leading universities. A member of the UK's prestigious Russell Group of leading research-led institutions, Sheffield offers world-class teaching and research excellence across a wide range of disciplines. The University of Sheffield is ranked 1<sup>st</sup> in the UK for Biological Science allied to healthcare and 5<sup>th</sup> in Biological Science in the most recent nation wide research excellence assessment (REF2014: research excellence framework). Unified by the power of discovery and understanding, staff and students at the university are committed to finding new ways to transform the world we live in. Sheffield is the only university to feature in The Sunday Times 100 Best Not-For-Profit Organisations to Work For 2016 and was voted number one university in the UK for Student Satisfaction by Times Higher Education in 2014. In the last decade it has won four Queen's Anniversary Prizes in recognition of the outstanding contribution to the United Kingdom's intellectual, economic, cultural and social life. Sheffield has five Nobel Prize winners among former staff and students and its alumni go on to hold positions of great responsibility and influence all over the world, making significant contributions in their chosen fields. Global research partners and clients include Boeing, Rolls-Royce, Unilever, AstraZeneca, Glaxo SmithKline, Siemens and Airbus, as well as many UK and overseas government agencies and charitable foundations.

### **About MIMIC**

MIMIC is an interdisciplinary European Industrial Doctorate at the interface of cell biology, engineering and drug development. The project aims to integrate organs on chips for drug development with genomic engineering of *in vitro* disease models. More information at [www.sheffield.ac.uk/itn-mimic](http://www.sheffield.ac.uk/itn-mimic).

**Contact information**

MIMETAS BV

Jos Joore, managing director

[pr@mimetas.com](mailto:pr@mimetas.com)

+31 85 888 3161

