

## Early Stage Researcher model development

### Developing biomimetic tissue models in OrganoPlates® to study the fungus-host-microbiota interplay

MIMETAS is looking for an Early Stage Researcher (ESR) with a focus on developing in vitro models of the gut, vagina, and oral mucosa to study fungal pathogenesis. The current project is in the framework of FunHoMic: “Deciphering the fungus-host-microbiota interplay to improve the management of fungal infections” a MSCA European Innovative Training Network (ITN) which started on the 1<sup>st</sup> of January 2019. [www.funhomic.eu](http://www.funhomic.eu)

#### About MIMETAS:

MIMETAS develops and validates customised disease-, toxicology- and transport tissue models using organ-on-a-chip technology for drug screening in 3D-tissues. Our unique microfluidic platform enables testing of compounds in high-throughput on miniaturized organ models. These models offer better predictivity as compared to laboratory animal testing and conventional cell culture models. The MIMETAS OrganoPlate® platform supports 3D cell culture under continuous perfusion, membrane-free co-culture and boundary- and gradient formation, thus mimicking important aspects of tissues and organs. MIMETAS has an open culture, where achievements go hand in hand with a fun place to work. Our close-knit team stays successful by maintaining a good atmosphere while working in a highly competitive field. MIMETAS’ headquarters are based in Leiden, The Netherlands and our manufacturing facility is based in Enschede, The Netherlands. We have subsidiaries in Gaithersburg, MD, USA and Tokyo, Japan.

#### About the ESR project:

The PhD student will develop new, and tailor existing, biomimetic tissue models in OrganoPlates® to support novel insights in fungal pathogenesis, LBP activity, and fungus-host-microbiota interactions. Candidates with a background in cell biology, molecular biology and/ or biochemistry are invited to apply for a PhD position in the department of model development (head Dr H Lanz) at MIMETAS Leiden, The Netherlands. *The selected candidate will be employed, and conduct research, at MIMETAS in Leiden. In addition, you will be enrolled at the University Leiden (UL) graduate school to obtain the PhD degree.*

#### Secondments:

During the project the candidate will be seconded as following: 3 months at the university of Aberdeen to investigate fungal infections in the gut model, and 3 months at the Hans Knoell Institute to study fungal infections in the vaginal model.

#### Your profile/requirements:

- Master degree in Cell Biology, Molecular Biology and/or biochemistry
- Interest in developing and translating technology to establish new tools for biomedical research
- Strong understanding in Cell and Molecular Biology
- Good knowledge of (3D) cell culture and laboratory equipment such as microscopes and plate readers
- Knowledge in the field of Organ-on-a-chip are great assets
- Able to communicate with scientists, engineers and clinicians of different disciplines
- Have a motivated, flexible and positive work attitude



- Proficiency in English language

**Eligibility:**

Applicants can be of any nationality and must be Early-Stage Researchers in the first four years of their research career and must not have been awarded a PhD. They must not have resided or carried out their main activity (work, studies, etc.) in the Netherlands for more than 12 months in the 3 years immediately prior to their recruitment.

**Starting date:** 1<sup>st</sup> July – 1<sup>st</sup> September 2019

**Duration:** 36 months

**Salary:** According to the Marie Curie-ITN rules

**How to apply:**

Applications should be sent to Ms Esther Groenewoud at [work@mimetas.com](mailto:work@mimetas.com).

The application will only be considered if the application includes the following:

- Letter of motivation
- Curriculum vitae of at most 3 pages
- Copies of University Diploma or Master certificates
- Copy of master's thesis or any other publications (if available)
- Two letters of recommendations and the referees contact details

**Deadline for application:** 8<sup>th</sup> March 2019