

PhD position at Gut Research & Academic Medical Center to study the role of fungi in intestinal failure in neonates.

RESEARCH FIELDS

Biological sciences › Biology, Biomedical Sciences, Biotechnology or Molecular Life Sciences

Data Sciences › Bio-informatics

Chemistry › Biochemistry

RESEARCHER PROFILE

Early Stage Researcher (≤ 4 years of research experience at time of recruitment)

APPLICATION DEADLINE

30 April 2019 18:00h - Europe/Brussels

LOCATION

- GUT RESEARCH BV (Amsterdam, The Netherlands)
- Academic Medical Center (Amsterdam, The Netherlands)

TYPE OF CONTRACT

Temporary, 36 months employed by GUT RESEARCH followed by 12 months Academic Medical Center (total 48 months)

JOB STATUS

Full-time

HOURS PER WEEK

40

OFFER STARTING DATE

Flexible starting June – October 2019

EU RESEARCH FRAMEWORK PROGRAMME

H2020 / Marie Skłodowska-Curie Actions / European Industrial Doctorates

MARIE CURIE GRANT AGREEMENT NUMBER

814168

We are looking for an Early Stage Researcher (ESR) with a focus on studying the role of fungi in intestinal failure in neonates and fungal pathogens in inflammatory bowel disease pathophysiology. This ESR project is part of the GROWTH consortium, a Marie-Sklodowska Curie Innovative Training Network (European Industrial Doctorates) that starts on the 1st of June 2019.

About GUT RESEARCH

GUT RESEARCH is a young and innovative company headed to accelerate the microbiome and mycobiome R&D in functional and intestinal inflammatory diseases. Among other expert services dedicated to gastrointestinal research, GUT RESEARCH delivers a unique end-to-end pipeline for bacterial microbiome and fungal mycobiome analyses supporting the discovery of microbiota leads, development of biomarkers and screening tools. GUT RESEARCH also develops and validates advanced disease tissue models (human and mouse tissue) using various epithelial cell platforms.

GUT RESEARCH premises are closely affiliated to the Academic Medical Center (Amsterdam) and the University Hospital Bonn emphasizing the open and collaborative atmosphere in our company. The GUT RESEARCH team in Amsterdam consists of scientists, business developers and technicians lead by a principle scientist.



ABOUT GROWTH

The GROWTH consortium, funded by the European Commission (2019-2023), is made up to train a new generation of researchers working on new pathological insights, biomarker diagnostics and personalized nutritional interventions for intestinal failure in neonates and preterm infants. Academic and industry partners, covering various disciplines ranging from fundamental research to clinical paediatrics and analytical chemistry to organoid and gut-on-chip applications, have teamed up in the EU:

- Gut Research BV (The Netherlands)
- University Hospital Bonn (Germany)
- Imperial College London (United Kingdom)
- Reckitt Benckiser (United Kingdom)
- Academic Medical Center (The Netherlands)
- Cherry Biotech (France)
- VU Medical Center (The Netherlands)
- TNO Research (The Netherlands)
- Radboud University Medical Center (The Netherlands)

GROWTH is a European Industrial Doctorate programme that requires PhD students to spend at least 50% of their time (18 months) in the non-academic sector.

GROWTH website url: <http://www.growth-horizon2020.eu/>

ABOUT THE ESR PROJECT

The PhD student will be enrolled in the AMC Graduate School and supervised by an academic and non-academic supervisor, equally exposing the candidate to the academic and non-academic sector.

The candidate will study the role of fungi in intestinal failure in neonates by capitalizing on a large cohort with a collection of daily fecal samples (>17.000) of 1,500 preterm and term neonates combined with a close clinical follow-up on health status from 9 Neonatal Intensive Care Units in The Netherlands. He/she will perform microbiota (16S) and mycobiota (ITS1) sequencing of pre-term fecal material, develop mouse and human fetal organoids, study organoid exposure to fungi and validate presence of fungi in a clinically relevant animal model. The second part of this project entails the investigation of fungal pathogens in inflammatory bowel disease (IBD), establish IBD flare related fungi in fecal and bowel tissue material, upon culturing, transplant these into experimental colitis models and perform fungal exposome proof of principle studies.

COLLABORATORS IN THIS ESR PROJECT:

- Academic Medical Center (Amsterdam, The Netherlands)
 - o Microbiota Center Amsterdam
- Imperial College London (United Kingdom)
 - o National Phenome Center
- University Hospital Bonn (Bonn, Germany)
- Westerdijk Fungal Diversity Center (Utrecht, The Netherlands)
- TNO, Microbiology & Systems Biology (Zeist, The Netherlands)

SECONDMENTS

During the first 36 months of the ESR project, the candidate will have the opportunity to spend 18 months at Imperial College London (National Phenome Center, United Kingdom) to deploy (un)targeted fungisome, lipidome and metabolome analyses on fecal samples of preterms and neonates integrate these datasets supported by machine learning approaches under supervision of Dr James Kinross.

CANDIDATE REQUIREMENTS

REQUIRED EDUCATION LEVEL

A degree (MSc, or equivalent) in Health and/or Life Sciences (Biology, Microbiology, Molecular Biology, Immunology, Biomedical Sciences, Biochemistry or closely related fields) or Data Sciences (Bio-informatics, Machine Learning). Candidates in the final stages of obtaining their degree are eligible to apply

REQUIRED LANGUAGES

ENGLISH: Excellent, both written and spoken.

SKILLS/QUALIFICATIONS

We expect a Master's degree (or equivalent) in Health and/or Life Sciences or Data Sciences. Furthermore, the applicant should be able to perform team-oriented as well as independent work. Desirable methodological skills: excellent background in molecular biology, biochemistry, cell biology, immunology and/or microbiology, hands-on knowledge of analytical methods. A previous experience of mass spectrometry is desirable.

ADDITIONAL INFORMATION

ELIGIBILITY

Applicants can be of any nationality and must be Early Stage Researchers and shall at the date of recruitment by GUT RESEARCH, be in the first four years (full-time equivalent research experience) of their research careers and have not been awarded a doctoral degree. Furthermore, the applicant must not have resided or carried out his/her main activity (work, studies, etc) in the country of his/her host organisation for more than 12 months in the 3 years immediately prior to his/her recruitment.

RENUMERATION

The per annum MSCA PhD student living and mobility allowance (plus family allowance if applicable, family status is assessed at recruitment) is in line with EU-MSCA requirements. This amount will be subject to tax and employee's National insurance deductions and will be paid in EURO.

HOW TO APPLY

Complete applications in English should include the GROWTH Application Form and its mandatory attachments (<http://growth-horizon2020.eu/apply-for-a-growth-position>). Please note that applications that do not meet these requirements WILL NOT BE CONSIDERED.

Please send the complete package as 1 PDF file via email to info@growth-horizon2020.eu before 30 April 2019 18:00h - Europe/Brussels.

Please familiarize yourself also with the other 7 ESR postings (PhD positions) within the GROWTH consortium (www.growth-horizon2020.eu). Selected applicants will be invited to an



Onsite Recruitment Event in Amsterdam on 13 May 2019. Awarding decisions will be announced shortly thereafter, and candidates are expected to be available to start their projects between June and October 2019.

HOW YOUR DATA IS KEPT

The data submitted in the Application Form will be used for recruitment purposes only and shared by members of the GROWTH consortium. The data will be held securely at Gut Research BV (network coordinator of GROWTH) and shared by secure cloud-based storage. Data is intended to be kept for a maximum of four years (the life-span of the project). Further information may be collected from the above-named institutes. Candidates can request deletion of their data by contacting info@growth-horizon2020.eu.