

1 PhD position at Hannover Medical School to therapeutically silence selected non coding RNA candidates using antisense oligonucleotides in mice with myocardial infarction.

RESEARCH FIELDS

Biological sciences › Biomedical Sciences, Cell Biology, Biochemistry, Biotechnology or Molecular Life Sciences.

RESEARCHER PROFILE

1 PhD student (≤ 4 years of research experience at time of recruitment).

APPLICATION DEADLINE

3 JUNE 2019 18:00h - Europe/Brussels

LOCATIONS

- Hannover Medical School Hannover (Germany).

TYPE OF CONTRACT

Temporary.

JOB STATUS

Full-time.

HOURS PER WEEK

40.

OFFER STARTING DATE

Flexible starting July – December 2019.

EU RESEARCH FRAMEWORK PROGRAMME

H2020 / Marie Skłodowska-Curie Actions / European Training Network.

MARIE CURIE GRANT AGREEMENT NUMBER

813617.

Hannover Medical School is looking for an Early Stage Researcher (ESR) who will perform loss-of-function studies of candidate non coding RNAs in vivo. This ESR position is part of the TRAIN-HEART consortium, a Marie-Sklodowska Curie Innovative Training Network that starts on the 1st of June 2019.

ABOUT HANNOVER MEDICAL SCHOOL

Hannover Medical School, founded in 1965, is one of the Germany's leading university medical centres with over 800 biomedical scientists. Due to its interdisciplinary research Hannover Medical School has strong collaborative links with many academic and industrial research organisations worldwide. The Institute of Molecular and Translational Therapeutic Strategies (IMTTS) at Hannover Medical School participates in the TRAIN-HEART consortium. IMTTS currently embeds several research groups in basic and translational cardiovascular strategies and employs about 50 employees (group leaders, Postdocs, students, technicians). Prof. Thomas Thum and Dr Filippo Perbellini will be supervising this ESR project at IMTTS.

ABOUT TRAIN-HEART

The TRAIN-HEART consortium, funded by the European Commission (2019-2023), is made up to train the next-generation of innovation-minded researchers who are able to explore and translate pathogenic insights, accelerate the development of existing RNA therapeutics, and effectively implement innovative drug delivery systems to improve safety and therapeutic efficacy for the treatment of ischemic heart failure. Academic, clinical and industry partners, covering various disciplines ranging from cardiovascular biology to clinical pharmacology and functional genomics to drug development, have teamed up in the EU:

- Maastricht University (The Netherlands)
- Hannover Medical School (Germany)
- King's College London (United Kingdom)
- Claude Bernard Lyon University (France)
- Technical University Munich (Germany)
- Humanitas University (Milan, Italy)
- University Hospital Hamburg (Germany)
- University of Porto (Portugal)
- Mirabilis Therapeutics BV (Maastricht, The Netherlands)
- Miltenyi Biotec (Cologne, Germany).

TRAIN-HEART website url: <http://www.train-heart.eu>

ABOUT THE ESR PROJECT

The PhD student will be enrolled at the Hannover Medical School and guided by two accredited academic supervisors.

- **Main supervisor: Prof. Thomas Thum.**
- **Local co-supervisor: Dr Filippo Perbellini.**

This PhD student will modulate pre-existing non coding RNA candidates using antisense oligonucleotides in mice with myocardial infarction. Resulting loss-of-function animal models are phenotyped using (non-) invasive imaging technology to assess the therapeutic potential of modulating these novel non coding RNAs. After surgery, heart samples are used for histology of cellular and organ morphology, fibrotic events in the remote myocardium, and abundance of heart failure biomarker genes. The main result of this project will be the establishment of loss-of-function mouse models for candidate non coding RNAs in ischemic heart failure. Mechanistic studies will address molecular signaling pathways regulated by these noncoding RNAs.

Secondments:

This PhD student will have the opportunity to spend 3 months at Maastricht University, The Netherlands (group of Prof. Leon de Windt, Molecular Cardiology) for histological analysis and expression analysis of heart failure biomarker genes.

Another non-academic secondment opportunity is proposed for 2 months at Miltenyi Biotec to learn about the development of an automated procedure for the standardised dissociation of mouse hearts and explore growth market opportunities for new cell culture products.

CANDIDATE REQUIREMENTS

REQUIRED EDUCATION LEVEL

A degree (MSc, or equivalent) in Health or Life Sciences (Biomedical Sciences, Cell Biology, Biochemistry, Biotechnology or Molecular Life Sciences). 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. Furthermore, the applicant should be able to perform team-oriented as well as independent work.

Desirable methodological skills: excellent background in molecular/cell biology and/or translational cardiac research, and/or hands-on knowledge of advanced laboratory methods.

ADDITIONAL INFORMATION

ELIGIBILITY

Applicants can be of any nationality and must be Early Stage Researchers and shall at the date of recruitment by Hannover Medical School, 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 TRAIN-HEART Application Form and its mandatory attachments (<http://train-heart.eu/apply-for-a-train-heart-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@train-heart.eu before 3 June 2019 18:00h - Europe/Brussels.

Please familiarize yourself also with the other 14 postings (PhD positions) within the TRAIN-HEART consortium (www.train-heart.eu). Selected applicants will be invited to a following face-to-face interview round (interviews will be held between 8 - 20 June 2019). Awarding decisions will be announced shortly thereafter, and candidates are expected to be available to start their projects between July and December 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 TRAIN-HEART consortium. The data will be held securely at Maastricht University (network coordinator of TRAIN-HEART) 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@train-heart.eu.