



Paul-Ehrlich-Institut has available two

PhD positions:
Biomarkers for early prediction of therapeutic efficacy (ESR 11)
Influence of species-specific virulence factors on host response
under antibiotic treatment (ESR 12)

as part of the Innovative Training Network (ITN) Training towards Innovative Personalized Antibiotic Therapy (TIPAT).

About TIPAT

The Innovative Training Network (ITN) **Training towards Innovative Personalized Antibiotic Therapy (TIPAT)** has started March 1, 2020. TIPAT offers a cutting-edge [training-by-research program](#) for 15 Early stage researchers (ESRs) / PhD candidates. TIPAT is part of the Marie Skłodowska-Curie International Training Network (ITN) of the European Commission. ESRs in TIPAT will be part of an international network of universities, hospitals and companies. To enable development of innovative personalized antibiotic treatment strategies, quantitative understanding of the interplay between drug, pathogen and host is crucial. The TIPAT network will train inter-disciplinary specialists optimally equipped with a skill set to address this challenge. Central to the TIPAT research and training program of ESRs is the combination of state-of-the art quantitative modelling with approaches in clinical pharmacology, immunology and microbiology, which enables development of innovative methodology to personalized antibiotic therapies.

Project description

ESR11:

The scope of the PhD project is to identify immune traits that indicate appropriate choice of antibiotic regimen at an early time point. The ESR will analyze differential induction of immune biomarkers and the leukocyte response observed in conjunction with administration of antibiotic treatment upon infection with Gram negative bacteria.

ESR12:

The scope of the PhD project is to investigate how bacterial virulence factors alter the immune response and directly or indirectly affect efficacy of antibiotics *in vivo*. The ESR will establish a murine pneumonia model to study how species-specific immune-relevant pathogenicity factors alter host immune signatures, the duration and severity of infection.

Selection criteria

- **Masters degree or state examination or equivalent** in a **life sciences subject or veterinary medicine** (graduation before project start date)
- Experience in **immunology, microbiology, molecular biology, animal experiments**
- Good communication and interpersonal skills to organize research
- Good communication (verbal and writing) skills in English and, preferably German
- Confirmed capacity to write high-level scientific reports and papers
- Independent and creative team player
- Keen interest in the development of preclinical rodent (infection) models. Completion of an accredited FELASA Function A animal handling course is a plus.

Planned start of employment: 01.10.2020

Duration of position: 36 months

Eligibility

- At the time of commencing their employment, researchers must not have resided or carried out their main activity (work, studies, etc.) in the country of their (recruiting) host organization *for more than 12 months in the 3 years prior to their recruitment*.
- Applicants must be in the first four years (full-time equivalent research experience) of their research career and have not been awarded a doctoral degree at the first day of their employment contract. This research experience is measured from the date when they obtain the degree which formally entitles them to embark on a doctorate (either in the country in which the degree was obtained or in the country in which the researcher is recruited), even if a doctorate was never started or envisaged. Research experience is measured to the first day of the employment contract of the researcher.
- Usual MSCA eligibility criteria apply and will be verified during the application process. For more information on MSCA, please see: <http://ec.europa.eu/mariecurieactions>.

Benefits

- The successful candidates will receive a 36-month, full-time employment contract as per Marie Skłodowska-Curie Actions (MSCA) regulations for early stage researchers. The monthly salary will be confirmed upon offer, paid in the currency of the host country, and with a correction factor applied to the host country.
- In addition to their individual scientific projects, TIPAT ESRs will collaborate with world-leading research groups and industries within the consortium through secondments. All ESRs will benefit from further extensive and varied continuing education, completing a series of carefully designed training modules and transferable skills courses; they will participate in symposia, workshops, and international conferences and will have meaningful exposure to the industrial environment through TIPAT industrial partners.

Application procedure

Questions about this position should be addressed to Prof. Isabelle Bekerédjian-Ding (email: isabelle.bekeredjian-ding@pei.de).

Your application should be sent to kariere@pei.de and to applications@tipat.eu.

When applying, please use the following **email subject title: TIPAT ESR11/ESR12 - Your Name**

In your application please include the following files:

- A motivation letter (1 page maximum), **please include in your letter alternative ESR TIPAT positions of interest to you if not selected, if any.**
- A CV according to the [Europass](#) format
- Two reference letters (at least one from your Master thesis supervisor)
- An up-to-date record of grades in your bachelor and master programs
- Optional: English proficiency test results (TOEFL, IELTS)

The **application deadline is July 31, 2020**. We may extend this deadline depending on the developments of the COVID19 pandemic.

Please be aware that disabled candidates will be given preference if their skills and qualifications are equivalent to those of non-disabled candidates. The Paul-Ehrlich-Institut encourages gender equality and life-work balance, especially in respect to the family.

Acknowledgement

This project has received funding from the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement No 861323.

Please note that the German Federal Ministry of Health will in some cases (if required) be authorised to inspect your application documents (Section 6 (1), No. C, General Data Protection Regulation (GDPR) in connection with Section 2 (1) Gemeinsame Geschäftsordnung der Bundesministerien (joint rules of procedure of the federal ministries), and Article 65 of the German Constitution (Grundgesetz, Fundamental Law) to ensure a staff selection which fulfils its purpose and is in the interest of all parties involved. Your data will be erased immediately after the application procedure has been completed.



Das Paul-Ehrlich-Institut ist ein Bundesinstitut im
Geschäftsbereich des Bundesministeriums für
Gesundheit / The Paul-Ehrlich-Institut is an Agency
of the German Federal Ministry of Health

Paul-Ehrlich-Straße
51-59
63225 Langen
Deutschland /
Germany

Telefon / Phone +49 (0)
6103 77 0
Fax +49 (0) 6103 77 1234
>> www.pei.de