

ORGANISATION/COMPANY	LIONEX Diagnostics and Therapeutics GmbH BactiVax (anti-Bacterial Innovative Vaccines) Training Network
RESEARCH FIELD	Biological sciences; Medical sciences
RESEARCHER PROFILE	Early/First Stage Researcher (R1)
APPLICATION DEADLINE	15th May 2020, 17:00 GMT
START DATE	June 2020
LOCATION	Braunschweig, Germany
TYPE OF CONTRACT	Temporary
JOB STATUS	Full-time
HOURS PER WEEK	40
EU RESEARCH FRAMEWORK PROGRAMME	H2020 / Marie Skłodowska-Curie Actions
MARIE CURIE GRANT AGREEMENT NUMBER	860325

Applications are invited for a three-year PhD studentship to be funded by the Marie- Skłodowska-Curie Innovative Training Network “**BactiVax**” within the Horizon 2020 Programme of the European Commission.

BactiVax (anti-Bacterial Innovative Vaccines) is an innovative European Training Network that will provide high-level training in vaccinology to 15 high-achieving, creative Early Stage Researchers (ESRs), and equip them with a wide range of transferrable skills for thriving careers in vaccine research within academia and industry. BactiVax will focus on developing novel vaccines to tackle the huge challenge of antimicrobial-resistant human pathogens that cause chronic, life-threatening respiratory and/or systemic infections. This network comprises 14 Principal Investigators with expertise in vaccinology, proteomics, medicine, microbiology, biochemistry, immunology, structural biology, medicinal, peptide and glycochemistry from 8 European countries and two companies which will collectively train ESRs in entrepreneurship, commercial vaccine development and bioprocessing.

Eligibility criteria for candidates

We are looking for a talented and highly motivated early career researcher with an MSc degree and experience in microbiology, biology, biochemistry, molecular biology or related disciplines.

The successful applicant will be offered a 36-month employee contract at LIONEX and she/he will be registered as full-time PhD student. The ESR will receive a salary set out by the Marie

Skłodowska-Curie Actions (MSCA) regulations. The salary includes living and mobility allowances and, if appropriate, a family allowance.

Please note that all criteria below are mandatory:

- Applicants should, at the time of recruitment, be **in the first four years** (full time equivalent research experience) of their research careers and not have been awarded a doctorate.
- At the time of recruitment by the host organisation, they must not have resided or carried out their main activity (work, studies, etc.) in the country of their host organisation **for more than 12 months in the 3 years** immediately prior to the recruitment date. Compulsory national service, short stays such as holidays, and time spent as part of a procedure for obtaining refugee status under the Geneva Convention are not taken into account.
- Admission to the programme is open to applicants who hold a master's degree (or equivalent), as required by the partner university for admission to doctoral studies. The above-mentioned degrees must be obtained by the time of recruitment.
- Applicants should be proficient in written and spoken English (minimum level of B2 or equivalent). Those who have passed an English proficiency test such as (but not limited to) IELTS Academic or TOEFL should enclose the relevant certificate with their application. English proficiency of short-listed applicants will be assessed during the selection interview.

Application and selection process

Applications for the positions below will be through a central application process run by the programme recruitment team.

Please note that to be eligible for appointment, successful applicants must comply with career stage and mobility criteria.

- Each applicant must submit a **single application** to the programme, which should include: **(i) CV; (ii) detailed academic transcripts** in the form of certified copies of all undergraduate and postgraduate level certificates; **(iii) a motivation letter; (iv)** name, title, contact details (address, telephone number, email address) and the capacity in which you know them for **three referees** and **(v) the Consent Form for Applicants** (which can be found on www.bactivax.eu/opportunities) filled in and signed.
- Applications should be submitted as a single .pdf document by email to office@bactivax.eu. *Acknowledgement of receipt of application documents should be expected by all candidates.*
- Each applicant will be notified in writing of the outcome of their application. Incomplete applications will not be considered.

- Successful candidates at the shortlisting stage will be invited for an interview. Each interview will be attended by a panel including principal investigators from the BactiVax consortium. Interviews may also be carried using Skype or other online platforms.

BactiVax values gender balance and is committed to creating a diverse environment. All qualified applicants will receive equal opportunities and consideration for employment.

ESR8 – Production and characterisation of fusion protein antigens with a focus on increased solubility for large membrane proteins

Organisation/Institute: LIONEX GmbH (Braunschweig, Germany), www.lionex.de

Supervisor: Prof. Mahavir Singh

Informal enquiries: info@lionex.de

Project description: This project will focus on the production and characterisation of fusion proteins with a high emphasis on increased solubility, particularly for large membrane proteins and other biomarkers identified as vaccine candidates. The ESR will (i) be trained in the optimization of expression of high-quality proteins under ISO13458 certified conditions; (ii) clone vaccine candidates; (iii) fuse, express and purify in preparation for efficacy testing in different models; (iv) scale-up potential vaccine candidate expression using LIO GMP-compliant facilities and evaluate expression in several bacterial, yeast, baculovirus and eukaryotic systems; (v) characterise vaccine targets by the Octet platform analysis for studying receptor-ligand interactions. The ESR role will involve secondments at CNR-IBB (Naples, Italy) for training in structural biology approaches and at SGUL (London, UK) for training in vaccination planning and vaccination.

Specific requirements for the project: MSc or equivalent in Microbiology, Biology, Biochemistry, Molecular Biology or related disciplines.