

Marie Skłodowska-Curie Actions Innovative Training Networks (MSCA-ITN-2014) “ProteinFactory”

15 Early-Stage Researcher (ESR) positions for 3-year structured PhD projects are offered by a consortium of 11 participants in the Marie Skłodowska-Curie Actions ITN project “ProteinFactory”.

Project Description

The ProteinFactory project “*Engineering of new-generation protein secretion systems*” is coordinated by the University Medical Center Groningen (UMCG). The project will involve extensive collaborations between 6 academic and 5 industrial participants, who are based in 7 European countries.

The production of recombinant proteins is of paramount importance within the biotechnology industry, with three broad forms of protein recognized: therapeutic proteins (biopharmaceuticals), industrial enzymes, and membrane proteins. A high proportion of the target proteins are produced in bacteria, where secretion out of the cytoplasm is a favoured strategy. However, current production platforms have severe limitations and cannot handle many secreted enzymes and membrane proteins. There is an urgent need for new production systems that can deliver these products in greater yields, with higher quality and at lower costs. The ProteinFactory programme will meet these challenges through the provision of a suite of super-secreting strains with unique capabilities. Of equal importance will be the training of a new generation of researchers, versed in Systems and Synthetic Biology approaches.

We offer

ProteinFactory offers a challenging PhD research training programme of 3 years, which is to be completed with a PhD thesis. All participating groups in ProteinFactory have excellent infrastructure, are well-equipped with state-of-the-art technologies, are highly experienced in the training of PhD students, and promote equal gender opportunities. In addition to hands-on training in multidisciplinary and intersectoral research, we offer extensive transferable skills training through network-wide training events. Each ESR will undertake a 3-months (minimum) intersectoral secondment.

We invite

Excellent applicants with degrees and/or expertise in biochemistry, biotechnology, molecular biology, microbiology, functional genomics, bioinformatics, systems biology, or computational biology are invited to apply by e-mail to preferred PhD supervisors as listed below. Proficiency in English is a strict requirement. Applications should include a letter of motivation, *curriculum vitae*, two letters of recommendation, copies of relevant degrees (BSc/MSc) and, if applicable, a list of publications. Notably, at the date of recruitment, applicants must be in the first four years of their career and not have a doctoral degree. They can be a national of any country, but must not have resided in the country where the ProteinFactory research training activities take place for more than 12 months in the 3 years immediately prior to the recruitment date (and not have carried out their main activity (work, studies, etc.) in that country).

Applications should be submitted as soon as possible, since different closing dates apply for different participating organizations. Eligible candidates are invited for an interview by Skype. Short-listed candidates will be invited for a recruitment

symposium on 26-27 May 2015 in Groningen, the Netherlands, for which travel costs and accommodation will be reimbursed.

Participants and contacts

- **Prof. Jan Maarten van Dijk** (j.m.van.dijk01@umcg.nl); University Medical Center Groningen, the Netherlands. Contact through Dr. Sierd Bron (s.bron01@umcg.nl).
- **Prof. Colin Robinson** (c.robinson-504@kent.ac.uk); University of Kent, Canterbury, UK.
- **Dr. Vincent Fromion** (vincent.fromion@jouy.inra.fr); Institut National de la Recherche Agronomique, Jouy-en-Josas, France.
- **Dr. Olivier Delumeau** (olivier.delumeau@jouy.inra.fr); Institut National de la Recherche Agronomique, Jouy-en-Josas, France.
- **Prof. Gunnar von Heijne** (gunnar.heijne@dbb.su.se); Stockholms Universitet, Stockholm, Sweden.
- **Prof. Arne Elofsson** (arne@bioinfo.se); Stockholms Universitet, Stockholm, Sweden.
- **Dr. Jan-Willem de Gier** (jan-willem.degier@dbb.su.se); Stockholms Universitet, Stockholm, Sweden & Abera Bioscience AB.
- **Prof. Edda Klipp** (edda.klipp@rz.hu-berlin.de); Humboldt Universität, Berlin, Germany.
- **Prof. Dörte Becher** (dbecher@uni-greifswald.de); Ernst-Moritz-Arndt-Universität, Greifswald, Germany.
- **Prof. Katharina Riedel** (riedela@uni-greifswald.de); Ernst-Moritz-Arndt-Universität, Greifswald, Germany.
- **Dr. Michael Dolberg Rasmussen** (mdra@novozymes.com) and Dr. Allan Kent Nielsen (AKNN@novozymes.com); Novozymes A/S, Bagsvaerd, Denmark.
- **Dr. Tjeerd van Rij** (tjeerd.rij-van@dsm.com) and Dr. Thijs Kouwen (thijs.kouwen@dsm.com); DSM Food Specialties BV, Delft, Netherlands.
- **Dr. David Humphreys** (david.humphreys@ucb.com); UCB-Celltech, Slough, UK.
- **Dr. Andreas Meyer** (meyer@fgen.ch); FGen GmbH, Basel, Switzerland.