

Job posting

Type of position

- scientific
 administrative

Target group

- graduates
 post docs
 other

Title 15 Early Stage Researcher Positions in the Marie Skłodowska-Curie European Training Network PROTrEIN – Training the next generation of computational proteomics researchers

Institution PROTrEIN is an European Training Network composed of 11 beneficiaries, and 6 partner organizations, from the academic and non-academic sectors (including two SMEs and two large companies).

The network's mission is to train a new generation of computational proteomics researchers by providing them an inter-sectorial and interdisciplinary set of skills to tackle the main challenges in the field and improve their future employability.

More information on PROTrEIN partners and individual ESR projects can be found at www.protrein.eu.

Position 15 Individual Research Projects:

- ESR1: Development of computational approaches for high precision and accuracy protein quantification (CRG, Barcelona, Spain)
- ESR2: Strategies for molecular diagnosis of Rare Disease patients through integrated analysis of proteomics, metabolomics, genomics and phenomics data (CNAG-CRG, Barcelona, Spain)
- ESR3: Algorithms and workflow for the deep characterization of the PTM landscape and PTM crosstalk (SDU, Odense, Denmark)
- ESR4: Development of (deep) machine learning computational proteomics tools and algorithms and its application to MaxQuant (MPIB, Martinsried, Germany)
- ESR5: Multi omics data analysis in the MaxQuant and Perseus environments (MPIB, Martinsried, Germany)
- ESR6: Machine Learning predictions of peptide behaviour for improved identification of modified peptides (VIB, Ghent, Belgium)

- ESR7: Development of smart acquisition methods using real-time control of instruments and machine learning (CNRS-IPBS, Toulouse, France)
- ESR8: Development of new signal processing algorithms of ion mobility MS data to improve the quantification of phosphoproteomics samples (CNRS-IPBS, Toulouse, France)
- ESR9: Transfer learning peptide properties of cross-linked peptides (TUM, Munich, Germany)
- ESR10: Establishment of proteome-to-phenome relationships by network analysis (ANAXOMICS, Barcelona, Spain)
- ESR11: The dark interactome – methods for discovering novel protein-nucleic acid interactions from complex samples (EKUT, Tuebingen, Germany)
- ESR12: Improved algorithms and tools for the identification of novel proteoforms using top-down proteomics (EKUT, Tuebingen, Germany)
- ESR13: MS DOSS – The next generation of hybrid algorithms for PTM enabled peptide search (FHOOE, Hagenberg, Austria)
- ESR14: Development of a complete data processing workflow for protein-protein and RNA-protein cross-linking (THERMO FISHER, Bremen, Germany)
- ESR15: Development of a gamified application for public understanding of complex scientific concepts and biological data (TAU, Tampere, Finland)

Responsibilities

The ESRs will be involved in a Marie-Curie network with excellent opportunities for scientific and personal development.

These include:

- – Fully funded research project for 36 months
- – Regularly adapted personal career development plans.
- – Funding for short stays at top-class research groups in the above-mentioned countries.
- – Regular training events and meetings across Europe

Requirements

Minimum qualifications

- o Fulfillment of eligibility criteria dictated by the European Commission under the H2020 Marie Curie Innovative Training Network Programme: The candidate must not have resided or carried out their main activity in the country of the hosting

institute for more than 12 months in the last 3 years immediately prior of the start of employment in this position.

- o Applicable degree: i.e. Master's degree or equivalent related to the scope of the position awarded before first day of employment

- o Candidate must be in the first four years of their research careers and not yet have been awarded a doctoral degree -- In other words, candidate should have obtained a degree (i.e. Master's or equivalent) which would formally entitle them to embark on a doctorate within the last 4 years

**Application
procedure
(deadline etc.)**

An application is solely possible via the PROTrEIN application form:

<http://protrein.eu/call-for-applicants/>

Applications must be in English. Applicants may indicate 3 ESR Projects which they would like to work on, ranking them in order to preference. Uploading reference letters is not mandatory, but applicants should be aware that referees will be automatically contacted after submission and receive a questionnaire.

Candidates must provide all information before the deadline.

The selection will be done jointly by both project co-supervisors, approximately in February and March 2021. Depending on the hosting institute, individual projects will start between April and September 2021.

Application deadline: 31 January 2021

Contact

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