

ESR 13 Project Information Sheet

Project Title	<i>Mitochondria targeted ROS mediated polypeptide-drug conjugate delivery platforms</i>
Reference number	BIOMOLMACS_ESR_13
Host Institution/Company	Centro de Investigación Príncipe Felipe
Supervisor(s)	Prof. María J. Vicent
Research Group	Polymer Therapeutics Lab.
Department/School	Advanced Therapies Area
Duration	36-months full-time employment contract provided and ESR enrolled on 4- year structured PhD.
Funding information	Funding agency: H2020-MSCA-ITN-2019 (Proposal no:859416)
Early Stage Researcher Salary and Allowances	Living allowance of €37.434,96 (gross salary/year + social security) Mobility allowance of €7,200/year Family allowance where applicable (all values before tax and social security payments) (all values before tax and social security payments)
Pre-application closing date	28 th of February 2020
Official application closing date	15 th of March 2020
Start date	1 st of April 2020 or as soon as thereafter
Official job application link*	http://www.cipf.es/documents/10157/fc3ca7b0-5280-4154-aeef-0bf9e58b32ae http://vicentresearchlab.com/biomolmacs/

**The pre-application form should be submitted to biomolmacs@gmail.com by latest 28th of February 2020. Following the initial eligibility assessment, the applicants will be requested to submit their applications using the links provided specific to each institution/company.*

Post Summary

Brief description of the project:

ESR 13 will focus on the design of bioresponsive polypeptide based conjugates capable to target mitochondria and delivery the selected cargo under specific trigger (ROS). Proline-based block copolymers will be synthesized and fully characterized by NCA polymerization methods. Alternatively star-shaped proline-based polymer with self-assembled properties and crosslinked stabilization possibilities will be also synthesized to explore different topology and therefore different cellular trafficking and distribution. Proline oligomers already target mitochondria but triphenyl phosphonium (TPP) or other well-known residues could be added to enhance this effect.

Further information on the research interests of Prof. Maria J. Vicent can be found on their website.

<http://vicentresearchlab.com>

Standard duties and responsibilities of the ESR

For the 36 months of employment contract the ESR will be required to work exclusively on the MSCA ITN programme (BIOMOLMACS). In all cases, all duties and responsibilities will be clearly outlined in the researchers Personal Career Development Plan, as determined in the early stages of the project between the ESR and their supervisory committee.

Person Specification

Qualifications

Essential

Applicants should hold or expect to attain, as a minimum a 2:1 Honours degree, or equivalent, in Chemistry, Materials Science, Analytical Chemistry, Organic Chemistry, Biomedical Science, Polymer Chemistry, Pharmaceuticals or related area.

Knowledge and Experience

Essential

- Research project carried out in at least one of the above disciplines.
- A demonstrated knowledge of at least three of the following: pharmaceutical formulation development, drug delivery, cell culture/molecular biology, nanotechnology, polymerisation techniques.

Desirable

Work placement undertaken in an industry related to the above disciplines

Skills and Competencies

Essential

- Applicants whose first language is not English must submit evidence of competency in English, please see CIPF's English Language Requirements for details.
- Evidence of interest, aptitude and research experience in the above disciplines.

Further information

For any informal queries, please contact Prof. Maria J. Vicent by email at mjvicent@cipf.es

For queries relating to the application and admission process please contact

Dr Gokhan Yilmaz at biomolmacs@gmail.com

Website: www.biomolmacs.com
