

ESR 10 Project Information Sheet

Project Title	<i>Functional liposomes and polymersomes with selective targeting</i>
Reference number	BIOMOLMACS_ESR_10
Host Institution/Company	AVROXA BV
Supervisor(s)	Dr. Victor R. de la Rosa. Prof. Richard Hoogenboom
Research Group	AVROXA BV
Department/School	Department of Macromolecular and Organic Chemistry/UGent
Duration	36-months full-time employment contract provided and ESR enrolled on 4- year structured PhD. ESR may be required to self-fund after the initial 36 months for successful completion of the PhD program at the University of Ghent.
Funding information	Funding agency: H2020-MSCA-ITN-2019 (Proposal no:859416)
Early Stage Researcher Salary and Allowances	Living allowance: approximately £40,000/year + mobility allowance of €7,200/year + family allowance where applicable (all values before tax and social security payments) This calculation is to give you an idea about the level of funding. The actual salaries can be found on the official job application link below.
Pre-application closing date	28 th of February 2020
Official application closing date	15 th of March 2020
Start date	1 st of June 2020
Official job application link*	tbc

**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:

The main objective of ESR10 shall be to develop cell-like vesicles from the self-assembly of biocompatible amphiphilic diblock copolymers or from the coassembly of phospholipids with polymers having a phospholipid end-group. Poly(2-oxazoline)s and poly(2-oxazine)s will be developed as hydrophilic part of these structures as these have been shown to more efficient in the suppression of non-specific interactions, at least on solid substrates, which will be extended to polymersomes and liposomes here. Furthermore, different synthetic strategies to allow controlled post-modifications with saccharides will be developed, involving end-group and side-chain modification strategies.

Further information on the research interests of the spin-off company from Prof. Richard Hoogenboom can be found on their website.

<https://ultroxa.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 University of Ghent'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 Victor R. de la Rosa (victor.rdelarosa@ultroxa.com) or Prof. Richard Hoogenboom (richard.hoogenboom@ultroxa.com)

For queries relating to the application and admission process please contact Dr Remzi Becer at biomolmacs@gmail.com or by telephone at +44 2476 523236
Website: www.biomolmacs.com
