

Postdoctoral Research Assistant - IQS & Royal Holloway University of London



Company Description

The **University Ramon Llull** is a confederation of schools, faculties and departments. IQS is its oldest founding member and consists of two major schools, the **School of Engineering** and the **School of Management** that form each an administrative grouping of departments and other institutions among which there are three strategic academic divisions: **IQS Executive Education** that offers cutting-edge and transformative learning experiences to business leaders; **IQS Tech Transfer** that promotes research with impact, innovation and technology transfer for companies and organizations and **IQS Tech Factory** that fosters entrepreneurship and supports the creation of new scientific-technological companies.

With 100 years of teaching experience, IQS is a university center of reference, committed to donating responses to the continuum of challenges that the social, economic, technological and industrial context poses.

Our mission and commitment are to cultivate individuals with values and competencies needed to flourish humanely and professionally.

Position

Applications are invited for a position of Postdoctoral scientist to be spent at IQS in Barcelona (Spain) and at the Department of Biological sciences at the Royal Holloway University of London.

The focus of the project, funded by the US Department of Defense, is the generation of new polymer-coated adeno-associated viral vectors for gene replacement in Duchenne muscular dystrophy. Due to the nature of the project, we are looking to appoint a highly motivated and enthusiastic scientist with excellent skills in both polymer chemistry and molecular biology.

The successful applicant will spend the first 10 months at IQS in Barcelona (Spain) and the following 14 months in the Gene Medicine Laboratory for Rare Diseases at Royal Holloway University of London (UK). Therefore, availability to move from Spain to the UK after the initial 10 months is key to work on this project.

Requirements

Expertise in western blotting, immunocytochemistry, and aseptic cell culture is desirable, as well as knowledge in polymer synthesis and nanovector characterization. Experience in adeno-associated virus (AAV) vector production would be an advantage, as would in vivo expertise. Training will be provided for any unfamiliar techniques. You are expected to be a good communicator, able to work both independently and collaboratively with other members of the laboratory.

Essential:

- PhD awarded or PhD thesis submitted
- Independent design, execution, interpretation and writing up of experimental research programmes.
- Initiative and innovation in the development of research objectives and new lines of investigation.
- Monitoring RCI-related deliverables and milestone achievements.
- Contribution to the production of RCI-related research reports and their publication.

- Working to deadlines under time pressures if required.
- Good interpersonal skills.
- Ability to work under pressure.

Desirable:

- Polymer synthesis based on PBAEs and/or zwitterionic polymers.
- Knowledge of polymer analytical techniques such as ¹H-NMR, gel permeation chromatography, and mass spectroscopy.
- Knowledge of physicochemical characterization techniques such as Z-potential, PAGE, TEM and asymmetrical flow field flow fractionation (AF4).
- Quantitative and semiquantitative PCR.
- Western blot, immunohistology.
- AAV virus & vector production.
- Experience in: Polymer chemistry and characterization, Duchenne & other muscular dystrophies, Adeno-associated virus gene therapy vectors, Antisense & nucleic acid modulator drug development, Previous work in the field of gene therapy, A Home office licence holder with experience of animal experimental procedures

Other information

The position is funded for 24 months.

We offer a highly competitive rewards and benefits package including generous annual leave and training and development opportunities. The post is based at the IQS in Barcelona and in Egham, Surrey, where the College is situated in a beautiful, leafy campus near to Windsor Great Park and within commuting distance from London.

The following documents should be added to the application:

- Motivation letter explaining why you would be a good candidate for this position and our team.
- Curriculum Vitae
- Recommendation letters.

We will contact the selected candidates and invite them to the interview. They will be asked to prepare a short (10 minutes) presentation of their recent research.

We are an **equal opportunity employer**. We promote equality and inclusion. All qualified applicants will receive consideration for employment without regard to race, colour, religion, sex, national origin, disability status, gender identity, sexual orientation, pregnancy and pregnancy-related conditions or any other characteristic protected by law. We strongly welcome applications from female candidates as they are currently under-represented at this level in this field of knowledge in our School.

We also promote **scientific and technological knowledge, business transformation and societal progress**. At IQS we look for professionals committed to both these values.