

Job Description

Job Title: Analytical Development Scientist

Reporting to: Lead Scientist – Process Development

Location: Centre for Regenerative Medicine, 5 Little France Drive,
Edinburgh, EH16 4UU

The Cell and Gene Therapy Catapult (CGT Catapult) is an independent innovation and technology organisation committed to the advancement of cell and gene therapies with a vision of a thriving industry delivering life changing advanced therapies to the world. Its aim is to create powerful collaborations which overcome challenges to the advancement of the sector.

With over 400 experts covering all aspects of advanced therapies, it applies its unique capabilities and assets, collaborates with academia, industry and healthcare providers to develop new technology and innovation.

The Cell and Gene Therapy Catapult works with Innovate UK.

Purpose of Role:

The role of the Analytical Development Scientist is to support the analytical development of novel advanced therapy medicinal products and associated technologies for multiple Collaborators working with the Cell and Gene Therapy (CGT) Catapult. Working in a multidisciplinary team, the successful candidate will play a central role in applying their in-depth scientific knowledge and technical expertise to develop analytical assays for associated stem cell culture processes. The CGT Catapult Edinburgh has a focus on induced Pluripotent Stem Cell (iPSC) products.

Key Accountabilities:

- Work with scientists and managers to plan, execute and record experiments in electronic laboratory notebooks across a range of analytical development projects from academic and industrial settings
- Responsible for executing agreed research independently with minimal supervision
- Responsible for progressing research based analytical/bioassay methods, e.g. to qualification/fit for purpose
- Independently analyse raw data to a high standard and communicate results to internal project teams and external clients/Collaborators using scientific reports, posters, and peer-reviewed publications as appropriate
- Maintain high standards of laboratory practices in all activities, including accurate recording and management of raw data in line with company policies
- Produce detailed protocols and SOPs to allow assay technology transfer both internally and externally

Experience:

Essential

- Demonstrable experience in assay development, optimisation and qualification for cell therapy products
- Demonstrable experience of producing detailed protocols and SOPs to allow assay technology transfer both internally and externally
- Excellent working knowledge in analytical/assay development for cell therapy products
- Extensive experience the following:
 - qPCR assay development including primer design, DNA/RNA isolation/purification and PCR quantification using data analysis packages
 - Immunoassay development using techniques such as fluorescent flow cytometry and ELISA

Desirable

- Cell culture experience with pluripotent stems cells and/or immune cells (lymphocytes, PBMCs, dendritic cells) or other clinically relevant cell types (e.g. CD34+, MSCs)
- Experience with digital PCR
- Experience in assay development, optimisation and qualification for gene therapy products
- Knowledge or experience of Design of Experiments
- Experience of ensuring consistent quality and uniformity throughout a bioprocess

Knowledge / Skills / Competencies:

- Highly motivated, pragmatic and practical to support the mission of the Cell and Gene Therapy Catapult to accelerate the development of a commercial cell and gene-based therapy industry in the UK.
- Desire to establish a high profile career within cell and gene sector and the personal drive to help push the sector to be a commercial success.
- Excellent oral and written communication skills is essential
- Resilient, with the ability to manage multiple and varied tasks and prioritise workload to meet deadlines, within a fast-paced professional environment, with an excellent attention to detail
- Ability to work well under pressure, to work independently and to be able to take the initiative when completing tasks.
- Ambitious, collaborative, driven.
- Excellent knowledge and understanding of Design of Experiments (DoE), capable of designing experiments
- Recording of experiments and report writing to ALCOA (Attributable, Legible, Contemporaneous, Original and Accurate) principles of data integrity
- A positive attitude towards learning, personal and professional development Keeps up to date with professional knowledge, expertise and best practice
- Ability to quickly establish credibility and build rapport and trust.

- Proven ability to engage constructively with colleagues at all levels across different departments to deliver objectives and to respond to a wide range of customer and management needs
- Results driven, able to work within areas of ambiguity, takes smart risks where appropriate
- Willingness to travel

Education / Qualifications:

- PhD in an area relevant to immune/stem cell analytical method development, or MSc/BSc in a Life Science or Biochemistry subject with 3+ years of experience within an appropriate environment focused to immune/stem cell analytical techniques