

Job Description

Job Title	
Research Assistant in Mammalian Cell Culture	
Grade	5
Department	Department of Chemical Engineering, School of Engineering, Faculty of Science and Engineering (based at the Manchester Institute of Biotechnology)
Overall Purpose	
Most mammalian cells grown in the lab still depend on fetal bovine serum, an animal-derived supplement that is expensive, varies from batch to batch and raises ethical concerns. This role exists to help find practical alternatives. You will grow mammalian cells in media containing less serum or none at all, test candidate serum substitutes against standard conditions, and measure how well the cells grow and perform. Working closely with an industry partner, you will produce the evidence that shows whether these alternatives work. Your results could help bring a new product closer to market and reduce the use of animal-derived materials in research and manufacturing. This is a full-time, fixed-term post for 5 months, giving the successful applicant experience of industrially-relevant fundamental research.	
About the Team	
You will join Prof Alan Dickson's research group in the Department of Chemical Engineering, based at the Manchester Institute of Biotechnology working closely with your direct supervisor, Dr Zeynep Betts . The group works on engineering mammalian cells and on how cells are grown to make protein-based products. The Institute brings together researchers from biology, chemistry, engineering and the physical sciences. This project is a partnership with an SME, and funded by the Industrial Biotechnology Innovation Catalyst, which supports collaboration between universities and industry. Whilst your day-to-day work will be with the academic team, you will have regular contact with the company, giving you direct experience of research with real-world applications.	
Key Accountabilities	
• Maintaining mammalian cell cultures (such as Chinese hamster ovary cells) using sterile technique and agreed protocols. • Adapting cells to grow in different supplements. • Measuring cell growth, viability and nutrient use, and the amount and quality of protein produced where relevant. • Recording, analysing and presenting data clearly and accurately, keeping full laboratory records. • Helping the project lead plan and refine experiments based on emerging results. • Preparing progress reports and presentations for the project team and industry partner. • Liaising with the industry partner, including sharing results and materials and attending project meetings.	

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- Maintaining cell stocks, reagents, consumables and equipment records.
- Working safely, following health and safety, biological safety and risk assessment procedures.
- Contributing to publications and presentations where appropriate.

Person Specification

Knowledge	Understanding of mammalian cell biology and the principles of cell culture.
Experience	Hands-on experience of sterile technique for handling cells (ideally mammalian cells).
Skills	• Accurate record keeping and data analysis. • Clear written and spoken communication. • Good organisation: able to plan your own work and meet deadlines. • Works well as part of a team and with external partners.
Education	Degree in biological sciences or chemical engineering or a related subject.

Key Behaviours

One University: A 'One University' approach, whereby we break down silos and work collaboratively towards furthering the University's strategic goals, vision and values.

Freedom of Speech and Academic Freedom: Support the University's commitment to securing and actively promoting the importance of free speech and academic freedom within our community.

Service Excellence: Committed to prioritising service excellence and high performance to deliver great people-centred experiences.

Agility: Demonstrate a commitment to agility and continuous improvement by embracing change, championing innovation, and being flexible and forward thinking to adapt.

Sustainability: A sustainable approach that safeguards the University of the future by championing environmental practices, advancing digital capability, and supporting financial stability and philanthropic initiatives.

Inclusion: Support the University's ambition to create an inclusive place to work where every person matters, demonstrating a commitment to non-discriminatory conduct and respect for others, and fostering a University where people feel deeply connected to each other, to Manchester, and to the wider world.

Social Responsibility: Promote and champion the University's social responsibility ambitions to advance social inclusion, prosperous communities, better health, and cultural engagement.