



Job title	Research Assistant/Associate/Fellow – UKRI Engineering Biology Mission	Job family and level	Research and Teaching Level 4 CTG
School/ Department	School of Chemistry	Location	Biodiscovery Institute University Park Campus

Purpose of role

The purpose of this role will be to have specific responsibility for research, for developing research objectives and proposals for a research project in applying engineering biology techniques to an apoferritin nanocage in order to improve its abilities to function as a targeted drug delivery platform. This will require the application of a range of techniques including protein engineering, synthetic and analytical chemistry, mammalian cell culture, and nanomaterial characterisation. The role will involve the synthesis of peptide-based materials using solid-phase methods as new cargo for the apoferritin nanocage. The person appointed will be expected to plan and conduct work using the above methodologies and techniques as appropriate to this type of research. The role holder will maintain accurate and detailed experimental records and curate the data they generate for long term access by others. They will be responsible for writing up their work for publication and assisting with further research grant submissions. The person will also be responsible for promoting safety laboratory working and supervision of less experienced researchers. The person appointed will have the opportunity to use their initiative and creativity to identify areas for research, develop research methods and extend their research portfolio.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	Deliver the technical development of a novel protein-based drug delivery system developed within the School of Chemistry. The successful applicant will have previous expertise in protein engineering, synthetic chemistry including solid-phase peptide synthesis and use of fluorescent probes and internally quenched peptide substrates.	60%
2	To write up research work for publication and/or contribute to the dissemination at national/international conferences, resulting in successful research outputs and knowledge exchange.	10 %
3	To provide support, guidance and supervision to other staff and students, where appropriate in own area of expertise.	10%
4	To build relationships with both internal and external contacts in order to exchange information, to form relationships for future collaborations and identify potential sources of funds and/or opportunities for collaboration.	10%
5	Any other duties appropriate to the role and level	10%

Person specification

	Essential	Desirable
Skills	<ul style="list-style-type: none"> • Oral and written communication skills, including the ability to communicate with clarity on complex information. • Demonstrate the ability to write a published article/review/report • Ability to analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights. • Ability to assess and organise resource requirements and deploy effectively. • Ability to build relationships and collaborate with others, both internally and externally. • Excellent problem-solving skills and an ability to apply technical knowledge in new contexts to solve unusual scientific challenges posed by industry. 	
Knowledge and experience	<ul style="list-style-type: none"> • Knowledge of protein structure and engineering as well as experience of recombinant protein synthesis mutagenesis and purification. • Experience of undertaking nanomaterial characterisation. • Experience of <i>in vitro</i> mammalian cell culture. • Experience of synthetic organic chemistry including solid-phase peptide synthesis. • Evidence of using other research methodologies and analytical techniques to work within the research area. • Experience of managing multiple deadlines and competing priorities. 	<ul style="list-style-type: none"> • Experience of using HPLC/MS/NMR • Good and demonstrable knowledge of contemporary drug delivery systems.
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> • Must have a Ph.D. or equivalent or be close to completing a Ph.D. in the relevant subject area. 	



Expectations and behaviours

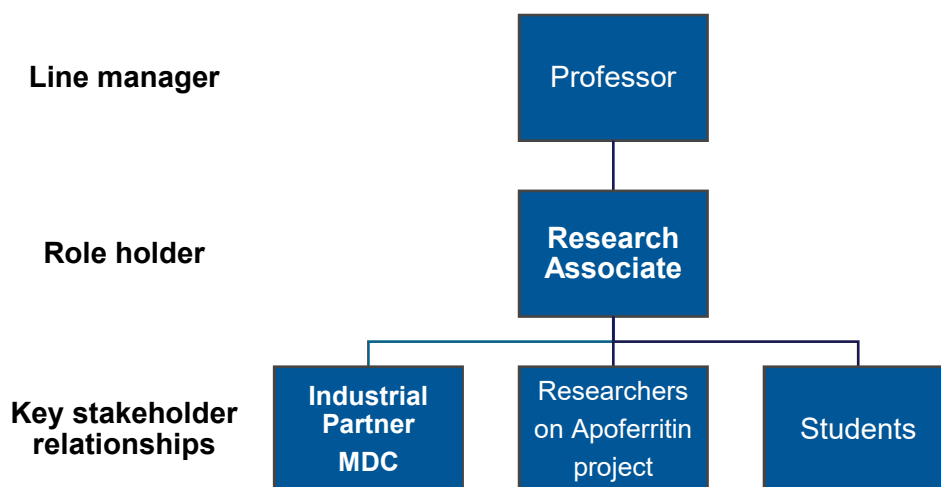
The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

Valuing people	Is friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.
Taking ownership	Is clear on what needs to be done encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.
Forward thinking	Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.
Professional pride	Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.
Always inclusive	Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.

Key relationships with others

This is a Smart Art diagram. Click on the boxes to enter the role holder's job title, line manager's job title and any direct reports (if applicable). If a role does not have any direct reports, remove this box by double clicking on it and pressing Delete.

****Please remove this paragraph of instructions before submitting the role profile****



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