



<b>Job title</b>	DGHPU Research Nurse/Paramedic Senior Human Studies Technician	<b>Job family and level</b>	TS3
<b>School/ Department</b>	School of Life Sciences	<b>Location</b>	Medical School, Queens Medical Centre Campus

## Purpose of role

The Senior Technical role provides expertise in clinical and human physiology monitoring and assessment techniques, and the skills and judgement required to safely execute invasive in vivo human research studies recruiting both 'healthy' and patient volunteers (primarily adults). The role will include organising and conducting these studies under the supervision of the project research team and the Unit clinician, in both acute and chronic study interventions.

With appropriate training and supervision, the role holder will carry out paramedic techniques (such as IV cannulation and venepuncture), human metabolic and physiological measurements (such as indirect calorimetry and ultrasonography) and provide support / assistance to medical colleagues in the execution of invasive protocols in human volunteers.

Acute nursing or paramedic experience and judgement is essential to maintain the health, safety and wellbeing of participants, (including vulnerable cohorts) and veracity of data collection.

	<b>Main responsibilities</b> (Primary accountabilities and responsibilities expected to fulfil the role)	<b>% time per year</b>
1	<p><b><i>In vivo</i> research studies (including those with patient cohorts)</b></p> <ul style="list-style-type: none"> <li>• Executing human research studies (including volunteer recruitment, screening, and consenting of healthy volunteers and patients) to ensure that the studies are completed diligently and efficiently with suitable volunteers. Assisting and advising colleagues and post-graduate students in the execution of their studies, as required.</li> <li>• Developing and maintaining skills to be able to perform physiological testing and monitoring of human volunteers to time and quality standards, including equipment calibration in the Unit. Documentation, collation, and analysis of data generated to deliver valid outcomes. Demonstrating initiative to resolve problems, including troubleshooting when appropriate.</li> <li>• Organisation and prioritisation of own work schedule, within study constraints and demands of the team. Working with minimal supervision but in collaboration with, and</li> </ul>	30%

	<p>consideration of, others within a team in the David Greenfield Human Physiology Unit (DGHPU) Manager.</p> <ul style="list-style-type: none"> <li>• Use of relevant clinical information and identified study requirements, alongside own experience and knowledge, to recruit appropriate patient cohorts across the lifespan and disease categories, including paediatrics and clinically vulnerable when necessary.</li> <li>• Hold a research passport with the appropriate hospital trust, to enable the accessing of NHS information (patient names and hospital numbers), to support recruitment activity (after consent has been obtained from patients).</li> <li>• Utilising clinical and technical expertise to facilitate conversations with clinical collaborators during the execution of research protocols to ensure any issues are promptly identified and resolved.</li> <li>• Attend research project meetings with Principal Investigators, e.g. to report progress and keep up to date with study issues.</li> <li>• Support the DGHPU and the wider research group to gain ethics committee approval for human volunteer research projects; by advising applicants on clinical or research matters within the scope and experience of the role holder.</li> <li>• With support and supervision, it is expected that the role holder will have the drive and capacity to undertake a continued program of development to ensure technical skills required to cover evolving research needs are met.</li> </ul>	
2	<p><b>Clinical procedures</b></p> <ul style="list-style-type: none"> <li>• Performing specialised paramedic skills including, retrograde and antegrade peripheral vein cannulation (upper and lower limb), ultrasonography, nasogastric tube insertion (healthy volunteers only), intravenous insulin and glucose tolerance tests, and putting up intravenous infusions of fluids and substrates.</li> <li>• Monitoring the health and well-being of volunteers during research studies involving invasive procedures, and working alongside clinical colleagues to resolve any issues.</li> <li>• Providing first-aid cover for the School of Life Sciences (research/teaching/staff)</li> <li>• Being the research participant’s advocate</li> </ul>	30%
3	<p><b>Teaching and teaching support</b></p> <ul style="list-style-type: none"> <li>• Teaching, advising and supervising post-graduate students and colleagues in areas of own expertise, including</li> </ul>	15%

	<p>occasionally assisting with undergraduate practical sessions, to disseminate knowledge.</p> <ul style="list-style-type: none"> <li>Specifically, support and supervise post-graduate students, and researchers during human studies conducted within the research group, including training and support in the clinical and technical aspects of protocols and their delivery.</li> </ul>	
4	<p><b>Specialist Health and Safety</b></p> <ul style="list-style-type: none"> <li>Maintaining and ensuring a safe and professional working environment to safeguard the interests of volunteers and colleagues by implementing HSE standards and International / National / local Ethics guidelines.</li> <li>Contribute to the writing and updating of Risk Assessments and Standard Operating procedures (SOPs) within areas of expertise.</li> <li>To act as a Dual Energy X Ray Absorptiometry (DEXA) operator.</li> </ul>	10%
	<p><b>Research study equipment</b></p> <ul style="list-style-type: none"> <li>Prepare and test equipment prior to study days, carrying out required quality control and calibration checks. Maintain equipment in good working order to ensure safe and accurate working practice.</li> <li>Work with the Unit physicians and advising the Unit Manager to ensure that emergency resuscitation equipment is complete and maintained and advise on any specialist emergency care requirements that may be required for new studies.</li> </ul>	10%
	<p><b>Other aspects</b></p> <ul style="list-style-type: none"> <li>Contribute positively to the School of Life Sciences, engaging with other colleagues to deliver School strategy.</li> <li>Demonstrate a commitment to upholding the University's core values of inclusivity, ambition, openness, fairness and respect.</li> <li>Any other duties appropriate to the grade and role.</li> </ul>	5%

## Person specification

	<b>Essential</b>	<b>Desirable</b>
<b>Qualifications/ Education</b>	UK recognised registered nurse or paramedic qualification.	
<b>Skills/Training</b>	<p>Trained in key clinical skills including venepuncture, administration of SC and IM injections and willing to learn IV cannulation (if no prior experience). Holding an IV drug administration certificate, and trained in immediate or advanced Life Support (ALS/ ILS).</p> <p>Able to demonstrate ability to recognise and respond to clinical issues, such as a deteriorating patient.</p> <p>Willingness to learn new human volunteer research techniques and their theoretical basis to allow effective troubleshooting.</p> <p>Able to adopt a methodical approach to prioritising work, and advanced problem-solving capability, in order to meet deadlines.</p> <p>Able to demonstrate the ability to build effective working relationships and collaborate with others both within a team and externally</p>	<p>IV cannulation Familiarity with muscle function and exercise testing protocols and equipment.</p> <p>NG tube insertion and management Expertise in ultrasonography DEXA operator trained Advanced Life Support (ALS) training</p> <p>Able to demonstrate capability in conducting invasive clinical research (including acute and chronic intervention studies), and an understanding of potential adverse health issues that may arise during such research studies.</p> <p>Proven ability to provide quality technical support and data collection</p>
<b>Experience</b>	<p>At least 2 years post-qualification nursing in an acute care setting, or paramedic experience</p> <p>Demonstrate experience in organising and prioritising resources and work schedules to meet demands.</p> <p>Experience in working with vulnerable individuals, such as children and frail older individuals</p>	<p>Experience of working in a research setting, including organisation and execution of physiology or clinical research studies</p> <p>Experience and working knowledge of regulatory requirements associated with human research</p> <p>Experience of team management and teaching / supervising junior colleagues and / or post-graduate students</p>

Statutory/ Legal	Successful DBS Check Registered practitioner (NMC or HCPC)	



## 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



