



<b>Job title</b>	Research Fellow in Raman Microscopy (Title will be Research Associate if appointment made before PhD has been completed)	<b>Job family and level</b>	Research and Teaching Level 4 (If appointment before PhD has been completed, level will be RT Level 4 Career Training Grade)
<b>School/ Department</b>	School of Physics and Astronomy	<b>Location</b>	School of Physics and Astronomy Building, University Park Campus

## Purpose of role

The purpose of the role is to carry out work on developing optical microscopy and Raman spectroscopy for imaging and monitoring molecular changes cause by foreign body response in mouse models. The role holder will carry out research based on diffuse imaging and Raman microscopy for monitoring foreign body response in mouse models. This includes designing or optimising instrumentation, design and carry out in vivo experiments with collaborators, analyse data and write up research paper based on the results. The candidates are expected to take an active role in dissemination of research (peer-reviewed papers, conferences).

This job description may be subject to revision following discussion with the person appointed and forms part of the contract of employment.

	<b>Main responsibilities</b> (Primary accountabilities and responsibilities expected to fulfil the role)	<b>% time per year</b>
1	<ul style="list-style-type: none"> <li>To take a leading role in the research activities described above under the supervision of academic staff in the School of Physics and Astronomy.</li> </ul>	70%
2	<ul style="list-style-type: none"> <li>To write up this research work for publication and contribute to dissemination at national/international conferences, resulting in successful research outputs.</li> </ul>	15%
3	<ul style="list-style-type: none"> <li>To build relationships with both internal and external collaborators in order to exchange information, develop collaborative projects and identify potential opportunities for future collaboration.</li> </ul>	15%

## Person specification

	Essential	Desirable
<b>Skills</b>	<ul style="list-style-type: none"> <li>• Excellent written and oral communication skills</li> <li>• Excellent interpersonal skills and ability to build relationships and collaborate with others, both internally and externally</li> <li>• Ability to work independently and in a team</li> </ul>	<ul style="list-style-type: none"> <li>• Experience in developing Raman spectrometers based on microscopes or fibre optics probes.</li> </ul>
<b>Knowledge and experience</b>	<ul style="list-style-type: none"> <li>• Knowledge of Raman spectroscopy, spatially offset Raman spectroscopy, multivariate statistical analysis of data.</li> <li>• Strong research track record in optical microscopy, spectroscopy, fibre optics, including using custom instruments.</li> </ul>	<ul style="list-style-type: none"> <li>• Worked in interdisciplinary teams, collaborations with medical and industrial partners.</li> <li>• Track record in Raman spectroscopy and imaging for biomedical applications.</li> </ul>
<b>Qualifications, certification and training (relevant to role)</b>	<ul style="list-style-type: none"> <li>• PhD or near to completion of a PhD, in Physics, Chemistry or Biomedical Engineering</li> </ul>	



## 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



