**Research Associate**

**Biosciences Institute**

**Faculty of Medical Sciences**

**The role**

Your role is to perform experiments on human cultured cells using a range of molecular cell biology techniques including cloning, mutagenesis, viral transductions, western blotting, confocal microscopy and analysis of protein-protein interactions. You will be expected to drive your own project but also work as part of a team and contribute to the supervision of students. You will prepare data for publication and present it in seminars and scientific conferences.

The project will investigate the mechanism by which several newly designed small molecules activate selective autophagy. The funds for this position are available for 2 years in the first instance and provided by a grant from pharmaceutical industry. As such the project will have specific objectives and tight deadlines. The successful candidate will join an enthusiastic team working within a thriving community of cell biology research labs working on various aspects of biology of ageing. A PhD (awarded or imminent, or equivalent professional qualification/experience) in a relevant field is essential, as is research experience in a molecular cell biology/biochemistry lab environment. Previous knowledge of autophagy and/or redox biology together with strong practical and analytical skills are also required.

This post is fixed term for a period of 2 years.

For informal enquiries contact: Dr. Viktor Korolchuk (viktor.korolchuk@ncl.ac.uk)

Find out more about the Faculty of Medical Sciences here: <https://www.ncl.ac.uk/medical-sciences/>

Find out more about our Research Institutes here:

<https://www.ncl.ac.uk/medical-sciences/research/institutes/>

As part of our commitment to career development for research colleagues, the University has developed 3 levels of [research role profiles](http://www.ncl.ac.uk/hr/recruitment/role-profiles.php). These profiles set out firstly the generic competences and responsibilities expected of role holders at each level and secondly the general qualifications and experiences needed for entry at a particular level.

**Key Accountabilities**

* Although working under the general guidance of an academic or Principal Investigator, the postholder will contribute ideas, including enhancements to the technical or methodological aspects of their studies, thus providing substantial 'added value'
* Develop and carry out the specified project using appropriate techniques and equipment as outlined in the personal requirements
* Determine appropriate methodologies for research, with advice and support where required
* Contribute to grant applications submitted by others and in time develop own research objectives and proposals for funding
* Begin to write, with appropriate support, proposals for individual research funding or, where funders do not permit this, contribute to the writing of collective bids
* Assess research findings for the need/scope for further investigations
* Contribute to the writing up of their research for publication and dissemination, either through seminar and conference presentations or through publications
* Present research findings, either at conferences or through publications in reputable outlets appropriate to the discipline
* May be involved in the supervision, with guidance, of final year undergraduate research projects and in providing support to postgraduate research students or Research Assistants
* Will need to work with the support staff and, on occasions, with undergraduate and postgraduate students, and interact intellectually with other academic members of the Institute.
* May contribute to events celebrating the public engagement of science/social sciences/humanities
* Develop an awareness of University structures, policies and procedures and relevant issues in the higher education, research, social and political environment

**The Person (Essential)**

Knowledge, Skills and Experience

*Essential*

* Ability to work well as part of a team and rapidly acquire new skills
* Detailed knowledge of autophagy, signal transduction pathways such as mTOR and/or redox biology
* Expertise in molecular cell biology, mammalian cell culture, confocal microscopy and biochemistry
* Likelihood of advanced skills directly related to the research projects
* High level of analytical and problem-solving capability
* Ability to communicate complex information with clarity and to encourage the commitment of others
* Experience of research with clear transferable skills and some experience or awareness of the research environment
* High-quality publications commensurate with the career stage

*Desirable*

* Experience in working with small molecules in the cell culture setting
* Experience of generating lentiviral vectors
* Experience of using fluorescent redox sensors

Attributes and Behaviour

*Essential*

* Willingness to work flexibly by mutual arrangement
* Applicants should be ambitious with a demonstrable drive to succeed and produce work at the highest level
* Ability to work independently and as part of a team
* Capacity for original thought
* Clear commitment to a career in research

*Desirable*

* Ability to write publications in collaboration with other team members

Qualifications

* A PhD in the research area required