

Research studentships are offered to students wishing to undertake a PhD programme. All studentships are highly competitive and you should ensure (and demonstrate) that there is a good match between your own qualifications and interests and those being sought for the particular studentship.

Research Centre where studentship will be held	School of Life Sciences, Faculty of Natural Sciences, Keele University. Academic registration will be at Keele University throughout the 3 year project.
Studentship reference	FNS GS 2018-10
Web link to any further information (e.g. Research Institute)	Faculty Research Office - http://www.keele.ac.uk/fnsro/
Research topic or field - title	Role of protein phosphatase 4 (PP4) in cancer: Analysis and potential therapeutic target?
Research topic or field – full description (or attach document)	<p>Phosphorylation is a post-translational modification central to cancer biology and treatment. The activity of many proteins which regulate apoptosis and cell proliferation is controlled by reversible phosphorylation which in turn results from the balance between the relevant protein kinase and phosphatase activities. The study of protein phosphatases and their regulation has recently become an expanding field of research, with these protein families becoming recognised as possible therapeutic targets. This project is intended to investigate the role of serine/threonine protein phosphatase 4 (PP4) in cancer development, progression to advanced metastatic stage, and therapy resistance.</p> <p>PP4 exists as a holoenzyme composed of a highly conserved catalytic subunit (PP4c) that associates with different regulatory proteins (including PP4R1, PP4R2, PP4R3α, PP4R3β, and PP4R4) giving rise to a diverse collection of distinct PP4 holoenzymes. Interaction with these regulatory proteins determines function, substrate selectivity and subcellular localisation of the catalytic subunit. Our results and others reveal a complex role of PP4 in controlling cell fate and cancer, highlighting the importance of identifying the signalling pathways regulated by PP4c and its role in the development and treatment of cancer. The project will therefore investigate the role of PP4c and its interacting proteins in different cancer cell lines.</p>

Available from (date)	Applications are accepted all year round
Funding support available – Fees, stipend, duration	Self-funded PhD position
Source of funding	Self-funded
Eligibility criteria	<p>Applications are welcomed from bioscience graduates with (or anticipating) at least a 2.1 honours degree or equivalent. Applicants with MSc in biochemistry/ biomedical sciences/biological sciences/natural sciences are also welcomed</p> <p>An interest in laboratory work is essential - full training will be provided.</p> <p>Home/EU and Overseas students are welcome to apply. Home/EU fees are £4260 per annum for 2018/9 and overseas fees are £23300 per annum.</p>
Terms and conditions of studentship	As per the University Code of Practice
Number of studentships available	1
Application details	go to http://www.keele.ac.uk/pgresearch/studentships/ and click on the "Apply online here" button in this studentship.
Closing date for applications	Applications are accepted all year round
Contact for further information and to whom applications will be sent	<p>Informal enquiries about the project should be made to the Project Lead Dr Mirna Mourtada-Maarabouni and should include a CV and a personal statement.</p> <p>Full applications to: http://www.keele.ac.uk/pgresearch/studentships/</p>

Candidate profile

	Essential	Desirable
Qualifications, Experience and Skills	<p>Minimum 2i classification or equivalent.</p> <p>OR</p> <p>Masters degree in the biochemical/ / biophysical/ chemical /natural sciences.</p> <p>An interest in laboratory work, cell culture and molecular biology.</p> <p>The opportunities are open to UK/EU and overseas students.</p>	
Attitude and Personality	<p>Self-motivation and resilience to undertake advanced research study at PhD level.</p> <p>Good communication, interpersonal and organizational skills.</p> <p>The ability to work both independently and as part of a team</p> <p>Willingness to learn new practical skills.</p>	