**De Montfort University**

**Full Bursary PhD Scholarship**

**Protein target identification for the proximicins, potent antitumour-antibiotics isolated from marine actinomycetes. Development of drug leads, from bench to pharma.**

**Chemistry for Health / Medicinal Chemistry Research Centre**

**Leicester School of Pharmacy, Faculty of Health and Life Sciences**

**De Montfort University, Leicester**

**COMMENCING October 2018**

A PhD position is available from October 2018 to work with Dr F. Brucoli at Leicester School of Pharmacy, De Montfort University (DMU). This is a drug discovery project at the interface to organic chemistry, chemical biology and biophysical technologies, and with a strong entrepreneurial input.

Proximicins are a family of potent antitumour-antibiotics isolated from the marine actinomycete *Verrucosispora fieldleri*. In this project, we wish to investigate the molecular targets of proximicins and adopt a multidisciplinary approach to develop novel drug-leads. The protein-targets of proximicins will be identified using proteomic techniques, and Nuclear Magnetic Resonance spectroscopy and X-ray crystallography experiments will be conducted to provide detailed information on the proximicins binding sites. Proximicins-derived therapeutic leads will be then rationally-designed and synthesised, and evaluated for anticancer and antimicrobial activity and receptor binding-affinity.

The successful candidate will be hosted at DMU and be able to access state-of-the-art research facilities within a stimulating research and training environment. They will acquire a solid foundation in medicinal synthetic and natural product chemistry, molecular biology and proteomics. Moreover, a robust entrepreneurial aspect is embedded in the project and the PhD candidate will become knowledgeable about patents, scientific ideas commercialisation and business model for patent exploitation of new molecular entities.

For a more detailed description of the scholarship, the subject area at DMU and an application pack please visit <http://www.dmu.ac.uk/research/graduate-school/phd-scholarships.aspx>. Please direct informal academic queries to Dr Federico Brucoli email [Federico.brucoli@dmu.ac.uk](mailto:Federico.brucoli@dmu.ac.uk). For administrative queries contact the Graduate School office email: [researchstudents@dmu.ac.uk](mailto:researchstudents@dmu.ac.uk), tel : 0116 250-6309.

Completed applications should be returned together with two supporting references and an academic transcript. Applications without all relevant documents will not be considered. Applications are invited from the UK or EU students with a Master’s degree or good first degree in a relevant subject (First, 2:1 or equivalent). Doctoral scholarships are available for up to three years full-time study commencing in October 2018 consisting of a bursary of £14,296 per annum in addition to waiver of tuition fees.

**CLOSING DATE: Friday 4th May, 2018. Interviews for shortlisted candidates will be held Friday 11th of May at DMU or via Skype**.