



University of Cape Town
Scientific Computing Research Unit (SCRU) and Department of Chemistry

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**2020 Doctoral Degree in Chemistry
(Cancer Therapeutics and Diagnostics)**

The Scientific Computing Research Unit invites students with a Master's Degree in Chemistry/Biochemistry/Molecular Biology along with a minimum of a full first year mathematics credit, to apply for a Doctoral Degree Scholarship in Chemistry.

The successful incumbent will be expected to contribute to the interdisciplinary research projects conducted within the Scientific Computing Research Unit (SCRU). The research is an interlinking of computation modelling and experimental enzymology. The project is centred on developing Glycomimetic Glycosyltransferase Inhibitors for Breast Cancer Treatment. The computations comprise of bioinformatics, cheminformatics and enzyme reaction dynamics in a systems biology approach to cancer therapeutics and diagnostics. The experimental program is centred on Michaelis-Menten kinetics, enzyme inhibitors, enzyme assay optimisation and protein expression for glycoenzymes that are key to tumorigenesis.

Pre-requisites:

A Master's degree in one or more of the following domain disciplines: chemistry, molecular and cellular biology. It will be advantages for PhD candidates to have senior credits in Computer Science or a masters level training in Enzymology/ Bioinformatics

Doctoral Degree Scholarship:

The value of the scholarship is R110 000 per annum, renewed for a second year pending mutual agreement and satisfactory progress. The scholarship is funded by the National Research Foundation (NRF) and Department of Science and Technology (DST) and are open to **South African students and permanent residents of South Africa only.**

Online application forms are available on the Scientific Computing Research Unit Website: <http://www.scientificcomputing.com> and should include; a CV, list of publications (if applicable), academic transcripts and contact details for two referees.

Closing date for applications is 20 January 2020

Please contact Ms Lydia Dreyer at the Scientific Computing Research Unit for further information.
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