



Department of Human Biology

UCT/MRC RESEARCH UNIT FOR EXERCISE SCIENCE & SPORTS MEDICINE
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Director: Professor T D Noakes
Discovery Health Professor of Exercise and Sports Science

MSc and PhD Fellowships in Human Biology

Applications are invited for MSc and PhD Fellowships within the Department of Human Biology at the University of Cape Town in collaboration with the South African Medical Research Council.

We are seeking highly motivated students to be part of a dynamic research group working on an NRF-funded research study entitled: “**Mechanisms underlying insulin resistance in black South African (SA) women: Lessons from an exercise intervention**”. Within SA, there is a high prevalence of type 2 diabetes, particularly in black women, which is compounded by their high prevalence of obesity. Furthermore, black SA women have a high prevalence of insulin resistance, a major risk factor for diabetes, and hypersecrete insulin to maintain normoglycaemia. However, with increasing age, insulin secretion in black SA women decreases, increasing their risk for type 2 diabetes. Many studies have shown that exercise training reduces the insulin resistance and the risk of type 2 diabetes. Therefore, the aim of the study is to examine the mechanisms underlying the changes in insulin sensitivity and secretion in response to a 12-week aerobic exercise intervention in obese black SA women. The proposed mechanisms to be studied will include lifestyle, physiological, metabolic, biochemical and molecular factors, with these specific components forming part of the MSc/PhD degrees.

Required qualifications:

A BSc Hons or MSc in any of the following disciplines: Medicine, biokinetics, dietetics, physiology, molecular biology, cell biology and other related health and biological sciences.

In addition to carrying out their specific research projects, the candidates will be expected to:

- Be involved in all aspects of the research project;
- Actively participate in group meetings;
- Attend additional courses and lectures for non-degree purposes

Successful candidates will be required to register for their MSc/PhD degrees at UCT. NRF grant-holder-linked bursaries (tax free) are available to the value of:

- MSc - R 40,000 renewable for 2 years,
- PhD - R60,000 renewable for 3 years

Preference will be given to South African citizens or South African permanent residents.

Applicants are requested to submit the following:

1. A covering letter indicating your suitability for the position;
2. Curriculum vitae, including names and contact details of 3 referees;
3. Certified copies of your qualifications and academic transcripts
4. Copy of your ID book.

Closing date for applications is Friday 13 February 2015

For further enquires or to apply, please email A/Prof Julia Goedecke:

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The University of Cape Town is committed to policies of equal opportunity and affirmative action which are essential to its mission of promoting critical inquiry and scholarship

