STUDY OPPORTUNITY

in the

Nanobiotechnology Research Group

The **Nanobiotechnology Research Group** in the Biotechnology Department at the University of the University of the Western Cape herewith invites potential students to enrol for **THRIP-funded** PhD or MSc degree to develop nano-enabled wound dressing for chronic wounds and burns. If interested, you may start either in the second semester of 2019, or the beginning of January 2020.

Research background:

An effective and complete process of wound healing is critical for the general well-being of patients, including burn victims and people living with diabetes. Current clinical treatments of wounds and ulcers, including topical antimicrobial agents, while useful, are ineffective against resistant microorganisms. The increasing prevalence of burns and chronic wounds raises the need for development of novel antimicrobial and wound healing agents that do not suffer the same fate. Recent development in nanotechnology for medical and pharmaceutical applications provide great opportunities for improving chronic wound treatments.

Research project:

Our lab intends to use nanotechnology and plant biodiversity for the production of nanoparticles, and study their cellular and molecular effects during wound healing, in order to improve future therapeutic interventions. In turn, these novel nanotechnology-based materials will be incorporated in advanced medical devices. The incumbent student will participate in industry-related development activities for the production of the nano-enabled devices.

Studentships:

Studentships (MSc and PhD) with bursary funding for South African citizens are available for 3 years. Experience in either nanotechnology, cell biology, histology, biochemistry, microbiology or molecular biology is required.

Interested students must contact **Prof Abram Madiehe** (amadiehe@uwc.ac.za) ASAP, by providing a CV, application letter, ID copy and transcripts.

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