

UNIVERSITY OF THE
WITWATERSRAND,
JOHANNESBURG



**Wits Advanced Drug Delivery Platform (WADDP) Research Unit,
Department of Pharmacy and Pharmacology, School of Therapeutic Sciences,
Faculty of Health Sciences, University of the Witwatersrand.**

CALL FOR APPLICATIONS:

PhD Degree Opportunity 2023

DEADLINE: 31 January 2023

The Wits Advanced Drug Delivery Platform (WADDP) Research Unit (www.wits.ac.za/waddp), under the leadership of Professor Yahya Choonara, is pleased to announce the following PhD Degree opportunities in the development of novel controlled release drug delivery systems using 21st-century pharmaceutical techniques.

Key Project Information:

Programme	Available positions	Mode	Eligibility
PhD Degree Opportunity	5	Full-time lab research	Open to candidates with a Master's degree in either the fields of Pharmacy, Chemistry, Chemical Engineering, Molecular Biology or a related area.

About This Project

If you are seeking to advance your career in the pharmaceutical sciences and are interested in developing innovative methods of drug delivery, the WADDP is offering unique project-based PhD positions with significant translational impact of the science.

Inappropriate medicines is a safety risk. The WADDP, over the years, have developed several platform-based technologies that allow for flexibility in the dosing, drug combinations, and all-encompassing 21st-century patient-centric medicines. With pharmaceutical technology such as 3D printing, multi-functional formulations with selected drugs/compounds in precise doses can be prepared that release in a controlled manner.

Our hypothesis is that a delivery system using advanced technologies can achieve the required release profiles for multiple drugs within a single tablet or other dosage form. The main challenge will be an innovative formulation design containing different medicines within US-FDA approved excipients.

You will join the WADDP within the Faculty of Health Sciences that is a highly productive multi-cultural team of research staff and students, engaged in a range of pharmaceutical development projects. Our team is known for its excellent research culture and is highly engaged, supportive, and productive. State-of-the-art equipment and labs will also enable you to thrive in your research.

In this project-based research degree, you will undertake a range of drug assays, formulation design and process optimization, controlled-release dosage form quality evaluations based on USP requirements, and preclinical animal studies.

Your multidisciplinary research team will help to evolve you into a translational pharmaceutical scientist with excellent problem-solving skills. You will develop expertise in pharmaceutical product development, and analysis, and gain experience in working with preclinical animal models and undertaking bio-sample analysis.

We will support and encourage you to attend at least one domestic and/or international conference to present the outcomes of the research project. You may also get the opportunity to perform some tests in our collaborating laboratories. You will have access to and gain valuable experience using world-class pharmaceutical instrumentation and other relative equipment. Your impressive set of skills and knowledge will position you well for a career in the pharmaceuticals industry, academia or other scientific organizations with a drug/pharmaceutical focus.

You will be based in the WADDP labs. We are known for innovation, impact, quality PG education and training, and we engage with industry and end-users. We aim to impact the design of 21st-century medicines development via new chemistry, biomaterials, analytics and modelling; novel drug delivery technologies; pharmaceutical innovation; preclinical optimization; and clinical and commercial translation. You will have access to an expert supervisory team having graduated >110 postgraduates. This project is fully funded for all reasonable research lab expenses to assist you in completing your degree.

Applicants must meet the eligibility criteria for entrance into a PhD to be considered. A merit selection process will be used to determine successful candidates. Successful applicants are expected to study full-time and to be based at the WADDP labs within the Faculty of Health Sciences at Wits. Applicants are expected to start in a timely manner upon receipt of an offer. Extended deferral periods are not available. Applications close on 31 January 2023.

- Tuition Fees: Find out more on the Wits PG studies and Fees Office websites. Limited tuition fee bursaries may be available for South African citizens.

Application process

- ☑ If interested, please send an email addressed directly to Professor Yahya Choonara (Principal Supervisor) – yahya.choonara@wits.ac.za
- ☑ Number of Positions: Five (5)
- ☑ Email subject line: WADDP PhD Application 2023
- ☑ Attaching your updated CV
- ☑ Attach a one-page motivation letter
- ☑ Attach at least two referee letters (of which one must be from your Master's degree Supervisor)
- ☑ Interviews for shortlisted applicants will be scheduled in February 2023.