

Date: March 2024

Re: Application for and selection of postgraduate students – Drug Delivery/Pharmaceutics

Purpose of document:

To provide guidance for prospective supervisors and other applicable stakeholders, i.e., co-supervisors or collaborators as well as the Subject Group, Pharmaceutics, operating as an organisational unit, for the selection of postgraduate students.

Point of Departure:

- The core business of the North-West University (hereafter NWU) is centred around teaching and learning together with research and innovation. While the teaching strategy of the NWU is primarily defined by and structured according to institutional frameworks, research activities are, due to the numerous categorical differences between the various sciences, approached from different perspectives.
- The Subject Group, Pharmaceutics, performs its research as part of the Centre of Excellence for Pharmaceutical Sciences (Pharmacem™), within the Faculty of Health Sciences, NWU, organisationally identified as Sub-Programme: 'Drug Delivery'.
- Our core research platform is founded on three research groups, i.e. Solid-state Pharmaceutical Innovation and Nanotechnology (SPIN), Cosmeceutical Research (CR), and Biopharmaceutics and Drug Delivery Systems (BDDS); however, these projects often evolve to include or compliment cell culturing (cytotoxicity studies, *in vitro* wound healing, efficacy testing, etc.); advanced pharmaceutical technologies (i.e. three-dimensional (3D) cell culturing techniques like air-liquid interface (ALI), 3D bioprinting, etc.); specialised drug delivery systems (oral, nasal, pulmonary, topical and transdermal), and claim substantiation.
- In order for members of staff to engage in both their teaching and research responsibilities, a major mechanism employed to strengthen the research core and to broaden the research activities of the group, involves the training and supervision of postgraduate students.
- Postgraduate studies that are conducted within Drug Delivery/Pharmaceutics are full-time based, labour intensive, intellectually challenging, expensive, and time-consuming.
- However, postgraduate studies conducted within Drug Delivery/Pharmaceutics are also highly rewarding. Indeed, we aim to develop postgraduate students not only as academics and scientists, but also as well-rounded, responsible and competent members of society that will not only strive to explore and study nature in an ethical manner, but that will avail and apply themselves to improve society as we know it.

- Except for registration, class and other administrative fees, postgraduate studies conducted within the Drug Delivery/Pharmaceutics are typically funded entirely by the respective study supervisors. Considering that most postgraduate study projects are expensive, careful selection of the appropriate candidates are necessary. This will ultimately influence the scientific integrity of projects, chances of successful study completion, as well as the dynamic nature of Drug Delivery/Pharmaceutics as a whole.
- Staff members as prospective supervisors can generally not be mandated to select a specific number of candidates and the supervision of postgraduate students are voluntary; however, such supervision, if any, is guided by the individual performance agreements signed between each employee and the respective Directors, which is determined by the availability of resources, facilities and funds.
- As such, a limited number of postgraduate projects become annually available.

General guideline for the selection of postgraduate students:

- Early in the year (**typically February/March**): The office of the Research Director of Pharmacen™ informs (via Efund) all fourth year BPharm-students interested in applying for post-graduate studies (MSc) that they should meet with prospective supervisors in the three research Sub-Programs.
- First and foremost, candidates who wish to join Drug Delivery/Pharmaceutics as MSc-students, PhD-students or postdoctoral fellows should not only be competent, but also be well informed about what the study will require from them and then express their willingness to commit to the project in the specific programme and its demands. To this extent, undergraduate students studying towards the BPharm degree (of relevance for MSc studies) or graduates (of relevance for PhD studies) should be informed well in advance of the internal application closing date (see 'Proposed Dates' below) in order to make the necessary timely arrangements to engage with prospective supervisors, current postgraduate students and other potential stakeholders to gain knowledge of the nature of the work performed in the Drug Delivery/Pharmaceutics.
- Candidates should be advised, encouraged, and allowed to engage with all supervisory staff members of the Drug Delivery/Pharmaceutics sub-program/subject group, if they so wish, in order to be informed of the complete spectrum of projects that are available. Hence, the candidates should contact supervisors (see "Drug Delivery Supervisors") via e-mail to make an appointment (face to face meeting or virtual meeting) between **April and June 2024**.
- Once such discussions have taken place, the onus rests on the candidate to re-schedule an appointment with the supervisor of his/her choice to establish if the supervisor has capacity and to ensure that the *Internal selection form* is signed by the supervisor.
- The signed *Internal selection form* together with a short curriculum vitae (CV), copy of ID and the original academic record should be submitted by the supervisor at the Research Director's office and to the Sub-Programme Leader: Drug Delivery, where it will be administered and processed according to normal Faculty processes. The final date for submitting application to the office of the Research Director is proposed as **29 July 2024** (internal closing date). Send to Mr Tebogo Kgaile (Tel: (018) 285 2102 and email: Tebogo.Kgaile@nwu.ac.za) and Prof Minja Gerber (Minja.Gerber@nwu.ac.za).

- Only after the *Internal selection form* has been signed and submitted to the Research Director's office, may the student apply online (<http://studies.nwu.ac.za/postgraduate-studies/higher-degree-admissions>) for the appropriate post-graduate degree. For enquiries contact Mr Thabang Mampe (SALA Higher Degrees Administration) Tel: (018) 285 2578 and email: 31643949@nwu.ac.za
- The final selection of candidates remains the prerogative of funding supervisors and whether the candidate meets the requirements for a Master's of Science in Pharmaceutics as stipulated in the Yearbook (Faculty of Health Sciences), since final selection only occurs upon the release of the previous degree's results.
- In the event that more applications for MSc studies are received after the internal, but before the institutional closing date, these will be approached on a case-by-case basis, bearing in mind that the financial and administrative capacity of supervisors may change over time to be accommodating for additional projects. However, this process will be cognisant of and afford consideration to earlier, albeit unsuccessful applicants also.

Proposed internal closing dates and approaches to extended closing dates:

- Since students must perform professional internships following the completion of their BPharm degrees and therefore need to apply for intern positions as soon as possible, an internal application closing date of **29 July 2024** is proposed for MSc applications in Pharmaceutics. Therefore, prior to this date, personal discussions between supervisors and potential candidates should be concluded between **April and June 2024**.
- Hence, successful candidates can then be assured of their selection by the office of the Research Director and in the unfortunate case that a candidate was unsuccessful, the necessary arrangements can be made in time to apply for other positions.
- For PhD applications, the internal application closing date can coincide with the institutional closing date.
- These dates must be well-communicated via official platforms, e.g., eFundi and the NWU website.

Prof Minja Gerber
Sub-Programme Leader: Drug Delivery