

NOTES

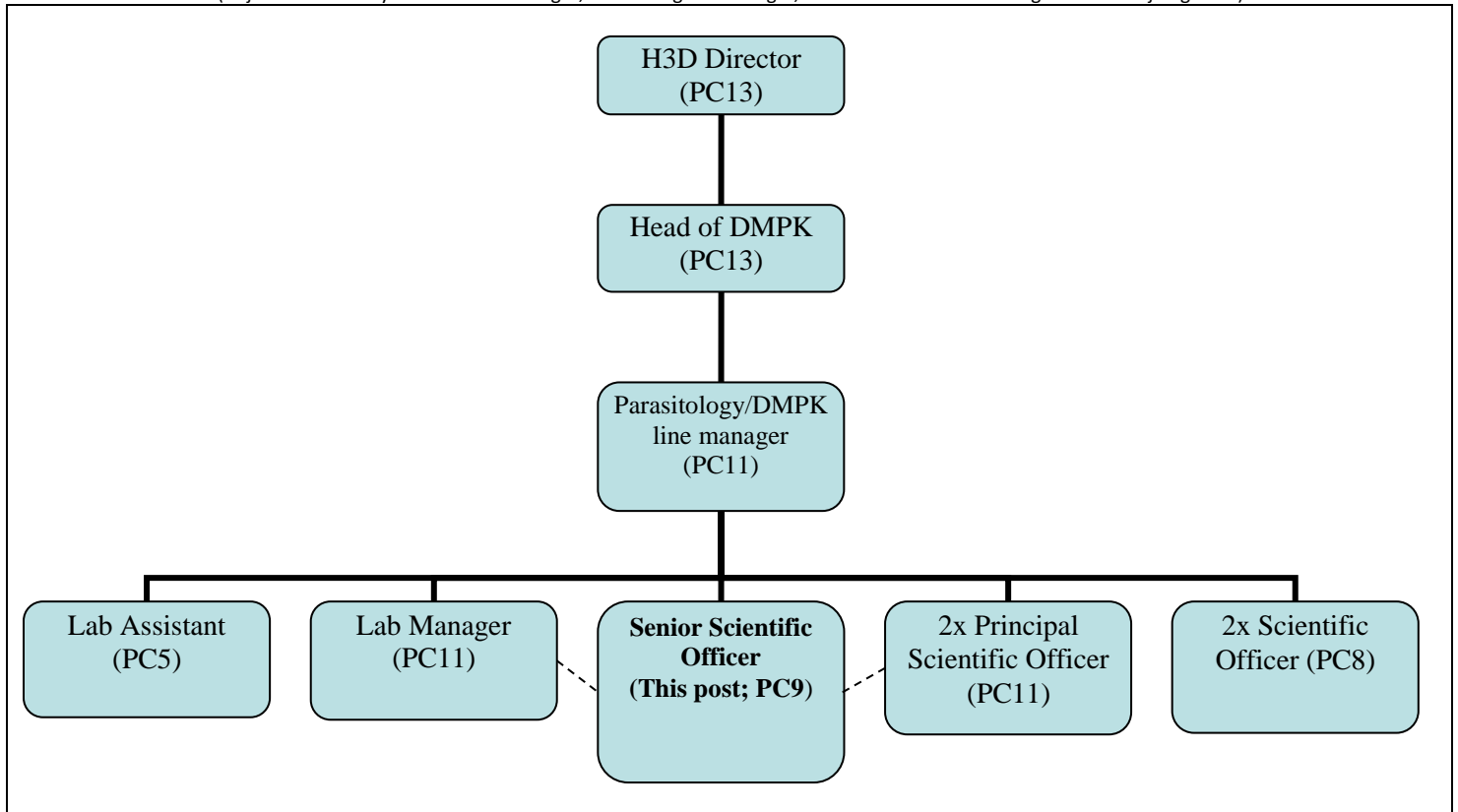
- Forms must be downloaded from the UCT website: <http://www.uct.ac.za/depts/sapweb/forms/forms.htm>
- This form serves as a template for the writing of job descriptions.
- A copy of this form is kept by the line manager and the job holder.

POSITION DETAILS

Position title	Senior Scientific Officer
Job title (HR Practitioner to provide)	
Job grade (if known)	Payclass 9
Academic faculty / PASS department	Faculty of Science
Academic department / PASS unit	
Division / section	Drug Discovery Center
Date of compilation	November 2017

ORGANOGRAM

(Adjust as necessary. Include line manager, line manager's manager, all subordinates and colleagues. Include job grades)



PURPOSE

The main purpose of this position is to provide scientific, technical and organizational support in the preclinical PK operation as part of an interdisciplinary translational research team discovering and developing innovative, lifesaving medicines.

Specifically, this position will support the preclinical PK and PK/PD teams with LCMS/MS analysis, including compound infusion, chromatography method development, preparation of LCMS standards and quality controls, and extracting and running sample batches, under logistical and scientific supervision from the Senior Investigators (dotted line).

The incumbent will also take responsibility for DMPK lab stock maintenance under direction from the Lab Manager.

Accountabilities and responsibilities of the Scientific Officer include:

Scientific & Research Impact

- Conduct a variety of tasks in a drug discovery laboratory requiring specific scientific or technical knowledge and laboratory techniques with regular input from supervisor; specifically LCMS/MS analysis investigating the pharmacokinetic properties of potential drug candidates *in vivo*.
- Perform routine data generation and routine laboratory activities in support of drug discovery projects/programs
- Address concerns and issues with data generation as they arise and assist with trouble-shooting if issues are identified
- Proactively identify areas of improvement in the laboratory and raise these with team
- Provide basic data analysis
- Document own experiments in accordance with H3D lab notebook policies (including tables, graphs, etc.)
- Periodically present results to supervisor and/or drug discovery team
- Manage lab equipment, including the maintenance, calibration and validation of laboratory equipment at H3D and, where applicable, at UCT
- Work collaboratively with all team and lab members and lab-associated students; provide technical assistance and share technical know-how with technical community at H3D and UCT as needed
- Actively participate in lab and team meetings as needed

Scientific/Technical & Operational Know-how

- Demonstrate ability to apply technical knowledge to complete work assignments and an understanding of modern techniques, instrumentation and underlying principles in LCMS/MS facilities.
- Help academic labs at UCT use drug discovery-related technologies and equipment where appropriate
- Perform duties with appropriate knowledge of relevant laboratory tools and procedures
- Propose ideas for and implement H3D-wide technology or research operations projects
- Demonstrate a working knowledge of relevant research policies, guidelines and procedures; assist in the preparation of SOPs for H3D, where appropriate; complete compliance training as required
- Operate and perform routine maintenance on instruments at H3D (and UCT as needed); identify and report unsafe equipment, conditions and practices so that they may be corrected prior to an incident

Decision Making

- Provide assistance in design of follow-on experiments, recommend use of alternative technologies or experimental protocols as needed
- Conduct experiments and organize data and seek regular input from supervisor as needed
- Demonstrate a clear understanding of how own experiments fit into overall project goals and organize day-to-day work accordingly

Desired Behaviors

Apply H3D Values & Behaviors with a specific focus on:

- Interaction with others in a positive, collaborative manner and help resolve conflicts in a constructive manner; encourage others to do the same
- Proactively share technical expertise and ideas for improvements with other members of the team/laboratory and contribute ideas to problem-solving on an ongoing basis; encourage other technical staff to do the same
- Support H3D mission and leadership decisions and prioritize own tasks in support of these decisions and towards accomplishing research goals

JOB CONTENT

Key performance areas (4 – 6) (What)		% of time spent	Activities / Objectives / Tasks (How)	Results / Outcomes (Why)
1	Preparation of standards and quality controls	5	<ul style="list-style-type: none"> • Weighing out of samples • Making up stock solution • Executing dilutions in specific solvent or matrix according to SOP. 	Ensure calibration curve for sample runs are accurate and valid
2	Running calibration standards	10	<ul style="list-style-type: none"> • Preparing standard calibration series • Extracting batch according to SOP • Executing batch on LCMS/MS platform. Batch must meet accepted pass/fail criteria. 	Validate LCMS method prior to sample extraction
3	Extracting DMPK sample batches and carrying out LCMS analysis	40	<ul style="list-style-type: none"> • Extracting a calibration series and the animal samples from various matrices according to SOP • Executing batch on LCMS/MS platform. Batch must meet accepted pass/fail criteria. 	Generate compound data after dosing for analysis by Senior Investigators
4	Assist Principal Scientific Officers with development of LCMS methods for sample analysis	30	<ul style="list-style-type: none"> • Carry out chromatographic method development for new compounds on LCMS/MS platform with appropriate columns and solvents. 	Develop robust methods prior to animal dosing to carry out pk parameter determination.
5	Assist lab manager with stock maintenance in conjunction with lab assistant	15	<ul style="list-style-type: none"> • Carry out regular stock-take of laboratory • Obtain quotes for replacement stock • Submit orders to H3D finance team 	Minimize downtime and to ensure workflow is maintained.

MINIMUM REQUIREMENTS

Minimum qualifications	A qualification in analytical chemistry or related biological discipline, with demonstrated competence in HPLC or LCMS/MS techniques is required. Knowledge of AB Sciex and/or Agilent analytical systems is beneficial.
Minimum experience (type and years)	At least 4 years' experience working in a relevant field or in a preclinical/clinical PK environment, using LC-based systems

COMPETENCIES

Competence	Level	Competence	Level
Analytical thinking / Problem solving	2	Building interpersonal relationships	2
Communication	2	Planning and organizing / work management	2
Professional knowledge and skill	3	Research support skills	2
Teamwork / collaboration	1	University awareness	2