



NOTES

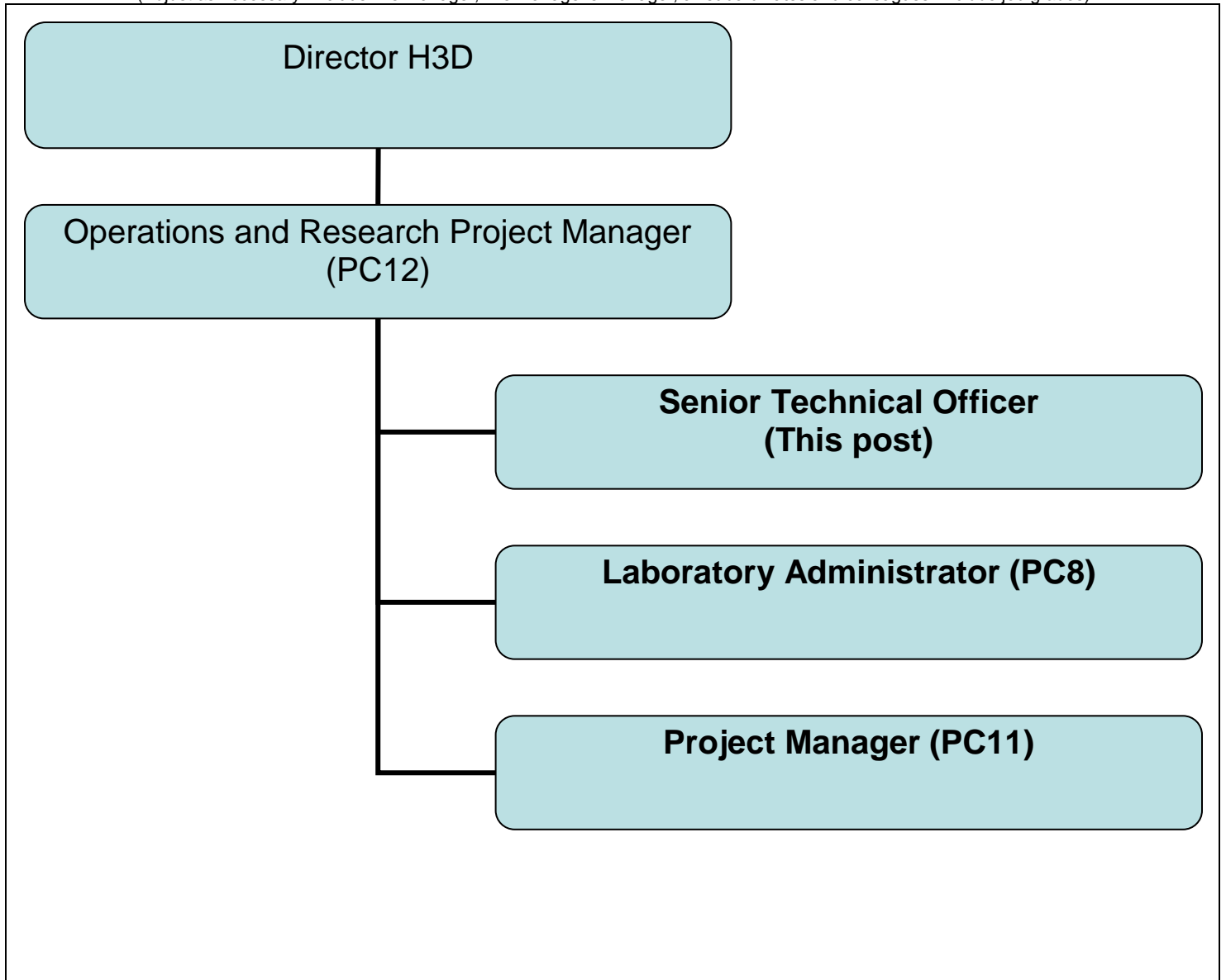
- Forms must be downloaded from the UCT website: <http://www.uct.ac.za/depts/sapweb/forms/forms.htm>
- This form serves as a template for the writing of job descriptions.
- A copy of this form is kept by the line manager and the job holder.

POSITION DETAILS

Position title	Senior Technical Officer
Job title (HR Practitioner to provide)	
Job grade (if known)	PC9
Academic faculty / PASS department	Science
Academic department / PASS unit	H3D Drug Discovery and Development
Division / section	H3D
Date of compilation	13 June 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 be part of an interdisciplinary translational research team discovering and developing innovative, lifesaving medicines.

Accountabilities and responsibilities of the Investigator include:

Scientific & Research Impact

- Design and perform experimental work independently and engage in complex research requiring highly specific scientific knowledge
- Consistently analyze, evaluate and interpret complex data and results from various sources and draw relevant conclusions
- Identify key scientific questions and develop/propose innovative solutions (experiments) to advance drug discovery research in accordance with overall program goals and priorities and in collaboration with academic groups at UCT, where appropriate
- Understand how specific discovery programs fit into overall scientific goals and priorities at H3D
- Network internally and externally in order to expand scientific knowledge, with focus on drug discovery principles and translational research, and optimize contributions to drug discovery and exploratory research
- Help train junior members of the team in data interpretation and experimental design (new postdoctoral researchers and technician-level members) and actively coach/mentor them
- Provide input into scientific presentations for H3D decision boards and external funders/collaborators and present results internally and at UCT as needed
- Contribute towards final reports and internal/external publications

Scientific/Technical & Operational Know-how

- Understand principles underlying relevant technologies and protocols in own discipline and demonstrate expertise of a particular technology and proficiency with full range of techniques used in job and core areas
- Coordinate use of equipment and share technological know-how with relevant academic groups at UCT
- Develop a thorough knowledge of drug discovery in own field of expertise (e.g., medicinal chemistry or disease biology) including the scientific background and literature; deepen knowledge in related scientific fields relevant to drug discovery
- Understand how own objectives/scientific experiments fit into overall, long-term program goals
- Propose ideas for H3D-wide technology or research operations projects and help with and/or lead their implementation
- Have a working knowledge of all relevant research policies and procedures, including safety, regulatory and other research guidelines; complete all required compliance trainings
- Identify and report unsafe equipment, conditions and practices so that they may be corrected prior to an incident

Decision Making

- Independently conceive, execute and interpret a complete range of experiments to advance discovery research in line with program time lines and goals
- Provide input into go/no-go decisions or alternative approaches for discovery or technology programs
- Execute day-to-day work in line with team and H3D overall mission, priorities and decisions, with input from supervisor/scientific mentor, as needed

Desired Behaviors

Apply H3D Values & Behaviors with a specific focus on:

- Contribute own ideas and explain perspective of own discipline to the team to enhance team's understanding of drug discovery and advance drug discovery efforts; apply non-traditional ideas to problem-solving as needed; help create room for everybody on the team to do the same
- Interact with others in a positive/collaborative manner and challenge other's ideas and help resolve conflicts in a constructive manner
- Fully align behind H3D's mission and leadership decisions and contribute to/understand overall program goals to prioritize own scientific work towards accomplishing these goals
- Strive towards working in a team-based, matrix organization in which all research activities are targeted towards overall H3D portfolio goals

JOB CONTENT

Key performance areas (4 – 6) (What)		% of time spent	Activities / Objectives / Tasks (How)	Results / Outcomes (Why)
1	<ul style="list-style-type: none"> Scientific Support 	60%	<ul style="list-style-type: none"> Independent optimization of assays including analysis and purification of problematic samples by LC-MS & HPLC-DAD, and method development in support of the scientific projects Implementation/application/validation of novel assays Proactively provide insights, recommendations and scientific interpretation for all data generated System innovation Routine generation of data Making up mobile phases & ensuring they're topped up at all times (especially necessary for the prep instruments) Quality control of data produced 	<ul style="list-style-type: none"> Routine services (purification, analysis etc.) provided Quality of data monitored To ensure the accurate and timely analysis of all intermediates and compounds prepared by the chemists To ensure the accurate and timely purification of produced compounds needing to undergo preparative HPLC.
2	<ul style="list-style-type: none"> Technical Support 	20%	<ul style="list-style-type: none"> Trouble-shoot technical problems and routine processes Provide technical support to H3D scientists Overseeing operation of technical equipment Column changes when needed Ensure that all instruments are correctly used and properly shutdown at the end the day Troubleshoot any problems Maintenance of analytical instrumentation such as fixing leaks and other general issues Break vacuum and clean source when contaminated Discuss with supervisor and other H3D TOs regarding more difficult instrument issues – when needed liaise with engineers 	<ul style="list-style-type: none"> Controls and calibrations performed Resolution of technical issues Provision of technical support To ensure the least down-time for all instruments. To ensure problems are dealt with as soon as they arise so they don't escalate To ensure results obtained are reliable at all times Discussion with other H3D TOs with more experience will ensure that engineers only get called out when absolutely necessary. Ensuring that the columns don't run dry, which would add unnecessary cost to running the lab. To ensure health and safety in the lab at all times.
3	<ul style="list-style-type: none"> Training and professional development 	10%	<ul style="list-style-type: none"> Provide instrument training to old and new lab staff and students Attending seminars, workshops, training courses etc. 	<ul style="list-style-type: none"> To ensure that the instruments are used correctly by all users Training/workshops/course/seminars attended

4	<ul style="list-style-type: none"> Organizational Support 	10%	<ul style="list-style-type: none"> Management of laboratory or laboratory space Preparing standard operating procedure (SOP) documents Laboratory housekeeping (waste removal, keeping work space clean and safety compliant, stock-take, stock control etc.) Liaising with suppliers for consumables and equipment maintenance Liaising with maintenance and technical engineers for lab and instrument maintenance 	<ul style="list-style-type: none"> Keep the laboratories and laboratory support services fully operational Lab housekeeping conducted in accordance with H3D and UCT guidelines 100% safety record
---	--	-----	---	---

MINIMUM REQUIREMENTS

Minimum qualifications	<ul style="list-style-type: none"> National Technical Diploma or equivalent
Minimum experience (type and years)	<ul style="list-style-type: none"> Apprenticeship/internship as a Lab Technician in a chemical/forensic/analytical lab and 5+ years relevant experience, or BSc(Hons) in relevant discipline and 2+ years' experience. 5+ years' experience actively working with HPLCs, LCMS and troubleshooting analytical and technical problems

COMPETENCIES

Competence	Level	Competence	Level
• Good oral and written communication	2	Analytical thinking / Problem solving	2
• Basic technical background in the use of drug discovery technologies and related laboratory techniques	2	Professional knowledge and skill	2
• Good interpersonal skills	2		
• Teamwork/collaboration	2		

AGREED BY

	PRINT NAME	SIGNATURE	CONTACT NO.	DATE
Job Holder				
Line Manager				
HOD				