

NOTES

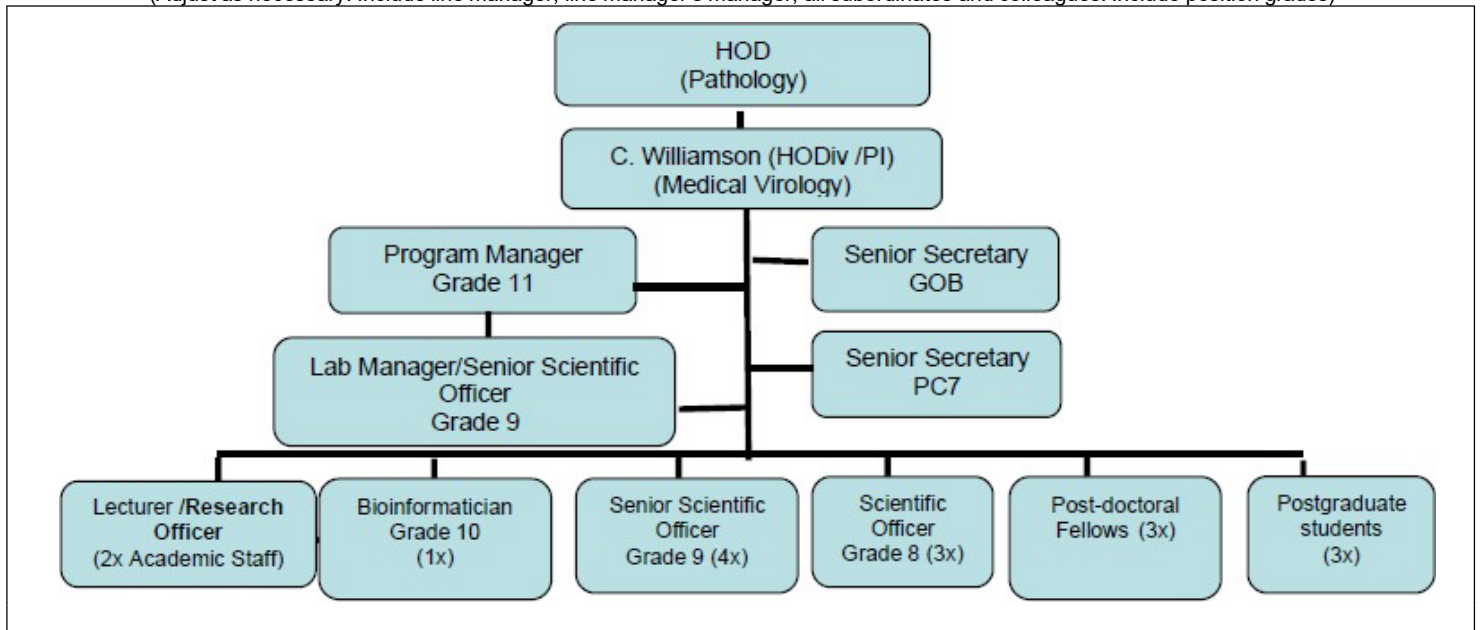
- Forms must be downloaded from the UCT website: <https://forms.uct.ac.za/forms.htm>
- This form serves as a template for the writing of position descriptions.
- A copy of this form is kept by the line manager and the position holder.

POSITION DETAILS

Position title	Research Officer (Bioinformatician)		
Job title (HR Business Partner to provide)			
Position grade (if known)	Research Officer (Lecturer)	Date last graded (if known)	
Academic faculty / PASS department	Health Sciences		
Academic department / PASS unit	Pathology		
Division / section	Medical Virology		
Date of compilation	8 March 2024		

ORGANOGRAM

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



PURPOSE

This is an academic post and the candidate would be expected to contribute to research; teaching and learning; management and leadership; and social responsiveness. This main purpose of this position is to deliver on the research objectives of the HIV vaccine projects within the group funded by SA MRC/USAID, NIH and the Gates foundation. The bulk of the work will be on analyzing HIV sequencing data, including deep sequencing data, to inform vaccine design. The candidate is expected to ensure delivery of objectives on these projects in consultation with the PI. This position requires the person to be familiar with the relevant literature in the field, and to work independently to develop approaches to analyzing and visualizing large sequencing datasets generated within the group, as well as internationally. Furthermore, to apply these approaches to inform vaccine development. They will be involved in line management of certain functions of the bioinformatician. They may be involved in the development and translation of bioinformatics tools for the projects within the broader research group. The incumbent is expected to write progress reports, and present research findings at local, national and international conferences. The successful candidate will play a leadership role in group meetings, workshops and advising on the organizational structure and running of the research group. The incumbent may be asked to contribute to grant writing for funding from national and international funding bodies. Furthermore, the candidate will also be required to contribute to public engagement initiatives, run by the Division/Department/IDM, to report research findings to the community.

CONTENT

Key performance areas		% of time spent	Inputs (Responsibilities / activities / processes/ methods used)	Outputs (Expected results)
E.g.	General and office administration	25%	<p>Takes, types up and distributes minutes and agendas for monthly departmental meeting.</p> <p>Greets visitors, enquires as to the nature of their visit and directs them to the appropriate staff member.</p>	<p>All staff members receive an electronic copy of accurate minutes and agendas, in the departmental template/format, a week before the meeting.</p> <p>Visitors are directed to appropriate staff member in a professional and efficient manner.</p>
1	Contributing to the research agenda and direction of the HIV Diversity Group	10	<p>Attendance of group meetings.</p> <p>Presentation at group research meetings and division as required</p> <p>Keeping up to date with current research /methodologies by attending seminars, reading journals, books etc.</p>	<p>Profile of HIV Diversity Group good</p> <p>Presentations prepared</p> <p>Knowledge of the literature</p>
2	Research	60	<p>Conceptualize, lead and execute research projects in HIV research.</p> <p>Assist with raising research funding through grant applications from appropriate national and international funding bodies.</p> <p>Management of projects such as, but not limited to, the BRILLIANT consortium, to ensure deliverables are met.</p> <p>Design and optimize computational tools to address research objectives;</p> <p>Train students, postdocs and other staff members to utilize these tools</p> <p>Present research findings at nationals and international meetings/conferences for peer review; present research findings to government and non-government bodies to impact policy development, write research papers.</p>	<p>Reports, research outputs, participation on conference calls and meetings.</p> <p>To increase grants awarded to UCT.</p> <p>To increase the capacity for producing high quality Doctoral graduates at UCT.</p>

3	Leadership, management and administration	15	<p>Perform administrative functions at Divisional, Departmental, Faculty and University level, if needed (eg: represent the division on a departmental committee). Co-ordinate and lead research related committees.</p> <p>Assist with line management of bioinformaticians.</p> <p>Coordinate administrative functions relating to the management of research projects (manage research teams, manage funding for research, monitor operational expenses, write progress reports etc)</p>	<p>To share responsibility and contribute to the smooth functioning of the HIV Diversity Group by managing those postgraduate students assigned to the incumbent.</p> <p>Ensure the smooth running of the research projects and maintaining the timely achievement of deliverables.</p>
4	Communicating research outcomes	10	Writing reports and manuscripts	Reports and manuscripts submitted timeously
5	Social responsiveness	As needed	Translate research findings into the community, for the benefit of the public, where relevant.	To translate research findings with the aim of promoting awareness and understanding of achievements in HIV prevention, treatment and diagnosis.
6	Good work environment within HIV Diversity Group	Ongoing	<p>Conducive work environment</p> <p>Good communication</p>	Group that collaborates well

MINIMUM REQUIREMENTS

Minimum qualifications	PhD in bioinformatics, computational biology or related field with at least 6 years of post PhD experience			
Minimum experience (type and years)	<ul style="list-style-type: none"> At least 6 years post PhD experience in bioinformatics with proficiency in Python, R or other coding language At least five publications in a relevant field. Good communication skills Good problem solving skills Ability to work well in a team 			
Skills	<ul style="list-style-type: none"> Advanced skills in Python and R Advanced skills in analysis of HIV sequences 			
Knowledge	<ul style="list-style-type: none"> Viral diversity and evolution Experience working with HIV related data / or viral pathogen genomics will be an advantage 			
Professional registration or license requirements	PhD in a relevant scientific field			
Other requirements (If the position requires the handling of cash or finances, other requirements must include 'Ability to handle cash or finances'.)	<ul style="list-style-type: none"> Project management skills Leadership skills 			
Competencies (Refer to UCT Competency Framework)	Competence	Level	Competence	Level
	Student service and support	1	Teamwork / leadership/collaboration	2
	Analytical thinking / Problem solving	3	Planning and organising	2
	Developing others	2	Written skills	2
	Planning and organizing / work management	2	Communication skills	2

SCOPE OF RESPONSIBILITY

Functions responsible for	<p>This is an academic post and the candidate would be expected to contribute to research; teaching and learning; management and leadership; and social responsiveness. This main purpose of this position is to deliver on the research objectives of the HIV vaccine projects within the group. The bulk of the work will be on analyzing HIV sequencing data to inform vaccine design. They will be involved in line management of certain functions of the bioinformatician. May be involved in the development and translation of bioinformatics tools for the projects within the broader research group. The incumbent is expected to write progress reports, and present research findings at local, national and international conferences.</p> <p>This person will be responsible for delivering on research objectives of the HIV vaccine projects within the group funded by SA MRC/USAID, NIH and the Gates foundation. The bulk of the work will be on analyzing HIV sequences to inform vaccine design. Taking a leadership role in the relevant working groups and committees of the consortium is expected.</p>
Amount and kind of supervision received	The candidate will work with the PI to refine, agree and prioritize the research objectives. Research outputs will be critically assessed and discussed.
Amount and kind of supervision exercised	The candidate is expected to ensure delivery of objectives on these projects in consultation with the PI. This position requires the person to be familiar with the relevant literature in the field, and to work independently to develop approaches to analyzing and visualizing large sequencing datasets generated within the group, as well as internationally. Furthermore, to apply these approaches to inform vaccine development.
Decisions which can be made	The successful candidate will play a leadership role in group meetings, workshops and advising on the organizational structure and running of the research group. The incumbent may be asked to contribute to grant writing for funding from national and international funding bodies. Furthermore, the candidate may also be required to contribute to public engagement initiatives run by the Division/Department/IDM, to report research findings to the community.
Decisions which must be referred	The following decisions are deferred to the PI: direction of the research project, decisions that have cost implications, scientific direction outside the scope of the project. New collaborations should be discussed with the PI, and any interaction that could have reputations impact on the research group should be deferred to the PI.

CONTACTS AND RELATIONSHIPS

Internal to UCT	ICTS, Finance Department and Procurement Office
External to UCT	Suppliers