HR191	**POSITION DESCRIPTION**	UNIVERSITY OF CAPE TOWN IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

NOTES

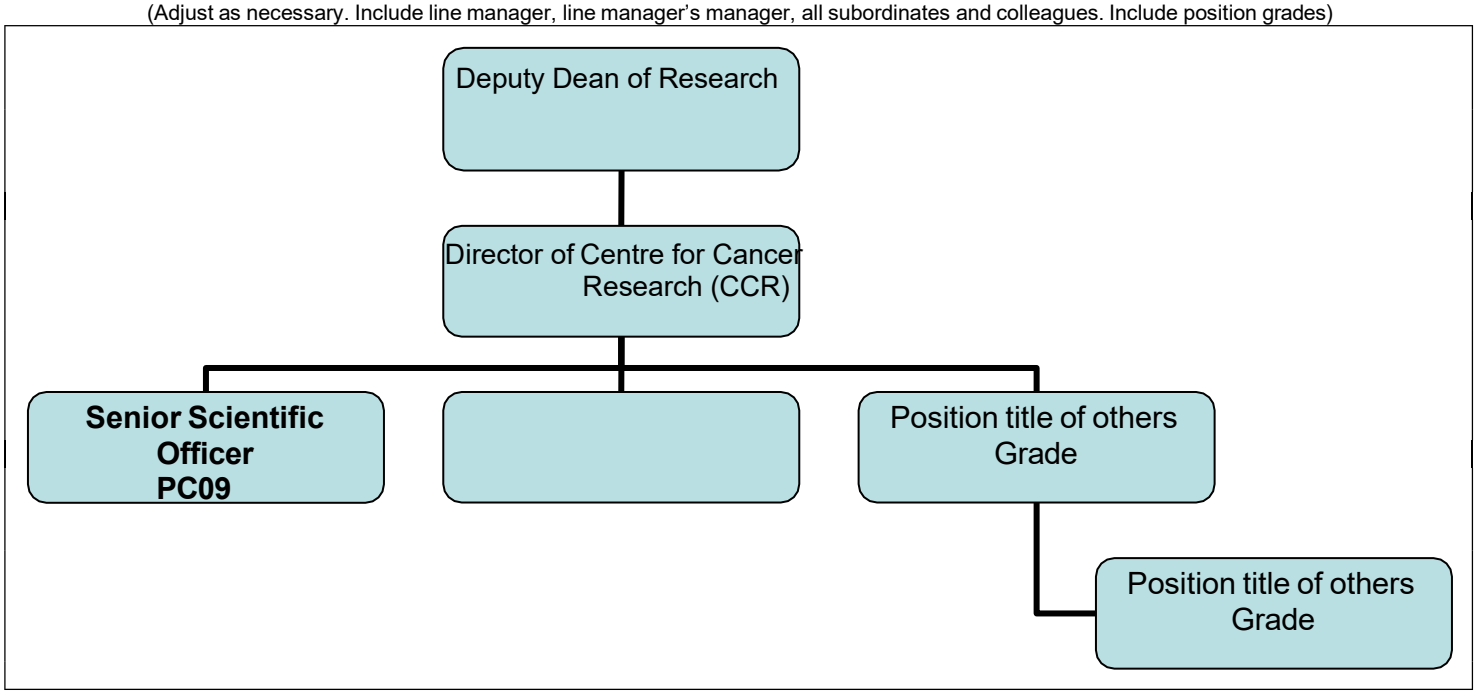
- Forms must be downloaded from the UCT website: http://forms.uct.ac.za/forms.htm
- This form serves as a template for the writing of position descriptions.
- A copy of this form is kept by the line manager and the position holder.

POSITION DETAILS

Position title	Senior Scientific Officer		
Job title (HR Business Partner to provide)			
Position grade (if known)	PC09	Date last graded (if known)	
Academic faculty / PASS department	Health Sciences		
Academic department / PASS unit			
Division / section			
Date of compilation	3rd April 2025		

ORGANOGRAM

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



PURPOSE

The main purpose of this position is:

Provide overarching laboratory management, ensuring a safe and efficient working environment for students and researchers in a molecular and cell biology setting. This includes establishing and supervising workflows involving patient samples, RNA/DNA isolation & handling techniques, protein extraction, isolation and analysis tools, and immortalization of patient derived probes by generating cell lines and organoid cultures. The Scientific Officer will train postgraduate students, postdoctoral fellows, interns, and visiting researchers in molecular and cell biology methods, and carry out experiments that contribute to scientific publications.

CONTENT

Key performance areas		% of time spent	**Inputs** (Responsibilities / activities / processes/ methods used)	**Outputs** (Expected results)
E.g.	General and office administration	25%	Takes, types up and distributes minutes and agendas for monthly departmental meeting. Greets visitors, enquires as to the nature of their visit and directs them to the appropriate staff member.	All staff members receive an electronic copy of accurate minutes and agendas, in the departmental template/format, a week before the meeting. Visitors are directed to appropriate staff member in a professional and efficient manner.
1	Establishment, management and maintenance of research laboratory	50%	• Oversee the upgrade and preparation of a fully functional molecular and cell biology laboratory for cutting edge oncology research. • Liaise with contractors and service providers to execute and complete work on the laboratory as indicated above. • Enforce proficient and safe laboratory practices by postgraduate students, postdoctoral fellows, and visiting/collaborating researchers. This includes teaching the correct procedures for handling, storing and disposing of hazardous reagents and waste. • Coordinate cleaning and laboratory housekeeping. • Overseeing the disposal of routinely generated hazardous waste. • Head and run the laboratory • Record all information regarding reagents used in the laboratory such as order details, applications, and safety. • Troubleshoot and solve any problems that impact the smooth running of the laboratory, such as problems with protocols, equipment, and infrastructure of the laboratory. • Coordinate servicing, calibration, and repair of laboratory instruments when necessary. • Provide technical support to staff/students/visitors for the use of specialized equipment. • Follow up on most updated SOPs. • Coordinating maintenance of instruments/devices/specialized equipment. • Discuss problems concerning products with suppliers.	• Efficient and safe operation of all laboratory functions is achieved. • Postgraduate students, postdoctoral fellows and visiting/collaborating researchers are aware of good laboratory practices. • Laboratory is maintained in good condition. • Databases of all chemicals and reagents, for ordering and reference purposes, are current and accessible. • Equipment is maintained in good working order to ensure projects run smoothly. • Ensuring that hazardous waste is handled and disposed of correctly and safely.

2	Teaching/training support	30%	• Be well acquainted with basic and advanced molecular and cell biology laboratory techniques as well as those relevant to cancer research. • Teach/train basic and advanced molecular and cell biology protocols to postgraduate students, postdoctoral fellows, and visiting/collaborating researchers. • Assist with supervision of postgraduate students, postdoctoral fellows, and visiting/collaborating researchers. • Compile SOPs for laboratory techniques. • Assist with collaborative research.	• Postgraduate students, postdoctoral fellows and visiting/collaborating researchers are equipped with the necessary technical expertise. • Postgraduate students, postdoctoral fellows and visiting/collaborating researchers can work independently and efficiently. • Quality of work produced by postgraduate students, postdoctoral fellows and visiting/collaborating researchers are of a high standard. • SOPs must achieve efficiency, quality output and uniformity of performance. • Contribute to the research outputs of the CCR.

3	Research support	10%	• Keep up-to-date with new laboratory technologies to support/improve research outputs. • Be fully trained in the monitoring and handling of rodents for research purposes. • Liaise with representatives from scientific manufacturers/suppliers to discuss new technologies and reliability/effectiveness of products. • Assist with grant and research paper writing, budget designs and reporting on progress for grants. • Assist with publications of studies started by postgraduate students/postdoctoral fellows who have left the laboratory by completing outstanding experiments. • Assist the Director of the CCR with fundraising.	• Efficiency in experimental research is improved. • Successful in-vivo research is achieved. • Contribute to the research outputs of the CCR. • Expand the repertoire of laboratory technologies and ensure that the laboratory remains up to date with current technology. • Contribute to attracting funding required for training of postgraduate students, postdoctoral fellows and visiting/collaborating researchers. • Contribute to attracting funding required for postgraduate students and postdoctoral fellows to carry out their research projects. • Contribute to accountability to funders.
4	General administration	10%	• Place orders and keep records of stocks. • Oversee all the funds and grants. • Filing documents including those related to reagents received through orders or requests from other researchers, equipment servicing and calibration records and invoices. • Organise campus access, desk and laboratory space for postgraduate students, postdoctoral fellows, and visiting/collaborating researchers. • Monitor and make payments for research services, including waste management, confocal microscopy, and animal husbandry.	• Laboratory stocks are current and accurately maintained. • Information and documentation is maintained in an orderly fashion and accessible to PI. • Application of funds is tightly controlled, and orders are efficiently timed. • Postgraduate students, postdoctoral fellows and visiting/collaborating researchers are successfully inducted into the laboratory environment.

MINIMUM REQUIREMENTS

Minimum qualifications	• MSc degree in Molecular and Cell Biology or a related discipline with at least 3 years of experience managing and supervising a molecular and cell biology research laboratory • **OR** • PhD degree in Molecular and Cell Biology or a related discipline with at least 2 years of experience managing and supervising a molecular and cell biology research laboratory
Minimum experience (type and years)	• Demonstrated experience in compliance related to relevant regulations • Experience in providing support and training undergraduate/postgraduate students in molecular and cell biology techniques • Experience with rodent experiments relevant to cancer research.
Skills	• Experience in mammalian cell culture; proficient with working with DNA, RNA and protein; including quality control and documented storage • Experience in performing experiments relevant to cancer biology including in vivo animal work • Experience with assistance in grant and research paper writing, budget designs and reporting on progress for grants • Computer literate and be fully competent in Microsoft Office (Word, Excel, PowerPoint) and be proficient in data interpretation and software for statistical analysis ability to operate relevant lab equipment • Effective communication and interpersonal skills
Knowledge	• Molecular and cell biology techniques. • Animal models for cancer research. • Engagement with suppliers of products for molecular and cell biology techniques. • Supervising postgraduate students.
Professional registration or license requirements	SAVC registered and authorized to monitor and handle rodents will be an advantage.
Other requirements (If the position requires the handling of cash or finances, other requirements must include 'Ability to handle cash or finances'.)	Immortalizing patient-derived probes. Honesty to handle cash or finances. Research ethics.

Competencies (Refer to UCT Competency Framework)

Competence	Level	Competence	Level
Follow up	2	Student Service and Support	2
Information management	2	Coaching / Developing Others	2
Building interpersonal relationships	2	Individual Leadership	2
Continuous learning	2	Decision-making/ Judgement	2
Professional knowledge and skill	2	Quality commitment/ work standards	2
Research support skills	2	Safety awareness	2
People management (including performance management and development)	2	Planning and organizing / work management	2
Stress tolerance	2	Teamwork / collaboration	2

SCOPE OF RESPONSIBILITY

Functions responsible for	General laboratory management. Ensuring a safe, efficient working environment for postgraduate students, postdoctoral fellows and visiting/collaborating researchers. Training and support of postgraduate students, postdoctoral fellows and visiting/collaborating researchers.
Amount and kind of supervision received	Moderate supervision received.
Amount and kind of supervision exercised	Moderate supervision received.
Decisions which can be made	Financial management and ordering. Ensuring safe research environment. Laboratory management.
Decisions which must be referred	Training of postgraduate students, postdoctoral fellows and visiting/collaborating researchers. Laboratory management.

CONTACTS AND RELATIONSHIPS

Internal to UCT	Full contact and relationships with all departmental academic and PASS staff as well as postgraduate students. Some contact with undergraduate students (HUB1006 and IBS1007S).

External to UCT	Liaising with representatives from scientific manufacturers/suppliers. Some contact with PI's collaborators and their postgraduate students.