



## UNIVERSITY OF CAPE TOWN / NATIONAL HEALTH LABORATORY SERVICE

### PROFESSOR/ASSOCIATE PROFESSOR AND HEAD OF DIVISION: MICROBIOLOGY DEPARTMENT OF PATHOLOGY FACULTY OF HEALTH SCIENCES

#### INFORMATION SHEET & JOB DESCRIPTION

#### UNIVERSITY OF CAPE TOWN

The University of Cape Town, founded 183 years ago, is one of the world's leading universities, and the highest ranked university in Africa. The University seeks to be "an outstanding teaching and research university, educating for life, and addressing the challenges facing our society". Part of its mission is to be an 'Afropolitan' university, by creating centres of research and teaching excellence that will bring together academics from South Africa, the rest of Africa and the world.

UCT is a medium-sized institution of some 25 000 students and 4 500 staff. Academically the University is divided into six Faculties (Commerce, Engineering and the Built Environment, Health Sciences, Humanities, Law and Science), the Centre for Higher Education Development and the Graduate School of Business. Teaching and research is underpinned by a number of Professional and Support Departments.

UCT's key strategic objectives include: to be research-led; to use its resources to contribute locally, nationally, regionally and internationally; to promote transformation in its institutional culture and in the composition of staff and students in order to address the inequities of the past; and to maintain itself as a medium-sized institution.

#### THE FACULTY OF HEALTH SCIENCES

Marking its 100th anniversary in 2012 as the oldest medical school in sub-Saharan Africa, UCT's Faculty of Health Sciences has a prestigious reputation for medical achievement and ground-breaking research that has impacted on health globally. It is also known for having trained some of the best health practitioners and health scientists internationally. UCT plays a vital role in advancing South Africa's health, by responding to local problems in the context of global health challenges through training, research and service. The Faculty Strategic Plan reflects the Primary Health Care approach, the will to engaged, policy-relevant and socially-responsive research and teaching, a commitment to transformation and a cultural identity in keeping with an Afropolitan institution.

The Faculty is composed of 13 academic departments, comprising Anaesthetics, Health and Rehabilitation Sciences, Health Sciences Education, Human Biology, Integrative Biomedical Sciences, Obstetrics and Gynaecology, Paediatrics, Primary Health Care Directorate, Pathology, Psychiatry, Public Health and Family Medicine, Radiation Medicine and Surgery. In addition, there are many research units, centres and institutes.

The Faculty has approximately 350 full-time academic, research and scientific/technical staff including 95 professors and associate professors, as well as 173 part-time academic, research and scientific/technical staff. Most academic staff members in the clinical disciplines are jointly employed by UCT and WCG, or by UCT and NHLS (pathology disciplines).

The Faculty offers undergraduate degree programmes in medicine, physiotherapy, occupational therapy and communication sciences as well as a large number of postgraduate degrees at diploma, honours, masters and doctoral levels (including medical specialisations). The number of students in 2011 totalled 3641, half of whom were postgraduate students. The main teaching hospitals are Groote Schuur Hospital and Red Cross Children's Hospital; student training also takes place at secondary and primary health care facilities in the broader Western Cape community.

The Faculty has a strong tradition of basic clinical health systems and public health research. Funding for research is available on a competitive basis from both the public sector- principally the Medical Research Council and the National Research Foundation - and international and local funders. Details of research in the Faculty are given in the University's annual research report [www.research2010.uct.ac.za](http://www.research2010.uct.ac.za).

### **DIVISION OF MICROBIOLOGY**

The Division of Medical Microbiology forms part of the Department of Pathology. The Department also hosts the Divisions of Anatomical Pathology, Chemical Pathology, Forensic Medicine, Haematology, Human Genetics, Immunology and Medical Virology. The Department of Pathology is situated within the Faculty of Health Sciences, Groote Schuur Hospital, The Red Cross War Memorial Children's Hospital and the Salt River Mortuary, and provides a comprehensive, pathology service, through partnerships between the University, the National Health Laboratory Service (NHLS), and Western Cape Government.

The NHLS is the largest diagnostic pathology service in South Africa with the responsibility of supporting the national and provincial health departments in the delivery of healthcare. The NHLS provides laboratory and related public health services to over 80% of the population through a national network of laboratories. The present joint agreement between the National Health Laboratory Service (NHLS) and the University provides for the clinical training of undergraduate and postgraduate students and for clinical service by staff. Many of the academic staff in the Division of Microbiology are joint appointment staff with the University of Cape Town and National Health Laboratory Service.

The Division of Medical Microbiology has a diagnostic laboratory, a clinical consultative service and a research laboratory. The NHLS Microbiology diagnostic laboratory is located at C18 in New Groote Schuur Hospital, while the research laboratory is on the adjoining the Faculty of Health Sciences campus. The diagnostic laboratory, which provides a comprehensive analytical service to Groote Schuur Hospital and other private and public sector hospitals, is equipped with modern and sophisticated instrumentation to allow best practice diagnostic testing. The diagnostic laboratory is accredited by the South African National Accreditation System (SANAS). There is a strong focus on clinical consultative services, including antimicrobial stewardship and infection prevention and control.

The academic teaching activities include undergraduate MBCHB teaching, as well as postgraduate training of Registrars, Honours, Masters and PhD students in Microbiological Pathology and Medical Microbiology. The Division's main teaching hospitals are Groote Schuur Hospital in Observatory and the Red Cross Children's Hospital in Rondebosch. There are currently four full time NHLS Medical Microbiologists as well as two medical scientists who are all joint academic staff members with UCT and play a role in teaching and training, including postgraduate training of registrars specializing in microbiological pathology, MSc and PhD students.

### **Research**

The Division has a dynamic research programme of international standing. It has a current focus on tuberculosis (pathogenesis, drug-discovery, diagnostics, epidemiology of drug-resistant TB, health systems

research), respiratory tract infections, the human microbiota, anaerobic infections and whole genome sequence-based molecular epidemiology of pathogens. The division works closely with the Institute of Infectious Disease and Molecular Medicine, with many of the staff being members of the Institute. Staff within the Division have active research funding from the major international and local funding bodies (NIH, Wellcome Trust, Bill and Melinda Gates Foundation, EDCTP, NRF, MRC). The Division hosts the Molecular Mycobacteriology Research Unit, and the DST/NRF Centre of Excellence, both led by Professor Valerie Mizrahi. Postgraduate student supervision is a particular strength with over 40 postgraduate students currently registered within the Division.

### **GENERAL CONDITIONS OF SERVICE**

#### **Study and research leave**

Permanent full time staff on academic conditions of services who fulfil the standard requirements of teaching and learning, research and administration are eligible to apply.

Study and research leave may be granted to a staff member to enable him/her to devote himself/herself to a period of uninterrupted study and/or research of a kind that will be of benefit to the University and scholarship generally.

#### **Professional Indemnity Insurance**

The University reserves the right to require appointees to clinical posts to carry personal professional indemnity insurance, at their own cost, through a group scheme, a designated scheme or an approved scheme, if they wish to engage in any private clinical practice.

#### **Medical Examination**

Appointment to the University's Retirement Fund (UCTRF) will be subject to a satisfactory medical report.

#### **General**

Appointment is subject to approval by, and in terms of, the agreement entered into between the University of Cape Town and the National Health Laboratory Service.

The University reserves the right to appoint a person other than one of the applicants, or to make no appointment.

## **JOB DESCRIPTION**

**JOB TITLE:**            **Head: Division of Microbiology**

**LOCATION:**             **Falmouth Building, Faculty Health Sciences**

*This permanent post is on the establishment of the University of Cape Town under the Joint Agreement with the National Health Laboratory Service.*

### **1. JOB PURPOSE**

To lead the Division of Medical Microbiology within the context of South Africa, the African Continent and Internationally. To have input into teaching, training, research and service provision including the assimilation, evaluation and translation of knowledge into minimum quality standards for the discipline to ensure that the investigation and diagnosis of disease within the discipline is conducted in accordance with current “best practice” throughout the NHLS. The essence of headship is to give academic leadership to the division, to be concerned about its scholarship, its teaching and its standards, to develop its staff, and to maintain a well-functioning academic unit.

### **KEY PERFORMANCE AREAS**

*The staff member undertakes to focus and to work actively towards the promotion and implementation of the Key Performance Areas within the policy framework and procedures of the University and the National Health Laboratory Service. The following is required:*

#### *1.1 Management and Leadership*

- Promote research, training and teaching in Medical Microbiology relevant to South Africa and the African continent
- Interface with National Health Laboratory Service and other stakeholders for the development of evidence-based guidelines for the practice of Microbiology
- Promote inter-disciplinary, multi-professional and inter-sectoral collaborative teamwork for the ongoing development of Microbiology through laboratory service, education and research initiatives
- Raise funding for ongoing, relevant and cutting edge research
- Responsible for staff planning (include succession planning), staff development, the development of a divisional employment equity plan (in consultation with the Departmental Transformation and Equity Committee), and the carrying out of this plan as well as measuring its performance.
- Support and endeavour to execute the joint and specific mandates of the NHLS
- Contribute to resource planning of UCT staff to ensure delivery of the teaching and research mandates.
- Contribute to resource planning of NHLS joint appointment staff to ensure delivery of the service mandate.

#### *1.2 Service*

- Coordinate the development of accessible, affordable and acceptable Microbiology services throughout the public sector and provide evidence through research that supports these initiatives.
- Develop and implement guidelines for the delivery of effective services for the NHLS across all levels of care (i.e primary, secondary and tertiary)
- Sustain relevant laboratory infrastructure to support efficient and appropriate services and research in the specific discipline;

- Initiate, develop and sustain community partnerships for the promotion of the division, and to ensure that community development is a two-way dynamic partnership that benefits all participants;
- Foster partnerships with the NHLS and Western Cape and National Departments of Health, and practitioners in the public and private health sectors;
- Accountable for the design, development and maintenance of the quality system that governs the laboratory and service components of the department to ensure compliance with the principles of Good Laboratory Practice and the fulfilment of SANAS accreditation requirements
- Sustain relevant laboratory infrastructure to support efficient and appropriate services and research
- Promote engagement with the national health care policies through teaching and research
- National coverage and support to regional hospitals with demonstrated capacity enhancement;

### 1.3 Research

- Develop a research strategy for Microbiology and enhance existing areas of excellence.
- Conduct cutting edge research. Support and supervise research projects at under- and / post-graduate levels in Microbiology
- Establish and promote research and development into potential new or enhanced technologies in order to improve the scope, quality, cost-effectiveness and turnaround times of diagnostic pathology service delivery within a setting of limited financial and human resources.
- Design, evaluate, review, revise and approve research and / or clinical trial protocols to ensure that the methodology is sound and divisional participation is appropriate to ensure that the research question is addressed in an adequate and efficient manner.
- Champion capacity building and dissemination of knowledge through the development and promotion of Continuing Professional Development (CPD) activities within the department and throughout the organisation, and by actively guiding policy development based on up-to-date knowledge and current accepted “Best Practice”, including active participation in NHLS Expert Committee activities and deliberations.

### 1.4 Teaching & Learning

- Develop and review appropriate undergraduate and postgraduate curricula (including courses, where relevant) for Microbiology which includes primary health care approaches, health service provision across different levels of health care
- Oversee selection of registrars and determine, review and update comprehensive learning objectives and training programmes, and develop a conducive registrar training platform
- Develop and sustain an active scientist (Honours, Intern, MSc, PhD, Postdoc) training programme
- Generate an academic environment that is conducive to student learning and staff development in order to fulfill the divisional obligations and responsibilities of the university, which includes providing academic staff for undergraduate and postgraduate teaching.
- Promote and facilitate intra- and interdisciplinary academic activities in line with the strategic vision of the Department of Pathology.
- Promote and facilitate the training of staff allied to service provision including registrars, technologists, or other relevant categories of staff.

*(The NHLS performance agreement for Medical Specialists is available on request)*

## **2. CHARACTERISTICS OF THE INCUMBENT**

### **Knowledge**

- Registered with the HPCSA as a specialist in Pathology (Medical Microbiology)
- In depth knowledge and expertise in the discipline of Laboratory Microbiology
- Skills and experience in undergraduate and post graduate teaching
- Knowledge of the health sector and its services as it pertains to Microbiology
- Knowledge of research methods, including molecular microbiology and other methods relevant to research in Medical Microbiology

### **Skills and Abilities**

- Excellent leadership qualities
- Research skills including proven ability to generate high impact research outputs as a principal investigator
- The ability to lead a multi-disciplinary team,
- Skills and experience in under and post-graduate teaching
- Ability to build and maintain effective partnerships and relationships with internal and external stakeholders
- Ability to consult and mentor
- Ability to identify and translate strategic needs into a practical set of objectives and action plan
- Proven track record of research
- Proven ability to generate funds for research

### **Qualifications and experience**

- MMed/FC Path or equivalent relevant to the discipline (Microbiological pathologist);
- Registration with HPCSA as health professional in the applicable discipline
- Minimum seven (7) years postgraduate experience of which at least four (4) years at senior level with demonstrable experience of managing a diagnostic laboratory.
- Prior formal involvement in undergraduate and postgraduate teaching at a tertiary academic institution is desirable
- Excellent research record is essential
- Prior supervision of postgraduate research at the level of Master's Degree or higher is desirable.