



UNIVERSITY OF CAPE TOWN / NATIONAL HEALTH LABORATORY SERVICE

PROFESSOR or ASSOCIATE PROFESSOR AND HEAD: DIVISION OF HUMAN GENETICS DEPARTMENT OF PATHOLOGY FACULTY OF HEALTH SCIENCES

INFORMATION SHEET & JOB DESCRIPTION

UNIVERSITY OF CAPE TOWN

The University of Cape Town, founded in 1829, is one of the world's leading universities, and ranked the highest in Africa. The University seeks to be "an outstanding teaching and research institution, educating for life, and addressing the challenges facing our society". Part of its mission is to be an 'Afropolitan' institution, 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 30 000 students and 5 000 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 are underpinned by 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, policy-relevant and socially-responsive research and teaching, a commitment to transformation and a cultural identity in keeping with an institution with African roots.

The Faculty is composed of 14 academic departments, comprising Anaesthesia & Perioperative Medicine;; Health and Rehabilitation Sciences; Health Sciences Education; Human Biology; Integrative Biomedical Sciences; Obstetrics and Gynaecology; Paediatrics and Child Health; Family, Community and Emergency Care; Pathology; Psychiatry and Mental Health; Public Health; Radiation Medicine and Surgery. In addition, there are many research units, centres and institutes.

The Faculty has approximately 2 000 full-time academic, research and scientific/technical staff including over 100 professors and associate professors, as well as over 200 part-time academic, research and scientific/technical staff. Most academic staff members in the clinical disciplines are jointly employed by UCT

and the Western Cape Government (WCG), or by UCT and the National Health Laboratory Service (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). In Health Sciences, in more recent years, our student demography reflects a largely postgraduate Faculty. 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.

The Division of Human Genetics is established in the Faculty of Health Sciences at UCT in terms of the joint agreement between the University, the Provincial Government of the Western Cape and the NHLS. The Division is located in the Department of Pathology together with the Divisions of Chemical Pathology, Anatomical Pathology, Haematology, Immunology, Forensic Pathology, Virology and Medical Microbiology.

Research activities within the Division focus on translational research into common genetic disorders including hereditary forms of blindness, deafness, , colorectal cancer, sickle cell disease, epilepsy, neurological and neuropsychiatric diseases, and pharmacogenomics as well research into the ethical and social aspects of the discipline. Some of these research programmes are based within the Institute of Infectious Disease and Molecular Medicine (<http://www.idm.uct.ac.za/>). The current staff within the Division of Human Genetics includes Professors, Associate Professors, lecturers, and scientific and technical support staff (scientific officers, technologists, nurses) and administrative support staff. In addition, the Division hosts several postdoctoral fellows, 10 Honours, 43 Masters and Doctoral postgraduate students.

This post is offered in partnership with the NHLS which is responsible for the provision of both a diagnostic and research service across the Western Cape province, and nationally.

Requirements of the Post

The successful applicant should be a scholar of distinction and will have demonstrated academic excellence as measured by his/her research record, publications and the successful supervision of candidates for higher degrees. A PhD in an appropriate field and/ or being a specialist Medical Geneticist or Genetic Counsellor registerable with the Health Professions Council of South Africa is preferable.

The primary responsibilities of the Division lie in research, teaching, diagnostic services and in supporting medical genetic and genetic counselling services.

Teaching and Training

The University attaches great importance to teaching and training, and the Head will be responsible for these activities of the Division. The incumbent will facilitate the strengthening of Human Genetics within the MBChB curriculum and be responsible for the establishment and expansion of further courses as well as sustaining and growing a strong postgraduate programme.

Research

The Head will be expected to undertake, lead and stimulate research in the Division. Basic and applied research in Human Genetics may include studies on human diseases relevant to the African continent. Inter-and multidisciplinary approaches and the exploitation of 'omics approaches are strongly encouraged. There is also a growing incorporation of bioinformatics and big data analytics as well as artificial intelligence in the field of Human Genetics and genomics.

The candidate is expected to generate research support from local and international funding agencies. Grants from the University and the NHLS are available on application to enable staff to present papers at congresses and conferences within and outside South Africa.

Members of the academic staff on University conditions of appointment are eligible for regular study and research leave privileges. This usually takes the form of six months leave on full pay after three years, or one year after six years. Travel grants are offered by the University to assist members of staff proceeding overseas on research leave. As an alternative, a member of the academic staff may apply to use a portion or all of their study and research leave credit for short period research contacts, under the University's contact leave scheme – this provides assistance towards the cost of overseas travel.

Diagnostic Service

The Division within the NHLS provides a comprehensive laboratory diagnostic service in the areas of cytogenetics and molecular genetics. In addition, the Division provides a consultative medical genetics service for many hospitals and laboratories in the region.

The main purpose of this position is to provide strategic leadership in the promotion of the discipline of Human Genetics in terms of academic and service excellence to uphold and enhance the reputation of the University of Cape Town and the NHLS. The Head of the Division of Human Genetics will demonstrate vision, management skills and the development of continuous improvement initiatives in achieving the objectives of the Division of Human Genetics.

Clinical medical genetic and genetic counselling service

The Medical Genetics (clinical) unit provides service to the public sector and is formally within the Department of Medicine at UCT, but there is a close collaborative working relationship of this unit and the other members of the Division of Human Genetics. In addition, some aspects of the service such as that provided by the teaching staff, senior students and NHLS-employed genetic counselling interns fall under the line management of the Head of Division of Human Genetics.

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 them to devote themselves 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 Human Genetics**

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, consolidate and manage the Division of Human Genetics within the context of South Africa, the African continent and internationally.
- To make input into teaching, training, research and service provision including the assimilation, evaluation and translation of knowledge into 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 grow it into 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 NHLS. The following are required:

1.1 Leadership and Management

- Provide effective and strategic leadership and management of research, teaching, administrative and clinical/laboratory service activities / programmes within the Division of Human Genetics, relevant to South Africa and the African continent.
- Participate in the strategic promotion and management of Departmental activities together with other HoDs within the Department of Pathology at UCT/NHLS.
- Develop and sustain consultation structures for effective interaction with staff within the Division of Human Genetics and provide leadership and management in matters of employment.
- Interface with NHLS and other stakeholders (e.g. Western Cape Department of Health) for the development of evidence-based guidelines for the practice of Human/Medical Genetics.
- Promote inter-disciplinary, multi-professional and inter-sectoral collaborative teamwork for the ongoing development of Human Genetics through clinical and laboratory services, education and research initiatives.
- Provide active leadership in formulating and implementing strategies for the promotion and advancement of the discipline of Human Genetics at UCT and in the PGWC and NHLS at local, regional and national levels.
- Raise funding for relevant research in Human Genetics.
- Responsible for staff planning (including succession planning), staff development, the development of a Divisional employment equity plan (in consultation with the Department of Pathology), and execution of this plan.
- Support and endeavour to execute the joint and specific mandates of the PGWC and the NHLS.
- Contribute to resource planning of UCT and joint staff to ensure delivery of the clinical, teaching and research mandates.
- Contribute to resource planning of NHLS joint appointment staff to ensure delivery of the service mandate.
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1.2 Teaching & Learning

- Develop appropriate curricula (including courses, where relevant) for Human Genetics which includes primary health care approaches, issues of diversity, inclusivity and transformation, issues related to human rights/equity and health service provision across different levels of health care.
- Develop and sustain an active Medical Genetics, Medical Scientist (Honours, Intern, MSc, PhD, Postdoc) and MSc(Genetic Counselling) training programme.
- Generate an academic environment that is conducive to student learning and staff development to fulfil 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.
- Develop new and improved training methods to support the student population of today.

1.3 Research

- Lead an independent and competitive research programme to promote and foster research output of international standard.
- Initiate and obtain resources from local and international funding agencies and administer resources in accordance with the rules of the contract and the governing rules of UCT.
- Actively pursue, initiate and facilitate local and international collaborations to improve Divisional research infrastructure, scientific research output and development and training of personnel.
- Enhance the visibility of the Division through local and international peer-reviewed publications, presentation at, participation in and facilitation of local and international scientific platforms including conferences workshops and symposia and the generation of patents.
- Supervise postgraduate students and post-doctoral fellows undertaking assigned scientific projects towards the fulfilment of their degrees where applicable.

1.4 Services

- Coordinate the development of accessible, affordable and acceptable Medical Genetics services and provide evidence through research that supports these initiatives.
- Develop and implement guidelines for the delivery of effective laboratory diagnostic services for the NHLS
- Sustain relevant laboratory infrastructure to support efficient and appropriate services and supporting translational research in Human Genetics
- Foster partnerships with the NHLS and Western Cape and National Departments of Health, and practitioners in the public and private health sectors
- Be accountable for the design, development and maintenance of the quality system that governs the laboratory and service components of the Division to ensure compliance with the principles of Good Laboratory Practice and the fulfilment of SANAS accreditation requirements
- Promote engagement with the national health care policies through clinics, teaching and research
- National coverage and support to regional hospitals with demonstrated capacity enhancement

2. CHARACTERISTICS OF THE INCUMBENT

Knowledge

- In-depth knowledge and expertise in the discipline of Human Genetics
- Skills and experience in undergraduate and post graduate teaching
- Knowledge of the health sector and its services, health equity and human rights for health as it pertains to Human/Medical Genetics
- Knowledge of research methods including knowledge as it pertains to the science of the discipline

Skills and Abilities

- Excellent leadership qualities
- Research skills and the ability to lead a multi-disciplinary team of researchers
- 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

- Registration (or meet the requirements for registration) with HPCSA as a health professional (if clinically trained)
- A PhD in an appropriate related field and/or a medical genetics specialist qualification.
- Evidence of a productive research record
- An internationally reputed record of peer-reviewed publications
- Prior supervision of postgraduate research up to the level of PhD
- Previous experience in teaching in Human Genetics up to PhD level.
- Demonstrated ability to communicate effectively, in writing and orally.
- Ability to collaborate effectively with diverse colleagues and students and to work well in a team.
- Ability to work autonomously, under pressure, and meet deadlines.
- Good administrative and organizational skills