

DEPARTMENT OF MEDICINE

(Incorporating the UCT Bioethics Centre, MRC/UCT Ischaemic Heart Research Unit, MRC/UCT Liver Research Centre, MRC/UCT/UWC Research Unit for Traditional Medicines and the World Health Organisation Collaborating Centre for Drug Policy, Albertina and Walter Sisulu Institute for Aging in Africa and Desmond Tutu HIV Research Centre)

HEAD OF DEPARTMENT - Professor RE Kirsch

DEPARTMENTAL CONTACT DETAILS

Postal Address: Department of Medicine

University of Cape Town Medical School

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Cape Town

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DEPARTMENTAL PROFILE

The Department incorporates 6 research Units: the UCT Bioethics Centre, the MRC/UCT Liver Research Centre, MRC/UCT/UWC Research Unit for Traditional Medicines and the MRC/UCT Ischaemic Heart Disease Research Unit; The Albertina and Walter Sisulu Institute for Aging in Africa and the Desmond Tutu HIV Research Centre, 18 divisions or clinics: Cardiology, Clinical Haematology, Critical Care, Dermatology, Endocrinology and Diabetology, Emergency Medicine, Gastroenterology, Geriatrics, the Hypertension Clinic, Infectious Diseases, Immunology, Lipidology, Pharmacology, Neurology, Pulmonology, and Rheumatology; and the Departments of Internal Medicine – at Groote Schuur, Conradie, Jooste, Somerset, and Victoria Hospitals.

The Department of Medicine was the second in the "top 20 Departments producing the most Department of Education accredited journal publications during 2002". The fact that this was achieved despite nearly a decade of severe cuts in the budgets of our teaching hospitals and the loss of nearly 50% of our teaching and research establishment is an indication of the commitment of our staff to the values of the University of Cape Town and the future of science in South Africa.

STATISTICS 2004

PERMANENT &LONG TERM CONTRACT STAFF

Professors	12
Associate Professors	20
Senior Lecturers/lecturers Full-time	27
Administrative and clerical staff	28
TOTAL	87

HONORARY STAFF	
Honorary Professors	2
Emeritus Professors	3
Honorary Associate Professors	1
Honorary Senior Lecturers	19
Honorary Research Associates	4
TOTAL	29

STUDENTS

Doctoral	35
Masters	134
Undergraduates	1014
TOTAL	1183

RESEARCH FIELDS

See Units and Divisions within the Department

Professor R E Kirsch: Medical education, health services, porphyria, hepatitis, infection and liver disease, cardiovascular manifestations of portal hypertension

UCT BIOETHICS CENTRE

DIRECTOR – Professor S.R. Benatar

CONTACT DETAILS

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DEPARTMENTAL PROFILE

We were awarded a Grant of US \$177,000 for the second year of our IRENSA Programme. The 12 participants admitted in 2004 to our Post-Graduate Diploma in International Research Ethics Programme came from 7 Universities in SA and 4 countries in Southern Africa. As in 2003 the Course comprised four modules, take-away assignments based on activities in the home institution's research ethics environment and a practicum. Our 12 mid-career colleagues were a highly enthusiastic group from throughout the country, as well as from Botswana, Kenya, Uganda and Tanzania. Three have a PhD degree in their discipline, 3 are Department Heads or Directors, most serve on Research Ethics Committees – and 5 hold senior positions on their Committees. We expanded our Faculty to incorporate Prof Len Doyal of St Bartholomews, London. He was a most stimulating teacher. Our website remains in a development stage and we hope to considerably improve it in the year ahead. (www.irensa.org). We presented our Second Annual IRENSA Research Ethics Seminar on 3rd and 4th August 2004, targeting members of Research Ethics Committees, with a Faculty drawn from throughout the country. This was very well received with 130 registrants and 113 people in attendance. The topics for this year were: "The Ethics of Research in Children"; "Reviewing Qualitative Research Ethics Proposals"; "Financial Conflicts of Interest within Research"; "Ethical Issues in HIV/AIDS".

STATISTICS 2004

PERMANENT AND LONG-TERM CONTRACT STAFF

Professor	1
Admin/secretarial	1
TOTAL	2

HONORARY STAFF

Honorary staff	22
TOTAL	22

RESEARCH FIELDS

Prof Solly Benatar

Research Ethics (including International Research Ethics) and Global Bioethics

Prof David Benatar

Moral Philosophy and Applied Ethics

Dr Lesley Henley

End of life decisions – with special reference to a children's hospital

Dr Paul Roux

The Impact of Informed Consent with regard to HIV/AIDS in a children's hospital

Dr Terry Fleischer

Resource Allocation / Priority setting within the context of shrinking resources

Dr Steve Andrews

Informed Consent in a multicultural setting

CARDIOLOGY (Cardiac Clinic)

HEAD OF DIVISION - Professor P J Commerford

CONTACT DETAILS

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DEPARTMENTAL PROFILE

The Cardiac Clinic provides an in- and outpatient clinical service in cardiology and training for registrars in the subspeciality. Research activities are predominantly clinical including evaluation of new pharmaceutical agents and adaptations of practice to suit local conditions. Professor Mayosi's group, in cooperation with the Division of Human Genetics and Directorate of Primary Health Care, is actively investigating aspects of the genetics and epidemiology of heart disease.

STATISTICS 2004

PERMANENT AND LONG TERM STAFF

Professor	1
Associate Professor	2
Senior Lecturers	3
Part-time Senior Lecturer	1
Registrars-in-training	3
Secretarial Staff and Research staff	6
Technologists	3
ECG Technicians	8
Honorary staff	1
Nursing staff	17
Radiographers	4
GSH Administrative	5
TOTAL	54

STUDENTS

STUDENTS	
Learner Technologists	2
Post-doctoral Fellow in Genetics	1
PhD	2
Masters	1
Research Fellow in Epidemiology	1
TOTAL	7

RESEARCH FIELDS

Professor PJ Commerford

Heart Failure; Acute Coronary Syndromes; Epidemiology; Treatment

Professor RN Scott Millar

Arrhythmias; Pacemakers; Electrophysiology

<u>Dr AM Okreglicki</u> Arrhythmias; Pacemakers; Electrophysiology

Dr BN Levetan

Follow-up on all patients receiving a local stent design

<u>Professor BM Mayosi</u> Genetics and Epidemiology of Heart Disease

Dr M Ntsekhe

Pericarditis and infectious diseases

DIVISION OF CLINICAL IMMUNOLOGY

HEAD OF DIVISION – Associate Professor SR Ress

CONTACT DETAILS

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DEPARTMENTAL PROFILE

Division of Clinical immunology continues to provide specialised diagnostic service to Groote Schuur and related teaching hospitals, including investigations for the evaluation of immune function in patients with suspected immune deficiency. Research activities are focussed on the evaluation of cellular immunity in tuberculosis. TB basic research evaluates protective immunity of cytotoxic T-cell activity. The NIH subcontract study is to be commenced that will evaluate the efficacy of aerosolised rIFN-γ1b versus subcutaneous route, in a RCT in moderate pulmonary tuberculosis (TB) patients, together with collaborators in New York and UCT lung institute. These data could provide novel targets and form the basis for additional clinical interventions.

Professor Ress attended the ICI in July where he was elected for a further 3 years as a IUIS council member, and visited collaborators in USA at NYU.

STATISTICS 2004

PERMANENT AND LONG-TERM STAFF

Associate Professors	1
Research officer	1
Research Staff-senior scientific officer	1
Laboratory technical staff	3
Technical support staff	1
TOTAL:	7

STUDENTS

PhD student	1
TOTAL	1

RESEARCH FIELDS

Professor Stanley Ress

Immunology of tuberculosis, BCG vaccination, and Lipid disorders.

Dr MM Keraan

Immunology of Lipid disorders and tuberculosis.

M Watkins

Immunology of TB, BCG vaccination

PL Semple

Immunology of TB

DIVISION OF CRITICAL CARE

CLINICAL DIRECTOR AND HEAD - Professor Eric Bateman

CONTACT DETAILS

Postal address: Division of Critical Care

Ward C27

Groote Schuur Hospital OBSERVATORY 7925

Telephone: 406.6901

DEPARTMENTAL PROFILE

In keeping with international trends, the Faculty and Groote Schuur Hospital Management in November 2003 approved the establishment of a multi disciplinary Department of Critical Care as a clinical service and academic unit within the School of Adult Medicine. The clinical service comprises the combined functions of the Respiratory, Source Isolation, Surgical, Neurosurgical, Spinal, Acute Spinal Injury and Cardiothoracic Intensive Care Units. Professor Eric Bateman was appointed Clinical Director and Head and Dr WL Michell Deputy Clinical Director. Over the past year clinical and administrative function has been consolidated, and an administration centre has been established in ward C27. The teaching programmes for the several categories of health professionals that receive training in the Department are being developed; these include:

- Subspecialty training for pulmonologists and critical care specialists
- Specialty training in critical care for registrars in anaesthesia, internal medicine, surgery, cardiothoracic surgery, emergency medicine
- Post-basic training for nurses in critical care nursing
- Under-graduate training of nurses in critical care
- Undergraduate MBChB training in basic critical care
- Undergraduate training of students in professions allied to medicine
- Undergraduate training of student clinical technology students specializing in critical care technology
- Post-graduate training for critical technologists taking a Batchelor of Technology degree
- Undergraduate and postgraduate training of paramedics

STATISTICS 2004

PERMANENT AND LONG-TERM STAFF

Consultant staff	13
Clinical technologists	4
Research assistant	1
TOTAL:	18

RESEARCH FIELDS

Associate Professor WL Michell

Audit of admissions to the Surgical ICU.

Dr RI Raine

Surfactant therapy in respiratory failure

Dr I Joubert

Crystalloid resuscitation and replacement fluids with respect to their impact on acid-base balance and strong-ion difference.

Richard van Zyl Smit ICU Audit at JF Jooste Hospital

 $\frac{R\ Gillespie}{Nutrition\ in\ the\ ICU\ (In\ association\ with\ Ms\ L\ Hill),}$

 $\frac{\text{Ms L Hill}}{\text{Corticotropin-releasing factor in acute traumatic injury}}$

DIVISION OF DERMATOLOGY

HEAD OF DIVISION - Professor Gail Todd

CONTACT DETAILS

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DEPARTMENTAL PROFILE

The division actively contributes to the development of the Phase III curriculum. A portfolio of in-course training, including clinical competency in procedures essential to the practice of dermatology, is being developed. Student interns continue to rotate through the division. These two-week rotations are a great success with the interns and have received approval from the HPCSA. We designed and implemented the section on occupation skin disease for the Diploma in Occupational Health of the Department of Public Health, a distance-based learning program. Our own teledermatology service and distance-based teaching platform has been initiated as part of a collaborative project with Professor Roy Colven, a Fulbright Fellow, of the Harborview Medical Centre, Seattle in the USA. It forms part of a telemedicine network in collaboration with the Medical Research Council, Provincial Governments and the University of Cape Town. Seven nurses successfully completed the Dermatology Nurse Diploma Course run in collaboration with the Division of Nursing of the University of Cape Town for the first time in 2004. This course is being upgraded to a full University of Cape Town diploma. Dermatology nurse run services are offered in Westfleur (Atlantis), Hout Bay, Mitchell's Plain and Ocean View and they are gradually being incorporated into our teaching as Primary Health Care teaching nodes. Similar services are operating in Gauteng, Umtata, Zimbabwe, Lesotho, Botswana and Zambia as a result of our training course. In line with the 2010 health plan for the Western Cape we are acting as lead physicians in the development of community based patient care. The University of Cape Town, Skin & Hair Centre at the UCT Lung Institute provide a complementary service for colleagues in private practice offering specialist referral services and facilities for outpatient management of skin diseases. Professor Gail Todd was part of an outreach lecture and clinical service programme to Botswana as a guest of the Leprosy Mission, Africa and the Botswana Government. Dr Khumalo initiated formal outreach dermatology teaching at Unitra. A regular outpatient clinic and teaching plan incorporating the two dermatology-trained nurses at the hospital, as the regular care-providers, has been established. Dr Pat Lawrence developed an extremely successful, dedicated outpatient paediatric dermatology service at Red Cross Hospital. The special clinic with the basic facilities necessary for a dermatology outpatient services was formally opened in 2004. The equipment and furnishings for the unit have been financed by a donation from the Crescent Fund Trust. They have also provided seed funding for the appointment of Nurse Lucia Volkwyn as the nurse educator of the unit for two years. Unfortunately Dr Lawrence has resigned from the public service and her input and collegiality will be sorely missed. The excellent service and good will she created in the School of Adolescent and Child Health has meant that a full time paediatric dermatology consultant will be appointed in 2005. Their aim will be to develop a full tertiary inpatient and outpatient Paediatric Dermatology service at Red Cross Hospital, establish an outreach consultancy, develop a diploma in Paediatric Dermatology and undertake appropriate research and student teaching as part of the Division of Dermatology and the School of Adolescent and Child Health.

Divisional teamwork has made the substantial contributions of 2004 possible as, in addition to teaching, our division and its staff of 13 doctors and 12 nurses, are responsible for 72,000 patient contacts per annum. The selfless efforts of the supernumerary staff and many visitors to South Africa need to be recognised. Without their help, access to dermatology services would be limited and the division unable to meet basic demands especially in the past year when sessional staff support was severely curtailed. Visitors and unpaid staff who deserve special mention include Dr Ulrike Raabe, Dr Fatima Al-Maamari, Dr Sean Christians and Dr Samantha Eisman, our willing team of supernumerary registrars, and Dr Jackie Dyche, Professor Roy Colven and Dr Abe Collison.

DEPARTMENTAL STATISTICS 2004

PERMANENT AND LONG TERM CONTRACT STAFF

Associate Professors	1
Senior Lecturer (full-time)	1
Senior Lecturers (part-time, 5/8)	2
(part-time, sessional)	2 1/2
Research Staff	5
Administrative and clerical staff	2
Honorary Lecturers	3
TOTAL	16 1/2

STUDENTS

Doctoral	1
Masters	9
Undergraduate	1228
TOTAL	1237

RESEARCH FIELDS

Associate Professor Gail Todd:

Prevalence and cost of childhood atopic dermatitis in rural, urban and peri-urban settlements around Cape Town, South Africa, collaborative project with the University of Nottingham; Occupational dermatoses amongst miners, collaborate project with SIMRAC and Occupational and Environmental Unit of the University of Cape Town; Patch testing and atopic eczema, collaborative study Dermatology Departments in UK, Tanzania and South Africa; All aspects of vitiligo especially national epidemiology and cancer risk.

Dr Susan Jessop

Treatments for discoid lupus erythematosus in collaboration with the Departments of Dermatology and Rheumatic Diseases Unit, University of Stellenbosch; Melanoma epidemiology in collaboration with the Division of Oncology and CANSA; Evidenced-based dermatology in collaboration with the Cochrane Skin Group as a lead editor, Nottingham UK; Medical education and convenor of the special study modules.

Dr Laduma Ngwanya

Dermatopathology; Diseases of the hair and nails. North American Hair Research Society African representative.

Dr Patricia Lawrence

Paediatric dermatology and the treatment of atopic eczema.

HONORARY STAFF

Honorary Lecturers: Emeritus Professor Norma Saxe (epidemiology of melanoma), Dr I. Webster (laser therapy), CPN Nora Christians (community dermatology – convenor of the dermatology nurse course).

REGISTRARS

Dr G Gottschalk

Molecular basis of vitiligo.

Dr H Omar

Incidence of skin disease amongst trainee hairdressers.

H Lehloenya

Drug reactions and hypersensitivity testing.

Dr M Penny (5/8 supernumerary women's training post)

Skin signs of chronic diarrhoea and their relationship to HIV infection.

Dr S Pather (5/8 supernumerary women's training post)

Cost effective treatment of tinea capitis.

Dr S Christians (supernumerary registrar and MRC post-intern fellow)

Epidemiology of itchy skin diseases in informal settlements in the Western Cape.

Dr U Raabe (supernumerary registrar)

Allergic response in atopic eczema.

Dr S Eisman (supernumerary registrar)

Dr F Al-Mammari (supernumerary registrar)

RESEARCHERS

Professor Roy Colven, University of Washington School of Medicine, Seattle, USA (Fulbright fellow).

Teledermatology service in South Africa.

Dr Nonhlanhla Khumalo (post doctoral PhD fellow)

Basic research on African hair and hair disorders. Blistering dermatoses. Evidenced-based dermatology.

L du Toit (CPN – part-time)

Comparative study of phototherapy responses in the Northern and Southern hemispheres, collaborative project with the University of Dundee, Scotland, UK; Qualitative research in dermatology.

P. Kelly (CPN – part-time)

Follow-up study on post-graduate dermatology nurses.

L Volkwyn (Paediatric nurse educator – Oasis day-care centre, Red Cross Hospital)

Allergic response in atopic eczema.

S. Woods (IT consultant – part-time)

Development and maintenance of dermatology databases and teaching slides.

VISITORS

Professor Henning Grossman, Regional Dermatology Training Centre, Moshi, Tanzania; Professor CL Goh, Singapore; Professor Peter S Friedmann, South Hampton; UK, Mr Ockie Kruger, African Director, Leprosy Mission, Pretoria; Professor Roy Colven, Harborview Medical Centre, University of Washington School of Medicine, Dermatology Section, Seattle, USA; Dr Jackie Dyche, Barts and The London, UK; Mr Harry Basdeo, Smith & Nephew, Health-care Division, KZN.

DERMATOLOGY NURSE GRADUATES 2004

Nurse Lynne Kennedy, Groote Schuur Hospital, Cape Town; Nurse Catherine Chavula, Lilongwe Central Hospital, Malawi; Nurse Mtolo, Rietvlei Hospital, Eastern Cape; Nurse Hleziphi E.N. Matola. Umtata; Nurse Magdalena Klem, Hermanus; Nurse Phuti Rebecca Phoffe, Polokwane; Mr Oliver Bekumzi Kumene, Rietvlei Hospital, Eastern Cape.

ELECTIVE STUDENTS

Hans Giard, The Netherlands; Joris Van der Heijden, The Netherlands; Lenneke De Visser, The Netherlands; Nabeel Shaik, Pakistan.

DIVISION OF ENDOCRINOLOGY & DIABETIC MEDICINE

HEAD OF DIVISION - Associate Professor N S Levitt

CONTACT DETAILS

Postal Address: Divisions of Endocrinology & Diabetic Medicine

Department of Medicine Faculty of Health Sciences

Observatory

7925

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DEPARTMENTAL PROFILE

The Division provides an inpatient and outpatient clinical service and sub-speciality training in adult endocrinology and diabetes. During the past year the division has provided training for a number of recipients of International Diabetes Training Fellowships for sub-Saharan Africa. The Division of Diabetic Medicine runs a variety of diabetes clinics that provide advice on control and management of problem patients, initiate insulin therapy and coordinate the various facilities required in the long-term follow up of patients. The re-development of these clinics into a Diabetes Training Centre is still being pursued against difficult odds in order to develop a tertiary referral point for primary and secondary health services in the community. Specialist Diabetes Education Sisters educate in- and outpatients regarding self-care management of diabetes as well as providing formal instruction to junior and senior nursing staff as part of an in-service training programme. Large patient numbers continue to overwhelm the type 2 diabetes clinics. A Young Adult Type 1 diabetic clinic initiated by Dr Philotheou is superbly run by Dr Wormald. Dr Philotheou heads the Adolescent Diabetic Clinic with the help of Dr Wormald. These clinics provide a true tertiary service. The specialist diabetes educators provide 24 hour support for our patients with diabetes. The service provided by the Division of Endocrinology includes a small number of inpatient beds, a referral service for inpatients, weekly Thyroid, New Patient and Follow up Endocrine Clinics as well as twice monthly Pituitary Clinics. The Thyroid Clinic staffed by members of the Endocrine service and the Department of Surgery facilitates integrated patient management. The multidisciplinary Pituitary Clinic run in conjunction with the Departments of Neurosurgery and Radiotherapy continues to provide an integrated approach to the management of patients with pituitary tumours.

STATISTICS 2004

PERMANENT AND LONG TERM STAFF

Associate Professor	1
Senior Lecturer (Hon)	1
Lecturer	1
Senior Registrar in training	1
Administrative and Clerical Staff	1
TOTAL	5

RESEARCH FIELDS

Associate Professor N S Levitt

Diabetes and hypertension health systems research; genetics of diabetes, mechanisms for and prevention of complications of diabetes, the foetal origins of chronic diseases and the glycaemic index of foods.

Dr A Philotheou

Clinical Director, Diabetes Clinical Trials Unit

Psychosocial adaptation in youth-onset diabetes; phase II/III head-on comparison of insulin analogue studies; evaluation of a continuous subcutaneous glucose measuring device; phase I PK/PD and immune response studies to an altered insulin peptide ligand; phase II cytokine and C peptide reserve in newly diagnosed type 1 diabetes subjects.

Dr I L Ross

Audits of the management and outcome of thyroid carcinoma and of thyroid dysfunction in patients treated with amiodarone.

Dr W May

Outcome after radioactive iodine for hyperthyroidism, the prevalence of glucose abnormalities in patients with acute stroke.

DIVISION OF GASTROENTEROLOGY (Gastrointestinal Clinic)

ACTING HEAD OF GI CLINIC - Professor PC Bornman

CONTACT DETAILS

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e-mail: bornman@curie.uct.ac.za

DEPARTMENTAL PROFILE

The Gastrointestinal Clinic is a multi-disciplinary clinical unit consisting of Medical and Surgical components. This report primarily reflects the Medical component. The Clinic carries a large clinical load and offers a number of specialised services, with clinical and applied research interests in: Hepatobiliary disease; Colorectal disease; Oesophageal disease; Inflammatory bowel disease; *H.pylori* related disease; and Nutrition. The Clinic is involved in a number of collaborative research projects.

STATISTICS 2004

PERMANENT AND LONG TERM CONTRACT STAFF

Lecturers	1
Research Staff	2
Administrative and Clerical Staff	1
TOTAL	4

STUDENTS

Masters	3	
TOTAL	3	

RESEARCH FIELDS

Mrs T Marks

Research Assistant: Inflammatory bowel disease and Nutrition: genetic studies in IBD (collaborative work with Oxford University, Christian Albrechts University in Kiel, Germany, and the Division of Digestive Diseases and Nutrition, University of Kentucky, USA).

Dr GA Watermeyer

Specialist: Probiotic in the maintenance of ulcerative colitis (AstraZeneca research fellowship); Risk of malignancy in inflammatory bowel disease treated with Azathioprine or 6-Mercaptopurine; the pathobiology of Barrett's oesophagus (with C van Rensburg [TBH]); drug trials - various.

THE ALBERTINA AND WALTER SISULU INSTITUTE OF AGEING IN AFRICA/ DIVISION OF GERIATRIC MEDICINE

HEAD OF INSTITUTE OF AGEING IN AFRICA - Professor Monica Ferreira ACTING HEAD OF DIVISION OF GERIATRIC MEDICINE - Dr SZ Kalula

CONTACT DETAILS

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INSTITUTE PROFILE

The Albertina and Walter Sisulu Institute of Ageing in Africa (IAA) is a Cross-Disciplinary Group which incorporates the divisions of Geriatric Medicine, Psychogeriatrics and Gerontology. The IAA has been operated since 2001. The vision of the IAA is to be an academic, clinical and research centre of excellence and relevance in Africa. Its mission is to facilitate the delivery of the highest standard of inter-disciplinary, in-context training for health and allied professionals, and evidence-based clinical and social care for older persons, whilst undertaking appropriate research and audit upon which policy and planning for older persons may be based. The mission is achieved through inter-disciplinary partnerships and teamwork; human resource development; and continuous risk assessment within current legal, ethical and financial constraints. The IAA is a leader in the area of research on ageing in sub-Saharan Africa and enjoys international recognition and acclaim. Research projects comprise a substantial element of training as well as a high degree of implementability, and draw in visiting research fellows, graduate students, policy makers, planners and community agencies alike. Several projects are conducted collaboratively with researchers in other African countries and countries further abroad.

STATISTICS 2004

PERMANENT AND LONG TERM CONTRACT STAFF

Director	1
Senior Consultant	2
Consultant	1
Registrar	2
Medical Officer	1
Researcher	1
Administrative and clerical staff	2
TOTAL	10

HONORARY STAFF

Senior lecturer	1
Lecturer	1
TOTAL	2

STUDENTS

Doctoral	2	
Masters	1	
TOTAL	3	

RESEARCH FIELDS

Professor Monica Ferreira

social gerontology, population ageing, health sociology, economics of ageing, social impact of HIV/AIDS, physical and cognitive functioning, ageing in Africa.

Dr Sebastiana Kalula

Senior Specialist; Acting Head, Division of Geriatric Medicine; epidemiology of dementia, falls.

Dr Jane Saunders

Senior Specialist, Department of Psychiatry and Mental Health; Head, Division of Psychogeriatrics; dementia, HIV-related mental illness, psychiatric/medical ethics, psycho-pharmacological guidelines.

Dr Linda de Villiers

Specialist, Division of Geriatric Medicine; stroke risk factors and rehabilitation, post-discharge stroke community care.

DIVISION OF HAEMATOLOGY

HEAD OF DIVISION - Professor N Novitzky

CONTACT DETAILS

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DEPARTMENTAL PROFILE

The Division of Haematology at Groote Schuur Hospital is a complex unit with multidisciplinary activities that include outpatient clinics, admission beds as well as diagnostic and research laboratories. The clinical services are organised under the umbrella of the Department of Internal Medicine, while the diagnostic sections are under the broader organisation of the Department of Laboratory Medicine and NHLS. Patients with elaborate diagnostic problems, bone marrow failure or requiring stem cell transplantation are referred from all provinces; particularly the Northern and Eastern Cape and occasionally we receive referrals from foreign institutions in Sub-Saharan Africa. The service laboratories have been under considerable strain due to staff shortages. In the academic section, this year again, no equipment budget was available to replace critical diagnostic instruments. Funding has now been made available for the creation of a scientist post under the university establishment to expand our strong academic roots. The task of this scientist will be to pursue with diligence further research into the area of haematopoietic stem cell biology both at the basic sciences level in the area of stem cell transplantation and into the various forms of application to improve the understanding and treatment for haematological malignancies. Patients with multiple myeloma and other lymphoproliferative disorders are treated in combined clinics together with the Department of Radiation Oncology. Among the other multiple clinical activities, a busy Haemophilia Centre provides total care to patients with congenital bleeding disorders. The apheresis section provides a service to the hospital and is central to the haematopoietic stem cell transplantation programme. Plasmapheresis continues to be provided for the emergency treatment of patients with myasthenia gravis and the Guillain-Barré syndrome. In the hyperlipidaemias; these procedures efficiently remove cholesterol and improve survival. Limitations in the availability of pharmaceuticals are also eroding our ability to provide state of the art therapies. An ongoing Professional Development programme has been established and run to improve the training of medical staff. A "streamed" program for the training of the recently established sub-speciality of Clinical Haematology has become popular with steady applications. Senior members of staff lecture at the Cape Technicon and are often invited to teach at the Universities of the Western Cape and Stellenbosch. Faculty members from the division also regularly contribute to the teaching programmes of the basic sciences as well as Departments of Internal and Laboratory Medicine and registrars from these disciplines rotate for periods of 3 -12 months.

STATISTICS 2004

PERMANENT AND LONG TERM CONTRACT STAFF

Professors	1
Specialist	1
Senior Specialists	2
Specialist part-time	1
Medical Natural Scientist	1
Chief Professional Nurse	2
Control Technologist	1
Chief Medical Technologists	10
Senior Medical Technologists	4
Medical Technicians	3
Pathology Registrars	6
Clinical Registrars	3
Senior House Officers	2

Social Worker	1
Dietician	1
Administrative & clerical staff (E5 clinic)	3
Admin & clerical staff (C17 laboratory)	4
Admin staff (medical school)	2
Laboratory assistants (C17)	2
Laboratory assistants (S18 lab)	2
TOTAL	52

HATTER INSTITUTE FOR CARDIOLOGY RESEARCH

DIRECTOR - Emeritus Professor Lionel H Opie

FINANCIAL & ADMINISTRATIVE DIRECTOR - Dr M Faadiel Essop

CONTACT DETAILS

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DEPARTMENTAL PROFILE

The Hatter Institute is predominantly a laboratory-based research division within the Department of Medicine. The research focus of the Hatter Institute includes the evaluation of cardiac protection against ischemia and the delineation of the molecular, cellular mechanisms underlying the transition from cardiac hypertrophy to heart failure, and the role of metabolic perturbations in the development of cardiac disease. Several collaborative research initiatives have been established both in Cape Town and internationally. Continued close collaboration continues between the Hatter Institute and our sister institute, the Hatter Institute at University College London. For the second consecutive year, these institutes hosted a conjoint meeting, Hatter Institutes Cardiac Horizons Series, in Cape Town in September 2004. Professor Lionel Opie continues to work in the Hypertension Clinic at Groote Schuur Hospital.

Additional Research Collaborative initiatives:

Department of Medical Physiology at the University of Tromsoe, Norway (Professor Terje Larsen, Professor Ole Mjos). This collaboration is supported by a conjoint grant from the National Research Foundations in Norway and South Africa; Department of Medical Physiology at the University of Stellenbosch (Professor Amanda Lochner); Department of Physiology at the University of Stellenbosch (Professor Kathy Myburgh); Washington University Medical School, St. Louis, MO, USA (Dr Daniel P. Kelly - Center for Cardiovascular Research); University of Texas Health Science Center, Houston TX, USA (Dr Martin Young – Institute of Molecular Medicine); University of Texas Health Science Center, Houston TX, USA (Dr Heinrich Taegtmeyer, Division of Cardiology); University of California, San Diego, San Diego, CA, USA. (Dr Ken Chien); University of Louisville, Louisville, Kentucky, USA. (Dr. Peipei Ping); Department of Medical Physiology, Oxford (Professor Kieran Clarke); National Institute of Health, USA (Professor Michael Sack); University of Alberta, Edmonton, Canada (Professor Gary Lopaschuk); University of Osaka, Japan (Prof. S. Akiro); Case Western Reserve University, USA (Professor William C Stanley); School of Biomedical Sciences, University of Queensland (Professor Lindsay Brown).

STATISTICS 2004

PERMANENT AND LONG TERM CONTRACT STAFF

Emeritus Professors	1
Clinical Staff	1
Research Assistants	3
Postdoctoral Research Fellows	3
Laboratory Technicians	2
TOTAL	10

HONORARY STAFF

Honorary Lecturers	3
Honorary Professor	1
TOTAL	4

STUDENTS

Doctoral	7
TOTAL	7

RESEARCH FIELDS

Professor Lionel Opie

Delineation of cellular and molecular mechanisms promoting cardiac protection

Professor Derek Yellon

Delineation of cellular and molecular mechanisms promoting cardiac protection

Dr Faadiel Essop

Molecular regulation of cardiac energy metabolism and its contribution to heart disease

Dr Sandrine Lecour

Delineation of cellular and molecular mechanisms promoting cardiac protection

Dr Rob Smith

Delineation of cellular and molecular mechanisms promoting cardiac protection

Dr Graeme Deuchar

Delineation of cellular and molecular mechanisms promoting cardiac protection

Mr Naushaad Suleman

Delineation of cellular and molecular mechanisms promoting cardiac protection

Ms Lydia Lacerda

Delineation of cellular and molecular mechanisms promoting cardiac protection

Ms Joy McCarthy

Molecular regulation of cardiac energy metabolism and its contribution to heart disease

Ms Kholiswa Ngumbela

Molecular regulation of cardiac energy metabolism and its contribution to heart disease

Dr Rebecca Felix

Molecular regulation of cardiac energy metabolism and its contribution to heart disease

Ms Nayna Manga

Molecular regulation of cardiac energy metabolism and its contribution to heart disease

Mr Siyanda Makaula

Molecular regulation of cardiac energy metabolism and its contribution to heart disease

Mr Sarin Somers

Molecular regulation of cardiac energy metabolism and its contribution to heart disease

Ms Tasneem Adam

Molecular regulation of cardiac energy metabolism and its contribution to heart disease

Ms Anna Chan

Molecular regulation of cardiac energy metabolism and its contribution to heart disease

HYPERTENSION CLINIC

HEAD OF DIVISION - Associate Professor Brian Rayner

CONTACT DETAILS

Postal Address: E13, New Groote Schuur Hospital

Observatory, 7925

Cape Town

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DEPARTMENTAL PROFILE

The Hypertension Clinic is a consultant clinic, which provides a specialist, in and outpatient service for patients with severe and/or secondary hypertension. It also provides specialist health care service to various Community Health Care Centres, an outreach programme providing support to the community health centres, and a 24 hour Ambulatory Blood Pressure service to the entire community and is an essential service staffed by Sister H. O. Barrett. To facilitate bookings and exclude inappropriate referrals to the Hypertension Clinic all patients undergo 24 hour blood pressure monitoring with compliance testing before the booking is accepted. This has been a huge success and we have been able to dramatically reduce our new patient waiting list. It is critical that this service is supported and **there is an urgent need to replace ageing blood pressure monitors**. The hypertension clinic has been very active in the last year. New research projects have been initiated and a community outreach programme has continued to operate. Visits to the clinic have been reduced in line with the hospital's cost containment policy allowing us to see more new patients, but despite these measures the waiting list for appointments continues to lengthen. The December closure worsens this problem. Despite the cut backs the hypertension clinic has continued to offer a quality service to patients but areas of concern have been highlighted. The 24 blood pressure monitoring service has expanded to fulfil a very important and growing need for patients with difficult hypertension. Research activity is being hampered by lack of facilities.

STATISTICS 2004

PERMANENT AND LONG TERM STAFF

Emeritus Professor	1
Professor	1
Consultant	1
Registrar	1
Medical Officers	4
Chief Prof. Nurse	1
Research staff	2
Total	11

RESEARCH FIELDS

Prof. Brian Rayner

Clinical research; Genetics of Hypertension; ENaC mutations, Hypertensive retinopathy, Contract Research

Prof. Lionel Opie

Clinical research; Genetics of Hypertension.

Dr. Yvonne Trinder

Clinical Research, Contract Research

Sister Ivy Nteyi

Genetics of hypertension, ACE genotype study

Sister Donette Baines

Contract Research Co-ordinator

DESMOND TUTU HIV CENTRE / INSTITUTE FOR INFECTIOUS DISEASES AND MOLECULAR MEDICINE

HEAD OF DIVISION - Professor Robin Wood

CONTACT DETAILS

Postal Address: Desmond Tutu HIV Centre

Institute of Infectious Diseases & Molecular Medicine

Wernher & Beit Building North Faculty of Health Sciences

Anzio Road

OBSERVATORY 7925

Telephone: (021) 650.6966 Fax: (021) 650.6963

Email: Rosalind.maynier@hiv-research.org.za

DEPARTMENTAL PROFILE

The DTHC provides antiretroviral therapy (ART) to public sector patients in both Nyanga and Masiphumelele as well as at the trials unit in the Institute of Infectious Diseases and Molecular Medicine. In partnership with the Western Cape Provincial AIDS directorate, the Desmond Tutu HIV Centre has run the first fully government integrated pilot project in Nyanga, Cape Town, where 432 patients have been treated in a temporary facility at the Community Health Centre in Guguletu. The DTHC team are evaluating this project, which is called 'Usapho Lwethu' (Our Family Clinic). The Hanan-Crusaid Treatment Centre is currently under construction in Guguletu, to accommodate the Usapho Lwethu Project and ART training. A community-based project, in the district called 'Sizophila' (We will Survive), trains a group of HIV-infected individuals to educate and support patients commencing treatment as part of Usapho Lwethu. The Centre has also developed a health economics unit with an economist (Guy Harling) investigating costs and cost effectiveness of these programs. A second site has been developed at Masiphumele where 122 patients have been commenced on ART since June 2004. An operational study is underway comparing doctor versus nurse case management of patients on ART as part of an NIH funded study. A purpose-built research centre was completed during 2004 and has been fully commissioned. Weekly HIV training/teaching ward rounds were commenced during the year at False Bay Hospital. The Masiphumele site also investigates the impact of treatment of ARV on the community tuberculosis rates.

The trials unit has 4 active studies of new antitetrovirals and 2 studies investigating antiretroviral mutations. The Centre has been actively involved in other preventive strategies and has developed a modular school life skills program based on Ntsomi or Xhosa storytelling and forum theatre. The DTHC is responsible for one of the four national HIV-vaccine sites within the South African AIDS Vaccine Initiative (SAAVI) involved in preparing communities for HIV vaccine clinical trials. The centre is also part of the international HIV Vaccine Network (HIVNET) of the National Institutes of Health, USA. Evaluation of community understanding of HIV has been investigated with a series of cross sectional surveys. Innovative drama based education modalities using youth in these 2 communities are being extended to community HIV and vaccine awareness and education and has already been applied with good effect in Masiphumelele. The Centre is actively engaged in the training and equipping of health care professionals and lay counselors and educators to meet the challenges of HIV care and prevention. Seven 3-day ART training courses have been completed for the Northern Cape Department of Health. Monthly continuing medical education meetings have been held at the IIDMM.

STATISTICS 2004

PERMANENT AND LONG TERM STAFF

Professors	1
Clinical Staff	9
Nursing staff	8
Biostatician	1
Economist	1
TOTAL	20

RESEARCH FIELDS

Associated Professor R Wood HIV therapy

<u>Dr L-G Bekker</u> Immunology of tuberculosis, HIV

DIVISION OF LIPIDOLOGY

HEAD OF DIVISION - Associate Professor AD Marais

CONTACT DETAILS

Postal Address: Lipid Laboratory

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Cape Town

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DEPARTMENTAL PROFILE

Lipidology is a division of the department of medicine that performs the following functions: the provision of an expert clinical consultation, a special diagnostic laboratory, clinical research including drug development studies with the pharmaceutical industry, and laboratory research with students and contracts. It is funded chiefly by contract research but does receive support from the Medical Research Council. The clinical research describes the severe dyslipidaemias occurring in public health sector of the province but is also available to other centres in the country. The laboratory research involves the application of gradient gel electrophoresis to dyslipidaemia and the development of a Friedl-Crafts acylation procedure to determine cholesterol and unsaturated fatty acid concentrations in human blood plasma as well as the description of dyslipidaemia. The pharmaceutical studies have involved the development of newer statins and established statins, including the their effects on the carotid artery.

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STATISTICS 2004

PERMANENT AND LONG TERM CONTRACT STAFF

Professor	1
Consultants	1
Medical Officers	3
Nursing sisters	3
Contract Dietitian	1
Postdoctoral scientist	1
Technical Support Staff	5
Administrative staff	2
TOTAL	17

STUDENTS

Doctoral	4
Masters	4
TOTAL	8

RESEARCH FIELDS

A D Marais

Familial hypercholesterolaemia; Dysbetalipoproteinaemia; Phytosterolaemia; Carotid intima-media thickness, dyslipidaemia, and drug intervention; Friedl Crafts acylation reaction for dyslipidaemia; Proteinuria with statins.

D J Blom

Dysbetalipoproteinaemia; Carotid intima-media thickness, dyslipidaemia, and drug intervention.

JC Firth

Familial hypercholesterolaemia; Carotid intima-media thickness, dyslipidaemia, and drug intervention.

KH Wolmarans

Carotid intima-media thickness, dyslipidaemia, and drug intervention.

P Byrnes, S Jones

Familial hypercholesterolaemia; Dysbetalipoproteinaemia;

M Moodie

Familial hypercholesterolaemia

D Tanyanyiwa

Dysbetalipoproteinaemia

F O'Neill

Phytosterolaemia; Friedl Crafts acylation reaction for dyslipidaemia.

J Freislich, S Delport, R Jooste, C Fuller

Carotid intima-media thickness, dyslipidaemia, and drug intervention

L O'Reilly

Friedl Crafts acylation reaction for dyslipidaemia

B Ratanjee, R van Zyl Smit, M Levey

Proteinuria with statins

DIVISION OF HEPATOLOGY / MRC/UCT LIVER RESEARCH CENTRE

EXECUTIVE DIRECTOR – Professor RE Kirsch **CO-DIRECTOR** – Professor D. Kahn

CONTACT DETAILS

Postal Address: MRC/UCT Liver Research Centre

Departments of Medicine and Surgery

University of Cape Town

Medical School Observatory, 7925

Cape Town

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DEPARTMENTAL PROFILE

The Centre is multidisciplinary and its members consist of physicians, surgeons, biochemists, immunologists and pathologists. Apart from its laboratories in the Departments of Medicine, Surgery, Biochemistry, virology and Anatomical Pathology the Centre runs the only multidisciplinary, comprehensive, liver clinic, including a liver transplantation program, in Africa. Major areas of research include: porphyria, viral hepatitis, chronic hepatitis, immune abnormalities in liver disease, immunosuppressive factors in the venom of bitis arietans, the role of hepatic stem cells in experimental cirrhosis, liver transplantation, the pathogenesis of cardiovascular changes in portal hypertension, the role of portal systemic shunting in abnormal energy metabolism of liver disease, laparoscopic cholecystectomy, the treatment of bile duct calculi, the management of portal hypertension, and new methods of liver resection.

The Centre currently collaborates with 5 overseas and 3 South African universities and with 9 Departments within UCT. The MRC Liver Research Centre celebrated 30 years as an MRC Unit in 2003. During this time it has published 680 papers and editorials in journals, 6 books, and 150 chapters in books. The Centre has trained 26 PhD, 1 MD, 5 ChM and 1 DSc Med graduates. The Centre has the only liver transplant programme in Africa. Previous directors include Emeritus Professors Stuart Saunders and John Terblanche.

STATISTICS 2004

PERMANENT AND LONG TERM CONTRACT STAFF

Professors	5
Associate Professors	6
Senior Lecturers	9
Senior Research Officers	10
Technical support staff	10
TOTAL	40

HONORARY STAFF

Honorary staff	3
TOTAL	3

STUDENTS

PhD students	6
TOTAL	6

RESEARCH FIELDS

Kirsch RE

Medical education, health services, porphyria, hepatitis, infection and liver disease, cardiovascular manifestations of portal hypertension

Bornman PC

Management of portal hypertension, new methods of liver resection laparoscopic cholecystectomy, treatment of bile duct calculi.

Hall P

Alcoholic liver disease, chronic hepatitis, non-alcoholic steatohepatitis.

Kahn D

liver transplantation, liver regeneration

Krige JEJ

Management of portal hypertension, new methods of liver resection laparoscopic cholecystectomy, treatment of bile duct calculi

Miller AJW

Liver transplantation

Shephard EG

Immunology of liver disease

Campbell JAH

Experimental cirrhosis

Hift RJ

Porphyria, iron overload

Spearman CWN

Liver transplantation

Corrigall AV

Porphyria

Mall A

The role of mucus in the pathogenesis of gallstones

Meissner PN

Porphyria

Sturrock E

Angiotensin converting enzyme

DIVISION OF NEPHROLOGY

HEAD OF DIVISION - Dr MD Pascoe

CONTACT DETAILS

Postal Address: Renal Unit

E13 Groote Schuur Hospital

Observatory 7925

Cape Town

Telephone: SA (21) 404 3318
Fax: SA (21) 448 2349
Email: pascoe@curie.uct.ac.za

DEPARTMENTAL PROFILE

The Division remains actively involved in contract research in the fields of transplantation immunosuppression and renal osteodystrophy and the anaemia of chronic kidney disease. Further studies in the field of immunosuppression have been initiated in the area of transplantation, and further studies are scheduled to commence in the area of iron metabolism in chronic renal disease. During 2004 a new research fellow, Dr I Okpechi, has joined us and 2 new International Society of Nephrology fellows have joined us for a year.

The Division of Nephrology was deeply saddened by the death of Dr Janet Halkett during the course of the year.

STATISTICS 2004

PERMANENT AND LONG TERM CONTRACT STAFF

Associate Professors	2
Senior Lecturers	2
TOTAL	4

STUDENTS

Medical Registrars (1 senior)	3
TOTAL	3

RESEARCH FIELDS

Associate Professor B L Rayner.

Research activities are based in the hypertension clinic. Nil renal.

Dr M D Pascoe:

Fine needle aspiration biopsy of renal allografts; Renal pathology with HIV disease; Factors influencing long term renal graft survival; Cost effective drug strategies in transplantation; New immunosuppression protocols for renal transplantation.

Associate Professor C R Swanepoel.

Renal osteodystrophy & lanthanum carbonate; New immunosuppressive drugs in systemic lupus erythematosis; Renal anaemia.

DIVISION OF NEUROLOGY

HEAD OF DIVISION - Associate Professor RW Eastman

CONTACT DETAILS

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Observatory, 7925

Cape Town

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DEPARTMENTAL PROFILE

The division runs dedicated clinics for Stroke, Myasthenia gravis, and Neuro-genetics, and has a major research interest in these fields. The Myasthenia gravis clinic, unique in the country, is examining the value of aggressive immunotherapy in this condition and has already published data to indicate the benefit of this approach. In collaboration with Pharmacology, patients are also being genotyped to establish their suitability for different methods of drug therapy, which promises to reduce the unwanted adverse effect of the therapies. The Stroke Unit maintains a database on all patients in Groote Schuur Hospital with an acute stroke. This is being used to establish the stroke subtypes, risk factors, causes and outcomes in our society of this common disorder. Acute treatment and rehabilitation protocols for use at primary and secondary levels of care are being developed in collaboration with the Swedish International Development Agency and the National Research Foundation of South Africa. The Neuro-genetics clinic, run jointly with genetic counsellors and staff from Genetics, sees a wide variety of conditions, but has a special interest in the spino-cerebellar ataxias and Huntington's disease. Epilepsy which is not satisfactorily controlled by drugs is a common disorder. Our epilepsy surgery programme, unique in a public hospital, is continuing to use advanced neurophysiological techniques to identify the cerebral site of onset of the seizures so as to allow for resective surgery to be performed. The division is also active in drug trial research, especially in Parkinson's disease, epilepsy and stroke. A start is also being made in the development of teaching methods using multi-media techniques.

STATISTICS 2004

PERMANENT AND LONG-TERM CONTRACT STAFF

Associate Professors	3
Senior Lecturers (Full-time)	1
Junior Lecturers (Full-time)	1
Lecturers (Part-time)	5
TOTAL	10

STUDENTS

MMed students	4
TOTAL	4

RESEARCH FIELDS

Assoc Prof R W Eastman

Epilepsy; epilepsy surgery; EMG

Assoc Prof B Kies

Parkinson's disease; epilepsy; neurotherapeutics; primary care management of common neurological conditions

Assoc Prof A Bryer

Stroke; neuro-genetics; spinocerebellar ataxias

Dr E Lee Pan

Health systems information technology; computer-based medical education

<u>Dr. J Heckmann:</u> Myasthenia gravis; neuro-immunology; neuro-genetics; HIV-related neurological disorders

DIVISION OF PHARMACOLOGY

MRC/UCT/UWC Research Unit for Traditional Medicines (World Health Organisation Collaborating Centre for Drug Policy Research)

HEAD OF DIVISION: Professor Gary Maartens

DEPARTMENTAL CONTACT DETAILS

Postal Address: Division of Pharmacology

University of Cape Town K45, Old Main Building Groote Schuur Hospital Observatory, 7925 South Africa

Telephone: (021) 406 6286 Fax: (021) 448 1989 Email: gary@curie.uct.ac.za

DEPARTMENTAL PROFILE

The major research thrusts of the division are in malaria, tuberculosis and HIV. The research in these fields is very broad, encompassing basic science, pharmacokinetics, clinical trials and pharmacoeconomic evaluation. The malaria cell biology programme is lead by the senior Wellcome Trust fellow, Heinrich Hoppe. A large multicentre clinical research group has secured substantial funding from the Global Fund – this programme is at the forefront of malaria treatment research and policy in Africa. The MRC South African Traditional Medicines Research Group (joint UCT & UWC) was extended for a further 5 years in 2004. Compounds with antimalarial and antituberculous activity are identified from plants used in traditional medicine. The laboratory has had its SANAS accreditation renewed in 2004. Assays have been developed for several new pharmacokinetic studies on antiretroviral drugs. An informal collaboration on population pharmacokinetics with Uppsala University was cemented with the awarding of an NRF grant to commence 2005. An NIH-funded study of an intervention to improve antiretroviral adherence has commenced. Pharmacoeconomics is an emerging interest, with several studies on antimalarial and antiretroviral drugs.

DEPARTMENTAL STATISTICS 2004

PERMANENT AND LONG TERM CONTRACT STAFF

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Professor	1
Associate professors	2
Senior Lecturer	1
Lecturer	1
Registrars	4
Consultant	1
Research Staff	7
Technical Support Staff	7
Administrative and Clerical Staff	5
TOTAL	29

HONORARY STAFF

Honorary Lecturers	2
TOTAL	2

STUDENTS

Post Doctoral	3
Doctoral	17
Masters	3

Honours	3
Undergraduate Medical Students	495
*	521

RESEARCH FIELDS

FJ Arens

Pharmaco-economics

KI Barnes

Malaria, combination antimalarial therapy – operational and policy research

M Blockman

Rational and cost-effective prescribing of medicines; drug utilisation review; adverse drug reaction monitoring; drug policy and regulation

WE Campbell

Phytochemical studies on indigenous Amaryllidaceae species; structural studies on active compounds isolated from traditional medicinal plants

A Evans

Drug assay development

G Gabriels

Analytical Chemistry, Pharmacokinetics, Traditional Medicines, Drug Discovery and Development, Drugs and Sport Performance

HC Hoppe

Malaria parasite cell biology

G Maartens

Adherence to antiretroviral therapy, immunopathology & diagnosis of HIV-associated tuberculosis, pharmacoeconomic evaluation of antiretroviral therapy

H McIlleron

Pharmacokinetics of anti-tuberculosis drugs, population pharmacokinetics, drug interactions between antiretrovirals & rifampicin.

U Mehta

Adverse drug reaction monitoring; pharmacovigilance; vaccines safety, drug regulation

R Onia,

Traditional Medicines

AH Robins

Psychopharmacology: neuroleptic malignant syndrome; catatonia; antidepressants

PJ Smith

Mechanisms of antimalarial drug resistance; pharmacokinetics of anti-tuberculosis drugs; isolation of novel drugs from traditional medicines; development of new drug assays

DIVISION OF RESPIRATORY MEDICINE (INCLUDING UCT LUNG INSTITUTE)

HEAD OF DIVISION – Professor ED Bateman

CONTACT DETAILS

Postal Address: UCT Lung Institute

PO Box 34560 Groote Schuur 7937

Cape Town

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Webpage: http://www.uct.ac.za/depts/respiratory/

DEPARTMENTAL PROFILE

Major research activity at the UCT Lung Institute has centred on the epidemiology, and population-based disease management strategies. Research projects in progress at the UCT Lung Institute include the following: i) Epidemiology of Lung Disease in South Africa: the Lung Health Study 2002, and Burden of Obstructive Lung Disease study; ii) Practical Approach to Lung Health in South Africa (PALSA); iii) PALSA PLUS Project is an extension of the PALSA project, developed at the request of the Free State Department of Health, to include the management of persons with AIDS, and the use of anti-retroviral drugs. These projects form part of a larger programme of research on the anti-retroviral rollout in the Free State, sponsored by the Governance, Equity and Health Unit of the IDRC (Canada) for which Professor Bateman is the co-ordinating project leader. Partners in these projects are the Centre for Health Systems Research & Development of the University of the Free State (Professor van Rensburg), and CIET International (Professor Neil Anderson). Components of this research are client/patient, facility and community surveys, evaluation of all aspects of the rollout, including training, effectiveness and impact of the rollout upon delivery of healthcare for other diseases.

Other projects include:

- **Disease Management Strategies in Asthma and COPD:** Development and validation of a computerised decision support system for diagnosing, treating and monitoring obstructive lung diseases (PulmAssist®).
- Studies on the Diagnostic Utility of High-Resolution Computerised Scanning in the Diagnosis of Diffuse Parenchymal Lung Disease. In collaboration with Professors A Wells and D Hansell of the Imperial College, London.
- **Host Immunity in Tuberculosis.** This 5-year National Institutes of Health-funded of the USA, examines the host immune response in blood and bronchoalveolar lavage fluid, in patients with pulmonary tuberculosis treated with standard four-drug anti-tuberculous treatment, with and without the addition of nebulised or subcutaneously-administered recombinant interferon-gamma administered 3-times-weekly for 4 months.
- Bakers Asthma in Bakeries in Cape Town. Over five hundred employees from bakeries in Cape Town were assessed by questionnaire, skin testing, lung function and methacholine bronchial challenge tests to establish the prevalence of Bakers asthma and related respiratory disease in this industry.

The Division of Respiratory Medicine was deeply saddened by the death of Dr Neil White during the course of the year.

STATISTICS 2004

PERMANENT & LONGTERM CONTRACT STAFF

Professor	2
Associate Professors	3

Senior Lecturer	1
RESEARCH STAFF	
Medical Officers	6
Nursing study co-ordinators	3
Clinical Technologists in Pulmonology	6
Admin & clerical staff	4
TOTAL	25

STUDENTS

Doctoral: PhD	4
MPhil	3
Master of Technology	1
Batchelor in Technology	2
TOTAL	10

RESEARCH FIELDS

Professor Eric Bateman

epidemiology of lung disease; asthma management; chronic obstructive airways disease; tuberculosis immunology and host defences, and management.

Associate Professor Gillian Ainslie

high resolution CT scanning in idiopathic pulmonary fibrosis; asthma education; alpha1-antitrypsin deficiency. **Dr. Richard Raine** - epidemiology of sleep-disordered breathing

Associate Professor Paul Willcox

multi-drug-resistant tuberculosis; lung cancer; cystic fibrosis; community-acquired pneumonia.

Associate Professor Neil White

lung disease in miners and ex-miners; occupational asthma; radiological classification of pneumoconiosis, epidemiology of lung disease in South Africa; asbestos-related lung disease; guideline development for spirometry.

Dr Mary Bateman

smoking cessation; pharmacology of asthma and COPD

Dr Rodney Dawson

immunology of tuberculosis; asthma deaths

Dr Rene English

guideline development and integrated management in primary health care; asthma and COPD management

Dr Lara Fairall

guideline development and integrated management in primary health care; asthma, COPD tuberculosis and HIV treatment

Dr. Anamika Jithoo

epidemiology of lung disease

DIVISION OF RHEUMATOLOGY

HEAD OF DIVISION - Professor Asgar Ali Kalla

CONTACT DETAILS

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DEPARTMENTAL PROFILE

The Division of Rheumatology has several research interests relating to different aspects of the rheumatic diseases. Osteoporosis is an area of interest for many years and there is ongoing collection of longitudinal bone mineral density data in patients with rheumatoid arthritis (RA) and systemic lupus erythematosus (SLE). Age-related bone loss at different skeletal sites is being prospectively studied in collaboration with the Department of Nuclear Medicine and the Endocrine Unit. Clinical drug trials are in progress to study the safety and efficacy of the newer non steroidal anti inflammatory drugs (NSAIDS), in collaboration with the GIT Unit. These newer COXIBS are being evaluated in patients with RA and osteo arthritis (OA). All of these include collaborative participation with the GIT Unit, where gastropathy is an outcome variable, measured by gastroscopy. We have also looked at psoriatic arthropathy in collaboration with Leeds University in the UK. The unit provides in- and outpatient rheumatology services for the entire Western Cape region. Sessions are carried out at the Heideveld and Khayelitsha Community Health Centres 6 times a year. Training is provided on a continuous basis for medical students, allied health professionals, a senior house officer, and two registrars. Research is largely clinically orientated, but a laboratory-based approach is being used to study the genetics of SLE and the pathogenesis of reactive arthritis. In addition, there is very significant involvement in clinical drug trials in both rheumatoid arthritis and osteoarthritis. Collaborative research is being carried out with the liver unit to study bone density.

STATISTICS 2004

PERMANENT & LONGTERM CONTRACT STAFF

Professor	1
Lecturer	2
Research Staff	2
Nurse practitioner	1
Admin & Clerical staff	1
TOTAL	7

HONORARY STAFF

Honorary lecturers	3
TOTAL	3

STUDENTS

Rotating medical registrar	1
Medical Officers (SHO)	1
TOTAL	2

RESEARCH FIELDS

Professor Asgar A Kalla

Head of Department: Osteoporosis, steroid-induced osteoporosis, disease modification of RA, psoriatic arthropathy, COXIB and NSAID gastropathy, Thalidomide treatment in RA.

Dr J Potts

Psoriatic arthropathy.

Dr R Breeds

Thalidomide treatment in rheumatoid arthritis.