



## 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)

**HEAD OF DEPARTMENT** - Professor RE Kirsch

### DEPARTMENTAL CONTACT DETAILS

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### DEPARTMENTAL PROFILE

The Department incorporates 4 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; 17 divisions or clinics: Cardiology, Immunology, Endocrinology and Diabetology, Infectious Diseases, Dermatology, Pharmacology, Emergency Medicine, Gastroenterology, Geriatrics, the Hypertension Clinic, Lipidology, Clinical Haematology, Neurology, Nephrology, Nutrition and Dietetics, Pulmonology, and Rheumatology; and 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 38% 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 2003

### PERMANENT & LONG TERM CONTRACT STAFF

Professors	12
Associate Professors	19
Senior Lecturers	11
Lecturers	3
Administrative and clerical staff	12
<b>TOTAL</b>	<b>57</b>

<b>HONORARY STAFF</b>	
Honorary Professors	1
Emeritus Professors	3
Honorary Associate Professors	1
Honorary Senior Lecturers	20
Honorary Research Associates	2
<b>TOTAL</b>	<b>27</b>

### STUDENTS

Doctoral	34
Masters	156
Honours	34
Undergraduates	674

<b>TOTAL</b>	<b>898</b>
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**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 DEPARTMENTAL PROFILE

The generous grant we received from the Fogarty International Center at the NIH (approximately R1.5 million per year) has enabled us to offer an intensive educational programme in the form of a Post-Graduate Diploma in International Research Ethics. We taught Four Modules in 2003 which comprised 3 x 2 weeks intensive on-site learning activities during the academic year, as well as some take-away assignments based on activities in the home institution's research ethics environment. Our first cohort of 13 students was an impressive group from throughout the country, as well as from Botswana, Kenya and Zambia. Over half have a PhD degree in their discipline, four are department heads or directors, most serve on research ethics committees – and four Chair their Committees, including that of the Medical Research Council.

We plan to expand our faculty next year to incorporate and strengthen selected areas of expertise, and Prof Len Doyal of St Bartholomews, London has agreed to teach during our first two modules in 2004. We are also developing a website that we hope will serve as an educational resource for research ethics committees in the region ([www.irensa.org](http://www.irensa.org)).

We presented our First Annual IRENSA Research Ethics Seminar on 11 and 12 August this year, targeting members of research ethics committees, with a faculty drawn from throughout the country. This was very well received with 120 registrants and 107 people in attendance. The topics for this year were: Current challenges to research ethics committees; Procedural issues for research ethics committees: how can we improve our processes?; Issues in HIV/AIDS vaccine trials; Informed consent: what does our experience in developing countries teach us. Solly Benatar and Terry Fleischer attended the Fogarty International Annual Network Meeting in Bethesda in October.

Jointly with the UCT Faculty of Law we sponsored a two-day Workshop entitled "HIV/AIDS, Public Health and Constitutional Rights: South Africa's Experiment" on 25 and 26 June 2003. The two major goals of the workshop were: first, to explore the relationships and intimate links between the HIV/AIDS pandemic, public health and socio-economic rights granted by South Africa's Constitution; second, to provide resources to judges, policy makers, academics and others to develop a model for justly and efficiently allocating scarce health resources – one that meets ethical, legal and national priorities. Among the speakers at the Workshop were Constitutional Court Justice Kate O'Regan and HIV/AIDS author, Alan Whiteside. Participants were representative group of judges, policy makers, ethicists, representatives of NGOs and academics from many disciplines.

Our consultation service at Groote Schuur Hospital continues to be popular. In addition Prof S Benatar has provided teaching/consultation sessions at our community hospitals - once a month at each of Victoria, Jooste, Somerset, Wynberg Military (and until it closed Conradie) Hospitals.

Prof David Benatar designed the course on medical ethics for the new MBChB curriculum and negotiations continue to ensure the best timing for the lectures and seminars.

Dr Terry Fleischer co-taught with Ms Anne Pope the course they developed in 2002 on Law and Medicine at the UCT Faculty of Law.

Prof S Benatar was Visiting Professor in Medicine and Public Health Sciences in Toronto for two months where he co-taught a Masters Module (International Research Ethics) with Prof Bernard Dickens of the Toronto University Law Faculty.

## STATISTICS 2003

### PERMANENT AND LONG-TERM CONTRACT STAFF

Professor	1
Admin/secretarial	1
<b>TOTAL</b>	<b>2</b>

### HONORARY STAFF

Honorary staff	25
<b>TOTAL</b>	<b>25</b>

### RESEARCH FIELDS

Prof Solly Benatar

Research Ethics (including International Research Ethics) and Global Bioethics

Prof David Benatar

Moral Philosophy and Applied Ethics

Dr Augustine Shutte

African Philosophy and its implications for Bioethics

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 2003

### 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	30
Radiographers	4
GSH Administrative	7
<b>TOTAL</b>	<b>68</b>

### STUDENTS

<b>STUDENTS</b>	
Learner Technologists	1
Post-doctoral Fellow in Genetics	1
PhD	1
Masters	1
Honours	1
Research Fellow in Epidemiology	1
<b>TOTAL</b>	<b>6</b>

## RESEARCH FIELDS

Professor PJ Commerford

Heart Failure; Acute Coronary Syndromes; Epidemiology; Treatment

Professor RN Scott Millar

Arrhythmias; Pacemakers; Electrophysiology

Dr AM Okreglicki

Arrhythmias; Pacemakers; Electrophysiology

Dr BN Levetan

Follow-up on all patients receiving a local stent design

Professor BM Mayosi

Genetics and Epidemiology of Heart Disease

#### **DISTINGUISHED VISITORS**

**Professor Bernard J Gersh** - Division of Cardiovascular Diseases & Internal Medicine, Mayo Clinic, USA

**Professor Colin Rose** – Associate Professor of Medicine, McGill University Health Center, Canada

**Dr Charles Bruce** - Echocardiography, Mayo Clinic, USA

**Professor George Mensah** - Chief, Cardiovascular Health Branch, Centers for Disease Control & Prevention, Atlanta, USA

**Professor Hugh Watkins** - Department of Cardiovascular Medicine, University of Oxford, UK

# DIVISION OF CLINICAL IMMUNOLOGY

**HEAD OF DIVISION** – Associate Professor SR Ress

## CONTACT DETAILS

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## DEPARTMENTAL PROFILE

Division of Clinical immunology provides a comprehensive diagnostic service to Groote Schuur and related teaching hospitals, including specialised investigations for the evaluation of immune function in patients with suspected immune deficiency. Research activities comprise the evaluation of cellular immunity in tuberculosis. TB basic research evaluates protective immunity of cytotoxic T-cell activity, while clinical collaborative studies with ICH at UCT are in progress, aimed at characterizing immunity following BCG vaccination. In addition, a NIH subcontract study was commenced that will evaluate the efficacy of aerosolised rIFN- $\gamma$ 1b in a RCT in advanced pulmonary tuberculosis (TB) patients, together with collaborators in New York and UCT lung institute. Immune modulatory effects of rIFN- $\gamma$  aerosol treatment are being evaluated in bronchoalveolar lavage (BAL) cells and peripheral blood (PB) cells. The *in vivo* molecular effects of aerosol rIFN- $\gamma$  that relate to amelioration of fibrosis and tissue destruction are being assessed by examining the TGF- $\beta$  system and by performing functional genomic studies. These data could provide novel targets and form the basis for additional clinical interventions.

Professor Ress presented papers at an international workshop on maternal infection and neonatal immunity in February in Tubingen, Germany, and at the 5<sup>th</sup> international congress of FAIS at Victoria Falls in May.

## STATISTICS 2003

### PERMANENT AND LONG-TERM STAFF

Associate Professors	1
Research officer	1
Research Staff-senior scientific officer	1
Laboratory technologists	3
Technical support staff	1
<b>TOTAL:</b>	<b>7</b>

### STUDENTS

PhD student	1
<b>TOTAL</b>	<b>1</b>

## 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 and lipid disorders



# DIVISION OF DERMATOLOGY

**HEAD OF DIVISION** - Professor Gail Todd

## CONTACT DETAILS

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## DEPARTMENTAL PROFILE

A national survey of academic dermatology in South Africa, commissioned by the Dermatological Society of South Africa reveals a critically under-resourced speciality struggling to meet basic needs, let alone build capacity. Our speciality is seriously threatened as higher education investment in dermatology is negligible and departmental heads seldom advance beyond senior specialist level. Dermatology registrar posts have been cut nationally from 32 to 28 and no development career opportunities are provided for in the academic sector.

Education continues to dominate the division's academic output. Despite a small staff, our division remains active in the development of the new undergraduate curriculum. Dr Sue Jessop convened the successful first round of Special Study Modules (SSM) for semester 3 – 5 and our division supervised 9 students in 4 of the SSM projects. The division represents the School of Adult Medicine on the semester 3 – 5 design team and is actively contributing to the development of the semester 6 – 10 design. The core dermatology module will continue to provide small group, problem orientated, patient-based tutorials. With both full time consultants on the committee of the College of Dermatology, our division is initiating a unified national dermatology examination platform. Major changes to the curriculum for this programme are envisaged in line with the current integrated education policy of the new curriculum. A portfolio of in-course training including clinical competency in procedures essential to the practice of dermatology is being developed.

Twelve nurses successfully completed the Dermatology Nurse Diploma Course run in collaboration with the Nursing Education Unit of Groote Schuur Hospital for the last time in 2003. This course will now be upgraded to a University of Cape Town diploma. The current 2 month practical course will form a module of the university diploma allowing those graduates, who have already completed the course the chance to upgrade their training. For the first time an external examiner, Dr Robert Dawe from Dundee University, Scotland, moderated the results. CPN Nora Christians continues as the course convenor. CPN Pat Kelly continues to co-ordinate the project and represents South Africa on the International Skin Care Nursing Group, an organisation that aims to promote the provision of skin care internationally. Dermatology nurse run services continue to be 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. Yearly statistics show that these graduates are treating up to 500 patients per month and this data has highlighted deficits in training that will be addressed in future courses. To date, Rotary International and the Rotary Road to Skin Health campaign have sponsored the training of 17 nurses. The International Federation of Anti-Leprosy Associations continues to list the course for leprosy field worker training internationally.

To improve community based patient care and to develop primary care teaching nodes, medical officers and general practitioners are given sessional posts in our outpatients unit on an annual basis. Dr Sean Christians completed his rotation in 2003 and Dr Ann Moore continues her rotation into 2004. For the first time in history student interns have been allocated to the division. These two-week rotations have been a great success with the interns and the move has received approval from the HPCSA.

Our contribution to continuing professional development continues with year round lectures to various healthcare providers as dermatology teaching remains in demand. The division collaborated with the Department of Family Medicine and Primary Care at Stellenbosch University designing the dermatology curriculum for their distance-based course in family medicine (MFamMed). We have contributed to the skin chapter of the Paediatric Education Programme and are currently designing the section for occupation skin disease of the Diploma in Occupational Health of the Department of Public Health, both distance-based learning programs. Our own teledermatology service and

distance-based teaching platform will be developed in 2004 as part of a collaborative project with Dr Roy Colvern of the Harborview Medical Centre, Seattle in the USA.

The division convened the Annual Congress of the South African Dermatology Association, Ikapa 2003 at Spier. This was a great success thanks to the capable organisation of Mrs Sally Elliot and her team at the Postgraduate Conference Centre, University of Cape Town. A Saturday morning mini congress with 3 international speakers on paediatric dermatology was hosted later in the year.

The University of Cape Town, Skin & Hair Centre at the UCT Lung Institute grows as a complementary service for colleagues in private practice offering specialist referral services and facilities for outpatient management of skin diseases. The current private and public service delivery divide of recent years has deprived our registrars of exposure to a sector of health care which this important postgraduate teaching resource provides.

Dr Pat Lawrence continues to develop the dedicated outpatient paediatric dermatology service at Red Cross Hospital. A special clinic with the basic facilities necessary for a dermatology outpatient services was finally commissioned 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.

Beach clinics, voluntarily manned by local dermatologists, to publicise the cancer risk of sun exposure, took place over December 2002 and January 2003 in collaboration with the Cancer Association of South Africa. During this time 435 patients were seen and 57/90 of those referred for management were for suspected skin cancers. This community project is organised annually by Dr Cecile Keyzer who is a part-time consultant in the division.

Data from a comparative study on atopic eczema in rural, peri-urban and urban communities in South Africa, completed in 2002, has been analysed and publications are in preparation in collaboration with Professor Hywel Williams of the University of Nottingham. Skin diseases in the seafood processing industry, a collaborative project with the Department of Community Health is complete and in preparation for publication. The Division continues its collaboration with the Oncology and Pathology Divisions in a follow up study of melanoma prevalence in Cape Town, sponsored by CANSA. This survey is now complete.

Investigation into the molecular basis of vitiligo and the low incidence of cancers in vitiligo patients continues in collaboration with the Department of Anatomy and Cell Biology. A randomised controlled trial of chloroquine compared to topical steroid for chronic discoid lupus erythematosus treatment in collaboration with the University of Stellenbosch and the University of Nottingham is in its second year. A study on contact hypersensitivity reactions in atopic eczema children was initiated in 2002 with more than 50 children investigated so far. An epidemiological study into the causes of an epidemic of itchy skin diseases in informal settlements in the Cape will form the basis of a MRC post intern fellowship awarded to Dr Sean Christians who joined the division as a supernumerary registrar.

As a sequel to the chapter on skin diseases in the mining industry, the lack of knowledge on the prevalence and type of skin problems encountered among miners has been acknowledged by the mining industry. Funds have been allocated and a study commissioned to address this problem, which will be a joint project between our division and the Department of Community Health. The importance of dermal exposure is receiving international recognition and is one of the areas targeted for development by NIOSH. Prof. Todd was a sponsored participant at an International Conference on Environmental Exposures of Skin to Chemicals: Science and Policy, in Washington D.C.

Divisional teamwork has made the additional efforts of 2003 possible as in addition to teaching, our division and its staff of 13 doctors and 13 nurses are responsible for 60,000 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 Alena Salim and Dr Abe Collison.

#### DEPARTMENTAL STATISTICS 2003

##### 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 ½
Research Staff	5

Administrative and clerical staff	1
Honorary Lecturers	3
<b>TOTAL</b>	<b>15 ½</b>

#### STUDENTS

Doctoral	0
Masters	9
Undergraduate	631
<b>TOTAL</b>	<b>640</b>

#### RESEARCH FIELDS

##### Associate Professor Gail Todd:

Head of Department; Prevalence and cost of childhood atopic dermatitis in rural, urban and periurban 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 and evidenced based dermatology in collaboration with the Cochrane Skin Group as a lead editor, Nottingham UK.

Dr Laduma Ngwanya

Dermatopathology. Diseases of the hair and nails.

##### 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, CPN Nora Christians (community dermatology – convenor of the dermatology nurse course).

#### REGISTRARS

Dr H Omar

Occupational skin disease.

Dr G Gottschalk

Molecular basis of vitiligo.

##### **Dr S Pather**

Cost effective treatment of tinea capitis.

Dr F Al-Mammari (supernumerary registrar)

Dr Nonhlanhla Khumalo (5/8 supernumerary women's training post)

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

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

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

Dr U Raabe (supernumerary registrar)

Allergic response in atopic eczema.

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

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

Dr S Eisman (supernumerary registrar)

#### RESEARCHERS

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.

**P. Kelly (CPN – part-time)**

Primary dermatology and wound care service delivery at community dermatology day-care centres.

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 vitiligo and dermatology database.

## **VISITORS**

Dr Marcia Hogeling, Toronto, Canada; Prof. Gerold Jaeger, Mbarara University Teaching Hospital, Uganda; Dr Alena Salim, Oxford University, UK; Dr Brian Shapiro, Ann Arbor University Hospital, Michigan, USA; Dr David Whiting, Dallas, Texas, USA; Dr Cornelius Walter, Director, The Leprosy Mission, New Delhi, India; Mr Ockie Kruger, African Director, Leprosy Mission, Pretoria; Mr Peter Laubscher, Chief Director, Leprosy Mission, Pretoria; Dr David de Berker, Bristol University, UK; Professor Rein Willemze, Leiden University, The Netherlands; Dr Chris Lovell, Royal United Hospital Bath, UK; Dr John Ives, Port Elizabeth; Dr Richard Hardegen, Gauteng; Professor Neil Prose, Duke University, USA; Dr Celia Moss, Birmingham Children's Hospital, UK; Dr Richard Ferner, West Midlands Centre for Adverse Drug Reaction Reporting, Birmingham, UK; Professor Irene Leigh, Queen Mary's School of Medicine and Dentistry, London Hospital, London, UK; Dr Robert Dawe, Ninewells Hospital, University of Dundee, Scotland, UK; Dr Birgitte Fiellies, Marburg, Germany; Mr Harry Basdeo, Smith & Nephew, Health-care Division; KZN.

## **DERMATOLOGY NURSE GRADUATES 2003**

Nurse Joan Pick, Tygerberg Hospital, Cape Town; Nurse Fatima Jamal, Primary Health Care, KwaZulu, Natal; Nurse Elizabeth Arendse, Hanover Park Day Hospital, Cape Town; CPN Quintas Wantza, Central Karoo Hospital, De Aar; Nurse Ingrid van Boven, Green Point, Day Hospital, Cape Town; Nurse Natalie Moses, Delft Community Hospital, Cape Town; Nurse DM Netshiswinzhe, Tshilindzini Hospital, Shayandima, Limpopo; Nurse K Morapendi, North West District Council, Maun, Botswana; Nurse P Mahilo, Tutume, Botswana; Nurse Karen Lotz, Mitchell's Plain Day Hospital, Cape Town; Nurse Francisca Rust, Lotus River Day Hospital, Cape Town; Nurse Estelle van Rooyen, Retreat Day Hospital, Cape Town.

## **ELECTIVE STUDENTS**

Karen Oomen, The Netherlands; Jon Goosen, The Netherlands; Liselote van Bockel, The Netherlands; Roel Custers, The Netherlands; Columbine Daintree, Tasmania; Amber Janjua, UK.

# DIVISION OF ENDOCRINOLOGY & DIABETIC MEDICINE

HEAD OF DIVISION OF DIABETIC MEDICINE - Professor F. Bonnici

HEAD OF DIVISION OF ENDOCRINOLOGY - Associate Professor N S Levitt

## CONTACT DETAILS

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## DEPARTMENTAL PROFILE

In June 2003 Prof François Bonnici retired as Head of the Division of Diabetic Medicine. He has led the Division admirably for nearly two decades. With his retirement Prof Levitt has become head of a single Division of Endocrinology and Diabetic Medicine, which provides clinical, research and laboratory services to the University of Cape Town Teaching Hospital Group as well as teaching both undergraduates and postgraduates. Dr Ian Ross is in his first year as a Consultant and Dr Wayne May has continued in the Senior Registrar post, this year he wrote the Subspeciality examination and is now a Certified Endocrinologist.

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

There is ongoing erosion of our ability to provide optimal care and management for our patients due to limited resource allocation. For example, the lack of a podiatrist, dedicated dietitian, Xhose-speaking diabetes educator and doctor shortages have a major impact on our care. Pharmaco-therapeutic options remain extremely limited.

Undergraduate medical students attend diabetes and endocrine clinics where they receive instructions in diabetes education, dietary management and the medical and psycho-social aspects of diabetes control, screening and treatment of complications. By attending the Endocrine Clinics, students are exposed to the spectrum of endocrine disorders encountered in the community but not seen in the wards.

The strong links between the Division of Endocrinology and the Department of Sports Science at UCT as well as the Chronic Diseases of Lifestyle Group at the Medical Research Council continues to promote active research in the areas of Diabetes and hypertension health systems research; mechanisms for and prevention of complications of diabetes, the foetal origins of chronic diseases, mechanisms underlying the metabolic sequelae of obesity in black and white women and exercise and hypoglycaemia.

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 Diabetes Clinical Trials Unit is continuing to run exciting phase II studies in patients with type 2 diabetes.

Prof Bonnici founded the Phumeza Mawonga Diabetes Fund, supported by UCT, Diabetes South Africa and the corporate pharmaceutical sector, to promote diabetes awareness and social upliftment in the African communities of Cape Town. An African senior Diabetes Education Sister is linking with the community and a number of day hospital clinics, exploring and evaluating novel avenues of cultural, religious and social self-expression to support the medical treatment of their chronic diabetes.

## STATISTICS 2003

### PERMANENT AND LONG TERM STAFF

Full Professor (until end of June 2003)	1
Associate Professor	1
Senior Lecturer ( Hon )	1
Lecturer	1
Senior Registrar in training	1
Technical Support Staff	0
Administrative and Clerical Staff	1
<b>TOTAL</b>	<b>6</b>

### RESEARCH FIELDS

#### Professor F Bonnici

Head of Division of Diabetic Medicine:

Genetic and molecular studies in growth hormone disorders; phase II/III insulin analogue studies in type 1 and 2 diabetes; phase I/II pharmacokinetic and immune response studies to an altered peptide ligand in the prevention of type 1 diabetes..

Associate Professor N S Levitt

Head of Division of Endocrinology:

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)

HEAD OF DIVISION - Professor Trevor Winter

## CONTACT DETAILS

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## 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 2003

### PERMANENT AND LONG TERM CONTRACT STAFF

Emeritus Professors	1
Associate Professors	1
Seniour Lecturers	1
Lecturers	2
Research Staff	2
Administrative and Clerical Staff	1
<b>TOTAL</b>	<b>8</b>

### STUDENTS

Masters	1
<b>TOTAL</b>	<b>1</b>

## RESEARCH FIELDS

A/Prof Trevor Winter - Senior Specialist and Acting Head of GI Clinic until 31 March 2003; Inflammatory bowel disease and Nutrition: genetic studies in IBD (collaborative work with Oxford and Christian Albrechts University, Kiel, Germany), drug trials with novel agents.

Dr GA Watermeyer - Senior 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.

# INSTITUTE OF AGEING IN AFRICA/ 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 has incorporated three units in the faculty with a specific focus on ageing: the Division of Geriatric Medicine, the Division of Psychogeriatrics and the former HSRC/UCT Centre for 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.

Current IAA research projects include: (1) The development of an assessment protocol for use in the IAA's Memory Clinic; the development of culture-appropriate cognitive function measurement instruments; the establishment of a data bank of Memory Clinic client profiles, the spectrum of mental disease, and community care and services demand and supply; and a deterioration of the epidemiology of dementia types in Africa. (2) An investigation of physical and cognitive functioning, and quality of life of older persons in Khayelitsha, in partnership with investigators at Columbia University, USA and the World Health Organization. (3) An audit of hospital records towards the establishment of a management plan for falls in the elderly. (4) A community based longitudinal follow-up investigation of post-discharge stroke patients. (5) A survey of medical practitioners' attitudes towards Geriatric Medicine and older patients. (6) The creation of a Minimum Data Set on ageing and older persons in Africa, under a World Health Organization-coordinated programme in four African countries. (7) A bi-national (Brazil and South Africa) comparative survey of pensioner households to determine the impact of social pension income on household poverty alleviation, in collaboration with investigators at universities in Manchester, UK and Rio de Janeiro, Brazil, and Rhodes University, under a DfID grant. (8) An ethnographic study of remembrance, culture and identity of older South Africans, in collaboration with investigators at the University of the Western Cape and the University of Amsterdam, the Netherlands, under a SANPAD grant.

## STATISTICS 2003

### PERMANENT AND LONG TERM CONTRACT STAFF

Director	1
Senior Consultant	1



Consultant	2
Registrar	2
Medical Officer	1
Administrative and clerical staff	2
<b>TOTAL</b>	<b>9</b>

#### HONORARY STAFF

Senior Lecturer	1
Lecturer	1
<b>TOTAL</b>	<b>2</b>

#### STUDENTS

Doctoral	1
Masters	2
<b>TOTAL</b>	<b>3</b>

#### RESEARCH FIELDS

##### Professor Monica Ferreira

Director; 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

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, CT head in stroke, post-discharge stroke community care.

# 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 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. During the last year Professor Michael Sack left the Hatter Institute to take up a new position at the National Institutes for Health in Washington, DC. In order to maintain continuity and the established high standard of research outputs, the Hatter Institute has subsequently been restructured. This arrangement has led to Professor Lionel Opie taking over as Director, and Dr Faadiel Essop as Financial & Administrative Director of the Hatter Institute.

A number of collaborative research initiatives have been established in Cape Town and internationally. These include:

1. Links between the Hatter Institutes, University College London and Cape Town: for the sixth consecutive year, formal collaboration between these institutes was celebrated by the presentation Cardiology at the Limits – VI in Cape Town during 2003. This symposium brings together experts in cardiology from the USA, Europe and South Africa. The link with University College London has also resulted in obtaining combined funding for research from the Wellcome Trust in the UK.
2. Collaboration with the Cardiac Clinic, GSH: numerous clinicians in the laboratory worked concurrently in the Cardiac Clinic at Groote Schuur Hospital.

## ADDITIONAL RESEARCH COLLABORATIVE INITIATIVES

1. Washington University Medical School, St Louis, MO, USA. Collaborative study with Dr Daniel P. Kelly, Centre for Cardiovascular Research.
2. University of Texas Health Science Center, Houston, TX, USA. Collaborative study with Dr Martin Young, Institute of Molecular Medicine.
3. University of California, San Diego, CA, USA. Collaborative study with Dr Ken Chien.
4. University of Louisville, Kentucky, USA. Dr Peipei Ping.

## STATISTICS 2003

### PERMANENT AND LONG TERM CONTRACT STAFF

Emeritus Professors	1
Clinical Staff	1
Research Assistants	4
Postdoctoral Research Fellows	3
<b>TOTAL</b>	<b>9</b>

#### HONORARY STAFF

Honorary Lecturers	2
Honorary Professor	1
<b>TOTAL</b>	<b>3</b>

#### STUDENTS

Doctoral	4
Hons	1
<b>TOTAL</b>	<b>5</b>

#### 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

##### Mr Peter Oroma

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

##### 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

##### Ms Alana Berger

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

# HYPERTENSION CLINIC

**HEAD OF DIVISION** - Associate Professor Brian Rayner

## CONTACT DETAILS

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## DEPARTMENTAL PROFILE

The Division of Hypertension continues to be active in research. Our main research activity over the past year has focused on the genetic causes of hypertension particularly in black South Africans in conjunction with the UCL College in London, and the Departments of Chemical Pathology, Obstetrics and Genetics, UCT. As a result of this research we have discovered a novel mutation (r563q) in the epithelial sodium channel (ENaC), which causes severe hypertension in black and coloured South Africans (but not whites) associated with low renin/low aldosterone levels. Current research projects include: i) the relationship of mutations of ENaC and hypertension in pregnancy, and the function of the ENaC in the placenta ii) the investigation of the kindred of patients with the ENaC mutation to firmly establish the relationship between the mutation and hypertension iii) the investigation of the genetic causes of severe hypertension in black South Africans. These 3 areas of research are the major research strengths of the division.

The division is also actively involved in Phase 2 and 3 clinical trials research in conjunction with multi-national pharmaceutical companies.

Summary of research projects:

- i) ACE genotype and activity in black African populations in conjunction with Hugh Montgomery from the UCL Centre for Cardiovascular Genetics in London
- ii) ENaC mutations in conjunction with Chemical Pathology and Obstetrics
- iii) Genetics of severe hypertension in blacks in conjunction with Department of Genetics and Chemical Pathology
- iv) Clinical research into the effects of differing angiotensin receptor blockers on uric acid and endothelial function in hypertensive patients, and aortic unfolding as a marker of target organ damage.
- v) Hypertensive retinopathy
- vi) A Multi-National, Prospective, Randomised, Double-Blind, Multi-Center, Placebo-Controlled Study to Evaluate the Efficacy and safety of a Fixed combination Therapy of Amlodipine and Atorvastatin in the Treatment of concurrent Hypertension and Hyperlipidaemia. A3841003.
- vii) A Phase IIa, double-blind, randomized, parallel group, placebo-controlled, rising dose study to assess the pharmacodynamics, safety, tolerability and pharmacokinetics of AVE7688 administered orally, once a day, for 4 weeks in hypertensive subjects. AVE7688A/2001

## STATISTICS 2003

### PERMANENT AND LONG TERM STAFF

Professor	1
Associate Professor	1
Consultant	1
Registrar	1
Medical Officers	3
Chief Prof. Nurse	1
Research staff	3
<b>Total</b>	<b>11</b>

## **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 Ntevi

Genetics of hypertension, ACE genotype study

### Sister Donette Baines

Contract Research Co-ordinator

# INFECTIOUS DISEASES UNIT

**HEAD OF DIVISION** - Associate Professor Gary Maartens

## CONTACT DETAILS

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## DEPARTMENTAL PROFILE

The Infectious Diseases Unit has research interests in the fields of tuberculosis and HIV. We have collaborations with the PHRI, New Jersey (Gilla Kaplan - the immune response to tuberculosis), Johns Hopkins University School of Medicine, Baltimore (Richard Chaisson – tuberculosis and HIV) and McGill University, Montreal (Eduard Beck - HIV resource utilisation). We have an HIV clinical trial centre (run by Prof Robin Wood) which conducts phase 2 & 3 drug trials.

## STATISTICS 2003

### PERMANENT AND LONG TERM STAFF

Professors	2
Clinical Staff	1
<b>TOTAL</b>	<b>3</b>

### HONORARY STAFF

Honorary Lecturers	1
<b>TOTAL</b>	<b>1</b>

### STUDENTS

Doctoral	1
Masters	1
Postdoctoral	1
<b>Total</b>	<b>3</b>

## RESEARCH FIELDS

Associate Professor G Maartens  
tuberculosis; HIV

Associated Professor R Wood  
HIV therapy

Dr L-G Bekker  
Immunology of tuberculosis, HIV

# DIVISION OF LIPIDOLOGY

**HEAD OF DIVISION** - Associate Professor AD Marais

## CONTACT DETAILS

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## DEPARTMENTAL PROFILE

The lipidology division of internal medicine integrates clinical consultation, laboratory diagnostic investigations and contract research. It has become known as the best venue in South Africa for working up unusual and severe dyslipidaemias. The main thrust of research remains the evaluation of new pharmacotherapeutic strategies for the control of severe dyslipidaemia. To this end it has become an international collaborator in studies that evaluate the atherosclerosis in carotid arteries in severe dyslipidaemia by ultrasound investigation. New ultrasound equipment has permitted an investigation into vascular function as well. The financing of Lipidology is chiefly from contract research but there is some support from the provincial government and Medical Research Council.

## STATISTICS 2003

### 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
<b>TOTAL</b>	<b>17</b>

### STUDENTS

Doctoral	4
Masters	4
<b>TOTAL</b>	<b>8</b>

## RESEARCH FIELDS

**A D Marais**

causes of dyslipidaemia; diagnostic procedures for dyslipidaemias using gradient gel electrophoresis; Friedel-Crafts reaction for identifying dyslipidaemia; newer therapeutic agents for dyslipidaemia including ezetimibe; genotype-phenotype interactions in familial hypercholesterolaemia; dyslipoproteinaemia of pregnancy; turnover of lipoproteins; surrogate markers for atherosclerosis in severe dyslipidaemia; renal effects of statins.

**D J Blom**

gradient gel electrophoresis in the diagnosis of dysbetalipoproteinaemia; acute fatty liver of pregnancy; impact of statins and fibrates on lipoproteins in dysbetalipoproteinaemia.

**J C Firth**

: Physical signs and genotype-phenotype interactions in familial hypercholesterolaemia; therapy of heterozygous as well as homozygous familial hypercholesterolaemia; atherosclerosis in adolescents with familial hypercholesterolaemia; ezetimibe as adjunct to simvastatin in the treatment of severe hypercholesterolaemia.

KH Wolmarans

atherosclerosis in adolescents with familial hypercholesterolaemia; ezetimibe as adjunct to simvastatin in the treatment of severe hypercholesterolaemia. Flow-mediated dilatation of brachial artery.

DM Blackhurst

peroxidation of unsaturated fatty acids and the antioxidant effect of wine. Effect of wine on flow-mediated dilatation.

RG Marillier

matrix metalloproteinase assays; influence of matrix metalloproteinase on atherosclerosis



# **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  
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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.

The Centre's Mission is to serve as a national resource by:

1. increasing the understanding of the liver in health and disease
2. identifying and studying diseases of the liver which occur in Southern Africa
3. identifying and studying measures capable of preventing liver disease
4. identifying and studying methods of improving the health of patients with liver disease
5. disseminating information which will allow health authorities and health workers to prevent liver disease, to promote health by emphasising dangers such as alcohol abuse and to improve the care of patients with already existing liver disease
6. developing human resources capable of continuing to fulfil our mission and in doing so to give preference where possible to persons disadvantaged as a result of discrimination on the basis of their race or gender.

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 celebrates 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 2003**

### **PERMANENT AND LONG TERM CONTRACT STAFF**

Professors	5
Associate Professors	6
Senior Lecturers	9
Senior Research Officers	10
Technical support staff	10
<b>TOTAL</b>	<b>40</b>

### **HONORARY STAFF**

Honorary staff	3
<b>TOTAL</b>	<b>3</b>

**S T U D E N T S**

PhD students	6
<b>TOTAL</b>	<b>6</b>

**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 JEL

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

Miller AJW

Liver transplantation

Shepherd EG

Immunology of liver disease

Campbell JAH

Experimental cirrhosis

Hift RJ

Porphyria, iron overload

Spearman CWN

Liver transplantation

Matsiliza N

Cardiovascular manifestations of portal hypertension

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

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## DEPARTMENTAL PROFILE

The Division remains actively involved in contract research in the fields of transplantation immunosuppression and renal osteodystrophy. 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.

## STATISTICS 2003

### PERMANENT AND LONG TERM CONTRACT STAFF

Associate Professors	2
Senior Lecturers	2
<b>TOTAL</b>	<b>4</b>

### STUDENTS

Medical Registrars (1 senior)	3
<b>TOTAL</b>	<b>3</b>

## RESEARCH FIELDS

### Dr J A Halkett

Anaemia and iron metabolism in chronic renal failure  
Aluminium overload in haemodialysis patients  
Acute renal failure: Demographics and out come at Groote Schuur Hospital  
Renal pathology with HIV disease  
Renal osteodystrophy

### 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 erythematosus.

### Dr E Coetzer (Research Fellow)

A new immunosuppressive agent in resistant nephrotic syndrome.

# DIVISION OF NEUROLOGY

**HEAD OF DIVISION** - Associate Professor RW Eastman

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## DEPARTMENTAL PROFILE

The major research interests of the division are stroke, myasthenia gravis, neuro-genetics, epilepsy and Parkinson's disease.

The Stroke Unit, run jointly with the Division of Geriatrics, maintains a database of all the stroke patients seen at Grootte Schuur Hospital. This information is being used to delineate the clinical patterns, risk factors and outcomes of stroke in our multicultural setting. The acute treatment and rehabilitation protocols being developed will also be used to determine the best model for stroke management at the regional primary and secondary levels of healthcare. This is the only such service in a public hospital in the country, and is attracting considerable attention, as stroke is a major cause of death and disability.

The Myasthenia gravis clinic, also unique in the country, is examining the beneficial effects of intensive immunotherapy on the course of the illness. Of especial interest, and a pointer to the way in which therapeutic drugs will be used in the future, the patients are genotyped to establish the presence or absence of certain enzyme systems, and the doses of the potentially toxic drugs are accordingly tailored for each individual.

The Neuro-genetic service sees a wide range of conditions, but has a special interest in the spino-cerebellar ataxias and Huntington's disease. The genetic basis for these disorders in our population are being explored.

Epilepsy which is not adequately controlled by drugs is a common and frequently disabling condition. Our epilepsy surgery programme, unique in a public hospital, is continuing to use advanced intra-cranial neurophysiological techniques to identify the cerebral source of the seizures to allow resective surgery to be performed.

The division is also active in drug trial research, especially in the fields of Parkinson's disease, epilepsy and stroke, and in the development of new teaching methods using multi-media techniques.

## STATISTICS 2003

### PERMANENT AND LONG-TERM CONTRACT STAFF

Associate Professors	3
Senior Lecturers (Full-time)	1
Junior Lecturers (Full-time)	1
Lecturers (Part-time)	3
<b>TOTAL</b>	<b>8</b>

### STUDENTS

MMed students	2
<b>TOTAL</b>	<b>2</b>

## **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

Dr. J Heckmann:

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 Peter I Folb, M.D., F.R.C.P.

## DEPARTMENTAL CONTACT DETAILS

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University of Cape Town  
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## DEPARTMENTAL PROFILE

Research in the department covers applied and clinical pharmacology and therapeutics for the University of Cape Town teaching hospitals, and the department participates in a number of regional, national, continental (African) and international programmes.

The World Health Organisation Collaborating Centre for Drug Policy Research, based in the division and functioning in conjunction with the School of Pharmacy of the University of the Western Cape, has the following terms of reference: (i) drug information and promotion of rational drug use; (ii) promotion of and research into drug safety; (iii) traditional medicines research, including discovery and development of novel drugs from Southern African medicinal plants; and (iv) drug development science. Systems for monitoring drug safety have been developed and drug toxicity is monitored countrywide. Collaboration with other developing countries is undertaken for training of research workers and of specialists in drug information and safety. The division of pharmacology serves as the WHO international training centre for monitoring adverse drug events following immunisation; altogether more than 135 senior personnel in drug regulation and directors of national immunisation programmes from more than 55 countries have been trained so far.

The department conducts a collaborative research programme, in conjunction with the Medical Research Council, into the early development of new anti-tuberculosis combination drugs. New drug assay methods are developed and clinical development of novel anti-tuberculosis drugs is supported by clinical trials in patients and in healthy normal volunteers. In two separate research programmes supported by innovation awards from the national Department of Science and Technology (DST, formerly DACST), novel anti-malarial and anti-tuberculosis drugs from Southern African traditional medicinal plants are investigated to the point of proof of principle. These programmes are conducted in conjunction with the Council for Scientific and Industrial Research (CSIR), the Medical Research Council, the National Botanical Institute and five other South African university departments. The division also conducts research into mechanisms of anti-malarial drug resistance of the malaria parasite, with special reference to chloroquine, mefloquine and pyronaridine. Activity has been tested *in vitro* of concentrated extracts of more than 400 plant extracts against approximately 15 strains of *Plasmodium falciparum*.

*The South African Medical Research Council South African Traditional Medicines Research Unit, run in conjunction with the University of the Western Cape School of Pharmacy, conducts laboratory research into activities of traditional medicines and their safety, with special reference to anti-malarial agents and anti-tuberculosis agents. A computerised database has been developed for use by researchers, traditional healers, other health professionals, and the public.*

The National Adverse Drug Event Monitoring Centre (NADEMC), based in the division of pharmacology, falls under the national Department of Health cluster Medicines Regulatory Affairs (MRA) Directorate: Clinical Evaluations and Clinical Trials. The personnel of the centre serve as secretariat to the Medicines Control Council (MCC). The centre monitors adverse reactions reported nationally for all registered medicines. During 2003 approximately 810 reports were processed. South Africa is a participating country in the WHO International Drug Monitoring Programme, and the NADEMC serves as the national centre to this programme of the WHO.

During 2003 the Medicines Information Centre (MIC) continued to focus its efforts on securing funding to continue to provide a professional drug information service to health professionals in southern Africa. Secure and adequate funding to continue in operation beyond 2004 has not been secured as yet. The Centre answered 5 196 queries received from both the private and public sector from January 2003 to October 2003. The MIC has continued to organise seminars, weekend courses and monthly lectures in support of continuing professional development, and to teach University of the Western Cape final year pharmacy students, Pharmacy interns from Groote Schuur Hospital, Red Cross Children's Hospital, Tygerberg Hospital and Conradie Hospital were trained for 2-4 weeks at the Centre in the provision of drug information. A number of foreign students doing internships at GSH spent 1 week each at the Centre.

**Deleted:** The National Adverse Drug Event Monitoring Centre, based in the division of pharmacology, falls under the national Department of Health cluster Medicines Regulatory Affairs (NRA) Directorate: Clinical Evaluation and Trials, and staff of the centre serve as secretariat to the Medicines Control Council (MCC). The centre monitors adverse effects reported for all registered drugs, nationally. During 2002 approximately 850 reports were processed. The centre serves as the national contributing centre to the World Health Organization international collaborating centre for adverse drug event monitoring.¶

<u>Consultations</u>	<u>2002/3</u>	<u>%</u>	<u>2001/2</u>	<u>%</u>
<u>Total</u>	<u>5559</u>	<u>100</u>	<u>7436</u>	<u>100</u>
<u>Groote Schuur</u>	<u>469</u>	<u>8</u>	<u>547</u>	<u>7</u>
<u>Topic</u>	<u>2002/3</u>	<u>%</u>	<u>2001/2</u>	<u>%</u>
<u>ADR</u>	<u>658</u>	<u>11.8</u>	<u>877</u>	<u>12.0</u>
<u>Availability/Supply</u>	<u>636</u>	<u>11.4</u>	<u>788</u>	<u>11.0</u>
<u>Drug Free Sport</u>	<u>194</u>	<u>3.5</u>	<u>99</u>	<u>1.3</u>
<u>Foreign ID/Equivalents</u>	<u>1181</u>	<u>21.2</u>	<u>1365</u>	<u>18.0</u>
<u>G6PD Deficiency</u>	<u>13</u>	<u>0.2</u>	<u>16</u>	<u>0.2</u>
<u>HIV/AIDS</u>	<u>94</u>	<u>1.7</u>		
<u>Interaction</u>	<u>451</u>	<u>8.1</u>	<u>602</u>	<u>8.0</u>
<u>Lactation</u>	<u>58</u>	<u>1.0</u>	<u>94</u>	<u>1.3</u>
<u>Malaria</u>	<u>594</u>	<u>10.7</u>	<u>1233</u>	<u>17.0</u>
<u>Medicolegal</u>	<u>28</u>	<u>0.5</u>	<u>15</u>	<u>15.0</u>
<u>Other</u>	<u>147</u>	<u>2.6</u>	<u>176</u>	<u>2.0</u>
<u>Pharmaceutical</u>	<u>257</u>	<u>4.6</u>	<u>407</u>	<u>5.0</u>
<u>Pharmacokinetics</u>	<u>38</u>	<u>0.7</u>	<u>57</u>	<u>0.7</u>
<u>Pharmacology/MOA</u>	<u>33</u>	<u>0.6</u>	<u>50</u>	<u>0.6</u>
<u>Poisoning</u>	<u>50</u>	<u>0.9</u>	<u>65</u>	<u>0.8</u>
<u>Porphyria</u>	<u>92</u>	<u>1.7</u>	<u>153</u>	<u>2.0</u>
<u>Pregnancy</u>	<u>224</u>	<u>4.0</u>	<u>315</u>	<u>4.0</u>
<u>Psychopharmacology</u>	<u>78</u>	<u>1.4</u>	<u>97</u>	<u>1.3</u>
<u>Tablet ID (Refer)</u>	<u>37</u>	<u>0.7</u>	<u>50</u>	<u>0.7</u>
<u>Therapy</u>	<u>696</u>	<u>12.5</u>	<u>977</u>	<u>13.0</u>
<u>Grand Total</u>	<u>5559</u>	<u>100.0</u>	<u>7436</u>	<u>100.0</u>

The sixth edition of the South African Medicines Formulary was published in 2003. The text was extensively reviewed by national experts in the various fields of medicine and updated by a dedicated editing team in the division of Pharmacology. An estimated 30 000 health professionals throughout the country, and students in a number of South African schools of medicine and health sciences, as well as health professionals abroad, make regular use of the SAME. A pharmacology database has been developed to facilitate production of the SAME and to store references and background material from which the SAME text is drawn. The database forms a valuable drug information tool, and subsets of the data will be used to generate print or electronic (CD-ROM, web and handheld device) products.

The South African traditional medicines data base, developed in the division of pharmacology in conjunction with the Medical Research Council, incorporates information gathered from contemporary scientific literature on medicinal plants and their chemistry, pharmacology and toxicology, and data from books, published articles, theses, unpublished reports and databases already available concentrating on African plants. Approximately 13 000 items have been entered to date.

The pharmacology analytical laboratory has modern research and routine assay facilities, including LC/MS and LS/MS/MS technology. The laboratory provides a routine analytical service to the University of Cape Town teaching hospitals and to approximately 20 other institutions in the Western Cape region for a range of drugs including the commonly used antibiotics and all the current immunosuppressive drugs, including sirolimus for which the laboratory serves as the national reference centre. The laboratory also serves as one of three WHO international reference centres for laboratory assay of rifampicin in fixed dose combinations. The laboratory provides assays for about 40 different

**Deleted:** The Medicines Information Centre provides a professional drug information service to all health professionals in Southern Africa, in the public and private sectors. The centre is the largest centre of its kind in Africa. The centre organises courses and seminars in for continuing professional development (CPD) throughout the country and during 2002 approximately 1500 health professionals participated in the programme. The centre deals with approximately 20-40 drug information queries a day, altogether 5981 in 2002. The centre provides a teaching course in drug information to pharmacy students at the University of the Western Cape. Pharmacy interns from Groote Schuur Hospital, Red Cross Children's Hospital, Tygerberg Hospital and Conradie Hospital are trained for 2-4 weeks at the centre in drug information. The centre provides an internationally recognised training course in drug information for setting up drug information centres elsewhere in an intensive 4-week programme. In 2002 one delegate attended the course from Uganda, sponsored by the World Health Organization.¶

**Deleted:** The sixth edition of the South African Medicines Formulary is due to be published early in 2003.¶

drugs. The strength of the laboratory lies in its capacity to develop and validate new assays, applicable not only to research but also to industry. Assays for nevirapine and efavirenz have been developed and validated in 2003, and assays for other antiretroviral agents and second-line anti-tuberculosis drugs are currently being developed. The laboratory was successful in its initiative to achieve ISO 17025 quality system accreditation with the South African National Accreditation System, which is affiliated to the International Laboratory Accreditation Co-operation. This accreditation as a testing facility provides the laboratory with the capacity to train students for placement in laboratories worldwide.

**Deleted:** The pharmacology analytical laboratory has modern research and routine assay facilities, including a liquid chromatography mass spectrometer. The laboratory provides a routine analytical service to the University of Cape Town teaching hospitals and altogether to approximately 20 other institutions in the Western Cape region for a range of drugs including the commonly used antibiotics and all the current immunosuppressive drugs, including sirolimus. The laboratory is the only site in South Africa that is able to offer this service. The laboratory serves as the national reference centre for assay of immunosuppressive agents and as one of three WHO international reference centres for laboratory assay of anti-tuberculosis agents. Chemical characterisation of active compounds from extracts of medicinal plants is a key research activity of the laboratories. The laboratory provides assays for about 40 different drugs. The strength of the laboratory lies in its capacity to develop and validate new assays, applicable not only to research but also to industry. Assays for nevirapine and efavirenz have been developed and validated in 2002, and assays for other antiretroviral agents and second-line anti-tuberculosis drugs are currently being developed. The laboratory is at present in the final stages of putting in to practice an ISO 17025 quality system, and applying for accreditation by the South African National Accreditation System. This accreditation as a testing facility will provide the laboratory with international recognition, as well as the capacity to train students for placement in laboratories worldwide. ¶

## DEPARTMENTAL STATISTICS 2003

### PERMANENT AND LONG TERM CONTRACT STAFF

Professor	1
Associate professor	1
Senior Lecturers	2
Lecturers	4
Research Staff	22
Technical Support Staff	8
Administrative and Clerical Staff	6
<b>TOTAL</b>	<b>44</b>

### HONORARY STAFF

Honorary Lecturers	3
<b>TOTAL</b>	<b>3</b>

### STUDENTS

Post Doctoral	3
Doctoral	14
Masters	9
Honours	5
Undergraduate Medical Students	530
*	<b>561</b>

## RESEARCH FIELDS

### P.I. Folb

clinical and experimental pharmacology, scientific basis of drug development, toxicology and drug safety, and malaria

### P.J. Smith

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

### A. Robins

psychopharmacology: neuroleptic malignant syndrome; catatonia; antidepressants

### K.I. Barnes

malaria, combination antimalarial therapy – operational and policy research

### H. McIlleron

tuberculosis drug kinetics in patients; tuberculosis drug formulation quality and bioequivalence

### M. Blockman

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

### W.E. Campbell

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



G. Gabriels

tuberculosis, pharmacokinetics

A. Evans

drug assay development

U. Mehta

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

H. Hoppe

malaria - pathogenesis

# RESPIRATORY CLINIC

**HEAD OF DIVISION** – Professor ED Bateman

## CONTACT DETAILS

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## DEPARTMENTAL PROFILE

### Research Projects

- ? **Epidemiology of Lung Disease in South Africa: the Lung Health Study 2002** in Ravensmead/Uitsig suburbs of Cape Town. An epidemiological survey of respiratory diseases including tuberculosis, across all age groups in the Ravensmead and Uitsig suburbs of Cape Town has been undertaken in collaboration with the Tuberculosis Research Unit of the University of Stellenbosch and the Lung Unit at Tygerberg Hospital. A randomised cross-sectional cluster design was used to gather details of living conditions and respiratory health in over 5000 persons, a 20% sample of the total population of the areas. All adult participants had chest radiographs, sputum examinations and skin tests for tuberculosis. Work on three follow-up studies is underway. In the first, lung function testing will be performed to confirm the prevalence of chronic obstructive lung disease and of other lung diseases in the community, and of risk factors for developing disease. A recently completed international questionnaire and lung function testing protocol (the Burden of Obstructive Lung Disease (BOLD)) is being employed to permit comparisons with results obtained from other countries. Reference values for spirometry in adults aged 40 years and older will be derived. Investigators: Dr Anamika Jithoo, and Professors Bateman, Peter Burney and White. A second study will assess the prevalence and associations of asthma in the age-group 15 to 35 years (Dr E van Schalkwyk and Professor E Iruken, University of Stellenbosch), and a third will examine the development of asthma and allergy in children (Dr C Obihara, and Professor R Gie, University of Stellenbosch). These results will be of value to planners of health care, and will provide insights into the combined effects of common risk factors for respiratory diseases, such as smoking, domestic and environmental pollution, tuberculosis, infections and infestations. Funding has been obtained from the SA Medical Research Council (ED Bateman), the South African Thoracic Society (The AstraZeneca Respiratory Research Grant (ED Bateman), and the GSK Respiratory Research Fellowship in Pulmonology (Dr A Jithoo).
- ? **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®). During the past year the diagnostic and therapeutic algorithms of this programme have been updated to accommodate changing views on criteria for distinguishing different forms of obstructive lung disease, new treatments and changes to international guidelines. Version 2 has been completed, and is being evaluated in a prospective study of 2000 patients in a primary health care clinic (Retreat Community Health Centre), against medical officer and specialist diagnosis and treatment opinions. This forms the topic of a Master of Philosophy for Dr. T van Rensburg.
- ? **Practical Approach to Lung Health in South Africa (PALSA).** Project Leader: Professor ED Bateman. The Practical Approach to Lung Health in South Africa (PALSA) projects originated in response to the World Health Organisation's Practical Approach to Lung Health (PAL) initiative, designed to improve the care of patients with common respiratory diseases in underserved communities: these diseases include tuberculosis, pneumonia, upper respiratory tract infections, asthma, and COPD. PALSA is a collaboration between the SA MRC, the University of the Free State, the World Health Organisation Stop TB Programme and the UCT Lung Institute. Four countries have been selected to develop, validate and implement the PAL principle, and the Lung Institute has received funding from the WHO, the IDRC in Canada, and the SA MRC to perform this study. The first phase of the Cape Town study was to develop an evidence-based symptom-based clinical practice guideline for nurses working in primary health care clinics. This phase is nearing completion. The second is to validate the PALSA guideline in a primary care setting, comparing the diagnoses and assessments of severity obtained from a trained nurse practitioner making use of the PALSA guideline, to that of an expert respiratory physician aided by relevant

diagnostic tests. This project is nearing completion at the Retreat Community Health Centre, where over 1500 patients have been assessed. The third is a randomised controlled trial in 40 clinics in the Free State Province, in collaboration with the Free State Department of Health. The clinical phase of this study has been completed. Doctoral degree students involved in this study are Drs Rene English and Dr Lara Fairall from UCT, and Mr Bosiela Majara (University of the Free State). A qualitative evaluation of the process of programme implementation, performed by Mrs Pat Mayers from the Department of Nursing will form the topic of a doctoral degree (UCT).

- ? **Occupational Asthma in Fish Handlers** (600 workers tested), in collaboration the Department of Public Health, UCT (Dr M Jeebay). The Lung Institute provided the respiratory assessments including field bronchial provocation testing for this study.
- ? **Small Airways Disease**, a physiological study of small airways in asthma. Dr A Venter, Prof E Bateman and Mrs B Holtzhausen.
- ? **Studies on the Diagnostic Utility of High-Resolution Computerised Scanning in the Diagnosis of Diffuse Parenchymal Lung Disease.** Professor E Bateman, in collaboration with Professors A Wells and D Hansell of the Royal Brompton Hospital, London.
- ? **Community-based Survey of Persons Exposed to a Large Sulphur Fire Smoke Plume;** an assessment of residual respiratory health effects six years after exposure to a sulphur fire smoke. Dr A Barnes, Mrs B Holtzhausen, Professor E Bateman, in collaboration with the University of Michigan.
- ? **Canadian Lung Volume Reduction Surgery.** The institute has been a participating centre in the Canadian Medical Research Council-sponsored randomised controlled trial to examine the efficacy and utility of this form of surgery in patients with severe emphysema. Recruitment has ceased, but follow-up will continue for a minimum of two years.
- ? **Host Immunity in Tuberculosis.** This 5-year project, funded by the National Institutes of Health 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 recombinant interferon-gamma administered 3times-weekly for 4 months. Principal investigators are Professor S Ress, Immunology Unit, Department of Medicine, UCT, and Professor W Rom, University of New York; co-investigators include Drs R Condon (NYU) and Dr R Dawson, and Professor E Bateman and P Willcox and Sr Wendy Lucke.
- ? **Bakers Asthma in Bakeries in Cape Town.** More than six hundred employees from bakeries in Cape Town will be 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. Principal investigator is Dr M Jeebay, Occupational Health Unit, Department of Public Health at UCT.
- ? **In occupational medicine,** an ongoing project undertaken for the Safety in Mines Research Advisory Committee (SIMRAC) has involved the development of guidelines and materials for the technology transfer of X-ray reading skills to medical practitioners in the mining industry. Medical surveillance of former asbestos exposed workers has continued, and a study of environmental factors associated with asthma in the north-west part of Cape Town has been completed. Links have been developed with the Department of Labour which have seen the establishment of a Provincial Medical Advisory Panel for the Compensation Commissioner and the beginning of specialist Occupational Medicine training at the UCT / Groote Schuur Hospital.
- ? **In the Lung Drug Research Unit** 16 pharmaceutical studies, 7 in chronic obstructive pulmonary disease, 8 in asthma and one in pulmonary hypertension, have been in progress or completed, and planning has commenced on a further 8 studies. Eighteen are phase III studies, three are phase II and one is a phase I study. Professor Bateman has served as national and/or international lead investigator for several studies, including the GOAL (Gaining Optimal Asthma control) study (GlaxoSmithKline), and for a phase 1 study performed for Kyowa Hakko (Japan) and another for Aventis, on a new inhaled corticosteroid. Staff include Dr Mary Bateman (Clinical Trials Manager), Cecilia Wilson (Senior Trials Co-ordinator) and Belinda Holtzhausen (Senior Clinical Technologist).

## STATISTICS 2003

## PERMANENT & LONGTERM CONTRACT STAFF

Professor	2
Associate Professors	3
Senior Lecturer	1
Honorary Lecturer	1
<b>RESEARCH STAFF</b>	
Medical Officers	7
Nursing study co-ordinator	6
Research assistants/study coordinators	7
Admin & clerical staff	3
<b>TOTAL</b>	<b>30</b>

## STUDENTS

Doctoral: PhD	4
MMed: FCP	2
MSc	2
<b>TOTAL</b>	<b>8</b>

## RESEARCH FIELDS

Professor E.D. Bateman

Disease management, pharmacology, and epidemiology of asthma and chronic obstructive pulmonary disease; classification and treatment of diffuse parenchymal lung diseases.

Associate Professor G.M. Ainslie

Natural history and predictors of outcome in sarcoidosis; high resolution CT scanning, and treatment in idiopathic pulmonary fibrosis; natural history of hypersensitivity pneumonitis; treatment of pulmonary hypertension; clinical patterns of asthma; asthma education; alpha 1 -antitrypsin deficiency.

Dr R.I. Raine

Airway management in critical care; exogenous surfactant in the adult respiratory distress syndrome; antimicrobial therapy in candidaemia; prognostic indicators in critical care; epidemiology and treatment of sleep-disordered breathing in South Africa.

Associate Professor N.W. White

Lung disease in ex-miners; epidemiology of silicosis in gold miners; lung function reference equations; tuberculosis in miners; occupational asthma; radiological classification of pneumoconiosis; effects of air pollution upon the health of children.

Associate Professor P.A. Willcox

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

Dr M.E. Bateman

Pharmacology of asthma and COPD; smoking cessation programmes.

Dr. D. Carman

Computer-based data collection systems and medical records.

Mrs C. Wilson, Mrs R. Kalam, Mrs M. Ivreva, Mrs W. Lucky, Mrs S. Donaldson,

Clinical drug trials

Mrs B Holtzhausen

Small airways disease; lung physiology; clinical drug trials; polysomnography.

Mrs J Etheridge

Clinical lung function and polysomnography

Mrs K Kriek

Lung physiology and trials co-ordination.

Dr D Fisher (Visiting Lecturer)

Lung burden of tuberculosis.

Dr C Kewley

Tuberculosis: social impact; multi-drug resistance, and therapeutics.

Ms E Nolojwe

Occupational Health research

# 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 2003

### PERMANENT & LONGTERM CONTRACT STAFF

Professor	1
Lecturer	2
Research Staff	2
Nurse practitioner	1
Admin & Clerical staff	1
<b>TOTAL</b>	<b>7</b>

### HONORARY STAFF

Honorary lecturers	3
<b>TOTAL</b>	<b>3</b>

### STUDENTS

Rotating medical registrar	1
Medical Officers (SHO)	1
<b>TOTAL</b>	<b>2</b>

## **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.