

# 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

Postal Address: Department of Medicine

University of Cape Town Medical School

Observatory, 7925

Cape Town

Telephone: SA (21) 406-6200 Fax: SA (21) 448-6815

E-mail: Ralph@uctgsh1.uct.ac.za

#### **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.

# **STATISTICS 2002**

## PERMANENT &LONG TERM CONTRACT STAFF

Professors	8
Associate Professors	23
Senior Lecturers	16
Lecturers	4
Administrative and clerical staff	12
TOTAL	

HONORARY STAFF	
Honorary Professors	1
Emeritus Professor	3
Honorary Associate Professors	1
Honorary Senior Lecturers	18
Honorary Research Associates	2
TOTAL	

#### **STUDENTS**

Doctoral	34
Masters	156
Honours	34
Undergraduates	674
TOTAL	898

## RESEARCH FIELDS

See Units and Divisions within the Department

# **UCT BIOETHICS CENTRE**

#### **DIRECTOR** – Professor S.R. Benatar

CONTACT DETAILS

Postal Address: UCT Bioethics Centre

J Floor, OMB

Groote Schuur Hospital Observatory, 7925

Cape Town

Telephone: SA (21) 406-6115 Fax: SA (21) 448-6815

Email: sbenatar@uctgsh1.uct.ac.za

cdekoker@uctgsh1.uct.ac.za

#### DEPARTMENTAL PROFILE

The year 2002 was another busy and productive year for members of the Centre. We completed and submitted our application to the Fogarty International Center for an educational grant and we were delighted to receive a generous grant from the US National Institutes of Health, through the Fogarty International Center in association with the National Institute of Environmental Health Sciences and the National Institutes of General Medicine. This is a major is a milestone event for our Centre, for UCT and for South Africa. It is one of the first awards made to a non-US Program Director, in a new era of NIH sponsored capacity building in developing countries. The overall goal of our newly funded programme is to develop sustainable multidisciplinary expertise in international research ethics and bioethics in Southern Africa.

Each year, for four years, 12 developing-country scientists, academics and clinicians serving on Research Ethics Committees (REC) will be funded through the grant to participate in specialized, graduate-level training focused on ethical, social and legal principles guiding responsible conduct of research on vulnerable subjects in the cross-cultural context of medium and low-income countries. Interest and training in research ethics will also be fostered through annual two-day courses to train and update 75 members of research ethics committees (RECs) and through the development of a research ethics network and website

This programme, taught by a multidisciplinary Faculty with national and international reputations in bioethics, will be unique in Africa and should impact considerably on the ethics of research in Southern Africa, where there has been both exponential increase in the volume of clinical research in developing countries and concern about unethical research, especially in relation to HIV/AIDS.

The grant award of almost R 2 million for the first year (renewable annually for three additional years) will provide total funding (about R8 million) for the four-year programme. Faculty will include staff from the Universities of Cape Town, Stellenbosch, Toronto, Yaounde (Cameroon), and Zimbabwe as well as from the Ethics Institute of South Africa.

Dr Terry Fleischer made a major contribution to developing our application to the Fogarty International Center for an Educational Grant and will have a central role the further development and implementation of our educational programme. He also co-taught with Ms Anne Pope the course he developed last year on Law and Medicine at the UCT Faculty of Law in the winter semester, 2002.

Prof Louis Reynolds of the Red Cross Children's Hospital was sponsored to attend an intensive course on Research Ethics at Harvard Medical School.

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

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

He gave several invited presentations at congresses in Canada, the UK, USA and Brazil, as well as several keynote addresses (see below).

## STATISTICS 2002

## PERMANENT AND LONG-TERM CONTRACT STAFF

Professor	1
Admin/secretarial	1
TOTAL	2

## **HONORARY STAFF**

Honorary staff	25
TOTAL	25

#### 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 Leslev Henlev

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

## RESEARCH OUTPUTS

## RESEARCH PAPERS AND REFEREED ARTICLES

Benatar D, Hudson D. A tale of two novel transplants not done: The ethics of limb allografts. British Medical Journal 2002;324:971-973.

Benatar D. HIV and the Hemi-Nanny state. The Lancet Infectious Diseases 2002;2:394.

Benatar S R. Some reflections and recommendations on research ethics in developing countries. Social Science & Medicine 2002;54(7):1131-41.

Benatar S R. Response to Doctors Pang and Ashcroft. Social Science & Medicine 2002;54(7):1147-48.

Benatar S R. The HIV/AIDS pandemic: A sign of instability in a complex global system. Journal of Medicine and Philosophy 2002;27:163-177.

Benatar S R. Human Rights in the Biotechnology Era. BioMed Central, 2002; http://www.biomedcentral.com/1472-698X/2/3.

Benatar S R. We must broaden the scope of research ethics. 2002; http://www.scidev.net/articles2./research/ethics. 1 November 2002.

Henley, L D. End of life care in HIV-infected children who died in hospital. Developing World Bioethics 2002;2:38-54.

#### **CHAPTERS IN BOOKS**

Benatar S R. Ethics & cardiovascular therapy: lessons from the third to the first world. Chapter 1. In: Cardiology at the Limits 2002. Opie L, Yellon D (Eds) UCT Press, Cape Town, pp. 1-16.

Benatar S R. Scientific integrity and values in science. In: <u>Spirit of the nation.</u>: <u>reflections on South Africa's Educational ethos.</u> K Asmal, W James (Eds). Human Sciences Research Council & Department of Education. Claremont Cape South Africa 2002. Pp 72-79.

#### UNIVERSITY PUBLICATIONS AND WORKS OF A POPULAR NATURE

Abratt R P. Ethical issues in continuing professional development. (Letter). South African Medical Journal 2002;92:97-98.

Benatar S R. Can Africa really solve its own health problems? <a href="http://bmj.com/cgi/letters/324/7339/688-9">http://bmj.com/cgi/letters/324/7339/688-9</a>. British Medical Journal 2002;324: 1525.

Benatar S R, Van Nielerk A, Landman W, Fleischer T. Laying down AIDS gauntlet: there are some things that must be accepted so that HIV/AIDS can be defeated. Sunday Independent, 7 April 2002, p7.

Goemaere E. Ford N, Benatar S R. HIV/AIDS prevention and treatment. Lancet 2002;360: 86-87.

#### CONSULTANCY AND OTHER ACTIVITIES BASED ON EXPERTISE DEVELOPMENT IN RESEARCH

## Prof S R Benatar

President International Association of Bioethics Board of Directors: Ethics Institute of South Africa Board of Trustees: Groote Schuur Hospital Trust

South African Scientific Advisor to the Novartis Foundation, London

Chairman UCT Committee of Ethics of Research

Editorial Advisory Board. Journal of Theoretical Medicine and Bioethics Editorial Advisory Board. International Library of Law, Ethics and Medicine

Ethics Advisor to Médecins Sans Frontières,

Ethics Advisor HPTN Network, Family Health International, Washington DC

Chairman S A National Research Ethics Committee

## **Dr Terry Fleisher**

Bioethics Advisor: Drug & Therapeutics Committee (MedScheme) Member: Research Ethics Committee, UCT Faculty of Health Sciences

## CONFERENCE PRESENTATIONS

## International

Dr Terry Fleischer gave an invited presentation at the 6<sup>th</sup> World Congress on Bioethics in Brazil.

Prof David Benatar gave an invited presentation at the 6<sup>th</sup> World Congress on Bioethics in Brazil.

Prof Solly Benatar gave invited presentations at the following conferences:

- March 9-13. International Conference on Healthcare Ethics Abu Dhabi 'Ethical considerations in resource allocation at the population level'
- February 22-24. HPTN Annual Conference Washington DC 'Ethical considerations in HIV prevention trials'
- April 20-21. Europe-developing country partnership programme for research into diseases of poverty Barcelona. 'Research ethics in developing countries and the cultural context'
- May 3-4. 1<sup>st</sup> Annual Global Health Research Conference University of Toronto. The global context of medical research.' & 'Research Ethics in developing countries'
- May 24-26. Sustainable Justice & Implementation of Sustainable Development Law Conference : Montreal 'International Sustainable Development: implications for health & health care.'
- May 17-18. Public Heath Ethics International Symposium
   Toronto 'Concluding Summary Address'
- June 9. Harvard/University of Toronto Health Management Course. "Understanding the New World of Health Care." Rotman Business School. Toronto, "Health care in a global context."
- 18 June. 5<sup>th</sup> International Conference on Medical Regulation Toronto. 'Professionalism in a globalising world'
- June 22-23. G6 billion Peoples' Counter summit Conference Calgary 'Health ethics & allocation of resources on a global scale'
- October 12. European Forum for Philosophy. York UK 'Medicine and Justice',
- October 30- November 3. 6<sup>th</sup> World Congress on Bioethics Brasilia
   Presidential Address: 'Bioethics: Power and Injustice,' & 'Public Health and Human Rights'
- December 2-3. Médecins Sans Frontières, "Drugs for neglected diseases initiative (DNDI) Rio de Janeiro 'Weighing the benefits and risk of medical research on neglected disease.'

He also gave invited lectures at the University of Bahia in Salvador, Brazil, and at the University of Alberta in Edmonton, Canada and the Keynote Plenary Address ('Globalization and health: expanding the discourse on ethics') at the Annual Conference of the American Society of Tropical Medicine and Hygiene (Denver 10-14 November 2002).

# **CARDIOLOGY** (Cardiac Clinic)

#### **HEAD OF DIVISION** - Professor P J Commerford

#### CONTACT DETAILS

Postal Address: The Cardiac Clinic

E25 Groote Schuur Hospital

Observatory, 7925

Cape Town

Telephone: SA (21) 404 6084 Fax: SA (21) 448 7062

Email: pjcomfrd@uctgsh1.uct.ac.za

## 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.

## **STATISTICS 2002**

## PERMANENT AND LONG TERM STAFF

Professor	1
Associate Professor	1
Senior Lecturers	4
Part-time Senior Lecturer	1
Registrars-in-training	3
Secretarial Staff and Research staff	7
Technologists	3
ECG Technicians	8
Honorary staff	1
Nursing staff	30
Radiographers	5
GSH Administrative	6
TOTAL	70

## **STUDENTS**

STUDENTS	
Learner Technologists	4
TOTAL	4

#### RESEARCH FIELDS

## Professor Patrick J Commerford

Heart Failure, Acute Coronary Syndromes, Epidemiology, Treatment.

# <u>Professor RN Scott Millar, Dr AM Okreglicki</u>

Arrhythmias, Pacemakers, Electrophysiology.

## Dr BN Levetan

Followup on all patients receiving a local stent design.

#### Dr BM Mayosi

Heart Failure and Genetics of Heart Disease

#### DISTINGUISHED VISITORS

#### Dr Cyril Ruwende

Division of Cardiology, John Hopkins Hospital, Baltimore USA

#### **Professor Hugh Watkins**

Oxford University, United Kingdom

#### Dr Lwakatare

Muhimbili University, College of Health Sciences, University of Dar-es-Salaam, Tanzania

#### Dr Kazema

Muhimbili University, College of Health Sciences, University of Dar-es-Salaam, Tanzania

#### Dr Maseru

Muhimbili University, College of Health Sciences, University of Dar-es-Salaam, Tanzania

## RESEARCH OUTPUTS

#### RESEARCH PAPERS AND REFEREED ARTICLES

Okreglicki AM. Common cardiac arrhythmias in the community. A comprehensive review of the management of cardiac arrhythmias with many clinically applicable hints. South African Journal of Continuing Medical Education 2002; 20(5): 296-304.

Buchanan-Lee Biddy, Levetan Basil N, Lombard Carl J, Commerford Patrick J.. Fixed-dose versus adjusted-dose warfarin in patients with prosthetic heart valves in a peri-urban impoverished population. Journal of Heart Valve Disease No. 11, 2002 (4): 583-593.

Okreglicki AM. Cardiac Wellness. The advice contained has been well-documented but bears constant reinforcement. South African Journal of Continuing Medical Education 2002; 20(8): 503-508.

Packer M, Califf RM, Konstam MA, Krum H, McMurray JJ, Rouleau J-L, Swedberg K for the OVERTURE Study Group. Comparison of omapatrilat and enalapril in patients with chronic heart failure. Circulation 2002; 106(8): 920-926.

Opie LH, Haus M, Commerford PJ, Levetan B, Moore K, Brink J. Antihypertensive effects of angiotensin converting enzyme inhibition by lisinopril in post-transplant patients. American Journal of Hypertension 2002; 15(10) Part I: 911-916.

Mayosi BM. SAMJ to co-publish Cochrane Reviews. South African Medical Journal 2002; 92: 1.

Mayosi BM, Keavney B, Kardos A, Farrall M, Watkins HC. Electrocardiographic markers of cardiac hypertrophy show greater heritability than echocardiographic left ventricular mass: A family study. Journal of the American College of Cardiology 2002; 39 (Suppl A): 237A.

Mayosi BM, Kardos A, Davies CH, Hovnanian A, Burge S, Watkins H. Heterozygous disruption of serca2a is not sufficient to impair cardiac performance in man. Journal of the American College of Cardiology 2002; 39 (Suppl B): 436B.

Bardien S, Matolweni LO, Mayosi BM. A South African family with arrhythmogenic right ventricular cardiomyopathy and incomplete penetrance maps to chromosome 10p12-14. Cardiovascular Journal of Southern Africa 2002; 13: 254.

Ntsekhe M, Volmink JA, Commerford PJ, Mayosi BM. Adjuvant corticosteroids show promise but remain of unproven value in tuberculous pericarditis: a systematic review. Cardiovascular Journal of Southern Africa 2002; 13: 259.

Manyemba J, Mayosi BM. Penicillin for the secondary prevention of acute rheumatic fever – updated review (Cochrane Review). In: The Cochrane Library, Issue 4, 2002. Oxford: Update Software. Cochrane Database System Review, 2002; 4: CD000526.

Mayosi BM, Kardos A, Davies CH, Hovnanian A, Burge S, Watkins H. Heterozygous disruption of SERCA2a is not sufficient to impair cardiac performance in man. Circulation 2002, 106 (Suppl): 2816.

Mayosi BM, Keavney B, Watkins H, Farrall M. Measured haplotype analysis of the aldosterone synthase gene and cardiac hypertrophy. Circulation 2002, 106 (Suppl): 3610.

Mayosi BM, Keavney B, Kardos A, Davies CH, Ratcliffe PJ, Farrall M, Watkins H. Electrocardiographic markers of cardiac hypertrophy show greater heritability than echocardiographic left ventricular mass. European Heart Journal 2002; 23: 74-82.

#### THESES PASSED FOR HIGHER DEGREES

BM Mayosi D.Phil (Oxon). Genetic determinations of cardiovascular risk factors in families. Pp. 1-151.

#### CONSULTANCY AND OTHER ACTIVITIES BASED ON EXPERTISE DEVELOPED IN RESEARCH

Professor Commerford served on the International Steering Committee of OASIS-2, 3 and 4 and the Organising Committee of INTERHEART, a multinational investigation of inter-ethnic variation in risk factors for acute myocardial infarction (Canadian Cardiovascular Collaboration.)

## **DIVISION OF CLINICAL IMMUNOLOGY**

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

#### CONTACT DETAILS

Postal Address: Clinical Immunology Laboratory

H47 Old Main Building Groote Schuur Hospital Observatory, 7925

Cape Town

Telephone: SA (21) 4066201 Fax: SA (21) 4486815

Email: sress@uctgsh1.uct.ac.za

#### 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 are in progress defining immunity after BCG vaccination (ICH, UCT). Collaborative research on the role of monocytes in inducing inflammation and arteriosclerosis is undertaken with the Lipid unit, dept of medicine.

We welcomed Mr. Zahied Isaacs on a research contract appointment as a new member of staff. Marcia Watkins spent a month at the Public Health Research Institute in New Jersey, USA, learning dendritic cell culture technology to implement in the vaccine research.

## STATISTICS 2002

#### PERMANENT AND LONG-TERM STAFF

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

## **STUDENTS**

Students	2
TOTAL	2

#### 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

#### <u>PL Semple</u>

Immunology of TB and lipid disorders

# **RESEARCH OUTPUTS**

## RESEARCH PAPERS AND REFEREED ARTICLES

Hussey GD, Watkins MLV, Goddard EA, Gottschalk S, Hughes EJ, Iloni K, Kibel MA, Ress SR. Neonatal mycobacterium specific cytotoxic T-lymphocyte and cytokine profiles in response to distinct BCG vaccination strategies. Immu nology 2002; 105: 314-324.

## **DIVISION OF DERMATOLOGY**

**HEAD OF DIVISION** - Professor Gail Todd

#### CONTACT DETAILS

Postal address: Division of Dermatology

Ward G23 Groote Schuur Hospital

Observatory, 7925 South Africa

Telephone: SA (21) 404-3376 Fax: SA (21) 47-8232

Email: dermatol@uctgsh1.uct.ac.za

#### DEPARTMENTAL PROFILE

With our long-term goal of a better-educated doctor, capable of dealing with skin diseases in all branches of health care delivery, education continues to dominate the department's output. While gains had been made in increasing undergraduate dermatology exposure time, this is slowly being eroded. Every effort has been made to adapt our teaching method to maximise the effective use of this reduced teaching time. Formal lectures have been substituted with interactive teaching. The inclusion of dermatologist as examiners for the undergraduate clinical examinations has heightened awareness of the importance of the skin in general medicine. With the move to community based teaching, an innovative approach to increasing dermatology contact has been an active decision to employ medical officers and general practitioners on a sessional basis in our outpatients unit. Dr Christians started his rotation in 2001 and Dr Ann Moore will commence her rotation in 2002. Despite a small staff complement, dermatology continues to be active in the development of the new undergraduate curriculum. Dr Sue Jessop has been appointed as the Convenor, Special Study Modules. Departmental team work has made this additional effort possible.

Doctors employed in the community and many GP's have expressed a need for dermatology as a subject for continuing professional development. The department participates in various programs, lecturing to healthcare providers by participating in refresher courses all year round. Unfortunately undergraduate commitments have meant that the introduction of a diploma course in dermatology has been postponed for another year. Despite the obvious need for dermatology, our speciality is seriously threatened as higher education investment in dermatology is negligible as shown in a national survey undertaken for the Dermatology Society of South Africa. Dermatology registrar posts have been cut nationally from 32 to 28, no career development opportunities are provided for in the academic sector and departmental heads seldom advance beyond senior specialist level.

The Dermatology Nurse's Diploma Course continues to train nurses in the diagnosis and management of common skin diseases empowering them with skills to run community based day-care centres. A new centre opening in Ocean View increases local facilities to 5 and is the first to officially incorporate a wound care service. Similar units in Umtata, Gauteng, Zambia, Botswana, Lesotho, Niger and Zimbabwe are providing valuable service data that will be used to update the curriculum and direct health delivery. The course has received wider listing by the International Federation of Anti-Leprosy Associations and health care workers from throughout Africa, Asia and India, sponsored by The Leprosy Mission (International and South Africa) can now apply. As the foundation of the Rotary Road to Skin Health campaign considerable local and international funding will support clinic development and the training of nurses in under-serviced areas of South Africa over the next 2 years. CPN Pat Kelly co-ordinates the initiative and represents South Africa and Africa on the International Skin-Care Nursing Group, whose aim is to promote the provision of skin care internationally. She is to co-organise a conference on dermatology nursing to be held in Kampala in 2003 with Ugandan colleagues. CPN Nora Christians is the course co-ordinator responsible for design and teaching. Continuing professional development courses for graduates and home site visits to evaluate the course are planned for 2003. We were invited to present a feed back on this initiative at the 81<sup>st</sup> Annual Congress of the British Association of Dermatology, Cardiff and the 20<sup>th</sup> World Congress of Dermatology, Paris.

Beach clinics, voluntarily manned by local dermatologists, to publicise the dangers of sunlight with regard to skin cancer, took place over December 2001 and January 2002 in collaboration with the Cancer Association of South Africa During this time 195 patients were seen and 6 skin cancers referred for management. This community project is organised annually by Dr Cecile Keyzer who is a part-time consultant in the division.

Dr Pat Lawrence continues to work as the only paediatric dermatologist in South Africa. After months of negotiation a special clinic with the basic service facilities necessary for a dermatology outpatient services has been planned for 2003.

This service forms part of the School of Adolescent and Child Health. A specialised hair problem clinic has been introduced and is lead by Dr Laduma Ngwanya and Dr Nonhlanhla Khumalo.

The selfless effort of many visitors to South Africa needs to be formally recognised. Without this additional help our teaching and service commitments would be severely limited. Our registrar complement was boosted by the addition of Dr F Al-Mammari, who will complete her dermatology training in South Africa funded by the United Arab Emirates. Dr Ulrike Raabe continues to provide essential service support as a non-salaried supernumerary registrar. The addition of Dr Karsten Hartmann from Freiburg as a supernumerary registrar for 6 months helped us through a crisis situation when sessional posts on which we rely, remained unfilled as services in the public sector become less attractive primarily due to deteriorating facilities.

The department continues to develop expertise in occupational skin diseases. Research into skin diseases in the seafood processing industry together with the Department of Community Health was completed in 2002. The data is currently being analysed for publication. Dr Asmah Johaar, a visiting consultant from Malaysia, played a pivotal role in the organisation and logistics that made the project feasible. The National Occupational Skin Disease Initiative, a national collaborative project run under the auspices of the South African Society of Occupational Medicine is co-ordinated through the Department. A national workshop on risk assessment was held in Cape Town with Mr Chris Packham as the guest speaker. Consequent to having written a pioneering chapter on skin diseases for a handbook on occupational health practice for the mining industry, the department will spearhead a three-year research project of occupational skin diseases in the South African mines together with the Occupational and Environmental Unit of the University of Cape Town.

A comparative study on atopic eczema in rural, peri-urban and urban communities in South Africa was completed in 2002. This is a collaborative project with Professor Hywel Williams, University of Nottingham, funded by a 3-year Wellcome Grant. One thousand children in urban Langa, rural Transkei, the peri-urban Joe Slovo and Imizamayethu informal settlements have been seen. Preliminary analysis of data confirmed a significant urban – rural prevalence difference. These findings were presented by Ms Tolosana at the EDEN IDEA Congress in Paris. An in depth study of the etiologic factors underlying this discrepancy will be planned once the data has been fully analysed. Additional information on the prevalence of skin diseases in this 3 to 11 year age group cohort demonstrates that >70% of normal children suffer from skin problems in need of care. The information will be used for planning health service delivery as a review of local health facilities confirmed that they were inadequate to meet demands.

A randomised controlled trial of chloroquine compared to topical steroid for discoid lupus erythematosus treatment lead by Dr Sue Jessop in collaboration with the University of Stellenbosch and the University of Nottingham has received MRC support. She collaborates with the Oncology and Pathology Divisions in a follow up study of melanoma prevalence in Cape Town, sponsored by CANSA.

Vitiligo remains an active field of research. CPN Elizabeth du Toit's work on the phenomenon of living with vitiligo has received international recognition following its presentation at the British Dermatology Nurses Group Congress in Edinburgh. It was extensively reviewed and commended in Dispatches, the magazine of the Vitiligo Society of the United Kingdom. Dr Gavin Gottschalk, together with the Department of Anatomy and Cell Biology investigate the molecular basis of vitiligo and the low incidence of sun-induced skin cancer in these patients.

An epidemiological study into the causes of the 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 for 2003. This will allow him to continue with his pioneering work in undergraduate teaching at the Khayelitsha Community Centre together with Dr Buchannan Lee

A study on contact hypersensitivity reactions in atopic eczema children was initiated in 2002 with 30 children investigated so far. This forms part of an international study that includes the United Kingdom and other centres in Africa.

The University of Cape Town, Skin & Hair Centre at the UCT Lung Institute has become established as a complementary service for colleagues in private practice offering specialist referral services and facilities for outpatient management of skin diseases. Patients with management and treatment problems are seen monthly in a combined clinic with colleagues in the private sector. This has provided an important postgraduate teaching resource exposing our registrars to another sector of health care. Surplus funds generated at the Centre are used for financing the department's running and research activities. Emeritus Professor Norma Saxe, an active honorary lecturer in the department, acts as the manager of the Institute.

#### PERMANENT AND LONG TERM CONTRACT STAFF

Associate Professors	1
Senior Lecturer (full-time)	1
Senior Lecturers (part-time 5/8)	2
(part-time, sessional)	6
Research Staff	3
Administrative and clerical staff	1
Honorary Lecturers	3
TOTAL	17

#### **STUDENTS**

Masters	4
Undergraduate	657
TOTAL	663

#### 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).

#### REGISTRARS

#### Dr G Gottschalk

Won the Galderma Fellowship for dermatology research. He spent 3 months in the Department of Anatomy and Cell Biology with Professor Sue Kidson furthering his studies on the molecular basis of vitiligo. He was awarded the prize for the best clinical research presentation at the Department of Medicine Annual Research Day.

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

Evidenced based dermatology, diseases of the hair and nails and blistering disorders.

Dr M Penny (sessional medical officer)

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

## RESEARCHERS

### S. Tolosana (research assistant – full-time)

Prevalence and cost of childhood atopic dermatitis in rural, urban and informal settlements around Cape Town, South Africa, collaborative project with the University of Nottingham (Wellcome grant).

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P. Kelly (senior sister – part-time)

Delivery of primary and secondary dermatological care. The role of the dermatology nurse and the establishment of community dermatology day-care centres.

S. Woods (IT consultant – part-time)

Development and maintenance of vitiligo and dermatology database.

#### **VISITORS**

Prof Hywel Williams, Nottingham University, UK; Mr Chris Packham; EnviroDerm Services, Eversham, UK; Prof David Ferguson, Oxford, UK; Dr John Sippe, Sydney, Australia; Dr Michael Hartmann, Freiburg, Germany.

#### RESEARCHERS

- **S. Tolosana (research assistant full-time)**: Prevalence and cost of childhood atopic dermatitis in rural, urban and informal settlements around Cape Town, South Africa, collaborative project with the University of Nottingham (Wellcome grant).
- **P. Kelly (senior sister part-time)**: Delivery of primary and secondary dermatological care. The role of the dermatology nurse and the establishment of community dermatology day-care centres.
- S. Woods (Copelyn) (IT consultant part-time): Development and maintenance of vitiligo and dermatology database.

## RESEARCH OUTPUTS

## RESEARCH PAPERS AND REFEREED ARTICLES

Langman G, Hall P, Todd G. 2001. Role of non-alcoholic steatohepatitis in methotrexate-induced liver injury. Journal of Gastroenterology and Hepatology 16:1395-1401.

Rapp S, Saxe N. 2002. An unusual cause of hair loss. Archives of Dermatology 138:259-264.

The Finasteride Male Pattern Hair Loss Study Group – A world-wide study group includes amongst others (South Africa – J Cilliers, Cape Town; M Sher, Johannesburg; G Todd, Cape Town). 2002. Long-term (5-year) multinational experience with Finasteride 1 mg in the treatment of men with androgenetic alopecia. European Journal of Dermatology 12:38-49.

Jessop S, McKenzie R, Milne J, Rapp S, Sobey G. 2002. Pattern of admissions to a tertiary dermatology unit in South Africa. International Journal of Dermatology 41:568-570.

#### **CONGRESS ABSTRACTS**

Kelly P, Todd G. 2002. Community-based dermatology nurse practitioners: A South African perspective. Annales de Dermatologie et Venereologie 129:1S327.

Todd G. 2002. Necrotizing fasciitis: epidemiologic features. Annals of Dermatology and Venereology 129:1S14.

#### UNIVERSITY PUBLICATIONS AND PUBLICATIONS OF A POPULAR NATURE

Kelly P. Dermatology nursing in primary health care. 2002. Nursing Update February:36-37.

#### **CHAPTERS IN BOOKS**

Todd G, Carman H. 2002. Occupational Skin Disorders. In SIMRAC Handbook of Occupational Health Practice in the South African Mining Industry. Editors Guild R, Ehrlich RI, Johnston JR and Ross MH. Publisher SIMRAC, Braamfontein. Chapter 13, p355-385.

Jessop S, Jordaan F. 2002. Dermatology. In Handbook of HIV medicine. Editors Wilson D, Naidoo S, Bekker LG, Cotton M and Maartens G. Publishers Oxford University Press, Cape Town. Chapter 16, p140-157.

#### CONSULTANCY AND OTHER ACTIVITIES

Members of the department act as consultants and serve on editorial boards and many committees at local, national and international level in addition to their routine commitments. This ensures that our dermatology service continues to function at a high standard and that dermatology, as a speciality, is not marginalised during health reforms.

We continue to be dependent on clinical drug trials to sustain and developed dermatology teaching, research and services. While these appear to compete with basic research time, they are generating peer-reviewed publications and international collaborations while providing registrars exposure to good basic research method.

## 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

Postal Address: Divisions of Endocrinology & Diabetic Medicine

Department of Medicine Faculty of Health Sciences

Observatory

7925

South Africa

Telephone: SA (21) 406-6140 Fax: SA (21) 448-6815

E-mail: suebotha@uctgsh1.uct.ac.za

#### DEPARTMENTAL PROFILE

There continues to be considerable overlap in areas of interest between the two Divisions of Diabetic Medicine and Endocrinology which provide clinical, research and laboratory services to the University of Cape Town Teaching Hospital Group as well as teaching of both undergraduates and postgraduates. During the latter stages of 2001 we lost the services of two longstanding consultants. Dr Brynne Ascott-Evans left to take up a post at Tygerberg Hospital and Dr Steve Soule emigrated to New Zealand. After a long and protracted process permission was received to advertise one of the consultant posts at a junior consultant level and Dr Ian Louis Ross, our Senior Registrar was appointed from October 2002. Professor Michael Sheppard, Head of the Department of Medicine and Endocrinology at Birmingham University spent a 3 month sabbatical as a Clause 18 visitor to the Division of Endocrinology early in 2002. Dr Ross wrote the Subspeciality examination and is now a Certified Endocrinologist. Dr Wayne May was appointed to the Senior Registrar post. The financial constraints placed on Groote Schuur Hospital and thus on our Divisions have increased this year further limiting our capacity to provide optimal care and management for our patients. This limitation includes hopelessly inadequate pharmaceutical budgets, as for example when patients with diabetes, osteoporosis, Paget's disease of bone and certain pituitary tumours are unable to receive appropriate therapy and a severe staff reduction leading to the lossack of a podiatrist and dedicated dietitian for the busy diabetes service.

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.

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 a much wider spectrum of endocrine disorders encountered in the community but not seen in the wards.

The Combined Endocrine Laboratory (under the Departments of Medicine, Chemical Pathology and Obstetrics and Gynaecology) at Medical School continues to offer an efficient service in the routine measurements of insulin, gastrin, TSH, prolactin, growth hormone, free T4 and free T3.

The strong links between the Division of Endocrinology and the Department of Sports Science and Dietetics 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; genetics of diabetes, mechanisms for and prevention of complications of diabetes, the foetal origins of chronic diseases and the glycaemic index of foods.

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. Unfortunately the near

collapse of chronic disorders clinics and non-availability of multiple drug prescriptions at community level and the drastic reduction of medical aid benefits have resulted in a massive inflow of patients mostly inappropriately referred, without much medical historical background available, just for dispensing of long-term medication. This has resulted in our general type 2 clinics – already depleted by the loss of two senior consultants - becoming more of a sorting place rather than a referral centre for appropriate subspecialist consultations. The lack of a dietetic service, a foot clinic for amputation prevention, fair access to end-stage renal support and statin therapy for cardiovascular protection is transforming these clinics into busy non-focused general follow up structures which could just as easily – and more cheaply - take place at a lower level of healthcare.

In contrast the Division has instituted a unique truly tertiary Young Adults' programme, mainly for type 1 insulindependent diabetes, as a natural extension of the already successful Adolescent Transition Care run by the Division of Paediatric and Adolescent Medicine. Education in self-management, intensification of metabolic control, psychosocial support, long-term follow up by the same carers, screening of early complications and a 24 hour cell-call facility is offered by the diabetes team led by Dr A Philotheou and supported by Dr M Wormald and our dedicated and experienced senior Specialist Diabetes Sisters. This programme is run totally separate from the usual diabetes clinics which cater on the whole for elderly type 2 patients with complications. It is extensively used, personalised, will soon offer interactive education facilities, on-site HbA1c measurements and drug dispensing, and has proved effective in the prevention of recurrent admissions and in ensuring more regular follow up in young adulthood as the most efficient preventative measure against early diabetes complications.

This year als o saw the formal establishment of the UCT Diabetes Clinical Trials Unit, located in GSH Ward G26 annex with Dr Philotheou as Clinical Director. An acclaimed clinical investigator for over 10 years – "zero-rated" audits, international awards for outstanding MQA – Dr Philotheou has succeeded in attracting exciting biotechnology and pharmaceutical research in many areas of diabetes, particularly focusing on early phase head-on comparisons between novel ultra-short and truly basal long-acting insulin analogues, the evaluation of continuous subcutaneous glucose sensor devices and immunomodulation studies for the eventual prevention of type 1 diabetes. The latter form part of an extensive basic programme – almost exclusively in SA clinical research centres - evaluating the pharmacokinetics, pharmacodynamics, immune effects of a US biotech-designed altered insulin peptide ligand as potential vaccine for the prevention of type 1 diabetes. Two Phase I studies, in young adult males and in adolescent volunteer subjects with type 1 diabetes, inaugurated the new premises of the UCT Pharmacokinetic Unit at the Lung Institute. The Phase II study on newly diagnosed patients – an attempt to alter cytokine responses and protect C peptide reserve, this time on a world scale -has received FDA and MCC approvals, is proceeding very satisfactorily with Dr Philotheou as national Principal Investigator and her centre leading the world in recruitment rate. The exellence of the work of our Specialist Diabetes Sisters as Study Coordinators in these clinically demanding trials has attracted international commendation.

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 2002

## PERMANENT AND LONG TERM STAFF

Full Professor	1
Associate Professor	1
Senior Lecturer ( Hon )	1
Lecturer commencing Oct 2002	1
Senior Registrar in training	1
Technical Support Staff	1
Administrative and Clerical Staff	1
TOTAL	7

#### 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

Prevalence of hypoadrenalism in bronchogenic carcinoma

#### Dr W May

Outcome after radioactive iodine for hyperthyroidism

## RESEARCH OUTPUTS

#### RESEARCH PAPERS AND REFEREED ARTICLES

Nthangeni G, Steyn NP, Alberts M, Steyn K, Levitt NS, Laubscher R, Bourne L, Dick J, Temple N. Dietary intake and barriers to dietary compliance in black type 2 diabetic patients attending primary health-care services. Public Health and Nutrition 2002;5:329-338.

Levitt NS, Lambert EV The foetal origins of the metabolic syndrome –a South African perspective Cardiovascular Journal of Southern Africa 2002;13:179-180

#### CONSULTANCIES AND OTHER ACTIVITIES BASED ON EXPERTISE IN RESEARCH

Professor F Bonnici: Re-elected National President, Diabetes South Africa; on Consultative Section on Childhood and Adolescent Diabetes and 2003 Nominating Committee of the International Diabetes Federation; Contributor, ISPAD Consensus Guidelines for the Management of type 1 diabetes; Board of Trustees, CDE Education Foundation; Expert Diabetes Education Study Group of the European Association for the Study of Diabetes; International Editorial Advisory Board, Practical Diabetes International; WHO Expert Advisory Panel (Diabetes); Co-Director of UCT Diabetes Clinical Trials Unit.

Associate Professor N S Levitt: Co-Ordinator of Subgroup for Development of National Guidelines for the Management of Type 1 and Type 2 Diabetes at hospital level in South Africa (Department of Health.

Dr A Philotheou: Director, UCT Diabetes Clinical Trials Unit; Chairperson, Board of Trustees, CDE Education Foundation; Advisory Board, SADA Diabetes Focus; National Principal Investigator, Phase I and II Diabetes Vaccine Studies.

# DIVISION OF GASTROENTEROLOGY (Gastrointestinal Clinic)

**HEAD OF DIVISION** - Professor Trevor Winter

#### CONTACT DETAILS

Postal Address: GI Clinic, E23

New Main Building Groote Schuur Hospital Observatory 7925 Cape Town

Telephone: SA (21) 404 3040/3062
Fax: SA (21) 447 0582
Email: winter@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 bad 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 2002**

#### PERMANENT AND LONG TERM CONTRACT STAFF

Professors	1
Emeritus Professors	1
Associate Professors	1
Research Staff	2
Administrative and Clerical Staff	1
TOTAL	6

#### **STUDENTS**

Masters	2
TOTAL	2

## RESEARCH FIELDS

<u>Professor Japie Louw</u> - Head of GI Clinic until 30 September 2002

The relationship between gastroesophageal reflux and asthma (with Respiratory Clinic); Gastroesophageal reflux disease: assessment of predictors of surgical outcome, audit of surgical outcome (with Surgery); Achalasia: evaluation of treatment modalities (with Surgery); the pathobiology of Barrett's oesophagus (with G Watermeyer/C van Rensburg [TBH]); drug trials - various.

### A/Prof Trevor Winter

Inflammatory bowel disease and Nutrition: genetic studies in IBD (collaborative work with Oxford and Christian Albrechts University, Kiel, Germany), drug trials with novel agents.

## RESEARCH OUTPUTS

#### RESEARCH PAPERS AND REFEREED ARTICLES

Young GO, Brown S, Stemmet N, Lastovica AJ, Marks IN, Modlin IM, Kidd M. The pepsinogen releasing effect of Helicobacter pylori lipopolysaccharide. Helicobacter 2002; 7(1): 30-38.

Louw JA, Marks IN. Peptic ulcer disease. Current Opinion in Gastroenterology 2002; 18: 663-668.

Lantermann A, Hampe J, Won HK, Winter TA, Kidd M, Nagy M, Fölsch UR, Schreiber S. Investigation of HLA-DPA1 genotypes as predictors of inflammatory bowel disease in the German, South African and South Korean populations. International Journal of Colorectal Disease 2002; 17: 238-244.

Thomsen OO, Cordot A, Jewell D, Wright J, Winter T, Veloso FT, Vatn M, Persson T, Pettersson E. Budesonide and mesalazine in active Crohn's Disease: a comparison of the effects on quality of life. American Journal of Gastroenterology 2002; 97: 649-653.

#### **CONFERENCE ABSTRACTS**

Fredericks E, Callanan M, Louw JA, Bornman PC, Watermeyer G. Return of peristalsis in achalasia. South African Medical Journal 2002; 92(7) Part 2: 573.

Callanan M, Bornman PC, Baigrie R, Louw JA. Short term dinical and manometric outcome of achalasia subjects treated with pneumatic dilatation or laparoscopic (Heller's) myotomy. South African Medical Journal 2002; 92(7) Part 2:575.

Jaffer N, Schloss I, Winter T. Vitamin D status of Crohn's disease (CD) patients attending the Gastrointestinal Unit at Groote Schuur Hospital. South African Medical Journal 2002; 92(7) Part 2: 576.

Thomsen OO, Cordot A, Jewell D, Wright J, Winter T, Veloso FT, Vatn M, Persson T, Pettersson E. Modified-release budesonide versus mesalazine in active Crohn's disease: are there benefits in continuing treatment after eight weeks. Journal of Gastroenterology & Hepatology 2002; 17(Suppl.): A303.

## PUBLISHED CONFERENCE PROCEEDINGS

Winter, T.A., Julies, M.G., Paterson, H., Marks, T., Warnich, L., du Plessis, L., & Kotze, M.J. Analysis of the NRAMP1 gene in South African patients with inflammatory bowel disease. 2002. Proceedings of Genomics of Inflammatory Bowel Disease, Kiel, Germany.

## THESES AND DISSERTATIONS PASSED FOR HIGHER DEGREES

Winter T. 2001. The effect of severe malnutrition, and subsequent re-feeding on digestive function in Human subjects, with special reference to gastric acid and pancreatic enzyme secretion, and protein synthesis. Pp. 1-280. PhD thesis: University of Cape Town. (Awarded in December 2001)

Jogee R. 2002. Evaluating the role of kinesiology, as an adjunct therapy, in the management of patients with Crohn's disease. Pp. 1-160. MA thesis: University of Cape Town.

## UNIVERSITY PUBLICATIONS AND PUBLICATIONS OF A POPULAR NATURE

Louw, J.A. 2002. Helicobacter pylori and disease of the foregut - curiouser and curiouser. The Louis Mirvish Memorial Lecture 2001. Transactions 46(1):40-47.

Winter, T.A. Nutrition as primary and supportive therapy. South African Journal of Clinical Nutrition. (in press)

Winter, T.A. Feeding the patient who cannot eat. South African Journal of Clinical Nutrition. (in press)

# 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

Telephone:

Postal address: Institute of Ageing in Africa

Faculty of Health Sciences University of Cape Town

Observatory

7925

South Africa 27 21 406-6538

Fax: 27 21 448-6815 Email: mf@cormack.uct.ac.za

#### DEPARTMENTAL PROFILE

#### INSTITUTE PROFILE

The Institute of Ageing in Africa (IAA) was established as a Cross-Disciplinary Group on 1 April 2001. It represents a coalescence of three former units in the faculty with a specific focus on ageing in an independent entity: the Division of Geriatric Medicine, the Psychogeriatrics Service and the HSRC/UCT Centre for Gerontology. The IAA's vision is to be an academic, training 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 and the development of research capacity, as well as a high degree of implementability, and draw in policy makers, planners and community agencies. Several projects are conducted collaboratively with researchers in other African countries.

Current 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; and the establishment of a data bank of client profiles, the spectrum of mental disease, and community care and services demand and supply. (2) The establishment of a stroke data bank. (3) The establishment of a Minimum Data Set on ageing and older persons under a World Health Organisation—co-ordinated programme in four African countries. (4) A bi-national (Brazil and South Africa) survey of pensioner households to determine the impact of the social pension on household poverty alleviation, in collaboration with investigators at the University of Manchester, UK. (5) An ethnographic study "to give voices to older South Africans," in collaboration with investigators at the University of the Western Cape and the University of Amsterdam, the Netherlands, under the SANPAD programme. (6) A survey of medical practitioners' attitudes towards caring for older patients.

## STATISTICS 2002

#### PERMANENT AND LONG TERM CONTRACT STAFF

Director	1
Senior Lecturer	1
Lecturer	2
Registrar	2
Medical Officer	1
Research Assistant	1
Administrative and clerical staff	1

TOTAL	9

## HONORARY STAFF

Senior Lecturer	1
Lecturer	1
TOTAL	2

#### **STUDENTS**

Masters	2
TOTAL	2

#### RESEARCH FIELDS

#### Professor Monica Ferreira

Director; social gerontology, population ageing, health sociology, economics of ageing, social impact of HIV/AIDS, late-life dementia, ageing in Africa.

#### Dr Sebastiana Kalula

Senior Specialist; Acting Head, Division of Geriatric Medicine; epidemiology of dementia, falls, upper gastrointestinal bleeding, needs assessment, dementia drug trials.

#### Dr Jane Saunders

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

#### Dr Linda de Villiers

 $Specialist, Geriatric\ Medicine\ Unit;\ stroke\ risk\ factors\ and\ rehabilitation,\ CT\ head\ in\ stroke\ and\ dementia\ drug\ trials.$ 

## RESEARCH OUTPUTS

#### RESEARCH PAPERS AND REFEREED ARTICLES

Ferreira M. Ageing in Africa: continuities and discontinuities in growing old in the continent. Ageing International 2002; 27(2) (Spring).

Makoni SB, Ferreira M. Old age and close relationships in Africa: snapshots and emergent perspectives. International Society for the Study of Behavioural Development Newsletter 2002; 41(1): 11-14.

## CHAPTER IN BOOK

Ferreira M. 2002. The impact of South Africa's social pension system on traditional support systems: more generally, should we be looking backwards or forwards in Africa? Part Three, Expert Papers. In: Sustainable social structures in a society for all ages, United Nations, Department of Economic and Social Affairs Program on Ageing (New York). Report ST/ESA/275; pp. 57-66.

Ferreira M, Makoni SB. Towards a cultural and linguistic construction of late-life dementia in an urban African population. In: Makoni, SB and Stroeken K, (Eds.). Ageing in Africa: sociolinguistic and anthropological approaches. Aldershot: Ashgate, 2002, pp. 21-42.

#### UNIVERSITY PUBLICATIONS AND WORKS OF A POPULAR NATURE

Kalula SZ. Upper gastrointestinal bleeding in the elderly. The Journal of Age Related Disorders 2002, 14(1): 8-12.

## EXTENSION AND DEVELOPMENT WORK (UNPUBLISHED)

Kalula SZ, Saunders J, Ferreira M, De Villiers L. 2002. Groote Schuur Hospital Memory Clinic Assessment Protocol.

Kalula SZ. Invited speaker at a workshop on Ageing and Intellectual Disability, Western Cape Forum for Intellectual Disability.

#### PUBLISHED CONFERENCE PAPERS AND ABSTRACTS

Ferreira M. 2002. Ageing, non-contributory pensions and development. International Association of Gerontology Valencia Forum Book of Abstracts, Spain; p. 13.

Ferreira M. 2002. Ageing in Africa: continuities and discontinuities in support and care systems. International Association of Gerontology Valencia Forum Book of Abstracts, Spain; p.168.

#### CONSULTANCY AND OTHER ACTIVITIES BASED ON EXPERTISE DEVELOPED IN RESEARCH

#### Dr Monica Ferreira

Executive Board member of the African Gerontological Society (AGES International). Executive Committee member of the South African Geriatrics Society.

Board Director of the International Network for the Prevention of Elder Abuse.

Research Co-ordinator of the World Health Organisation Minimum Data Set on Ageing and Older Persons in Africa project.

#### Dr S.Z. Kalula

Executive Committee member of the South African Geriatrics Society.

Executive Committee member of the South African Gerontological Association.

Member of the Human Research Ethics Committee of the Faculty of Health Sciences, University of Cape Town.

## Dr L. de Villiers

Executive Committee member of the South African Geriatrics Society.

Consultant in the Stroke Unit.

\* The research output of Dr Jane Saunders is listed under Department of Psychiatry and Mental Health.

## HATTER INSTITUTE FOR CARDIOLOGY RESEARCH

**DIRECTOR** - Associate Professor Michael N Sack

#### CONTACT DETAILS

Postal Address: Chris Barnard Building

University of Cape Town

Medical School Observatory, 7925

Cape Town SA (21) 406 6358

Telephone: SA (21) 406 6358 Fax: SA (21) 447 8789

Email: sack@capeheart.uct.ac.za

#### 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.

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

- 1. Links between the Hatter Institutes, University College London and Cape Town: For the fifth consecutive year, formal collaboration between these institutes will be celebrated by the presentation Cardiology at the Limits -V in Cape Town during April 2002. 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 work concurrently in the cardiac clinic. in addition, Dr Chris Mcleod is supported, in part, by the cardiac clinic research fund.

## **Additional Research Collaborative Initiatives**

- 1. Washington University Medical School, St. Louis, MO, USA. Collaborative study with Dr Daniel P. Kelly Center for Cardiovascular Research.
- 2. University of California, San Diego, San Diego, CA, USA. Collaborative Study with Dr Ken Chien.
- 3. University of Louisville, Louisville, Kentucky, USA. DR Peipei Ping.

# STATISTICS 2002

### PERMANENT AND LONG TERM CONTRACT STAFF

Assoc.Professors	1
Emeritus Professors	1
Lecturer	2
Clinical Staff	4
Research Assistants	2
Postdoctoral Research Fellows	4
TOTAL	14

#### HONORARY STAFF

Honorary Professor	1
Visiting Professor	1
TOTAL	2

## **STUDENTS**

STEELING	
Doctoral	5

MSc	1
TOTAL	6

#### RESEARCH FIELDS

#### Associate Professor Michael Sack

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

#### Professor Lionel Opie

Delineation of cellular and molecular mechanisms promoting cardiac protection

#### Professor Derek Yellon

Delineation of cellular and molecular mechanisms promoting cardiac protection

#### <u>Professor Daneel Dietrich</u> (Visiting Professor, UWC)

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 Chris McLeod

Delineation of cellular and molecular mechanisms promoting cardiac protection

#### Dr Sandrine Lecour

Delineation of cellular and molecular mechanisms promoting cardiac protection

#### Dr Jan Minners

Delineation of cellular and molecular mechanisms promoting cardiac protection

#### Dr Rob Smith

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

## RESEARCH OUTPUTS

#### RESEARCH PAPERS AND REFEREED ARTICLES

Opie LH, Schall R. Evidence-based evaluation of calcium channel blockers for hypertension: equality of mortality and cardiovascular risk relative to conventional therapy. Journal of the American College of Cardiology 2002; 16; 315-322.

Lecour S, Smith RM, Woodward B, Opie LH, Rochette L, Sack MN. Identification of a novel role for sphingolipid singaling in TNF- $\alpha$  and ischemic preconditioning mediated cardioprotection. Journal of Molecular and Cellular Cardiology 2002; 34: 509-518.

Opie LH, Sack MN. Metabolic plasticity and the promotion of cardiac protection in ischemia and ischemic preconditioning. Journal of Molecular and Cellular Cardiology. Journal of Molecular and Cellular Cardiology 2002; 34: 1077-1089.

Opie LH, Haus M, Commerford PJ, Levetan B, Moore K, Brink J. Antihypertensive effects of angiotensin-converting-enzyme inhibition by lisinopril in post-transplant patients. American Journal of Hypertension 2002; 15: 911-916.

Lopaschuk GD, Opie, LH. Introduction to JMCC symposium on myocardial energy metabolism in health and disease. Journal of Molecular and Cellular Cardiology 2002; 34: 1075-1076.

Opie LH. The neuroendocrinology of congestive heart failure. Cardiovascular Journal of Southern Africa 2002; 13: 171-178.

Opie LH, Parving H-H. Diabetic nephropathy. Can renoprotection be extrapolated to cardiovascular protection? (Editorial) Circulation 2002; 106: 643-645.

Van Rooyen J, McCarthy J, Opie LH. Increased glycolysis during ischaemia mediates the protective effect of glucose and insulin in the isolated rat heart despite the presence of cardiodepressant exogenous substrates. Cardiovascular Journal of Southern Africa 2002; 13: 103-109.

Sack MN. Tumor necrosis factor-alpha in cardiovascular biology and the potential role for anti-tumor necrosis factor-alpha therapy in heart disease. Pharmacology and Therapeutics 2002; 94: 123-135.

Smith RM, Suleman N, McCarthy J, Sack MN. Classic ischemic but not pharmacologic preconditioning is abrogated following genetic ablation of the TNFalpha gene. Cardiovascular Research 2002; 55: 553-560.

Smith RM, Lecour S, Sack MN. Innate immunity and cardiac preconditioning: a putative intrinsic cardioprotective program. Cardiovascular Research 2002; 55: 474-482.

#### **BOOKS**

L H Opie, D M Yellon (Editors). Cardiology at the Limits V. Stanford Writers, Cape Town, 2002, pp 1-65.

## CHAPTERS IN BOOKS

Abrahms J, Frishman WH, Bates SM, Weitz JI, Opie LH. Pharmacologic options for treatment of ischemic disease. In: Cardiovascular Therapeutics, 2<sup>nd</sup> Edition. E M Antmann, ed. WB Saunders, Philadelphia. 2002. pp 97-153.

Opie LH. Cardiovascular Drug Interactions. In: Cardiovascular Pharmacotherapeutics. Companion Handbook. W H Frishman, E H Sonnenblick, eds. McGraw-Hill, New York, 2002. pp 479-505.

#### THESIS AND DISSERTATIONS

Suleman N. The role of TNFα in cardiac protection. University of Cape Town, MSc degree, Pp. 1-86.

## HYPERTENSION CLINIC

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

CONTACT DETAILS

Postal Address: E13, New Groote Schuur Hospital

Observatory, 7925

Cape Town

Telephone: SA (21) 404-3495
Fax: SA (21) 448-2349
E mail: rayner@curie.uct.ac.za

#### DEPARTMENTAL PROFILE

The Division of Hypertension continues to be active in research. Our main research activity has focused on the causes and investigation of low renin hypertension in conjunction with the Department of Chemical Pathology and the Division of Endocrinology. These research projects include: i) practical investigation and treatment of primary aldosteronism ii) mutations and polymorhisms in the epithelial sodium channel (ENaC). These 2 areas of research are the major research strengths of the division. In particular the ENaC research has resulted in the identification of a new mutation causing low renin hypertension in blacks and coloureds, but not in whites. This research has been expanded to determine if the ENaC mutation and primary aldosteronism are factors in the development of hypertension in pregnancy.

## Other research projects includes;

- i) Ace genotype and activity in black African populations in conjunction with Hugh Montgomery from the UCL Centre for Cardiovascular Genetics in London
- ii) Genome wide scanning for genetic causes of hypertension in conjunction with Dept of Genetics
- iii) 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.
- iv) Hypertensive retinopathy
- v) A double blind randomized dose-response study of losartan in children with hypertension.
- vi) A randomised, double blind, 2 arm, parallel group Health Assessment Study of losartan or atenolol in patients with mild to moderate hypertension.
- vii) Indapamide SR in eldelry patients with isolated systolic hypertension.
- viii) 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.

## **STATISTICS 2002**

#### PERMANENT AND LONG TERM STAFF

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

## RESEARCH FIELDS

Prof. Brian Rayner

Clinical research; Primary aldosteronism; Genetics of Hypertension; Low Renin Hypertension; ENaC mutations, Hypertensive retinopathyContract Research

#### Prof. Lionel Opie

Clinical research; Primary aldosteronism; Genetics of Hypertension; Low Renin Hypertension.

#### Dr. Yvonne Trinder

Clinical Research, Contract Research

#### Sister Ivy Nteyi

Genetics of hypertension, ACE genotype study

#### Sister Donette Baines

Contract Research Co-ordinator

## RESEARCH OUTPUTS

#### RESEARCH PAPERS AND REFEREED ARTICLES

Rayner BL. Screening and diagnosis of primary aldosteronism. Cardiovascular Journal of Southern Africa 2002; 13: 97-101.

Rayner BL. Choice of diuretics for hypertension. (Editorial) South African Medical Journal 2002; 92: 524-5.

Rayner BL, Buchanan-Lee B, Brink J, Opie LH. Generic substitution – is it safe in patients at high cardiovascular risk? South African Medical Journal 2002; 92: 603-4.

Rayner BL, Willet C, Hollander M. Adequacy of dialysis and nutrition in CAPD patients. South African Medical Journal October, 2002; 92: 887-889.

#### CONFERENCE PRESENTATIONS

Rayner BL. Characteristics of the new angiotensin receptor blocker, eprosartan. Invited speaker. Korean Cardiology Society, Seoul, 2002

Rayner BL. The effects of the AT1-Receptor blocker eprosartan on renal function. Invited speaker International Society of Hypertension, 2002.

Rayner BL. An overview of moxonidine. Invited speaker to the seminar entitled "Insulin resistance and sympathetic overactivity", Lebanon, 2002

Rayner BL, Soule S, Opie L, Owen P, King J, Vreede H, Davidson J. A new mutation, r563q, of the beta subunit of the epithelial sodium channel associated with low-renin, low-aldosterone hypertension. 41<sup>st</sup> Annual Congress of the Federation of South African Societies of Pathology, Cape Town, 1-4 July 2001, and at the 84<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, 19-22 June 2002.

## INFECTIOUS DISEASES UNIT

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

CONTACT DETAILS

Postal Address: Ward G4

New Groote Schuur Hospital

Observatory, 7925

Cape Town

Telephone: SA (21) 404.3474
Fax: SA (21) 448.6815
Email: gary@curie.uct.ac.za

#### DEPARTMENTAL PROFILE

The Infectious Diseases Unit has research interests in the fields of tuberculosis and HIV. We have collaborations with the Rockefeller University, New York (Gilla Kaplan - the immune response to tuberculosis), Johns Hopkins University School of Medicine, Baltimore (Richard Chaisson – smear-negative tuberculosis) 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. We have just embarked on a prospective study on the diagnosis of tuberculosis in HIV-infected adults.

## **STATISTICS 2002**

#### PERMANENT AND LONG TERM STAFF

AssociateProfessors	2
Clinical Staff	1
TOTAL	3

#### HONORARY STAFF

Honorary Lecturers	1
TOTAL	1

#### **STUDENTS**

Doctoral	1
Masters	1
Postdoctoral	1
Total	3

## RESEARCH FIELDS

Associate Professor G Maartens

tuberculosis; HIV

Associated Professor R Wood

HIV therapy

Dr L-G Bekker

Immunology of tuberculosis, HIV

## RESEARCH OUTPUTS

Badri M, Ehrlich R, Wood R, Maartens G. Tuberculosis should not be considered an AIDS-defining illness in areas with a high tuberculosis prevalence. International Journal of Tuberculosis and Lung Disease 2002;6:231-7.

Maartens G. Advances in adult pulmonary tuberculosis. Current Opinion in Pulmonary Medicine 2002;8:173-7.

Maartens G (corresponding author for the HIV Clinicians Society of Southern Africa). The prevention and treatment of opportunistic infections in HIV-infected adults. South African Medical Journal 2002;92:426-8.

Maartens G, Beyers N. Tuberculosis in the tropics. Clinics in Chest Medicine 2002;23(2):341-50.

Maartens G. Opportunistic infections associated with HIV in Africa. Oral Diseases 2002;8 (Suppl 2):76-9.

Feldman C, Brink AJ, Richards G, Bateman ED, O'Brien J, Maartens G, Klugman KP (for the working group of the South African Thoracic Society). Management of community-acquired pneumonia in adults. South African Medical Journal 2002;92:647-55.

Bekker LG. The epidemiology and pathophysiology of HIV--as seen by a South African. Oral Diseases. 2002;8 Suppl 2:15-6.

Bekker LG, Wood R. Antiretroviral therapy in South Africa - can we do it? South African Medical Journal 2002;92(3):191-3

Moreira AL, Tsenova L, Aman MH, Bekker LG, Freeman S, Mangaliso B, Schroder U, Jagirdar J, Rom WN, Tovey MG, Freedman VH, Kaplan G. Mycobacterial antigens exacerbate disease manifestations in Mycobacterium tuberculosis-infected mice. Infection and Immunity 2002; 70(4) 2100-2107.

Hoggard PG, Kewn S, Maherbe A, Wood R, Almond LM, Sales SD, Gould J, Lou Y, De Vries C, Back DJ, Khoo SH.Time-dependent changes in HIV nucleoside analogue phosphorylation and the effect of hydroxyurea. AIDS. 2002;16(18):2439-2446.

Boulle A, Kenyon C, Skordis J, Wood R. Exploring the costs of a limited public sector antiretroviral treatment programme in South Africa. South African Medical Journal 2002;92(10):811-7

Wood R. Management of HIV and AIDS in the African context. Oral Diseases 2002;8 Suppl 2:32-3.

Badri M, Wilson D, Wood R. Effect of highly active antiretroviral therapy on incidence of tuberculosis in South Africa: a cohort study. Lancet. 2002;359(9323):2059-64

## **BOOKS**

Wilson D, Naidoo S, Bekker L-G, Cotton M, Maartens G. Handbook of HIV medicine. Oxford University Press Southern Africa, Cape Town 2002, pp. 1-469.

## **DIVISION OF LIPIDOLOGY**

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

CONTACT DETAILS

Postal Address: Lipid Laboratory

Cape Heart Centre University of Cape Town

Anzio Road Observatory, 7925 Cape Town

Telephone: SA (21) 4066166 Fax: SA (21) 4066396

Email: dmarais@capeheart.uct.ac.za

#### DEPARTMENTAL PROFILE

The lipid clinic and laboratory continued to provide expert clinical and diagnostic service during the year for major gene disorders of lipid and lipoprotein metabolism and, in doing so, gathered information about the genetic causes of the dyslipidaemias in the region. The main thrust in clinical research is the use of newer therapeutic agents (chiefly hydroxy-methylglutaryl coenzyme A inhibitors or statins) and to introduce carotid intima-media thickness into the evaluation of atherosclerosis. The main thrust of the laboratory research was to develop diagnostic procedures that included the setting up of gas chromatography for identifying phytosterolaemia and a fluorescent low density lipoprotein assay for the diagnosis of LDL receptor defects. The collaboration on hypobetalipoproteinaemia was with the Clinical Pathology at the University of Western Australia.

## STATISTICS 2002

#### PERMANENT AND LONG TERM CONTRACT STAFF

Associate Professor	1
Consultants	1
Medical Officers	2
Nursing sisters	3
Contract Dietitian	1
Technical Support Staff	5
Administrative staff	2
TOTAL	15

## **STUDENTS**

Doctoral	3
Masters	3
MMed	1
Honours	1
TOTAL	8

#### RESEARCH FIELDS

## A D Marais

causes of dyslipidaemia; diagnostic procedures for dyslipidaemias using gradient gel electrophoresis; Chugaev reaction for identifying dyslipidaemia; newer therapeutic agents for dyslipidaemia including ezetimibe; genotype-phenotype interactions in familial hyeprcholesterolaemia; 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.

#### JC 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.

#### **DM Blackhurst**

peroxidation of unsaturated fatty acids and the antioxidant effect of wine.

#### RG Marillier

matrix metalloproteinase assays; influence of matrix metalloproteinase on atherosclerosis

#### **Z** Hamdulay

phytosterol supplementation in familial hypercholesterolaemia

## RESEARCH OUTPUTS

#### RESEARCH PAPERS AND REFEREED ARTICLES

Marais AD, Blom DJ, Firth JC. Statins in homozygous familial hypercholesterolemia. Current Atherosclerosis Reports. 2002; 4: 19-25.

Blom DJ, Marais AD. Diagnosis and management of lipid disorders in South Africa. South African Journal of Continuing Medical Education 2002; 20(5): 281-290.

Blom DJ, Marais AD. Classical Physical Signs of Dyslipidaemia. South African Journal of Continuing Medical Education 2002; 20(5): 313-315.

Van Velden DP, Mansvelt EPG, Fourie E, Rossouw M, Marais AD. The cardioprotective effect of wine on human blood chemistry. Annals of the New York Academy of Sciences 2002; 957: 337-340.

Blom DJ, Byrnes P, Jones S, Marais AD. Dysbetalipoproteinaemia - clinical and pathophysiological features. South African Medical Journal 2002; 92: 892-897.

# 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

Telephone: (21) 406-6200 Fax: (21) 447-9670

Email: ralph@uctgsh1.uct.ac.za

#### **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.

## STATISTICS 2002

#### PERMANENT AND LONG TERM CONTRACT STAFF

Professors	4
Associate Professors	7
Senior Lecturers	9
Senior Research Officers	10
Technical support staff	10
TOTAL	40

#### HONORARY STAFF

Honorary staff	3
TOTAL	3

#### **STUDENTS**

PhD students	8
TOTAL	8

#### 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

## 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

## RESEARCH OUTPUTS

#### RESEARCH PAPERS AND REFEREED ARTICLES

Hift RJ. Liver disease and abuse of alcohol and drugs in men. South African Journal of Continuing Medical Education 2002; 20: 510-515.

Kirsch R, Jaffer MA, Woodburne, VE, Sewell T, Kelly SL, Kirsch RE, Shephard EG. Fibrinogen is degraded during incubation with neutrophils and products localize to electron lucent vesicles. The Biochemical Journal (2002); 364: 403 – 412.

Passmore JS, Burch VC, Shephard EG, Marais DJ, Allan B, Kay P, Rose RC, Williamson AL. Single cell cytokine analysis allows detection of cervical T cell responses against human papillomavirus Type 16 L-1 in women infected with genital HPV. Journal of Medical Virology (2002); 9999: 1-7.

Mall AS, Dent DM, McLeod H, Kahn D, Taylor K, Hickman R. Extraction, isolation, and SDS-PAGE analysis of purified gastric mucin in a patient with Menetrier's disease. American Journal of Gastroenterology 2002; 97(3): 752-755.

Van As S, Lotz Z, Tyler M, Kahn D. Reperfusion injury associated with portal venous and hepatic arterial perfusion in liver transplantation. Transplantation 2002; 74(2): 158-163.

Krige JEJ, Millar AJW, Rode H, Knobel D. Fatal hypernatraemia after hypertonic saline irrigation of hepatic hydatid cysts. Pediatric Surgery International 2002;18:64-65.

#### CHAPTERS IN BOOKS

Krige JEJ Beningfield SJ Bomman PC. Liver and Portal Circulation. In: Burnand K, Young A. Rowlands BJ, Scholfield J, Lucas J (Eds). New AIRD'S Textbook of Surgery. Churchill Livingstone London 2003.

Singh B Krige JEJ Bornman PC. Thoracoscopic Splanchnicectomy in chronic Pancreatitis. In: Clavien PA, Sarr M, Fong Y (Eds). Atlas of Upper Abdominal Surgery. Springer Verlag. Heidelberg 2003.

# **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. Further studies in the field of immunosuppression have been initiated in the area of transplantation, and a new study is scheduled to start early in the New Year evaluating a new immunosuppressive agent in the treatment of resistant nephrotic syndrome.

# **STATISTICS 2002**

## PERMANENT AND LONG TERM CONTRACT STAFF

Associate Professors	2
Senior Lecturers	2
TOTAL	4

# **STUDENTS**

Medical Registrars (1 senior)	3
TOTAL	3

# RESEARCH FIELDS

# Dr J A Halkett

Anaemia and iron metabolism in chronic renal failure Aluminium overload in haemodialysis patients

Acute renal failure: Demographics and outcome 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 erythematosis.

# <u>Dr E Coetzer</u> (Research Fellow)

A new immunosuppressive agent in resistant nephrotic syndrome.

# **RESEARCH OUTPUTS**

# RESEARCH PAPERS AND REFEREED ARTICLES

Van Zyl Smit R, Halkett JA. Experience with the use of an iron polymaltose (dextrin) complex given by single dose infusion to stable chronic haemodialysis patients. Nephron 2002 Oct; 92(2): 316-323.

# **DIVISION OF NEUROLOGY**

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

CONTACT DETAILS

Postal Address: E8, New Groote Schuur Hospital

Observatory, 7925

Cape Town

Telephone: SA (21) 404 3197/8 Fax: SA (21) 406 6251

Email:: reastman@uctgsh1.uct.ac.za

#### DEPARTMENTAL PROFILE

Neurology provides a full general clinical and neurophysiological service to the region. In addition, a number of specialised clinical activities are undertaken which provide both a unique service in the public hospital sector and largely form the focus of our research.

The Stroke Unit, run jointly with the Division of Geriatrics, maintains a comprehensive database of all stroke patients seen. This resource is being used to establish the epidemiology of stroke, the causes of stroke, the outcome of stroke, the socio-economic burden of stroke, and the communication problems resulting from stroke. The acute treatment and rehabilitation protocols being piloted will also serve as models of modern stroke care.

The Myasthenia Gravis Clinic continues to pioneer the use of intensive immunotherapy for this disabling condition, including the development of genotyping to identify patients at risk of adverse drug effects. This work has demonstrably improved the care of patients with this disorder.

The Neuro-genetics Clinic, run jointly with the Department of Human Genetics, provides a diagnostic and counselling service as well as undertaking research into the molecular characterisation of the Spino-Cerebellar Ataxias, and investigating the drug therapy of Huntington's disease. The epilepsy surgery programme continues to use advanced intra-cranial neurophysiological techniques to identify the cerebral source of seizure discharged in patients with uncontrolled seizures to allow surgical resection to be performed.

The division is also active in continuing medical education, community outreach programmes, and in the development of computer-based teaching.

Dr. A. Bryer was promoted to Assoc. Professor, and Dr. E Lee Pan was re-appointed as the Faculty Portfolio Manager for Information Technology.

# STATISTICS 2002

# PERMANENT AND LONG-TERM CONTRACT STAFF

Associate Professors	3
Senior Lecturers (Full-time)	1
Junior Lecturers (Full-time)	1
Lecturers (Part-time)	3
TOTAL	8

# **STUDENTS**

MMed students	2
TOTAL	2

# 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

## DISTINGUISHED VISITORS

# Prof S Berkovic

Australia

# RESEARCH OUTPUTS

# CONFERENCE PROCEEDINGS (ABSTRACTS)

Heckmann JM, Low WC, de Villiers C, Rutherfoord S, Morris CM, Ramesar R, Kalaria RN: Novel presenilin 1 mutation with profound neurofibrillary pathology in an indigenous South African family with early-onset Alzheimer's disease. Neurobiology of Aging 2002; 23(51): 5231.

Kies BM: Epilepsy management issues in South Africa. Epilepsia. 2002; 43(8): 202.

# NON-PEER REVIEWED PUBLICATIONS

Kies BM: The global campaign against epilepsy. Search on epilepsy. 2002; 7(2): 3-5.

# **NUTRITION & DIETETICS UNIT**

**HEAD OF DIVISION** - Associate Professor Karen Charlton

CONTACT DETAILS

Postal Address: J Floor, OMB

Groote Schuur Hospital Observatory, 7925

Cape Town

 Telephone:
 SA (21) 406 6534

 Fax:
 SA (21) 448 6815

 Email:
 kc@uctgsh1.uct.ac.za

lleroux@uctgsh1.uct.ac.za (secretary)

## **DEPARTMENT PROFILE**

The Nutrition and Dietetics Division was established in 1990 and is the only facility to offer postgraduate training in nutrition in the country, and indeed the region of Southern Africa, to enable science graduates to become state-registered dietitians, after following a 2year postgraduate Bachelor of Science Medical Honours degree course. Masters' programmes are offered, by dissertation only.

Ongoing research activities in the Division include the investigation of the impact of potassium and calcium supplementation on blood pressure in black South Africans, and physiological determinants of the blood pressure-diet relationship.

HIV/AIDS has been declared a global emergency by the Word Health Organization. Affordable and effective interventions are urgently required for the management of HIV/AIDS patients in sub-Saharan Africa. Mrs Marianne Visser has co-authored a Cochrane systematic review that assesses the effectiveness of micronutrient interventions in reducing morbidity and mortality in HIV-infected children and adults.

Two nutritionists from the National Food and Nutrition Commission in Zambia are completing research in the areas of maternal and child health. Ms. Siyandi aims to investigate gaps in the knowledge, attitudes and practices of health-care workers and pregnant women in Zambia, in relation to the prevention and treatment of iron deficiency anaemia. The identification of severely anaemic women is of critical importance, as these women are at high risk in terms of perinatal mortality. Ms Kawana is assessing the effectiveness of a Growth Monitoring Programme, following implementation of training among primary health-care workers at clinics and among lay community health workers in one district in Zambia.

Staff and students of the Division have been involved in the development and validation of culturally appropriate tools for use in epidemiological research in various sectors of the South African population. An instrument to test the knowledge of primary health-care workers on the role of nutrition, physical activity and smoking in the context of prevention and management of cardiovascular disease has been developed this year. Dietary questionnaires to assess the habitual intake of the following groups are currently being field-tested: young (6-years) black and white children, black and white mothers living in urban areas, populations living in two areas of the Transkei which differ in risk for oesophageal cancer.

A study was undertaken in two provinces to identify sources of nutrition information which are accessed by black women living in urban settings, as well as the perceived credibility thereof. The findings will be useful for the planning of national nutrition education interventions, pending the launch of South Africa's first food-based dietary guidelines.

Research on nutrition and ageing continues to be a focus area for the Division. In this regard, a case-control study was undertaken in institutionalised older adults in Johannesburg and Cape Town in order to investigate the vitamin C and E status of patients with Alzheimer's Disease and dementia. A World Health Association-funded project on identifying determinants of poor nutritional status in 283 elderly black South Africans has been completed. The study findings will provide the most comprehensive information on various nutritional, and physical and cognitive function indicators in this age group in Southern Africa, and will be incorporated into the Minimal Data Set Project of the WHO.

A collaborative study with the Department of Health is currently underway to determine the breastfeeding practices of a representative sample of 600 mothers of infants aged 0-12 months in the Southern Cape/Karoo region, including the prevalence and duration of exclusive breastfeeding and mixed feeding, and the age of introduction of weaning foods to infants. Knowledge of mothers regarding the benefits of breastfeeding, with regard to the current infant feeding

recommendations will be identified, as well as attitudes of mothers to breastfeeding practices, and the factors which influence mothers' breastfeeding practices. The survey findings will identify the key breastfeeding education topics which should be used for antenatal education and other breastfeeding support, promotion and protection activities.

In addition to teaching and research activities, the Division has a comprehensive outreach extension service, run under the auspices of the Nestle Nutrition Resources Centre which is housed within the Division. Partnerships have continued with communities in Heideveld, Hout Bay, Woodstock and in George.

# **STATISTICS 2002**

## PERMANENT AND LONGTERM CONTRACT STAFF

A.Prof/ Head of Unit	1
Lecturer	1
Assistant lecturers	1
Part-time lecturers	2
Secretarial Staff	1
TOTAL	6

## **STUDENTS**

1 <sup>St</sup> Postgraduate Year (Hons)	11
2 <sup>nd</sup> Post graduate Year (Hons)	15
M.Sc. Students	6
TOTAL	32

#### RESEARCH FIELDS

#### A/Prof. K. Charlton:

Salt sensitivity and blood pressure in transitional communities; nutrition and successful ageing; nutrition and cognitive functioning; nutritional epidemiology; prevention and management of obesity and other chronic diseases; body composition.

# Ms. I. Schloss:

Clinical nutrition, nutrition in critical care, nutrition and gastrointestinal disease

#### Mrs. A. Meyer:

Public health and nutrition policy; community nutrition; promotion, support and protection of breastfeeding.

# Mrs. M. Visser (Honorary Lecturer):

Clinical nutrition; nutritional epidemiology; nutrition & HIV/AIDS; nutritional biochemistry.

# RESEARCH OUTPUTS

# RESEARCH PAPERS AND REFEREED ARTICLES

Rose D, Charlton KE. Quantitative indicators from a food expenditure survey can be used to target the food insecure in South Africa. Journal of Nutrition 2002; 132:3235-3242.

Rose D, Charlton KE. Prevalence of household food poverty in South Africa: results from a large nationally representative survey. Journal of Public Health Nutrition 2002; 5(3): 383-389.

Rose D, Meershoek S, Ismael C, McEwan M. Evaluation of a rapid field tool for assessing household diet quality in Mozambique. Food and Nutrition Bulletin 2002; 23: 181 – 189.

Pietersen C, Charlton KE, du Toit MC, Sibeko L. An assessment of the nutrient content of meals provided and facilities present at state-funded crèches in Cape Town. South African Journal of Clinical Nutrition 2002; 15 (2): 15-23.

Charlton KE. Diet and blood pressure. Continuing Medical Education April 2002; 20 (4): 235-239.

Steenkamp L, Visser ME. Can nutrition support prevent HIV disease progression and delay AIDS-related mortality? The Specialist Forum 2002 May, 44 - 54.

Irlam J, Visser ME, Rollins N, Siegfried N. Micronutrient supplementation in HIV-infected children and adults (Review protocol) Cochrane Library 2002, Issue 2.

#### **CHAPTERS IN BOOKS**

Charlton KE, Schloss I. Anaemia in the elderly. In: Geriatric Practice. Roseville, Australia: McGraw Hill, 2002: 613-635.

Visser ME, Kennedy RD. Nutritional Assessment and Management of HIV-positive adults. In: Handbook of HIV Medicine. Oxford University Press, Cape Town 2002: 412-417.

#### PUBLISHED CONFERENCE PROCEEDINGS

Charlton KE, Steyn K, Zulu J, Jonathan D, levitt NS, Nel JH, Veldman D. Association between blood pressure and sodium, potassium and calcium excretion in South Africans. South African Journal of Clinical Nutrition 2002, 15: Supplement 1: S12.

Charlton KE, Brewitt P, Bourne LT. Sources of nutrition information and perceived credibility thereof in black urban women in two provinces. South African Journal of Clinical Nutrition 2002, 15: Supplement 1: S12.

#### THESES AND DISSERTATIONS PASSED FOR HIGHER DEGREES

# **B.Sc.** (Med) Hons in Nutrition and Dietetics

- 1. Bluett Kerry-Lee. The effect of conjugated linoleic acid administration on insulin sensitivity & blood lipid profiles, and the associated changes in body composition in regularly exercising individuals.
- 2. Cader Shihaam. The knowledge, attitudes and practices of health workers regarding the South African Code of the Marketing of Breastmilk Substitutes.
- 3. Channing Catherine. Development of a simplified tool for nutritional assessment of children with chronic renal failure.
- 4. De Klerk Sandy. A survey of Buchu in the Western Cape and an in vitro analysis of a range of products from two Buchu species.
- 5. Del Fabbro Terry. A Case-control Study of Nutritional Determinants of Cardiomyopathy in HIV- infected patients.
- 6. Heggie Kerry-Louise. An investigation of the effect of CLA administration on the satiety of 64 healthy, exercising individuals over a 12 week period, and associated changes in body composition and resting energy expenditure.
- 7. Klotnick Melanie. An evaluation of the implementation and monitoring of the protein energy malnutrition scheme in two regions of the Western Cape Province.
- 8. Mabaleng Kekeletso. The prevalence of deficiency in the Maseru district in Lesotho.
- 9. Meyer Catharina. An assessment of the folate status of bi-polar patients: a case control study.
- 10. Mongoato Philisiwe. The impact of nutrition knowledge, socio-economic status, self concept, and body shape on eating attitudes in self catering residence students of UCT,.
- 11. Nyabela Malijane. Consumer testing of food based dietary guidelines for people living with HIV/AIDS and their carers in Lesotho.

- 12. Rees Robyn. An investigation of the safety and efficacy in administration of Aqueous Garlic Extract (AGE) for Oorpharyngeal Candida spp in children with HIV/AIDS.
- 13. Sexton Kerry. An assessment of the knowledge and attitudes of HIV positive pregnant women on the MTCT programme regarding infant feeding practices.
- 14. Talip Wadhi-Ah. Development and validation of screening tool to assess knowledge and practices of health professionals regarding the role of nutrition, physical exercise and smoking in the prevention and management of chronic diseases of lifestyle.
- 15. Upson Nicola. An investigation of the level of knowledge of the South African population regarding iodine nutrition.

# CONSULTANCIES AND OTHER COMMUNITY ACTIVITIES BASED ON EXPERTISE DEVELOPED IN RESEARCH

## Charlton KE

Member of Working Group for Development of National Food Based Dietary Guidelines.

Member of Nutrition Advisory Committee of Nutrition Directorate of Department of Health: Western Cape.

International Union of Nutritional Sciences' (IUNS) Task Force on Nutrition and Long Term Health: Member.

#### Meyer A

Member of Cape Town Breastfeeding Liaison Group.

Member of Working Group for Development of National Food Based Dietary Guidelines for children aged less than 7 years.

Member of the Executive Committee of the Association of Dietetics in South Africa (ADSA).

# 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

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: pfolb@uctgsh1.uct.ac.za

#### 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 countrywide is monitored. 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 120 senior personnel in drug regulation and directors of national immunisation programmes from more than 50 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 a separate research programme supported by an innovation award from the national Department of Science and Technology (DST, formerly DACST), novel anti-malarial drugs from Southern African traditional medicinal plants are investigated to the point of proof of principle. This programme is conducted in conjunction with the Council for Scientific and Industrial Research (CSIR), the Medical Research Council, the University of Pretoria, and the National Botanical Institute. 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 is being developed for use by researchers, traditional healers, other health professionals, and the public.

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.

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.

The sixth edition of the South African Medicines Formulary is due to be published early in 2003. A pharmacology database has been developed to facilitate production of print and electronic (CD-ROM, web and handheld device) versions of the SAMF and from which storage of references and background material for the SAMF text is drawn. The database, when completed, will form a valuable drug information tool, and subsets of the data will be used to generate other products, print or electronic. 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 many health professionals abroad, make regular use of the SAMF.

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 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 2002**

## 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
TOTAL	44

## HONORARY STAFF

Honorary Lecturers	3
Honorary Research Associates	0
TOTAL	3

# **STUDENTS**

Post Doctoral	1
Doctoral	15
Masters	9
Honours	5

Undergraduate Medical Students	530
*	560

#### 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

#### <u>K.I.Barnes</u>

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

#### P. Waako

Investigating anti-malarial activity of plants use in the treatment of malaria

# **VISITORS**

Dr G Staniland. Division Manager: Knowledge Management Division, MRC.

Professor J.A. Louw. Informatics & Knowledge Management Directorate, MRC.

Dr M. Ripandelli. Programme and Administrative Co-ordinator. International Centre for Genetic Engineering and Biotechnology.

Dr Kattrin Lempp, Medecines Sans Frontieres.

Professor Mafauzy Mohamed. Principal: University Sains Malaysia.

Dr Adwoa D. Bentsi-Enchill, Vaccines and Biologicals. World Health Organization.

 $Professor\ Dato'Dzulkifli\ Abdul\ Razak:\ Vice-chancellor,\ Universiti\ Sains\ Malaysia.$ 

Associate Professor Sukor Kasim: Director, Centre for Policy Research Universiti Sains Malaysia.

Professor Mohamed Isa Abdul Majid. National Poison centre. Universiti Sains Malaysia.

Mr Datuk Zainal Azman Zainal Abidin High Commissioner of Malaysia. Pretoria.

Li Gaogui Education Commission of Helongjiang Province, China.

Professor Dazhu Zhang: Dean, International College, International Affiliations Harbin Normal University, China.

Professor Cao Hong Xin: President of Heilongjiang, University of Chinese Medicine, PR China.

Professor Xuesong Liu: Director Heilongjiang Provincial Degree Committee Office. Director Post-Graduate Division, The Education Department of Heilongiang Province, China.

Professor Shouwen Zhang. Vice-President, Food Science and Engineering, Harbin Commercial University, P.R. China. Dr Winnie Tumwikirize. Department of Pharmacology, Makerere University, Kampala, Uganda.

## RESEARCH OUTPUTS

#### **BOOKS**

State of the World's Vaccines and Immunization. Editors: Agha M, Almazrou Y, Batson A, Cheyne J, Folb P, Larson H, Odwo Bele JM, Tarantola D, Zaffran M. World Health Organization, Geneva, 2002. ISBN 92 4 154578 X pages 1-96

Arthur N, Bentsi-Enchill A, Couper MR, Duclos P, Edwards IR, Folb PI, Fushimi T, Hartigan-Go K, Kshirsagar NA, Lazdins-Held JK, Lepahkin V, Maruyama Y, Mehta U, Pal S, Olsson S, Olumese P, Rago L, Rowsell B, Schou JS, Soulaymani-Bencheikh R, Tamiya K. The Importance of Pharmacovigilance World Health Organization, Geneva, 2002. ISBN 92 41590157 pages 1-48

Gould C and Folb PI. 2002. Project Coast: Apartheid's Chemical and Biological Warfare Programme. United Nations. Geneva Switzerland. ISBN 92-9045-144-0 pages 1-297

South African Medicines Formulary. 5<sup>th</sup> edition: electronic version. Published by the South African Medical Association Health and Medical Publishing Group. Pinelands CD Rom Version

#### CHAPTERS IN BOOKS

Handbook of HIV medicine. Editors: Wilson D, Naidoo S, Bekker L et al. Essential drugs for primary care facilities (Cohen K, Wilson D and Gibbon C). Oxford University Press, Cape Town, 2002. Chapter 43 pages 375-382

Handbook of HIV medicine. Editors: Wilson D, Naidoo S, Bekker L et al. Chapter 44: Primary care approach (Cohen K, Andrews S, Harley B, Roux P and Wilson D). Oxford University Press, Cape Town, 2002. Chapter 44 pages 385-393

Drug Benefits and Risks International Textbook of Clinical Pharmacology. M Blockman and PI Folb. Publisher: John Wiley & Sons, Ltd. Chichester. New York. Weinheim. Brisbane. Singapore. Toronto. Chapter 5 pages 51-60

# RESEARCH PAPERS AND REFEREED ARTICLES

H McIlleron, P Wash, A Burger, P Folb, P Smith. Widespread distribution of a single drug rifampicin formulation of inferior bioavailability in South Africa. The International Journal of Tuberculosis and Lung Disease 2002; 6(4): 356-361.

N Brine, W Campbell, J Bastida, M Herrera, F Vilodomat, C Codina, P Smith. A New Dinitrogenous Alkaloid from Cyrtanthus obliquus. Phytochemistry (2002), 61(4), 443-447.

Gumede B, Folb PI and Ryffel B. Oral artesunate prevents Plasmodium berghei Anka infection in mice. Parasitology International 52 (2003) 53-59

Egan TJ, Combrinck JM, Egan J, Hearne GR, Marques H, Ntenteni S, Sewell BT, Smith PJ, Taylor D, van Schalkwyk DA and Walden JC (2002) The fate of haem iron in the malaria parasite Plasmodium falciparum. Biochemical Journal, 365, 343-347.

Beagley P, Blackie M, Chibale K, Clarkson C, Moss J and Smith PJ (2002) Synthesis and antimalarial activity in vitro of new ruthenocene-chloroquine analogues. Journal of the Chemical Society Dalton Transactions 4426-4433.

Bentsi-Enchill AD, Duclos P, Folb PI. Sustaining childhood vaccination programmes – not all about cost. Vaccines: Children and Practice. 2002, 5, 26-29.

Trouiller P, Folb P, Bouteau S, Tessier A, Ford N. Clinical trials and pharmaceutical needs in developing countries. Good Clinical Practice Journal, 2002, 9, 1-6.

Trouiller P, Folb P, Weerasuriya K. Legal and regulatory issues affecting drug development for neglected diseases. Medecins sans Frontieres, 2002. <a href="http://www.accessmed-msf.org/prod/">http://www.accessmed-msf.org/prod/</a> publications.

Cohen K, Andrews S and Maartens G. Drug Interactions with Antiretroviral Therapy. Southern African Journal of HIV Medicine, 2002; 9: 42-47.

Elandallousi LM and Smith PJ (2002) Preparation of pure and intact Plasmodium falciparum plasma membrane vesicles and partial characterisation of the plasma membrane ATPase. Malaria Journal, 1:6, 1-7. Article available from <a href="http://www.malariajournal.com/content/1/1/6">http://www.malariajournal.com/content/1/1/6</a>.

Wilkins JJ, Folb PI, Valentine N, Barnes KI 2002 An economic comparison of chloroquine and sulfadoxine pyrimethamine as first line treatment for malaria in South Africa: development of a model for estimating recurrent direct costs. Transactions of the Royal Society of Tropical Medicine and Hygiene; 95: 1-6

#### EXTENSION AND DEVELOPMENT WORK

H McIlleron, J Norman, G Gabriels, P Smith. Bioequivalence study: A comparison of the bioavailability of isotretinoin in two capsule products. 2002. "Generix"

#### PRESENTATIONS AT INTERNATIONAL CONFERENCES

C Clarkson. "Isolation, characterisation and chemical modification of related analogues of abietane and totarane diterpenes with antiplasmodial activity from Harpagophytum procumbens". 50th Annual Congress of the Society for Medicinal Plant Research Barcelona, Spain, September, 2002. D Fitoteropia Vol 2 9/2002 In The Book Of Abstracts. Society of Medicinal Plants Research 50<sup>th</sup> Annual Congress.

N Brine, W Campbell, J Bastida, M Herrera, F Vilodomat, C Codina, P Smith. A New Dinitrogenous Alkaloid from Cyrtanthus obliquus. 50<sup>th</sup> Annual Congress of the Society for Medicinal Plant Research. Barcelona, Spain, September 2002. D Fitoteropia Vol 2 9/2002. In the Book of Abstracts. Society of Medicinal Plants Research 50<sup>th</sup> Annual Congress

Bentsi-Enchill AD, Duclos P, Folb PI. Vaccine safety – an international perspective. Plenary presentation at the 6<sup>th</sup> International Conference for Tropical Pediatrics. Ankara, Turkey. August 2002.

The following Abstracts were published in the book of Abstracts: "The third MIM Pan-African Conference" Nov 17-22<sup>nd</sup> 2002. Arusha, Tanzania. Organised by the MIM Secretariat, Fogarty International Centre and the National Institute for Medical Research in Tanzania. Published by Multilateral Initiative on Malaria.

Bredenkamp B, Sharp B, Keyser A, Pearce R, Roper C, Barnes K, Mabuza A, Durrheim D, Baretto A, Streate E and Mthembu J. Molecular markers of resistance: Correlation of Clinical Outcomes in KZN and implications of drug policy in Mozambique and Mpumalanga. 3<sup>rd</sup> Multilateral Initiative on Malaria, Pan-African Conference, Arusha, Tanzania. November 2002.

Shretta R, Barnes K, Kishuna A, Lee C, Mthembu D, Thuo M. Drug management for malaria. 3<sup>rd</sup> Multilateral Initiative on Malaria, Pan-African Conference, Arusha, Tanzania. November 2002.

Barnes KI, Govere J, Mabuza A, Streat E, Kruger P, Sharp B, Durrheim D. In vivo SP efficacy: Is it time to reevaluate study methodology. 3<sup>rd</sup> Multilateral Initiative on Malaria, Pan-African Conference, Arusha, Tanzania. November 2002.

Dzinjalamala F, Kublin J, Macheso A, Smith P, Barnes K, Molyneux M, Plowe CV. Pyrimethamine-sulfadoxine efficacy and the molecular markers of resistance in high and low transmission areas in Malawi. 3<sup>rd</sup> Multilateral Initiative on Malaria, Pan-African Conference, Arusha, Tanzania. November 2002.

Qwabe B, Mthembu D, la Cock C, Mthembu DJ, Sharp B, Durrheim DN, Barnes KI. In vivo therapeutic efficacy of artemether – lumefantrine in KwaZulu Natal, South Africa. 3<sup>rd</sup> Multilateral Initiative on Malaria, Pan-African Conference, Arusha, Tanzania. November 2002.

Durrheim DN, Williams HA, Barnes KI, Sharp BL, Speare R. Beyond Evidence: Factors Influencing Malaria Treatment Policy in South Africa. 3<sup>rd</sup> Multilateral Initiative on Malaria, Pan-African Conference, Arusha, Tanzania. November 2002.

## HIGHER DEGREES AWARDED

Stephanie Delicour BSc (Med) Hons (first class): Thesis Title: Cytochrome P450 Genotyping as an Alternative to Phenotyping for the Determination of Metabolic Status in Clinical Trial. Cape Town 2002 Pages 1-52 Supervisors: J Norman Dr H Hoppe

Nicolaas Erasmus BSc (Med) hons: Thesis Title: Section A: An investigation Of The Effects Of A Porphyrinogenic Agent On R59w Mutant Variegate Porphyric Mice. Section B: An investigation Of A Second 537 Delat South African VP Family to Determine The Possibility Of A Common Ancestry By Using Haplotype Analysis: Cape Town November 2002 Pages 1-67 Supervisors: Professor P.N. Meissner, Doctor A.V. Corrigal

Asma Hendricks BSc (Med) Hons: Thesis Title: The Development and Validation Of A High performance Liquid Chromatography Assay For Nevirapine In Human Plasma.

Cape Town 2002 pages 1-68 Supervisors Laboratory: Associate Professor P.J. Smith, Mrs J. Norman, G Langdon. Clinical: Dr M. Blockman, Dr K, Cohen

Sandra Meredith BSc (Med) Hons (first Class): Thesis Title: Cloning and Expression of Malaria Genes Involved in Endocytosis. Cape Town November 2002 (Thesis). Pages 1-49 Supervisor: Dr H Hoppe

Clinton Solomon BSc (MED) Hons: Thesis Title: The effect of Human Digestion on Plant Extracts. Cape Town 2002 Pages 1-39 Supervisor Dr J.S Cridland

Marc Blockman BPham, MBChB Master of Medicine in Pharmacology Thesis Title: Chlorproguanil/ Dapsone; A rising dose-tolerance study in healthy human subjects

Nchinya Benedict Bapela (BPLNCH001) BSc (Med) Hons 1999 MSc (Med) in Pharmacology. Thesis Title: In vivo effects of South African traditional medicines against mycobacterial tuberculosis in mice: alone or in combination with antimycobacterial drugs.

Supervisors Prof B Ryffel, Prof Pete Smith, Dr Gilbert Matsabisa

Cailean Clarkson BSc (Med) Hons Doctor of Philosophy (in Pharmacology) Thesis Title: Isolation and characterisation of two antiplasmodial diterpenes from Harpagophytum procumbens (Devils Claw) and chemical modification of a related analogue

#### CONSULTANCIES AND OTHER RESEARCH AND SPECIAL APPOINTMENTS

Barnes, KI. Member of National Malaria Advisory Group, Department of Health.

Blockman M: Chair: Editorial Expert Committee; (2002); sub-committee of the National Essential Drugs List, Department of National Health.

Blockman M: WHO consultant to Turkey for national standard treatment guidelines. 2002

Folb PI: chair of the WHO Global Advisory Committee on Vaccine Safety.

Folb PI: member of Strategic Advisory Group of Experts of WHO on vaccine policies world-wide.

Folb PI: Member: Steering Committee of Medecins Sans Frontieres initiative for scientific

development of novel drugs for neglected diseases in the developing world.

Folb PI: Chair: World Health Organization task force for research into severe malaria.

Folb PI: Chair; World Health Organization task force for development of artesunate in severe, life-threatening malaria.

Folb PI: Scientific member; World Health Organization Steering Committee for proof of principal research.

Mehta U and Folb PI: WHO international training centre on adverse events following immunization as part of the Global Training Network of WHO.

Ntutela SC: Member of the Indigenous Knowledge Systems (IKS) of the Parliamentary Steering Committee; Western Cape Representative of IKS Secretariat.

# RESPIRATORY CLINIC

**HEAD OF DIVISION** – Professor ED Bateman

CONTACT DETAILS

Postal Address: UCT Lung Institute

PO Box 34560 Groote Schuur 7937 Cape Town

Telephone: SA (21) 406-6901 Fax: SA (21) 406-6902

Email: ebateman@uctgsh1.uct.ac.za

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. The Lung Health Survey 2002, performed in collaboration with the Tuberculosis Research Unit of Stellenbosch is nearing completion and will provided important data on the burden of lung disease in the community, and the influence of domestic and environmental factors. The Practical Approach to Lung Health in South Africa (PALSA) project (partnering with the Free State University) comprises three parts. The first is the adaptation of a WHO disease management guideline for local use and the planning of professional detailing for frontline clinicians (nurse practitioners). The second is validation of the approach in a primary care clinic in Cape Town. The final phase is a randomised controlled trial in 40 clinics in the Free State province. Other projects include a survey of adults exposed to a sulphur fire smoke plume 6 years ago (with the University of Michigan), a study of new methods of assessing small airways dysfunction in asthma, and disease management of airways diseases utilising a computerised interactive guideline-based support and diagnostic system. The Lung Drug Research section has undergone further improvements in quality and in operating procedures to ensure that it is fully compliant with international standards for clinical drug trials (Phases II and III). Staff have been involved more than 20 such trials over the past year, involving patients with the following diseases: pneumonia, multi-drug resistant tuberculosis, idiopathic pulmonary fibrosis, pulmonary hypertension, asthma, allergic rhinitis and chronic obstructive pulmonary disease. Work has continued on the Canadian Lung Volume Reduction Surgery trial. In occupational medicine, a 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 pollution in Cape Town.

# **STATISTICS 2002**

# PERMANENT & LONGTERM CONTRACT STAFF

Professor	2
Associate Professors	3
Senior Lecturers	1
Honorary Lecturer	1
RESEARCH STAFF	
Medical Officers	5
Nursing study co-ordinator	4
Admin & clerical staff	3
TOTAL	19

#### **STUDENTS**

Doctoral: MD/PhD	3
MMed: FCP	2
MSc	1
TOTAL	6

#### 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; alpha1-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 Nolokwe

Occupational Health research

# RESEARCH OUTPUTS

## RESEARCH PAPERS AND REFEREED ARTICLES

Bousquet J, van Cauwenberge P, Khaltaev N, on behalf of an expert committee Allergic Rhinitis and its Impact on Asthma (ARIA). ARIA Workshop Report. Journal of Allergy and Clinical Immunology 2001; 108: S1-147.

Bateman ED, Frith LF, Braunstein GL. Achieving guideline-based asthma control – does the patient benefit? European Respiratory Journal, 2002; 20: 588-595.

Donohue JF, van Noord JA, Bateman ED, Langley SJ, Lee A, Witek TJ, Kesten S, Towse L. A 6-month placebo-controlled study comparing lung function and health status changes in COPD patients treated with tiotropium or salmeterol. Chest 2002; 122: 47-55.

Esterhuizen T., Rees D., Hnizdo E., Kielkowski D., Van Schalkwyk E., White N., Smith F., Hoggins B., Curtis T. Occupational respiratory disease surveillance in South Africa - Part 2: Results from SORDSA (1997 to 1999). South African Medical Journal 2001; 91: 502-508.

Feldman C, Brink AJ, Richards G, Bateman ED, O'Brien J, Maartens G, Klugman KP. Management of Community-Acquired Pneumonia in Adults - Clinical Guideline. South African Medical Journal 2002; 92: 647-655.

Poyser MA, Nelson H, Ehrlich RI, Bateman ED, Parnell S, Puterman A, Weinberg E. Socioeconomic deprivation and asthma prevalence and severity in young adolescents. European Respiratory Journal 2002; 19: 892-898.

Travis WD, King TE, Bateman ED, Lynch DA for the Core Panel. ATS/ERS International Multidisciplinary Consensus Classification of the Idiopathic Interstitial Pneumonias. Joint statement of the American Thoracic Society (ATS), and the European Respiratory Society (ERS). American Journal of Respiratory and Critical Care Medicine 2002; 165: 277-304.

#### CHAPTERS IN BOOKS

White N, Bateman ED. Mesothelioma and Exposure to Asbestos in South Africa: 1962-2000. In: Mesothelioma. Eds BWS Robinson and AP Chahinian. Martin Duntiz: London; 2002, pp. 93-110.

White N. SIMRAC Handbook of Occupational Health Practice in the South African Mining Industry. Guild R, Ehrlich RI, Johnston JR, Ross MH (Eds). Chapter 5: Occupational Lung Disease. SIMRAC, Johannesburg 2001, pp. 119-151.

#### CONFERENCE ABSTRACTS

Ainslie GM, Bateman ED. The clinical spectrum and natural history of pulmonary sarcoidosis in South Africa. Sarcoidosis, Vasculitis & Diffuse Lung Disease 2002; 19 (Suppl 1): 46.

Ainslie GM, Bateman ED. The clinical spectrum and natural history of pulmonary sarcoidosis in Southern Africa. South African Respiratory Journal 2002; 8 (2): 60.

Ainslie GM, Bateman ED. The clinical features and natural history of bird-fanciers' hypersensitivity pneumonitis in South Africa. American Journal of Respiratory and Critical Care Medicine 2002; 163: A17.

Ainslie GM, Bateman ED. The clinical spectrum and natural history of bird-fanciers' hypersensitivity pneumonitis in South Africa. South African Respiratory Journal 2002; 8 (2): 60.

Bateman ED, Bateman ME, Lee A, Towse L, van Dyk M, Serby C. A 6-month placebo-controlled study comparing lung function and health status changes in COPD patients treated with Tiotropium or Salmeterol. South African Respiratory Journal 2002; 8: 62.

Bateman ED, Frith L, Ho M. Asthma control defined in terms of goals of guidelines reduces maximally the impact of asthma upon patient assessed quality of life. South African Respiratory Journal 2002; 8: 62.

Bateman ED. Fixed—dose combination budesonide/formeterol as monotherapies in patients with COPD. South African Respiratory Journal 2002; 8: 64.

Bateman ED, Frith LF, Ho M. Guideline-based asthma control reduces maximally the impact of asthma upon patient-assessed quality of life. American Journal of Respiratory and Critical Care Medicine 2002; 165: A44.

Bateman ED, Jenkins C, Korducki L, Kesten S. Tiotropium (TIO) improves health care resource utilization (HRU) and patient disability in patients with COPD. American Journal of Respiratory and Critical Care Medicine 2002; 165: A111.

Bateman ED, English R, Kruger M. Reduction in total and hospital costs associated with increased prescribing for obstructive lung disease (AFO) in a large insured population in South Africa. South African Respiratory Journal 2002; 8: 68.

Bateman ED, Jithoo A, Kruger MA. Asthma with "fixed" airflow obstruction: associations and treatment. South African Respiratory Journal 2002; 8: 76.

Bateman ED, Edin HM, Sondhi S, Gul N. Asthma-related quality of life in the GOAL Study: Baseline results. European Respiratory Journal 2002; 20: 46s.

Clark TJH, Bateman ED, James MH. Assessing asthma control using a composite measure based on GINA/NIH guidelines: an analysis of GOAL baseline data. European Respiratory Journal 2002; 20: 47s.

Dawson R, Shean K, Walther G, de Groot M, Willcox P. Surgery for Multi-Drug Resistant Tuberculosis. South African Respiratory Journal 2002; 8:66

Holtzhausen B, Jeebhay M, Miller M, Robins T, Bateman ED. Development and testing of an abbreviated methacholine airway challenge protocol for a field study investigating occupational asthma. South African Respiratory Journal 2002; 8:73

Jeebhay M, Robins, Lehrer SB, Bateman ED, Lopata LA. Occupational asthma among fish processing workers in the Western Cape. South African Respiratory Journal 2002; 8: 75.

Kuna P, Lalloo U, Bateman ED, Buhl R. Budesonide/formoterol in a single inhaler rapidly improves lung funtion in adult patients with mild or moderate asthma. European Respiratory Journal 2002; 20: 387s.

Letier MH, Zar HJ, Callanan M, Bateman ED, Louw JA. Asthma and gastroesophageal reflux disease: The effects of acid suppression therapy on asthma outcome. South African Respiratory Journal 2002; 8: 100.

Letier MH, Zar HJ, Callanan M, Bateman ED, Louw JA. Asthma and GORD: The effects of acid suppression therapy on asthma outcome. South African Respiratory Journal 2002; 92: 81.

Shean K, Willcox P. Multi-drug resistant tuberculosis in health care workers in the Cape Metropole. South African Respiratory Journal 2002; 8: 98.

White N. Treatment of COPD in low income countries. Symposium: Can the Global Strategy for Obstructive Lung Diseases (GOLD) be applied in low income countries? Int. J. of Tuberculosis and Lung Diseases 2002; 6; 10 s 21.

# UNIVERSITY PUBLICATIONS AND WORKS OF A POPULAR NATURE

Ainslie GM. Managing the side effects of asthma treatment. Asthma Forum. Medical Chronicle, 2002 August.

Bateman ED. The Allergic Rhinitis and its Impact on Asthma (ARIA) Initiative. Current Allergy and Clinical Immunology 2001; 14:10-13.

Bateman ED. The classification, assessment and treatment of the idiopathic interstitial pneumonias. South African Respiratory Journal 2001; 7:88-96.

White NW, Girdler-Brown BV, Feldman C, Bateman ED. Respiratory illness and pulmonology in South Africa - Distribution and trends 1987 - 1997. A report commissioned by the SA Thoracic Society. South African Respiratory Journal 2002; 7: 137-143.

# CONSULTANCY AND OTHER ACTIVITIES

Professor Bateman is Executive Director of the UCT Lung Institute and Past-President of the SA Thoracic Society. He serves as a member of the Scientific Committee of the Global Initiative for Asthma, is a member of the Communication Committee of the American Thoracic Society. He was an invited speaker at the South African Thoracic Society Congress in Sun City in July, at the Pulmonology Continuing Medical Education Meeting in October, at a European Respiratory Physicians Congress on "New Frontiers in Respiratory Medicine" in Budapest in November, at the Eighth Symposium on Chronic Obstructive Airways Disease, in Barcelona in March, at the Congress of the European

Academy of Allergology and Clinical Immunology in Naples in June, at the COPD3 Congress in Birmingham in June, and at the Slovenian Respiratory Society Congress in December. He was a contributor at an Asthma Workshop in Seville in February, and Atlanta in May. He delivered lectures and chaired sessions at the European Respiratory Society meeting in Stockholm in September. He delivered lectures to meetings of physicians in Lebanon and in three cities in Saudi Arabia in October, to the Cape Natural History Club, and at the UCT Summer School Course. He served as consultant to several companies including Partners-in-HealthCare, Boehringer Ingelheim, Astra-Zeneca, GlaxoSmithKline, and Bristol Myers Squibb. He is a faculty member of the GlaxoSmithKline Global Respiratory Institute, and has been appointed a member of the Advisory Board of the Chest Research Foundation in Pune, India. He convened and contributed at the SA Thoracic Society Guidelines Meetings on Community Acquired Pneumonia in February and on COPD in July, and chaired an international workshop on Inhalation Devices in Medicine, in Lisbon in June. Collaborative research is being undertaken with the Universities of Stellenbosch, Free State, Rotterdam and Michigan, the South African Medical Research Council, and World Health Organisation Stop TB Programme.

Prof Ainslie is an alternate director of the UCT Lung Institute, and serves on the Executive Council on the National Asthma Educational Programme and Course Convenor for the NRTC(UK)/NAEP Diploma in Asthma Care courses. She is a Council Member of the SA Thoracic Society and secretary of the Asthma, Allergy and Immunology Assembly, serves as examiner for the College of Medicine of SA, is the SA representative for the Alpha-1 Anti-Trypsin Deficiency International Registry. She presented papers at the Congress of the American Thoracic Society in Atlanta in May, at the congress of the World Association of Sarcoidosis and Other Granulomatous Disorders in Stockholm in June, and at the SA Thoracic Society (COPICON) congress at Sun City in July.

Dr Raine is a member of the executive council of Critical Care Society of Southern
Africa and chair of Assembly on Respiratory Physiological and Sleep of the SA Thoracic
Society. He is co-chair of the Combined Congress of the Critical Care, Thoracic and Allergy Societies of South Africa
to be held in Cape Town in 2003. He presented papers and chaired sessions at congresses of SA Thoracic Society and
Critical Care Society. He also spoke at Physician and Critical Care Refresher Courses.

Prof White is head of the Occupational Health Clinical Research Unit of the UCT Lung Institute, is a council member of the South African Thoracic Society, and serves on the Occupational Health Assembly, and the Standards of Spirometry Committee. He is chairperson of the Western Cape chapter of SASOM and serves on statutory committees concerned with occupational hdisease prevention and compensation. During sabbatical leave he continued work on Health 803 (development of a comprehensive, interactive CD-Rom based distance learning tool for radiological occupational lung disease surveillance) and convened a CME programme for practitioners in the mining industry. He presented papers at the Congress of the International Union Against Tuberculosis and Lung Disease in Montreal and at the 33 rd Congress for Silica, Silicosis and other diseases in Italy in October, and at the congress of the SA Thoracic Society in July.

Professor Willcox presented papers at the Congress of the South African Thoracic Society in Sun City in July, at the British Thoracic Society Winter meeting in December. He is a member of the Scientific Committee of the South African Cystic Fibrosis Society and a member of the Editorial Board of the Malawi Medical Journal.

# **DIVISION OF RHEUMATOLOGY**

**HEAD OF DIVISION** - Professor Asgar Ali Kalla

CONTACT DETAILS

Postal Address: J47 Old Main Building

Groote Schuur Hospital Observatory, 7925

Cape Town

Telephone: 404-5422 / 404-2131 / 406-6514

Fax: 448-3253

Email: mburger@uctgsh1.uct.ac.za

#### 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 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 are also looking 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 also 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 this regard, collaborative arrangements are in place with the Rheumatic Diseases Hospital in Bath, UK. In addition, there is very significant involvement in clinical drug trials in both rheumatoid arthritis and osteoarthritis. Collaborative projects are being planned with Leeds University in the UK, as well as Wits and Nelson Mandela Medical University, under the directorship of Professor Paul Emery. These include Scleroderma lung disease, and the response to cyclosporin A in steroid-dependent SLE and Psoriatic.

# STATISTICS 2002

#### 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)	2
TOTAL	3

#### 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.

# RESEARCH OUTPUTS

## RESEARCH PAPERS AND REFEREED ARTICLES

Kalla AA. Renal vascular resistance in systemic lupus erythematosus with and without renal involvement: Assessment by colour duplex Doppler ultrasound. Clinical Rheumatology

Kalla AA. Heterogeneity of bone mineral density changes in women with systemic lupus erythematosus. Clinical Rheumatology.

Kalla AA. Lupus hepatitis or autoimmune hepatitis in a patient with systemic lupus erythematosus. Clinical Rheumatology.

Kalla AA, Bewerunge L, Langley A, Meyers OL, Fataar AB. Trabecular bone density in premenopausal rheumatoid arthritis patients. South African Medical Journal 2002; 92(1): 62-68.

Geusens PP, Truitt K, Sfikakis P, Zhao PL, DeTora L, Shingo S, Lau CS, Kalla A, Tate G. A placebo and active comparator-controlled trial of rofecoxib for the treatment of rheumatoid arthritis. Scandinavian Journal of rheumatology 2002; 31(4): 230-238.

# PUBLISHED CONFERENCE PROCEEDINGS

Kalla AA. Comparison of Health Assessment Questionnaire and Keitel Function Index in active rheumatoid arthritis. Arthritis Rheum.

# POPULAR PUBLICATIONS

Breeds R, Kalla AA. Lupus Nephritis. Rheumatology News Vol 13(2).

#### UNPUBLISHED RESEARCH / POLICY DOCUMENTS

Kalla AA. Principal author of guidelines for the treatment of rheumatoid arthritis. Project run by SAMA.

Kalla AA. Member of committee for guidelines for the treatment of osteoarthritis.

Kalla AA. Member of committee for guidelines on the treatment of Gout.

Kalla AA. Longitudinal BMD measurements in SLE.

## CONSULTANCY AND OTHER ACTIVITIES

#### Kalla AA

Heideveld CHC Khayelitsha CHC Conradie Hospital