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This report was compiled by Colleen Mitchell



OVERVIEW

The main event at the university in 2005 was its merger, with effect from January 1, with the previous University of the North, to form the University of Limpopo. I was due to retire at the end of June, 2005, but, due to the demands of the merger, was asked to continue, with the added responsibility of being appointed Merger Manager for the Medunsa Campus. During the year progress was made in entrenching the concept of a multi-campus institution, in harmonising programmes common to both main campuses and in developing administrative and academic structures, although none of these elements was fully formed at the time of writing. Many of the tasks associated with an enterprise of this nature proved difficult and required much effort. In the meantime, of course, the academic work of the institution had to continue.

In the particular case of the BPharm programmes, the huge need in the country for pharmacy human resources (pharmacists are at the top of the list of the government's scarce skills occupations) led to the continuation of pharmacy training at both main campuses. Some progress was made during the year in bringing the staff and the programmes closer together.

The School of Pharmacy at the Medunsa Campus, the numerous activities of which are described in this report, is entering its twenty-fourth year. Its two main divisions are responsible for the formal academic programmes, namely the BPharm programme in the undergraduate division, and the Masters and Doctors degree programmes and the Postgraduate Diploma in Hospital Pharmacy Management in the postgraduate division. Its affiliated units are the Pharmacy Training and Development Project, which provides outreach training and operational research, and the Photobiology Laboratory, which offers testing services to industry. The latter two units have been completely self-funded since their inceptions in 1991 and 1990 respectively.

The demands on the staff during 2005 have been huge, as they have had to add the activities associated with the merger to their normal workload. Despite these challenges, some of them continued with their postgraduate and research work and graduated during the year. I would therefore offer them all, including the staff of the School of Pharmacy at Tshwane University of Technology, our partners in the BPharm programme, my sincere thanks.

Prof Rob Summers
January 30, 2006



THE UNIVERSITY OF LIMPOPO

A world-class African university, which responds to education, research and community development needs through partnerships, and knowledge generation - continuing the long tradition of empowerment.

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SCHOOL OF PHARMACY FACULTY OF MEDICINE

1. STAFF COMPLEMENTS AND QUALIFICATIONS

ACADEMIC STAFF (FULL-TIME)

NAME	QUALIFICATIONS	POSITION
Bezuidenhout S Ms	Nat Dip Med Tech (Virology), Nat High Dip Med Tech (Virology), MTech (Virology)	Senior Lecturer (joint with Virology),
Brown L Ms	BPharm, MSc (Pharm)	Senior Lecturer
Fourie S Dr	BPharm, PhD	Senior Lecturer (joint with Pharmacology)
Gous AGS Prof	BPharm, PharmD	Associate Professor/Postgraduate and Research Coordinator
Hanson C Ms	BPharm, BSc (Hons) (Pharmacology)	Lecturer (joint with Pharmacology)
Helberg E Ms	Dip Pharm	Senior Lecturer/Postgraduate Diploma in Hospital Pharmacy Management Course Coordinator
Leteka M Ms	BPharm, MSc(Med) (Pharmacy)	Lecturer/Clinical Pharmacist
Mashele S Dr	PhD	Senior Lecturer (joint with Physiology)
Meyer JC Ms	BPharm, MSc (Med) (Pharmacy)	Senior Lecturer/BPharm Course Coordinator
Modiba W Mr	BSc Hons, MTech	Lecturer (joint with Pharmacology)
Molefe SM Ms	BAgri, BSc, BSc (Hons) (Animal Science Nutrition), MSc (Animal Science Nutrition)	Lecturer (joint with Physiology & Nutrition)
Pochee E Mr	MSc, Dip Med Micro	Senior Lecturer (joint with Medical Microbiology)
Summers RS Prof	BSc (Pharm), PhD, FPS (SA)	Professor and Head
Untiedt S Dr	MBChB, MSc (Med) (Pharmacy)	Senior Lecturer

NON-ACADEMIC STAFF (FULL-TIME)

NAME	QUALIFICATIONS	POSITION
Mabope LA Ms	M Biochemistry	Senior Medical Natural Scientist / BPharm Deputy Course Coordinator
Mothibe M Ms	BSc (Hons) Pharmacology	Medical Natural Scientist



PART-TIME APPOINTMENTS

NAME	QUALIFICATIONS	POSITION
Crous EI Ms	BSc (Hons)	Lecturer
De Beer MC Ms	MSc	Senior Lecturer
Engelbrecht BA Ms	BPharm, MBA	Senior Lecturer
Engelbrecht CJ Ms	Bpharm	Lecturer
Malangu N Mr	BPharm, MBA, MSc (Pharmacology),	Senior Lecturer
Peenze I Ms	MSc (Med) (Virology)	Senior Lecturer
Pholo M Mr	BSc (Hons)	Lecturer
Qolohle SZ Ms	BPharm, MBA	Senior Lecturer
Stafford L Ms	BSc (Pharm)	Senior Lecturer
Strickland-Hodge B Prof	PhD Medical Sociology	Visiting Chair in (Rational) Pharmacotherapy
Summers B Dr	BPharm, PhD	Senior Lecturer / Photobiology Laboratory Manager

RESEARCH FELLOW/ACADEMIC INTERN

NAME	QUALIFICATIONS	POSITION
Baaisi T Mr	BPharm	Research Fellow / Academic Intern
Mapetla K Ms	BPharm	Research Fellow / Academic Intern

JOINT STAFF WITH MPUMALANGA PROVINCE

NAME	QUALIFICATIONS	POSITION
Graham M Ms	BPharm	Chief Pharmacist/Lecturer, Witbank Hospital
Vacant		Chief Pharmacist / Senior Lecturer (Philadelphia Hospital)
Vacant		Senior Pharmacist / Senior Lecturer (Philadelphia Hospital)
Vacant		Senior Pharmacist / Senior Lecturer (Groblersdal Hospital)
Vacant		Senior Pharmacist / Senior Lecturer (Witbank Hospital)
Vacant		Principal Pharmacist / Senior Lecturer (VHL Depot)
Vacant		Principal Pharmacist / Senior Lecturer (KwaMhlanga Hospital)

ADMINISTRATIVE STAFF

Ms CJ Mitchell, Administrative Officer: School of Pharmacy
Ms A Winton, Secretary (temporary): BPharm programme

PROMOTIONS

Ms CJ Mitchell, Administrative Officer: School of Pharmacy

RESIGNATIONS AND RETIREMENTS

Resignations:

Mr C Kruger, *BSc Pharm, MSc (Med)*, Chief Pharmacist/Snr Lecturer, Philadelphia Hospital
(resigned wef 31 March, 2005)

Ms K Runnalls, Secretary (temporary): BPharm programme (resigned wef 30 June, 2005)



Retirements:

Prof RS Summers, Prof / Head: Officially retired on 30 June, 2005. However, the university extended his contract to the end of 2005 due to his appointment as Merger Manager.

STAFF MEMBERSHIP OF VARIOUS HOSPITAL, PROVINCIAL AND NATIONAL ORGANISATIONS

- **Dr George Mukhari Hospital Pharmacy Management Committee**
Prof AGS Gous (Chairman), Ms M Leteka
- **Pharmacy and Therapeutics Committee (Dr George Mukhari Hospital)**
Prof AGS Gous (Vice-Chairman)
- **Pharmacy and Therapeutics Committee (Provincial)**
Prof RS Summers
- **Cosmetic Toiletry & Fragrance Association of SA Sunscreen Committee**
Dr B Summers
- **SA Bureau of Standards Sunscreen Standards Group**
Dr B Summers
- **SA Association of Hospital and Institutional Pharmacists: Branch & Conference Organising Committees**
Dr B Summers
- **Cosmetic Toiletry & Fragrance Association Bearberry Working Group**
Dr B Summers

GENERAL

- Professor Summers was appointed Convenor and Chair of Task Team III for the Standards Generating Body (SGB) for SA Pharmacy Council (SAPC).
- Professor Summers continued to be a member of the MEDUNSA Joint Pension and Provident Funds: Board of Trustees Committee.
- Professor Gous was appointed as External Examiner for the Schools of Pharmacy of University of Western Cape, University of Witwatersrand and Northwest University, Potchefstroom Campus.
- Professor Gous continued as Examiner for the Professional Examinations, Pharmacology and Toxicology of the SAPC.
- Professor Gous continued as a moderator for the Pre-registration evaluation of the SAPC for Pharmacist Interns.
- Professor Gous was appointed as a member and leader of the SAPC inspection team to the Schools of Pharmacy of the University of Kwa-Zulu Natal, University of Western Cape and the Northwest University, Potchefstroom Campus.
- Professor Gous was appointed by the Minister of Health as a member of the Appeal Committee in terms of Section 24 of the Medicines and Related Substance Act, 1965.
- Dr Fourie, Ms Hanson, Ms Leteka and Ms Meyer were appointed as assessors for the SAPC for assessing Pharmacist Intern portfolios.
- Ms Meyer continued to be an evaluator of courses for the SAPC.
- Staff have assisted with pharmaceutical services, in-service training and continuing education at Ga-Rankuwa Hospital and elsewhere (See Pharmacy Training and Development Project - attached).

AWARDS

Best undergraduate poster award. Masinge M, Molale MG, Shirilele VE and Bezuidenhout S, Hanson C, 2005. The extent of the use of oral antibiotics in the management of influenza-like symptoms in patients at Hercules Primary Health Care Clinic. **Academic Day.** University of Limpopo (Medunsa Campus). 17-18 August.



2. CENTRES OF EXCELLENCE

The School of Pharmacy and its affiliated units have become widely known, nationally and internationally, because of their willingness to engage constructively with other organisations. This characteristic has led to the innovative BPharm programme, the unique Postgraduate Diploma in Hospital Pharmacy Management and its designation as a WHO Collaborating Centre for Pharmacy Curriculum Development and Rational Pharmacotherapy. It also supports the efforts of other organisations, such as the SA Pharmacy Council, the National and some provincial Departments of Health and the Medunsa National ARV Pharmacovigilance Centre through the voluntary commitment of the staff to its mission.

During 2006, this effort was extended to revising and updating a Pharmaceuticals Supply Management course for the Commonwealth Pharmaceutical Association and completing the Developing Pharmacy Practice Manual with WHO.

Other aspects of importance include its outreach through national and international committees. Details of these and other activities are presented later in this report.



3. RESEARCH AND OUTREACH UNITS

PHARMACY TRAINING AND DEVELOPMENT PROJECT

The Pharmacy Training and Development Project affiliated to the School of Pharmacy is a self-supporting unit, which provides outreach training and operational research in pharmaceutical and health services. It has operated since 1991, firstly as the Medicos Pharmacy Project, and then as the Pharmacy Training and Development Project, since 1996.

STAFF

Professor RS Summers	Director (Part-time)
Ms A Soopee	Trainer/Consultant
Ms M Fourie	Secretary (part-time)
Ms C Fratter	Secretary (full-time)
Ms G Kruger	Secretary (part-time): Postgraduate and short courses
Ms S Theron	Financial records (part-time)
Ms N Williamson	Secretary: Short courses
Ms L Mogogole	Admin Assistant (part-time)
Ms I Kgabo	Admin Assistant (part-time)
Ms M Zweygarth	Technical writer/data manager
Ms E Crous	Administrator

RESIGNATIONS

Ms J Fullard, wef June 3, 2005

The following additional short-term staff were employed for specific projects / programmes:

Mr G Malangu	Consultant / Assessor
Dr DP Rossiter	Consultant / Assessor
Ms L Stafford	Consultant / Assessor
Ms H Opperman	Consultant / Assessor

PHARMACIST'S ASSISTANTS TRAINING

Pharmacist's Assistant Training (PAT) (Basic Level)

SECTORS	ENROLLED	COMPLETED
Hospital	95	142
Community	16	20
Distribution	0	0
Total	111	162

Pharmacist's Assistant Training (PAT) (Post-Basic Level)

SECTORS	ENROLLED	COMPLETED
Hospital	111	16
Community	13	7
Total	124	23



DISPENSING FOR HEALTH CARE PROFESSIONALS

No. of candidates registered to date	6 466
No. of candidates registered during 2005	4 669
No. of candidates assessed	1 805
No. of competent candidates	1 219
Nurses	1 122
Doctors	97
Pass rate:	68%
No. of assessors assisting with the Dispensing course	63

CPD COURSE: THE PHARMACIST IN HIV/AIDS

No. of candidates registered to date	235
No. of candidates registered during 2005	198
No. of candidates assessed during 2005	7

OTHER CONTRIBUTIONS

The Project was engaged to revise the Commonwealth Pharmaceutical Association's (CPA) distance learning course on "The Management of Pharmaceutical Supplies".

Eight hundred and thirty two copies of the Primary Health Care Formulary, Fourth Edition, were issued/sold during 2005. This publication also formed part of the self-learning package for the Dispensing Course.

Staff assisted the National Department of Health in the development of Unit Standards for HIV/AIDS training and contributed to an e-learning course in Rational Drug Management. They also participated in the setting up and management of the Medunsa Antiretroviral Pharmacovigilance Centre.

PHOTOBIOLOGY LABORATORY

The Photobiology Laboratory is a self-supporting unit affiliated to the School of Pharmacy. It has provided testing and support services to industry since 1990.

STAFF

Manager

Dr B Summers (part-time), *BPharm, MSc (Med), PhD (MEDUNSA), MRPharmS*,
Photobiology Laboratory Manager

Research staff

Ms TM Ndlovu, *BTech (Analytical Chemistry)*, Research Assistant
Ms LA Raaff, Research and Computer Support
Ms M Schoeman, Research Assistant (part-time)



TESTS PERFORMED

During 2005, the Photobiology Laboratory performed the following tests:

- ☀ 13 *in vivo* Sun Protection Factor (SPF) tests
- ☀ 6 *in vitro* SPF fabric tests using the Optometrics SPF 290 apparatus
- ☀ 9 *in vitro* SPF topical product tests
- ☀ 13 skin irritancy potential tests (with an average of 20 products per test)
- ☀ 5 hair relaxer studies
- ☀ 3 skin pigmentation studies
- ☀ 2 Ophthalmic Irritancy tests
- ☀ 1 Striae (Stretch Mark) study
- ☀ 1 Scar Study
- ☀ 1 Oil Control study

VISITORS/GUESTS

Ms Amy Qualls, Ms Judy Rahn & Ms Monica Bispo: Unilever, USA



4. PROGRAMMES / CURRICULUM DEVELOPMENT

STAFF RESPONSIBILITIES

Full-time staff

Staff member	Small group teaching/facilitating/lecturing
Bezuidenhout S Ms	BPharm (years 1-4)
Brown L Ms	BPharm (years 1-4)/MSc (Med) (Pharmacy)
Fourie S Dr	BPharm (years 1-4)/MBChB
Gous AGS Prof	BPharm (years 1-4)/MSc (Med) (Pharmacy)/PhD
Hanson C Ms	BPharm (years 1-4)
Helberg E Ms	Postgraduate Diploma in Hospital Pharmacy Management
Leteka M Ms	BPharm (years 1-4)/MSc (Med) (Pharmacy)
Mabope LA Ms	BPharm (years 1-4)
Mashele S Dr	BPharm (years 1-4)/MBChB
Meyer JC Ms	BPharm (years 1-4)/MSc (Med) (Pharmacy)
Modiba W Mr	BPharm (years 1-4)
Molefe SM Ms	BPharm (years 1-4)
Mothibe M Ms	BPharm (years 1-4)
Pochee E Mr	BPharm (years 1-4)
Summers RS Prof	BPharm (years 1-4)/PhD/Postgraduate Diploma in Hospital Pharmacy Management
Untiedt S Dr	BPharm (years 1-4)/MSc (Med) Pharmacy

Part-time staff

Staff member	Course/activity
Summers B Dr (Senior Lecturer/ Photobiology Laboratory Manager)	BPharm (Years 1-4) / MSc(Med) (Pharmacy)/ PhD Facilitator/Supervisor
Stafford L Ms (Senior Lecturer)	BPharm (Years 1 and 2) Facilitator
Engelbrecht B Ms (Senior Lecturer)	BPharm (Years 3 and 4) Facilitator
De Beer M Ms (Senior Lecturer)	BPharm (Years 2 and 3) Facilitator
Malangu N Mr (Senior Lecturer)	BPharm (Years 3 and 4) Facilitator
Crous E I Ms (Lecturer)	BPharm (Years 1 and 2) Facilitator

PROGRAMMES RUNNING

UNDERGRADUATE PROGRAMME

BPharm degree programme

Course Coordinator: Ms JC Meyer

Deputy Course Coordinator: Ms LA Mabope

(Note: This programme is offered in partnership with Tshwane University of Technology)

The seventh intake of first year BPharm students numbered 56.

The administration, activities and outcomes of the BPharm programme were supported by a critical Quality Assurance measure, the introduction of Standard Operating Procedures



(SOPs) for all academic activities. As with SOPs in industry and other forms of practice, these SOPs are also used for staff training.

The School of Pharmacy's problem-based learning approach to undergraduate education is being adopted by the Faculty of Dentistry, staff of which were trained by our staff, and the Department of Microbiological Pathology.

The BPharm programme undergoes continuous review and updating, module by module. The review process provides for input from both students and staff through in-module, post-module and pre-module reflection and review sessions and meetings. The assessment process is managed in similar fashion.

Number of students/class/year/course and pass/success rates

Course (2005)	Total student numbers			
	Registered	Wrote	Passed	% Pass
BPHARM 1	56	54	44	81.5
BPHARM 2	49	49	45	92.0
BPHARM 3	41	41	39	95.0
BPHARM 4	54	53	52	98.0
Average				91.6

Graduates of 2005

BPharm		
Adams Melony	Links Tammy	Mphoso Germina
Bezuidenhout Thinus	Mabaso Lange	Mqoqi Thandeka
Bhamjee Attiya	Maboa Rose	Negondeni Rudzani
Chetty Anisha	Magagula Felicity	Nkosi Isabella
Chezuba Percy	Mahlangu Zodwa	Ntwe Tshiamiso
Denath Nosh	Mansoor Fatimah	Nyakane Jacobeth
Dlamini Nokulunga	Mathew Amritha	Osman Raesa
Dlamini Nomsa	Matjila Lesego	Phasha Kucky
Dube Sakhile	Mbhambhu Khensani	Pretorius Carmen
Du Preez Maryke	Mdlalose Mpumi	Ramdass Nishana
Erasmus Nadia	Mistry Bhavyata	Ratau Meriam
Filita Pumza	Mmono Refilwe	Sarela Stanley
Horne Riaan	Mnukwa Lindiwe	Shaku Sekie
Johannes Thapelo	Mofokeng Thabang	Singabapha Tizza
Kannemeyer Carina	Mohlala Peter	Strachan Lize-Mari
Khalo Nkagiseng	Mokhethi Lerato	Tamme Owen
Kopanye Mural	Monye Tsholofelo	Zulu Philile
Ledwaba Cecilia	Moraba Gao	



POSTGRADUATE PROGRAMMES

MSc (Med) (Pharmacy)

Programme Coordinator: Professor AGS Gous

Six students were admitted to the 2005 MSc (Med) programme. Students continuing from previous years numbered 22. Two MSc (Med) (Pharmacy) students graduated in 2005 (See below).

The course work for the MSc (Med) (Pharmacy) programme covered the following topics: Research Methodology; Protocol Development; Pharmaceutical Care Clinical Laboratory Tests; Pharmacokinetics and Therapeutic Drug Monitoring; Drug Information; Infectious Diseases and Antibiotic Therapy; Gastroenterology; Endocrinology; Cardio-vascular Diseases; Respiratory Diseases; Psycho-pharmacotherapeutics and Renal Diseases.

Titles of research projects being undertaken by postgraduate students appear in the section on Research (see below).

Graduates of 2005

Ms M Leteka [MSc (Med) Pharmacy]

Ms L D'Amico [MSc (Med) Pharmacy] *Cum Laude*

Doctor of Philosophy (by research)

Three PhD students are continuing from previous years.

Postgraduate Diploma In Hospital Pharmacy Management

Course Coordinator: Ms E Helberg

The primary purpose of the qualification is to provide qualifying learners with comprehensive management skills to manage a hospital pharmacy effectively. The development of the course was funded by the World Health Organisation and the South African Drug Action Programme.

The course consists of five modules. The module titles and the average (and range of) the marks obtained by the first cohort of 18 students follow. Only one student from this cohort did not complete the programme, to give a 95% pass rate.

Progress

Module	Title	Average (SD)	Range
1	Management Processes	72.2 (9.9)	58-92
2	Human Resource Management	67.9 (8.7)	51-85
3	Financial Systems	65.6 (8.9)	52-85
4	Medicines' Management	64.3 (10.8)	50-82
5	Technical Report	62.4 (8.5)	45-78
	Final mark	67.2 (8.6)	55.0-85.5

Course outcomes at individual, system and services level were all positive. The course has achieved its main objective of enabling hospital pharmacy managers to do their jobs better. Provincial Divisions of Pharmaceutical Services provide financial support for their staff to undertake this programme.



5. RESEARCH

INDIVIDUAL RESEARCH PROJECTS RUNNING

NB: Progress reports have already been submitted to the Research Office.

Research in drug use and kinetics

- ◆ Pharmacokinetics of fluconazole in AIDS patients [MP60/2001 – M Paterson]
- ◆ Gentamicin in post-caesarean section patients [MP49/2001 – D Vengadejellum]
- ◆ Drug use at Ga-Rankuwa Hospital Intensive Care Unit [MP45/2002 – L Mokhadi]
- ◆ Drug-related hospital admissions in the elderly at Casualty Department of Pretoria Academic Hospital [MP5/2002 – JO Famikin]
- ◆ Antiretroviral drug transport across intestinal epithelial cells: Influence of tuberculosis and traditional medicines [MP151/2003 – L Brown]
- ◆ Antimicrobial use and the influence of an intervention programme on the usage patterns in the adult wards of Witbank Hospital [MP108/2002 – Graham M]
- ◆ The effectiveness of pharmacist's intervention in the treatment of patients with hypertension and diabetes mellitus at Kalafong Hospital [MP45/2003 – Ferreira SJ]
- ◆ The monitoring of hydroxyzine prescribing usage patterns in Ga-Rankuwa Hospital [MP108/2003 – Hanson C]
- ◆ The impact of pharmacist interventions in a medical ward at Polokwane Hospital [MP26/2003 – Ghoor A]
- ◆ A description of the knowledge, understanding and outcome of disease management in diabetic patients in dedicated, semi-dedicated and non-dedicated institutions [MP137/2003 – Mlati MK]
- ◆ Evaluation of directly observed treatment short-course programme at Good Shepherd Hospital, Siteki, Swaziland [MP46/2003 – Oyewumi BR]
- ◆ Methylphenidate prescribing patterns in a retail pharmacy group in Tshwane [MP138/2003 – Van Jaarsveld A]
- ◆ The effectiveness of insulin sensitisers in achieving improved glycaemic control in type II diabetes [MP119/2004 - Joshi S]
- ◆ Evaluation of surgical prophylactic use of antibiotics in the main theatre of Windhoek Central Hospital [MP118/2004 - Rushibiza JK]
- ◆ The effect of pharmaceutical care on antimicrobial prescribing patterns, cost and resistance at Ga-Rankuwa Hospital [MP12/2004 – Tlali M]
- ◆ A phase III, open, randomised, controlled primary vaccination study to demonstrate the non-inferiority of GlaxoSmithKline (GSK) Biologicals' Hb-MenAC vaccine when mixed extemporaneously and given as a single injection with GSK Biologicals' Tritanrix™ – HepB vaccine as compared to Tritanrix™ - HepB/Hiberix™ with respect to the immunogenicity of the hepatitis B antigen, when administered to healthy infants at 6, 10 and 14 weeks of age after a birth dose of hepatitis B vaccine [MC46/2004 – Summers RS]

Educational research

- ◆ The impact of educational intervention on the prescribing pattern of a selected antimicrobial agent [M133/99 – Prof AGS Gous]
- ◆ The effect of the selection, orientation and induction processes on the academic outcome of BPharm students of MEDUNSA-Technikon Pretoria [MP117/2001 – Mabope LA (nee Zikalala)]
- ◆ HIV/AIDS education and training for undergraduate BPharm students at the MEDUNSA/Technikon Pretoria Schools of Pharmacy [MP154/2003 - Bezuidenhout S]



New projects registered during 2005

- ◆ A qualitative study to describe the experiences, feelings, knowledge, attitudes and perceived problems of adult institutionalised epileptic patients [MP11/2005 – Helberg E]
- ◆ The impact of pharmaceutical care interventions on cardiovascular patients at Dr George Mukhari Hospital [MP54/2005 – Baaisi TK]
- ◆ Quantification of antiretroviral regimen adherence in selected treatment centres in South Africa [MP57/2005 – Mapetla K]
- ◆ Determinants of adherence to antiretrovirals in selected treatment centres in South Africa [MP58/2005 – Meyer JC]

Undergraduate projects registered and completed during 2005

- ◆ An *in vitro* evaluation of the effect of P-glycoprotein (P-gp) on the oral absorption of ibuprofen and atenol [MU30/2005 – Tamme O]
- ◆ Testing of tools to measure adherence to anti-retroviral (ARV) treatment in HIV patients at Dr George Mukhari Hospital [MU70/2005 – Dlamini N]
- ◆ Drug release behaviour of different types of hydrophilic colloid matrix systems [MU60/2005 – Chetty A]
- ◆ ARV compliance in a cohort of children treated at Dr George Mukhari Hospital [MU49/2005 – Adams M]
- ◆ The knowledge, practice and attitudes of Primary Health Care (PHC) nurses on Adverse Drug Reactions (ADR) reporting in Tshwane municipality area [MU36/2005 – Ntwe T]
- ◆ Medicine disposal practices of private and public hospital pharmacies in the Tshwane area [MU35/2005 – Bezuidenhout T]
- ◆ Comparing prescribing patterns at Dr George Mukhari Hospital with standard treatment guidelines and essential drug list [MU34/2005 - Phasha K]
- ◆ Formulation of a tonic in a solid dosage form [MU32/2005 – Pumza F]
- ◆ Comparison of two formulated antimicrobial burn creams to a commercially available burn cream [MU127/2005 – Horne R, Bartle C, Ndlela S]
- ◆ Bioburden of water used for antibiotic reconstitution in Tshwane area [MU108/2005 – Ramokolo P, Dithebe MK, Kubeka GI]
- ◆ A review of currently available natural sweeteners for use in diabetes mellitus and obesity [MU106/2005 – Dlamini M, Moshiga L, Zungu C]

INDIVIDUAL RESEARCH COMPLETED DURING 2005

- ◆ The impact of pharmaceutical care on therapeutic outcomes in chronic kidney disease [MP65/2003 – Leteka M]
- ◆ Comparison of conventional total parenteral nutrition versus glutamine-supplement total parenteral nutrition on the influence of cost, morbidity and mortality in critically ill patients at Chris Hani Baragwanath Hospital [MP4/2002 – L D'Amico]

GROUP RESEARCH

The School participated in the SAPC's Dispensing Service Research - Pilot Project

EXTERNALLY FUNDED RESEARCH

The antimicrobial resistance and use surveillance programme [MR119/2002 – Prof AGS Gous] was completed. R83 587 was received on completion of the study from the World Health Organisation.



CONTRACT RESEARCH

- ◆ Afro hair – novel approaches to hair straightening [MC04/2005 – Dr B Summers]
- ◆ Evaluation of hair breakage after relaxer treatment [MC130/2003 – Dr B Summers]
- ◆ The effect of skin lighteners (with and without ultraviolet light) on skin tone [MC87/2000 – Dr B Summers]
- ◆ The induction and evaluation of skin dryness and remoisturising [M45/90 – Dr B Summers]
- ◆ The determination of Sun Protection Factors (SPF) for sunscreen preparations [M6/90 – Dr B Summers]
- ◆ *Pseudofolliculitis barbae*: Occurrence and treatment in black males [MR55/95 – Dr B Summers]
- ◆ Characterisation of skin pigmentation by visual, qualitative and quantitative analysis [MR65/97 – Dr B Summers]
- ◆ Determination of skin irritancy potential of topically applied products [M13/92 – Dr B Summers]
- ◆ Ophthalmic irritancy potential of a “non-sting” topical product [MR08/99 – Dr B Summers]



6. PUBLICATIONS

SAPSE ACCREDITED PUBLICATIONS

Gous A, *et al.* 2005. Fluid shifts have no influence on ciprofloxacin pharmacokinetics in intensive care patients with intra-abdominal sepsis. **International Journal of Antimicrobial Agents**; **26 (2005)**: 50-55.

NON-SAPSE ACCREDITED PUBLICATIONS

Summers B, Summers RS, Muller E. 2005. A national web-based survey of sunscreen products as a tool for industry self-regulation, consumer awareness campaigns and marketing. **IFSCC Magazine**; **8(3)**: 201-204.

BOOKS

Wiedenmayer KA (Swiss Centre for International Health, Swiss Tropical Institute, Basel, Switzerland); **Summers RS** (School of Pharmacy, University of Limpopo, MEDUNSA Campus, South Africa); **Mackie CA** (Medway School of Pharmacy, The Universities of Greenwich and Kent, Chatham Maritime, United Kingdom); **Gous AGS** (School of Pharmacy, University of Limpopo, MEDUNSA Campus, South Africa); **Everard M** (Department of Medicines Policy and Standards, World Health Organization, Geneva, Switzerland). *Developing Pharmacy Practice Manual: A Focus on Patient Care*. Published by: World Health Organization, Department of Medicines Policy and Standards; In collaboration with International Pharmaceutical Federation. 2005.

This publication is a working draft for field testing and revision.

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7. CONFERENCE ATTENDANCE

NATIONAL

Papers

- Leteka M, Gous AGS, 2005. The impact of pharmaceutical care on therapeutic outcomes in chronic kidney disease. **South African Association of Hospital and Institutional Pharmacists Conference.** The Wilderness. 10-13 March.
- Summers RS, 2005. Continuing professional development in HIV/AIDS management. **Mpumalanga Annual Pharmaceutical Conference.** Aventura Loskopdam. 2-4 September.
- Gous AGS, Crous E, Leteka M, Combrinck LJ, Pochee E, Holloway KA, Sorensen TL, 2005. Antimicrobial prescribing patterns in the Madibeng District. **Academy of Pharmaceutical Sciences Conference.** Summerstrand Inn Hotel, Port Elizabeth. 29 September – 2 October.
- Gous AGS, Combrinck LJ, Pochee E, Holloway KA, Sorensen TL, 2005. Adherence of antimicrobial prescribing patterns in the Madibeng District to the STGs/EDL. **Academy of Pharmaceutical Sciences Conference.** Summerstrand Inn Hotel, Port Elizabeth. 29 September – 2 October.
- Fourie S, Summers B, Richards P, Haavik C, Summers RS, 2005. Measurement of difficulty and discrimination indices in pharmacy examinations. **Academy of Pharmaceutical Sciences Conference.** Summerstrand Inn Hotel, Port Elizabeth. 29 September – 2 October.
- Summers B, 2005. Message on a bottle: can you, in reality, substantiate your claims? **Society of Cosmetic Chemists Conference.** Volkswagen Conference Centre, Halfway House, Midrand. 5-6 October.
- Gous AGS, Crous E, Leteka M, Combrinck LJ, Pochee E, Holloway KA, Sorensen TL, 2005. Antimicrobial prescribing patterns in the Madibeng district. **Second Annual North West Department of Health Research Conference.** Orion Safari Hotel, Rustenburg, 26 – 27 May.
- Pochee E, Gous AGS, Leteka M, Crous E, Holloway KA, Sørensen TL, 2005. District-based antimicrobial resistance surveillance in the North-West Province. **Second Annual North West Department of Health Research Conference.** Orion Safari Hotel, Rustenburg, 26 – 27 May.

Posters

- Nthlane MC, Gous AGS, 2005. Evaluation of a standardised once-daily dosage regimen of amikacin for neonates. **South African Association of Hospital and Institutional Pharmacists Conference.** The Wilderness. 10-13 March.
- Hanson C, 2005. Drug utilisation review of hydroxyzine in Dr George Mukhari Hospital. **Academy of Pharmaceutical Sciences Conference.** Summerstrand Inn Hotel, Port Elizabeth. 29 September – 2 October.
- Pochee E, Gous AGS, Holloway KA, Sørensen TL, 2005. Antimicrobial susceptibility of *Escherichia coli* strains isolated from women with uncomplicated urinary tract infection and pregnant women with covert bacteriuria. **Academy of Pharmaceutical Sciences Conference.** Summerstrand Inn Hotel, Port Elizabeth. 29 September – 2 October.
- Leteka_M, Crous E, Gous AGS, Combrinck LJ, Pochee E, Holloway KA, Sorensen TL, 2005. Comparison of antimicrobial prescribing patterns in the Madibeng district with the STD/EDL. **Second Annual North West Department of Health Research Conference.** Orion Safari Hotel, Rustenburg, 26 – 27 May.



Attendance

- Fourie S, 2005. **SADC and International Regulatory Harmonisation in a Risk-based cGMP 21st Century Symposium (SIRHS)**, CSIR, Pretoria. 25-27 May.
- Untiedt S, 2005. **SADC and International Regulatory Harmonisation in a Risk-based cGMP 21st Century Symposium (SIRHS)** on Scientific, GMP and Regulatory Issues for the International Pharmaceutical Market with special reference to the SADC region, CSIR, Pretoria. 25-27 May.
- Summers RS, 2005. Attendance of a lecture in Pricing Regulations (Continued Education Series). **Pharmaceutical Society of SA, Pretoria Branch, SAAHIP**. 10 August.

INTERNATIONAL

Papers

- Summers RS, 2005. Quality assurance in pharmaceutical education assessment: designing and implementing Standard Operating Procedures. **Third Pharmacy Education Symposium**. School of Pharmacy, Monash University Campus, Prato, Italy. 11-13 July.
- Summers B, 2005. Conventional written examinations and problem-solving exercises as assessment tools in problem-based learning (PBL). **Third Pharmacy Education Symposium**. School of Pharmacy, Monash University Campus, Prato, Italy. 11-13 July.

Attendance

- Meyer JC, Zweygarth M, 2005. Preparatory workshop on ARV adherence country studies. Bagamoyo, Tanzania. 4-8 February.



8. CONFERENCES AND WORKSHOPS INTERNALLY ARRANGED

Papers

- Fourie S, Summers B, Richards P, Haavik C, Summers RS, 2005. Difficulty and discrimination indices of pharmacy examinations. **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.
- Summers B, Crous E, Fourie S, Summers RS, Zweygarth M, 2005. Conventional written examinations and problem solving exercises as assessment tools in problem-based learning (PBL). **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.
- Summers RS and Van der Walt E, 2005. Views of general practitioners and pharmacists about the role of the pharmacists in HIV/AIDS management. **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.
- Brown L, 2005. Medical bioethics in reproductive issues and religion – a Buddhist, Christian, Hindu, Jewish and Muslim perspective. **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.
- Dangor Y, de Jongh M, Le Roux M, Pochee E, Adam A, Hoosen AA, 2005. *Neisseria gonorrhoeae* isolates from the Pretoria region: antimicrobial profiles of past 20 years. **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.
- Makobe R, Masinga G, Tsime W and Meyer JC, 2005. An investigation of the use of oral contraceptives and condoms by Medunsa undergraduate students. **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.

Posters

- Naicker L, Strümpher L, Samy B, Mokwane L, Dreyer M, Meyer JC and Bezuidenhout S, 2005. BPharm I experiential learning: an indicator study of pharmaceutical services, drug use and patient care at primary health care level. **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.
- Crous E, Gous AGS, Leteka M, Combrinck LG, Pochee E, Holloway KA, Sorensen TL, 2005. Surveillance of antimicrobial prescribing patterns in the Madibeng District. **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.
- Pochee E, Gous AGS, Holloway KA, Sørensen TL, 2005. Antimicrobial susceptibility of *escherichia coli* strains isolated from women with uncomplicated urinary tract infection and pregnant women with covert bacteriuria. **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.
- Masinge M, Molale MG, Shirilele VE and Bezuidenhout S, Hanson C, 2005. The extent of the use of oral antibiotics in the management of influenza-like symptoms in patients at Hercules Primary Health Care Clinic. **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.
- Summers RS, Summers B, Enslin GM, 2005. Quality assurance in pharmaceutical education: Designing and implementing Standard Operating Procedures (SOPs). **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.
- Leteka M, Crous E, Gous AGS, Combrinck LJ, Pochee E, Holloway KA, Sorensen TL, 2005. Comparison of antimicrobial prescribing patterns in the Madibeng District with the STGs/EDL. **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.
- Brown L, Heyneke O, Brown D, van Wyk JPH and Hamman JH, 2005. Transport of selected HIV/AIDS antiretroviral (ARV) drugs: zidovudine, nevirapine and nelfinavir across the *in vitro* cell culture model, caco-2 - a pilot study. **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.



- Mabope LA, Summers B and Fourie S, 2005. Quantity and quality: can higher education provide what the economy and employers need? **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.
- Malangu N, Mapetla K, Ledwaba M and Mochwaro R, 2005. Availability of selected antidotes in primary health care clinics in Pretoria. **Academic Day**. University of Limpopo (Medunsa Campus). 17-18 August.



9. LINKAGES / COLLABORATIONS / EXCHANGE PROGRAMMES / VISITING ACADEMICS

WORLD HEALTH ORGANISATION COLLABORATING CENTRE



The main purpose of the WHO Collaborating Centre is to support and promote Pharmacy Curriculum Development and the Rational Use of Drugs. Contributions to these objectives are made through a variety of initiatives, which include the design and preparation of learning materials and the presentation of short courses.

Pharmacy Curriculum Development

Pharmacy curriculum development moved forward through the ongoing work on the Developing Pharmacy Practice Manual. This publication presents an approach to the introduction and incorporation of Pharmaceutical Care into the undergraduate curriculum. It has international reach, as it will be tested in a number of countries in coming years. This endeavour also holds important implications for the BPharm programmes of the University of Limpopo, as it means that curriculum reform can follow modern principles and practice.

Rational Drug Management

The School of Pharmacy makes an ongoing international contribution to this important aspect of health care through participation in international courses on the topic, one of which was again held in Basle, Switzerland. The revision of the Commonwealth Pharmaceutical Association course on Pharmaceutical Supply Management was an element in this process.

VISITS

- Summers RS, 2005. Department of Medicines Policy and Standards (PSM), WHO Head Quarters, Geneva, Switzerland.
- Summers RS, 2005. Faculty of Pharmacy, University of Basle, Switzerland.



10. STAFF IMPROVEMENT / DEVELOPMENT

Most effort in staff development is put into the supervision of staff projects for postgraduate degrees. Additional support is offered by direct funding of staff to attend relevant courses and conferences. An innovation during the year was the holding of weekly research meetings, which stimulated research activities.

The following staff received degrees in 2005:

Ms T Ndlovu: BTech (Analytical Chemistry), Tshwane University of Technology (Ga-Rankuwa Campus), April 7, 2005

Mr WK Modiba: MTech (Pharmaceutical Sciences), Tshwane University of Technology, September 7, 2005.

Ms M Leteka: [MSc (Med) Pharmacy], University of Limpopo (Medunsa Campus), May, 2005.

The following members of staff are studying for the courses listed after their names, with financial support from the Photobiology Laboratory.

Ms T Ndlovu: Diploma in Cosmetic Science (SA Society of Cosmetic Chemists)

Ms M Schoeman: Diploma in Cosmetic Science (SA Society of Cosmetic Chemists)

Ms LA Raaff: BBA (Bachelor for Business Administration), UNISA.

Staff currently studying for postgraduate degrees:

MSc (Med) (Pharmacy)

Mr T Baaisi

Ms M Graham

Ms C Hanson

Ms E Helberg

Ms LA Mabope

Ms K Mapetla

PhD

Ms S Bezuidenhout

Ms JC Meyer

Mrs L Brown



11. COMMUNITY OUTREACH

ON CAMPUS

Staff continue to contribute to the work of a number of university committees, as well as supporting students by acting as guides and mentors. The committees include the Higher Degrees Committee of the Faculty of Medicine; Senate Research, Ethics and Publications Committee; Faculty Board of Medicine; University Quality Assurance Committee.

Clearly, the time commitment for this work impacts seriously on other activities, including research.

OFF CAMPUS

The outreach programmes of the School of Pharmacy, mainly presented through the Pharmacy Training and Development Project, reach most corners of the country, where they are accessed by a variety of health care providers and contribute to improved patient care. During the year over 4 000 candidates were enrolled for various short courses and certificate programmes, including “Dispensing for Health Practitioners other than Pharmacists”, “The pharmacist in HIV/AIDS management” and Pharmacists’ Assistants National Certificate courses.



GENERAL COMMENTS

The SA Pharmacy Council printed an updated list of approved providers and courses for pharmacy education and training in their official journal [**Pharmaciae; 13(4): 11**]. We remain the only site / institution which offers a complete training range from Basic Pharmacist's Assistants to PhD.

HIGHLIGHTS OF 2005

This report describes what has been achieved by a relatively small group of educators, researchers, practitioners and support staff who are dedicated to making a difference in pharmaceutical education and practice, notwithstanding the uncertainty and extra work which the merger brought into the situation. Whilst all staff contributed overall during 2005, there are some aspects which deserve special mention.

1. Some 45 staff are now employed, full-time or part-time, at the School of Pharmacy on the Medunsa Campus and its associated units. Altogether almost 5 000 learners were reached through the formal teaching programmes and outreach training during 2005. Outreach training around South Africa is supported by over 65 assessors, who are employed on an "as and when needed" basis.
2. The fact that the BPharm now has the second highest enrolment for any degree programme on the Medunsa Campus.
3. The continued high pass rates by all student years of the BPharm programme and the identification of our graduates as preferred interns for employment across all sectors.
4. The final year research projects contribute to our overall research efforts and assist in the identification of potential postgraduate students.
5. The number of staff undertaking postgraduate studies and who were awarded their degrees.
6. The success of the first cohort of Postgraduate Diploma in Hospital Pharmacy Management students.
7. The international "pull" of the Photobiology Laboratory.

Our thanks and congratulations go to all those who made these achievements possible.

PROFESSOR RS SUMMERS
HEAD: SCHOOL OF PHARMACY