

Volume 54 (2) JUL - DEC 2010

ISSN 0010-1095

## Admission Ceremony May 2010



# TRANSACTIONS



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#### **Production**

Editor: Dr Douw GS Greeff Manager: Me Caryl de Meillon Medpharm Publications (Pty) Ltd

Publisher: Medpharm Publications (Pty) Ltd PO Box 14804 Lyttelton Manor, Centurion, 0140 Tel: (012) 664-7460 Fax: (012) 664-6276 E-mail: enquiries@medpharm.co.za

Designer: Jenny Hattingh (X-Axiscc)

Printed by: Intrepid Printers (Pty) Ltd

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College of Family Physicians
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College of Maxillo-Facial and Oral Surgeons
College of Medical Geneticists
College of Neurologists
College of Neurosurgeons
College of Nuclear Physicians
College of Obstetricians and Gynaecologists
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In support of contemporary Zulu telephone wire baskets Artist: Dudu Cele, Port Shepstone, Kwazulu-Natal Photographer: William Raats

Dudu's work is well described as being full of riotous colors and oozing individual expression. She had a passion for celebrating life and occasion in her work, and her baskets showcase images of soccer championships and other such events. Her artwork is available from the BAT Shop, Durban, Tei (031) 332 9951, E-mail: batcraft@mweb.co.za

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## **Fees and Charges**

(Applicable 1 June 2010 to 31 May 2011)

#### **PAYABLE BY MEMBERS OF THE CMSA:**

#### Annual Subscriptions

#### Local:

Associate Founders, Associates, Fellows, Members and Certificants	R 638.00
Diplomates (local)	R 375.00
Overseas (all categories of members)	R 638.00
Retired members	R 72.00
Assessment Fee : Fellowship by Peer Review	R 950.00
Registration Fee : Associates	R 620.00
Fellows, Members, Certificants and Diplomates	R 432.00
(The registration fee for F, M, C and D forms part of the examination fe	ee)

#### Purchase or Hire of Gowns and Hoods

(The charge for the hire of gowns by new Fellows, Members,

Certificants and Diplomates is included in their registration fees)

Occasional hire:	Gown and hood	R 150.00
	Gown only	R 100.00
	Hood only	R 60.00
Purchase of hood	S	R 250.00
Cost of Past Exam	nination Papers (per set of 6 papers)	R 50.00

#### **PAYABLE BY THE CMSA:**

Subsistence Allowance (paid in addition to accommodation) per day or part thereof, actually spent on CMSA business	
Senators, examiners and staff (local)	R 276/day
CMSA delegates <i>(overseas)</i>	\$ 215/day
Honorarium (local subsistence)	
Local examiners : R276 per day less PAYE of R69	R 207.00
Remuneration for Setting FCS(SA) Part I Papers	R 330.00
Remuneration for Invigilating (not applicable to salaried personnel of the CMSA)	
Full day	R 385.00
Half day	R 210.00
Remuneration for Secretarial Assistance	

Remuneration for Secretarial Assistance (not applicable to CMSA staff)

The following sliding scale applies:

<b>J</b>	3		
Hours worked	Remuneration	Hours worked	Remuneration
Up to 8 hours	R 40 per hour	26 – 30 hours	R 945
08 – 10 hours	R 385	31 – 35 hours	R1 060
11 – 15 hours	R 555	36 – 40 hours	R1 175
16 – 20 hours	R 725	41 – 45 hours	R1 265
21 – 25 hours	R 835	46 – 50 hours	R1 320

There is a ceiling of R1 320 as persons providing secretarial assistance to the CMSA at examination time already receive a full-time salary. Claims in respect of secretarial assistance rendered have to be supported by a special recommendation for payment signed by the examination Convener.

Remuneration to Laboratory Technologists/Technicians and Enrolled Nurses (off duty)	R 98 p/h
Nurses / Interpreters	R 75 p/h
Claims for reimbursement of laboratory technologists/technicians who assist during CMSA examinations also have to be supported by a special recommendation for payment signed by the examination Convener.	1
Travel Reimbursement (prescribed by the Minister of Finance)	R 2,92/km

#### **CMSA MEMBERSHIP PRIVILEGES**

#### Life Membership

Members who have remained in good standing with the CMSA for **thirty years since registration and who have reached the age of sixty-five years** qualify for life membership, but must apply to the CMSA office in Rondebosch. They can also become life members by **paying a sum equal to twenty annual subscriptions** at the rate applicable at the date of such payment, **less an amount equal to five annual subscriptions** if they have already paid for five years or longer.

#### **Retirement Options**

The names of members who have **retired from active practice** will, upon receipt of notification by the CMSA office in Rondebosch, be transferred to the list of "retired members".

The CMSA offers two options in this category:

#### **First Option**

The payment of a small subscription which will entitle the member to all privileges, including voting rights at Senate or constituent College elections. If they continue to pay this small subscription they will, most importantly, qualify for life membership when this is due.

#### Second Option

No further financial obligations to the CMSA, no voting rights and unfortunately no life membership in years to come.

Members in either of the "retired membership" categories continue to have electronic access to the Journal Transactions and other important Collegiate matter.

Waiving of Annual Subscriptions

Payment of annual subscriptions are waived in respect of those who have attained the age of **seventy years** and members in this category retain their voting rights.

Those who have reached the age of seventy years must advise the CMSA Office in Rondebosch accordingly as subscriptions are not waived automatically.



#### Dear colleagues,

As we usher in the new CMSA executive for the triennium (2010– 2013), I take this opportunity to highlight the strategic sevenpoint plan of Prof Anil Madaree (the new President) and his team for the CMSA, which you will find in the Presidential newsletter. His newsletter summarises the plan as follows:

- Strategic positioning of the CMSA as the preferred provider of the anticipated specialist national qualifying exam (NQE). The Health Professions Council of South Africa has appointed the CMSA to fulfill that role. The HPCSA gazette on the NQE will be promulgated on 1 January 2011.
- Intensification of dialogue with various bodies involved with postgraduate medical and dental training and healthcare in South Africa such as the Department of Health, Department of Higher Education and Training, HPCSA to mention a few.
- 3. Continuation of the CMSA project on "Strengthening academic medicine and specialist training" for South Africa.
- Increased liaison with sister colleges both internationally and continentally with the African initiative a priority area for improvement.
- 5. Strengthening audit of our examination processes, which include syllabi content, blue printing, benchmarking etc.
- 6. Co-ordination of research initiatives especially within the CMSA. This will be led by Prof Bongani Mayosi.
- 7. Construction of the new CMSA building in Durban hopefully in this triennium.

The above plan is an important thrust in positioning the CMSA as a strategic organisation in maintaining standards of the examinations and certification of medical and dental specialists in South Africa.

The senate annual report covers the period of 1 June 2009 to 31 May 2010 in which newly elected officers for the CMSA are listed. Apart from Prof Anil Madaree who is the President, two vice presidents were elected namely Profs Gboyega Ogunbanjo and Jeanine Vellema. The new chairman for the Examination and Credentials Committee is Prof Arthur Rantloane and the new honorary registrar is Prof Mike Sathekge. The 28<sup>th</sup> constituent college of the CMSA, that is, the College of Paediatric Surgeons, was officially established in May 2010. An update on the CMSA's project is also reflected in the report. The College website is about to be updated to make it more user-friendly and it is hoped that the new website will be operational by November 2010. The senate adopted the disciplinary procedure to deal with candidates who are caught in acts of dishonesty during CMSA examinations and ruled that the offence committed and punishment/sanction will in future be published on the CMSA website and in the Transactions to discourage this practice.

Two review articles reprinted with permission from JEMDSA have been included in this issue of the Transactions for a particular reason. In a recent national health survey measuring the health of the South African nation commissioned by GlaxoSmithKline (GSK) and conducted by Added Value's South African team, it was found that 74% of South Africans think their fellow citizens are overweight, while only 34% of people considered themselves as overweight or obese.<sup>1</sup> The national survey further reports that 61%, or nearly two in every three South Africans are overweight, obese or morbidly obese.

The first article on "Factors predisposing to obesity" by Ali AT and Crowther NJ presents a current literature review of this condition. Socioeconomic status and levels of education are associated factors for obesity. Studies have found that Body Mass Index (BMI) is significantly higher among low socioeconomic than middle and high socioeconomic groups, while the level of education is inversely associated with obesity especially in women. Other associated factors are presented in this article and the authors conclude that the only solution to the problem of the obesity epidemic is a rapid change in environmental conditions to better match our present genetic make-up.

The second article is an excellent review of hypertriglyceridaemia by Blom DJ. Hypertriglyceridaemia (HTG) is often neglected when clinicians focus on dyslipidaemia. Severe HTG can trigger fatal acute pancreatitis and partially metabolised triglyceride-rich lipoproteins are among the most atherogenic lipoproteins. The article covers the aetiology, complications and management of this condition in a clear and systematic manner. I highly recommend both articles to you as we strive to control the obesity epidemic in South Africa.

As we approach the end of 2010 and the last issue of the Transactions for 2010, I take this opportunity as usual to "wish you a peaceful and restful Christmas/festive period and a prosperous 2011". In 2011, watch the space for more relevant, interesting "original and review" articles in the Transactions. Your letters to the editor are welcomed.

#### Professor Gboyega A Ogunbanjo

Editor: Transactions Email: gao@intekom.co.za

#### **Reference:**

GlaxoSmithKline, Health24, September 2010 http://www.health24.com/news/Weight\_management\_Obesity/1-955,58238.asp [accessed on 26 September 2010]

## **Instructions to Authors**

#### 1. Manuscripts

- 1.1 All copy should be typewritten using double spacing with wide margins.
- 1.2 In addition to the hard copy, material should also, if possible, be sent on disk (in text only format) to facilitate and expedite the setting of the manuscript.
- 1.3 Abbreviations should be spelt out when first used in the text. Scientific measurements should be expressed in SI units throughout, with two exceptions; blood pressure should be given in mmHg and haemoglobin as g/dl.
- 1.4 All numerals should be written as such (i.e. not spelt out) except at the beginning of a sentence.
- 1.5 Tables, references and legends for illustrations should be typed on separate sheets and should be clearly identified. Tables should carry Roman numerals, thus: I, II, III, etc. and illustrations should have Arabic numerals, thus 1,2,3, etc.
- 1.6 The author's contact details should be given on the title page, i.e. telephone, cellphone, fax numbers and e-mail address.

#### 2. Figures

2.1 Figures consist of all material which cannot be set in type, such as photographs, line drawings, etc.

(Tables are not included in this classification and should not be submitted as photographs).

Photographs should be glossy prints, not mounted, untrimmed and unmarked. Where possible, all illustrations should be of the same size, using the same scale.

- 2.2 Figure numbers should be clearly marked with a sticker on the back, and the top of the illustration should be indicated.
- 2.3 Where identification of a patient is possible from a photograph the author must submit consent to publication signed by the patient, or the parent or guardian in the case of a minor.

#### 3. References

- 3.1 References should be inserted in the text as superior numbers and should be listed at the end of the article in numerical order.
- 3.2 References should be set out in the Vancouver style and the abbreviations of journals should conform to those used in Index Medicus. Names and initials of all authors should be given unless there are more than six, in which case the first three names should be given followed by
  - 'et al'. First and last page num¬bers should be given.
- 3.3 'Unpublished observations' and 'personal communica¬tions' may be cited in the text, but not as references.

#### **Article references:**

• Price NC. Importance of asking about glaucoma. BMJ 1983; 286: 349-350.

#### **Book references:**

- Jeffcoate N. Principles of Gynaecology. 4th ed. London: Butterworths, 1975: 96.
- Weinstein L, Swartz MN. Pathogenic properties of inva-ding micro-organisms. In: Sodeman WA jun, Sodeman WA, eds. Pathologic Physiology: Mechanisms of Disease. Philadelphia: WB Saunders, 1974: 457-472.

## **Lost Members**

The CMSA office in Rondebosch is keen to establish the whereabouts of the following "lost members", some of whom may be deceased. Any information that could be of assistance should please be e-mailed to Mrs Naomi Adams at members@colmedsa.co.za

Aaron, Cyril Leon (College of Family Physicians)
Bennett, Margaret Betty (College of Radiologists)
Block, Sidney (College of Family Physicians)
Breen, James Langhorne (College of Obstetricians and Gynaecologists)
Bresler, Pieter Benjamin (College of Public Health Medicine)
Dembetembe, Vimbai (College of Paediatricians)
Gibson, John Hartley (College of Obstetricians and Gynaecologists)
Kok, Hendrik Willem Lindley (College of Neurologists)
Ndimande, Benjamin Gregory Paschalis (College of Anaesthetists)
Phillips, Grant David (College of Surgeons)
Phillips, Kenneth David (College of Family Physicians)

**Raubenheimer**, Arthur Arnold (College of Obstetricians and Gynaecologists)

Richmond, George (College of Physicians)

Thoka, Matome Jacob (College of Psychiatrists)

Van Coller, Beulah Mariè (College of Paediatricians)

Van Greunen, Johannes Petrus (College of Obstetricians and Gynaecologists)

Van Schalkwyk, Leoni (College of Forensic Pathologists)

Venter, Shirley Ann (College of Anaesthetists)

Wilson, William Edmond (College of Anaesthetists)

Information as at 17 September 2010

## **Presidential Newsletter**



**Prof Anil Madaree** 

It is with great pride that, as President, I write my first foreword for the Transactions. I wish to thank my fellow Senators for placing their trust in me by electing me to this position.

Having served on Senate under five Presidents (Peter Gordon Smith, Dave Morrell, Ralph Kirsch, Lizo Mazwai and Zephne van der Spuy), I have watched the College grow, transform and change for the better.

At the outset I would like to pay

a tribute to, and thank Professor Zephne van der Spuy for her leadership of The Colleges of Medicine of South Africa over the last three years. She had the conviction and courage to explore new frontiers with the College Project. This has proven to be a very successful and important task to help improve postgraduate medical and dental training and the standard of healthcare in the country. She led the College with pride, dignity and decorum.

In this article, I would like to lay out my goals for the next triennium. Hopefully when I write my last foreword in 2013, I would have achieved most, if not all, of my goals. Although the core business of the College is examinations, it will be in danger of becoming irrelevant if we do not explore and expand into other frontiers.

My first objective was that of the College being chosen by the Health Professions Council of South Africa as the preferred provider of the specialist national qualifying examination. I led a delegation and presented the College's offer to the Postgraduate Education and Training Subcommittee (Medical) of the HPCSA. In August we were informed that the CMSA was indeed chosen as the preferred provider. All new registrars, commencing in January 2011, will have to abide by this regulation.

The second objective is to increase and intensify dialogue and colloquy with bodies that are involved directly or indirectly with post graduate medical and dental training and healthcare. This would include bodies such as the Department of Health, Department of Higher Education, Treasury, HPCSA, Health Science Review Committee, Committee of Deans and medical and dental schools. We have already made progress in this regard and met with the Minister of Health and the Health Science Review Committee.

The College Project is another objective. This is gaining momentum rapidly and expanding in content. It has brought together all the role players involved in medical and dental training and healthcare. As an independent and autonomous body, we have the ear of the important organisations.

The fourth objective is to increase liaisons with sister colleges internationally. We do presently have links with colleges in the United Kingdom, United States, Canada, Australasia, Hong Kong, Singapore, Malaysia, Pakistan and in Africa. This dialogue needs to be strengthened with the view to improving aspects such as the examination process, syllabi, training, audit and healthcare. I would especially like to see more cohesion with the African Colleges. This has already been initiated under the Presidency of Lizo Mazwai but there is a need to take it to the next level. This African Initiative, as we call it in the College, has obstacles but we must endeavour to overcome these.

The fifth objective revolves around audit. If we want to ensure that governance principles are adhered to in the College activities, measures must be instituted to implement this. These would include items such as syllabi content, the examination process and benchmarking.

Research is the process whereby so called medical dictums and theories are challenged. Ultimately this will lead to implementation of new measures with the resultant improvement in healthcare. As the premier postgraduate examination body in South Africa, the College must become more involved in research. Many of the College senators and members are indeed eminent researchers at their own institutions. The College must play a role in partaking in and perhaps co-ordination of research initiatives. The Academy of Science of South Africa has published a document explaining the need to strengthen clinical research. This team was led by Professor Bongani Mayosi and he has kindly agreed to lead this aspect for the College.

The seventh and last objective revolves around the Durban building. There is no doubt as to the need for this building. Unfortunately the economic climate has not been the best over the last few years. However, thanks to the Chairman of the Board of Trustees, Dr Warren Clewlow, the fund raising is gaining momentum and we may soon turn the corner. I would also like to thank Professor Y K Seedat for his immense generosity and his tremendous contribution toward the Durban building. He has always supported the College in an unstinting manner. I hope that in my Presidency I will at least see the commencement of building activities on the Durban property.

I would like to thank the Past President, Professor Zephne van der Spuy, my Vice Presidents Professors Gboyega Ogunbanjo and Jeanine Vellema, the Executive, the Senate, the various Councils, Mrs Bothma and the Cape Town Office, Mrs Vorster and the Johannesburg office, Mrs Walker and the Durban Office for their support and for making my job as President such a pleasant and easy one.

Anil Madaree President



## Admission Ceremony 13 May 2010

The admission ceremony was held in the Callie Human Centre, a magnificent sports centre on the grounds of the University of the Free State in Bloemfontein.

At the opening of the ceremony the President, Professor Anil Madaree asked the audience to observe a moment's silence for prayer and meditation.

The Honourable Mr Louis Harms, Judge in the Supreme Court of Appeal in South Africa, delivered the oration. His speech was a wonderful tribute to the medical profession and to the CMSA in particular.

The incoming President, Professor Anil Madaree presented the outgoing President, Professor Zephne van der Spuy with the Past President's Badge.

Six Fellowships by Peer Review were conferred by the following colleges: College of Family Physicians (Hanneke Britz, Engela Adriana Margrietha Prinsloo, Wilhelm Johannes Steinberg) and the College of Paediatricians (Cornelius Johannes Schoeman, David Kenneth Stones, Jerzy Adam Targonski).

Nine medallists were congratulated by the President on their outstanding performance in the CMSA examinations. Medals were awarded in the following fellowship disciplines: Cardiothoracic Surgery, Neurology, Obstetrics and Gynaecology, Ophthalmology, Paediatrics, Surgery and Public Health Medicine. Medals were also awarded in the following diploma disciplines: Allergology and Emergency Medicine.

The President announced that he would proceed with the admission to the CMSA of the new certificants, fellows and diplomates.

## The new Certificants were announced and congratulated.

The Honorary Registrar - Examinations and Credentials, Professor Arthur Rantloane announced the candidates, in order, to be congratulated by the President. The Honorary Registrar – Education, Professor Jamila Aboobaker individually hooded the new Fellows. The Honorary Registrar – Finance and General Purposes, Professor Dhiren Govender handed each graduate a scroll containing the Credo of the CMSA.

## The new Diplomates were announced and congratulated.

All in all the President admitted 37 Certificants, 218 Fellows and 239 Diplomates.

The University of the Free State's choir performed before the ceremony started and then again at the end when the National Anthem was sung, where after the President led the recent graduates out of the hall. Refreshments were served to the graduates and their families.

## Admission ceremony 13 May 2010

#### **Guest Speaker**



THE HONOURABLE MR LOUIS HARMS JUDGE IN THE SUPREME COURT OF APPEAL SOUTH AFRICA

**Past President's Badge** 



PROF Z M VAN DER SPUY

#### **Medallists**



JOHANN BRINK FC Cardio(SA) Final



LIBERO FATTI MEDAL MEDAL SIGO NIELSEN MEORIAL PRIZE MOHAMMAD ELTZAZ SADIQ FC Neurol(SA) Part I



**GP CHARLEWOOD MEDAL** VULIKHAYA MPUMLWANA FCOG(SA) Part I



JUSTIN VAN SELM MEDAL ANTONIO DOS RAMOS FC Ophth(SA) Part II



**ROBERT MCDONALD MEDAL BIANCE ROWE** FC Neurol(SA) Part II



**DOUGLAS MEDAL** SUNU JOHN TENGUVILLA PHILIP FCS(SA) Final



HENRY GLUCKMAN MEDAL ELVIRA SINGH FCPHM(SA)



**EUGENE WEINBERG MEDAL** ANNEMARIE GOUWS FC Paed(SA) Part II



**NOVARTIS MEDAL** CAMPBELL MACFARLANE MEDAL CHERESE LAUBSCHER Dip PEC(SA)

## Address by the honourable Mr Louis Harms at the CMSA Admission Ceremony 13 May 2010

I thank you for the honour of being invited to attend this admission ceremony – and for speaking to you, members of the medical profession, without involving my medical aid scheme. You are here to receive recognition for your professional attainments – whether by way of fellowships, certificates, diplomas or medals. What makes the recognition special is because it is peer recognition. The word 'peer' refers to one's equals and to nobility. Both meanings apply. Your peers evaluated you; reviewed your abilities; and accepted you as one of the nobles of your profession. I congratulate you.

The recognition is reminiscent of taking silk in the advocates' profession; Queen's Counsel or, in our Republic, Senior Consultus. It used to be and supposedly still is an award in recognition of your abilities as advocate. You were assessed by your colleagues and by the judiciary. The head of state makes the award without ceremony or speeches. Your reward is the right to charge higher fees, assuming that you are briefed.

Much is due to your families and friends who have had to endure you, and suffer with you, and make sacrifices, during this difficult time. I often wonder why anyone wishes to become a medical practitioner. Your studies are difficult; your hours are long; the work may be stomach churning; and your remuneration is seldom commensurate with your effort and sacrifice. I know, on the other hand, why people become lawyers – it is because they cannot get admitted to a medical school.

Some months ago I was asked to deliver a two minute keynote address at a graduation ceremony. Today I have ten, and I am supposed to say something profound; something you should remember; but something you probably will forget.

A German doctor who turned comedian – he found it more profitable – tells the story about a competition at the World Cup in Germany. A pot with €50 000 was placed in the middle of the pitch. There were four competitors at the four corners of the field: a good orthopaedic surgeon; a bad orthopaedic surgeon; a surgeon and a radiologist. The first to reach the pot could keep the money. Who won? The bad orthopaedic surgeon won. Why? There are no good orthopaedic surgeons; the surgeon did not understand the rules, and the radiologist was not interested in a measly €50 000.

There is a point to the story, which may not amuse you. You, in your profession, as we lawyers, are often seen as incompetent and money grubbers. If someone is in trouble, he runs to a lawyer. If the lawyer gets him out of the trouble it is not because the lawyer was good or did a good job. No, it was because the client always had such a good case and because he was such a good witness. Actually, he could have won the case without a lawyer. And if the lawyer loses the case it is not because the client had a bad case or was an unaccomplished liar, it was because the lawyer was bad.

The same applies to your profession. If the patient recovers it is because he was strong and not seriously ill; or because Aunt Mabel's boereraat laced with alcohol did the job. If the patient dies it is not because he was terminally ill; it was because the diagnosis was wrong or treatment bad.

As you know, the word 'profession' originally applied to three only: the clergy, the medical and the legal. Maybe four if we include the oldest. The other two do not suffer as much as we do. If St Peter places you in Limbo, it is too late to complain about the priest or moruti or dominee. And who dares to complain openly about the services of the lady of the night?

Our professions are in a cauldron. I note your concern about medical academic training. We lawyers have the same concerns. Quantity has become more important than quality. We have quotas. We often lack suitably qualified or dedicated teachers. Let us not speak about infra-structure. In law we had during the period 1940-1970 the period of the Great Professors: a few professors at different universities who were able to mould legal thinking for years to come. We are now in the era of the Many Law Professors, a few of whom have too much influence.

Both professions are under threat of Big Brother, the Government, who wishes to control all and everything. You, as the CMSA, have been able to survive as an independent organisation. The judiciary is struggling to survive as an independent body. The threat is everpresent, looming over us. And not only here. The Chief Justice of the USA recently denounced Pres Obama for attacking the Supreme Court during the State of Union address, using it as a political pep rally. Both professions tend to suffer from the 'ecstasy of sanctimony' (Philip Roth). But we have serious ethical issues. On the day I wrote this there was a front page article in the Sunday Independent entitled 'Dodgy doctors run amok in hospitals'. I shall refrain from mentioning the instances of – let us say 'questionable' – conduct of certain judicial officers.

I am told that the four pillars of medical ethics are: non-maleficence, beneficence, distributive justice and autonomy (Beauchamp and Childress) although I am unsure whether beneficence should precede non-maleficence. I would imagine that if my profession had thought about the matter it would have come up with more or less the same pillars although all four are encompassed by the term justice, something the judiciary has to dispense. The law is supposed to be the art of what is good and just, but it should also be the dictate of reason. Justice is epitomized by the figure of lustitia: she is blind, which means that justice does not depend on the identity of the parties. It also implies that the judge should do nothing of his own arbitrary will, nor on the dictate of his personal wishes, but should decide according to law and justice. On the other hand, it may also symbolize the possibility that the outcome of litigation depends on luck or fate. There is the scale to weigh the conflicting interests to ensure that everyone should receive that which the person is entitled to. And there is the double-edged sword, symbolizing the power of reason and justice, which may be wielded for or against either party, and which signifies that the state will enforce the judgment. I have not been able to determine the symbolism behind the fact that lustitia is not male although it has been suggested that her maidenly form guarantees her impartiality.

We all fail from time to time. There is, for instance, the belief, some centuries old and often very true, that although the duty of judges is to dispense justice, their profession is to delay it. And although they know their duty they practise their profession.

One of your ethical issues is your role in reversing Darwin's theory of survival of the fittest – are we not at the stage where the weakest survive? Performing procedures that hit the headlines instead of spreading resources sensibly? The law and the judiciary is struggling with a similar issue but in our case we have a duty to ensure that the weak do survive; but this does not mean that the weak must survive if the weak has a weak case. 'Hard cases [in medicine] make bad ethics in the same way they make bad law' (Robert Williamson).

By the very nature of our professions our work is not only in the public eye; we are watched by our peers. There is a danger inherent in the judicial office. Any judge is always prone, in a moment of boredom or impatience, to say something downright silly. He is then denounced in the press, his resignation is called for, he is stigmatized as malicious or at least mad and his bench becomes a bed of nails (Rumpole). You, too, have to live with colleagues, assistants and nurses who watch you. And then you have patients who, with a

remote in hand, do doctor hopping.

We are also in the age of quick fixes: you have a pill for everything: for erectile dysfunction, for infertility, and conversely, a contraceptive or a pill to end pregnancy. There are pills to make one sleep and pills to keep you awake. There are anti-depressants and pills to suppress emotions. And there are broad spectrum antibiotics with a shotgun approach to medicine.

Lawyers also use quick fixes: we, for instance, have a Constitution that is supposed to fix everything, social, financial, administrative or legal. A Constitution that tends to mean anything we wish it to mean; a Constitution that creates rights but, we wish, imposes no obligations. We have laws, such as the law on minimum sentencing, that are supposed to cure social ills but in fact exacerbate them or create new ones.

We should be aware of the social and physical consequences of using drugs or laws to fix all of life's ills. And of the propensity for addiction that develops when an over-the-counter fix or a popular law is seen as the palliative.

You have to compete with the alternative health unprofessional. With counterfeit medicines. You have to bear ignorance. One version of the sangoma we have to suffer is the sea lawyer (when at sea a sailor is a law expert) often the prisoner who knows it all and advises his colleagues on how to conduct their defence; or the radio or TV commentator.

I set out to mention a few challenges that your profession and mine face. There is a challenge however that we do not share and that is the brain drain. It affects your profession profoundly. It does not affect mine substantially but it is not, as you think, because we do not have brains. There may be other reasons.

Remember: Grouching is a good excuse. Fretting makes us important. Tragedy is better than comedy for self-dramatization as every teenager knows. Being gloomy is easier than being cheerful. And worrying is less work than doing something to fix the worry (PJ O'Rourke). However, professions are supposed to serve. In Roman times a lawyer, for instance, could not charge fees. We are here to serve. We are in this country to serve our country. It is not only a duty; it is a calling and a privilege.

And in conclusion: for those of you who did not listen, I would suggest Ritalin; and for those who became depressed, some or other serotonin lifter should help. I remain an optimist mainly because I am on placebos.

L T C Harms 13 May 2010

## List of Successful Candidates

March 2010

#### Fellowships

Fellowship of the College of Anaesthetists of South Africa: FCA(SA)

ALLI Ahmad	WITS
ALLIE Sayed Imtiaz	UKZN
CILLIERS Celeste	UCT
EKWUEME Henry Uche	UKZN
FITCHAT Tracey Leanne	WITS
ISHWARLALL Sujay	UKZN
JACHES Gavin Joseph	WITS
JACOBS Hendrika	WSU
JANSEN Tracy-Lee	WITS
JITHOO Suven	UKZN
KEERATH Kiran	UKZN
LE ROUX Gabriel Johannes	US
MARE Frans	WSU
MARWICK Peter Clive	US
MENSAH Langa Adelaide	WITS
MEYER Ockert Johannes	UFS
MPHOMANE Morakane	WITS
NETHATHE Gladness Dakalo	WITS
OBERHOLZER Sean	US
ROBERTSON William Luke	WITS
ROODT Francois	UCT
RORKE Nicolette Francis	UKZN
RUSSELL Samantha Lee	WITS
SAMUEL Raphael Anthony	UKZN
SCHULEIN Simone	UCT
TORBORG Alexandra Meryl	UKZN
VISU Daniela	UCT
WELS David Peter	WITS
WISE Robert Deon	UKZN

#### Fellowship of the College of Cardiothoracic Surgeons of South Africa: FC Cardio(SA)

DAVIDSON Murray Brian	WITS
MOOPANAR Manogran	UKZN
NAID00 Surendra	UKZN
SCHULENBURG Richard Peter	UFS
STROEBEL Johannes Andries Thomas	UFS

## Fellowship of the College of Dermatologists of South Africa: FC Derm(SA)

BROWNE IIsphi	UCT
CLUR Bernhard Philip	
ESMAIL Fatema	UCT
HOFFMAN Tessa-Mari	WITS
LALLOO Yashmita	UKZN
MKHIZE Zamambo Noguthando Carol	UKZN

MOODLEY Mahendran Perianathan MOTI-JOOSUB Nooren-Nisa Razack RAMKISSON Ishaan SKENJANA Andiswa	ukzn Wits Up Ukzn
Fellowship of the College of Emergen Medicine of South Africa: FCEM(SA)	су
CARIM Sameer DHARSEY Mohamed Riaz POTGIETER Deidré Ann	WITS WITS WITS
Fellowship of the College of Forensic Pathologists of South Africa: FC For P MOODLEY Clive James	<mark>ath(SA)</mark> UKZN
WALRAVEN Sonata	WSU
Fellowship of the College of Maxillofa Oral Surgeons of South Africa: FCMFC	
DE WAAL André Stephanus GOPAL Ismael	UWC UWC
Fellowship of the College of Neurolog of South Africa: FC Neurol(SA)	jists
MANYANE Dikeledi Millicent MAXWELL Fiona SITHARAM Raksha	ul Wits Wits
Fellowship of the College of Neurosu of South Africa: FC Neurosurg(SA)	rgeons
GOWEN Michael John Andrew HARRICHANDPARSAD Rohen THOMPSON Crispin Maeder	UCT UKZN UCT
Fellowship of the College of Obstetric Gynaecologists of South Africa: FCOG	
BILANKULU Sharon Basani	WITS
BOSHOFF Idalette	UP
BUTT Jennifer Leigh	UCT
FOOLCHAND Serantha GOVENDER Shavershree	ukzn ukzn
GOVENDER Vineshree	UKZN
GREEN Beulah Emelyne	UP
ISMAIL Abdul Karim	UKZN
KAMWARO Gerishon Ngotho Kiige	UKZN
KLEYN Michael Inus	UCT
LUBEGA Abdu Muwonge MANYAME Sarah	UP ZIM
MASELOANE Jeremiah Akanyang	UKZN
MATUTU Davidzoyashe Patronellah	
MNISI Edwin France	UP
MOLOKOANE Felicia Moitlamo	UP
THOMAS Viju Varghese	UCT

WALMSLEY Linda Joanne	UCT
Fellowship of the College of Ophthalmologists of South Africa: FC Ophth(SA)	
CULLEN Claire	UL
DE LA BAT Gabriën de Vos	UFS
DEWAR Cathrine Valerie	UKZN
KOETSIE Karen Monica	WITS
OJAGEER Rashika	UKZN
SCHEEPERS Marius Anton	UCT
VALLABH Bhavesh Bardavesingh	WITS
WEITZ Charl George	UP
Fellowship of the College of Orthopaedic Surgeons of South Africa: FC Orth(SA)	
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UKZN

**TSHEPUWANE** Tshimane Charles

BAM Tsepo Qunda	UKZN
<b>BUGWANDIN Satish</b>	UKZN
DU PLESSIS Jean-Pierre	UCT
GOLLER Ruan	UP
KALAGOBE Junior	UKZN
LOUW Frederik Marthinus	UCT
MARÈ Pieter Daniel	UP
MAZIBUKO Allen Dumsan	WITS
PRYCE LEWIS Jordan Ronald	UKZN
RAMASUVHA Brian Emmanuel	UL
<b>ROCHER Antoine Gideon Louw</b>	UKZN
SEFEANE Tatolo Ishmael	WITS
SITHEBE Hlabane	UL

#### Fellowship of the College of

Otorhinolaryngologists of South Africa: FCORL(SA)

HOEK Werner	UFS
LIEBENBERG Simon John Roy	UCT

## Fellowship of the College of Paediatricians of South Africa: FC Paed(SA)

ABRAHAM Vinita	UKZN
APPEL Ilse Nadine	UCT
BISETTY Suveena	UKZN
FRIGATI Lisa Jane	UCT
GOLDSTONE Erica Delene	UKZN
GOVENDER Prashini	UKZN
KHAN Nadia	UKZN
KITOKO Tolela Marc	WITS
LALA Nilesh	WITS
LLOYD Lizel Georgi	UP
MAHARAJ Subashni	UCT
MOSHESH Nthabeleng Marcia	WITS

NABY Fathima NAIDOO Kuban Dhasaradha NAIDOO Romola Suriakumarie	ukzn Wits Ukzn
VON FINTEL Rosemarie Astrid Elizabeth ZOZI Nombini	WITS WSU
Fellowship of the College of Pathologis South Africa – Anatomical: FC Path(SA)	
MALAKA Shumani Emmanuel NAICKER Shaun	UCT UKZN
SOOKHAYI Raveendra VAN DEN BERG Eunice Joy	UCT WITS
Fellowship of the College of Pathologis South Africa – Chemical: FC Path(SA) C	
LLOYD Mariana Magdalena	UFS
Fellowship of the College of Pathologis of South Africa - Clinical Pathology: FC Path(SA) Clin	its
VAN DEN BERG Sylvia	UP
Fellowship of the College of Pathologis South Africa – Haematology: FC Path(S Haem	
GREWAL Ravnit Kaur	US
NTABENI Nokuthula Lumka NTOBONGWANA Monalisa	WITS UCT
Fellowship of the College of Pathologis of South Africa – Microbiology: FC Path(SA) Micro	its
BONORCHIS Kim Justine	UCT
BOSMAN Nomampondomise Norma	WITS
DLAMINI Nomonde Ritta RAMJATHAN Praksha	ukzn ukzn
Fellowship of the College of Physicians South Africa: FCP(SA)	s of
BUTAU Martin Tawanda	WSU
DAVID Ria	WITS
GOGELA Neliswa Antonia HARRIS George Spencer	UCT UFS
HEYS Izak Cronje	UCT
KALIDEEN Letasha	UKZN
MAASDORP Shaun Donnovin	UFS
MAHARAJ Nirvarthi MAKAN Gita	WITS WITS
MAKAN Kavita	WISU
MOGOGANE Michael Thamaga	WITS
MORKAR Jatin	US
NYIRENDA Mulinda	WITS
PECORARO Alfonso Jan Kemp SCHÄR Bronwyn Elise	US WITS
VARKEL Leon	UCT
Fellowship of the College of Plastic	
Surgeons of South Africa: FC Plast Surg	
STEINMANN Mark Eugene WESSELS William Louis Fick	WITS US
Fellowship of the College of Psychiatri	
South Africa: FC Psych(SA)	
BODASING Zerisha Sastrising COSSIE Qhama Zamani	UKZN UCT

JONNALAGADDA Chanakya	UCT	
LATILLA Candice Lee	WITS	
LUDWICK Judith Jacoba	US	
MAMABOLO Makitli Melida	UP	
MOOLA Zuber	UKZN	
M00SA Shaakira	WITS	
PORTER Alicia Stacey	UKZN	
SCHULTE Fiona Ulla		
SINGH Leesha	UCT	
WILLIAMS Ronell Narelize	UCT	
Fellowship of the College of Public Health Medicine of South Africa: FCPHM(SA)		
medicine of oouth Anica. For fim(OA)		

JASSAT Waasila	WITS
MAHOMED Saajida	UKZN
MOODLEY Saiendhra Vasudevan	UP
ROSE André Stanford	WITS
TIMOTHY Geraldine Antoinette	WITS

Fellowship of the College of Public Health Medicine of South Africa - Occupational Medicine: FCPHM(SA) Occ Med

GOVENDER Nadira	UKZN
KGALAMONO Spoponki Mamohapi Alina	WITS

Fellowship of the College of Diagnostic Radiologists of South Africa: FC Bad Diag(SA)

FC Rad Diag(SA)		
CARIM Humza	WITS	
EBRAHIM Zaeem Ismail	UP	
GABUZA Marilyn Lungile	WITS	
GOGAKIS Aphrodite	WITS	
GOUSE Mohamed Riaz	WITS	
KEMP Marnie Laura	WITS	
KRUGER Mark	UFS	
MAHARAJ Narisha	UKZN	
MAKOMBA Carol Evelyn	WITS	
NAIDOO Pumersha	UKZN	
SCHULENBURG Deon Herbert	UFS	
SUDWARTS Gary	WITS	
TWETWA Thina	WITS	
VAN DER MERWE Dirk Johannes	US	
VENTER Dirk Jacobus	UP	
VISAGIE Ruan Louw	UKZN	
Fellowship of the College of Radiation		
Oncologists of South Africa: FC Rad Onc(SA)		
BUDDU Sayeuri	UFS	
VEERSAMY Petrosian Diwaker	UKZN	

Fellowship of the College of Surgeons of South Africa: FCS(SA)

ALHARETHI Salem Nasser	UCT
ALLORTO Nikki Leigh	UKZN
BHORAT Naseem Yusuph	UKZN
DU PLOOY Philippus Theunis	WITS
GEORGIOU Ellie	US
GOVENDER Magenthran	UKZN
GROBLER Lukas Cornelius	UKZN
GROTTE Anders Christian	UCT
JACKS Gavin Rubin	WITS
LUBBE Jeanne-Adele	US
MANGRAY Hansraj	UKZN
MATHIR Ahmed	UKZN

MJOLI Dennis Monde Thamsanqa	UKZN
MORNA Martin Tangnaa	WITS
NATHA Bhavesh	UCT
NONGOGO Lwazi Knowledge	UCT
PEARCE Nicholas Ernest	UFS
PILLAY Tharuneshan Ganas	UKZN
SCHAMM Markus Riann	WITS
SCHUTTE Albertus Nicolaas	UFS
SHAIK Muhammed Zaki	UKZN
SINGH Avesh	UKZN
SONDAY Shaheeda	UCT
STRAUSS Carel Petrus	UKZN
VERMAAK Jacobus Stephanus	WITS
VICTOR Anna Elizabeth	US
WARDEN Claire	UCT
WESSELS Jan Jochemus	UFS

## Fellowship of the College of Urologists of South Africa: FC Urol(SA)

AMEER Yusuf	UKZN
CHOHAN Zubair Ebrahim	UKZN
MOOLMAN Conray	UCT
PRETORIUS Philippus	UKZN
VAN SCHALKWYK Dieter Robert	UFS
WOOD Bradley Ryan	WITS

#### Certificates

Certificate in Cardiology of the College of Paediatricians of South Africa: Cert Cardiology(SA) Paed	
COMITIS George Argiris Michael MOTARA Firoza	UCT WITS
Certificate in Cardiology of the College of Physicians of South Africa: Cert Cardiology(SA) Phys	
ANGEL Gavin David MOTAUNG Motaung Moahloli Joshua THOMAS Vinod	WITS UCT UCT
Certificate in Child Psychiatry of the College of Psychiatrists of South Africa Cert Child Psychiatry(SA)	c
MOTINGOE Kediemetse Ursula	WITS
Certificate in Clinical Haematology of the College of Paediatricians of South Africe Cert Clin Haematology(SA) Paed	
NEETHLING Beverley Gail	UKZN
Certificate in Clinical Haematology of the College of Pathologists of South Africa: Cert Clin Haematology(SA) Path	
CHITSIKE Rufaro Saeed PARASNATH Sharlene	wits Ukzn
Certificate in Clinical Haematology of the College of Physicians of South Africa: Cert Clin Haematology(SA) Phys	he
NAHRWAR Shahroch Patrick Emile RASESEMOLA Mmamoloko Joseph SARSANSKI Olivija WEBB Michael John	UCT WITS WITS UFS

Certificate in Critical Care of the College of Anaesthetists of South Afr Cert Critical Care(SA) Anaes	rica:	Certificate in Pulmonology of the College of Physicians of South Afr Cert Pulmonolgy(SA) Phys
MDLADLA Aurence Nkosinathi	WITS	KHALFEY Hoosain
MRARA Busisiwe	WITS	Certificate in Rheumatology of the
Certificate in Critical Care of the College of Paediatricians of South Ai Cert Critical Care(SA) Paed	frica:	College of Physicians of South Afr Cert Rheumatology(SA) Phys ARENDSE Regan Emile
RANCHOD Harshad Bhagwandas	WITS	KHAN Yunus
Certificate in Developmental Paedia		LATIEF Josef
the College of Paediatricians of Sout Cert Dev Paed(SA)		Certificate in Trauma Surgery of t College of Surgeons of South Afric
THOMSON Heather Clare	WITS	Cert Trauma Surgery(SA) MOTILALL Sooraj Ramith
Certificate in Endocrinology & Metal of the College of Physicians of South	n Africa:	Certificate in Vascular Surgery of College of Surgeons of South Afri
Cert Endocrinology & Metabolism(SA		Cert Vascular Surgery(SA)
BAYAT Zaheer DE LANGE Willem	WITS UFS	EYAL Ariel Shalom
Certificate in Infectious Diseases of		PADAYACHY Vinesh
College of Paediatricians of South Ai College of Paediatricians of South Ai Cert ID(SA) Paed		Part I, Primary and Intermediate examinati
BARNABAS Shaun Lawrence	UCT	Part I of the Fellowship of the Col
Certificate in Infectious Diseases of	the	Anaesthetists of South Africa: FC/
College of Physicians of South Africa Cert ID(SA) Phys	<b>a</b> :	ALPHONSUS Christella Sinthuja ATIYA Ahmed
DEFFUR Armin	UCT	BEN-ZEEV Shachar
KENYON Christopher Richard	UCT	BOLON Stefan Nicholas CHETTY Aneshree
Certificate in Medical Oncology of th	е	DE WET Glenmarie
College of Paediatricians of South A	frica:	GANAW Adel
Cert Medical Oncology(SA) Paed		HADJIMICHAEL Maria Anna
OMAR Fareed Ebrahim	UP	HEPBURN Dylan Alexander HONING Beáte
VAN EYSSEN Ann Louise	UCT	JACKSON Tracy Anne
Certificate in Neonatology of the		KAY Jonathan Andrew Robert
College of Paediatricians of South A Cert Neonatology(SA)	rica:	MFEYA Loyiso Ndzondelelo
MADIDE Avanda	US	NOLTE Dean Christopher PIENAAR Gert Johannes
MADIDE Ayanua	03	PIENAAR Rudolf Philip
Certificate in Nephrology of the		PLAATJEES Natasha
College of Paediatricians of South A	frica:	POULTNEY Shane Knott
Cert Nephrology(SA) Paed		RADEMEYER Karel Marcus
NAICKER Elaene	UKZN	ROOS Anna-Mart
Certificate in Nephrology of the		SHELDON Jonathan SINGH Rakhee Krishnalal
College of Physicians of South Africa	a: Cert	STARKOWITZ Jed Paul
Nephrology(SA) Phys		STROVER Bruce Minto Walter
MANTHRI Nerissa	WITS	WASSERMANN George Henry
Certificate in Paediatric Neurology o College of Paediatricians of South Ai		Part I of the Fellowship of the Col Clinical Pharmacologists of South
Cert Paediatric Neurology(SA)		FC Clin Pharm(SA) Part I
HANSEN Perrin	WITS	DECLOEDT Eric Hermann
SAMIA Pauline Wangechi	UCT	Part I of the Fellowship of the
Certificate in Pulmonology of the		College of Dermatologists of Sout
College of Paediatricians of South A	frica:	FC Derm(SA) Part I
Cert Pulmonology(SA) Paed		ISAACS Thuraya
KRITZINGER Fiona Elize	US	MISRA Rupesh

College of Physicians of South Africa: Cert Pulmonolgy(SA) Phys	
KHALFEY Hoosain	UCT
Certificate in Rheumatology of the College of Physicians of South Africa: Cert Rheumatology(SA) Phys	
ARENDSE Regan Emile	UCT
KHAN Yunus	WITS
LATIEF Josef	US
Certificate in Trauma Surgery of the College of Surgeons of South Africa: Cert Trauma Surgery(SA) MOTILALL Sooraj Ramith	WITS
Certificate in Vascular Surgery of the College of Surgeons of South Africa:	
Cert Vascular Surgery(SA)	
EYAL Ariel Shalom	WITS
PADAYACHY Vinesh	UKZN
Part I, Primary and Intermediate examinations	
Part I of the Fellowship of the College	
Anaesthetists of South Africa: FCA(SA)	
ALPHONSUS Christella Sinthuja	UKZN
ATIYA Ahmed BEN-ZEEV Shachar	WITS WITS
BOLON Stefan Nicholas	WITS
CHETTY Aneshree	WITS
DE WET Glenmarie	WITS
GANAW Adel	UKZN
HADJIMICHAEL Maria Anna	WITS
HEPBURN Dylan Alexander	WITS
HONING Beáte JACKSON Tracy Anne	UCT UCT
KAY Jonathan Andrew Robert	UCT
MFEYA Loyiso Ndzondelelo	001
NOLTE Dean Christopher	UCT
PIENAAR Gert Johannes	WITS
PIENAAR Rudolf Philip	WITS
PLAATJEES Natasha	UKZN
POULTNEY Shane Knott RADEMEYER Karel Marcus	WSU UCT
ROOS Anna-Mart	UKZN
SHELDON Jonathan	WITS
SINGH Rakhee Krishnalal	
STARKOWITZ Jed Paul	WITS
STROVER Bruce Minto Walter	WSU
WASSERMANN George Henry	UCT
Part I of the Fellowship of the College Clinical Pharmacologists of South Afric FC Clin Pharm(SA) Part I	
DECLOEDT Eric Hermann	UCT
Part I of the Fellowship of the	
College of Dermatologists of South Afr FC Derm(SA) Part I	ica:
ISAACS Thuraya	UCT
MISRA Rupesh	UCT

of Emergency Medicine of South Africa:FCEM(SA) Part IFERREIRA YolandiUCTMCCANN Adrian ThomasWITSPHILLIPS Laverne JoyUSPart I of the Fellowship of the College of Emergency Medicine of South Africa:FCEM(SA) Part I New RegulationsALSHEHRI Mohammed FaiezUCTFÖLSCHER Lindy-LeeWITSGALAL MeenalWITSKOMBORA Tendayi SydneyUCTMBAYA Khalid RaiabuUS	
MCCANN Adrian ThomasWITSPHILLIPS Laverne JoyUSPart I of the Fellowship of the College of Emergency Medicine of South Africa: FCEM(SA) Part I New RegulationsALSHEHRI Mohammed FaiezUCTFÖLSCHER Lindy-LeeWITSGALAL MeenalWITSKOMBORA Tendayi SydneyUCT	
of Emergency Medicine of South Africa:FCEM(SA) Part I New RegulationsALSHEHRI Mohammed FaiezUCTFÖLSCHER Lindy-LeeWITSGALAL MeenalWITSKOMBORA Tendayi SydneyUCT	
FÖLSCHER Lindy-LeeWITSGALAL MeenalWITSKOMBORA Tendayi SydneyUCT	
RAJBARAN Joshna US	
SIMELELA Fetolang Rebecca     WITS       THIRSK Joanna Frances     VAN JAARSVELD Theunis Visser	
Part I of the Fellowship of the College of Forensic Pathologists of South Africa: FC For Path(SA) Part I	
KGOETE Kgolane NKONDO Tinyiko Zelda	
Primary Examination of the Fellowship of the College of Maxillofacial & Oral Surgeons of South: FCMFOS(SA) Primary	
BEZUIDENHOUT Ruan Viljoen	
Part I of the Fellowship of the College of Neurologists of South Africa: FC Neurol(SA) Part I	
NAIDOO Vanmala WITS	
Part I of the Fellowship of the College of Obstetricians & Gynaecologists of South Africa: FCOG(SA) Part I ADAMS Hudaa	

ADAMS Hudaa	
BALOYI Kaizer	UKZN
GADAMA Luis Aaron	
GQIBA Luthondo Lusizo	WITS
GROENEWALD Gary Roland	UCT
HOLDER Douw Wynand Gysbert	
JACOBS Moegamat Samier	US
KADER RAHEL	UKZN
KRICK Daniela	UCT
MAGOPA Eugenia Malebo	WITS
MDONDOLO Mziwohlanga	UKZN
MEMBE Gladys Chikumbutso	
MORRISON Candice Jane	UCT
MTAMBO Thabiso Bruce	UKZN
PIELICHOWSKA Joanna	WITS
SENGURAYI Elton	
VAN NIEKERK Elizabeth Christine	
VATHARAJH Rochelle	

#### Part I of the Fellowship of the College of Ophthalmologists of South Africa: FC Ophth(SA) Part I

COETZEE Dirk Johannes Lourens	UL
CONRADIE Karen	UFS
DULLABH Viresh	WITS
GERBER Willem-Martin	WSU
GOBERDHAN Adisha	WITS
JANSEN VAN RENSBURG Julia	
JOGI Thenushka	UKZN
MAKAKASE Makata Gedion	UL
MISTRY Jiten	WITS
MKABILE Pakamisa Kayalethu	WSU
MODI Jyoti	WITS
SURKA Sameer	mile
Primary Examination of the Fellows	hip of
the College of Otorhinolaryngologis	ts of
South Africa: FCORL(SA) Primary	
WASL Hisham	UCT
Part I of the Fellowship of the Colle	ne of
Paediatricians of South Africa:	90 01
FC Paed(SA) Part I	
BOSMAN Marelize	UKZN
BOTES Alida Maria	UCT
CAJEE Zaheer	UKZN
CHETTY Strinivasen Komalan	UKZN
DE WET Matthys Johannes	
ISAACS Jodi	UCT
ISMAIL Mugammad Taib	UCT
JEEVARATHNUM Ashley Clement	UKZN
KAWAZA Kondwani Mbwani Dominic	MALAWI
MASU Adelaide Ngina	UCT
MLOTHA Rachel	UCT
MOSESE Tholang Seipei	WITS
NAIDOO Krian	UKZN
NETSHIMBONI Rendani	UP
PAMACHECHE Togara Manomano	WITS
PENTZ Adele	UP
REDDY Deveshni	UCT
STANDER Ruaan Johann	US
TSHABALALA Donald	
VAN DER WESTHUIZEN Tarryn Elizabeth	
Part I of the Fellowship of the Colle	ae of
Pathologists of South Africa – Anato	-
-	
FC Path(SA) Anat Part I	inicai.
FC Path(SA) Anat Part I SCHOLFIELD Nicola Gillian	WITS

Part I of the Fellowship of the College of Pathologists of South Africa – Haematology: FC Path(SA) Haem Part I

MOODLEY Somashree	UKZN
STEENKAMP Janami	US

#### Part I of the Fellowship of the College of Physicians of South Africa: FCP(SA) Part I

ARBEE Mohamed	WITS
BAPOO Nabeel Ahmed	US
BARNARD Kim	UCT
BUTHELEZI Nkululeko Nduduzo	UKZN
COKA Cedrick Sithembiso	UKZN
DE WITT Pieter	US

DLAKANE Siphokazi Priscilla	WITS
GOVENDER Kavashree	UKZN
GOVENDER Kubendran	UKZN
GOVENDER Yuvashnee	UKZN
GREYLING Koenraad Edwin	US
HAARHOFF Catherine Anne	WITS
HARIPERSAD Asheen Ashok	UCT
IYER Kuban	WITS
KATHAWAR00 Tanusha	WITS
KOORNHOF Johannes Jochemus Euchari	stius US
LANGA Pone	UKZN
LUTHULI Nkosinathi Dennis	UKZN
MAGOMERO Kingsley Ross	WITS
MALULEKE Lesley Mesaba	WITS
MANGENA Phetho Mashaole Nkululeko	UCT
MBALEKWA Lungile	
MGWEDLI Fezekile	UCT
MITHA Mohammed	UKZN
MOGAMBERY Jade Caris	UKZN
MOHUN Sudhir Dhanishwar	UKZN
MOODLEY Venesh Riashen	UKZN
MOSES Jane	US
MOTTAY Lynelle Sarasvatnie	UCT
MTINGI-NKONZOMBI Lungiswa Stella	WSU
MUDALY Terrence	US
MZINGELI Luvuyo	WSU
NAIDOO Shialin	UKZN
NARISMULU Renusha	UKZN
NDLOVU Kwazi Celani Zwakele	UKZN
NORTJE Andre Jacques	US
OGUDE Omondi	WITS
PILLAY Diana	UKZN
PURAN Rishen	UKZN
RAJKARAN Michelle	UKZN
RAMKILLAWAN Arisha	UKZN
RANCHOD Rakesh Nagin	
ROBERG Kim	WITS
ROESTOFF Tumelo Kingsley	WITS
SEETHARAM Revana	UKZN
SLABBERT Pieter Johannes Adriaan	UFS
STEVENS Zane Douglas	US
TSABEDZE Nqoba Israel	WITS
VAN DER HORST Amada Ada	UFS
WADEE Bilaal	WITS
ZIKI Joyce Tukayi	WITS
Part I of the Fellowship of the College	)
of Psychiatrists of South Africa:	
FC Psych(SA) Part I	
ADLARD Rosalind Jane	
ADLARD Rosalino Jane MAPATWANA Dumakazi	UKZN
IMAFAT WAINA DUITTaKazi	UKZN

ADLAND NUSAIIIIU JAIIE	
MAPATWANA Dumakazi	UKZN
MOGASHOA Nomsa Barnolia	UL
MUSOKE Peter	WSU
YORKE Neil John	UCT

#### Part I of the Fellowship of the College of Diagnostic Radiologists of South Africa: FC Rad Diag(SA) Part I

# ESHRAGHI HodaWITSGOVENDER NishenthaWITSJANSEN VAN RENSBURG ColinWITSKUEHNAST MarianneWITSMOODLEY HalvaniULNDLOVU Sibusiso GugulethuUL

SIKWILA Christopher Temba	UKZN
WANER Jonathan IIan	WITS
Part I of the Fellowship of the College	of
Radiation Oncologists of South Africa:	UI .
FC Rad Onc(SA) Part I	
BOSHOFF Mariza	WITS
MULLER Charleen	WSU
Primary Examination of the Fellowshi	h of
the College of Surgeons of South Afric	
FCS(SA) Primary	a.
ABDURAHIM Ahmed Mohamed Omar	UKZN
APAI Pacifico Gabriel	UCT
AWANG Peter Thomas Ajack	UCT
BAIRAGI Anjana	UKZN
BEN HUSEIN Mohamed Ibrahim Ali	
BHOOLA Zaheer	WITS
CHAUKE Nyiko Zakaria	
DAYANAND Avindra	
DEACON Mark Bryan	
DONKIN Ian Edward	
DOWNS Jennifer Sidwell	WSU
DU PLESSIS Maré	
DU TOIT Theunis	
GANWO Ibrahim	UKZN
GARCEZ Ana Filipa Correia	
GERBER Erhardt	US
GQOLI Lonwabo Viwe Zuko	
IRSIGLER Nils Gernot	
KOPOLO Matongo Mfuneko	
LOWTON Vimal Ranjith	
MADZIBA Sanele Stanley	UKZN
MAMATHUNTSHA Tshilidzi Godfrey	
MATEKANE Katleho Motseki	
MFUNDISI Coceka Harmony	US
MODIKENG Cleopatra Lebohang	WITS
MOGERE Edwin Kamaiga	UCT
MONAISA Letihogonolo Brian Andrew	WITS
MOUMIN Omar Salem	mile
MTIMBA Lungisani	WSU
MUTHAMBI Tendani Theobold	100
NAIDOO Arushka	UKZN
NAIDOO Alusiika NAIDOO Thivani	UKZN
NAJJAAR Azzaam	WSU
NGAPO Billy	W3U
NGAFO Billy NORTH David Martin	WCU
NORTH David Martin NSHIJTI Richard	WSU
Honoritara	WITS
NTIMBANI Jimmy Amos	UL
OJWANG Peter Douglas	UP
OKE Olalekan	US
PILLAY Shaun	UKZN
PLASKETT Jeremy	
ROUSSOT Mark Anthony	UFS
SESING Ephraim Green	UL
SIGODI Duduzile	UKZN
SMALL Lizanne	
STEVENS Paul Stuart	UP
VAN DER WALT Nicolaas Stephanus Tjaart	WITS
WESSELS Gerrit Serge	

Primary Examination incl Neuroanatomy of the Fellowship of the College of Surgeons of South: FCS(SA) Primary - Neuroanatomy

BEN HUSEIN Mohamed Ibrahim Ali	
BHOOLA Zaheer	WITS
MAKHAMBENI Wilheminah Hendrika	WITS
MFUNDISI Coceka Harmony	US
MOGERE Edwin Kamaiga	UCT
PANDARAM Brian	

#### Intermediate Examination of the

Fellowship of the College of Maxillofacial & Oral Surgeons of South: FCMFOS(SA) Intermediate

JOSÈ Veruschka Melissa	
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Intermediate Examination of the College of Orthopaedic Surgeons of South Africa: FC Orth(SA) Intermediate

BABA Sachin Ramanlali	UK7N
Bi Bi Codonin Hamanan	0.12.1
BERTIE Julia Diana	UKZN
FRANK Ruvyn	UKZN
GREY Barend Christiaan	UKZN
KAUTA Ntambue	WSU
MARITZ Robert Myles	WITS
MASONDO Thabani Xolani	UKZN
MKHIZE Dumisani Sihle Magnificent	UKZN
MSITHINI Thobile Nozizwe	WITS
MVELASE Sicelo Nkulukelo	UKZN
NAIDOO Keegan	UKZN
NAUDÈ Petrus Hendrik	UCT
NUNES Daniel Domingues	WITS
SONJANI Siyabonga	UKZN
SULIMAN Mohammed	WITS
SWART Marzanne	WSU

#### Intermediate Examination of the Fellowship of the College of Surgeons of South Africa: FCS(SA) Intermediate

BHAGWAN Yateen Bhupandra Natvazlal	UKZN
BRUCE John Lambert	UKZN
CHIBA Nishal	UKZN
CHRISTIAN Wendy Dawn	UCT
DO VALE Isabel Lewis	WITS
DU TOIT Johannes Marthinus	UCT
FALAIYE Michael Oluwatubiluba	UCT
FORGAN Timothy Robin	US
KARRO Ryan Searle	US
KIMMIE Faizel	UCT
KOSHY Jithan Jacob	UCT
LIAKOS Dimitri	WITS
MADELA Fusi Godwin	UKZN
MBATHA Bongani Calvin	WITS
MERVEN Marc	UKZN
MITCHELL Claire Eileen	WITS
MJOLI Ntethelelo	UCT
MOTEBEJANE Mogwale Samson	UKZN
NAIDOO Deon	UKZN
NOAH Patrick Mavuto	UCT
ODUAH George Onuwa	UCT
PADAYACHEE Eneshra	UKZN
QUAIL Gavin Sean	
RABE Sieglinde Erica	UKZN
REDDY Kriban	UKZN

SIGONYA Blossom Lungelwa	UKZN
SMITS Cornelis Adrianus Gerhardus	
SSENYONGA Peter Kato	UCT
STROBELE Bernd Paul	WITS
THERON André Pieter	WITS
TSAI Ming-Chih	WITS
URRY Ronald James	UKZN
WOPULA Zwelabantu	WITS

Intermediate Examination of the Fellowship of the College of Urologists of South Africa: FC Urol(SA) Intermediate

VAN DER MERWE Jacobus Johannes US

#### **Higher Diplomas**

WITS

Higher Diploma in Internal Medicine of the College of Physicians of South Africa: H Dip Int Med(SA) TAMAYO ISLA Ramon Alberto UL

Higher Diploma in Orthopaedics of the College of Orthopaedic Surgeons of South

Africa: H Dip Orth(SA)	
ADEWUSI Olaolu Olufemi	UKZN
CHETTY Rinesh	UKZN
MASONDO Thabani Xolani	UKZN
PUDDU Alberto	UKZN
RAUF Abdul	UP
SMIT Rian Wilfred	UKZN
TER HAAR Michiel	UKZN

#### Higher Diploma in Surgery of the College of

Surgeons of South Africa: H Dip Surg(SA) TOGONIDZE Zurab Tristan

#### Diplomas

Diploma in Allergology of the College of Family Physicians of South Africa: Dip Allerg(SA) ALLI Razia ELS Carla

UP

UKZN

LAMB Gregory Vincent UP WHITE Debbie Ann WITS Diploma in Anaesthetics of the College of Anaesthetists of South Africa: DA(SA) ALEXANDER Tamara WITS AWATH BEHARI Amit UKZN WITS **BANNAN Scott James BIYASE Ntombiyethu Geraldine** UL BORRILL Kim Leigh WITS UFS **COETZEE Robert CROUS Annelize** UP **DAVIES Helen Margaret** UKZN **DAWSON Samuel Robert** UKZN **DE JAGER Corne** DE VILLIERS Mari-Louise UFS DOKOLWANA Banele Amanda WSU DUBE Nokukhanya Zamantima **GRIFFITHS Andrew James Howel** WITS

HAYES Paula	WITS
HEATHCOTE Gladwell	
HOFMEYR Michael Ross	UCT
IJUMBA Ken Rwakabale Namanya Kaizilege	UKZN
INYANG OTU Ukeme Sunday	WITS
JANSSEN Nikki	UKZN
JWAMBI Lumka Portia	
KABAMBI Kasandji Freddy	WSU
KELLY Eugene Hamerton	
LAPERE Steven Robert Jan	UFS
LAUBSCHER Cherese	UFS
MAAKAMEDI Hendrick Maisela	
MAISTO Maria Jose	WITS
MAKOTSVANA Tinevimbo Tichapiwa	WITS
MLOTSHWA Musawenkosi Buhlebentombi	WITS
MORFORD Victoria	WITS
MOUTLANA Hlamatsi Jacob	UL
MUDALI Jacinth Nadine	UKZN
MULLER Guillaume Roux	UFS
NGETU Lumko Robert	UFS
NONGQO Nezisa Petunia	WSU
NQALA Onke Mampondonke	WSU
NTUNKA Kabangie	UKZN
NXUMALO Mpucuko	
PURCHASE Karien	UKZN
RAHAMON Rasaq Olushola	UKZN
REDDY Tyesha	UKZN
REICHERT Lize	
SAUNDERS Amanda Carol	UKZN
STEYN Annamarie	
SULEMAN Mohammed Shabeer	UKZN
SWART Werner	UFS
VAN COPPENHAGEN Jan Willem	UFS
VAN DER MERWE Louise	
VAN DER WALT Jessica Gwendoline	UCT
VARUGHESE Jeena Mary	UL
WENZEL-SMITH Gisela	UCT
ZANGE Layla	

#### Diploma in Child Health of the College of Paediatricians of South Africa: DCH(SA)

ARMITAGE Alexander Jacob	
BLAAUW Magdalena Maria	
BOOTH Shannon Leigh	UCT
COMLEY Vanessa	UKZN
DABROWSKI Julia Jo	
DE BEVER Graham Nicolas	UCT
DE JAGER Pieter Pieterse	UCT
DLAMINI Thandukwazi Theunis	
FRY Samantha	UFS
GASARASI Ingrid	
GIOIO Regina Jovita	US
GRANTHAM Michele	US
JACUB Ayesha	
JULIUS Bronwyn	UKZN
KADER Naushina Bibi	UKZN
KHAN Saadiya Bibi	UCT
LA GRANGE Johan	UFS
MABOBO Lorraine Hlekani	UL
MALAHLEHA Moelo	UKZN
MEYER Mandy-Lyn	US
MIEDEMA Kelley Dominique	UKZN
MORIENYANE Mampoi Tsepiso Grace	UFS

**GUNNING Matthew David Godfrey** 

HARTMANN Tania Edna

MSIMANG Nozipho MURIGO Davidzo	UKZN
NAIDOO Gitanya Davina NTSHANGASE Ayanda Nomvula ONYEBUKWA Chukwuma Victor PRETORIUS Careni Elizabeth RENCKEN Andrea VAN NIEKERK Margaretha Susan VAN WYK Nicole Terese Celine WEGE Martha Helena WILLIAMS Hannelie Sarita	UKZN UKZN WITS UCT US
Diploma in Forensic Medicine of th of Forensic Pathologists of South A Clin: Dip For Med(SA) Clin	-
ANDREWS Donavan Mark SELEPE Malesiba Mampotoko	
Diploma in Forensic Medicine of th of Forensic Pathologists of South / Path: Dip For Med(SA) Path VAN DER NEST Sandra Anette	-
Diploma in HIV Management of the of Family Physicians of South Afric Dip HIV Man(SA)	•
ADEWUMI Olaoluwa Olusola AJAYI Adekunle Omoniyi AMANAMBU Ndudi Azubuike ANDREWS Anthony Donald	UL
BANGO Funeka BEKE Masase Girly BILTON Rebecca Margaret BOGOPA Zandile Lebogang	UL
BURDET Claire Elise CHELIN Neville	UKZN
CONRADIE Karien DINBERU Addisu Fantaye GOULDING Colleen	UKZN
GOVENDER Nerisha	UKZN
GOVENDER Preesha	UKZN
GOVENDER Seshen	UKZN
GUPTA Ravi Shankar	
HASSIM Zeenat	UKZN
HLOPHE Themba	
HLWATIKA Pilasande HUGO Johannes Matthys IHUARULAM Vitalis Chinedu JANNEKER Deshree	WSU
JOOSTE Ynishia Laurentia KABENGELE KAYEMBE Dominique KANDE Patrick Lufuta KAYEMBE Mbuyi Musanzayi	US
KEEL Sandra Cornelia	UCT
KINGSTON-RADLOFF Lauren Mary	UCT
KUEHNE Jan Cavan MACHERI Farai Peter	001
MAHARAJ Kamal	UKZN
MAJA Mabule Andrew	
MAKAMBWA Edson	
MAKOLA Thokoe Vincent Thabiso	
MAKURUMIDZE Richard	
MANDEYA Jeremiah Antony	
MANYERUKE Stephen	

MASVIMBO Courage	
MATELA Lerato	
MBATHA Nontobeko Fundiswa	
MBONANE Sithembile Samukelisiwe Pa	atience
MEKGOE Omphile Tshegofatso	WITS
MENDEL Eve Frances	
MENSAH Juliet Mame	UL
MHLAHLO Nombulelo Pumeza	
MIMPONGO-MOOLMAN Bijoux Enzanga	1
MLONDZO Nkateko Buster	UP
MOLABE Hunadi	
MOLALA Raisibe Ivy	WITS
MTSHALI Fikile Primrose	
MUKIAPINI Shapi Deo Gratias	
MUROPA Mazvita Naome	WITS
MXO Ezile Lusanda	
MYBURGH Susanna Magaretha	
NGCOBO Princess Nonhle	
NGOBENI Rhulani Sophie	
NGOMO Shungu Daniel	UKZN
NKUNA Sevha	
NONGOGO Deborah Dunyiswa	
NSANGI Mubibala	
NYAMUNDA Vimbayinaishe	
OLORUNFEMI Stephen Ojo	
OMAR Ayesha	WITS
ORIZU Bonaventure Uchenna	WITO
OYEWUMI Ayobami Akinkunmi	
PANDIE Mishal	UCT
PFUMOJENA Simbarashe Andrew	001
PROUDFOOT lan Graham	
QUPE Sibongile Zukiswa	WITS
RAMDASS Ryan Andrew	WIIS
RAMKYLAS Brindha	UKZN
SHUMBA Tafara Eric	UKZN
SINGH Shire Karan	
SOTOBE MOSE Sibusiso Nompumelelo	Foith
	WITS
STACEY Sarah Lynn	WIIS
STODDART Gregory John SYMONS Ian Robert	
TAGWIRA Tendai Chengeto	WITO
VAN DEN HANDEL Theodoor Antonius	WITS
VAN SCHALKWYK-VERKERK Marije	US
XABA Ntombizonke Bright	
YUSUF-SAKA Tunde Hammed	UCT
Diploma in Mental Health of the Col	lege of
Psychiatrists of South Africa: DMH(	-
CONNELL Alida	,
DAWOOD Zaheer	
	ukzn Wits
DOLO Sejabaledi Abram	WI12
FRANKEN Herman Casper	LIOT
JONES Megan Peta	UCT
LUMU Lavinia Deborah	WSU
NKUSHUBANA Onke Thanidsizwe	WSU
ZONDI Junaid Freedom	UCT
Diploma in Obstetrics of the College	e of
Obstetricians and Gynaecologists of	
Africa: Dip Obst(SA)	
ASSUMANI Basemenane Justin	UKZN
	WSU
BLIGNAUT Quinton Craig	W20
FANI-SIGCU Nombulelo Patricia	

IGBOGIDI Uzezi Raymond Graphwell	
JAFTA Nkosinathi Morley	
JAFTER Rolene Megan	UKZN
JONAS Mfundo Origin	WSU
KASUMBI Mukanya	WSU
LALENDLE Nomaqitiqiti Nomyezo	
LEGUTKO Dagmara Anna	UKZN
MAHARAJ Atisha	UKZN
MAKANGALA Mandlenkosi	
MAKUNYANE Lefate Lazarus	UKZN
MAKWERO Martha Thokozani	UFS
MBO ENKAKE Antoine	UKZN
MUKADAM Fatima	WITS
NOMANDELA Zinkosi Simon	WSU
ODUFUWA Olowatoyin Aliu	US
OJODUN Olumide	US
ONWUAGBU Oburota	WITS
RAMCHURRAN Bikash	UKZN
RICHARDSON Rosemarie Tessa	
SCISLOWSKI Pawel	UKZN
SIPUKA Zandi	UKZN
TSHIBANGU Eugene Munyenze	UP
0 ,	UP
VAN EEDEN Christine Corné	
Diploma in Ophthalmology of the	
College of Ophthalmologists of Sou	th Africa:
Dip Ophth(SA)	
ALAM Bifat Tasmeen	WSU
DJAN Michael Kwame Gyedu	WSU
DU PLESSIS Jacobus Johannes	UFS
DU TOIT Schalk Hugo	UL
Ū	UL
PHATUDI Ntlhatlamola Kagiso Philip	UL
PHATUDI Precious Pusetso	UL
TUSWA Gcobani Maxwell	WSU
TUSWA Gcobani Maxwell	WSU WSU re of the
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car	WSU WSU re of the
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA)	WSU WSU re of the
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina	WSU WSU re of the South
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA)	WSU WSU re of the South
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan	WSU WSU re of the South
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha	WSU WSU e of the South UP
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani	WSU WSU re of the South
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude	WSU WSU e of the South UP UKZN
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar	WSU WSU e of the South UP
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen	WSU WSU e of the South UP UKZN US
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience	WSU WSU e of the South UP UKZN
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen	WSU WSU e of the South UP UKZN US
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience	WSU WSU e of the South UP UKZN US
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience VISSER Bianca Marie Fellows by Peer Review	WSU WSU e of the South UP UKZN US
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience VISSER Bianca Marie Fellows by Peer Review Dr Roger DICKERSON	WSU WSU e of the South UP UKZN US WITS
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience VISSER Bianca Marie <b>Fellows by Peer Review</b> Dr Roger DICKERSON College of Emergency	WSU WSU e of the South UP UKZN US WITS Medicine
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience VISSER Bianca Marie Fellows by Peer Review Dr Roger DICKERSON	WSU WSU e of the South UP UKZN US WITS Medicine
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience VISSER Bianca Marie <b>Fellows by Peer Review</b> Dr Roger DICKERSON College of Emergency	WSU WSU e of the South UP UKZN US WITS Medicine
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience VISSER Bianca Marie Fellows by Peer Review Dr Roger DICKERSON College of Emergency	WSU WSU UP UKZN US WITS Medicine iew
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience VISSER Bianca Marie <b>Fellows by Peer Review</b> Dr Roger DICKERSON College of Emergency <b>Certificants by Peer Rev</b> Dr Lufuno Rudo MATHIVHA College of Paec	WSU e of the South UP UKZN US WITS Medicine iew diatricians
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience VISSER Bianca Marie <b>Fellows by Peer Review</b> Dr Roger DICKERSON College of Emergency <b>Certificants by Peer Rev</b> Dr Lufuno Rudo MATHIVHA College of Paec Dr Andrew Charles ARGENT College of Paec	WSU WSU UP UKZN US WITS Medicine iew diatricians
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience VISSER Bianca Marie <b>Fellows by Peer Review</b> Dr Roger DICKERSON College of Emergency <b>Certificants by Peer Rev</b> Dr Lufuno Rudo MATHIVHA College of Paee Dr Andrew Charles ARGENT College of Paee Prof Guy Antony RICHARDS College of F	WSU WSU UP UKZN US WITS Medicine iew diatricians
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience VISSER Bianca Marie <b>Fellows by Peer Review</b> Dr Roger DICKERSON College of Emergency <b>Certificants by Peer Rev</b> Dr Lufuno Rudo MATHIVHA College of Paee Dr Andrew Charles ARGENT College of Paee Prof Guy Antony RICHARDS College of F	WSU WSU UP UKZN US WITS Medicine iewv diatricians diatricians
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience VISSER Bianca Marie <b>Fellows by Peer Review</b> Dr Roger DICKERSON College of Emergency <b>Certificants by Peer Rev</b> Dr Lufuno Rudo MATHIVHA College of Paec Dr Andrew Charles ARGENT College of Paec Prof Guy Antony RICHARDS College of F	WSU WSU UP UKZN US WITS Medicine iewv diatricians diatricians
TUSWA Gcobani Maxwell VAN WYK Daniel Jacobus Diploma in Primary Emergency Car College of Emergency Medicine of Africa: Dip PEC(SA) BELKINE Valentina CARSTENS Anna Margaretha CHRISTIE Simon Alan MOKOENA Samantha MTSHALI Raphael Thulani POEWE Jean-Claude SOOD Rajesh Kumar STEPHEN Victoria Stephen THABETHE Bongiwe Patience VISSER Bianca Marie <b>Fellows by Peer Review</b> Dr Roger DICKERSON College of Emergency <b>Certificants by Peer Rev</b> Dr Lufuno Rudo MATHIVHA College of Paee Dr Andrew Charles ARGENT College of Paee Prof Guy Antony RICHARDS College of F	WSU WSU e of the South UP UKZN US WITS Medicine iew diatricians diatricians diatricians

IFEORAH Osita

## Annual Report of the Senate of The Colleges of Medicine of South Africa for the period 1st June 2009 to 31st May 2010

The second Annual Report of the Eighteenth Senate gives an overview of the business of Senate during the financial year 1 June 2009 to 31 May 2010. The report will customarily be presented in separate sections:

#### **Annual Financial Statements**

The financial statements and matters pertaining to the appreciation of the state of affairs of the CMSA, its business and profit and loss, will be published on the web page. Hard copies will be available upon application.

#### **Annual Reports of Constituent Colleges**

The annual reports of constituent Colleges, covering activities during the period under review, form part of this report of Senate but appear as a section on its own as an extension of the report.

#### **General Activities of Senate**

A general overview of the activities of Senate during the past year are given below.

#### **IN MEMORIAM**

Senate mourned the death of two esteemed past Presidents during the year under review – Prof Ralph Kirsch on 9 February 2010 and Prof Bert Myburgh on 7 March 2010. Sincere condolences are extended to Mrs Beverley Kirsch and Mrs Marie-Louise Myburgh and their families in their bereavement. Obituaries for both appeared in the last issue of Transactions.

The President and Senate also, with regret, received notification of the death of the following:

#### **Honorary Fellows**

DE BEER. Johannes DE VILLIERS, Henri GILLINGHAM, Francis John JAFFE, Basil TRACY, Graham Douglas

Founders BASKIND, Eugene

#### **Associate Founders**

BARLOW, John Brereton BARNARD, Pieter Melius DU PLESSIS, Hercules Gerhardus GRIFFITHS, Seaton Bythyl NEL, Rhoderic William Arthur SANDERS, Eric John SHAPIRO, Max Philip SMITH, Lionel Shelsley

#### Fellows

AGGETT, Michael John ANDREWS, Steven Murray CHETTY, Gonasilan DANIELS, Letticia Michelle FLISHER, Alan John FREEMAN, Arthur Arnold GILLMER, Ralph Ellis HAMILTON, Donald Graham HARIPARSAD. Dhuneshwar LAKHOO, Maganlal LEONG, Cheryl Venessa MABINA, Mpôe Herman MAFOJANE, Ntutu Andrew MATHIVHA, Tshimbiluni Mavhungu NUTT, Robert O'CONNELL, Kevin Otto Charles PRICE, Samuel Nathaniel SALTON, Diana Gail Mameena VAN NIEKERK, Willem Abraham VAN SCHALKWYK, Colin Henri WILSON, Jennifer Anne Greta

#### Diplomates

MDLULI, Sipho Ofentse PLATTS, Julian Roderick VAN HUYSSTEEN, Hendrik Roelof

Senate also extends sincere sympathy to their next of kin.

#### **NEW OFFICERS ELECTED FOR THE CMSA**

#### President

Prof Anil Madaree was elected as President of The Colleges of Medicine of South Africa in October 2009 and officially resumed this office at the Senate meeting in Bloemfontein on 13 May 2010. Prof Madaree will remain in office until May 2013.

#### **Vice Presidents**

Prof Gboyega Ogunbanjo (Pretoria) who was elected as the Senior Vice President and Prof Jeanine Vellema (Johannesburg), elected as

the second Vice President, also resumed office on 13 May 2010 and will serve in that capacity until May 2013.

#### **Chairman Examinations and Credentials Committee**

With the election of Prof Jeanine Vellema as Vice President, the office of Chairman of the Examinations and Credentials Committee became vacant and it is recorded with pleasure that Prof Arthur Rantloane (who served in the office of Honorary Registrar ECC), was duly elected to take over from Prof Vellema for the remainder of the current triennium of Senate ending in October 2011.

#### **Honorary Registrar**

The position of Honorary Registrar Examinations and Credentials Committee had to be filled with the elevation of Prof Rantloane to the Chairmanship, and it is reported that Prof Mike Sathekge was elected to take over the portfiolio of Honorary Registrar Examinations and Credentials Committee for the remainder of this term of office of Senate.

#### NEW OFFICERS AND SENATE REPRESENTATIVES ELECTED FOR CONSTITUENT COLLEGES

#### **College of Forensic Pathologists**

As the Secretary and one of the representatives of the College of Forensic Pathologists on Senate, Dr Isabel Brouwer emigrated, Dr Gavin Kirk was elected to replace her as Secretary and Dr Sageren Aiyer, as representative of the College of Forensic Pathologists on Senate.

#### **College of Plastic Surgeons**

In terms of the Articles of Association and By-laws, the CMSA President does not represent any of the constituent Colleges. Should the President of a constituent College therefore be elected as President of the CMSA, he/she has to relinquish that office with immediate effect.

Dr Roger Nicholson of Johannesburg was therefore duly elected to replace Prof Anil Madaree as the second representative of the College of Plastic Surgeons on Senate when the latter was elected to the Presidency of the CMSA. Dr Nicholson has also replaced Prof Madaree as the Secretary C PLAST SURG. Dr Nicholson will remain in office for the rest of the current term of office of Senate.

#### **College of Radiologists**

For personal reasons, Dr Savvas Andronikou resigned as President of the College of Radiologists and as Councillor of that College. Prof Coert de Vries was elected to replace him as President and as the second representative of the College of Radiologists on the CMSA Senate. Prof de Vries will also remain in office until October 2011.

#### **ESTABLISHMENT OF NEW COLLEGE**

The 28<sup>th</sup> constituent College of the CMSA, namely the College of Paediatric Surgeons, was officially established in May 2010. The first Councillors and panel of examiners are:

Prof P G Beale(Johannesburg)Prof G P Hadley(Durban)Prof C Lazarus(East London)Dr S M le Grange(Bloemfontein)Prof A J W Millar(Cape Town)

Prof S W Moore Dr E W Mueller (Cape Town) (Pretoria)

Prof Peter Beale was duly elected as the first President of the College of Paediatric Surgeons and will also be representing that College on the CMSA Senate. Prof Alastair Millar was elected as the second representative on Senate. Prof Colin Lazarus was elected as the College Secretary. They will all be serving in their respective offices for the remainder of the current term of office of Senate ending in May 2011.

#### **CONSTITUTIONS OF CONSTITUENT COLLEGES**

The constituent College Constitutions have been updated and published on the website.

#### CMSA PROJECT "STRENGTHENING ACADEMIC MEDICINE AND SPECIALIST TRAINING" INITIATED IN 2007

Prof Tuviah Zabow has taken control of the Project management on a part-time basis. Together with the Project co-ordinator, Dr Brigid Strachan, they reported the following progress during the past year:

The project was initiated in response to the growing concern among medical and dental professionals about the increasing challenges in the academic training environment and issues relating to the output and retention of specialists and sub specialists. These have a significant impact on the capacity of both the public and private health sectors to provide the necessary quality health care within South Africa.

Research has shown that South Africa compares unfavourably to other countries on ratios of medical practitioners to population. South Africa has a ratio per 1000 population of 0.77 medical professionals compared with 1.85 for Brazil, 1.98 for Mexico, 2.47 for Australia, and 2.3 for the UK. CMSA research demonstrated that in fact South African ratio per 1000 is closer to 0.55. South Africa has 25,000 doctors for 50 million people and the UK has 120,000 doctors for 60 million people.

Research done by Dr Nicholas Crisp of Benguela Health Pty Ltd and shared with the CMSA Project, detailed that the number of specialists on the public health pay roll from 1997 – 2006 has declined by 25% - by 854 from 3782 in 1997 to 2928 in 2006. The number of medical practitioners on the public sector pay roll has increased by only 774 from 9184 to 9958 in the same period: 1997 – 2006. The decline in specialist numbers is despite an output of specialists of 500 a year or 5000 in the same 10 year period.

The CMSA Project is analysing the issues that impact on the financing and planning of specialist training and academic sites and health services. There is a strong historical correlation between the provision of healthcare and the number of doctors - thus a continuing decline in the number of doctors being absorbed into the public sector system will lead to (is leading to) a proportionate decline in access to health care.

The CMSA Project has undertaken surveys of specialist disciplines in the CMSA and of the Deans of Faculties of Health Sciences to assess needs for specialist and medical practitioners, and capacity for development of medical professionals.

#### The objectives for the Project are:

- To develop a shared vision for the CMSA which addresses the strategic and operational issues surrounding specialist training and academic medicine and dentistry
- To focus in the immediate term on establishing the current number, type and distribution of specialists; future specialist needs and training requirements; and ways of retaining academic and clinical staff
- To review the governance of academic health centres and conditions of service
- Technical committees have been formed which will address the issues affecting specialist training, the governance and financing of academic medicine, and the infrastructure for academic medicine on an ongoing basis
- To organise an annual Policy Forum which brings together stakeholders to discuss technical and policy issues and identifies appropriate action with regard to specialist training.
- To produce Working Papers / reports on issues which affect specialist output, academic medicine, and the governance of academic institutions
- To undertake an advocacy role in order to ensure that policy proposals are presented to the appropriate channels within the public and private sector
- To build partnerships with private sector health care funders, and public and private sector service providers
- To assess how to build leadership within the profession and to develop a leadership courses for specialists
- To address the challenges in training and clinical practice presented by the HIV/ AIDS pandemic through curriculum development and workshops.

Meetings have been held with the Minister of Health and the Department of Higher Education. The Project has made recommendations and will complete the research at the end of 2010.

#### **CMSA WEBSITE**

The College website http://www.collegemedsa.ac.za is in the process of being upgraded, re-designed and modernised with a view to making it more user friendly. The new site will go live in November 2010.

#### **EXAMINATION AND EDUCATION RELATED MATTERS**

#### **National Professional Examination**

It is with excitement that Senate announces that the CMSA received a request from the Health Professions Council of South Africa to run the National Professional Examination (NPE). Meetings are currently taking place between HPCSA and the CMSA with a view to running the NPE from 2011.

#### Successful Candidates

The names of candidates who pass the biannual CMSA examinations appear in each issue of Transactions. The results are also published on the web site.

#### **Dishonesty in Examinations**

Senate adopted a disciplinary procedure in the event that a candidate:

· communicates or attempts to communicate with any other

candidate or any person other than the invigilator on duty;

- makes use of, or has in his/her possession or under his/her control any notes, books or devices which contain information that might be relevant to the examination;
- disrupts the examination in any manner;
- conducts himself/herself in any other dishonest or improper manner, including but not limited to offering bribes, going to the wards immediately before the examination and accessing electronic or written patient files or information; and/or
- behaves or conducts himself/herself in such a manner that has or might have the effect of bringing the good name of the CMSA into disrepute.

Should a candidate be found guilty of misconduct, one or more of the following penalties may be imposed:

- Disqualification from the examination in question and future examinations in the same subject/discipline or any other subject/ discipline, for a period to be determined;
- Ineligibility to write any future CMSA examinations;
- Eligibility to write future examinations subject to certain conditions; and/or
- That the matter be reported to the Health Professionals Council of South Africa/Professional Board.
- Inform the Faculty of Health Sciences of the relevant University.

Senate ruled that the offence, as well as the punishment, will be published on the CMSA website and in Transactions to discourage this practise.

#### **Medal Recipients**

Recipients of medals during the period under review were:

Cape Town : 15 October 2009

**Novartis Medal** : FC Neurol(SA) Part II Kathleen Jane Bateman

**G P Charlewood Medal** : FCOG(SA) Part I Dominic Giles Dudley Richards

A M Meyers Medal : FCP(SA) Part I William Wayne Lubbe

Lynn Gillis Medal : FC Psych(SA) Part I Katherine Verne Gilfillan

Rhône-Poulenc Rorer Medal : FC Rad Diag(SA) Part I Hofmeyr Viljoen

**Brebner Award** : FCS(SA) Intermediate Stefan Hofmeyr

**Douglas Award** : FCS(SA) Final Lydia Leone Cairncross

SASA John Couper Medal : DA(SA) Leah Dunn Reid

Bloemfontein : 13 May 2010

Libero Fatti Medal : FC Cardio(SA) Final Johann Brink

Sigo Nielsen Memorial Prize : FC Neurol(SA) Part I Mohammad Eltzaz Sadiq **GP Charlewood Medal** : FCOG(SA) Part I Vulikhaya Mpumlwana

Justin van Selm Medal : FC Ophth(SA) Part II Antonio dos Ramos

Robert McDonald Medal : FC Paed(SA) Part II Biance Rowe

**Douglas Award** : FCS(SA) Final Sunu John Thenguvilla Philip

Henry Gluckman Medal : FCPHM(SA) Elvira Singh

**Eugene Weinberg Medal** : Dip Allerg(SA) Annemarie Gouws

Campbell MacFarlane Medal : Dip PEC(SA) Cherese Laubscher

#### **Fellowship by Peer Review**

The candidates listed below, were successfully considered for Fellowship by peer review since the last report:

**College of Emergency Medicine** 

DICKERSON, Roger WELLS, Michael David John

**College of Paediatricians** 

ARGENT, Andrew Charles HOEK, Beyers Bresler MATHIVHA, Lufuno Rudo NEL, Etienne de la Rey PARBHOO, Kiran B ROSEN, Eric Uriah SCHAAF, Hendrik Simon SCHER, Linda Gail SCHOEMAN, Cornelius Johannes SMITH, Johan STONES, David Kenneth TARGONSKI, Jerzy Adam

**College of Physicians** 

MER, Mervyn RAINE, Richard Ian RICHARDS, Guy Anthony

#### **Endowment of Basil Jaffe Medal**

To acknowledge the significant role that the late Dr Basil Jaffe played in the Faculty of General Practice (now known as the College of Family Physicians) over many years, his family and colleagues endowed a medal to perpetuate his name. More details will appear in the next report.

Dr Jaffe's major contribution to the activities of the College of Family Physicians was also recognised by his peers with the award of a Fellowship *ad eundem* some years ago.

#### **Examiners' Workshops**

No workshops were held during the past year. The next workshops will be offered, with Prof Cees van der Vleuten, in Cape Town on 7

November 2010, Durban on 8 November 2010 and Johannesburg on 9 November 2010. Topics under discussion will be: "How can we improve the assessment of clinical skills, knowledge and attitudes for specialist qualification?" and "The validity of workbased assessment lies in its users: a workshop on work – based assessment procedures".

#### **Accreditation of Hospital Training Posts**

The following hospitals were accredited:

H Dip Int Med(SA) Leratong Hospital

H Dip Surg(SA) Boitumelo Hospital

#### **Dip HIV Man(SA)**

Hlabisa Hospital Paarl Medi-Clinic

**DCH(SA)** Gordonia Hospital

**Dip OBST(SA)** Raleigh Fitkin Memorial Hospital

**Dip Ophth(SA)** Kimberley Hospital Complex

**Dip PEC(SA)** Cecilia Makiwane Hospital

#### Regulations

Update

The Education Committee looked at all the qualifying examinations offered by the constituent Colleges, using parameters to assess the regulations. It was agreed in principle that the regulations would be re-assessed every three years, that a comprehensive syllabus would be developed for every qualification and that all syllabi would have a suggested reading list.

#### **HIV Curriculum**

The Education Committee, as a spinoff from the CMSA Forum, was tasked with including HIV/AIDS in all curricula. The issues with regard to HIV/AIDS would be farmed out to two groups viz. basic sciences and the discipline specific aspect. This is still work in progress.

**Qualifications Accepted/Declined by HPCSA** 

The following qualifications were accepted:

- Cert Allergology(SA) Colleges of Family Physicians, Paediatricians and Physicians
- Cert Maternal & Fetal Medicine(SA) College of Obstetricians and Gynaecologists
- The HPCSA declined the following:
- Cert Addiction Psychiatry(SA) College of Psychiatrists
- Cert Consultation-Liaison Psychiatry(SA) College of Psychiatrists
- Cert PET/CT Imaging(SA) Colleges of Radiologists and Nuclear Physicians
- Cert Abdominal Radiology(SA) College of Radiologists
- Cert Breast Imaging(SA) College of Radiologists
- Cert Chest Radiology(SA) College of Radiologists

Cert Interventional Radiology(SA) – College of Radiologists Cert Musculo-Skeletal Radiology(SA) – College of Radiologists Cert Neuro Interventional Radiology(SA) – College of Radiologists Cert Neuroradiology(SA) – College of Radiologists

#### **RECIPROCATING AUDITING**

It was agreed in principle that, as a body involved with matters of education and examination, the CMSA should have internal systems in place for quality assurance and audit, complying also with national and international trends. This is currently receiving attention.

#### **SCHOLARSHIPS AND AWARDS**

#### Phyllis Knocker/Bradlow Award: 2007

Dr Nisha Naicker (FCPHM(SA) 2006) has now finalised her project for the 2007 award, entitled "Association between lead exposure and maladjusted behaviour in young adulthood: the birth to twenty cohort".

#### KM Browse Scholarship

The scholarship was advertised in 2010 and applications were received for the following studies:

Dr K Bateman: "A prospective, observational cohort study of tuberculous meningitis in South African adults in Cape Town"

Dr D Devchand: "Prospective evaluation of phantom limb sensations and phantom limb pain in a third world setting"

The decision of the review committee was that the award be split equally between the two applicants.

Maurice Weinbren Award in Radiology: 2009 No award was made during the past year.

R W S Cheetham Award: 2009

No application was received.

#### M S Bell Scholarship: 2009

In terms of the will of the late Mrs Margaret Bell, the College of Psychiatrists established the M S Bell Scholarship some years ago. The Award is made alternate years to coincide with the biennial Psychiatric Congress when registrars are selected and assessed by the Council of the College of Psychiatrists on the standard of their lecture presentations at the Congress. The award for 2009 was made to Dr B R Bruwer.

#### Y K Seedat Research Project

Interest is being allowed to accumulate for a further year before a call for applications is made.

#### **MEDICAL EDUCATION VISITS**

#### **Educational Development Programme: Mthatha**

The following activities took place during the past year:

13 – 15 August 2009

Forensic Pathology and Medico-legal issues

Dr N Tsotsi, University of the Witwatersrand, covered medico-legal issues and Dr R Ngude presented on forensic pathology.

#### 15 - 17 October 2009

#### Medical and Surgical Emergencies

Lectures were presented by Dr A Aboo, Cape Town (medical emergencies) and Professor J H R Becker, Pretoria (surgical emergencies).

18 – 20 March 2010

Urology and Circumcision Complications

Lectures were presented by consultants from the Department of Urology, Walter Sisulu University, Mthatha. They were joined by Dr S Ramkissoon from Durban.

20 - 22 May 2010

**Obstetrics and Neonatal Emergencies** 

Dr G Kali and Professor J Smith, both from the Cape, took care of the talks on neonatal emergencies and they were joined by Dr HC Maise, an obstetrician from the University of KwaZulu-Natal.

#### **Robert McDonald Rural Paediatric Fund**

During the year under review, the Department of Paediatrics at the University of KwaZulu-Natal was funded for their outreach course: "Improving the prevention-to-mother transmission program through focused training".

#### **LECTURESHIPS**

#### Arthur Landau Lectureship: 2009

Professor Janet Seggie delivered her lecture, "Educating doctors for Africa ... a captivating 'alchemy'" in Johannesburg on 31 July, Cape Town on 22 October and KwaZulu-Natal on 25 October 2010.

Professor Sarala Naicker has been nominated by the College of Physicians to be the Arthur Landau Lecturer for 2010. Her lecture, "The changing epidemic of chronic kidney disease" will be given during the coming year.

#### Francois P Fouché Lecturer: 2009

Professor Bennie Lindeque from Colorado, USA delivered his lecture "Antibiotic loaded bone cement: where is the evidence?", on 31 August 2009 at the South African Orthopaedic Congress held in the Drakensberg.

Dr Clive Duncan from Canada has been nominated as the Francois P Fouché Lecturer for 2010. He will deliver his lecture, "Just a thought: but see it through" on 30 August 2010 at the next congress to be held in Port Elizabeth.

#### J C Coetzee Lectureship in Family Medicine and K M Seedat Memorial Lecture

The national Family Physicians Congress is not being held in South Africa during 2010. An appointment for both a J C Coetzee Lecturer and a K M Seedat Memorial Lecturer will be made for 2011.

#### Margaret Orford Memorial Lecturer: 2010

The next lecture will be given at the Congress of the South African Society of Obstetricians and Gynaecologists in October/November 2010.

#### The J N Jacobson and W L S Jacobson Annual Lecture

Owing to lack of funds in the distribution account, no lecturer was appointed for 2010.

#### **CPD ACCREDITATION**

For the year under review, income from CPD accreditation amounted to R12 900.00.

#### **OUTREACH IN AFRICA INITIATIVE**

It was agreed that the CMSA should be more pro-active and forward thinking with regard to its role in Africa. An approach will be made to the Presidents of existing Colleges to determine how the CMSA could assist in terms of their specific needs. Once an understanding is established at this level, the respective constituent Colleges of the CMSA will have a framework within which to arrange their discipline specific collaborations.

#### J C COETZEE PROJECTS (OBSTETRICS AND GYNAECOLOGY)

The J C Coetzee Fund can be applied for projects in three main areas in obstetrics and gynaecology. These areas are J C Coetzee refresher courses or CME meetings, the J C Coetzee medical development programme to sub-Saharan Africa and the J C Coetzee Lectureship (report on the latter appears elsewhere).

The following activities took place during the period under review:

#### **Refresher Courses or CME meetings**

#### University of Cape Town

The Department of Obstetrics and Gynaecology, University of Cape Town, continued their existing out-reach activities to the Eastern Cape with visits by departmental consultants on various occasions. These visits involved presentations, meetings and ward rounds at Dora Nginza, Frere and Cecilia Makiwane hospitals respectively.

Seven consultants visited the Eastern Cape on four occasions. The topics covered, included:

- Modern management of cervical cancer
- · Meconium stained liquor
- Approach to benign vulval disorders
- Diabetes in pregnancy
- Obesity in pregnancy
- Gestational diabetes: the latest picture
- The progress of oral hypoglycaemic agents in pregnancy.

#### University of Pretoria

Lecturers from the University of Pretoria were involved in two refresher courses:

- In Rustenburg on 6 August 2009. (Prof A Macdonald, Dr P Soma-Pillay and Dr Z Abdool).
- In Nelspruit on 8 September 2009 (Prof L C Snyman, Dr D H Lombaard, Dr J Biko and Dr D Amoko).

## THE COLLEGE OF MEDICINE FOUNDATION DISSOLVED

The College of Medicine Foundation has now been officially dissolved. In terms of By-law 54 of the Articles of Association and By-laws of the CMSA (already amended to make provision for the trustees to function as an entity within the CMSA), the board of trustees shall continue to be constituted every three years at the first meeting of each new Senate.

The board will continue to deal with matters related to fundraising strategies as agreed upon by Senate; the Honorary Treasurer of the CMSA will in future present a report on behalf of the Trustees at each meeting of Senate and a schedule of CMSA investments will be tabled at meetings of the Board of Trustees for information.

#### **CMSA MEMBERSHIP**

#### **Benefits**

The link to MELISA (the Medical Electronic Library of South Africa) on the CMSA website serves as an incentive to members to participate in what the CMSA has to offer.

#### **Honorary Fellows**

Three Honorary Fellowships were awarded during the year under review. The recipients were:

#### The Colleges of Medicine of South Africa

Prof Ralph Kirsch (Past President)

#### **College of Obstetricians and Gynaecologists of South Africa** Prof David Baird

#### Associates

The following registered with the CMSA as Associates during the past year:

#### **College of Anaesthetists**

MATSIPA, Joel Jonas

**College of Cardiothoracic Surgeons** CHAUKE, Risenga Frank

#### College of Clinical Pharmacologists

EBRAHIM, Osman VAN ZYL, Paulina Maria

#### **College of Emergency Medicine**

ANDERSON, Peter William Henry RAUF, Wawar-Un-Nisa SMITH, Wayne Patrick

#### **College of Ophthalmologists** PIENAAR, Ané

**College of Public Health Medicine** KEW, Gregory (Division of Occupational Medicine) MOODLEY, Jennifer Rose RYAN, Amanda Patricia (Division of Occupational Medicine)

College of Psychiatrists NICHOL, Richard John **College of Radiologists** ACKERMANN, Christelle STOKER, Aisne Foster

**College of Urologists** FOURIE, Tjaart SIGARROA, Nelson Bustamante

#### Lost Members

Despite several attempts by the office to trace "lost members", there are still individuals whose whereabouts are unknown. Information that can assist the office will be appreciated.

#### **Special Award to Dr Ian Huskisson**

Dr lan Huskisson's illustrious history within the CMSA, which came to an end when he requested leave of Senate with effect from October 2009, warrants special recognition. He received his Fellowship in 1959 and thereafter served on Senate for 45 years. He wrote the History of the CMSA (the first 50 years), was involved for many years with the (now dissolved) College of Medicine Foundation and served the CMSA in numerous other offices. Dr Huskisson received the highest honour that the CMSA can bestow, an Honorary Fellowship, in 1997.

In his final presentation to Senate in October 2009, he pointed out that it was 50 years (almost to the day) that he received his Fellowship of the College of Physicians and Surgeons of South Africa from the hands of the first President, Prof Guy Abercrombie Elliot. The most remarkable feat being the fact that over 45 years with 15 Presidents, there had only been two Secretaries, Mrs Ella Skea and Mrs Bernise Bothma the current CEO.

Dr Huskisson attended over 85 Council/Senate meetings and possibly as many admission ceremonies. He lived through three name changes of the College and had the honour of being Editor of Transactions for 18 years, Treasurer for 15 years and a Trustee of the Foundation for two full decades, over half of which he occupied the post as Secretary/Treasurer of the Foundation. He also had the honour of being an examiner in six different disciplines on well over 50 occasions.

Dr Huskisson said it was with a twinge of sadness, compensated by a sense of pride and fulfillment, that he was part of the development of the College from humble beginnings (in a small part-time office) to a truly national body, three buildings and staff in three centres and committees in each of them, that he wished to say farewell to an august body wishing the Senate great wisdom in its future decision making. It was his wish that the College would continue to expand and prosper and that all its visions would blossom in the future.

It is only fitting, therefore, that he will be receiving an illuminated scroll and a bound leather edition of his book entitled "The History of The Colleges of Medicine of South Africa: The First 50 Years" at a graduation ceremony of his choice.

#### **ASSOCIATION OF MEMBERS**

#### KwaZulu-Natal

Due to lack of interest there has been no activity during the year under review.

#### Western Cape

At a function for members in the Western Cape the President, Prof Zephne van der Spuy, welcomed the 2009 graduates. This was followed by an address by Prof Francois Venter entitled "HIV in South Africa : How are we doing?". Members were entertained to cocktails after the lecture.

The feasibility of this endeavour is currently under review.

#### LIONEL B GOLDSCHMIDT ARCHIVES LIBRARY

During the period under review, over 60 books and special issue historical journals were received, including anniversary issues from South African hospitals and universities. These items were all received as donations. In addition, a number of individual donations of books and memorabilia were received from College members.

The archival collection of papers and newsletters published by the CMSA were maintained.

Mrs Gillian Cress, College librarian, processed and catalogued all additions to the collection on Libwin, the library computer programme.

#### **CMSA PROPERTIES**

#### **Development of Durban Property**

A fundraising drive aimed at development of the four properties now owned by the CMSA in Glastonbury Place (directly opposite the Nelson R Mandela School of Medicine, University of KwaZulu-Natal) has not been very successful in the current economic climate. The Trustees are, however, continuing to pursue further fundraising initiatives.

#### **Cape Town Property (Rondebosch)**

The City Council has credited the College's rates account with R52 273.33 for the period 2009/2010.

#### LINKS WITH OTHER PROFESSIONAL BODIES

#### Health Professions Council of South Africa (HPCSA)

CMSA Representation on HPCSA Boards and Subcommittees

#### Medical and Dental Professions Board

The HPCSA endorsed the proposal by the CMSA that the President (the office rather than the individual) in future act as representative of the CMSA on the MDPB. Prof Anil Madaree will serve in this capacity for the remainder of his tenure of office on Senate.

Postgraduate Education and Training Committee (Medical and Dental)

With regard to representation of the CMSA on the PETC, the acting Registrar/CEO of the HPCSA, Mrs Marella O'Reilly, pointed out that it was the normal practice of the Board that members of the Subcommittees of the Board be elected from amongst the members of the Board. In terms of this, the Board would not appoint members to its Subcommittee if they were not members of the Board otherwise. In this regard, what the Board wuld possibly consider, was for the representative of the CMSA who would already be a member of the Board, to be elected to serve on the Postgraduate and Training Committee (PETC).

#### **National Departments of Health and Education**

The CMSA remain committed to assisting in the maintenance and improvement of the standard of healthcare and the training of doctors in South Africa and in renewed associations with the Department of Health and Department of Education, continue to make the expertise of CMSA members available to them.

## RELATIONS WITH SISTER COLLEGES AND ACADEMIES

Contact with Sister Colleges and Academies remain of extreme importance and every effort is made by the CMSA to attend their conferences and meetings. Intercollegiate relationships were fostered at the following meetings where the CMSA was represented:

#### The American Board of Pediatrics : Global Summit of Pediatric Credentialing Organizations held in Frankfurt, Germany from 17 – 19 July 2009

Representative: Prof Haroon Saloojee, President College of Paediatricians.

Academy of Medicine, Singapore : 43rd Singapore-Malaysia Congress of Medicine held in Singapore from 6 - 8 August 2009

Representative: Prof Zephne van der Spuy, President.

The Royal College of Physicians and Surgeons of Canada: 2009 International Conference on Residency Education

#### (ICRE) held in Victoria, British Columbia from 24 – 26 September 2009 (preceded by the International Medical Educators Leadership Forum on 23 September 2009)

Representative: Prof Zephne van der Spuy.

The College of Surgeons of East Central and Southern Africa (COSECSA): 10th Anniversay of the College and 60th Anniversary of The Association of Surgeons of East Afria (ASEA), Annual General Meeting and Scientific Conference held in Kigali, Rwanda from 2 – 4 December 2009

Representative: Prof Zephne van der Spuy.

#### ACKNOWLEDGEMENTS

The major role played by honorary officers, examiners, trustees, constituent College Council and committee and sub-committee members in ensuring the well being of the CMSA, is acknowledged with sincere appreciation.

A word of thanks is also extended particularly, to participants in the educational endeavours of the CMSA during the past year.

The full-time staff form an immensely important component of the infrastructure of the CMSA. Senate records its grateful thanks to each of them for the invaluable role that they play in the administration of the diverse activities of the College.

Bernise Bothma

CE0

#### MAURICE WEINBREN AWARD IN RADIOLOGY 2010

The award is offered annually (in respect of a calendar year) by the Senate of The Colleges of Medicine of South Africa for a paper of sufficient merit dealing either with radiodiagnosis, radiotherapy, nuclear medicine or diagnostic ultrasound.

The award consists of a Certificate and a Medal.

The closing date is **15 January 2011.** The Guidelines pertaining to the award can be requested from the CEO Mrs Bernise Bothma, CMSA, 17 Milner Road, Rondebosch, 7700.

Tel: (021) 689-9533, Fax: (021) 685-3766 and E-mail: bernise.ceo@colmedsa.co.za

#### R W S CHEETHAM AWARD IN PSYCHIATRY 2010

The award is offered annually (in respect of a calendar year) by the Senate of The Colleges of Medicine of South Africa for a published essay of sufficient merit on trans- or cross-cultural psychiatry, which may include a research or review article. All medical practitioners registered and practising in South Africa qualify for the award.

The award consists of a Certificate and a Medal.

The closing date is **15 January 2011.** The Guidelines pertaining to the award can be requested from the CEO Mrs Bernise Bothma, CMSA, 17 Milner Road, Rondebosch, 7700.

Tel: (021) 689-9533, Fax: (021) 685-3766 and E-mail: bernise.ceo@colmedsa.co.za

## CMSA CONSTITUENT COLLEGES

**College of Anaesthetists** CA (CMSA)

COLLEGE OF CARDIOTHORACIC SURGEONS CCS (CMSA)

COLLEGE OF CLINICAL PHARMACOLOGISTS CCP (CMSA)

**College of Dentistry** CD (CMSA)

**COLLEGE OF DERMATOLOGISTS** C DERM (CMSA)

**COLLEGE OF EMERGENCY MEDICINE** CEM (CMSA)

**College of Family Physicians** CFP (CMSA)

**COLLEGE OF FORENSIC PATHOLOGISTS** C FOR PATH (CMSA)

**COLLEGE OF MAXILLO-FACIAL AND ORAL SURGEONS** CMFOS (CMSA)

**College of Medical Geneticists** CMG (CMSA)

**COLLEGE OF NEUROLOGISTS** C NEUROL (CMSA)

**College of Neurosurgeons** C Neurosurg (CMSA)

**COLLEGE OF NUCLEAR PHYSICIANS** CNP (CMSA)

**COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS** COG (CMSA) **COLLEGE OF OPHTHALMOLOGISTS** C OPHTH (CMSA)

**COLLEGE OF ORTHOPAEDIC SURGEONS** C ORTH (CMSA)

**COLLEGE OF OTORHINOLARYNGOLOGISTS** C ORL (CMSA)

**COLLEGE OF PAEDIATRICIANS** C PAED (CMSA)

**COLLEGE OF PAEDIATRIC SURGEONS** CPS (CMSA)

**COLLEGE OF PATHOLOGISTS** C PATH (CMSA)

**College of Physicians** CP (CMSA)

**COLLEGE OF PLASTIC SURGEONS** C PLAST (CMSA)

**COLLEGE OF PSYCHIATRISTS** C PSYCH (CMSA)

COLLEGE OF PUBLIC HEALTH MEDICINE (INCLUDING OCCUPATIONAL MEDICINE) CPHM (CMSA)

COLLEGE OF RADIATION ONCOLOGISTS CRO (CMSA)

**COLLEGE OF RADIOLOGISTS** CR (CMSA)

**College of Surgeons** CS (CMSA)

**COLLEGE OF UROLOGISTS** CU (CMSA)

## Annual Reports of the Constituent Colleges 2009 – 2010

#### **COLLEGE OF ANAESTHETISTS**

As would be expected, College Council was largely occupied with examination related matters in the period under review.

A major accomplishment was the finalisation of the examiner's handbook which incorporates all our examination offerings, being the diploma, primary, exit and certificate examinations. This handbook details all aspects of the examination process including setup and conduct and also addresses the role and obligations of observers to our examinations. I am particularly grateful to Drs Gopalan and Joubert for compiling this document.

Another area of activity was addressing the quality of feedback to candidates and teachers, especially following an unsuccessful attempt at the examination. In this regard a formal feedback instrument has been developed to assist both the candidate and their teachers in preparing for the next examination attempt.

The FCA(SA) Part I remains the most difficult to arrange, principally due to the small pool of examiners available for this examination. Numerous and various means have been tried to attract more colleagues to participate in this examination but largely without success. College Council has thus approved a plan to reintroduce the FCA(SA) I examiners meeting as a strategy to address the difficulty highlighted. It is hoped that this will present an opportunity for colleagues to interact more meaningfully and perhaps encourage one another to get or stay involved in the primary examinations. Other potential benefits are that such a grouping would compile the questions for the next examination and also assist Council with nominations for the next examiners panels. This will obviously have implications for the College, but it is nonetheless a very necessary step in improving the quality, fairness and reliability of the primary examinations. To further enhance examination processes, both the FCA(SA) I and FCA(SA) II will hold workshops for examiners in the second half of 2010.

As regards linkages with external colleagues and organisations, I am pleased to report that our College has nominated Prof John Sear from Oxford University for Honorary Fellowship and that he has accepted this honour. Prof Sear is an icon of anaesthesia internationally and our College is privileged indeed to be associated with him.

The College of Anaesthetists held its annual general meeting in March this year on the occasion of the annual congress of the South African Society of Anaesthesiologists (SASA) which was held in Bloemfontein. Flowing from this our two organisations will be working more closely together and this will benefit our College enormously, especially as regards support for some of our educational projects.

Prof Arthur Rantloane PRESIDENT

#### **COLLEGE OF CARDIOTHORACIC SURGEONS**

From reservations recently expressed about the format of the Fellowship examination, changes, effective as of September 2010, have been made to the current structure of the written paper, such that the three broad components of Cardiothoracic Surgery viz general thoracic surgery, cardiovascular surgery (acquired and congenital) are proportionally represented in line with blue-printing

With the use and submission by candidates of the Portfolio of Learning (logbooks) in its current standardised format, now routinely employed by all the academic departments, examination conveners who review these records (and hence the College Council) have become aware of the disparate training in the various units in the country, raising concerns about the quality and volume of exposure to surgical disease and technical skills development. This sensitive and disconcerting feature maybe reflected in the performance of the candidate in the Fellowship examination.

As a Council, a decision on the ratio of trainer to trainee to workload needs to be made and adjusted to obtain optimal exposure and expertise within a limited time-frame. The latter issue, i.e. training time for cardiothoracic surgeons is another source of contention. In this regard the phrase "exit exam" is a misnomer as it presumes that, having favourably acquitted oneself in the Fellowship examination the candidate is suitably qualified for independent practice. Four winters is universally accepted as an inadequate training period. The CMSA does not function in a vacuum. It is incandescently clear that the three eminent bodies : University (badge), Department of Health (purse strings), HPCSA (rubber stamper) need to function in unison and synchronously to establish seamless training schemes.

#### Prof Anu Reddi PRESIDENT

#### **COLLEGE OF CLINICAL PHARMACOLOGISTS**

#### Regulations

The HPCSA has recognised clinical pharmacology as a stand-alone speciality, but this still has to be gazetted.

#### Membership

The following candidates were nominated as Associates of the College of Clinical Pharmacologists:

Prof E N Kwizera : Walter Sisulu University Dr T Kredo : University of Cape Town Dr K Cohen : University of Cape Town Prof K I Barens : University of Cape Town Dr O Ebrahim : University of Cape Town Dr R de B Gounden : University of Stellenbosch Dr M F P C van Jaarsveld : University of the Free State Dr C M Smith : University of the Free State Dr P M van Zyl : University of the Free State Dr P Mugabo : University of the Western Cape

#### Examinations

The FC Clin Pharm(SA) Part I was held for the first time in March/May 2010. One candidate entered the examination and passed.

#### **Annual General Meeting**

The first annual general meeting of the CCP was held at the North-West University, Potchefstroom on 24 September 2009 during the 5th International Congress of Pharmaceutical and Pharmacological Sciences (5th ICPPS 2009) attended by Prof G Maartens (President), Prof E Osuch (Secretary), Prof B Rosenkranz, Prof J R Snyman and Prof O B W Greeff.

#### Prof Elzbieta Osuch SECRETARY

#### **COLLEGE OF DENTISTRY**

During the past year the College has been trying to develop the various postgraduate dental curricula to meet the changing needs of the country. The President and Secretary attended the strategic planning courses and have presented their ideas to various stakeholders at the four Dental teaching Universities, requesting their input and feedback. There was unfortunately not much response, but despite this they have begun to work on and refine the portfolios for each of the disciplines. A proposal has been submitted to the CMSA offering candidates an opportunity to complete a Diploma course in Implantology. This will now be sent to Senate for ratification.

Many of the old members have retired and as such a number of changes were made to the old list of examiners. It is hoped that the newly elected pool of examiners will bring a fresh approach to the College and stimulate more candidates to register in the future. The retired members also left the College with a much reduced membership list. As such the committee have begun to actively seek out potentially qualified specialists who can be considered for Associateship. The committee is busy assimilating and reviewing their CVs and hope to short list suitable candidates within the next three months. This focus is to include specialists from all the disciplines and from all regions in South Africa so that all branches of dentistry will be more fully represented. We are hoping they will encourage registrars in their home institutions to enrol for the College examinations and look forward to an increased number of dental specialists receiving College Fellowships in the near future.

Prof Leanne Sykes PRESIDENT Dr Rashid Chamda SECRETARY

#### **COLLEGE OF DERMATOLOGISTS**

It is my pleasure to present this annual report of the College of Dermatologists.

The highest number of candidates passed the FC Derm(SA) examinations in May 2010. We had 6 successful candidates in the Part 1 examinations and 10 out of 13 successful candidates in the final examinations. The clinical examinations were held in Bloemfontein and Prof W Sinclair must be commended for his excellent convening.

The successful candidates were:

Part 1: Isaacs Thuraya, Misra Rupesh, Mokwena Tshepo Trevor, Moosa Muhammed-Ammen, Nkgapele Mabu Julia, Ntombela Bubele Magnificent.

Part 2: Browne Ilsphi, Clur Bernhard Philip, Esmail Fatema, Hoffman Tess-Man, Lalloo Yashmita, Mkhize Zamambo Noguthando Carol, Moodley Mahendran Perianathan, Moti-Joosub Nooren-Nisa Razak, Ramkisson Ishaan, Skenjana Andiswa.

The dermatology portfolio will be implemented in 2011. The finalised version will be posted on the website. The consensus was that the departmental heads will modify the portfolio and use it to fulfill the specific departmental requirements.

Much time was spent on examination matters at the annual Council meeting of our College which was held at Spiers in May 2010. The time allocations, types of medical and dermatology cases and histopathological conditions were clarified that should be chosen for the clinical examinations. The roles of the moderators and convenors of both the Part 1 and 2 examinations were also defined. These will also be posted on the website.

#### Prof Jamila Aboobaker PRESIDENT

#### **COLLEGE OF EMERGENCY MEDICINE**

It is a great privilege to present the sixth Annual Report of the College of Emergency Medicine of South Africa. It is pleasing to note that the discipline of emergency medicine continues to grow from strength to strength, as reflected in the following activities and achievements.

#### **Elected Councillors**

- Dr Walter Kloeck (President and Senate Representative)
- Dr Roger Dickerson (Secretary)
- Dr William Lubinga (Senate Representative)
- Dr Michael Wells
- Dr George Dimopoulos
- Dr Caryn Frith (Diplomate Representative)
- Dr Nicola Rains (Diplomate Representative)

#### **University Representation**

Six South African medical universities now offer post-graduate registrar training in emergency medicine. Representatives of all six universities have been elected or co-opted onto the Council of the College of Emergency Medicine:

 Professor Lee Wallis – Universities of Cape Town and Stellenbosch

- Professor Efraim Kramer University of the Witwatersrand
- Professor Andreas Engelbrecht University of Pretoria
- Dr William Lubinga University of Limpopo
- Dr Pravindas Hargovan University of KwaZulu-Natal

We are pleased to note that the University of KwaZulu-Natal has now been accredited by the Health Professions Council of South Africa to offer emergency medicine registrar training and we welcome Dr Hargovan onto our Council as their university representative.

Our College actively pursues a policy of close co-operation and consensus between all major academic institutions involved in the training and provision of emergency care, a goal which is essential for the uniformity and development of our new specialty.

#### Fellowship by Peer Review

Fellowship of the College of Emergency Medicine (FCEM(SA)) by peer review has been awarded by the CMSA to the following two leaders in the field of emergency medicine for their ongoing dedication and commitment to the development of emergency medicine in South Africa:

- Dr Michael Wells
- Dr Roger Dickerson

#### Associateship

In recognition of his active involvement in disaster medicine and emergency care in this country, Dr Wayne Smith was nominated as an Associate of the College of Emergency Medicine.

#### Diploma in Primary Emergency Care (DipPEC(SA))

To date, a total of 519 candidates have successfully obtained the Diploma in Primary Emergency Care (DipPEC(SA)) qualification since the CMSA first introduced this examination in 1986.

The regulations for the DipPEC(SA) have been revised, allowing the Diploma examination to be more accessible to all medical practitioners with an active interest and involvement in emergency care and not only those based in selected casualty and emergency departments. Doctors based at any hospital that is accredited by the HPCSA for intern training, as well as numerous private hospitals, are now able to submit a comprehensive "portfolio of learning" in support of their application to write the examination.

The syllabus for the Diploma has also been revised, with less emphasis on basic sciences and greater emphasis on clinical and environmental aspects of emergency care. A formal resuscitation skills assessment has been added to the OSCE component of the examination, further enhancing the practical competence of successful candidates.

Many thanks are extended to our Diplomate representatives, Dr Caryn Frith and Dr Nicky Rains, for revising and updating this exciting Diploma.

Dr C Laubscher and Dr S Singh are to be congratulated on being the 2009 medal recipients for the DipPEC(SA) examination.

#### **Higher Diploma in Emergency Medicine**

The College of Emergency Medicine will be introducing a Higher Diploma in Emergency Medicine as from next year. The Higher Diploma will be open to candidates who have held the Diploma in Primary Emergency Care (or equivalent) for at least 2 years and is intended to empower medical practitioners actively involved in the practice of emergency medicine to supervise and train junior doctors in the skills and procedures required to practise safe and effective acute medical care.

Thanks are extended to Dr Mike Wells for his input into the development of this new Higher Diploma.

## Fellowship of the College of Emergency Medicine (FCEM(SA))

To date, the College of Emergency Medicine has 13 candidates who have successfully passed the FCEM(SA) Part 2 Examination and are registered as specialists in emergency medicine. In addition, 36 candidates have successfully completed the FCEM(SA) Part 1 Examination and 9 additional candidates have obtained credits in one or more of the four basic sciences subjects (anatomy, pathology, physiology and pharmacology).

As from January 2010, the four basic science subjects are being examined in combination rather than separately and the basic sciences credit system will be phased out over the following 18 months.

Training in emergency ultrasonography has become a compulsory entry requirement for candidates attempting the FCEM(SA) Part 2 Examination as from July 2010, in line with international trends advocating the importance of this valuable diagnostic tool in emergency care. Dr Mike Wells and Dr Stevan Bruijns are thanked for the extensive preparatory documentation provided in this regard and for agreeing to co-ordinate training programmes and certification in emergency ultrasonography countrywide.

#### **Subspecialty in Critical Care**

It is pleasing to note that the specialty of emergency medicine has been accredited by the HPCSA as a base specialty for subspecialist training in critical care.

#### **Emergency-Related Short Courses**

A comprehensive and updated list of emergency-related short courses available in South Africa is available on the CMSA Website to assist candidates in their preparation for College examinations, as well as providing a useful resource for all post-graduate doctors practising in South Africa.

As a membership benefit, a discount of R100-00 is offered to all paid-up members of the CMSA on many of the listed courses. The College extends its appreciation to all these training organisations for their continued support and encourages College members to take advantage of this offer.

#### **Emergency Medicine Society of South Africa**

It is very pleasing to note that many recipients of the DipPEC(SA) have joined the Emergency Medicine Society of South Africa (EMSSA), adding strength to the growing voice of Emergency Medicine in South Africa. Medical practitioners with an interest in emergency medicine are encouraged to join EMSSA and benefit from the wide range of activities, practice guidelines, congresses, courses and learning opportunities that EMSSA has to offer. Details are available from the website "www.emssa.org.za".

#### **African Federation of Emergency Medicine**

Several universities in other parts of Africa, such as Botswana, Malawi and Ghana, have indicated an interest in developing formal emergency medicine training programmes and establishing an African Federation of Emergency Medicine. Our College is fully supportive of this trend and is actively involved in assisting in this regard.

#### Membership of the College of Emergency Medicine

Following the establishment of the College of Emergency Medicine of South Africa in May 2004, we are pleased to report significant growth in all our membership categories:

- 34 Fellows
- 9 Associates
- 519 Diplomates

The College of Emergency Medicine is proud of all medical practitioners who strive to raise the practice of emergency care in our country and is pleased to be able to honour and reward colleagues who achieve excellence in this vast discipline.

Dr Walter Kloeck Dr Roger Dickerson PRESIDENT SECRETARY

#### **COLLEGE OF FAMILY PHYSICIANS**

The Council of the College of Family Physicians held its annual faceto-face meeting on 25 May 2010 at the CMSA offices, Johannesburg. Having discussed various matters, the following were resolved:

#### FCP(SA) Examination

The first FCFP(SA) Part 1 examination was scheduled for the August/ October 2010 CMSA examinations. The CFP Council agreed that each Family Medicine department would nominate one examiner. In addition, a panel of 3 moderators was nominated to review the question papers. The finalisation of examination questions was to be completed by the convener, Prof S S Naidoo. The generic portfolio to be used for the candidates was discussed. It was decided that the portfolio template on the CMSA web-site would be populated, taking into consideration the portfolios of the various departments of Family Medicine and that for the first set of candidates, the HODs should send their logbooks and compliance letters to the CFP for verification.

#### **Higher Diploma in Family Medicine**

The CFP Council discussed the introduction of a Higher Diploma in Family Medicine within the College of Family Physicians. The regulations, including the curriculum, were reviewed extensively and it was agreed that a revised copy would be compiled and approved by the Council before presentation to the CMSA Examinations and Credentials Committee.

#### Lesotho-Boston Family Medicine Training Programme

A request was received from the Lesotho-Boston Family Medicine Training Programme to review their Family Medicine residency programme with the view of endorsing this. The Council agreed to send a 2-person team to visit the training sites in Lesotho and to review the residency programme. A report was to be compiled and distributed to Council members after the visit for a final decision.

#### Rotation of registrars through general practice sites

The possibility of Family Medicine registrars rotating through accredited GP sites was discussed. According to HPCSA's regulations, a 3-month maximum rotation was allowed without HPCSA approval. The Council decided to review this issue at a later date.

#### **CMSA Officers**

The Council noted with pleasure that Prof Gboyega Ogunbanjo was elected to the position of Senior Vice President of the CMSA in May 2010 and will be serving in that capacity until May 2013.

#### Date of next CFP council meeting

It was agreed that the next meeting would take place in Durban on 13 October 2010.

Prof Gboyega Ogunbanjo	Prof Soornarain Naidoo
PRESIDENT	SECRETARY

#### **COLLEGE OF FORENSIC PATHOLOGISTS**

The College of Forensic Pathologists held a full Council meeting in Cape Town during October 2009, the first for several years. It was resolved to, as far as possible, meet at least on an annual basis.

At this meeting decisions were taken to change the format of the FC For Path(SA) examination. These changes were subsequently approved by the Examinations and Credentials Committee and ratified by Senate and come into effect with the August/October examinations in 2010. The Part I of the FC For Path(SA) examinations previously comprised one 3-hour written paper, one 3-hour histopathology slide practical and a 45 minute oral examination. The oral examination has now been removed and instead, there will be two 3-hour written papers. In addition, both the FC For Path(SA) Part I and II histopathology slide practical examinations will now be held in the relevant University Departments around the country during the week of the written examinations. This will reduce travel costs for both the candidates and the CMSA. The Part II examination for the FC For Path(SA) will now include an autopsy examination during the practical/oral CMSA examination week as a permanent component, where previously it was an option that was available to be used at the discretion of the examiners panel, but that was seldom included.

Our College welcomed a number of new Fellows and Diplomates during the past 12 months. We wish to extend our warmest congratulations and welcome to all these new CMSA members:

FC For Path(SA) II Graduates:

Dr Hestelle Nel, Dr Clive Moodley, Dr Sonata Walraven.

Dip For Med(SA) Path Graduates: Dr Estevão Afonso, Dr Akmal Khan, Dr Venessen Pillay, Dr Sandra van der Nest.

Dip For Med(SA) Clin Graduates: Dr Adri Krieger, Dr Donovan Andrews, Dr Malesiba Selepe. On behalf of our Council, I would like to express my sincere thanks to Mrs Ann Vorster and Mrs Bernise Bothma, as well as their administrative staff for their ongoing support, advice and assistance.

#### Dr Gavin Kirk SECRETARY

## COLLEGE OF MAXILLO-FACIAL AND ORAL SURGEONS

It is a pleasure to present the annual report of the College of Maxillo-Facial and Oral Surgeons for the period 1 June 2009 to 31 May 2010.

A meeting of the Council was held on 5 August 2009. Following this meeting:

- The constitution of the CMFOS was reviewed and changes were made.
- The examination regulations and portfolios were revised and published on the web in May 2010. The Regulations will allow for an equivalent examination with international Colleges.

Contact was made with the West African College of Surgeons and the National Postgraduate Medical College of Nigeria. Presently a concept "Memorandum of Understanding" is being prepared for discussion and implementation.

In August/October 2009 there were three successful candidates in the primary examination and in March/May 2010, there was one successful candidate in each of the primary and intermediate examinations and two successful candidates in the final examination.

On behalf of the College of Maxillo-Facial and Oral Surgeons, I would like to thank the College Council and the CMSA staff in the Cape Town, Durban and Johannesburg offices for ongoing support.

Dr Suvir Singh SECRETARY

#### **COLLEGE OF MEDICAL GENETICISTS**

The College of Medical Genetics was constituted in 2008, as training in the new full specialty of Medical Genetics is now offered.

The first three registrars have registered to write the FCMG(SA) Part 1 in August 2010.

Concerns have been voiced by the Council on the severe shortage of consultant medical geneticists and the difficulties in obtaining training posts for registrars, thus severely limiting our ability to train.

Prof Amanda Krause SECRETARY

#### **COLLEGE OF NEUROLOGISTS**

#### **Council Meeting**

All 9 members attended the annual Council meeting in Johannesburg on 12 February 2010.

#### Examinations

At the Council meeting, final changes were made to the Neurology Portfolio which will be used by all Neurology trainees who start their specialisation in 2010. No changes were made to the syllabi for the FC Neurol(SA) Parts 1 and 2 examination. Concerns were raised about the conduct of the neurology examination and all convenors and examiners will be reminded to adhere to the agreed regulations. The panel of examiners was updated. The Sigo Nielsen medal for Part 1 and Novartis medal for Part 2 of the FC Neurol(SA) will be retained. The regulations for the Diploma in Sleep Medicine will be updated to enable trainees to complete there training either on a full time or part-time basis.

#### **K M Browse Research Scholarship**

This scholarship will be advertised in 2010 to the value of R30 000.

#### **CMSA Meetings**

Professors Roland Eastman and Bryan Kies represented the College of Neurologists at the CMSA Senate meetings and Finance and General Purposes Committee meetings.

#### **Annual Subscriptions**

All our members are encouraged to maintain their annual subscriptions and so ensure that our College is able to continue its core function of maintaining academic standards in College specialist examinations.

#### **CMSA Project**

The CMSA project "Strengthening Academic Medicine and Specialist Training" continues to make good progress. There have been engagements with the ministries of health, education and other stake holders. A key proposal will be that the funding and control of specialist training should be managed nationally rather than provincially.

Prof Bryan Kies SECRETARY

#### **COLLEGE OF NEUROSURGEONS**

The annual meeting of the Neurosurgical College Council was held on 7 August 2009, in the J G van der Horst room at the Cape Town office of the CMSA. The following members were present: Prof H B Hartzenberg, Prof P Semple, Prof G Fieggen, Dr M du Trevou, Dr S Nadvi, Prof R Gopal, Dr N Fisher-Jeffes and Dr P L Lekgwara, acting head of Neurosurgery at Medunsa, who attended by invitation. It was decided that Dr Lekgwara would be co-opted to the Council when he was appointed as Head of the Department at Medunsa.

The August – October 2009 Neurosurgery final examination was convened by Prof H B Hartzenberg at Tygerberg academic hospital. One candidate wrote the examination and passed.

The March – May 2010 clinical and oral examination was held in Bloemfontein, convened by Prof G Fieggen of the University of Cape Town and ably assisted by Dr D Hugo (acting Head of Neurosurgery at the University of the Free State). Out of the 6 candidates who wrote the examination, 4 were invited to do the clinical and oral examination and 3 successfully passed the examination. Our thanks go to Prof Fieggen and Dr Hugo and his staff for hosting the examination. Profs G Fieggen, R Gopal, H B Hartzenberg, M S M Mokgokong and P Semple, and Drs M D du Trevou and N Govender are thanked for their participation in the above examinations. Dr N Fisher Jeffes has been the convenor of the neuro-anatomy part of the FCS primary examination for a number of years. He has been assisted by Dr J Ouma (Wits) and Dr E Kiratu (UKZN) over the past year. They are congratulated and thanked for their work in this regard.

The logbook became a requirement for the neurosurgery final examination in 2010 and is a matter that requires scrutiny, particularly in terms of who scrutinises it and how it should be used in assessing candidates for their readiness to practice as a specialist after obtaining the FC Neurosurg(SA).

The next Council meeting of the College of Neurosurgeons is scheduled to take place at the 21st Biennial Congress of the Society of Neurosurgeons in September 2010.

Prof Bennie Hartzenberg PRESIDENT

#### **COLLEGE OF NUCLEAR PHYSICIANS**

The College of Nuclear Physicians is continuing to grow in terms of the number of Fellows. This will be of benefit to our training as well as expanding the pool of potential examiners. Coupled to this growth, CNP would like to appeal to the policy makers to expand nuclear medicine services and other disciplines to secondary hospitals/centres. Not only would this help with training of both medical students and specialists, it would most definitely be crucial to improving access to quality health care systems.

All departments are urged to remind registrars who have been enrolled from 2010 about the student portfolio which will be compulsory prior to being admitted for the FCNP(SA) Part II examination. Candidates are reminded to rotate in other departments in cases where there are limitations in their own institutions. Furthermore, with effect from the previous year, the Part II examination clinical cases may be reviewed on a workstation, to give the candidates the benefit of reporting as they are used to in the real work situation. We also wish to thank the examiners and fellows for the successful introduction of a moderator in the examination system; this will be beneficial in terms of quality and fairness.

CNP would also like to thank the CMSA for according smaller Colleges equal opportunity by appointing a CNP Senator to the important role of Honorary Registrar of the Examinations and Credentials Committee.

Prof Annare Ellmann PRESIDENT

#### Prof Mike Sathekge SECRETARY

## COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS

The Council of COG met twice in the report year, as always once per semester, organised by the Secretary Prof D W Steyn. Attendance at the meetings is very good.

The COG expresses its immense gratitude to colleagues who are prepared to serve the College and who have done so with distinction. The COG is fortunate to have in place a Part I examination committee (lead by Prof E Buchmann), a Part II examination committee (lead by Prof F Guidozzi) and a Diploma committee (lead by Dr C Stewart). Likewise, for the three subspecialties there are driving teams for each: (Fetomaternal - Profs J Anthony and D W Steyn: Gynaecologic Oncology - Profs B G Lindeque and G Dreyer and Reproductive Medicine - Profs Z M van der Spuy and T Kruger). All these committees report to the COG council. Not only are examinations planned in detail, but the curricula are revised continuously.

## The COG offered the following examinations in the year of report:

FCOG(SA) Parts I and II Dip Obst(SA) Cert Gynaecol Oncol(SA) Cert Fetomaternal Med(SA) Cert Reprod Med(SA)

The COG is thus pleased to report that examinations for all subspecialties have now been implemented with successful candidates having received the relevant certificates.

COG once again took part in all the CMSA initiatives of the past year to improve the quality of the examination process. The portfolio system has been all but finalised for all exit examinations. CMSA Senate is attended by the President of the COG and by Prof J Bagratee.

Other activities of COG include the J C Coetzee programme. This sponsorship allows a year long programme of continuing education primarily aimed at general practitioners in towns and rural areas. Once again thanks are expressed to those colleagues who took part in the various J C Coetzee programmes.

The following kindly examined during the year under review:

August/September/October 2009

#### FCOG(SA) Part I

Prof G Dreyer (Convenor) Prof S L Levin Dr L Matsela Dr T D Naidoo Prof M J Matjila Dr H van Zyl Dr T Siebert Dr PJ Swart

#### FCOG(SA) Part II

Prof T F Kruger (Convenor) Dr M H Botha Prof S J Dyer Dr L Govender Dr T Smith Prof L C Snyman Dr H M Sebitloane Prof E J Buchmann (written only) Prof D W Steyn (oral only)

#### **Observers:**

Dr G A Petro Dr J A van Rensburg Dr F H van der Merwe

#### Dip Obst(SA)

Dr T Matinde (Convenor) Dr P Soma-Pillay Dr B Hira Dr T A Horak Dr D H A Amoko Dr H van Zyl

#### Cert Maternal & Fetal Medicine(SA)

Prof D W Steyn (Convenor) Dr L K Schoeman

#### Cert Reproductive Medicine(SA)

Prof J S Bagratee (Convenor) Dr K van der Merwe

#### **Observer:**

Prof Z M van der Spuy

#### March/April/May 2010

#### FCOG(SA) Part I

Prof J Anthony (Convenor) Dr T A Horak Dr J A van Rensburg Dr H A du T Lombaard Dr Z Sheik Dr A Muse Prof B F Cooreman Dr R Gangaram Dr P Naidoo Dr T D Naidoo

#### FCOG(SA) Part II

Prof P H Wessels (Convenor) Dr L Smith Prof G Dreyer Dr H C Maise Prof G B Theron Prof Z M van der Spuy Prof L Denny Prof S Levin

#### Dip Obst(SA)

Dr J D Nortje (Convenor) Dr M J Titus Dr W Edridge Dr L Matsela Dr Z Sheik Dr H Ramnarain

Prof B G Lindeque PRESIDENT

#### **COLLEGE OF OPHTHALMOLOGISTS**

The College of Ophthalmologists enthusiastically supports the principle of a national unitary exit examination for all ophthalmologists trained in the Republic of South Africa. In order to ensure maximum participation towards this ideal, the Council now has wide representation from all the eight Faculties of Health Sciences in South Africa. Clearly the Ophthalmological Society of South Africa, the departments/ divisions of Ophthalmology of the eight faculties of health sciences and the College of Ophthalmologists (CMSA) will mutually benefit from a high-quality working relationship as these entities share the goal of maintaining the best quality eye care possible for South Africans.

#### African Outreach

Outreach to countries on the African continent has been and is an important initiative of our College. Several Cuncillors in their institutional capacities have active ongoing outreach programs. Prof Colin Cook heads the Institute of Community Eye Health based at the University of Cape Town. This organisation, in conjunction with non-governmental agencies, promotes the quality of clinical and academic ophthalmology through a large part of sub-Saharan Africa and by offering training courses at the University of Cape Town.

Prof Polla Roux from the University of Pretoria is currently training three registrars from Rwanda, Tunisia and Cameroen. One Fellow in retinal surgery, sponsored by the non-governmental organisation Orbis, is from Ethiopia. Professor Roux personally also visited Gondar, Ehtiopia and performed the first retinal surgery in that country during this period. Besides training a registrar from Namibia, the country was also visited on several occasions during the report period by Prof David Meyer, Stellenbosch University, where he performed complex subspecialty ophthalmic surgery on special cases at the State Hospital in Windhoek. During these visits academic activities include surgical and clinical skills transfer to local surgeons as well as full academic evening sessions with CME activity presented by Prof Meyer.

#### **New Curriculum**

The Council of the College of Ophthalmologists has recently received approval from the Examinations and Credentials Committee to adjust both the Fellowship and Diploma curricula. The guiding principle was parity with international colleges as well as ensuring a national uniform exit examination for specialists. The new regulations for the Fellowship examination will take effect 1 January 2011 and the new regulations for the Diploma are in effect for 2010 already. The most significant changes to the Fellowship curriculum are the following:

- Clearly indicated objectives, essential clinical experience, mandatory competence and desirable clinical experience for each of the sub-sections of the FC Ophth(SA) Part II syllabus.
- The introduction of an Intermediate Examination comprising two modules, one in Pathology and the other in Clinical Optics. During the practical examination of the latter a clinical refraction will form part of the assessment of the candidate.
- Support of the new HPCSA requirement of evidence of a completed postgraduate research project in the discipline prior to granting eligibility for registration as a specialist.
- · A portfolio as a required document to be handed in at the final

examination for assessment by the examiners. The portfolio will contain a full record of all learning activities during the candidate's registrarship including surgical record, clinical rotations, outreach activities, academic lectures/workshops attended or presented, academic ward rounds attended, research/publications etc.

 Adjustment to the format of the examination whereby written examinations may consist of a combination of long essay like, short and MCQ type questions, with sub minimums of 50% in each section of the examination.

It was agreed by Council that the need existed for an annual national registrar meeting, with a view to grooming examination skills and hence improving the outcome of C Ophth(SA) examinations. Prof Juzer Surka from Walter Sisulu University was nominated to drive this process.

On a national level the College of Ophthalmologists is dedicated and geared to support all initiatives to achieve the goal of producing the best specialist ophthalmologists for all the people of South Africa

#### Prof David Meyer PRESIDENT

#### **COLLEGE OF ORTHOPAEDIC SURGEONS**

The College Council holds regular meetings throughout the year, with an annual general meeting at the annual congress of the South African Orthopaedic Association in September.

There has in the past been concern regarding the high failure rate in the intermediate examination for the specialist degree. After consultation with the general surgeons it has been decided that the College of Orthopaedic Surgeons will conduct the examination, which will be in 2 parts. Part 1 will be intensive care treatment and principles of surgery, whereas part 2 will focus on principles of orthopaedic surgery. It is felt that a knowledge of general surgery is no longer necessary. The new guidelines have been handed to the College for publication on the website and have been in force since the last College examinations held in Bloemfontein.

Following past concern about the lack of awarding the Edelstein medal for overall excellence in the final orthopaedic examination, this medal was awarded to Dr T W Parker in 2009. Candidates will be identified during the 2010 examinations and the most successful candidate will be awarded the medal this year as well.

Professor B G P Lindeque delivered the Francois P Fouché lecture at the annual South African Orthopaedic Association (SAOA) congress in 2009. The lecture was of a high standard. The 2010 lecture is to be delivered by Professor C Duncan from Vancouver, Canada. He is an international expert on joint arthroplasty and we look forward to hearing his address.

Prof Anton Schepers PRESIDENT

#### **COLLEGE OF OTORHINOLARYNGOLOGISTS**

*Office bearers at present:* President: Claassen A J Secretary: Fagan J J **Representatives CMSA Senate:** Claassen A J Ramages L J

Other Council Members: Davidge-Pitts K J Joseph C A Loock J W Modi P C Seedat R Y Tshifularo M I Wagenfeld D J H

The examination curriculum and regulations were revised during the past year at a special meeting held in Cape Town.

The new Primary Examination is now well established and running. It is very much a discipline orientated examination.

In addition to the above, the College of Otorhinolaryngologists had a look at what minimal standards for post-graduate training should be. This was of extreme importance to secure standards for the future. A document to this effect was compiled, with thanks to Prof Johan Fagan.

The College of Otorhinolaryngologists have been functioning satisfactorily with regard to the present needs of the discipline. Members of Council have the same interests at heart and work together in achieving what is regarded as best for Otorhinolaryngology and Head and Neck Surgery.

Prof André Claassen PRESIDENT

#### **COLLEGE OF PAEDIATRICIANS**

There are two main activities to report on for this period.

#### Certificate (sub-specialty) examinations

A considerable effort was expended this year on ensuring uniformity in standards, requirements and assessment techniques for the ten Certificate examinations offered by the College of Paediatricians. This work has been spearheaded by the College's Certificate working group, led by Prof Robin Green. Revised guidelines now exist for all Certificate examinations and candidates will encounter the new assessment and examination system in March 2011. The revised guidelines, curricula and details about examinations are available on the CMSA web site (from August 2010).

#### **Global Paediatrician initiative**

The College of Paediatricians has joined 17 other Colleges internationally in an alliance to explore ways in which child healthcare can be transformed by improving the quality of training and assessment of paediatricians. The Global Pediatric Education Consortium (GPEC) includes leaders from education, assessment and standard-setting bodies from resource rich and poor countries. During the past year, the GPEC have been engaged in a process to define, develop and implement a standard approach to postgraduate training and assessment in general paediatrics. Members of the GPEC strongly believe that improved training in paediatrics and child health will inevitably lead to improved care of children worldwide. The GPEC has convened two Global Pediatric Summits over the past 18 months; both held in Frankfurt, Germany. The College of Paediatricians (CMSA) was represented Prof Haroon Saloojee. The group reached consensus on its common vision and mission. The consortium agreed to collaborate in drafting a standard curriculum for postgraduate training in general paediatrics. This curriculum will embody the core elements that are representative of physician competency and inclusive of worldwide best practices. The foundation of the curriculum will be a competency-based framework, with an emphasis on formative and summative assessments to ensure high-quality training. The College of Paediatricians is committed to contributing to this process as it develops.

I wish to thank the CMSA staff at all three regional centres for the fantastic support they offer the College in the various activities we undertake.

#### Prof Haroon Saloojee PRESIDENT

#### **COLLEGE OF PATHOLOGISTS**

The College of Pathologists continues to offer seven different Fellowship examinations and a certificate examination in the various disciplines of pathology. The challenge remains the relatively small examiner pool. The Council has made a concerted effort to induct new faces into the examiners pool in the form of observers and new examiners and will strive to continue doing so in future.

The core business of examining has been successful with each discipline maintaining the high standard of examination synonymous with the CMSA.

All portfolios are in place, with the clinical pathology portfolio just having being finalised. Curriculum review is underway with only clinical pathology lagging behind. As we move towards a unitary examination the executive believes that the pathology disciplines are well placed to meet the challenges of conducting a unitary examination, whilst the HPCSA-required research component necessary for registration will remain the responsibility of the universities and the university departments of pathology.

The executive has begun forging more formal links with the Royal College of Pathologists (UK) and a draft memorandum of understanding (MOU) with the RCPath has been submitted to their executive for discussion. A memorandum of understanding with the West African College of Pathologists awaits finalisation, having been referred back to them for approval. It is probable that similar MOUs will be drawn up with colleges in East Africa, particularly as COPECSA comes into being formally.

The annual meeting of the international liaison committee of Presidents of Colleges of Pathology (ILCP) will be held in the first week of September in Hong Kong and will be hosted by the College of Pathologists of Hong Kong. This provides a further vehicle for interaction with colleagues from the Colleges of Pathology of most major English speaking countries.

We wish to thank the administrative staff of the CMSA, particularly Mrs Bernise Bothma. the CEO and Mrs Ann Vorster, the Academic registrar and all their dedicated staff for their tireless work and efficiency in running the College and the examinations respectively, as well as the councillors of the College of Pathologists and all convenors and examiners for their hard work and support during the past year.

Finally we thank Professor Zephne van der Spuy for all the hard work she has done on behalf of the Colleges over the past three years as President of the CMSA and welcome Prof Anil Madaree as the new president of the CMSA.

Prof Simon Nayler PRESIDENT Prof Johnny Mahlangu SECRETARY

#### **COLLEGE OF PHYSICIANS**

The main activities of the period under review were (1) the reform of the format of the FCP(SA) Part I examination; (2) the appointment of Arthur Landau Lecturers for 2010/2011 and (3) the planning of the Joint Conference of the Royal College of Physicians of London and the College of Physicians of South Africa which will take place in Cape Town in March 2011.

A workshop with 16 participants representing all the medical schools was held in August 2009 and a subsequent meeting was held on Sunday 11 October 2009 to develop a bank of MCQs for the FCP(SA) Part I examination. Questions for the first paper will be finalised by the end of May 2010. The new MCQ format of the FCP(SA) Part I examination will be implemented in August 2011 under the guidance of the Education Sub-committee.

The 2010 Arthur Landau Lecturer is Professor Sarala Naicker (Johannesburg) who will be delivering the lecture in Pretoria, Johannesburg, Mthatha and Bloemfontein. The process of the nomination of the Arthur Landua Lecturer continues to involve all Fellows and Diplomates of the College of Physicians. A large number of nominations were received for the 2011 Arthur Landau Lecturer and the Councillors of the College of Physicians have voted for Professor Yosuf Veriava from Johannesburg as the 2011 Arthur Landau Lecturer.

Professor Willie Mollentze of the Department of Internal Medicine at the University of Free State is acting as the convenor of the Joint Royal College of Physicians of London and the College of Physicians of South Africa Conference which will be held in Cape Town from 11-13 March 2011. Other members of the Organising Committee are Professor Janet Seggie (Africa Representative of the Royal College of Physicians of London), Professor Bryan Kies and Professor Marc Blockman, all from the University of Cape Town. The first draft of the programme has been drawn up and a request for further input from Heads of Department of Medicine in other institutions is awaited. I also had an opportunity to discuss the meeting with the representatives of the International Office of the Royal College of Physicians during my recent visit to London. I will give detailed feedback on this meeting to the Organising Committee at its next meeting.

The College of Physicians is in good financial health. The balance of the levy account in March 2010 was R191,073.90 (R241,000 in March 2009).

Prof Bongani M Mayosi PRESIDENT

#### **COLLEGE OF PLASTIC SURGEONS**

The AGM of the College of Plastic Surgeons (C PLAST) was held on 17 October at the CSIR, Pretoria.

At the meeting Prof Anil Madaree was congratulated on being the first Plastic Surgeon to be elected President of the CMSA. Prof Madaree acted as secretary of C PLAST, but Dr Roger Nicholson was elected as the new secretary and also as the second representative of the C PLAST on the CMSA Senate. Dr G Morrison, Dr M Pillay and Dr C Snijman would remain as elected representatives for the remainder of the current triennium of office.

Traditionally the CMSA has only been an examining body in the past. In line with new initiatives by the CMSA, the C PLAST has decided to promote education to try and improve a below average pass rate in the discipline (+/-30% pass rate). Support and encouragement is being given to two training centres without permanent heads and one not active enough in educational matters. The University of Pretoria has taken a first initiative in organising a national flap dissection course. Registrar symposia are now routinely organised on an annual basis, and have proved to be a tremendous success.

There is a general feeling within the C PLAST that the changes to the FC Plast(SA) implemented over the last year have been well received. The current format now provides a more balanced assessment of the candidate's knowledge. Of the 11 candidates to participate in the FC Plast(SA) examination in the last year, 4 passed.

Keeping of logbooks became compulsory in 2010. The Educational Subcommittee of ASSAPS will be meeting in October to review sample logbooks from the various teaching departments.

Prof Piet CoetzeeDr Roger NicholsonPRESIDENTSECRETARY

#### **COLLEGE OF PSYCHIATRISTS**

#### Examination

A significant change occurred in the examination format for the March/May examinations in that the Part II Clinical Neurology examination part was replaced by an OSCE. The first run of the OSCE took place at the October examinations in Bloemfontein. This went off without a hitch, with thanks to the examination convenor. The reports from the candidates have been very positive and it looks like the College is on the right track.

#### Workshops

An examiners and candidates workshop was held in Johannesburg on 20 March 2010. The workshop was attended by approximately 65 delegates from all Departments of Psychiatry. Topics discussed ranged from examination presentation techniques to the format of the Neuropsychiatry OSCE that was implemented for the first time during the May 2010 examinations in Bloemfontein. The workshop also included a refresher course on important new developments in the field of Psychiatry. Attendees gave very positive feedback and the Council have decided to host the workshop on an annual basis.

#### **Psychotherapy logbook**

The task team has done a good job in making the logbook userfriendly. It will be on the website soon.

#### **Subspecialities**

The proposals for Consultation-liaison Psychiatry were sent back by the HPCSA Postgraduate Committee with a few suggestions. These have been attended to and will be resubmitted. The subspeciality Addiction Psychiatry was also sent back. It will be resubmitted soon with a letter of support from the Department of Health.

It is with great sadness that we report the passing of Professor Alan Flischer on 18 April 2010. He was an active and useful member of the College. We extend condolences to his family and friends. May his soul rest in peace.

#### Prof Dan Mkize PRESIDENT

#### COLLEGE OF PUBLIC HEALTH MEDICINE (Including occupational medicine)

For the triennium 2008 to 2011, the Council is as follows:

President : Naidoo S	(Wits)
Secretary : Knight S E	(Ukzn)

Representatives	on	the	CMSA	Senate:
Naidoo S				(Wits)

Kistnasamy M B	(Ukzn)

Other Members of the Council:

Cameron N A	(Us)
Coetzee D J	(Uct)
Ehrlich R I	(Uct)
Kawonga M	(Wits)
Kistnasamy M B	(Ukzn)
Louwagie G M C	(Up)
Moorman J M	(Wits)
Naidoo S	(Ukzn)
Jeebhay M F	(Uct)
Kruger W J	(Fs)

The Council has focussed on consolidating the regulations and guidelines in anticipation of introducing new regulations by next year. We will be assisted by the President of the UK Faculty of Public Health, Professor Alan Maryon-Davis, who is visiting in October 2010 and will be awarded an Honorary Fellowship by our College.

The College implemented the new registrar portfolios in both Public Health Medicine and Occupational Medicine in January 2010, applicable to all new registrars in training.

The Fellowship in Occupational Medicine has now been gazetted as a formal qualification by the HPCSA.

The College also welcomed the following Associates to its ranks and know that they will assist in its work: Dr A P Ryan for Occupational Medicine and Drs Dr J R Moodley and N R van Zyl for Public Health Medicine.

The Occupational Medicine Division has a strategy in place to broaden the pool of examiners and is also planning to get institutions involved in academic training together to review and update the current College regulations and portfolio requirements.

#### The College also welcomed the following Fellows:

#### October 2009

**Public Health Medicine** Mametja, Selaelo Mabu Sara Rajaram, Sinola Karishma Senkubuge, Flavia Vundle, Ziyanda Zungu, Laszchenov Muzimkhulu

*Occupational Medicine* Knight, David Williams, Haidee Maxine

#### May 2010

**Public Health Medicine** Jassat, Waasila Mahomed, Saajida Moodley, Saiendhra Vasudevan Rose, André Stanford Timothy, Geraldine Antoinette

*Occupational Medicine* Govender, Nadira Kgalamono, Spoponki Mamohap Alina

Prof Shan Naidoo PRESIDENT

#### **COLLEGE OF RADIATION ONCOLOGISTS**

The College of Radiation Oncologists has completed a major revision of the curriculum for Fellowship of the College. These changes reflect the changes in technology and knowledge required for specialists in this field. The syllabi have been modified and tailored towards ensuring that successful candidates will be well equipped to managing cancer patients. In September/October 2010 candidates will be examined on the new curriculum for the first time. All candidates will have a personal portfolio that will also be evaluated at the time of the final examination. The curriculum committee and heads of department plan to meet regularly to evaluate the success of the new curriculum and to make modifications where necessary.

There remains an ongoing need to train specialists in this field as there are shortages of qualified personnel, particularly in the public sector. Students from other African countries are being trained at the academic hospitals. Sponsorship is available from the International Atomic Energy Agency and OPEC. There are many experienced radiation oncologist and teachers at the academic centres who are able to offer comprehensive training. The equipment available for delivery of radiation therapy at the academic centres are regularly upgraded and maintained to ensure that students are exposed to state of the art therapy.

Examinations for part I and Part II candidates were held in September/October 2009 and March/April 2010. The pass rate was reasonable and no problems arose concerning the conduct of these examinations.

Prof Bernard Donde SECRETARY

#### **COLLEGE OF RADIOLOGISTS**

We report the highlights of the year, as follows.

Dr Savvas Andronikou, immediate past President, participated in examinations of the Royal College of Radiologists for the purpose of benchmarking standards and exploring their utilisation of computer technology in examinations. He reported that the standards of the College of Radiologists (CMSA) and the Royal College were more or less compatible. Regarding examination techniques, the Royal College uses electronic long cases, done centrally on computer work stations. They also use a formatted answering sheet and marking for these long cases. Dr Andronikou's report was discussed by the Council and agreement was reached that the C RAD should work towards an examination with electronic long cases, with reporting being done from computer work stations.

The format of the Part I examination has changed in order to utilise computer technology and for the candidates to write the examination as medical officers.

Most of the training units are now represented on the Council.

Dr Andronikou unfortunately resigned as President of the C RAD due to work pressure and Prof Coert de Vries was elected as President and representative on the CMSA Senate for the remainder of the current term of office.

#### Prof C S de Vries PRESIDENT

#### **COLLEGE OF SURGEONS**

It is a well known fact that change is inevitable. It has also been said that the more things change, the more they stay the same. Thus, within the College of Surgeons we are constantly reviewing our core business, which is the examination and assessment of postgraduate trainees in general surgery and the various surgical subspecialties.

The syllabi for the FCS(SA) Primary, Intermediate and Final examinations were reviewed several years ago and are now well established. Professor Damon Bizos, the convenor for the Primary examination, together with representation from each of the Academic Departments of Surgery, is constantly involved in the process of reviewing and expanding the bank of MCQ questions for the FCS(SA) Primary.

We have clearly identified the need to revise the format of the FCS(SA) Intermediate examination. The motivation for this change has been the major increase in the number of candidates writing the examination, which in recent years has become a logistical challenge. In addition, the existing format, which involves essay questions, is out-dated. A sub-committee has been established to address this.

The assessment of the Logbook remains another unresolved issue. Although it has been compulsory to maintain and submit the Logbook for the FCS(SA) Final examination, the process of the assessment of the Logbook still needs to be developed. This is obviously extremely important in view of the requirement from the HPCSA for the implementation of formative assessment. A sub-committee is currently looking at the assessment of the Logbook. The HPCSA will also require a research component as part of the final assessment of specialists in training. Our College took the decision several years ago to include the completion of a research dissertation as part of the requirements to write the FCS(SA) Final examination. This has now been added to the regulations and will be implemented in 2012.

The College has in recent years formalised its relationship with the Association of Surgeons of South Africa. It is proposed that the College will function as the academic arm of the Association.

# Prof Del Kahn PRESIDENT

# **COLLEGE OF UROLOGISTS**

A meeting of the Council and the Panel of Examiners of the College of Urologists took place in Bloemfontein on 9 May 2010. The minutes of this meeting were taken by Prof S Wentzel, who served as Secretary in the absence of Prof M Haffejee.

It was agreed that the Urology Registrar's Portfolio of Learning, which Prof Wentzel had adapted from the template provided by the CMSA, would be implemented for registrars starting in 2011, and would become a requirement for examinations from March/May 2014. Until that time the current logbook would be applicable.

Portfolios have to be submitted 3 months before the written part of the examination. The convener will review the portfolios, identify those possibly not acceptable and circulate them to the other examiners for a final decision. If the portfolio is not acceptable, the candidate will not be allowed to sit for the written examination.

There was extensive discussion of the issues related to research as a component of postgraduate specialist training. It was decided to submit amendments to the regulations for approval by the CMSA Senate, stipulating that a research project according to the rules and requirements of the training university should be submitted before the candidate would be allowed to sit for the written part of the Final examination. The FC Urol(SA) would only be awarded after approval of the research project by the training institution. This requirement would be implemented for examinations as from March/May 2015.

With regard to reciprocity of other qualifications allowing entry to the Final, it was agreed that candidates who had passed the MMed Intermediate at a university could apply for exemption from the College Intermediate, i.e. be allowed to enter the Final directly.

With regard to the required training period, it was agreed that there should be at least 3 years of training in a Urology registrar post after completion of the Intermediate. The consensus decision was that candidates could take the Final examination of the FC Urol(SA) after 2½ years of the required 3 years of urology training, but that this should exclude time spent in Urology used as part of the 18 months submitted for admission to the Intermediate examination.

There was extensive discussion of the issues related to the number of registrar posts funded by the different provincial departments of health and recognised by the HPCSA, relative to the number of consultants and clinical training facilities. There was also considerable discussion of the potential problems posed by the appointment of disproportionately large numbers of supernumerary registrars, who inevitably compete with other registrars for training opportunities.

Previous correspondence with the HPCSA indicated that the Council regarded the allocation and recognition of new registrar posts as an internal matter between itself and the relevant province and university, and that consultation with the College of Urologists (CMSA) or the Urological Association was not necessary.

The consensus of the meeting was that this lack of consultation with important stakeholders in the training of urologists was regrettable, and that unilateral decisions taken at provincial rather than national level might lead to difficulties in providing adequate registrar training. This opened the possibility that the Council of the College of Urologists could recommend to the CMSA Senate that certain registrar posts not be recognised with regard to admission of candidates to the FC Urol(SA) Final.

With regard to the proposal from the HPCSA that the consultant: registrar ratio (currently 1:2) be changed to 1:3, it was pointed out that this would relieve funding authorities from the obligation to create additional consultant posts (and expand training facilities) to train increased numbers of registrars. This would certainly have adverse effects on the standard of training. There was general agreement that the current requirement for a consultant:registrar ratio of 1:2 should remain in force with regard to urology training.

With regard to candidates who wished to take the FC Urol(SA) Final but had not completed training in a urology post registered with the HPCSA, it was decided that the current regulation should be retained which permitted the Council of the College of Urologists to allow this, based on the merits of each individual applicant, supported by his/ her Head of Department.

It was agreed that applications to the HPCSA for specialist registration of doctors with qualifications obtained outside South Africa should be submitted to the Council of the College of Urologists for approval to enter the FC Urol(SA) Final. In principle, a candidate would be allowed only if he/she had fulfilled all the criteria required of any other candidate (logbook or portfolio, dissertation, etc).

The College of Urologists remains extremely grateful to those Fellows of the College who have contributed to its activities during the past year, sacrificing much of their valuable time to serve as examiners or as members of the Council. Improving the standards of urological training in South Africa relies on the sustained efforts of full-time specialists at academic centres, as well as the goodwill of colleagues in private practice who contribute their valuable time and expertise to the training and examination of the young urologists of the future.

Prof C F Heyns PRESIDENT Prof S W Wentzel SECRETARY

# Factors predisposing to obesity: a review of the literature

Ali AT, PhD Crowther NJ, BSc(Hons), DPhil Department of Chemical Pathology, National Health Laboratory Service, University of the Witwatersrand Medical School, Parktown, Johannesburg Correspondence to: Prof Nigel Crowther, e-mail: nigel.crowther@nhls.ac.za Keywords: obesity, caloric intake, genetic factors, evolution

# Abstract

The rising prevalence of obesity is a worldwide problem affecting not only the developed world but also developing nations such as South Africa. Excess body fat deposition is caused by an imbalance between energy intake and energy expenditure and there are many genetic and environmental factors that can influence this balance. The present article will describe these factors and discuss the complex interaction between the environment and the human genome that may underlie the current obesity epidemic.

#### JEMDSA 2009;14(2):81-84

### Introduction

A famous ancient proverb states: eat breakfast like a king, lunch like an ordinary person, and your dinner like a beggar. These words of wisdom have long been discarded. Modern life has brought with it more food with high caloric density and better taste. New technology has made life easier and less active, and the result is a worldwide epidemic of obesity and its associated disorders.<sup>1,2</sup> Obesity involves both increased fat cell size and number<sup>1</sup> and occurs when energy intake is greater than energy expenditure. This balance between energy input and energy output can be affected by many factors including the quality and quantity of dietary intake, environmental and genetic inputs and physiological and psychological status.

Obesity is a common and serious medical problem all over the world<sup>1,2</sup> and South Africa is one of the developing countries that has been most affected by the current obesity epidemic. One of the possible reasons for the rise in prevalence of obesity in South Africa is the migration of populations from rural to urban areas, which has been shown to be associated with significant lifestyle changes particularly the increased availability and therefore consumption of calorie dense, fatty food.<sup>3</sup> Within South Africa older women (age range 45–54 years) have a significantly higher level of obesity (mean BMI of 29.4  $\pm$  0.27) than their younger counterparts (age range 15–24 years, mean BMI of 23.4  $\pm$  0.13) with middle-aged, urban African females having the highest prevalence of obesity.<sup>4</sup>

Obesity is not only a problem found in the adult population but is also occurring at an increased frequency in children in both the developed and the developing world. Thus, a national survey among South African school children showed that the prevalence of overweight in black, female students was 20.9% compared to 4.2% in males.<sup>5</sup> This study also noted that white males were heavier than males of other races while black and white females were heavier than coloured females.<sup>5,6</sup> In general, young females were heavier than young males<sup>6</sup> and among black teenagers these differences were attributed to overeating in females compared with undereating in males, in whom the prevalence of underweight (17% compared to 3.9% in black females) was higher than in all other groups.<sup>5,6</sup> It can therefore be seen that within all age groups in South Africa there are gender and ethnicity related differences in the prevalence of obesity (see Table I). These differences are probably a result of cultural, socio-economic and genetic factors which also underlie the worldwide obesity epidemic. This review will address all these influences with an emphasis on the most recent literature.

Table I: The prevalence of obesity i	in male and	female adolesce	nts and adults in
different South African ethnic grou	ıps		

Ethnic group	Age 13–19 years*		Age 15–95 years**		
Eunic group	Male	Female	Male	Female	
African	1.9	5.3	7.7	30.5	
European	4.8	7.7	19.8	24.3	
Coloured	2.8	3.8	9.1	28.3	
Indian	_	-	8.7	20.2	

Data given as % values. \*Data taken from reference number 6. \*\*Data taken from reference number 4

#### **Caloric intake**

Food intake can be affected by many factors, including the price, portion size, taste, variety, and accessibility of foods. The method by which the food is prepared is also important. There are also strong cultural influences on the types of food consumed with some societies abstaining from particular types of food or only eating food if it has been prepared in a specific manner.

A high fat diet enriched with saturated fatty acids is the common diet in developed countries whilst in poorer countries the majority of people derive their calories from a vegetarian diet.<sup>7,8</sup> Diet may affect

body weight by controlling satiety and metabolic efficiency, or by modulating insulin secretion and action.<sup>9</sup> Thus, the calorie dense diet common in the western world may predispose to obesity via elevated postprandial insulin levels resulting from the high carbohydrate intake which leads to increased triglyceride storage in the adipose tissue depots.<sup>10</sup> High insulin levels may also provoke a vicious metabolic cycle. Insulin induces hunger by depleting the glucose levels of the blood, and this promotes further food intake which leads to greater insulin secretion. Ultimately, this cycle will lead to weight gain and chronic hyperinsulinaemia.<sup>11,12</sup> It has also been observed that obese subjects have an increased preference for fatty foods<sup>13</sup> which will also enhance insulin output and triglyceride storage.

The modern diet of developed and developing countries contains more fat and considerably less fibre than the recommended levels. Thus, in one large epidemiological study, fat constituted 37.8% of the total energy intake compared to a recommended level of < 30.0%, whilst fibre intake was 8.6g/1000 kcal per day compared to a recommended intake of 14g/1000 kcal.<sup>14</sup> Studies have shown that food containing saturated fat results in greater weight gain compared to food containing unsaturated fatty acids.<sup>15,16</sup> Fatty acids activate peroxisome proliferator-activated receptors delta and gamma (PPAR  $\delta$ , PPAR  $\gamma$ ), which promote adipogenesis, and expansion of adipose tissue depots.<sup>17</sup> Epidemiological studies have confirmed the positive correlation between a high-fat diet and the development of obesity.<sup>18,19</sup>

#### Socio-economic status and level of education

Obesity is a common feature in migrants, where a population with a common genetic heritage live under new socio-economic and cultural conditions. Pima Indians, who live in the USA, are on average 25 kg heavier than Pima Indians who live in Mexico.<sup>20</sup> Migration of Asian-Indians<sup>21</sup> and Australian Aboriginals<sup>22</sup> from rural areas to an industrialised environment is related to an increasing prevalence of obesity in these societies.

Studies have found that BMI is significantly higher among low socioeconomic than middle and high socio-economic groups<sup>23,24</sup> with lower socio-economic status (SES) being associated with accelerated weight gain during adulthood.<sup>25,26</sup> Thus, data from the Whitehall study shows that over a five year period of follow-up, subjects with a clerical post had a two fold greater risk of an increase in BMI of > 3 units than subjects with an administrative post.<sup>26</sup> The effect of socioeconomic status (SES) on the prevalence of obesity may be mediated by low income which will limit the availability of the more healthy food options.

In many populations the level of education is inversely associated with obesity especially in women,<sup>23,27</sup> while husbands' education was found to be correlated negatively with the prevalence of obesity in their wives.<sup>27</sup> Conversely, in a national obesity survey in South Africa, a multivariate regression analysis demonstrated that women with greater than 12 years of education had higher BMIs than women with 1–12 years of education (p < 0.0001). A possible explanation for this phenomenon is that women in the latter group tend to perform higher levels of manual labour than the more educated women.<sup>4</sup>

# **Genetic factors**

Genetic factors may act as determinants of BMI by affecting energy balance. More than 300 genes, markers, and chromosomal regions have been found to be associated with various human obesity phenotypes<sup>28</sup> and it has been estimated that 30–70% of the variance in BMI in humans can be explained by genetic factors.<sup>29</sup>

The first monogenic human obesity syndrome, congenital leptin deficiency was reported in 1997.<sup>30</sup> The discovery of the leptin gene has dramatically changed our understanding of the role that adipose tissue plays in the regulation of energy balance and appetite.<sup>31</sup> Leptin acts within the arcuate nucleus of the hypothalamus to decrease the expression of orexigenic signals and increase the levels of anorexigenic signals and thus reduce food intake.<sup>30</sup> A number of other forms of monogenic obesity have been discovered and each of the affected genes has been shown to be expressed in the hypothalamus and to play a part in the control of appetite.<sup>32</sup> However, these gene mutations explain only a very small proportion of cases of human obesity. The common form of obesity is a polygenic disease and it is thought that each of the polymorphisms involved contributes in only a small way to the phenotype and this may explain why it has been very difficult to unravel the genetic aetiology of human obesity. However, recent advances in gene screening techniques have allowed geneticists to perform high throughput, whole genome analyses and uncover a number of new gene loci that may play a part in causing increased adipose tissue deposition. Most of these genes are thought to be expressed in the CNS and to be involved in controlling food intake.33 The genetic variant with the strongest association to the polygenic form of obesity lies close to the FTO (fat mass and obesity associated) gene.<sup>34</sup> This association has been confirmed in a number of large population studies, however the exact function of the FTO gene remains a mystery although expression studies have demonstrated that this gene is expressed in a wide range of tissues with high expression in the brain.<sup>34</sup>

# Factors acting early in life, and during puberty, pregnancy and aging

In both genders rapid weight gain during infancy is an important risk factor for later obesity. Thus, children who showed rapid weight gain or catch-up growth between zero and two years of age have higher measures of adiposity at five years of age than children who did not undergo catch-up growth.<sup>35</sup> It is known that BMI falls in neonatal life and then increases in infancy. This increase in adipose tissue mass is known as adiposity rebound and children who experience adiposity rebound at an earlier age have a greater chance of being obese in adulthood.<sup>36</sup> Studies have also shown that the relationship between birthweight and adult obesity is U-shaped with low birthweight being associated with increased measures of adult abdominal fat deposition whilst high birthweight is associated with higher adult levels of overall body adiposity.<sup>37</sup>

Females have a higher prevalence of obesity than males and it has been suggested that this may be related to gender differences in the brain's response to hunger and satiety.<sup>38</sup> Furthermore, factors acting during puberty have been shown to influence the risk of obesity in females. Thus, a longitudinal growth study performed in Finland demonstrated that at the age of 31 the prevalence of obesity in females who reached menarche before the age of 11 was 15% compared to 4% in those who reached menarche after 15 years of age.<sup>39</sup> The reason for this may be that fat accumulation during childhood increases the chances of early menarche<sup>40,41</sup> or that girls with early sexual maturation have a longer period of positive energy balance.<sup>42</sup>

A number of studies have shown that a positive relationship exists between gestational weight gain and postpartum weight retention.<sup>43-45</sup> However, the level to which weight is retained after parturition differs across societies. It has been demonstrated that American and Swedish women retained between 1.5 and 3.0 kg twelve months after delivery,<sup>46,47</sup> whilst in Brazilian females, 20% of mothers retained more than 7.5 kg nine months after delivery.<sup>45</sup> Another study showed that black women were twice as likely (odds ratio, 2.2 and 95% Cls of 1.5–3.2) as white women to retain more than 20 lb in weight postpartum, despite comparable weight gain during pregnancy.<sup>44</sup>

Body adiposity increases with age. This is because as people grow older their metabolic rate falls and energy expenditure decreases. Thus, older subjects do not require as many calories to maintain their body weight. If caloric intake remains constant or increases they will therefore gain weight. Men require more calories to maintain their body weight, because they have a higher resting metabolic rate than women. In postmenopausal women, obesity is a result of decreased metabolic rate and alterations in ovarian hormones, which accelerates the age-related increase in body fatness and decreases energy expenditure.<sup>48</sup> Thus, women have a higher BMI than men, especially after the age of 50 years.<sup>49</sup>

# **Psychological factors**

Psychological status can influence eating habits, because most people eat in response to negative emotions. Stress for example, not only increases consumption of food but also shifts consumption toward high caloric foods that are normally avoided.<sup>50</sup> It is thought that the effect of stress on food intake is mediated via increased adrenal glucocorticoid (GC) output. Chronically elevated GC levels can give rise to increased intake of 'comfort foods' which in turn leads to abdominal obesity.<sup>51</sup> This hypothesis has been developed and tested successfully in rodent models,<sup>51</sup> however more studies are required in humans to confirm its validity.

Depression and some neurological problems can also promote overeating which will ultimately lead to increased fat accumulation.<sup>52</sup> A number of studies have shown a higher prevalence of borderline personality disorder in obese patients (ranging from 1.1 to 30.4%) compared to the general population (prevalence of 2%).<sup>53</sup> Such data suggests that psychopathology may have an impact on weight loss and weight maintenance, and may be an important factor that should be considered when devising intervention strategies in obese subjects. It is also noteworthy that one study has shown a higher prevalence of suicides in subjects following bariatric surgery (15 suicides out of 7 925 subjects) when compared to a control group of untreated, obese subjects (5 suicides out of 7 925 subjects).<sup>54</sup> This suggests that psychological disorders may be present in morbidly obese subjects and that these are not attenuated by surgical intervention. It has therefore been suggested that patients undergoing bariatric surgery are assessed for psychological disorders before treatment and are monitored after surgery.54

Studies conducted on families of patients with morbid obesity have suggested that anomalous eating habits of families, parental conflicts and parents' psychopathology may influence weight gain in children.<sup>55,56</sup> Familial influences on childhood obesity differ according to the gender of both the parent and child.<sup>55</sup> Dysfunctional patterns in these families which lead to overeating include regressive coping styles such as stress eating, lack of self-esteem, unsatisfactory personal relationships, and stigmatisation of the obese individuals.<sup>57</sup>

### **Other factors**

The aetiology of obesity is obviously multi-factorial. The current article has discussed those factors that have received the majority of attention in the scientific literature but there are others that have received far less attention but may still be important. These factors have been the subject of a recent review<sup>58</sup> and therefore they will only be briefly discussed here.

**Sleep duration:** It has been shown in human studies that BMI is inversely correlated with sleep duration.

**Smoking:** A number of investigations have clearly shown that smokers are less obese than non-smokers and that cessation of smoking leads to weight gain.

**Pharmaceuticals:** A number of drug types lead to increased weight gain and these include antidepressants (e.g. serotonin re-uptake inhibitors), contraceptives, corticosteroids, antidiabetic agents (e.g. insulin, sulphonylureas and thiazolidinediones) and medications used for treating hypertension (e.g. beta adrenergic receptor antagonists).

**Maternal age:** Studies in humans and animals have shown that there is a positive correlation between maternal age at birth and BMI of the resulting offspring. Thus, one study has shown that for every five year increase in maternal age, the risk of obesity in the offspring increases by 14.4%.<sup>59</sup>

**Increased life expectancy:** BMI is known to increase with age and therefore as life expectancy for humans increases the relative frequency of older individuals within the population will increase and hence so will the prevalence of obesity.

**Endocrine disruptors:** These agents are by-products of industrial processes and leak into the environment and hence into the food chain. These molecules are able to elicit endocrine responses and include agents that have oestrogen-like effects (e.g. vinclozolin and bisphenol A) and also substances that are able to activate adipogenesis via interaction with transcription factors.

Environmental temperature: The advent of air conditioners has meant that humans spend less time in temperatures outside the thermoneutral zone (TNZ). The TNZ is the range of temperatures over which changes in metabolic rate are not required to maintain normal body temperature. Once a person leaves the TNZ, energy expenditure will increase in an attempt to maintain body temperature at the required level. Thus, in humans who are constantly within the TNZ, energy expenditure is reduced and this predisposes to weight gain at lower levels of energy intake when compared to subjects who do not spend large periods of time within the TNZ. **Reproductive fitness:** The BMI of parents has been shown to be positively related to increased number of offspring for both mothers and fathers. Therefore, because of the strong genetic component to BMI this will lead to increased transmission of obesogenic gene variants.

#### **Conclusions**

Obesity is a multi-factorial disorder with major contribution from the environment and the genome. The maintenance of a large number of genetic variants within the genome that give rise to increased adipose tissue mass may be explained by the process of natural selection. It has been hypothesised that during human evolution there was selection for any genotype that favours energy storage because this would enhance survival during periods of famine. Famine is known to be an important and consistent occurrence during the evolution of the human species. However, this genotype is only advantageous under conditions of food scarcity and is deleterious in conditions where food availability is high and energy expenditure is low i.e. the prevailing environment! Thus, obesity is the result of an unfavourable interaction between our current environment and our ancient genome. The process of natural selection is not fast enough to modify our genome in response to rapid changes in environmental conditions. This genomic inertia has led to many mass extinction events during the life course of planet Earth. The only solution to the problem of the obesity epidemic is therefore a rapid change in environmental conditions to better match our present genetic make-up. Such changes must occur at the individual level and be encouraged by changes at the population level. However, societal inertia is a major stumbling block and it is therefore possible that the ultimate demise of the human species will be the result of a clash between a highly evolved genome, sculpted by millennia of fine tuning and a human-built, change-resistant environment crudely cobbled into existence over mere decades.

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# Hypertriglyceridaemia: aetiology, complications and management

Blom DJ, MBChB(UCT), FCP(SA), MMed(UCT), PhD(UCT) Division of Lipidology, Department of Medicine, University of Cape Town Correspondence to: Dr Dirk Blom, e-mail: dirk.blom@uct.ac.za Keywords: triglycerides; pancreatitis; fibrates; lipoprotein lipase; eruptive xanthomata

# Abstract

The bulk of plasma triglycerides are carried by chylomicrons in the fed and very low-density lipoproteins in the fasted state. These triglyceriderich lipoproteins are metabolised to remnant lipoproteins by lipoprotein lipase (LPL). Hypertriglyceridaemia results if triglyceride-rich lipoproteins accumulate either due to defective clearance, overproduction or a combination of both mechanisms. Genetic and environmental factors interact in the genesis of hypertriglyceridaemia but occasionally a single factor may be dominant. At a molecular level the most common cause of severe primary hypertriglyceridaemia is loss of function mutations in both alleles of LPL. The most common environmental contributors include diabetes, diet, alcohol and medications (including oestrogen, steroids, retinoids and protease inhibitors). Severe hypertriglyceridaemia can trigger acute pancreatitis while mild to moderate hypertriglyceridaemia is an independent cardiovascular risk factor. Treatment strategies are determined by the severity and aetiology of hypertriglyceridaemia as well as the patient's cardiovascular risk profile. General strategies include lifestyle modifications with restriction of dietary fat intake, cessation of alcohol intake and increased exercise. Contributing metabolic disorders should be controlled and aggravating medications withdrawn or reduced where possible. Moderate hypertriglyceridaemia may be treated with high doses of omega-3 fatty acids (4 g/day), fibrates, niacin or statins. Fibrates are the agents of choice in severe hypertriglyceridaemia.

Peer reviewed. (Submitted: 2010-02-09, Accepted: 2010-02-24)

# Introduction

Clinicians mostly do not treat all members of the 'lipid family' with the equal respect they deserve. Triglycerides often find themselves in the role of the neglected and ignored stepsister while all attention is lavished on the 'evil' sister, cholesterol. Triglyceride metabolism is, however, ignored at the clinician's peril, as severe hypertriglyceridaemia can trigger potentially fatal acute pancreatitis. Less marked elevations of plasma triglycerides (TG) may also be deleterious by independently raising the risk for cardiovascular disease. Partially metabolised triglyceride-rich lipoproteins (TGRL) (remnants) are among the most atherogenic lipoproteins. In addition, hypertriglyceridaemia often associates with other cardiovascular risk factors such as obesity, Type II diabetes, inflammation and a pro-thrombotic state.<sup>1,2</sup> This article reviews hypertriglyceridaemia and focuses on severe hypertriglyceridaemia (TG > 10–15 mmol/L) and recent advances in the genetics of hypertriglyceridaemia.

Being members of the 'lipid family', both cholesterol and TGs are insoluble in plasma and are packaged in lipoproteins for plasma export. Although lipoproteins may vary markedly in size and composition (e.g. from triglyceride-rich to cholesterol-rich), no lipoprotein exclusively transports a single lipid type. Triglyceride and cholesterol metabolism are thus intertwined and should not be considered separately, but viewed from the perspective of lipoprotein metabolism.

#### Triglyceride-rich lipoprotein metabolism

Plasma TGs derive from two main sources: exogenous (uptake from dietary fat) and endogenous (hepatic synthesis). Following digestion and absorption, dietary fat is packaged into chylomicrons, which enter the circulation via the lymphatic system. Excess chylomicrons (hyperchylomicronaemia) cause turbid or even milky (lipaemia) plasma. Following a meal, up to 90% of plasma TGs are found in chylomicrons. The liver exports TGs (from endogenous synthesis or derived from uptake of chylomicrons) mainly as very low-density lipoproteins (VLDLs). In healthy individuals there should be no circulating chylomicrons following a 12-hour fast, and the bulk of TGs is found in VLDLs. VLDL particles may be subdivided into large, triglyceride-rich VLDL1 and smaller, less triglyceride-enriched VLDL2. Although triglyceride is the major lipid constituent of chylomicrons and VLDL, both these lipoproteins do contain cholesterol, and accumulation of TGRL may elevate the total cholesterol very substantially.

JEMDSA 2010;15(1):11-17

Chylomicrons are normally rapidly cleared from the circulation following partial hydrolysis of their triglyceride content by lipoprotein lipase (LPL), an enzyme found mainly in the capillaries of adipose and muscle tissue. The resulting chylomicron remnants are cleared from the circulation by hepatic uptake via apolipoproteinE (apoE) mediated binding. The triglyceride content of VLDL is also partially hydrolysed by LPL. The resultant VLDL-remnants can either be hepatically cleared via apoE or undergo further modification to form low-density lipoproteins (LDL).

LPL activity is regulated at multiple levels. At the genetic level, peroxisome proliferator-activated receptor  $\gamma$  (PPAR $\gamma$ ) upregulates adipose tissue LPL, while liver LPL is upregulated by PPAR $\alpha$  and liver X receptor (LXR). Exercising increases skeletal muscle LPL expression. The enzymatic activity of LPL is increased by apolipoproteinCII (apoCII) (essential cofactor) and apolipoproteinAV (apoAV), while apolipoproteinCIII (apoCIII) inhibits LPL.<sup>3</sup> Recent research has led to the identification of multiple other proteins involved in the lipolytic process. These include two members of the angiopoetin-like protein family (ANGPLT), namely ANGPLT3 and ANGPLT4. ANGPLT3 inhibits LPL catalytic activity in the presence of substrate while ANGPLT4 inhibits LPL activity by promoting the conversion of active LPL dimers into inactive monomers.<sup>4</sup> Glycosylphosphatidylinositol-anchored high-density lipoprotein-binding protein 1 (GPI-HBP1) is a high-affinity anchor for LPL.<sup>4</sup>

Increased plasma TGRL can therefore mechanistically result from increased production (increased hepatic synthesis, high-fat diets) or reduced clearance (mainly decreased LPL activity or occasionally dysfunctional apoE). In many patients hypertriglyceridaemia is multifactorial with both mechanisms contributing to accumulation of TGRL. Plasma TGs can fluctuate widely and rapidly. Dietary indiscretions (fatty meals) or metabolic stressors (e.g. uncontrolled diabetes mellitus) can rapidly raise plasma TGs, converting moderate hypertriglyceridaemia into severe hypertriglyceridaemia (see Table I for an example).

# Table I: Triglyceride response to a fatty meal

As	Assumptions:				
•	Complete digestion and absorption of dietary fat				
•	Clearance is zero (e.g. LPL deficiency)				
•	Ignore VLDL production				
•	Fasting triglycerides are 4 mmol/L				
•	Plasma volume of 3 L				
•	1 mol triglycerides $\approx$ 885 g				
	Take-away meal: Triglyceride content				
•	Double hamburger with cheese	42 g			
•	French fries (large)	30 g			
•	Chocolate triple thick shake (supersize)	28 g			
	Total meal is 100 g of triglyceride $\rightarrow$ 113 mmol				
	Change in triglycerides: 113 mmol of triglyceride/3	L plasma volume: 37.66 mmol/L			
	Triglycerides can rise from 4 mmol/L to over 40 mm	ol/L			
	Cholesterol consumed: 255 mg ( $\approx$ 0.7 mmol)				

## **Classification**

There is no uniform classification system for hypertriglyceridaemia. A frequently used classification is: primary hypertriglyceridaemia (molecular aberration of lipoprotein metabolism, no other metabolic abnormalities) or secondary hypertriglyceridaemia due to metabolic precipitants. This classification is somewhat simplistic, as many patients with secondary hypertriglyceridaemia are likely to have 'susceptibility genes', as equivalent metabolic stressors provoke very variable individual triglyceride responses (see below). In most patients, including those with primary hypertriglyceridaemia, the molecular cause remains unknown.<sup>5</sup>

Hypertriglyceridaemia can also simply be classified according to the degree of triglyceride elevation: TG < 1.7 mmol/l is regarded as normal (2.3 mmol/L in some classifications), TG < 5.0 mmol/L is mild hypertriglyceridaemia, TG 5–10 mmol/L is moderately severe hypertriglyceridaemia and TG > 10 mmol/L is very severe hypertriglyceridaemia.

The Fredrickson classification of hyperlipidaemia<sup>6</sup> is also widely used, but often poorly understood - leading to much confusion. Fredrickson simply grouped similar agarose electrophoresis patterns and labelled them with Roman numerals. The intention was not to create an aetiological classification but to group electrophoretic patterns. Further details regarding the Fredrickson classification can be found in Table II. As our knowledge of lipoprotein metabolism and its disorders grew, some electrophoretic patterns were found to be characteristic of molecularly defined disorders (e.g. Type I pattern  $\rightarrow$  LPL deficiency), while other patterns have no specific molecular correlates (e.g. Type IIa). Yet other molecularly defined disorders have variable patterns such as dysbetalipoproteinaemia (apoE mutations) - the Type III pattern is characteristic but the electrophoresis may also variably be classified as a Type IIb, Type IV or even Type V pattern. The conflation of electrophoretic patterns and metabolic and genetic diagnoses are responsible for much of the confusion surrounding the Fredrickson classification.

# **Genetics of hypertriglyceridaemia**

#### **Monogenic disorders**

Homozygous mutations in LPL cause severe primary hypertrigly ceridaemia from birth. The clinical phenotype is characterised by eruptive xanthomata, hepatosplenomegaly and lipaemic plasma. Pancreatitis may occur in infancy. The agarose electrophoresis is characterised by an accumulation of chylomicrons (Fredrickson Type I pattern), and LPL deficiency is thus often also known as Type I hyperlipidaemia. LPL deficiency is a rare condition, but in South Africa there are founder mutations in the Indian and Afrikaner populations. Cases have, however, been reported from all population groups. <sup>7</sup> As this is a recessive disorder, there is usually no family history of hypertriglyceridaemia. LPL deficiency is a potentially fatal disorder and all children with hypertriglyceridaemia should be referred for urgent specialist evaluation. Establishing the correct diagnosis is essential in planning management. The University of Cape Town's Lipid Laboratory can estimate lipolytic activity and screen for the common founder mutations in LPL. Currently, the only available management is dietary, with severe restriction of dietary TGs. The implementation of a very low-fat diet, while still providing adequate calories and essential fatty acids for growth and nutrition, requires advice from a dietitian specialised in lipid disorders and is especially challenging in infants. Lipid-lowering drugs are ineffective but are still frequently prescribed inappropriately, especially when an exact diagnosis has not been made. Gene therapy may be a therapeutic option in the future. Early Phase I human trials using adeno-associated virus as a vector to express an LPL allele with enhanced catalytic activity in muscles have been completed in humans with encouraging short-term results.8,9

Although heterozygous mutations in LPL reduce measured lipolytic activity, most carriers have normal lipid phenotypes. In situations of metabolic stress or in the presence of mutations or polymorphisms in other genes involved in lipid metabolism, hypertriglyceridaemia, usually of mild to moderate severity, may manifest. The Fredrickson pattern is variable, with Type IV and Type V patterns being the most common. In a

Pattern	Predominant stain/band	Lipoprotein predominantly increased	Comments
Type I	Origin	Chylomicrons	LPL + apo CII deficiency
Type II A	Beta-band	LDL	TG > 2.3 mmol/L distinguishes IIA from IIB
Type II B	Beta-band + pre-beta-band	LDL and some VLDL	
Type III	Broad-beta band	Remnant particles	Broad-beta describes uniform staining from beta to pre-beta
Type IV	Pre-beta band	VLDL	
Type V	Origin + pre-beta band	Chylomicrons + VLDL	

#### Table II: Agarose gel electrophoretic patterns according to Fredrickson's classification

Lipoproteins migrate as follows from origin: origin (chylomicrons), beta-band (LDL), pre-beta band (VLDL) and alpha-band (HDL). The Fredrickson's classification does not comment on HDL staining.

recent report, the entire LPL, apoCII and apoAV genes were sequenced in 110 non-diabetic patients with TG >10 mmol/L (Fredrickson Type V pattern) on at least two occasions. Known disease-causing mutations in LPL were identified in seven patients, indicating that heterozygous LPL mutations may be an important contributory factor in some patients with adult-onset severe hypertriglyceridaemia.<sup>5</sup>

ApoCII activates LPL, and homozygous apoCII deficiency is phenotypically indistinguishable from LPL deficiency.<sup>10–13</sup> Fresh frozen plasma contains apoCII and may be infused at times of severe hypertriglyceridaemia or when pancreatitis has developed. To the best of my knowledge, there are no known cases of apoCII deficiency in South Africa.

Dysbetalipoproteinaemia (also known as Fredrickson Type III hyperlipidaemia or remnant removal disease) is characterised by the accumulation of remnants of TGRL. The most common molecular cause is homozygosity for the receptor-binding defective  $\varepsilon 2$  isoform of apoE.<sup>14</sup> Phenotypic expression of the disease usually requires the presence of additional metabolic stressors such as diabetes, obesity or hypothyroidism. Patients typically present with severe mixed hyperlipidaemia (molar ratio of total cholesterol to plasma TGs approximates 2 : 1.) and high levels of apoE.<sup>15</sup> Severe hypertriglyceridaemia, however, is not infrequent and high levels of apoE2 have been shown to impair lipolytic activity mainly by displacing or masking apoCll.<sup>16</sup> Polymorphisms in apoAV may also explain why hypertriglyceridaemia is more severe in some dysbetalipoproteinaemic patients.<sup>17</sup>

More recently, mutations in several novel genes have been identified as causes of severe hypertriglyceridaemia. Some of these genes are listed below.

- ApoAV is encoded on chromosome 11, and homozygosity for rare truncating mutations in ApoAV (Q139X) may cause hyperchylomicronaemia.<sup>18,19</sup> In the majority of patients, hypertriglyceridaemia was first documented in adulthood. The molecular mechanism of hypertriglyceridaemia in apoAV deficiency is not well understood, but may include failure to inhibit hepatic VLDL-triglyceride production as well as impaired lipolysis due to LPL not having adequate access to the lipoprotein core in the absence of functional apoAV.<sup>20</sup> The genotype is not fully penetrant and not all mutation carriers have hypertriglyceridaemia.
- Lipase maturation factor (LMF 1) is involved in the endoplasmic maturation of LPL and hepatic lipase peptides. Homozygous nonsense mutations in LMF 1 have been identified in a few patients with severe hypertriglyceridaemia.<sup>21,22</sup>
- GPI-HBP1 is an endothelial cell surface protein found in the capillaries of organs where lipolysis occurs. GPI-HBP1 likely provides a platform for lipolysis to occur by anchoring LPL, TGRL and apoAV-phospholipid disks.<sup>23</sup> Homozygous mutations in this

protein have been identified in several patients with severe hypertriglyceridaemia in whom other known genetic causes of hypertriglyceridaemia had previously been excluded.<sup>24,25</sup>

The term familial hypertriglyceridaemia (FHTG) is often used to describe inheritance of a lipid phenotype characterised by an isolated increase in VLDL (Fredrickson Type IV pattern) – often with concomitantly low highdensity lipoprotein cholesterol (HDLC). Most patients with FHTG have moderate elevations in TGs in the 3 to 10 mmol/L range. The disorder is familial but the molecular basis is unknown and is likely polygenic in many patients (see below).<sup>26</sup> FHTG is often found in association with other cardiovascular risk factors such as obesity, insulin resistance, hypertension and hyperuricaemia and overlaps with the metabolic syndrome. In future, the clinically described entity of FHTG is likely to be progressively replaced by a multiplicity of molecularly diverse disorders with similar lipid phenotypes.

Familial combined hyperlipidaemia (FCH) is inherited in an autosomal dominant fashion with variable penetrance.<sup>27</sup> The population frequency is reported to be 2 to 5%, making it the most common genetic dyslipidaemia. The lipid phenotype may vary widely within families, ranging from phenotypes dominated by increases in VLDL to those in which increased LDL is the major abnormality. HDLC is often low and apoB levels are usually high. Atherosclerotic risk is high. Severe hypertriglyceridaemia is uncommon in FCH and TGs are usually less than 5 mmol/L. The diagnosis is clinical and requires knowledge of the family history and lipid values in family members.<sup>28</sup> The genetics of FCH have not been fully elucidated and it is likely that FCH is a genetically heterogeneous disorder. FCH has been linked to the APOAI/CIII/AIV/AV gene cluster,<sup>29</sup> but the strongest candidate gene currently is Upstream Stimulatory Factor 1 (USF1), which encodes a transcription factor that modulates the expression of many genes involved in lipid and glucose homeostasis.<sup>30,31</sup> Mutations in USF 1 may result in defective insulinmediated induction of USF 1 and subsequently reduced expression of target genes.32

#### Polygenic hypertriglyceridaemia

In the majority of patients, the genetic basis of hypertriglyceridaemia remains unknown. Genome-wide association studies (GWAS) are improving our understanding of the genetic architecture of complex diseases. Single nucleotide polymorphisms (SNPs) at many loci have been linked to triglyceride metabolism in healthy controls, although the absolute effect on triglyceride levels is generally very small.<sup>33</sup> In a recent study of hypertriglyceridaemic patients, previously identified SNPs were found to cluster according to Fredrickson phenotype. SNPs in ApoAV, Transducin-beta-like-2 (TBL2 – function unknown) and homologue of Drosophila Tribbles 1 (TR1B1 – function unknown) significantly associated with Fredrickson IIB, III, IV and V phenotypes. SNPs in other

genes, including ANGPTL3 and apoE, associated with selected phenotypes only.<sup>17</sup> Taken together, these genotypes explained about 20% of variation in trialyceride concentration. Direct sequencing of some of these genes linked to hypertriglyceridaemia by GWAS but of as yet unknown function may identify rare loss of function mutations and provide a monogenic explanation for some patients with severe hypertriglyceridaemia. Clearly, our understanding of triglyceride metabolism is not yet complete. A plausible genetic model for hypertriglyceridaemia is that rare loss of function mutations with large effect sizes (e.g. LPL mutations) are found in a small group of patients, usually with extreme phenotypes. In most other patients, hypertriglyceridaemia may result from accumulating multiple common alleles that each individually only have a minor effect on triglyceride metabolism. Such a genetic background would not necessarily lead to hypertriglyceridaemia in itself, but would markedly increase the likelihood of hypertriglyceridaemia developing with environmental or metabolic stressors.

## Secondary causes of hypertriglyceridaemia

Metabolic stressors or exposure to certain drugs may lead to hypertriglyceridaemia in some but not all patients. Those that develop hypertriglyceridaemia are likely genetically predisposed (see above), although we do not fully understand the interactions between the

# Table III: Secondary causes of hypertriglyceridaemia

Condition	Comments
Obesity	Mild hypertriglyceridaemia frequent in metabolic syndrome Increased waist circumference highly predictive of mild hypertriglyceridaemia
Diet	See Table I for the effect of dietary fat in patients with lipolytic defects
Diabetes mellitus	Most common secondary cause in our experience Controlling diabetes mellitus often lowers TGs substantially
Alcohol	Alcohol can increase VLDL synthesis Pancreatitis risk from alcohol and TGs
Renal disease	Mild hypertriglyceridaemia frequently seen in uremia
Pregnancy	Increased VLDL production may expose lipolytic effect Pancreatitis has high fatality rate in pregnancy
Paraproteins	May inhibit lipolytic proteins
Autoimmune disorders	Systemic lupus erythematosus (SLE) may generate auto-antibodies to LPL
Other disorders	Glycogen storage disorders may have mild hypertriglyceridaemia

#### Table IV: Drugs associated with hypertriglyceridaemia

Drug	Comments
Oestrogen	Oral oestrogen elevate TGs more than transdermal preparations May cause marked hypertriglyceridaemia in susceptible individuals
Corticosteroids	Variable lipid phenotypes, may cause predominant hypercholesterolaemia
Isotretinion	Severe hypertriglyceridaemia possible Check baseline TGs before therapy and once on treatment
Antiretrovirals	Protease inhibitors, especially ritonavir, most often implicated Hypertriglyceridaemia often severe
Cholestyramine	May aggravate hypertriglyceridaemia Avoid prescription when TGs are increased
Immunosuppressant drugs	Sirolimus frequently implicated
Beta blockers, thiazides	Increase in TGs usually minor
Atypical antipsychotics	Weight gain, insulin resistance and diabetes commonly accompany rise in TGs

genome and the environment as yet. In clinical practice, diabetes is the most common metabolic stressor. In susceptible individuals certain drugs can also trigger hypertriglyceridaemia. Further information on secondary causes of hypertriglyceridaemia can be found in Tables III and IV.

#### **Clinical manifestations**

#### **Physical signs**

Eruptive xanthomata (Figure 1) are cutaneous manifestations of severe hypertriglyceridaemia regardless of aetiology. They are small yellow papules often on an erythematous base. They tend to occur in crops



#### Figure 1: Eruptive xanthomata

Eruptive xanthomata occur in hyperchylomicronaemia and are usually asymptomatic. They indicate severe hypertriglyceridaemia and a high risk of acute pancreatitis. Eruptive xanthomata tend to occur in crops on the elbows, knees, thighs, buttocks and trunk.



#### Figure 2: Lipaemic plasma

Plasma that has stood overnight at 4 °C appears milky and turbid. Chylomicrons have floated to the top and have formed a creamy layer.



#### Figure 3: Tuboeruptive xanthomata

Tuboeruptive xanthomata may occur with long-standing hyperchylomicronaemia but are most commonly seen in severe mixed hyperlipidaemia such as dysbetalipoproteinaemia. and are most commonly found on the extensor surfaces of elbows and knees, the buttocks, thighs and trunk. Eruptive xanthomata resolve over several weeks to months once the TGs have been controlled. The retina may appear pink with 'milky' vessels in severely hypertriglyceridaemic patients – this is known as lipaemia retinalis. Plasma that has been left standing overnight at 4 °C (Figure 2) appears turbid (VLDL excess) with a creamy layer on top (chylomicron excess). In long-standing, severe hypertriglyceridaemia or in patients with dysbetalipoproteinaemia, eruptive xanthomata may coalesce to form tuboeruptive xanthomata (Figure 3).

# **Pancreatitis**

Severe hypertriglyceridaemia is a well-established trigger for acute pancreatitis.<sup>34,35</sup>. Accurate measurement of serum amylase is challenging in the presence of lipaemia, and pancreatitis may be falsely ruled out when the amylase is not elevated.<sup>36</sup> Pancreatitis rarely occurs when TGs are under 10 to 15 mmol/L. In many patients, TGs are only measured several days after the onset of pancreatitis and a prolonged period of nil per mouth. In such situations, hypertriglyceridaemia may have improved markedly and may then be erroneously excluded as a possible cause of pancreatitis. As illustrated in Table I, TGs may vary markedly and rapidly and a patient with only moderately elevated TGs may develop pancreatitis following a short period of dietary indiscretion. However, there are also patients with persistently marked hypertriglyceridaemia who never develop pancreatitis. Pancreatitis is therefore an unpredictable complication of hypertriglyceridaemia that strikes unexpectedly. The pathophysiology of hypertriglyceridaemic pancreatitis remains imperfectly understood. Intravascular triglyceride hydrolysis by pancreatic lipase with subsequent release of free fatty acids is the most commonly postulated pathophysiological mechanism.<sup>35</sup>

The treatment of hypertriglyceridaemic pancreatitis does not differ fundamentally from that of pancreatitis of any other cause. Metabolic disturbances should be sought and controlled. Should total parenteral nutrition be necessary, it is important to avoid excess fat supply (e.g. Intralipid or Lipovenous). Subsequently, severe restriction of dietary fat intake is necessary. Apheresis will rapidly, but transiently, lower plasma TGs.<sup>34,37</sup> There is no evidence that patients treated with apheresis recover more rapidly or have fewer pancreatitis-associated complications, and this expensive treatment modality cannot be routinely recommended.<sup>38</sup>

#### Atherosclerosis

Moderate hypertriglyceridaemia is an independent risk factor for atherosclerosis, and TGs have been incorporated in the PROCAM cardiovascular risk-prediction algorithm.<sup>39,40</sup> Subsequent studies have confirmed these findings<sup>41</sup> and also suggest that non-fasting TGs are a better predictor of risk than fasting TGs.<sup>42,43</sup> Non-fasting TGs probably predict risk better than fasting TGs, as they, at least in part, reflect the duration of postprandial lipaemia and the rapidity with which atherogenic remnant lipoproteins are cleared. It is, however, almost impossible to precisely determine the contribution that moderate hypertriglyceridaemia makes to cardiovascular risk independently due to the multiple metabolic abnormalities (diabetes, obesity, hypertension), secondary lipid changes (low HDLC, small dense LDLC) and pro-inflammatory and pro-thrombotic changes seen in association with hypertriglyceridaemia.

# Treatment of hypertriglyceridaemia

#### Treatment to reduce cardiovascular risk

The evidence base for specifically targeting mild to moderate hypertriglyceridaemia beyond control of other risk factors, including LDLC, in patients at high cardiovascular risk is limited. Most clinical outcome studies have focused on LDLC reduction as the primary target and have used statins that have modest triglyceride-lowering properties. The strongest evidence of benefit for a non-LDLC-centred strategy comes from studies in which fibrates were given to patients with well-defined lipid phenotypes: moderate hypertriglyceridaemia with low HDLC.<sup>44,45</sup> The ACCORD study is currently investigating the use of a statin versus a statin + fibrate strategy in high-risk Type II diabetes mellitus. There are no well-established triglyceride target values and treatment selection currently requires careful analysis of the lipid phenotype as well as a lifestyle review and clinical judgement. A fuller discussion of these issues can be found in Yuan et al<sup>46</sup> and Brunzell.<sup>47</sup>

#### Treatment of severe hypertriglyceridaemia

The primary goal is to lower TGs rapidly to reduce the risk of acute pancreatitis. Cardiovascular risk reduction is of secondary concern, but becomes increasingly relevant once the pancreatitis risk has been dealt with.

# Non-drug treatment

Secondary factors that may be contributing to hypertriglyceridaemia need to be actively sought out and treated (Tables III and IV). In clinical practice, the most common problem is either undiagnosed or uncontrolled diabetes. Admission to hospital is often helpful to rapidly control hyperglycaemia. If drugs are contributing significantly to hypertriglyceridaemia, treatment should be switched or discontinued if the patient's clinical condition allows this and there are effective alternative treatment options. In the longer term, weight loss and exercise contribute to improved metabolic control.

Marked restriction of dietary fat intake is essential when managing severe hypertriglyceridaemia (see Table I). At Groote Schuur Hospital we prescribe an extremely low-fat diet (less than 10 g of fat a day [g/d]) for about three days when patients with severe hypertriglyceridaemia are initially referred. This diet is colloquially known as the 'Rescue diet' and rapidly lowers TGs (Table V). It is not nutritionally adequate in the long term and the long-term dietary goal is to restrict total fat intake to around 20–30 g/d. This is not always easy to achieve and requires dedication from the patient (reading labels, assessing portion sizes, calculating expenditure on 'fat budget') and the assistance of a dietitian with specific experience in the management of severe hypertriglyceridaemia. Dietary fat restriction needs constant re-enforcement and spiking triglyceride values on follow-up are often related to dietary indiscretions. Alcohol should ideally be avoided completely or intake should be reduced drastically.

Omega-3 fatty acids (fish oils) lower TGs by reducing the synthesis and secretion of VLDL<sup>48</sup> and by increasing expression of LPL in adipose tissue.<sup>49</sup> Pharmacological doses of around 4 g/d of eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) are required for maximal effect. Fish oils are most effective in moderately severe hypertriglyceridaemia and may lower TGs by up to 40% in some patients.<sup>50,51</sup> Fish oils are ineffective in LPL deficiency and related disorders and may worsen hypertriglyceridaemia if prescribed inappropriately. Preparations of

Daily menu			
Breakfast	(1.7 g)		
125 ml orange juice	0.3	1 banana	0.4
3/4 cup Rice Crispies	0.0	250 ml skim milk	0.5
1 slice white bread	0.5	15 ml honey	0.0
Lunch	(1.6 or 2.4 g)		
2 med potatoes (2 bread)	0.2 (1.0)	60 g fat-free cottage cheese	0.9
Salad (lettuce, cucumber, tomato)	0.5		
Supper	(2.4 or 3.6 g)		
375 ml white rice (pasta)	0.6 (1.6)	125 ml tomato/onion mix	0.4
125 ml lentils	0.4	Vegetables (carrot, broccoli)	0.4
Fruit (3 slices of pineapple)	0.6		
	(1.0.)		
Snacks	(1.3 g)		
Apple, morning	0.6	Pear, afternoon	0.7

#### Table V: 'Rescue diet' for severe hypertriglyceridaemia

#### Other supplements

No diabetes	Diabetes			
Beverages				
Carbonated drinks including colas	Dietetic cold drinks			
Lucozade	Low calorie Lecol, Oros			
Fruit juice, including orange, apricot, apple, grape				
Sweets				
Boiled sweets	Artificially sweetened			
Jelly babies, wine gums, marshmallows				
Peppermints, vitamin C sweets				
Spreads				
Sugar syrup, honey, molasses	Dietetic jams			
Jam, marmalade				
Desserts				
Jelly, canned fruit, custard made with skim milk (0.4 g fat/250 ml)	Artificially sweetened jelly			
Meringues without cream	Low-calorie canned fruit			
Dried fruit				

Fats are often poorly declared on food labels, and recipes may variably include fats and are best not trusted. Medium-chain TGs, although not necessarily destined to chylomicrons, could still undergo chain elongation and enter chylomicrons and thus aggravate hypertriglyceridaemia. Intravenous lipid supplementation (Intralipid, Lipovenous) is contra-indicated. Diet developed at the Lipid Clinic with the assistance of Cecily Fuller (RD).

sufficient strength and purity are not always readily available in South Africa.

#### Drug treatment

Monotherapy is preferred initially, but many patients do ultimately require combination lipid-lowering therapy to achieve optimal control. Combination therapy should be prescribed with due consideration of contra-indications and with careful monitoring. The second drug is selected based on the predominant remaining lipid abnormality once a steady state has been reached on monotherapy.

Fibric acid derivatives include bezafibrate, fenofibrate and gemfibrozil. These drugs influence lipid metabolism at multiple points by binding to PPAR- $\alpha$  in the liver and modulating transcription of many genes involved in lipoprotein metabolism. Fibrates are central to the management of severe hypertriglyceridaemia and are the drugs of first choice. Fibrates

lower TGs, increase HDLC and may either lower or in some cases raise LDLC. The latter situation often arises in hypertriglyceridaemic subjects when the more efficient lipolytic processing brought about by fibrates results in increased LDL production. Fibrates are excreted renally and doses need to be adjusted to renal function. Fibrate therapy is often accompanied by a modest ( $\pm$  10%) rise in creatinine but this is not due to a lowered glomerular filtration rate and reverses on discontinuation.<sup>52,53</sup>

Niacin may lower TGs by up to 45% but is most frequently prescribed in mild to moderate hypertriglyceridaemia. There are multiple other beneficial effects on the lipid profile (LDLC reduction, HDLC increase, Lp(a) reduction) and niacin prescription is generally targeted at cardiovascular risk reduction rather than the management of severe hypertriglyceridaemia. Flushing and pruritus limit the acceptability to patients but newer preparations with reduced flushing due to slowrelease formulation and the addition of a prostaglandin D2 receptor 1 blocker should be available in South Africa soon.<sup>54</sup>

Statins do lower TGs but are not effective in severe hypertriglyceridaemia. In the experience of the Groote Schuur Hospital's lipid clinic, statins continue to be frequently prescribed for severe hypertriglyceridaemia with predictably disappointing results. Statins may be used as monotherapy in mild to moderate hypertriglyceridaemia or in combination with fibrates if LDLC remains high after TGs have been controlled.

Ezetimibe does not lower TGs significantly but can be combined with fibrates if additional LDLC lowering is required and statins are contraindicated or not tolerated. Cholestyramine can raise TGs and should be avoided in hypertriglyceridaemia.

## Conclusion

Marked hypertriglyceridaemia is a risk factor for pancreatitis, while moderate hypertriglyceridaemia is a cardiovascular risk factor. Several new proteins that play important roles in lipolysis have been discovered recently and GWAS have identified linkages to many genes of as yet unknown function. We may yet have a lot to learn about lipolysis and TGRL metabolism in general.

The case for treating severe hypertriglyceridaemia is unequivocal, while treatment strategies and triglyceride goals are less well defined in moderate hypertriglyceridaemia, where the focus is on cardiovascular risk reduction.

Although LDL rightly remains the focus of our attention for cardiovascular risk reduction and the belle of the ball, TGRL are attracting increasing scientific attention and study. Unfortunately, this is not a true fairytale transformation, as the emerging Cinderella certainly has a mean and vindictive streak, causing mayhem in the pancreas or partnering with her stepsister to ravage the arteries.

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# Honorary Fellows The Colleges of Medicine of South Africa As at 2 September 2010

- Abrahamse Leonard George (CMSA) (1991)
   Acquaye Joseph Kpakpo (CP) (2004)
   Adams Aileen Kirkpatrick (CA) (1987)
   Adamson Fryhofer Sandra (CP) (2003)
   Akande Oluwole (COG) (2002)
   Alberti Kurt George MM (CP) (1998)
- Anderson Edward William (C PSYCH) (1964)
   Arulkumaran Sabaratnam (COG) (2005)
   Asmal Kader (CMSA) (2003)
- \* Atkins Hedley John Barnard (CS) (1968) Azubuike Jonathan C (C PAED) (2005) Baird David (COG) (2009)
- Ballantyne John Chalmers (C ORL) (1989)
   Baltzan Richard (CP) (2001)
- Barlow Charles Sydney (CS) (1970)
   Becklake Margaret R (CP) (1994)
   Benatar Solomon Robert (CP) (2001)
   Bird Alan Charles (C OPHTH) (2006)
- \* Blaisdell F William (CS) (1986)
  \* Bortz Edward L (COG (1957)
- Bothwell Thomas Hamilton (CP) (1994) Bouchier Ian Arthur Dennis (CP) (1992)
- \* Boulter Patrick Stewart (CS) (1961)
- Boix-Ochoa José (CS) (2006)
- Bradlow Emanuel Percy (CMSA) (1980)
   Brain Walter Russell (C NEUROL) (1957)
- Brebner Innes Wares (CS) (1961)
- Breen James Langhorn (COG) (1984)
- \* Brock John Fleming (CP) (1973) Brown Thomas C K (Kester) (CA) (2002) Browse Norman (CS) (1996)
- Bruce John (CS) (1962)
   Burger Henry (CP) (1984)
   Burger John (CS) (1984)
- Burgess John H (CP) (1991) \* Byrne Patrick Sarsfield (CFP) (1975) Calder Andrew (COG) (2005) Calnan Charles Dermod (C DERM) (1970) Cameron Donald Patrick (CP) (1998) Caruso Vincent (C PATH) (2005) Chalmers Iain Geoffrey (COG) (2001)
- \* Chisholm Geoffrey Duncan (C UROL) (1990)
- \* Clark Douglas Henderson (CS) (1979)
- Clayton Stanley George (COG) (1975)
   Clewlow Warren (CMSA) (2006)
   Collin John Richard Olaf (C OPHTH) (2007)
   Conti Charles Richard (CP) (1991)
   Courtemanche Albert Douglas (CS) (1991)
   Couture Jean (CS) (1979)
- \* Cowley John Godfrey (CMSA) (1989) Cox John (C PSYCH) (2000)
- \* Craib William Hofmeyer (CP) (1974)
- Crichton Eric Cuthbert (COG) (1963)
   Cunningham Anthony Andrew (CA) (2004)
   Cywes Sidney (CS) (1998)
- \* Dacie John Vivian (C PATH) (1973)
- \* Dall George (CMSA) (1989)
- \* Dart Raymond Arthur (CMSA) (1984)
- \* Daubenton François (Snr) (COG) (1986)
   \* De Beer Johannes (CMSA) (1978)

Cape Town, SA Accra, Ghana London, UK Atlanta, USA Ibadan, Nigeria London, UK Frant, UK London,UK Cape Town, SA London, UK Enugu, Nigeria Edinburgh, UK London,UK Saskatoon, Canada Johannesburg, SA Montreal, Canada Cape Town, SA London, UK California, USA Pennsylvania, USA Johannesburg, SA Edinburgh, UK Cumbria. UK Barcelona, Spain Johannesburg, SA London, UK Halfway House, SA New Jersey, USA Cape Town, SA Victoria, Australia London, UK Edinburgh, UK Victoria, Australia Westmount, Canada Manchester, UK Edinburgh, UK London, UK Queensland, Australia NSW, Australia Oxford, UK Edinburgh, UK Glasgow, UK Surrey, UK Sandton, SA London, UK Florida, USA Ottawa Canada Quebec, Canada Johannesburg, SA London. UK Somerset East, SA Cape Town, SA Dublin, Ireland Cape Town, SA London, UK Cape Town, SA Johannesburg, SA Cape Town, SA Pretoria, SA

Deschênes Luc (CS) (1998) De Swiet Michael (COG) (2004) Deutman August (C OPHTH) (2000) De Villiers Henri Paul (CMSA) (1993) Dewar Frederick Plummer (C ORTH) (1982) Dewhurst Christopher John (COG (1978) Dickson Wright Arthur (CS) (1960) Diederichs Nico (CMSA) (1977) Dinsdale Henry B (CP) (1996) Donald lan (COG) (1967) Dott Norman McOmish (CS) (1957) Douglas Donald MacLeod (CS) (1972) Douglas Neil James (CP) (2005) Doyle J Stephen (CP) (1994) Drake Charles George (CS) (1972) Drife James Owen (COG) (2002) Dubb Asher (CP) (1998) Dudley Hugh Arnold Freeman (CS) (1987) Duff Francis Arthur Joseph M (CS) (1972) Dunlop Derrick (CP) (1978) Du Plessis Daniel Jakob (CS) (1982) Du Toit Guillaume Tom (C ORTH) (1982) Elkington Andrew R (C OPHTH) (1997) Elliott Guy Abercrombie (CP) (1968) English Terence Alexander H (CS) (1991) Fabb Wesley Earl (CFP) (1975) Farooqui Muhammad S (CP) (2001) Fitzpatrick John Michael (C UROL) (2002) Foëx Pierre (CA) (2007) Forman Frank (CP) (1970) Foulds Wallace Stewart (C OPHTH) (1992) Fritz Vivian Una (FCP) (1972) Galasko Charles S B (C ORTH) (2003) Gear James Henderson S (CMSA) (1990) Geldenhuys Frans Gert (COG) (1987) Genest Jacques (CP) (1970) Gillingham Francis J (C NEUROS) (1981) Gill Geoffrey Victor (CP) (2007) Gilmore lan Thomas (CP) (2007) Giwa-Osagie Osato O F (COG) (2005) Gluckman Henry (CP) (1983) Gordon Isidor (C FOR PATH) (1984) Gordon-Smith Derek Peter (CMSA) (1993) Greenberger Norton J (CP) (1991) Guillebaud John (COG) (2004) Hamilton Andrew M P (C OPHTH) (2001) Hamilton Stewart (CS) (2005) Hanlon C Rollins (CS) (1988) Hanrahan John Chadwick (CS) (1992) Harrison Donald F N (C ORL) (1988) Harwood-Nash Derek C (C RAD) (1991) Hederman William Patrick (CS) (1992) Hennessy Thomas Patrick J (CS) (1997) Hoffenberg Raymond (CP) (1999) Hollins Sheila (C PSYCH) (2005) Hudson Alan Roy (C NEUROS) (1992)

De Klerk Frederick Willem (CMSA) (1994)

De Laey Jean-Jacques (C OPHTH) (2000)

Denny-Brown Derek Ernest (CP) (1971)

Gent, Belgium Boston, USA Quebec, Canada London, UK Nijmegen, Netherl. Johannesburg, SA Ontario, Canada London, UK London, UK Pretoria, SA Ontario, Canada Essex, UK Edinburgh, UK Dundee, UK Edinburgh, UK Dublin. Ireland Ontario, Canada Leeds, UK Johannesburg, SA London, UK Dublin, Ireland Edinburah. UK Johannesburg, SA Johannesburg, SA Hampshire, UK Cape Town, SA London, UK Victoria, Australia Karachi, Pakistan Dublin, Ireland Oxford, UK Tel Aviv, Israel Glasgow, UK Johannesburg, SA Cheshire, UK Johannesburg, SA Pretoria, SA Montreal, Canada Edinburgh, UK Wirral, UK London, UK Lagos Johannesburg, SA Durban, SA Johannesburg, SA Massachusetts USA Oxford, UK Middlesex,UK Alberta, Canada Chicago, USA Peppermint Gr. WA London, UK Toronto, Canada Dublin, Ireland Dublin, Ireland Queensland, Austr. London, UK Ontario, Canada

Cape Town, SA

Hume Robert (CS) (1992)

Huskisson lan Douglas (CMSA) (1997) Hutton Peter (CA) (2003) Idezuki Yaso (CS) (1992) Illingworth Charles Frederic W (CS) (1965) Jaffe Basil (CFP) (2007) Jansen Ernest George (CP) (1959) Janssen Paul Adriaan Jan (CMSA) (1989) Jeffcoate Thomas Norman A (COG) (1972) Joubert Peter Gowar (CMSA) (1999) Kathrada Ismail (CMSA) (1998) Kay Andrew Watt (CS) (1972) Keogh Brian (CP) (1998) Kerr David Nicol Sharp (CP) (1992) Kevs Derek Lyle (CMSA) (1993) Kirsch Ralph Emmanuel (CMSA) 2009 Knocker Phyllis Amelia H (CMSA) (1988) Kok Ordino Victor Steyn (CA) (1975) Krige Christiaan Frederik (COG) (1966) Kuku Sonny F (CP) (2001) Landau Arthur (CP) (1981) Langer Bernard (CS) (2001) Leffall LaSalle D (CS) (1996) Lemmer Johan (CD) (2006) Leon Alan Henry (CMSA) (1978) Levett Michael John (CMSA) (1999) Levin Lawrence Scott (C PLAST) (2006) Loewenthal John (CS) (1972) Looi Lai Meng (C PATH) (2005) Lorimer Andrew Ross (CP) (2004) Louw Jan Hendrik (CS) (1980) Luke Egerton M F (CP) (2001) Luntz Maurice Harold (C OPHTH) (1999) MacKay Colin (CS) (1998) MacKenzie Walter Campbell (CS) (1975) McDonald John W David (CP) (2004) McLean Peter (CS) (1998) MacLean Lloyd Douglas (CS) (1996) MacSween Roderick N M (C PATH) (1998) Mandela Nelson Rohlihlala (CMSA) (1995) Maran Arnold George D (CS) (1998) McKenna Terence Joseph (CP) (2005) Meakins Jonathan Larmonth (CS) (2004) Mensah George A (CP) (2005) Mercer Walter (C ORTH) (1956) Meursing Anneke Elina Elvira (CA) (2003) Middlemiss John Howard (C RAD) (1975) Mieny Carel Johannes (CMSA) (1996) Mokgokong Ephraim T (COG) (2006) Molteno Anthony C B (C OPHTH) (2001) Morrell David Francis (CMSA) (2004) Mortimer Robin Hampton (CP) (2004)

- \* Murley Reginald Sydney (CS) (1979)
- \* Mushin William Woolf (CA) (1962)
- \* Myburgh Johannes Albertus (CMSA) (1991) Myers Eugene Nicholas (C ORL) (1989)
- \* Nel Cornelius Johann C (CMSA) (1998)
- \* Newman Philip Harker (C ORTH) (1982) Ngu Victor Anomah (FCS) (2008) Norman Geoffrey Ross (FCM) (2003)
- O'Brien Bernard McCarthy (C PLAST) (1992) O'Donnell Barry (CS) (2001) Ogilvie Thompson Julian Oh Teik Ewe (CA) (2003) O'Higgins Niall (CS) (2005)
- Oliver Thomas Keyser (Jnr) (C PAED) (1980) \* Ong Guan-Bee (CS) (1976) Ong Liver (DS) (1976)
- Opie Lionel Henry (CP) (2008) \* Oppenheimer Harry Frederick (CP) (1968)
- Organ Claude H (Jnr) (CS) (1986)
   Pasnau Robert O (C PSYCH) (1988)
   Patel Naren (COG) (1997)
- \* Peel John (COG) (1968)
- \* Petrie James Colquhoun (CP) (1998) Pinker George (COG) (1991)

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Victoria, Australia Dublin, Ireland Johannesburg, SA Perth, West Australia Dublin, Ireland North Carolina, USA Mid-Lev. Hong Kong Cape Town, SA Johanneburg, SA California, USA California, USA Dunkeld, Scotland Salisbury, UK Edinburgh, UK London, UK

- \* Platt Harry (CS) (1957)
- \* Porritt Arthur (CS) (1962)
   Prys-Roberts Cedric (CA) (1996)
   Ramphele Mamphela Aletta (CMSA) (2005)
   Reeve Thomas Smith (CS) (1991)
   Retief Daniel Hugo (CD) (1995)
- Rhoads Jonathan Evans (CS) (1972)
   Rice Donald Ingram (CFP) (1975) Richmond John (CP) (1991)
- \* Rickham Peter Paul (CS) (1992)
- \* Robson Kenneth (CP) (1969)
- \* Rosenheim Max Leonard (CP) (1972) Rosholt Aanon Michael (CMSA) (1980)
- \* Roth Martin (C PSYCH) (1973)
- Rudowski Witold (CS) (1990)
- \* Rupert Antony Edward (CP) (1968)
   \* Rutledge Felix Noah (COG) (1990)
- Saint Charles Frederick Morris (CS) (1967)
   Saiter Robert B (C ORTH) (1973)
   Salyer K Everett (C PLAST) (2007)
   Saunders Stuart John (CMSA) (1989)
   Schulz Eleonora Joy (C DERM) (2006)
   Seedat Yackoob Kassim (CMSA) (1998)
   Segal Anthony Walter (CP) (2008)
- \* Sellors Thomas Holmes (CS) (1972) Sewell Jill (CP) (2005)
- \* Shaw Keith Meares (CS) (1979) Shear Mervyn (CD) (1999); (C PATH) (2004)
- \* Shields Robert (CS) (1991) Shires George Thomas (CS) (1979) Siker Ephraim S (CA) (1983) Sims Andrew C Peter (C PSYCH) (1997) Slaney Geoffrey (CS) (1986) Smith Edward Durham (CS) (1990) Smith John Allan Raymond (CS) (2005)
- \* Smith Marlow Rodney (CS) (1976)
- \* Smythe Patrick Montrose (C PAED) (1988) Soothill Peter William (COG) (2004) Sparks Bruce Louis W (CFP) (2006) Spitz Lewis (CS) (2005)
- \* Stallworthy John Arthur (COG) (1964)
   \* Star, Iulius (CD) (1080)
- \* Staz Julius (CD) (1989) Steer Phillip James (COG) (2004)
- \* Straffon Ralph A (CS) (1992) Strong John Anderson (CP) (1982) Strunin Leo (CA) (2000)
- \* Swart Charles Robberts (CP) (1963) Sweetnam Sir Rodney (CS) (1998) Sykes Malcolm Keith (CA) (1989) Tan Ser-Kiat (CS) (1998) Tan Walter Tiang Lee (CP) (2001)
- Taylor Selwyn Francis (CS) (1978)
- Te Groen Lutherus Johannes (COG) (1963)
   Terblanche John (CMSA) (1995)
   Thomas William Ernest Ghinn (CS) (2006)
   Thomson George Edmund (CP) (1996)
   Tobias Phillip (CMSA) (1998)
   Todd Ian P (CS) (1987)
- Townsend Sydney Lance (COG) (1972)
   Tracy Graham Douglas (CS) (1979) Trunkey Donald Dean (CS) (1990)
   Tucker Ronald BK (CMSA) (1997)
   Turnberg Leslie Arnold (CP) (1995)
   Turner-Warwick Margaret (CP) (1991)
- Underwood James C E (C PATH) (2006) \* Van der Horst Johannes G (CP) (1974) Van Heerden Jonathan A (CS) (1989) Vaughan Ralph S (CA) (2003)
- Viljoen Marais (CMSA) (1981)
   Visser Gerard (COG) (1999)
- \* Walt Alexander J (CS) (1989)
- Wijesiriwardena Bandula C (CP) (2005) \* Wilkinson Andrew Wood (CS) (1979)
- \* Wrigley Arthur Joseph (COG) (1957) Yeoh Poh-Hong (CS) (1998)

Manchester, UK Wellington, N Zealand Bristol, UK Cape Town, SA NSW. Australia Alabama, USA Philadelphia, USA Ontario, Canada Edinburgh, UK Altendorf, Switzerl. London, UK London, UK Johanneburg, SA Cambridge, UK Warsaw, Poland Stellenbosch, CT Texas, USA Cape Town, SA Ontario, Canada Texas, USA Cape Town, SA Pretoria. SA London, UK Durban, SA London, UK Victoria, Australia Dublin, Ireland Cape Town, SA Liverpool, UK Nevada, USA Pennsylvania, USA Leeds, UK London, UK Victoria, Australia Sheffield, UK London, UK Durban, SA Bristol, UK Parktown, SA London, UK Oxford, UK Cape Town, SA London, UK Ohio, USA Edinburgh, UK London, UK Brandfort, SA London, UK Oxford, UK Singapore Singapore London, UK Pretoria, SA Cape Town, SA Sheffield, UK New York, USA Johannesburg, SA London, UK Victoria, Australia NSW, Australia Oregon, USA Cape Town, SA Johannesburg, SA London, UK Sheffield, UK Cape Town, SA S Carolina, USA Cardiff, UK Pretoria SA Utrecht, Netherlands Michigan, USA Kalubowila, Sri Lanka Edinburgh, UK Cheshire, UK

Kuala Lump, Malaysia

# Fellowship ad Eundem

# Fellowship ad Eundem

The Colleges of Medicine of South Africa *As at 2 September 2010* 

	Bowie Malcolm David (C PAED) (2007)	Knysna
۲	Breytenbach Hermanus (CMFOS) (2001)	Stellenbosch
	Cleaton-Jones Peter Eiddon (CD) (2005)	Johannesburg
	Corder Robert Franklin (CEM) (2007)	Maryland, USA
	Davey Dennis Albert (C PAED) (2008)	Bergvliet, Cape Town
	Davies John Carol Anthony (CPHM) (2007)	Johannesburg
	Gear John Spencer Sutherland (CPHM) (2005)	Still Bay
	Gevers Wieland (CP) (2001)	Rosebank, Cape Town
	Hansen John D Lindsell (C PAED) (2007)	Plettenberg Bay
	Heese Hans de Villiers (C PAED) (2007)	Rondebosch
	Keet Marie Paulowna (C PAED) (2007)	Cape Town
	Levin Solomon Elias (C PAED) (2007)	Johannesburg
	Lemmer Johan (CD) (2003)	Johannesburg
	Makgoba Malegapuru W (CP) (2003)	Durban
	Ncayiyana Daniel JM (CMSA) (2002)	Durban

Odendaal Hendrik Johannnes (COG) (2009)	Cape Town
Padayachee Gopalan N (CPHM) (2004)	Cape Town
Philpott Hugh Robert (COG) (2008)	Durban
Price Max Rodney (CPHM) (2004)	Cape Town
Saffer Seelig David (C NEURO) (2004)	Johannesburg
Sutcliffe Thomas James (C PSYCH) (2008)	Cape Town
Van Reenen Johannes F (C DENT) (2003)	George
Van Selm Justin Leander (C OPHTH) (2005)	Plettenberg Bay
Welsh Neville Hepburn (C OPHTH) (2006)	Lydenburg

# \* Deceased

# Erratum: TRANSACTIONS 2010; 54(1):45

Box 2: Standards for teaching delivery

- Patient safety
- Quality assurance, review and evaluation
- Equality, diversity and opportunity
- Student selection
- Design and delivery of curriculum including assessment
- Support and development of students, teachers and local faculty
- Management of teaching, learning and assessment
- Educational resources and capacity

We herewith wish to apologise for the error in the previous edition of Transactions. Box 1 was incorrectly repeated as Box 2. The updated pdf is available from www.collegemedsa.ac.za.

# CMSA Life Members As at 2 September 2010

Aaron Cyril Leon Abdulla Mohamed Abdul Latif Abel Solomon

- Abell David Alan Abrahams Abduragiem Abrahams Cyril Abramowitz Israel Ackermann Daniel J Joubert
- Adam Anvir Adams Edward Barry Adhikari Mariam Adler David Ivan
- Adler Max Adno Jacob Africa Benjamin Jakobus Ahmed Yusuf Aitken Robert James Alderton Norman
- Alexander Louis Leonard Allan John Cameron
- Allen Colin E Lewer
- Allen Keith Lewer Allen Peter John Allie Abduraghiem Allison John Graham Allwood Clifford William Allwright George Tunley
- Anderson Donald Frederick Anderson Joan Anderson Mary Gwendoline Anderton Edward Townsend Andre Nellie Marv Andrew William Kelvin Appleberg Michael Archer Graham Geoffrey
- Armitage Bernard Albert
- Arndt Theodore C Heinrich Asmal Aboobaker
- Baigrie Robert D Hutchinson Bailey Michael John Baillie Peter **Baines** Richard E Mackinnon Baise Gershan Baker Graeme Cecil Baker Lynne Wilford **Baker** Peter Michael Barbezat Gilbert Olivier Barday Abdul Wahab
- Barlow John Brereton
- Barnard Christiaan Neethling Barnard Philip Grant
- Barnard Pieter Melius **Barnes** Donal Richard Barnetson Bruce James
- \* Barrett Carl T Herzl Barron David
- Barry Michael Emmet Baskind Eugene
- Batchelor George Bryan Bax Geoffrey Charles

#### Bean Eric Beatty David William Becker Herbert

- Becker Ryk Massyn Bedford Michael Charles
- Beemer Abraham Mayer Benatar Solly Robert Benatar Victor Benjamin Ephraim Sheftel Bennett Margaret Betty Bennett Michael Julian
- Bensusan Arthur David Berk Morris Eli
- Berkowitz Hayman Solomon Berkowitz Leslie Berson Solomon David Bernstein Alicia Sheila
- Bernstein Henry Bethlehem Brian H James
- Beukes Hendrik Johannes Stefanus Rezuidenhout Daniel Johannes J Bezwoda Werner Robert Beyer Elke Johanna Inge
- Biddulph Sydney Lionel Biebuvck Julien Francois Binnewald Bertram R Arnim Bird Allan Vivian
- Blair Ronald Mc Allister Blaylock Roger Selwyn Moffat
- Blecher John Aubrey Bleloch John Andrew Bloch Cecil Emanuel Bloch Hymen Joshua
- Block Joseph Block Sidney Blum Lionel
- Blyth Alan George Bock Ortwin A Alwin
- **Bodenstah** Albert TBH Bok Louis Botha
- \* Booth John Vivian Borchers Trevor Michael
- Bosman Christopher Kay Botha Daniel Johannes
- Botha Jan Barend Christiaan Rotha Jean René Botha Louis Johannes Bothwell Thomas Hamilton Boulle Trevor Paul Bowen Robert Mitford
- Bowie Malcolm David Bradlow Bertram Abraham **Braude** Basil
- Bremer Paul MacKenzie Bremner Cedric Gordon
- Brenner Dietrich Karl Briedé Wilhelmus M Hendrik Brink Andries Jacob Brink Garth Kuys Brink Stefanie

Brits Jacobus Johannes Brock-Utne John Gerhard Brokensha Brian David Broude Abraham Mendel

- \* Brown Alexander Annan Brown Helen Annan Brown Baymond Solomon Brueckner Roberta Mildred Bruinette Hendrik van Rensburg Bruwer André Daniel
- Buch Julius
- Buchan Terry Bull Arthur Barclav
- Burgess John Digby Burain Solomon
- Butcher Nigel Ross Butler George Parker Butt Anthony Dan Buvs Anna Catherina
- Cain Michael Frank Caldwell Michael William Caldwell Robert lan Carim Abdool Samad Carim Suliman Catterall Robert Desmond Catzel Pincus Cavvadas Aikaterine
- Chaimowitz Meyer Alexander Chait Jack Charles David Michael
- Charles Lionel Robert Charlewood Godfrey Phillips
- Charlton Robert William Charnock Frederick Niven
- Cheetham Richard W Spencer
- \* Chenik Gerald Samson
- \* Chitters Max
- Chouler Florence Joan Gordon
- **Cilliers** Pieter Hendrik Krynauw **Cinman** Arnold Clive Claassens Hermanus JH
- Cluver John Arthur Clyde Jack Howard
- Coetzee Louis Frederik Coetzer Hendrik Martin Cochrane Raymond Ivan Cohen Brian Michael Cohen David Cohen Eric Cohen Harvey Cohen Leon Allan

- \* Cohen Lionel Cohen Morris Michael Cohen Philip Lester **Coller** Julian Somerset Combrink Johanna Ida Lilly
- **Comfort** Peter Thomas Conradie Marthinus T Stevn Cooke Paul Anthony Cooke Richard Dale Cooper Cedric Kenneth Norman Coote Nigel Penley Coovadia Hoosen Mahomed Coovadia Mohamed Abdool Hak
- Cort Alexander
- Cowie Robert Lawrence \* Cowley John Godfrey
- \* Cowley Ronald
- \* Cowlin John Albert
- \* Cox Herbert Walter Coxon John Duncan Craig Cecil John Tainton Crewe-Brown Heather Helen Crichton Eric Derk Crosier James Herbert Crosley Anthony lan Croucamp Petrus C Hendrik Cullis Sydney Neville Raynor **Cumes** David Michael Cywes Sidney
- \* Dall George Dalrymple Desmond Ross Danchin Jack Errol
- \* Dando Raymond Victor Danilewitz Daniel Daneel Alexander Bertin **Darlison** Michael Tatlow
- **Daubenton** Francois Daubenton François (Snr) Daubenton John David Davey Dennis Albert Davidson Aaron Davies David
- Davies Michael Ross Quail Davis Charles Pierre
- Davis Meldrum J Finnamore **Dawes** Marion Elizabeth
- \* Daynes William Guy De Beer Hardie Alfred De Klerk Daniel Johannes Janse
- \* De Kock Johannes Hendrikus \* De Kock Machiel Adriaan
- De Villiers Jacquez Charl \* De Villiers Jan Naude
- De Villiers Pieter Ackerman De Wet Jacobus Johannes Dean Joseph G Kerfoot
- Denis-Lester Leslie Dent David Marshall **Dennehy** Patrick J Pearce Derman Henry Jack

# Bruwer Ignatius Marthinus Stephanus Burger Thomas Francois

- Burns Derrick Graham
- \* Burton Dudley Walton
- Byrne James Peter

- Chetty Dhevaraj Vasudeva
- Cilliers Leon
- Clausen Lavinia
- Coetzee Daniël

- Dhansay Yumna \* Dickie-Clark William Findlay Digby Rodney Mark Distiller Lawrence Allen Docrat Rookayia
- \* Dommisse George Frederick Donald Peter Roderick Dornfest Franklyn David Douglas-Henry Dorothea Dove Ephraim
- \* Dove Jechiel
- \* Dowdle Eugene B Davey Dower Peter Rory
- \* Dreyer Cornelis Jan Dreyer Wynand Pieter
- \* Dubb Seymour
- \* Duckworth William Calvert Duncan Harold James Dunning Richard Edwin Frank
- \* **Du Plessis** Daniel Jacob **Du Plessis** Dionisius Johann
- Du Plessis Hendrik Pienaar Du Plessis Hennie Lodewia
- \* Du Plessis Hercules Gerhardus
- \* Du Plessis Willem Hendrik
- Durham Francis James \* Du Toit Guilluame Tom Du Toit Johan Jakob Du Toit Johan Loots Du Toit Pierre F Mulvihal Duursma Rienk Willem Duys Pieter Jan
- \* Dykman Cornelis Derksen
  \* Eales Lennox
- **Eathorne** Allan James **Edelstein** Harold
- \* Edelstein Wolfe
- Edge Kenneth Roger \* Edge William E Basil Ehrlich Hyman
- Eksteen Jurgen Kotze \* Engelbrecht Jacobus Adriaan
- Enslin Ronald
- \* Enslin Theophilus Benedictus
   \* Epstein Edward
   Erasmus Frederick Rudolph
   Erasmus Philip Daniel Christoffel
   Essack Maimona
   Esterhuysen Stephen Philip
   Etellin Pierre Anthony
   Evans Warwick Llewellyn
- \* Evans William Benjamin David I
- \* Eyre Jane
- Faiman Israel Osser
   Fainsinger Maurice Haig
   Fanarof Gerald
   Fehler Boris Michael
- Feldman Max Bernard
   Fergusson David J Guillemard
   Fergusson David J Guillemard
   Fernandes Carlos Manuel Coelho
   Findlay Cornelius Delfos
   Fine Julius
   Fine Leon Arthur
- Fine Stuart Hamilton \* Fischer Gustav Fichardt Fisher-Jeffes Donald Leonard Fleishman Solomon Joel Flynn Michael Anthony Fontein Batholomeus T Petrus
- \* Foord Charles John Forman Robert Förtsch Hagen E Armin Foster Nathaniel E George Foster Patrick Anthony
- \* Fourie Christian F Gilsen

- Frankel Freddy Harold Frank Joachim Roelof
- Frank Joachim Roelor
   Franks Maurice
- Freedman Jeffrey \* Freeman Arthur Arnold
- Freiman Ida
- \* Friedberg David
- \* Friedland Benjamin Percival
- \* Friedman Isidore \* Friedman Sydney
- Friedmann Allan Isodore Fritz Vivian Una
- \* Frost Cyril
- Froese Steven Philip
  \* Fuller Denis Norden
- \* Futeran Gerald Galatis Chrisostomos Galloway Peter Allan Gani Akbar
- Garb Minnie Gardner Jacqueline Elizabeth
- \* Gasson Charles H Reginald Gasson John Edward
- Gaylis Hyman \* Geere Jacobus Johannes
- \* Geerling Rudolf
- \* Geffen Heime
- \* Geldenhuys Frans Gert Gentin Beniamin
- \* Gerber Johan Abraham Gersh Bernard John Gibson John Hartley

**Gildenhuys** Jacobus Johannes **Gillis** Lynn Sinclair

- \* Gillmer Ralph Ellis Ginsberg Hilde
- \* Girdwood Donald Hampden Glazer Harry
- \* Glen Alan Murray \* Gluckman Jonathan
- Giyn Thomas Raymond Goeller Errol Andrew
- \* Goetz Robert Johannes
- Goldberg Solomon
- \* Goldblatt Nochem Goldin Martin
- Goldschmidt Reith Bernard Goldstein Bertie \* Gollach Benjamin Leonard
- Goodley Robert Henry Goodman Hillel Tuvia Goosen Felicity
- \* Gordon Grant M Cameron
- \* Gordon Isidor
- Gordon Vivian Nathan
   Gordon Walter
- Gordon-Smith Derek Peter
   Gorvy Victor
   Govender Perisamy Neelapithambaran
- Govender Perisarity Neelapitriaribara Govind Uttam Gowans Ronald
- \* Gowans Ronald \* Graham John Donald
- Graham Kathleen Mary Grant John F Cardross
- \* Grayce Isaac
- Grek Isaac Joseph Greyling Jacobus Arnoldus
- \* Grieve James Muir Griffiths Joan McElwee Griffiths Seaton Bythyl Grimbeek Johannes Fredericus Grobbelaar Nicolaas Johannes Grobler Johannes Lodewikus Grobler Marthinus Grotepass Frans Willem

Transactions

- \* Grundill Wilfrid
- \* Grusiner Wolf
- \* Haarburger Oswald Maximillian\* Hacking Edgar Bolton
- Haffejee Ismail Ebrahim
- \* Hamelberg Henri Jacques \* Hamilton Clarence Gawn
- \* Hamilton Donald Graham
- Hamilton Donale Granam
   Hamilton Ritchie Douglas Archibald
   Hammer Alan John
   Hangelbroek Peter
   Hansen Denys Arthur
   Hansen John D Lindsell
   Harper Peter James
- Harris Ian Michael
- \* Harris Michael
- \* Harrison Derek Haddrell
- \* Harrison Gaisford Gerald Hartdegen Richard Gerhardus Hartley Patricia Staunton Hartman Ella
- Hassan Mohamed Saeed
- \* Haupt Frank Johannes Groot
   \* Haynes Donovan Russell Hayward Frederick
   Heese Hans de Villiers
   Heitner Rene
- Hefer Adam Gottlieb \* Helfet Arthur Jacob Helman Isaac
- Henderson Linda Grantham Henderson Rex Scott
- \* Hendrix Robert J Maria
- \* Henning Alwyn J Harvard \* Henson Soloman
- Henson Soloman
   \* Hersch Sidney Julius
- \* Hersman Doris
- \* Heselson Jack
- \* Heymann Seymour Charles Heyns Anthon du Plessis Hift Walter

Higgs Stephen Charles Hill John William

Hill Paul Villiers Hillock Andrew John

\* Hilson Don
 Hirschowitz Jack Sydney
 Hirschson Herman
 Hitchcock Peter John
 Hockly Jacqueline Douglas Lawton

- Hoffmann David Allen Hoffmann Vivian Jack \* Hofmeyr Francis Edward
- Hofmeyr Nicholas Gall Holland Victor Bernard Holloway Alison Mary Horak Lindley Rousseau Horrowitz Stephen Dan
- \* Hossy Sidney Charles Hovis Arthur Jehiel Howell Michael E Oram Howes Neville Edward
- Hugo André Paul \* Hugo Pierre Andre \* Human Randolph Russell Hundleby Christopher J Bretherton Hurwitz Charles Hillel Hurwitz Mervyn Bernard Hurwitz Solomon Simon Huskisson lan Douglas Hyslop Robert James Immelman Edward John Ichim Camelia Vasilica
- Ichim Liviu
  \* Ingle Pauline Cornwell

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- Isaacson Charles
- Ismail Khalid Hajee \* Ismail Mahomed Hoosen Hajee
- Israelstam Dennis Manfred \* Jacob Hilderbrand Hamilton
- Jacobs Daniel Pieter Sydney Jacobs Miguel Adrian Jacobs Peter
- \* Jacobson Isaac \* Jaffe Basil
- Jammy Joel Tobias Jan Farida Janse van Rensburg Johan Helgard

Jassat Essop Essak Jasön Peter Michael Constantine

.ledeikin Leon Victor

Jeffery Peter Colin

Jeppe Carl L Biccard

Jöckel Wolfgang Heinrich Joel-Cohen Sidney

Jeena Hansa

Jersky Jechiel

Joffe Leonard

Johnson Sylvia

Jonker Edmund

Jooste Edmund

Jordaan Robert

Kaiser Walter

\* Kaplan Harry

\* Katz Arnold

\* Katz Hymie

\* Kay Sholem

\* Kalley Harold Aaron

Kaplan Cyril Jacob

Kaplan Neville Lewis

Karlsson Eric Lennart

Kaufman Morris Louis

\* Keen Edward Norman

Keet Robert Arthur

Keeton Godfrey Roy

Kenyon Michael Robert

Kernoff Leslie Maurice

Kerr Edward Matson

Kew Michael Charles

Key Jillian Jane Aston

Kieck Charles Frederick

Kinsley Robin Howard

\* Kirsch Ralph Emmanuel

Kessler Edmund

King Jennifer Ann

\* Kisner Cyril David\* Klein Herman

Klein Hymie Ronald

Klenerman Pauline

Klevansky Hyman

Kling Kenneth George

Klugman Leon Hyam

Knox Lance O'Neil

Knobel John

Klopper Johannes Frederick

Knocker Phyllis A Hendrika

Knoetze Gerald Casparus

Kloppers Phillippus Johannes

Kemp Donald Harold Maxwell

Keet Marie Paulowna

\* Karstaedt Abraham Lemel

Jooste Jacobus Letterstedt

Jordaan James Charles

Jordaan Johann Petrus

Joubert James Rattray

Kane-Berman Jocelyne Denise Lambie

Joffe Stephen Neal

Jones Cecil Stanley

Janse van Rensburg Lucas Carl

Jansen van Rensburg Martinus

Kok Hendrick Willem Lindley Koopowitz Joseph Ivan

- Kornell Simon
   Kotton Bernard
   Kotzé Johannes van Zyl
   Koz Gabriel
- \* Kramer Michael Sherman Krengel Biniomin
- \* Kretzmar Noel Kriel Jacques Ryno
- \* Krige Christiaan Frederick Krige Louis Edmund
- \* Kriseman Michael Maurice
- \* Krogh Lex Kussel Jack Josiah Kussman Barry David Labuschagne Izak Lachman Sydney Joshua Laing John Gordon Dacomb Lake Walter Thomas Lallo Maneklal Lampert Jack Arthur
- Landsberg Pieter Guillaume \* Landsman Gerald Bernard
- Lantermans Elizabeth Cornelia \* Lapinsky Gerald Bert Large Robert George Lasich Angelo John Latif Ahmed Suliman Laubscher Willem M Lötter Lautenbach Earle E Gerard
- \* Lawrence Henry Martin Lawson Hugh Hill Leary Peter Michael Leary William P Pepperrell Leask Anthony Raymond Leaver Roy
- \* Lebona Aaron David Leeb Julius
- \* Leeming John A Lamprey
- \* Leigh Werner E Julius Lejuste Michel JL Remi \* Lemmer Eric Richard
- Lemmer Johan Lemmer Lourens Badenhorst Le Roex René Denyssen
- \* Le Roux Desmond Raubenheimer Le Roux Petrus A Jacobus Lessing Abrahim J Petrus Levenstein Stanley Levin Joseph Levin Solomon Elias Levy Reginald Bernard Levy Waltace Michael Levy Walter Jack Lewin Arthur
- \* Lewin Fihel
- \* Lewis Henry Montague L'Heureux Renton
- \* Liebenberg Nicolaas Dreyer Linde Stuart Allen Lipper Maurice Harold
- \* Lipper Maurice Ha \* Lipschitz David
- \* Lipschitz David
- Lipschilz Robert
   \* Lipschilz Robert
   \* Lipschilz Robert
   Lipworth Edward
   Lipworth Edward
   Lioyd David Allden
   Lloyd Elwyn Allden
   Lochner Jan de Villiers
   Lodemann Heide Katharina
   Loening Walter E Karl
   Lombard Hermanus Egbertus
   Loot Sayyed M Hosain
   Loots Petrus Beaufort

Losken Hans Wolfgang Losman Elma Lotzof Samuel Loubser Johannes Samuel

- Louw Adriaan Jacobus
   Louw John Xavier
   Macdonald Angus Peter
- MacEwan Ian Campbell \* MacGregor James MacWilliam MacKenzie Basil Louis MacKenzie Donald Bernard MacLeod Ian Nevis
- MacPhail Andrew Patrick \* Maggs Roderick Frank Mahomed Abdullah Eshaak Mair Michael John Hayes Maitin Charles Thabo Malan Atties Fourie
- Malan Christina \* Malan Gerard Maliza Andile
- \* Malkiel-Shapiro Boris Mangera Ismail
- \* Mangold Fritz Theodor Mankowitz Emmanuel
   \* Mann Noël Myddelton Mann Solly
- Marais Ian Philip Marais Johannes Stephanus
- \* Marchand Paul Edmond Maresky Abraham Leib
   \* Maresky Leon Solomon
- Marivate Russell Margolis Frank Margolis Kenneth Marivate Martin Markman Philip Marks Charles
- \* Masey George R Frederick
- \* Mason Eric Ivor Henry
   \* Massey Patricia J Helen
- Matisonn Rodney Earl \* Matus Szlejma Mauff Alfred Carl May Abraham Bernard Maytham Dermine McCutcheon John Peter McDonald Robert
- \* McIntosh Robert Roy McIntosh William Andrew McKenzie Malcolm Bett McPhee Michael Henry Mears Jasper W Walter Meer Farooq Moosa Meeran Mooideen Kader Melvill Roger Laidman Melville Ronald George
- Mervis Benjamin \* Mendel Sonnie Ivan
- \* Mendelow Harry
- Mendelsohn Leonard Meyer
   Meyer Anthonie Christoffel
   Meyer Bernhardt Heinrich
   Meyer Cornelius Martinus
- Meyer David \* Meyer Eric Theodore \* Meyer Jan Abraham
- Meyer Jan Abraham
   Meyer Julius
   Meyer Roland Martin
   Meyers Anthony Molyneux
   Meyersohn Sidney Jacob
- Meyerson Louis
   Michael Aaron Michael
   Michaelides Basil Andrew
   Michaels Maureen Jeanne

Michalowsky Aubrey Michael Michelow Maurice Cecil Midgley Franklin John Mieny Carel Johannes Miles Anthony Ernest Millar Robert Norman Scott

- Miller Samuel
   Milne Anthony Tracey
   Milne Frank John
   Milner Selwyn
   Mirkin Wilfred Hyman
- Mirkin Wilfred Hyman Misnuner Zelik Mitchell Peter John Mokhobo Kubeni Patrick Molapo Jonathan Lepoga
- Möller Carl Theodorus
   Möller Carl Theodorus
   Molteno Christopher David
   Moodley Jagidesa
   Moodley Thirugnanasumburanam
   Moola Yousoof Mahomed
   Moosa Abdool-Sattar
   Morley Eric Clyde
   Morrell David Francis
   Morrel David Francis
- Morris Charles David Wilkie \* Morris Derrick Ryder Morris Edel Morrison Gavin Moti Abdool Razack Movsowitz Leon
- Mullan Bertram Strancham
  \* Muller Hendrik
- Mulligan Terence P Simpson
  \* Mundy Raymond
- \* Murray Neil Laird
- \* Myburgh Johannes Albertus Myers Leonard Naidoo Balagaru Narsimaloo Naidoo Lutchman Perumal Naidoo Premilla Devi Nair Gonasegrie Puckree Nanabhay Sayed Suliman
- Nash Eleanor Scarborough Naude Johannes Hendrik \* Naylor Aubrey Chalkley Neifeld Hyman Nel Elias Albertus Nel Jan Gideon Nel Jacques Bernadus Anton
- Nel Pieter Daniel \* Nel Rhoderic William Arthur Nel Wilhelm Stephanus Neser Francois Nicholas Nestadt Allan Newbury Claude Edward
- \* Nicholson John Campbell Nicholson Melanie Eugene Noble Clive Allister Noll Brian Julian
- Norman-Smith Jack
  \* Norwich Isadore
  Novis Bernard
  Nurick Ivan James
  Obel Israel Woolf Promund
  Odendaal Hendrik Johannes
  Okreglicki Andrzej Michael
  Olinsky Anthony
  Oliver Johannes Andries
- Omar Yusuf \* Opie William Henry Orelowitz Manney Sidney Osler Henry Ingram Ospovat Norman Theodore Padayatchi Perumal Palmer Philip Edward Stephen Palmer Raymond Ivor

Pantanowitz Desmond

- \* Paradisgarten Hymie Charles Parkes John Ryan
- Parsons Arthur Charles \* Pascoe Francis Danby
- Pasco Michael Danby Patel Prabhakant Lalloo Pather Runganayagum
- Pearlman Theodore Peer Dawood Goolam Hoosen
- \* Penn Jack Penzhorn Herbert Otto
- \* Pein Nathaniel Kemsley Perdikis Phoebus
- \* Perk David Peters Ralph Leslie Pettifor John Morley Philcox Derek Vincent Phillips Gerald Isaac
- Phillips Louisa Marilyn Piesold Gerald A Ferdinand
- \* Pieterse Holland Frederik
   Pillay George Permall
   Pillay Govindasamy Sokalingum
   Pillay Rathinasabapathy Arumugam
   Pillay Thiagarajan Sundragasen
   Pillay Veerasamy K Govinda
   Planer Meyer
   Pilt Michael
- Polakow Everard Stanley \* Polakow Raphaely Politzky Nathan Pollak Ottilie Polley Neville Alfred Pompe van Meerdervoort Hjalmar Frans Porter Christopher Michael
- \* Posel Max Michael
   \* Potgieter Louis
   Power David John
   Prentice Bernard Ross
   Pretorius David H Schalk
   Pretorius Jack
   Pretorius Jachannes Jacobus
- Pretorius Johannes Lodewikus
  \* Price Samuel Nathaniel
  Prinsloo Simon Lodewyk
  Procter Desmond S Collacott
  Prosser Geoffrey Leslie
  Prowse Clive Morley
  Przybojewski Jerzy Zbigniew
  Pudifin Dennis James
  Quan Tim
  Quantock Owen Peter
  Quinlan Desmond Kluge
  Quirke Peter Dathy Grace
- Rabinowitz Albert
   \* Rabinowitz Leslie
- Rabinowitz Lesile Radford Geoffrey Raftopulos Paris Raghavjee Indira Vaghjee Raine Edgar Raymond Rankin Anthony Mottram Ransome Olliver James Rayman Ashley Rebstein Stephen Eric Redfern Michael John Reichman Leslie Reichman Percy
   Reid Frederick Payne
- Reid Frederick Payne Reidy Jeremy Charles Reif Simon Reinach Werner Renton Maurice Ashley Retief Daniel Hugo
- \* Retief Degenes Jacobus

**Betief** Francois Jacobus **Retief** Francois Johannes Petrus Retief Francois Pieter Reynders Johannes Jurgens Reyneke Philippus Johannes Rice Gordon Clarke

- Richev Allan Frank Whitfield Richards Alan Trevor Richmond George Ritchken Harry David **Boberts** William A Brooksbank
- Roberts William Michael Robertson Thomas Chalmers Robinson Brian Stanlev Rode Heinz Rogan lan MacKenzie Roediger Wolf Ernst Wilhelm **Boelofse** Hendrik Johannes Roman Horatius E Hereward Rome Paul Roos Charles Phillipus Roos Nicolaas Jacobus Roose Patricia Garfield Rosenberg Basil **Bosenberg** Edwin Bobert
- Rosenthal Elijah
- Rosin Isodore Roland
- Ross Bremner Lloyd Rousseau Theodore Emile Rossouw Dennis Pieter
- Rossouw Johan Tertius
- **Bothschild** Emil E Aaron
- Roux Daniel Jacobus
- Rudolph Isidore Russell John Tait
- Rutovitz Isaac Jacob Ryan Raymond
- Sacks Selig
- Sacks Sidney Sacks William Safro Ivor Lawrence Salant David John
- Salkinder Joe Samson lan David Samson John Monteith Sandeman John Charles
- Sanders Eric John Sanders Hannah-Reeve
- Sandison Alexander Gorrie Saner Robert Godfrey
- Sapire David Warren Sarkin Theodore Leonard
- Sartorius Kurt Honbaum Saunders Stuart John Saxe Norma Phyllis Schaetzing Albrecht Eberhard Scallan Michael John Herbert Schepers Anton
- Schepers Nicolaas Jacobus Scher Alan Theodore Schneider Cecil Max
- Schneider Tobias Schneier Felix Theodore Scholtz Boelof Schutte Philippus Johannes Schwär Theodor Gottfried Schwarz Kurt
- Scott Bruce William Haigh Scott James Graham Scott Neil Petrie Scott Quentin John
- Scott Walter Fleming Scragg Joan Noelle Seaward Percival Douglas Sedgwick Jerome

Seedat Yackoob Kassim Sellars Sean Liam Senior Boris

- Sesel John Ruby Shapiro Benjamin Leon
- Shapiro Max Phillip
- Shapiro Norman Sharpe Jean Marv Shear Mervyn Sher Gerald Sher Geoffrey Sher Joseph Norman Sher Mary Ann Sher Rickard Charles Shété Charudutt Dattatrava Shulman Louis Shweni Phila Michael Siew Shirley Silberman Reuben Silbert Maurice Vivian
- Simons George Arthur Simonsz Christiaan G Adolph
- Simpson Thomas Victor Simson lan Wark Singer Martin
- Sischy Benjamin Skinner Donald Pape
- Skudowitz Reuben Beniamin Sliom Cvril Mever
- Smalberger Johannes Marthinus (Snr) Smit Wilhelm Michiel Smith Alan Nathaniel
- Smith John Alaister
- Smith Lionel Shelsley Smith Michael Ewart
- Smith Petrus Nicolaas
- Smulian Hubert Godfrey Smythe Patrick Montrose Sneider Paul Snyman Adam Johannes
- Snyman Hendrick G Abraham Solomon Herman Israel
- Somera Satiadev Sonnendecker Ernest W Walter Sparks Bruce Louis Walsh Snies Sarel Jacob
- Spilg Harold Spitz Mendel Stein Aaron (Archie) Stein Abraham
- Stein Leo Stein Lionel Stein Mannie
- Stern Ferdinand
- Steyn Dora Nell Steyn Gerbrandt
- Steyn Izak Stefanus Stronkhorst Johannes Hendrikus Stvaer Viktor
- Suliman Abdoorahaman Ebrahim Sur Monalisa
- Sur Ranjan Kumar
- Suzman Moses Myer Svensson Lars Georg
- Swart Barend Hermanus
- Swartz Jack Swift Peter John Tang Kenneth Tarboton Peter Vaughan Taylor Robert Kay Nixon
- Te Groen Frans Wilhelmus

- \* Te Groen Lutherus H Treub Teeger Arnold Terblanche John
- Terespolsky Percy Samuel Thaning Niels-Otto
- Thatcher Geoffrey Newton Theron Eduard Stanley Theron Francis Theron Jakobus L Luttig Tinker John Thomson Alan J George Thomson Morley Peter Thomson Peter Drummond Thompson Michael Wilson Balfour Thompson Roderick Mark McGregor
- Thorburn Kentigern Thornington Roger Edgar Thorn Marc Alexander
- Tobias Ralph Lulu Toker Eugene
- Tomlinson John R Dacomb Treisman Oswald Selwyn Trichard Louis C G Lennox
- Trope Robert Allan
- \* Trott Edmund Lorimer
- \* Trubshaw William H Daines Tucker Robert D St George Tucker Ronald B Kidger Turner Peter James **Ungerer** Matthys Johannes Utian Hessel Lionel Van Coeverden de Groot Herman A Van Coller Beulah Marie Van den Berg Andries D Petrus Van den Bergh Cornelius Jacob Van den Ende Jan Van der Merwe Christiaan

Van der Merwe Hendrik Johannes Van der Merwe Jan Abraham Van der Merwe Schalk W Petrus Van der Meyden Cornelis Hendrikus

- \* Van der Riet John Werendly \* Van der Riet Ryno le Seur Van der Spuy Johan Wilhelm
- Van der Walt Andrè Van der Walt Johannes Joachim
- Van der Wat Jacobus JH Botha Van Dongen Leon G Raymond Van Drimmelen Bertha Van Drimmelen Pieter Van Gelderen Cyril Jack Van Graan Nico Jacobus Van Greunen Francois
- Van Hasselt Carel Hugh
- Van Helsdingen Jacobus O Tertius Van Huyssteen Hendrik Roelof (Snr) Van Leenhoff Johannes Willem Van Niekerk Christopher Van Niekerk Christoffel Hendrik
- Van Niekerk Gilbert André
- Van Niekerk Willem Abraham \* Van Rooyen Adriaan J Louw Van Schalkwyk Colin Henri Van Schalkwyk Derrick
- Van Schalkwyk Herman Eben Van Selm Christopher Denys Van Selm Justin Leander
- Van Wvk Chris Van Wyk Eugene Muller Van Wyk Frederick A Kelly
- Van Zyl Jakobus J Wynand Van Zyl-Smit Roal Venter Pieter Ferdinand
- Victor Arthur Viljoen Ignatius Michael

- \* Vilioen Theunis Gabriel
- Visser Daniel
- Vogelpoel Louis Von Varendorff Edeltraud Mathilde Von Wielligh Gysbertus Johannes Vooght Terence Edward Vorster Carl Theodorus
- Vosloo Arnoldus Johannes Wade Harry Wahl Jacobus Johannes Walker David Anthony Walker Dennis Hamilton Walker John Douglas
- Walker Lindsav Hamilton Walls Ronald Stewart
- Walsh James Clifford
- \* Warren George St Leger
- \* Watson lan France \* Wayburne Samuel Webber Bruce Leonard Weich Dirk Jacobus Visser Weinberg Eugene Godfrey
- \* Weingartz Felix Kruger Wellsted Michael Dennis Welsh lan Bransby Welsh Neville Hepburn
  - Welsh Robert I Hepburn
- \* Wessels Cornelius Johannes Westaway Joan Lorraine Weston Neville Anthony Whiffler Kurt
- White Ian William Craig Whitfield Leslie Edwin Whiting David Ashby Whittaker David Ernest Wickens Johannes Tromp Wienand Adolf Johann Wiggelinkhuizen Jan Willemse Pieter Willers Petrus Salmon Williams Margaret Ethel Williams Robert Edward Wilson Peter James Wilson Timothy Dover Wilson William Wilton Thomas Derrick Wingreen Basil Winship William Sinclair Wise Roy Oliver Wittenberg Dankwart Friedrich
- \* Wium Peter Pet Wolfsdorf Jack Wood Frank Henry Wootton John Barry Leif Wranz Peter Anthony Bernhard Wright lan James Spencer Wright Michael
- Wunsh Louis
- Wykerd Hermanus Claassens
- Wylde Ronald Burns \* Youngleson John Henry Yudaken Israel Reuwen Zaacks Philip Louis Zaaiiman John du Toit Zabow Tuviah Zent Clive Steven Zent Rov Zieff Solly Zion Monty Mordecai
  - \* Deceased

- Stewart-Wynne Edward George

- Sutin Gerald Joseph
  - Swanepoel André
  - Swart Johannes Gerhardus