



SAMPS NEWS

2002/2003

From the editor

This year's copy of SAMPS news is a bumper edition. I was challenged to produce something that didn't look like the operating instructions for a linac. Seriously though it is obvious we are responding vitally to the challenges and opportunities facing us. Radiation Oncology/Medical Physics is still in a period of growth that shows no sign of slowing down. Many thanks to those sites that contributed. For those sites that did not, this is a good time to start preparing for next year's newsletter.

Ed.

How many oncologists does it take to change a light bulb?

Only one, but he's going to need a team of at least two planning radiographers, six therapy radiographers, a 3d planning system and linac with IMRT... Oh, yes and one medical physicist to do the actual changing.

Addington Hospital News

The Medical Physics Department in Durban has started to deliver some services at the new Inkosi Albert Luthuli Central Hospital. This modern newly equipped hospital makes use of many new technologies and there are many areas for Medical Physicists to become actively involved.

We have an Intern Medical Physicist with us, Justice Msomi, who started his training in December 2003.

We still have two vacant posts for Interns, and would welcome serious applications.

Some of the members of staff are involved in university based research projects and are supervising post-graduate students. Areas of involvement are mammography image analysis, and MRI.

We are looking forward with enthusiasm to a period of increased activity, involvement and growth.

How many medical physicists does it take to change a light bulb?

Only one, but he/she is going to need four weeks to do the QA on the new bulb!

NETCARE NEWS:

At the recent SASMO/SASCRO congress, Netcare announced a complete facelift for the Unitas Oncology Department. Apart from getting a brand new digital linac with a 120 leaf multileaf collimator, the unit will also have the very first ExacTrac Patient Positioning system, allowing high precision extracranial Stereotactic Radiotherapy. The system uses x-ray sources to do virtual simulation and position a patient automatically according to internal bony structures or implants. It will add a new dimension to Netcare's Stereotactic Radiosurgery and Radiotherapy programme and will ensure the positional accuracy required to implement an IMRT programme in the future.

At Southern Cross Hospital, the Stereotactic Radiosurgery program using a micro-multileaf collimator is growing steadily, with 39 patients treated in the past financial year compared to 25 patients treated in the year before. Another exciting development in the Radiotherapy department is the use of the high dose rate afterloader unit in a venture with a breast surgeon to treat early breast disease with a single fraction of brachytherapy after a lumpectomy. Similar treatment is currently offered at only a few other institutions worldwide but may become the treatment of choice for early breast disease in future. Erhardt has enrolled and started with his studies for the MBA degree at the University of Stellenbosch's Business School and have to use all his time management skills to juggle between his work, family and study responsibilities.

On the academic and training front Netcare has through the University of Pretoria applied to the HPCSA for partial accreditation of experiential/ internship training at three of its centres (2 in Gauteng and 1 in the Western Cape). We are awaiting the inspection from the Committee for Medical Science. A positive outcome to the request for partial accreditation will give access to more students who wish to do some of their experiential training at the accredited Netcare facilities.

Netcare currently supports one Medical Physics bursary student, Mr. Lunga April, who is registered for a B.Sc (Hons.) degree at the University of Pretoria.

Regards

Hester, Erhardt and Frank

How many radiographers does it take to change a light bulb?

None – Why do you think we have medical physicists?

**2003 NUUSBRIEF
GENEESKUNDIGE FISIKA
UNIVERSITEIT VAN DIE
VRYSTAAT EN
UNIVERSITAS AKADEMIESE
KOMPLEKS**

1. NUUSFLITSE.

Ons is besonders trots dat Casper Willemse vanaf 1 Januarie 2003 bevorder is. Ons is ook trots dat Prof. Willemse die President van die SAVFGB is.

Einde van Desember 2002 het drie Interns as Geneeskundige Fisici registreer. Vincent Maselesele het by ons personeel aangesluit. Willie Shaw is na die privaatsektor en Emari Lätti is in Skotland. Al vier Internposte is tans gevul.

Vier studente het die MMedSc grade verwerf, naamlik Puleng Moleme, Stanley Magkere, Victor Mugabe en PD du Toit. Prof. Charles Herbst en Hanlie du Raan het as studieleiers opgetree en waardevolle leiding aan die studente verskaf. Ons wil graag die ekterne eksaminators bedank vir die harde werk en positiewe en besondere bydrae wat hulle tot die verhandelings gemaak het.

Die tweede groep van 19 studente is in Januarie 2003 gekeur vir die voorgraadse B.Med.Sc Stralingswetenskap kursus. Die uitset van die program sal kandidate vir Geneeskundige Fisika en Stralingsbiologie van 'n hoë kwaliteit lewer. Die hoofvakke van die kursus is Fisika en Stralingswetenskap.

Die Nagraadse Diploma in Geneeskundige Fisika is ingestel om gedurende Internskap verwerf te kan word.

Sunè le Roux Rabe is 'n nuwe aankomeling in ons Departementele familie.

Besoek ons webwerf by
<http://www.uovs.ac.za/faculties/>

2. PERSONEEL

a) *Geneeskundige Fisici en Mediese Wetenskaplikes*

Prof M G Lötter, Prof. C A Willemse, Dr J Duvenage, Prof C P Herbst, Mnr W L Rabe, Dr H du Raan, Mnr F C P du Plessis, Mnr J A van Staden, Mnr J Marais, Mev. S Acho, Mev S Jansen en Mnr W P van Wyk

b) *Administratief*

Sekretaresses: Mev V A Botha, Mev G Makgele

c) *Tegnies*

Mnr R Taylor en Mev J M Kriel

3. AKADEMIESE AKTIWITEITE

a) *Onderrig*

(i) *Voorgraadse onderrig*

Voorgraadse onderrig is in die volgende kursusse aangebied:

Kursus	Vak	Dosent	Taal
<i>Menslike Voeding</i>	Biof. Spes	Mnr J A van Staden Mnr J Marais	Engels Afrikaans
<i>Arbeidsterapie</i>	Gen. Fis.	Prof C P Herbst	Afrikaans
<i>Verpleegkunde</i>	Gen. Fis.	Mrs. S. Acho Mnr F C P du Plessis	Engels Afrikaans
<i>B.Med.Sc</i>	Stralingsstipes	Prof. CP Herbst Mnr. J. van Staden	
<i>B.Med.Sc</i>	Stralings-detektore	Prof. MG Lötter Dr. H du Raan Mnr. V. Maselesele	
<i>B.Med.Sc</i>	Stralings-bronne	Dr. CA Willemse Mnr. F du Plessis	
<i>B.Med.Sc</i>	Stralings-beskerming	Mnr. F du Plessis Dr. CA Willemse	
<i>B.Med.Sc</i>	Stralings-biologie	Me. A. Zerwick	
<i>MBChB I</i>	Mediese Fisika	Prof C P Herbst Prof C P Herbst Dr H du Raan Prof C P Herbst	Afrikaans/ Engels Engels Afrikaans

			Afrikaans/ Engels
<i>MBChB II</i>	Mediese Fisika	Prof C P Herbst Dr H du Raan	Afrikaans Engels

(ii) *Nagraadse onderrig*

Kursus	Vak	Dosent
<i>B Med Sc Hons</i>	Mediese Fisika vir Stralingsonkologie	Dr. C A Willemse Dr J Duvenage
<i>B Med Sc Hons</i>	Mediese Fisika vir Diagnose	Prof M G Lötter Prof C P Herbst
<i>B Med Sc Hons</i>	Stralingsfisika	Dr. H. du Raan Dr C A Willemse Prof M G Lötter Prof C P Herbst
<i>M Med Sc</i>	Geneeskundige Fisika/Onkoterapie	Dr C A Willemse Dr J Duvenage Dr. H. du Raan
<i>M Med Sc</i>	Stralingsfisika	Dr. H. du Raan Dr C A Willemse Prof M G Lötter Prof C P Herbst
<i>M Med Sc</i>	Mediese Fisika vir Diagnose	Prof M G Lötter Prof C P Herbst
<i>M Med Sc</i>	Stralingsbiologie	Dr C A Willemse
<i>M Med Sc</i>	Anatomie	Dr C A Willemse
<i>M Med Sc</i>	Fisiologie	Dr C A Willemse
<i>M Sc (Fisio)</i>	Geneeskundige Fisika	Dr H du Raan
<i>M Med Anes</i>	Geneeskundige Fisika	Prof C P Herbst
<i>M Med Rad (D)</i>	Geneeskundige Fisika	Prof C P Herbst
<i>M Med Int</i>	Geneeskundige Fisika	Prof M G Lötter
<i>M Med Rad (T)</i>	Geneeskundige Fisika	Dr C A Willemse
<i>M Med Opt.</i>	Geneeskundige Fisika	Dr. J. Duvenage

(T) Radioterapie

(D) Diagnostiese Radiologie.

(iii) *Nagraadse kwalifikasies en toekennings*

B.Med.Sc. Hons: Studente – T. Mokoro en D. Pepenene.

B.Med.Sc. Hons: Mnr W Shaw en Mnr M K Moji.

M.Med Sc: Mnr PD du Toit, Mnr KV Mugabe, Me PA Moleme en Mnr S Makgere

(iv) *Nagraadse program*

Maandag: 08:00 Twee Weeklikse Gesamentlike Onkoterapievergadering

12:00: Bestuurs- en Finansiële Vergadering

14:00: Maandelikse Departementele Vergadering

15:00: Weeklikse Deurlopende Onderrig en Literatuurbespreking

16:00: Navorsingsbespreking

Woensdag: 08:00: Gesamentlike Kerngeneeskunde vergadering (weekliks)

08:00: Gesamentlike Diagnostiese Radiologie vergadering (1 keer per maand)

Donderdag: 08:00: Fisika vir Diagnostiese Beelding (weekliks)

Vrydag 08:00: Fisika vir Onkoterapie (weekliks)

11:30: Navorsingsbespreking

(v) Eksterne eksaminatore

Prof C P Herbst

B Rad (Diag) 111 - Mediese Fisika vir Kerngeneeskunde Medunsa.

B.Sc.Med. Hons – Mediese Fisika in Radiologie – Medunsa.

Henrietta Stockdale Verpleegkunde Kollege – Kimberley.

Free State School of Nursing – Welkom.

MMed, Mediese Fisika – vir Anesthesiologie – Medunsa

Fisika vir Anesthesiologie – Kollege van Geneeskunde

Mediese Fisika - Unitra

(vi) Gemeenskapsonderrig

Die volgende lesings is gedurende die jaar aangebied in die gebruik van rekenaarprogrammatuur:

- Introduction to Computers & Windows 22
- Introduction to MS Word 2000 30
- Introduction to Powerpoint 2000 152
- Introduction to Excel 2000 73
- Intermediate to Windows & Explorer 25
- Intermediate to Word 2000 34

- Intermediate to Powerpoint 2000 25

- Introduction to Pmail 17

- Introduction to the Internet 21

TOTAL 399

(vii) Skyfieervaardiging en Netwerkinstandhouding

'n Bydrae word deur Prof CP Herbst, Mnr. le Roux Rabe en Willem van Wyk gelewer ten opsigte van die bedryf van die fakulteitsnetwerk.

b) Navorsing

Projekte met steun:

MNR Toekenning:

- Prof MG Lötter: Evaluation of Image Registration Methods
- Dr CA Willemsse: Improvement of RT Planning

IAEA Toekenning:

- Prof MG Lötter en Dr Hanlie du raan: Software Phantoms

Projekte met geen steun:

- *Mediese Fisika vir Kerngeneeskunde*

Alternatiewe korreksie by miokardiale hekse in tomografie

Beeldregistrasie in Kerngeneeskunde

- *Mediese Fisika vir Diagnostiese Radiologie*

Die gebruik van Al stapwigte vir die nagaan van kV en moontlik ook mAs tydens die normale gehalteversekering.

- *Mediese Fisika vir Onkoterapie*

Die toepassing van Monte Carlo tegnieke om akkuraatheid van

stralingbehandeling en beplanning te evalueer.

c) Aanbied van kursusse

Daar is namens AFRA 'n suksesvolle werkswinkel oor Die Opgradering van Sintillasekamas in Universitas Hospitaal aangebied. Die kursus in deur 13 geneeskundige fisici bygewoon van 18-29 November 2002. Die afgevaardigdes het van die volgende lande gekom: Morokko (2), Tunisië (2), Egipte (3), Ghana (1), Madagascar (1), Sudan (1) Zimbabwe (1) and Suid-Afrika. (2). Opleiding is verskaf deur die Mediese Fisika Departement en Dr. Valintin Fidler van Slovenia. Die afgevaardigdes was beïndruk met die gehalte van die kursus.

Gedurende die kursus is GE Sintillasekamera met die AlfaNuclear verwerkingstelsel opgradeer en ons is groot dank aan die IAEA verskuldig vir die uitstekende werkverrigting van die stelsel.



4. BYWONING VAN KONGRESSE/KURSUSSE EN REFERATE GELEWER

Nasionale Voordragte

1. M.G. Lötter Regulations relating to the registration of medical physicists and medical biological scientists (Radiation Biology). 42nd

SAAPMB congress and Mount Amanzi Winter school, Pretoria, 2002.

2. K.V. Mugabe, Dr. H. du Raan, Prof. M.G. Lötter Development of a software phantom for the evaluation of gated cardiac blood pool studies. 42nd SAAPMB congress and Mount Amanzi Winter school, Pretoria, 2002.

3. P.A. Moleme, C.P. Herbst, M.G. Lötter The effect of lossy JPEG compression on chest x-ray images. 42nd SAAPMB congress and Mount Amanzi Winter school, Pretoria, 2002.

4. H.V. Maselesele, Dr. C.W. Willemsse, R.D. Pepene, S.M. Mongane Commissioning of diode detectors for in vivo dosimetry. 42nd SAAPMB congress and Mount Amanzi Winter school, Pretoria, 2002.

5. W. Shaw, F du Plessis Evaluation of Shielding Calculations at National Hospital. 42nd SAAPMB congress and Mount Amanzi Winter school, Pretoria, 2002.

6. J. Marais, M.G. Lötter, J.A. van Staden, C.P. Herbst 3-D Feature Detection of the Left Ventricle to be used in Image Registration. 42nd SAAPMB congress and Mount Amanzi Winter school, Pretoria, 2002.

7. S. Acho, C.P. Herbst, V. Maselesele, P. Moleme, M.G. Lötter, A. van Rensburg, C. de Vries Comparison of entrance exposure for similar radiological examinations on different x-ray units. 42nd SAAPMB congress and Mount Amanzi Winter school, Pretoria, 2002.

8. Mugabe KV, Du Raan H, Lötter MG, Otto Ac Development of a Software Phantom for the evaluation of gated cardiac blood pool studies. 10th Congress of the South African Society of Nuclear Medicine, Stellenbosch, 2002.

9. Makgere SS, du Raan H, van Staden J, Lötter MG, Otto Ac The

reproducibility and accuracy of left ventricular function determined by gated myocardial perfusion spect studies. 10th Congress of the South African Society of Nuclear Medicine, Stellenbosch, 2002.

10. SE Jansen, WL Rabe, WPJ van den Berg, A van Aswegen, MG Lötter The C-14 urea breath test for the detection of helicobacter pylori: comparison with upper gastrointestinal endoscopic biopsy data. 10th Congress of the South African Society of Nuclear Medicine, Stellenbosch, 2002.

Plaaslike voordragte

1. W Shaw, F du Plessis Evaluation of a Phillips SL25 Linac Shielding Calculations at National Hospital. UFS Faculty of Health Sciences, Forum, 2002.

2. KV Mugabe, H du Raan, MG Lötter, Development of a Software Phantom for the evaluation of gated cardiac blood pool studies. UFS Faculty of Health Sciences Forum, 2002.

3. PA Moleme, CP Herbst, MG Lötter, The effect of lossy JPEG compression on chest x-ray images. UFS Faculty Health of Sciences Forum, 2002.

5. PERSONEEL PRESTASIES

a) Komitees

Prof M G Lötter

- Lid:Mediese en Tandheelkundige Beroepsraad. (MTB).
- Voorsitter:Komitee vir die Mediese Wetenskap. (MTB)
- Lid:Radio-Isotoopbeheerkomitee, Universitas Hospitaal.

- Projek Wetenskaplike Konsultant:AFRA Program: Versterking van die Mediese Fisika vermoë in die streek.

Prof C P Herbst

- Tesourier:Uitvoerende Komitee, Suid Afrikaanse Vereniging vir Fisici in Geneeskunde en Biologie
- Beoordelaar:Nasionale Expo - Jong Wetenskaplikes
- Lid:Internasionale Beoordelingskomitee Expo - Jong Wetenskaplikes
- Voorsitter:Rekenaarkomitee Skool van Geneeskunde
- Voorsitter:Rekenaarkomitee Fakulteit Gesondheidswetenskappe
- Lid:Finansiële komitee: Fakulteit Gesondheidswetenskappe

Dr C A Willemse

- President:Suid-Afrikaanse vir Fisici in Geneeskunde en Biologie

Dr Hanlie du Raan

- Raadslid:Uitvoerende Komitee, SA Vereniging vir Kerngeneeskunde

b) Pryse (Toekennings)

By die 42ste Jaarkongres van die Suid-Afrikaanse Vereniging vir Fisici in Geneeskunde en Biologie (SAVFGB) wat in Pretoria op 1-2 Augustus 2002 gehou is, het die volgende lede van die Departement Geneeskundige Fisika toekennings ontvang:

- Dr. Hanlie du Raan het die Radi Kotze prys van iThemba Labs (NRF) vir haar bydrae tot Geneeskundige Fisika ontvang.
- Mnr. Vincent Maselesele het die Aansporingsprys van die SAVGB

Raad ontvang. Die titel van sy referaat: “Commissioning of a commercial diode in-vivo dosimetry system”.

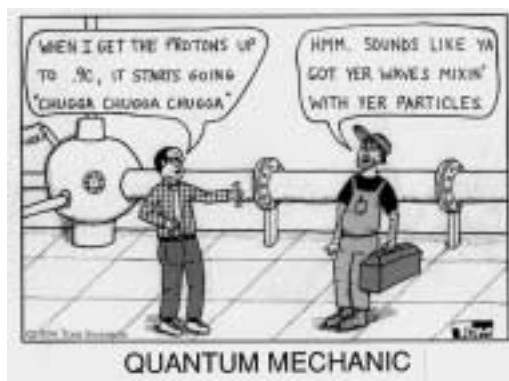
- Me. Puleng Moleme het die prys vir die beste plakkaat voordrag. Die titel van haar plakkaat was “The effect of lossy JPEG compression on chest x-ray images during teleradiology”.

Fakulteitsforum:

- W Shaw het die prys vir 2de beste referaat op die Fakulteitsforum ontvang. Die titel van sy referaat: “Evaluation of a Phillips SL25 Linac Shielding Calculations at National Hospital”.

IAEA Toekennings

- Johan van Staden het van 22 Maart die AFRA/IAEA kursus aangaande Teleinstandhouding van Sintillasiekameras in Egipte bygewoon van 22-26 Maart 2003.
- Johan Marais het van die IAEA ‘n beurs vir 6 maande gekry om in Leuven by die Katolieke Universiteit opleiding te werk.



iThemba LABS – Medical Radiation Group

The particle therapy program at iThemba LABS continues apace, but the activities of the Medical Radiation Group at iThemba for the past year

have been to a large extent devoted to the groundwork for the new Major Radiation Medicine Centre (MRMC) project. This ambitious project will involve the acquisition of a new cyclotron to enable the expansion of the existing proton therapy facilities without compromising the other programs at iThemba, as well as the addition of a complete photon therapy centre. The MRMC will enable iThemba to offer clinicians a complete range of radiotherapy treatment modalities, which can be used separately or in combination to ensure the optimal treatment of each patient.

The Group has also been very active in organising conferences. November 2002 saw the Group hosting the 37th meeting of the Particle Therapy Co-operative Group (PTCOG XXXVII) and the associated one-day Workshop On The Role Of Radiotherapy In Cancer Care. Both were very successful. The workshop was aimed at highlighting the role of radiotherapy to members of the medical professions who were not working in the field. It attracted 122 delegates, mostly local but some of the international delegates who were here for the PTCOG meeting also attended. The PTCOG meeting had 106 delegates, of whom more than half were from overseas. In the three days talks were given on a wide variety of topics related to particle therapy. The object of the PTCOG is to promote particle therapy and to act as a forum for those in the field. Judging from the level of talks given and the number of new particle therapy facilities in planning or under construction it seems to be accomplishing both these objectives.

June will see us hosting the 43rd Annual Congress and Winter School of the SA Association for Physicists in Medicine and Biology (SAAPMB 43), and we hope to see all of you here for

it. The meeting will run from the 10th to the 13th of June, with the sessions all being held at iThemba. The Winter School theme is "Medical Imaging", and the keynote speaker will be Professor M Hofmann of Hannover, who is an expert on PET. For more details keep an eye on the webpage: <http://saapmb43.tlabs.ac.za> or contact the chair of the organising committee (Julyan Symons) at 021-8431219.

From 27-31 October we will be hosting The 9th International Symposium on Radiation Physics (ISRP-9). This will be preceded (24-26 October) by a Workshop on Radiation Based Analytical Techniques, whose emphasis will be on x-ray fluorescence and diffraction (XRF, XRD) and particle-induced x-ray emission (PIXE). Again, all of you are welcome to attend. Further details can be found at: <http://isrp9.tlabs.ac.za> or contact the chair of the organising committee (Dr D Jones) at 021-8431335.

Despite all this going on we still have several projects currently underway aimed at improving and advancing the therapy facilities at iThemba, as well as providing valuable training and research opportunities for post-graduate students. These projects include: introducing an SPG patient positioning system that is linked directly to the CT scanner system; modifying and improving the current SPG patient positioning system; development of hardware and software to use a robot arm for patient positioning; and digital x-ray imaging systems for the new robot-based patient positioning system. Work continues on the use of the MCNPx Monte-Carlo modelling package to model various problems of interest.

On the personnel front the year has been equally busy, with the past few months seeing 3 weddings, but (happily) no funerals. We will,

however, soon be bidding farewell to Avril O'Ryan-Blair as she goes to join the Midwest Proton Radiotherapy Institute in Indiana, USA.

And Then There Were Photons
by William Rolnick

*An electron, while trav'ling in space,
Met a positron there "face-to-face."
The electron then sighed,
At the sight of his bride
And they "died" in a loving embrace.*

Department of Radiation Services Johannesburg Hospital.



As the Radiation Oncology building construction continues, our Medical Physics team is also growing/developing. The Annual National Symposium on Brachytherapy was organized and held successfully at the Johannesburg Hospital in November 2002. The Medical Physics department organizes monthly Joint Meetings (which are CPD-accredited) together with the PAH and all other local medical physicists from. In addition, a monthly Journal club is held at the department for the benefit of trainees and to keep up with current research.

Canon Dr Scott retired (still going strong) but is still in touch with us as a standby physicist. She also regularly attends our monthly Joint meetings.

Prof (Nobantu) van der Merwe – leader of the pack. She organized a national workshop on the new

Dosimetry protocol (TRS 398) that was hosted in our department in September 2002 and the turnout was good. Thank you to those who participated in this! (How were results in your institution?)

Mr Ivan Boyd continues to do a good job in Nuclear Medicine at Johannesburg and Chris Hani Baragwanath Hospitals and also oversees the training of physicists when they go for their Nuclear Medicine component. He is also responsible for the CPD activities of the division.

Nico van der Merwe a Bloemfontein boy (hopefully he has a farm) has been very busy implementing new protocol in diagnostic radiology.

John Bhengu, continues to do a good job in HDR and LDR brachytherapy. He is also organizing the monthly Journal club. He is planning to tie the knot before the end of the year.

Congratulations to **Nhlakanipho Mdletshe** who is now a Qualified Medical Physicist as of May 2002. He worked very hard in comparing and compiling a protocol for Orthovoltage Dosimetry in our department. He is busy organizing the monthly Joint meetings. Hope to see him sitting behind the steering wheel before the end of the year...driver's licence!

Sekai Shambira has been lecturing to Radiation Laboratory Technology (RLT) students for the past year. She will be finishing her academic component this year and will qualify and register with the Health Professions Council end of this year.

Givenson Mbatha will be finishing the academic component of his training and we expect him to qualify and register with the Council early 2004. This Zulu boy has been struggling very hard to get used to the rest of us!!

We hosted 4 IAEA Fellows in 2002 for on the job training.

The mould room (with **David Joseph, Sandile Kolobile and Lindekile Shabangu**) is kept busy with 5 fulltime Radiation Laboratory Technology (RLT) students who have passed their first set of examinations allowing them to proceed to second year. We are also starting to mobilize ourselves for the organization of the SAAPMB Congress in 2004.

The movement to abolish Ohm's law is apparently meeting some resistance.

Groote Schuur - Hospital

There is actually very little news from our side.

Staff news: Cameron Challens has left us and gone to Saudia Arabia. Emari Latti is continuing her training in Bloemfontein and David Roux has decided to stop his training and has accepted a physicist position in the United States. Gerrie Maree from the Department of Health (Radiation Control) has joined us as intern Medical Physicist. We also have two new trainee Radiation Technologists in our Mould Room. Jan Hough has done quite a bit of travelling around Africa for his AFRA commitments and, more important, he got married to Kim at the end of last year. Suzanne is still keeping contact with us and has had her second baby.

The contract for our Philips LINAC expired at the end of September last year. The Hospital is very keen to shut it down and when a new Thyatron was required we had to get the money from the Radiotherapy Fund which is solely dependent on donations from the public. Any item that is being bought or repaired now needs a special

motivation. This is really a great additional hassle.

*Condensed Story of Ms Farad
by A. P. French*

*Miss Farad was pretty and sensual
And charged to a reckless potential;
But a rascal named Ohm
Conducted her home -
Her decline was, alas, exponential.*

Medunsa/GaRunkuwa 2003 News

We are very excited about the new therapy facility being built at Polokwane(Pietersburg). This will finally give us our long awaited therapy component. The installation should be finished towards the third quarter of the year. We will also be gaining an extra post which will be a joint Medunsa/Northern Province post.

Staff news: Congratulations are in order to Ndanganeni Mandiwana who was promoted to Senior Lecturer and Doctor Maboe who was promoted to Lecturer. On the down side we said goodbye to Frank Daniels who entered the private arena and went to Netcare and to Enoch Sithole who transferred to the Medunsa Physics department. Enoch and Frank have not left us entirely as they are still pursuing their doctorates through us.

For the first time in many years we are operating at a nearly full staff complement with the appointment of David Lechokgotha in Enoch's place and the addition of Wilhelmina Letsoalo and Hendriëtta Mohlaka.

Academic news: Monique du Toit and Steven Maage graduated with their Masters degrees this year. Our congratulations to them. We have five honours students this year, one masters and two doctoral students.

*There was a young lady from Bright
Who always travelled faster than light
She set out one day
In a relative way
And arrived back the previous night.*

TYGERBERG HOSPITAAL EN DIE UNIVERSITEIT VAN STELLENBOSCH

Aan die begin van 2002 het mev Emma Snyman as mediese fisikus by ons departement aangesluit. Ons was verheug om mev Snyman in ons midde te verwelkom. Vir 'n periode van meer as sestien maande het Tygerberg Hospitaal slegs twee mediese fisici op sy diensstaat gehad wat twee groot departemente, naamlik Stralingsonkologie en Kerngeneeskunde moes bedien. Mev Snyman het haar opleiding in Bloemfontein ondergaan en het reeds 'n draai gemaak in die onderwys en in privaat stralingsonkologie.

Ons het op die oomblik twee mediese fisika interns wat hier opleiding ondergaan. Mev Louise Prins het reeds vroeg in 2001 met haar opleiding begin en mnr Monwabisi Vuza in Februarie 2002. Monwabisi Vuza het so-pas sy M.Sc-graad aan die Universiteit Wes Kaap voltooi.

Emma Snyman is genomineer om die AFRA werkswinkel oor die implementering van die IAEA TRS398 Dosimetrie Gebruikskode vanaf 29 April tot 3 Mei 2002 in Tunisië by te woon.

In November 2001 het Wilhelm Groenewald as projekkoördineerder die koördineringsvergadering vir die AFRA mediese fisika projek in Marrakesh, Marokko bygewoon. Die koördineringsvergadering het saamgeval met die eerste kongres van AFROG, die African Radiation

Oncology Group. Op die koördineringsvergadering is die konsepworskodokument vir die mediese fisika projek, wat tydens die taakgroep byeenkoms in Bloemfontein, 18 tot 22 Junie 2002 opgestel is, eenparig aanvaar. Die aanvaarding van hierdie dokument hou belangrike implikasies in vir mediese fisika op die Afrika kontinent.

The dynamic team at the department of Nuclear Medicine was entertained by many exciting events during the past months. The most noteworthy item is the telelink with Windhoek in Namibia. The Nuclear Diagnostics Hermes system was installed in July last year and the telelink has proved to be beneficial to both departments. The system administrative tasks and software support of both hospitals is managed by the physicist, Shivani Ghoorun.

Shivani presented lectures at a regional workshop titled "Acceptance Testing and Quality Control of SPECT Systems" in Rabat, Morocco at the end of last year. She also performed the acceptance testing of a small field of view Mediso Gamma Camera at the Ibn Sina Hospital in Rabat.

The department hosted a Brain Imaging Workshop in November 2001. A medical physicist and a nuclear medicine physician from the universities of Leuven and Ghent were the guest speakers at this workshop.

The staff in Nuclear Medicine was honoured by the visits of the following renowned professors in the field:

- Prof Johan Nuyts (June 2001), a physicist from the Catholic University of Leuven
- Prof Keith Britton (September 2001), nuclear medicine physician from St Bartholomew's Hospital in London

- Prof Patrick Dupont (November 2001), a physicist from the Catholic University of Leuven
- Prof Rudi Dierckx (November 2001), a nuclear medicine physician from the University of Ghent.

Future projects mainly involve telelinking with other countries in Africa, with Tanzania being first on the list.

If you wish to find out more about the Nuclear Medicine Department at Tygerberg Hospital, please visit our website at www.sun.ac.za/nuclear.

A Call for More Scientific Truth in Product Warning Labels

by Susan Hewitt and Edward Subitzky from the Journal of Irreproducible Results, Vol. 36, No. 1

As scientists and concerned citizens, we applaud the recent trend towards legislation that requires the prominent placing of warnings on products that present hazards to the general public. Yet we must also offer the cautionary thought that such warnings, however well-intentioned, merely scratch the surface of what is really necessary in this important area. This is especially true in light of the findings of 20th century physics.

We are therefore proposing that, as responsible scientists, we join together in an intensive push for new laws that will mandate the conspicuous placement of suitably informative warnings on the packaging of every product offered for sale in the United States of America. Our Suggested list of required warnings appears below.

Warning: This Product Warps Space and Time in Its Vicinity.

Warning: This Product Attracts Every Other Piece of Matter in the Universe,

Including the Products of Other Manufacturers, with a Force Proportional to the Product of the Masses and Inversely Proportional to the Distance Between Them.

Caution: *The Mass of This Product Contains the Energy Equivalent of 85 Million Tons of TNT per Net Ounce of Weight.*

Handle with Extreme Care: *This Product Contains Minute Electrically Charged Particles Moving at Velocities in Excess of Five Hundred Million Miles per Hour.*

Consumer Notice: *Because of the 'Uncertainty Principle,' It Is Impossible for the Consumer to Find Out at the Same Time Both Precisely Where This Product Is and How Fast It Is Moving.*

Advisory: *There is an Extremely Small but Nonzero Chance That, Through a Process Known as 'Tunneling,' This Product May Spontaneously Disappear from Its Present Location and Reappear at Any Random Place in the Universe, Including Your Neighbor Us Domicile. The Manufacturer Will Not Be Responsible for Any Damages or Inconvenience That May Result.*

Read This Before Opening Package: *According to Certain Suggested Versions of a Grand Unified Theory, the Primary Particles Constituting This Product May Decay to Nothingness Within the Next Four Hundred Million Years.*

This is a 100% Matter product: *In the Unlikely Event That This Merchandise Should Contact Antimatter in Any Form, a Catastrophic Explosion Will Result.*

Public Notice as Required by Law: *Any Use of This Product, in Any Manner Whatsoever, Will Increase the Amount of Disorder in the Universe. Although No Liability Is Implied Herein, the Consumer Is Warned That*

This Process Will Ultimately Lead to the Heat Death of the Universe.

Note: *The Most Fundamental Particles in This Product Are Held Together by a 'Gluing' Force About Which Little Is Currently Known and Whose Adhesive Power Can Therefore Not Be Permanently Guaranteed.*

Attention: *Despite Any Other Listing of Product Contents Found Hereon, the Consumer Is Advised That, in Actuality, This Product Consists Of 99.9999999999% Empty Space.*

New Grand Unified Theory

Disclaimer: *The Manufacturer May Technically Be Entitled to Claim That This Product Is Ten-Dimensional. However, the Consumer Is Reminded That This Confers No Legal Rights Above and Beyond Those Applicable to Three-Dimensional Objects, Since the Seven New Dimensions Are 'Rolled Up' into Such a Small 'Area' That They Cannot Be Detected.*

Please Note: *Some Quantum Physics Theories Suggest That When the Consumer Is Not Directly Observing This Product, It May Cease to Exist or Will Exist Only in a Vague and Undetermined State.*

Component equivalency notice: *The Subatomic Particles (Electrons, Protons, etc.) Comprising This Product Are Exactly the Same in Every Measurable Respect as Those Used in the Products of Other Manufacturers, and No Claim to the Contrary May Legitimately Be Expressed or Implied.*

Health Warning: *Care Should Be Taken When Lifting This Product, Since Its Mass, and Thus Its Weight, Is Dependent on Its Velocity Relative to the User.*

Important Notice to Purchasers: *The Entire Physical Universe, Including This Product, May One Day Collapse Back into an Infinitesimally Small*

*Space. Should Another Universe
Subsequently Re-emerge, the Existence
of This Product in That Universe
Cannot be Guaranteed.*