



NIH director visits FHS

It was a whirlwind visit for Dr Francis Collins, Director of the National Institutes of Health (NIH) and several of his colleagues as they embarked on a one-day fact-finding visit to the Faculty on Thursday, 3 March 2011.

The visit included a brief meeting with members of the Deanery, where there was intense discussion on Faculty structure, methodologies and funding. This was followed by a brief, but informative sojourn with members of the Institute of Infectious Disease and Molecular Medicine, where researchers took the opportunity to speak about their work, some of it funded by agencies of the NIH.

Deputy Dean: Research, Professor Gregory Hussey, then accompanied the group and Professor Robert J. Wilkinson to the Khayelitsha Site B Community Health Care Centre, which is also the site of several Clinical Infectious Diseases Research Initiative (CIDRI) research projects. The delegation paid a visit to the isoniazid Preventive plus antiretroviral therapy study, whereby patients who are on antiretroviral therapy, or are about to begin ARV treatment, join a randomized control study to test the effectiveness of isoniazid in preventing TB disease. The group met Dr Molebogeng Rangaka, a member of the Centre for Infectious Disease and Epidemiology Research (CIDER) in the School of Public Health, who is the lead investigator of this study.

"We are very excited about this study, which is probably the only one to have evaluated isoniazid in this fashion, and we are confident that it will influence public health policy in South Africa," said Dr Rangaka.



During the Vice-Chancellor's Open Lecture, Dr Francis Collins of the NIH and Sir Mark Walport of the Wellcome Trust emphasised the role of collaborations in the pursuit of treatments for disease.

From there, it was a short walk to the new prefabricated building that will house the Phase IIb TB vaccine trial, which is due to begin later in 2011. The building forms part of an existing refurbishment to the premises, funded by the European Developing Countries Training Programme (EDCTP).

At GF Jooste Hospital in Manenberg, Dr Collins and his team met with Dr Rosie Burton, who took the group through the infectious diseases ward and clinic. Dr Charlotte Schutz spent a few minutes explaining the COAT study, which aims to decrease the mortality rate in cryptococcal meningitis in HIV-positive people. This is a recently initiated project, which is funded by NIH.

The Red Cross War Memorial Children's Hospital was the second-last stop on their

itinerary, and this included a walk-through of the emergency admitting ward and the paediatric intensive care unit and then up to the Institute of Child Health, to meet with Heather Zar, the Head of the School of Child and Adolescent Health, and professors Lelsey Henley, Colleen Adnams, Antony Figaji, Jo Wilmshurst, and Ernesta Meintjies, where NIH-funded projects were discussed, among others. "I was really impressed by them, they were very insightful and asked pertinent questions of the researchers," said Assoc Prof Wilmshurst.

The collaborative Centre of Excellence, Chronic Diseases Initiative in Africa includes the Universities of Cape Town, Stellenbosch and Western Cape, the SA Medical Research Council, the Western Cape provincial government and Shree Hindu Mandal Hospital and Ministry of Health and Social Welfare in Tanzania and Harvard University, USA. It was the final element of the NIH visit and it was clear that the visitors were impressed by the initiative and what it proposes to do.

Professor Dinky Levitt, Director of the Initiative, explained that it "will serve as a regional hub for developing and evaluating models for chronic disease care and prevention of their risk factors." "The Initiative aims to reduce the burden of chronic diseases in Africa – we realize this is very ambitious, but what are we without ambition?" she said.

Dr Collins went on to speak at the first Vice-Chancellor's Lecture of 2011 later in the day, with Sir Mark Walport, Director of the Wellcome Trust.

EDITOR'S NOTE: Melanie Jackson

2011 has certainly got off to a flying start from a research perspective! The excitement began to build in November of 2010, when the Faculty hosted its first international research review and on 25 February, a lively feedback session took place in the Wolfson Pavilion Lecture Theatre.

Issues such as that of soft-funded research staff and the effect of the global recession on donor income came up and although no decisions were made at this session, the Deanery undertook to respond to the report in writing and take up the concerns raised in the meeting.

One of the issues discussed was that of funding streams, and this was picked up at a meeting to discuss the disbursement of income from research activities, such as the publications grant. There has been some discussion around changing the way that

research income is distributed, and this dialogue is ongoing.

In addition, funding has been received from the Cancer Research Trust to provide for a contract coordinator to explore the various research units working in the fields relating to cancer, and to create a more cohesive approach to fighting the disease in its many forms.

In February, the Faculty had news that Professor Raj Ramesar had managed to secure a visit from not only Dr Francis Collins, Director of the National Institutes of Health (NIH) and the person who sequenced the genome, but also Sir Mark Walport, who heads up the Wellcome Trust. This resulted in the first Vice-Chancellor's Open Lecture on 4 March—but before that, came a visit from Dr Collins to several of our research projects, with a particular focus on those receiving funding from the NIH. This was followed by the 2011 Joint International

Conference of the African and Southern African Societies of Human Genetics, which was ably chaired by Prof Ramesar, and took place from 6 to 9 March.

In addition, the Young Researchers Forum, under the leadership of Aisha-Bibi Pandor and Lauren Watson, did the Faculty proud. The Forum sought to foster stronger links between students at institutions across the continent, allowing them the opportunity to present and evaluate research, explore the possibility of collaborations and career opportunities, and learn from senior scientists. It took the form of a "mini-conference", and included oral presentations, a poster session, talks and information on career development.

Both the conference and Young Researchers Forum were hailed as great successes, and the organizers are to be congratulated for their efforts.

Learning Centre opening celebrations

With its gestation period having been almost four years and with many challenges overcome along the way, the “birth” of the Hanover Park Student Learning Centre was a joyous and celebratory affair.

Dean of the Faculty of Health Sciences, Professor Marian Jacobs, set the tone for the opening event when she insisted that each person present should give their name and where they were from before the speeches could continue. This formality dealt with, she explained that in the past, students used to complete their training in big hospitals, with very little time being spent in the clinics and day hospitals.

With the Department of Health’s change to a strategy of decentralization, this model was no longer appropriate and it was recognized that health sciences students needed to be “fit for purpose” and learn in all settings, in order to meet the healthcare needs of the all of the people of South Africa.

She congratulated the team that had made the development of the Hanover Park Student Learning Centre a reality and described it as a fantastic partnership between the Faculty of Health Sciences at the University of Cape Town and the Department of Health, and specifically the staff at the Hanover Park Community Health Centre. She added that one of the upcoming projects planned for the facility is a research project, involving a team from the Perinatal Mental Health Project, who will be working with the staff in the Midwife Obstetrics Unit to identify issues, with the ultimate goal of improving conditions for both patients and staff.

Mrs Elizabeth Bantam, the Chairperson of



Sharing the celebrations: Dr Tsepo Motsphi, Senior Family Physician at Hanover Park CHC, Prof Marian Jacobs, Dean, Mrs Elizabeth Bantam, Chairperson of the Hanover Park Community Health Forum and Frank Molteno, Health Teaching Platform Coordinator, Faculty of Health Sciences.

the Hanover Park Community Health Forum, introduced herself as “the health lady”, explaining that she has been involved in the health forum and other community structures in the area for many years. She added her congratulations to both the Faculty of Health Sciences and the Hanover Park CHC for the Student Learning Centre, adding that there were times when she was not sure that the project would come to fruition, but the fact that they were all gathered there was a testament to the perseverance of the implementation team.

She added a message to the students who will be making use of the centre: “You need to be dedicated to your work. Wherever you may go, you must do your work with dedication and

love.”

The new facility will be used by students who will be interviewing, examining and treating patients under the supervision of Senior Family Physician, Dr Tsepo Motsphi, and other colleagues from the Division of Family Medicine. Frank Molteno, the Health Teaching Platform Co-ordinator of the Primary Health Care Directorate, explained that, prior to the erection of the SLC, there was simply no space for this to happen.

It also allows for one-on-one and small-group teaching, on-site internet access for students and clinicians and much-needed additional clinical consulting space for the CHC when students are not on-site.



Dr Jane Yeats of the Department of Clinical Laboratory Sciences with one of the 14 displays of congenital abnormalities currently on exhibit on the ground floor of the Barnard Fuller Building, entitled “When things go wrong”. The display forms part of a departmental initiative to digitize the pathology teaching collection and also ties in with refurbishments to the Pathology Learning Centre, which are currently underway.

Hair-raising CANSA Shavathon



“Hair today and gone tomorrow” was the order of the day in the Faculty of Health Sciences on Friday 4 March 2011 as willing staff and students lined up to have their heads shaved or sprayed in all the colours of the rainbow.

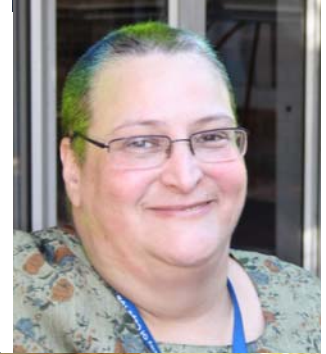
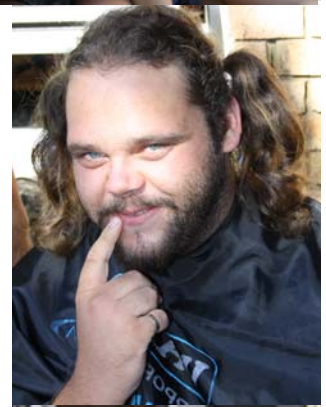
From 9am to 4pm, members of Dr Sharon Prince’s cancer laboratory in the Department of Human Biology worked alongside volunteers and staff of the Cancer Association of South Africa (CANSA), industriously shaving, or enthusiastically spraying the large numbers of people who arrived to show their support for CANSA.

And speaking of large numbers, this industrious team raised an impressive R7 000 on the day; R1 000 for each hour spent wielding the electric shaver or spray can. “Everyone knows someone who has been affected by cancer, whether it is a family member, friend or themselves. By participating in the

CANSA Shavathon, we have the opportunity to support the work of CANSA, and the fight against the disease,” said Dr Sharon Prince, who initiated the event.

The Faculty’s Shavathon team was also proud to host family and friends of Dr Doug Banks, a graduate of UCT’s Faculty of Engineering and the Built Environment, who died of cancer recently. University pal, Dave Gale, and a group of Doug’s friends have also started the Doug Banks Renewable Energy Vision Initiative in his memory.

Family members, including Doug’s wife, H el ene (also a UCT graduate) and their three children, as well as friends, arrived at the Barnard Fuller Plaza at 2.30pm, where, amidst much laughter and reminiscing, they proceeded to shave and spray in memory of Doug. “It was gratifying to play a role in commemorating the life of a person lost to cancer in such a positive way,” added Dr Prince.



HEU receives EU funding

The Health Economics Unit (HEU) has been awarded a collaborative 5-year research project by the European Union that will focus on monitoring and evaluating policy formulation and implementation processes aimed at achieving 'universal health coverage' in South Africa and Tanzania.

Providing health services to all persons in need of health care in a way that does not put them at risk of financial catastrophe requires a major redesign of health care financing policy. While each country is taking a different approach (South Africa is proposing a universal system which is largely tax funded while Tanzania is proposing a system which combines mandatory insurance for formal sector workers and community-based schemes for the informal sector), both are still at the challenging stage of policy formulation.

The new multi-million Rand project called UNITAS (Universal Coverage in Tanzania and South Africa) will track this policy formulation process to assist policy makers with managing the compromise that must be reached in ensuring the policy is acceptable to all critical policy actors.

The main component of UNITAS will be to support the implementation of policy aimed at achieving universal health coverage in South Africa and Tanzania, undertaking monitoring at

district level, and will establish an 'early warning system' of implementation difficulties.

While it is expected that UNITAS will be of tremendous benefit to the health financing policy arena, the project faces an element of risk because if powerful stakeholders oppose universal health coverage proposals (in either country), the policy process could be stalled.



Prof Di McIntyre with a delegate from a UNITAS workshop.

However, Di McIntyre (Professor at the HEU and project coordinator) points out that "our assessment of the policy context in both South Africa and Tanzania from the Strategies for Health Insurance for Equity in Less Developed Countries (SHIELD) research project shows that there is very strong government commitment to pursuing universal coverage and that some interventions towards this goal, even if in a somewhat different form to that currently envisaged, will be implemented".

The SHIELD project assessed who pays for and who benefits from health care in both countries (as well as Ghana). Findings from the SHIELD project have been widely disseminated to senior policy officials, including South Africa's National Health Insurance Ministerial Advisory Committee and the Tanzanian National Forum on Health Financing for Equity. The SHIELD project will provide a baseline against which the impact of these financing reforms can be assessed by the UNITAS project.



Lecturers Shamila Manie and Assoc Prof Shajila Singh (back) celebrate with students (middle, left) Siyabonga Zulu and Niki Machida; and (front, left) Nadia Umuneza and Diana Kgekong at the oath ceremony of the second-year physiotherapy students.

Professionalism the watchword for Physio students

Second-year physiotherapy students undertook to sacrifice certain habits, including flashy hairstyles and jewellery, to abide by the professional code of conduct when engaging with patients.

Prior to the commencement of their clinical rotations, the students took an oath to fulfil their duties to themselves, to patients, society, the profession, colleagues and other professionals. At the oath ceremony recently, Associate Professor Shajila Singh, head of the Division of Communication Sciences & Disorders, delivered a lecture on professional ethics, and called on the students to respect the patients' rights and render an equal service at all times.

"Whether you are treating the son of a prominent politician or a person from an informal settlement, the level of your service should be the same," Singh said.

She emphasised, though, that it was not about the rules but about the heart and the mind wanting to provide services in an ethical and professional way. "Show empathy, warmth, compassion and tolerance. That will make you excellent physiotherapists".

Singh reminded students that they represent themselves, the university and the profession, and should conduct themselves to honour that.

SATVI plays host to European Parliamentary delegation

Deputy vice-chancellor Professor Thandabantu Nhlapo welcomed six Members of the European Parliament (MEPs) on 25 February, who were here to observe the most advanced tuberculosis vaccine clinical trial on infants in the world.

The trial in Worcester is being conducted by UCT's South African Tuberculosis Vaccine Initiative (SATVI), the world's leading TB vaccine clinical research group, in partnership with the European-based Oxford-Emergent Tuberculosis Consortium and the US-based group Aeras.

"UCT's mission is internationalisation with an Afropolitan niche," said Nhlapo, "which means our goal is to be internationally competitive while focussing on Africa. The European Union has been absolutely wonderful in supporting our mission."

The visiting MEPs were Michael Cashman (UK), Giles Chichester (UK), Bernd Lange (Germany), Judith Sargentini (Netherlands), Alf Svensson (Sweden), Roeland van de Geer (Netherlands), and Sabine Verheyen (Germany).

The new vaccine was developed in Europe, so the MEPs were especially interested in hearing about its progress.



Vaccine developer Dr Helen McShane of Oxford University in the UK was also here to report to the MEPs. "So far," McShane said, "the trial has progressed smoothly with no safety concerns experienced among the 2537 babies vaccinated to date."

SATVI principal investigator, Dr Hassan Mahomed, added that the community's positive response to the trial is due to their willingness to be part of the fight against TB, which is ravaging their community.

The trial, which has generated worldwide media attention, is expected to run until 2012.

International Roundtable on Human Rights-based Tobacco Control

Tuesday 22 March 2011
10am to 2pm,
Conference Room 4
Barnard Fuller Building

Inaugural: Karen Sliwa

State of the heart

After Professor Karen Sliwa delivered her inaugural lecture on 16 February, colleague Professor Valerie Mizrahi described her as the "consummate clinician/scientist", someone whose work stretches "from the intricacies of cell biology and genetics through to primary health care and intervention". And she is always thinking, Mizrahi stressed, of the "wellbeing of the patient and the population".

All clearly illustrated in Sliwa's inaugural lecture, *Capturing and Preserving the 'Heart' of Africa*, her coming-out as UCT's new professor of cardiac research and successor to Professor Lionel Opie as director of the Hatter Institute for Cardiovascular Research in Africa.

Firstly Sliwa spoke of - the primary health care and intervention bit - the surveillance of cardiovascular risk factors and disease, specifically in Africa. She pointed out that chronic disease, especially cardiovascular disease alongside diabetes and cancer, is fast becoming the leading cause of death and disability worldwide.

More worrying is that 80% of deaths from chronic disease occur in low- and middle-income countries.

Statistics that Sliwa confirmed in the Heart of Soweto Study, a groundbreaking project that she established and led at Wits University to look into the emerging causes and consequences of cardiovascular disease in South Africa, specifically in a community in transition. In that study, she and colleagues screened over 8 000 people between 2006 and 2008, and started a primary care registry of the 1 300 patients at risk for cardiovascular disease, particularly because of hypertension, aka high blood pressure.

In addition, they also launched an intervention trial, a study now managed from the Hatter Institute.

As the Heart of Soweto Study also demonstrated, the burden of chronic disease is growing in South Africa, spurred on by obesity and hypertension, said Sliwa. "It will be a challenge to prevent the escalation of this problem."

Underpinning that big picture, however, are a series of "interesting" cardiac diseases, said Sliwa. One that attracted her attention is Peripartum cardiomyopathy, a condition more common in Africa than in other parts of the world.

This very-often fatal condition - it kills about 20% of patients affected - is a rare disorder in which women are diagnosed with a weakened heart within the final month of pregnancy or within five months after delivery. So feeble is the heart that it cannot contract forcibly enough to pump enough blood to the rest of the body.

"These are totally healthy women; they get a child, they go home, and they develop this disease," explained Sliwa.

Scientists struggled to pin down a



determinable cause of the heart failure, however, even after looking at a number of possible suspects such as the autoimmune response and genetic factors.

It was only through a chance meeting with Denise Hilfiker-Kleiner, now professor of molecular cardiology at the Hannover Medical School in Germany, that Sliwa struck on a possible answer. In work totally unrelated to Peripartum cardiomyopathy, Hilfiker-Kleiner had found that many of her model mice would, for some inexplicable reason, die after giving birth.

A conversation over a cup of coffee would grow into a five-year study into how a dearth of STAT3, a gene that triggers a series of chemical pathways, could lead to heart failure. By 2010, the two reported in a proof-of-concept study that treatment with a drug known as bromocriptine could preserve blood vessel formation and cardiac function, and so make up for the STAT3 deficiency.

This research is but one that Sliwa has introduced to the Hatter Institute. Another is the Heart of Africa, the umbrella title for a medley of projects that follow up and expand, into eight sites in Africa, on the Heart of Soweto study.

So Sliwa is shaking things up at the Hatter Institute. Little wonder, then, that she's earned a couple of nicknames at UCT already.

On the night of her inaugural, Professor Bongani Mayosi, head of the Department of Medicine, assigned one: *Lindiwe*, which in isiXhosa means "the one we have been waiting for", and is given to a bride taken from another nation. (Sliwa was born in Germany.)

The first Sliwa heard of may be more apt, however: *Hurricane Katrina*.

News in brief

CVRU in R2.2-mil award with CERECAM

Researchers at UCT's Cardiovascular Research Unit (CVRU) recently joined forces with the Centre for Research in Computational and Applied Mechanics (CERECAM) and the Centre for High-Performance Computing (CHPC) for a three-year research project funded by the CHPC to the tune of R2.2 million.

Specifically, this exercise in computational biomechanics will explore possible treatments for myocardial infarction, better known as a heart attack. The project builds on the work of project co-investigator Dr Neil Davies of the Biology Group in the CVRU, who's been looking into the use of a synthetic polyethylene glycol hydrogel - essentially a plastic and chemical compound - to repair the weakened walls of the heart following a heart attack.

Other collaborators on the project are CERECAM's Professor Daya Reddy and Dr Sebastian Skatulla.

And in keeping with its interest in developing human capacity, the project also involves postdoctoral fellow Dr Jeroen Kortsmits, doctoral researchers Mazin Sirry, Dr Karen Kadner and Fulufhelo Masithulela, master's students Renee Miller, James Mbewu and Peter Wise all of UCT, and biomedical engineering student Jesse Macadangdang from the University of Virginia in the US.

EGPAF award for Myer

Associate Professor Landon Myer has won the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) International Leadership Award Grant to focus on mother-to-child transmission of HIV in South Africa.

His research will help drive innovative new strategies to deliver antiretroviral treatment to HIV-positive pregnant women. The ILA grant will fund Assoc Prof Myer's project in the community of Gugulethu, where in 2009, HIV prevalence was 28% among pregnant women attending antenatal services.

EGPAF has provided more than \$5.2 million in grants to 13 award recipients from nine countries. The Foundation works at more than 5,100 sites in 17 countries to implement prevention, care, and treatment services; to further advance innovative research; and to execute strategic and targeted global advocacy activities in order to bring dramatic change to the lives of millions of women, children, and families worldwide.



Signing the IRHAP MOU: Dr. Jim Cochrane, Prof. Lucy Gilson, Dr. Teresa Cutts, Prof. Leslie London and Dr Gary Gunderson.

Linking health and faith

During a 4-day launch, the School of Public Health & Family Medicine (SOPH) welcomed a new partnership with the African Religious Health Assets Programme (ARHAP) - to be known as the International Religious Health Assets Programme (IRHAP). This research network works at the interface of religion and public health, to promote sustainable health among poor communities, especially in Africa, and includes a particular focus on the role of religious health assets within health systems.

One of ARHAP-IRHAP's wider network, Methodist LeBonheur Healthcare's Center of Excellence in Faith and Health (based in Memphis, Tennessee) will also be a partner in the new collaboration with SOPH and was represented at the launch - including the signing of a Memorandum of Collaboration and a seminar held on 9 March 2011.

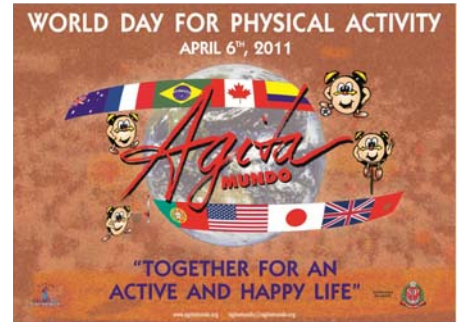
Seminar presenters from Memphis outlined how ARHAP's work in Africa has provided important 'learnings from the ground' that have to some extent helped shape an initiative taking place in Memphis that is building a trusted health care delivery system that blends what the hospital knows about disease with what religious communities know about life.

Called the Congregational Health Network (CHN), this initiative is a partnership between congregations and faith communities to share in the ministry of caring for CHN patients in the community.

The programme is having remarkable effects in health care. Take for instance the case of an elderly man who was suffering from congestive heart failure. After the CHN intervened to provide him with home-based caregiving services, his annual hospital visits reduced from six to one. There are ample examples of other positive health outcomes, including significantly reduced mortality rates among CHN patients - and most of the community work is unpaid; it is done for 'love not money'.

UCT recognises the tremendous value of ARHAP-IRHAP's work. As noted by Professor Leslie London (Head of the School of Public Health and Family Medicine), "it is important not only to recognise that investing in systems outside of hospitals can improve health care outcomes but to understand how that takes place - through what pathways and mechanisms; because if we understand that we can potentially extrapolate to other contexts which are very different to Memphis and to the faith-based environments they are working in".

As the collaboration gets off the ground, the School will be supporting engagements between ARHAP-IRHAP, Methodist LeBonheur Healthcare and its own health policy and systems work that further inquiry into these complex system dynamics, and generate wider lessons for health system development in South Africa and beyond.



Clock a block for health

Inactivity is the 4th highest risk factor and cause of death in the world, with 2 000 000 lives lost annually. This is a global problem, but the reality is - it is closer to home than you think!

The Healthy Active Kids Report Card 2010, highlights concerning trends in healthy eating, physical activity, tobacco and alcohol use in children and adolescents in South Africa. Less than 70% of high-school learners have regularly scheduled Physical Education and there has been an increase in overweight and obese children to 20% and 5% respectively. A glaring reality is that if action is not taken soon, to curb the current lack of physical activity amongst South Africans, this prevalence of obesity will continue to increase.

In April 2002, the World Health Organisation introduced World Health Day in Sao Paulo, Brazil, with the theme "move for Health". The Agita Mundo global physical activity network encourages all partners to organise events in celebration of World Physical Activity Day. In 2010, 4 million people participated in World Physical Activity Day, with 2 million representing Cuba alone! Other countries with excellent participation included Columbia, Argentina and Brazil.

The Sports Science Institute of South Africa (SSISA) and the UCT Exercise Science and Sports Medicine Research Unit (ESSM) is encouraging all South Africans to clock a block for health, in support of World Physical Activity Day. We invite you to be part of this global initiative so that we can work together towards being the country with the highest participation.

On 6 April 2011, all South Africans are invited to clock a block for health. Walk around the block at work, at school or in your neighbourhood. Mobilise your friends, family and colleagues to join you. Think about it this way ... if 300 000 South Africans walked for 30 minutes, we would have walked the circumference of the Earth!

For more information, visit us on Facebook under *World Physical Activity Day - South Africa* and don't forget to like our page!

Once you have done your walking on 6 April 2011, visit our page and let us know:

- what activity you did
- how long it took to do the activity (ideally at least 10 minutes)
- how many people participated in the activity with you
- and where your activity took place.

You can also e-mail us on mapril@ssisa.com or send a fax to (021) 686 7530, marked 'World Physical Activity Day'.