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HOOP NUUS

SU makes real difference

**Driving sustainability: Prof Russel Botman.**

Picture: DANIE NEL

Stellenbosch University (SU) has greatly contributed to the development of both the country and the continent over the past five years by using its expertise and excellence in the service of society.

This is apparent from an analysis of the successes of the HOPE Project, which has taken shape since the inauguration of Prof Russel Botman as Rector and Vice-Chancellor on 11 April 2007.

"I said then that we are placing a development agenda on the table as

a countermeasure to despair. When one looks at what has been achieved since then, we can take pride in the real difference that SU is making in people's lives," Prof Botman told HOPE TIMES.

Highlights of the HOPE Project since its public launch on 21 July 2010 include (read more inside):

- The invention of the nanotech "teabag" filter for the purification of polluted drinking water.
- The first medical doctors graduated from SU's new Ukwanda Rural Clinical School.

- 76 PhD candidates from Africa enrolled at SU via the Graduate School of Arts and Social Sciences.
- More than 3 500 Maties participated in activities of the Frederik Van Zyl Slabbert Institute for Student Leadership Development.

The HOPE Project is also successful as Africa's largest higher education funding campaign. According to Ms Annamia van den Heever, Director: Development and Alumni Relations, nearly R2 billion in donations, research contracts and sponsorships have so far streamed in.

"Thank you very much to all our supporters for investing in a better future," Botman said.

The University Council has reappointed Botman for a second five-year term. He says the greatest challenge facing the University now is sustainability.

"In the 21st century, serious efforts are needed worldwide to rectify the damage caused in the 20th century. Energy saving, water security and climate change will have to receive the attention of our best academics and researchers.

"This challenge will also have to be reflected in the further development of the University. New sustainable buildings will have to be erected and our carbon footprint will have to become smaller. We also

want to inculcate critical thinking in our students about 'green as the new maroon'.


"To achieve this, we will have to enter into very strong partnerships with foundations and companies and individuals who share our outlook. Sustainability will become

'Thank you very much to all our supporters.'

SU's trademark and we will forge strong bonds with others who also have this trademark."

Botman said that SU can quite rightly celebrate its continued excellence and increasing relevance. In 2011, the University was included in three international rankings of the top 500 universities in the world for the first time.

"The excellence of the 21st century will have to reflect the character of sustainability. In this way we will make hope happen for our country and for our continent. In this way we will make hope happen for future generations."

 Support HOPE:
www.thehopeproject.co.za

Hi-tech therapy lets her walk tall



MANDI BARNARD

Due to severe cerebral palsy, Ms Hillary Lane only started walking at the age of five. Today, at 53, she can boast of having completed the 42 km New York City Marathon – thanks to hi-tech therapy provided to her by the Motion Analysis Clinic of Stellenbosch University (SU).

'My first reaction was, No way!'

Funding provided by the University's HOPE Project enabled the Clinic to acquire additional state-of-the-art equipment to identify problems in the gait of patients and to design a tailor-made treatment regime in each case.

"I was approached by a colleague in January 2010 to walk the marathon," says Lane, CEO of the Western Cape Cerebral Palsy Association.

"My first reaction was, No way! I have a 'Disabled Driver' sticker on my car, and I don't normally walk further than I have to."

However, strongly motivated by the personal challenge and keen to lead the way for others with cerebral palsy, Lane started going for therapy at the Clinic. And on 6 November last year she finished the marathon

in 10 hours 7 seconds.

With 47 000 finishers in 2011, the race through the boroughs of New York is one of the largest in the world. It is famous for its supportive crowds and neighbourhood spirit.

"This was a chance to show the world that many of us with cerebral palsy are not defined by our disabilities but rather by our abilities."

Lane is adamant that she would not have been able to finish the race if it were not for the therapy she had received at the Clinic – "and that's the bottom line!"

So, how did it work?

"To start with, we generated a detailed description of her walking pattern with a motion-capture system," explains Mr Dominic Fisher, a physiotherapist at the Clinic.

"This was used by a team of specialists to make an optimal diagnosis and prescribe training and physiotherapy treatment to correct her posture and walking technique under close supervision."

Lane says: "I walked out of the clinic after the first session feeling 10 feet taller. I had seen myself objectively for the first time, and knew there were things I could correct."

"When I went for a walk at home, though, I could hardly make it around the block. But as the weeks went by, I started feeling better. Soon I was able to walk up to 15 km with no problems."

The facility at the University's



Ms Hillary Lane, who was born with cerebral palsy, displays the medal she earned for finishing the 2011 New York City Marathon after receiving help at SU's Motion Analysis Clinic.

Picture: STEFAN ELS

Faculty of Health Sciences in Tygerberg is the only clinic in Africa equipped with an 8-camera T-series Vicon system, synchronised with a Bertec force plate and high-speed video cameras.

This technology delivers three-dimensional analyses for the diagnosis of sports, postural, occupational, neurological and ergonomic problems.

"We bought two more cameras and laid on engineering support to streamline data processing with the HOPE Project funds," says Prof


Quinette Louw, the head of the Clinic.

"The additional equipment improved the accuracy of our system and enables us to formulate recommendations regarding optimal interventions to enhance performance."

The funding was provided by an initiative of the HOPE Project called the University Partnership in Adapted Physical Activity. It is headed up by Prof Liz Bressan, Director of the Centre for Human Performance Sciences at SU.

"This is a perfect example of the

HOPE Project's science-for-society approach in action," she says.

 Support HOPE: www.thehopeproject.co.za/humanperformance



VIDEO: Follow this QR code with your smartphone camera.

Making HOPE happen

With R2 billion raised since April 2007, the HOPE Project is Africa's most successful higher education funding campaign so far. This has enabled Stellenbosch University (SU) to make a real difference to the lives of the people of South Africa and the rest of the continent.

'Thank you!'

SU Rector and Vice-Chancellor Prof H Russel Botman has expressed his gratitude to donors and partners of the University for their on-going support.

"Thank you to all our supporters for investing in a better future. You are helping us to sustain our excellence and relevance in the 21st century," he said.

Funds received from:

- The South African government
- The Stellenbosch Trust
- Stellenbosch University SA Foundation United Kingdom
- Friends of the University of Stellenbosch Foundation United States
- The Council of Stellenbosch University
- Major international philanthropic foundations
- National and international corporate investors
- Individual donors (14 people have given more than R1 million each)
- Alumni of Stellenbosch University

Botman appealed for "additional multi-billion rand support that is now required to help the University meet its new quantum challenge of sustaining hope into the future."

Ways of giving:

- Safe online donation at www.thehopeproject.co.za
- EFT to dedicated SU bank account
- Monthly debit order
- Once-off donation
- Bequest to the University
- Sponsorship of specific projects
- Research contracts
- The naming of specific facilities
- Bursary fund donations

More Information:

Contact the Stellenbosch University Development Office:

- Tel: +27 21 808 4645
- Email: development@sun.ac.za

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HOPE
PROJECT



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HOPE TIMES

Published by: Communication and Liaison Division,
Stellenbosch University Tel: +27 21 808 4977

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Sustaining the future

New facilities and a green mobility plan linked to the HOPE Project are helping Stellenbosch University meet the challenges of the 21st century. **Wayne Muller reports.**

Builders have been hard at work on the corner of Durban Street and the Robertson road in Worcester since November 2010. This is to ensure that the Ukwanda Rural Clinical School is ready to train a new generation of health workers for rural areas by June 2012.

The School is a joint project by the Faculty of Health Sciences and the Western Cape Provincial Government. The cost of the project will amount to about R60 million.

The School will have an academic building and a residence with space for 40 students. The first seven final-year medical students moved into their new accommodation in March 2012. *See story on p. 12.*



Legal Aid Clinic expands

With the opening of its new wing in August 2011, SU's Legal Aid Clinic is now geared to deliver a more comprehensive service to its 4 000 annual clients. Four new offices, a seminar room and a computer centre are also making it possible to provide 64 instead of 32 students with practical legal skills each year.

Aids Centre gets new home

The new home of the Africa Centre for HIV/Aids Management is rapidly nearing completion. The Centre will move to Joubert Street, Stellenbosch in May 2012. The double-storey building will boast 10 offices and two open-plan spaces. It will also have a rehearsal room for the Centre's popular educational plays.



Shuttle service introduced

Unprecedented growth the past decade has led to a shortage of parking on the Stellenbosch campus. The problem is worsened by the fact that 82% of staff members and 43% of students use their own cars. If they all have to get their own parking, there would be a shortage of 7 200 bays.

A shuttle service has been introduced to help alleviate this problem. Staff and students coming into town can park at Coetzenburg or Lentelus and catch a shuttle to the centre of campus. A pilot project is currently operational on two routes – from Coetzenburg to the Conservatoire and from Lentelus to Joubert Street.

MATIE BIKES rolled out

A total of 400 commuter bicycles have been rolled out on campus as part of the MATIE BIKE project.

Staff and students can rent a bicycle for R1 000 per year, R600 of which will be refunded if the bike is returned in good condition. The aim is to reduce the number of motor vehicles on campus.

The bicycles used to form part of a rent-a-bike scheme for train commuters in the Netherlands. When they were replaced with a new range after a few years, the bikes were imported into South Africa by the Bicycling Empowerment Network with the assistance of the Dutch Ministry of Foreign Affairs.

The University acquired them for its new MATIE BIKE project. The project is aimed at promoting environmental sustainability, which is one of the themes of SU's HOPE Project.

"Worldwide, a mind shift has

occurred. Humankind has realised that our natural resources are limited and that we cannot continue polluting our planet like we have been doing. The MATIE BIKE is part of SU's contribution towards the

green concern," SU Rector and Vice-Chancellor Prof Russel Botman said.

On 11 March 2012 seven Stellenbosch cyclists completed the Cape Argus Pick n Pay Cycle Tour on single-speed MATIE BIKES.



Watchdogs for Africa

Right behind the historical house in Crozier Street where the Department of Journalism is housed, now stands an ultramodern centre by the name of MEDIAFRIKA.

The double-storey building, which was inaugurated in March 2011, comprises a multipurpose lecture venue, a computer room and audio-visual studios.

Prof Lizette Rabe, MEDIAFRIKA initiator and former Head of the Department, says the new facility is a great help in training top-quality journalists in ethical reporting and investigative journalism.

Pictured above are Journalism students Samina Anwary, left, and Nielen Bottomley.



Ms Vanessa Swartz, left, and Ms Mariëtte Odendaal toast to Swartz's success at her graduation ceremony. Picture: STEFAN ELS

Farmworker's daughter graduates

DESMOND THOMPSON

Ms Vanessa Swartz (23) had to overcome big stumbling blocks before graduating with a BComm degree in Management Accounting from Stellenbosch University (SU) in December 2011.

She comes from Citrusdal, where her father, Mr Klaas Jantjies, is a farm labourer and her mother, Ms Katriena Swartz, is a seasonal worker in the fruit industry. However, she grew up with her grandmother, Ms Magrieta Witbooi, on a farm near Piketberg.

Ms Mariëtte Odendaal, an SU alumna, had started a farm library there, and Swartz was one of the children who visited it regularly.

"It meant a lot to me. The books opened worlds to me and I was part of a group of teenagers who discussed all sorts of things," she says.

Despite falling pregnant in her last year at school, she wrote matric and did well. However, she decided to first stay at home with her baby

daughter, Vanashree (now 4).

"Vanessa was one of the stars of our library group. I was really keen that she should study further. I spoke to her and to her mother, and then took Vanessa for aptitude tests. I was very happy when she got admission to Maties," says Odendaal, who now lives in Kuils River.

'It meant a lot to me. The books opened worlds to me...'

Vanashree remained behind with her grandmother in Citrusdal when her mother left for Stellenbosch. Swartz's studies were financed through bursary loans from SU and the National Student Financing Scheme.

"It was very difficult at the beginning. The adjustment was big,

both socially and academically, and I really missed my daughter terribly," says Swartz.

"Aunty Mariëtte helped me through the most difficult times. For a first-generation student such as myself, it is every important to have someone like her who can be your campus mother."

In his installation address in 2007, SU Rector and Vice-Chancellor Prof Russel Botman said his vision was that Stellenbosch should become "a multicultural home for all", where "the problems of the poor with regard to access" were dealt with.

His standpoint, "We can only feel satisfied that there is fair access when the daughter of the farm worker has the same future opportunities as the son of the farmer," has since become a rallying call.

Promoting student success is one of the strategic objectives of SU's HOPE Project.

Support HOPE: www.thehopeproject.co.za/studentsuccess

Making dreams come true

The course of many young people's lives has been changed as a result of Stellenbosch University's bridging programme in Science and Mathematics, reports **Wayne Muller**.

SciMathUS provides support to motivated school learners from educationally disadvantaged communities who did not qualify for admission to higher education to realise their dreams of building a professional career.

Since its launch in 2001, the year-long SciMathUS programme has helped a total of 572 learners to pass their matric examinations with exemption. Of these, 428 registered for their first year at Stellenbosch University (SU).

So far, 71 students have completed their degrees at SU in disciplines ranging from medicine and engineering to agriculture and accounting. Some of them have also completed postgraduate studies.

Students may apply for SciMathUS if they have passed Grade 12 with a minimum of 50% in Afrikaans or English, a minimum of 30% in Mathematics and 30% in Physical Sciences, or 80% in Mathematical Literacy and 50% in any four of the subjects designated for university admission.

The programme follows a hybrid problem-based learning model of teaching. This allows students to take responsibility for their own learning, while the lecturers facilitate the learning process.

Mr Gerald Maarman from Kleinvlei in Eerste River completed his MSc degree at SU. He tells his story in a DVD recently filmed by SciMathUS

to motivate others like himself who come from poor communities. Despite his brother becoming involved in gangsterism and his 15-year-old sister falling pregnant, Maarman held on to his dream, "although it felt my circumstances at home held me back".

Maarman describes SciMathUS as a transformation process. "I can tell young people that, irrespective of

'Through hard work and perseverance, I am now a medical doctor.'

your circumstance, you can become the best you can be – there is hope for you."

For Dr Pumza Ghu from Mthatha in the Eastern Cape, life looked bleak when she realised her matric results did not give her entrance to a university education.

"That's when I heard about SciMathUS. I made it through, and was able to enrol for Medicine. Through hard work and perseverance, I am now a medical doctor. Much thanks to SciMathUS who believed in me."



Dr Bongiwe Tyhala and Dr Pumza Ghu, who completed the SciMathUS bridging programme before enrolling at SU's Faculty of Health Sciences, at their graduation in 2009. Picture: ANNEKE MULLER

Dr Bongiwe Tyhala and her three siblings come from a single-parent household.

"Life for me and my family has been a challenge. Becoming a medical doctor has been a dream of mine but little did I know how much it required. SciMathUS came to my rescue. I've never met people so caring, compassionate and patient."

SciMathUS is a programme of the Stellenbosch University Institute for Mathematics and Science Teaching (IMSTUS), which forms part of the HOPE Project.

Support HOPE: www.thehopeproject.co.za/imstus



VIDEO: Follow this QR code with your smartphone camera.

71

The number of SciMathUS alumni who have gone on to graduate from Stellenbosch University.
Source: SciMathUS

Academic bridge builders of note

ALEC BASSON

Monday afternoons are bridge-building time at the Centre for Studies in Complexity (CSC) at Stellenbosch University (SU).

This is when postgraduate students, lecturers and researchers from divergent worlds come together and talk to their hearts' content about anything from biochemistry, philosophy and music to mathematics, drama and conflict management.

"We have to approach the complexity of the world and the complex problems that confront us every day in new ways," says CSC head Prof Jannie Hofmeyr.

"This means we have to bridge the divisions between the natural sciences and the humanities."

Hofmeyr is a biochemist. He and the late Prof Paul Cilliers, who was a lecturer in philosophy, established the CSC together in 2009. When Cilliers passed away on 31 July 2011, Hofmeyr continued the CSC's activities.

He is assisted by Ms Rika Preiser, a doctoral student who co-edited

the Springer book, *Complexity, difference and identity: An ethical perspective*, with Cilliers in 2010. She organises the Monday afternoon discussion sessions.

"It's incredibly stimulating to participate in the Centre's discussions," says Mr Danie Palm, a doctoral student in Biochemistry.

"They offer someone like me the rare opportunity to take the philosophy and science of complex systems beyond conventional approaches and then to explore methods that overcome these restrictions in meaningful ways."

Ms Tanja Malan, a master's student in Philosophy, agrees.

"The Centre offers gripping and insightful discussions. These discussions expand your knowledge in interdisciplinary ways."

The CSC is the only one of its kind in Africa and forms part of SU's HOPE Project. It applies the insights from complexity studies – a relatively new field – to some of the most pressing challenges in society.

Hofmeyr is excited about a national complexity forum that is expected to be launched in October



An interdisciplinary discussion session at the Centre for Studies in Complexity.

Picture: JUSTIN ALBERTS

2012. The CSC received funding for it from the National Research Foundation.

"There is a strong need, especially among younger academics and those within the field of complexity

studies, to explore new ideas on the theory of complexity together."

Hofmeyr says that two conferences are already being planned within the framework of the proposed complexity forum.

"These will create a platform for a national association for the study of complexity, with the CSC as the intellectual and administrative hub."

Support HOPE: www.thehopeproject.co.za/complexity



'Rights litigation has to be accessible to everyone,' says Ms Gillian Armstrong, a recent LLM graduate.

Picture: JOHANN SWART

Justice for all



STEPHANIE NIEUWOUTD

Her research opened her eyes to the wasted resources that go into litigation trying to enforce socio-economic rights in South Africa, says Ms Gillian Armstrong, who recently graduated with an LLM degree from Stellenbosch University (SU).

She took part in the Law Faculty's HOPE Project initiative, entitled Combating Poverty, Homelessness and Socio-Economic Vulnerability under the Constitution.

"In rights litigation a lot of money from the Department of Justice is wasted on applications for review," says Armstrong.

"In my research I identified this cost, and considered new ways to approach administrative justice. I investigated alternative methods of dispute resolution and came to the conclusion that administrative tribunals have lots to offer."

Armstrong says she has been fortified in her resolve to pursue a career in government, in an advisory

capacity. She believes her thesis on the role of administrative justice in the realisation of socio-economic rights will stand her in good stead. South Africa's 1996 Constitution proclaims in its preamble that it was adopted to "improve the quality of life of all citizens and free the potential of each person".

The Constitution contains a Bill of Rights that not only protects citizens' civil and political rights, but also their economic, social and cultural rights. This includes the rights of access to adequate housing, protection against arbitrary evictions, access to health care, water and social security, as well as educational rights.

Armstrong says her involvement in the Law Faculty's HOPE Project initiative reinforced her conviction that rights litigation has to be accessible to everyone. One of the aims of the Faculty's initiative is to promote research into how the legal system can be used more effectively to empower disadvantaged citizens.

"Although each of us in the initiative worked in our own specialised field, we had the benefit of learning from each other. Through our academic interaction, we came to realise how multifaceted the problem of poverty, homelessness and socio-economic disadvantage is," Armstrong says.

It is estimated that the initiative, Combating Poverty, Homelessness and Socio-economic Vulnerability under the Constitution, has so far assisted more than 10 000 people through the work of Stellenbosch University's Legal Aid Clinic.

• *Contributions to the Law Faculty's 2011 Colloquium on Law and Poverty have been published in a special edition of the Stellenbosch Law Review. The event also gave rise to a book, Law and Poverty: Perspectives from South Africa and Beyond, published by Juta & Co and edited by Proff Sandra Liebenberg and Geo Quinot.*

Support HOPE: www.thehopeproject.co.za/povertyrights

'It is not rocket science'

SRC member
Ms Simoné Nortmann explains why she supports the HOPE Project.

Let me be honest – before I decided to run for SRC, I did not have the foggiest idea of what the HOPE Project was. Zilch. Nada.

I just saw all these massive banners across campus, displaying friendly yet unknown faces. I thought it was ridiculous.

As a Drama student, I grieved

with my Department when we did not get our own HOPE banner. We went on to write "We believe Drama will change the world" on an A4 page, which we stuck up on the door of the HB Thom Theatre.

That was the sum total of my experience of the HOPE Project.

Then I got elected and was promptly assigned the HOPE Project as my portfolio! What an irony, because from the very first day I got involved, I had no desire to look the other way. Once you get what it's about, there is no stopping you – you have to support it.

The HOPE Project aligns us with top international universities. Most of them declare very prominently on their websites that universities need

to be focused on delivering solutions to the challenges of the world.

It is not rocket science. It's not something that Prof Botman thought up. This is us accepting the challenge. It's Stellenbosch University (SU) rising to the occasion.

It's only right for science to be utilised to make a positive difference in society. It's good that the agenda is to put SU on the map, in line with the objectives of the country and the United Nations.

The objective of the HOPE Project is indirectly to foster a culture of giving among SU students. It is bursting the so-called Stellenbosch bubble.

Because now, it's no longer about

graduating only. It is about doing something meaningful with your degree; something that could change someone else's life.

• *This is an edited version of a blog by Nortmann. Turn to the middle page for a poster of the students' photo campaign.*

Support HOPE: www.thehopeproject.co.za/studentesuccess



VIDEO: Follow this QR code with your smartphone camera.



Ms Simoné Nortmann.

Picture: BERNARD BRAVENBOER

Broadcasts improve results

Either side of the TV cameras in a studio at Stellenbosch University lays an education success story second to none.

Alec Basson tells more.

Last year he was attending extra classes to help him with his school work; this year, Mr Adwill May is studying BAEC at Stellenbosch University (SU) – with a bursary that he earned for matriculating among the top 100 in the Western Cape.

The Western Cape Education Department broadcast additional lessons in key subjects to 20 000 Grade 11 and 12 learners in 145 schools in the province in 2011. The facilities for this were provided by SU's Division for Telematic Services.

The lessons were broadcast live per satellite, and highly competent

‘These broadcasts changed my life.’

teachers were used as presenters. The same approach is followed in the Division's HOPE Project initiative, namely Virtual Postgraduate Learning Support, which is aimed at University students.

“The virtual lessons were well presented and easy to understand. I used the notes to prepare for my finals and I was able to improve in most of my subjects,” says May, who matriculated from the Bernadino

10,9%

The average improvement in the matric pass rate of Western Cape schools supported by SU's telematic programme.

Source: SU Telematic Services

Heights High School in Kraaifontein.

Even though he is in the middle of his first test series at SU, he still makes time to meet me for an interview. We do so at Telematic Services and I show him the studio from where the school lessons are broadcast. This is his first visit.

“Very impressive!” he says about the advanced technology in the studio filled with cameras, audio and visual mixers and TV screens.

He smiles broadly when I introduce him to Dr Antoinette van der Merwe and Prof Tom Park of the Division.

“These broadcasts changed my life. If you'd like, I could come in one afternoon and tell the current group of pupils how these lessons helped me,” he offers.

I ask Prof Park about the reason



Mr Adwill May with Dr Antoinette van der Merwe and Prof Tom Park in the studio at the Division for Telematic Services. Having received extra lessons, he matriculated among the top 100 learners in the Western Cape.

Picture: JUSTIN ALBERTS

for the programme. “By being involved in schools in this way, the University fulfils its role as a knowledge partner and it plays an active role in the development of the South African community,” he answers.

Formal feedback from learners and principals has indicated that this telematic project has a big impact on the learning culture in schools. Many teachers have also indicated

that they have benefited from the exposure to a variety of educational approaches.

“We are very excited about the project being expanded to the Northern Cape this year. This means 69 schools there will also be able to receive the departmental broadcasts from the University's studio here in Stellenbosch,” says Van der Merwe.



Support HOPE: www.thehopeproject.co.za/virtual

50%+

The improvement between 2010 and 2011 in 20 of the 145 Western Cape schools receiving the broadcasts.

Source: Telematic Services



Postgraduate students in the Carnegie Research Commons.

Picture: JUSTIN ALBERTS

Carnegie Research Commons

The facility is named after Scottish-American philanthropist Andrew Carnegie, in recognition of donations received from the Carnegie Corporation of New York.

Modern facility supports student success

SONIKA LAMPRECHT and
LUCIA SCHOOMBEE

A little over a year after the glass sliding door of the Carnegie Research Commons in Stellenbosch University's (SU) main library officially slid open for the first time, many postgraduate students say that the modern facility has significantly boosted their performance.

“The fact that a space like this was created makes me think that the University cares about me and wants me to be successful. This makes me feel special and subconsciously it motivates me to work harder,” says Ms Jenni Carstens, an Industrial Psychology master's degree student.

The Carnegie Research Commons forms part of the HOPE Project initiative of the Library and Information Service called Access to Electronic Resources. The other major component is the Learning Commons, which caters mainly for undergraduate students.

Both facilities are aimed at improving student success. And they do so in an interesting way – by combining 21st-century technology and contemporary design with time-honoured fundamentals: Knowledgeable and helpful staff committed to opening the doors of learning and keeping them open.

A thoughtful staffing model ensures that users are supported on multiple levels. Two experienced librarians provide users with professional assistance. They are assisted by six postgraduate students recruited to provide peer support.

Ms Ellen Tise, Senior Director of SU's Library and Information

Service, says “the interior design elements created a modern, elegant, quiet and inspirational space that allows users to spend long hours working comfortably and with focus.”

Patrons tend to have favourite

‘Everything I need is right here – books, printers, coffee, computers.’

spots where they like to work on academic articles or on their theses. Keen students swipe in early because full capacity is usually reached not long after 8.30am.

Mr Richard Burman, a master's student in Knowledge Dynamics and Decision Making, says that he would not have been as productive as he is now if he had to work from home. “Everything I need is right here – books, printers, coffee, computers. This is a positive environment. Seeing others hard at work is infectious.”

Mr Lawrence Mpekansambo, who hails from Malawi and is doing his MPhil in Business Ethics, says the Carnegie Research Commons came at just the right time for him.

“Here I have access to the latest material from across the world and people who can help me when I need it. This space contributed tremendously to my research.”



Support HOPE: www.thehopeproject.co.za/library

Research shared with the world

In October 2011, Stellenbosch University (SU) became one of the first universities on the continent to house and publish open access journals online.

SUNJournals

There are already 11 titles on the SUNJournals platform. Journals are published with the Open Journal Systems open source software, and all the titles are freely available to anyone at <http://bit.ly/sunjournals>.

SUNScholar

SU also has an open access repository, SUNScholar, where anyone may gain access via the internet to theses, dissertations and other academic works. Visit <http://scholar.sun.ac.za>.

Berlin Declaration

In October 2010, Stellenbosch became the first university in Africa to sign the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities. The goal of this international convention is to make research freely and widely available to society.

From 6-8 November 2012, SU will play host to the Berlin 10 Open Access Conference. It will be the first time that this meeting takes place in Africa. Visit www.berlin10.org.



Raise a glass to GeoIT

ILSE ARENDSSE

With 850 million litres of wine produced in 2009 alone, generating revenues in excess of R2,7 billion, the contribution of viticulture and oenology to the South African economy cannot be overstated.

Now research done under the aegis of the HOPE Project of Stellenbosch University (SU) could give a further boost to the country's wine industry, which employs 350 000 people on wine farms and in cellars.

The research focuses on Robertson in the South Western Cape, renowned for its quality red and white wine varieties. It looks at the use of aerial photography and satellite imagery to identify the best areas for growing specific grape cultivars.

"Although viticultural and oenological practices play an important role in the aroma and quality of a wine, natural factors such as topography, climate, soil and geology are considered the most important ones in determining the character and style of a wine," says Mr Hadley Remas, a researcher in the Department of Geography and Environmental Studies.

The combination of topography, climate, soil and geology make up

what is known in the wine industry as NTUs – natural terroir units. By obtaining a bird's eye view of the area, Remas uses sophisticated geographic information systems (GIS) and earth observation (EO) techniques to identify NTUs in the Robertson district.

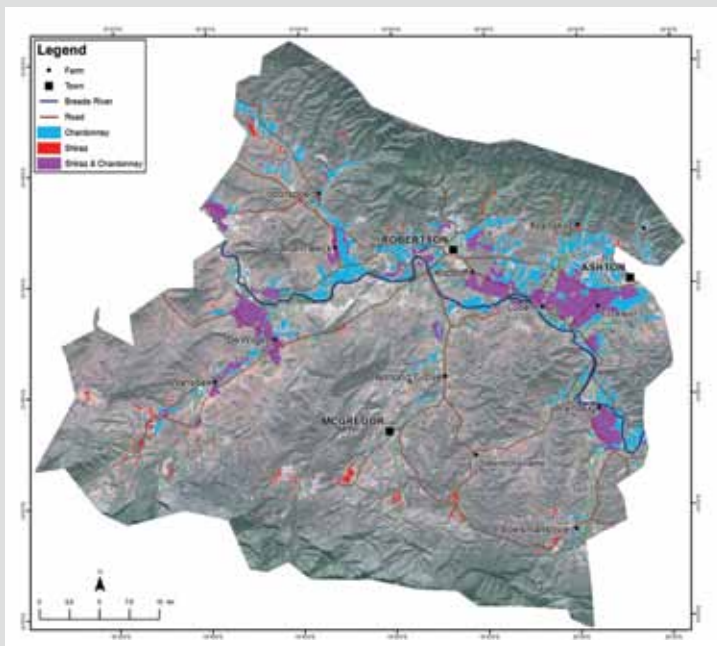
"Several studies have recognised GIS technology as an essential tool. This goes for traditional wine-producing countries, such as France, Spain and Italy, as well as 'newcomers' such as South Africa, Australia and the USA," he says.

According to Dr Adriaan van Niekerk, Project Manager of the HOPE Project's Geographic Information Technology (GeoIT) initiative, the research demonstrates that NTUs can be identified using GIS and remote sensing.

"It shows that we can make a positive difference using this technology," he says.

NTUs have implications beyond winemaking. The production of various agricultural crops can benefit from research pointing out the most suitable locations for their cultivation. GIS and EO technologies can also be used in the planning and management of land use.

Support HOPE:
www.thehopeproject.co.za/GeoIT



This satellite image shows which areas in the Robertson district will be best for which grape cultivars. Researchers at Stellenbosch University are using sophisticated geographic information systems and earth observation techniques to identify natural terroir units.

Image: GeoIT, SU

On water and wine



ENGELA DUVENAGE

How to change as little water into wine as possible – this is the aim of a new research project under the banner of the Water Institute of Stellenbosch University (SU).

It is, of course, illegal to add water to wine itself, but a lot of water is used every day to clean cellars and equipment and to do bottling and labelling.

However, when asking winemakers what the water footprint of their wines is, the answer varies between 1 and 13 litres per bottle.

"No one really knows, it seems to me," says Ms Adél Conradie, a trained winemaker doing her MSc in Viticulture and Oenology on the improvement of water use in the wine industry. She is working under the supervision of Dr Gunnar Sigge of SU's Department of Food Science, Mr Riaan Wassung,

winemaker at SU's experimental cellar, Welgevallen, and Prof Eugene Cloete, Dean of the Faculty of Science.

"Very little information is available on similar studies; there are even fewer references in the South African context. There's a cellar in Portugal that claims it needs only 650 ml water to make a litre of wine – but how they manage that I don't know."

South Africa's Department of Water Affairs has strict regulations that specify that run-off water may not summarily be discharged into rivers and must be cleaned well enough to use, at the very least, as irrigation water. The methods that wine farms can use for this vary greatly in terms of cost and the required space.

"You have to know how much water you use before you can implement ways to use less water,"

says Conradie.

She is also doing chemical analyses to determine the efficacy of various water-purification systems.

Conradie is working with the Delheim and Hartenberg wine farms outside Stellenbosch, where waste water is cleaned through a vlei filtration system and reused for the irrigation of vineyards.

Research is also being done at Welgevallen, where grapes from the University's own town vineyard at Mostertsdraai are pressed.

"It's only a small cellar, where between 100 and 200 tons of grapes are processed per season into about 122 boxes of wine containing six bottles each," says Conradie. "But our recommendations could help most cellars be more sustainable."

Support HOPE:
www.thehopeproject.co.za/water



Ms Adél Conradie takes water samples in the University's experimental wine cellar, Welgevallen.

Picture: JUSTIN ALBERTS

Update on the 'teabag' water filter

The first edition of *HOPE TIMES* in 2010 led with an invention that would grab attention worldwide, the "teabag" water filter. What is the latest news?

Prof Eugene Cloete and his team of microbiologists and polymer scientists have been improving the laboratory prototype of the nanofibre material used to make the filter. The necessary testing has been done by the South African Bureau of Standards, and the filter has been found to be effective in removing bacteria from water.

SU concluded an agreement with

South African company Aquacure for the exclusive rights to manufacture, market and distribute the filter product. Groundwork is proceeding on the development and design of the bottles in which the filters will be placed. This must be done before a commercial product can be released.

Ms Danny du Plessis and Dr Nonjabulo Gule, students involved in the project, have since been awarded an MSc and PdD respectively for their research.

RIGHT: Dr Michéle de Kwaadsteniet with a prototype filter.

Picture: JACQUES BOTHA



iShack a bright idea



ABOVE: Thinati Manxiwa (11) in the iShack that she shares with her mother, Ms Nosango Plaatjie, and two brothers. **RIGHT:** Stellenbosch researchers Ms Lauren Tavener-Smith, Mr Berry Wessels and Mr Andreas Keller in front of the prototype iShack in Enkanini, Stellenbosch.

Pictures: ANNA LUSTY

DESMOND THOMPSON

"This house is more comfortable than our previous place, and I am very happy that we have lights because there is no electricity here," says Nosango Victoria Plaatjie, proud occupant of a prototype eco-friendly dwelling in the informal

'It is more comfortable and I am very happy that we have lights.'

settlement of Enkanini, Stellenbosch, called the iShack.

The "i" stands for "improved", and it entails cost-effective and sustainable modifications to the basic corrugated iron shack common in developing countries. It has been designed to protect its occupants from extreme temperatures, and it features a solar panel for basic electricity needs. The roof is slanted for rainwater harvesting.

The iShack is the result of an 18-month transdisciplinary research project by Stellenbosch University's TsamaHub, an initiative of the HOPE Project, and the Sustainability Institute at Lynedoch outside Stellenbosch. Postgraduate students Ms Lauren Tavener-Smith, Mr Andreas Keller and Mr Berry Wessels stayed in Enkanini to collaborate with local residents on the design.

"The materials and design were chosen based on affordability, accessibility and impact on thermal comfort," says Tavener-Smith, who is doing her PhD in the economics of water and sanitation upgrading in

informal settlements.

The iShack is north-facing with a roof overhang – to maximise passive heating potential in winter, and provide shade in summer. Windows are strategically placed on the north and east walls to let drafts in for better air circulation.

A lining of disused cardboard boxes against the wall and roof is sprayed with fire retardant paint.

"Old long-life milk cartons are wedged between the cardboard and the zinc sheets for additional insulation," says Keller, who is doing his MPhil in Sustainable Development at the University's School of Public Leadership (SPL).

The floor is made from bricks picked up at the nearby landfill site, and on one side there is a half wall made from mud and straw, which helps to smooth out temperature fluctuations.

The estimated 8 000 people who live in Enkanini have to make do with 36 taps, 60 toilets, no electricity, inadequate waste disposal and flimsy dwellings subject to floods and fires.

The iShack has small photovoltaic panel on the roof for two interior lights, a motion sensitive exterior light and a cellphone charger.

"In the next phase we plan to introduce upgraded solar systems that can power household appliances," says Wessels, who is also doing his MPhil at the SPL.

Six Enkanini residents have been trained to install, operate, maintain and repair the solar power system. It is envisaged that they will become

energy entrepreneurs serving the community.

Also involved in the project is the Stellenbosch Municipality, the Informal Settlement Network (the local affiliate of Slum Dwellers International) and the Community Organisation Resource Centre. The iShack and the research around sanitation, water and waste is intended to contribute to the knowledge base around informal settlement upgrading.


Prof Mark Swilling, Professor in sustainable development at the SPL and Project Leader of the TsamaHub, points out that South African policy regarding human settlements has shifted from a once off housing intervention to an incremental approach of infrastructure



upgrading.

"But for this to work we need partnerships between shack dwellers, local government and researchers."

Mr John van Breda, Project Manager of the TsamaHub, says there are plans to scale up the project. "The aim is to refine the design principles and operational systems for application elsewhere."

 **Support HOPE:**
www.thehopeproject.co.za/tsama

Focus on the sun

The Solar Thermal Energy Research Group (STERG) at Stellenbosch University is considered a major role player in renewable energy in South Africa. **Martin Viljoen** spoke to the group's coordinator, Mr Paul Gauché, about tapping into the sun's power.

Why solar energy?

Solar energy is mandated as a major source of power generation for the future, as conventional forms are becoming very costly and coal resources are heading towards depletion.

How does the technology work?

Large solar thermal power stations use vast arrays of mirrors that focus sunlight to a point, creating a very high temperature on a receiver. The receiver either sends this high-quality energy directly to a turbine, or it sends it to a storage system for later turbine operation. At that point, it works the same way as a typical Eskom power plant. This technology is called concentrating solar power (CSP).

Is SA well positioned for solar energy?

CSP plants require very high-quality, direct sunlight. South Africa is blessed with an abundance of top-quality solar energy. If we consider

99,98%

The percentage of Earth's energy that comes from the sun.

Source: Paul Gauché, STERG

just the area near transmission lines, SA could generate 15 times its current electricity demand using solar thermal energy.

When will it become a reality?

CSP is a relatively new technology and, like many renewable technologies, the upfront capital costs are high, even though the fuel is free. In the long run, CSP plants will be cost competitive, but it is difficult to make commitments to CSP in SA when coal is still quite cheap. But several quite large CSP plants are expected to be operational in a few years.

Is it really feasible?

Feasibility is not the question in regions where the technology has been operating continuously for more than 25 years. The question is about a commitment to cost reduction and about cutting-edge engineering. We turned heads by braaing boerewors during the recent SU Sustainability Day using nothing other than a 1,5 m diameter cheap Chinese solar cooker. We have tested this cooker to a temperature of over 1 000 °C. The sun is the source of 99.98% of all our energy. We just don't seem to see it.

How well is SU positioned in the field?

The research potential of solar thermal energy is huge and, with limited resources, SU has strategically chosen key technologies to focus on. These include condenser cooling of power stations and water reduction; finding innovative local and low-cost solutions to the storage of energy; and the development of

heliostats, which are mirrors that track the sun to focus energy on a specific point.

What is next?

We are close to completing several infrastructure projects on campus that are nationwide firsts, including a new 18-m tower to be used for heliostat research. We will be moving into a new building with dedicated space for all students soon and the growth in our postgraduate student numbers shows no signs of slowing down. Our solar resource mapping efforts will give rise to a spinoff company in 2012 and we are

building a portfolio of inventions that may lead to many exciting developments.

• *Gauché is a senior researcher in the Department of Mechanical and Mechatronic Engineering. STERG and the Centre for Renewable and Sustainable Energy Studies form part of the Energy and the Environment initiative of the HOPE Project. They are hosting the first Southern African Solar Energy Conference in May 2012. Visit www.sasec.org.za for more information.*

 **Support HOPE:**
www.thehopeproject.co.za/energy



Mr Karel Malan, left, a postgraduate student, and Mr Andrew de Wet, a STERG engineer, with a heliostat mirror that Malan designed to track the sun.
Picture: ANTON JORDAAN

Transforming agriculture

ILSE ARENDESE

"Our Agricultural Leadership Laboratory is making a pioneering contribution to agricultural strategy in South Africa," says Prof Johan van Rooyen, director of the Standard Bank Centre for Agribusiness

Leadership and Mentorship Development, an initiative of the HOPE Project of Stellenbosch University.

The centre was established in the Faculty of AgriSciences in April 2010 to support leadership development and transformation

in the agricultural sector. Its Agricultural Leadership Laboratory presents regular imbizos on relevant themes in agritransformation.

"Acknowledged agribusiness leaders, producers, opinion-formers and government representatives are invited to think freely within a laboratory environment about topical issues in the agricultural sector.

"Attention is drawn mainly to contentious matters and especially to what is needed to position the sector fittingly on South Africa's economic and social road to development.

"Issues like land reform, rural development, job creation through agriculture and the need for a structure of unity for organised agriculture have already been scrutinised thoroughly," explains Van Rooyen.

A Young Leaders Laboratory has

also been hosted in conjunction with Grain SA, AgriSantam and Standard Bank, and with the participation of prominent political and business leaders.

According to Van Rooyen, the written outcomes, supporting research and discussion documents of the imbizos are made available to the government's National Planning Commission (NPC), on which Prof Mohammad Karaan, Dean of the Faculty of AgriSciences, serves as commissioner.

"Many ideas from the imbizos are contained in the chapter on agriculture in the NPC National Development Plan. It is good to know these come from contributions made by a prominent, independent group of agricultural leaders.

"The existence of a representative agricultural forum has been deemed to be of the greatest importance at every imbizo already held. Agriculture should ultimately negotiate with one voice to make a meaningful contribution to the implementation of the national development strategies and the NPC



Prof Mohammad Karaan, Dean of the Faculty of AgriSciences, serves on the National Planning Commission.

Picture: BERNARD BRAVENBOER

National Development Plan," says Van Rooyen.

More imbizos are planned for 2012 and 2013.

 **Support HOPE:**
www.thehopeproject.co.za/agri



Workers on SU's experimental farm Welgevallen.

Picture: BERNARD BRAVENBOER

Green power from black powder

Cape Flats biochar soil study asks burning questions.
By **Sonika Lamprecht.**

On the Cape Flats, hunger is particularly acute in early childhood," Mr David Jacobs, business development manager of non-governmental organisation Stop Hunger Now said in a press release last year.

"Malnutrition at this stage can severely impact a child's ability to concentrate and learn, as well as cause permanent physical and mental arrested development."

Does part of the solution to this tragic situation lie in the seemingly humble practice of introducing biochar – powdered charcoal used for agricultural purposes – into the soil?

Research done under the auspices of the Stellenbosch University (SU) Food Security Initiative (FSI) has confirmed that adding biochar to poor soil can significantly enrich its quality and increase crop yields.

Sustainable food production is the cornerstone of food security. However, the deterioration of agricultural soil and the pollution of water sources through the leaching



MSc student Ms Angelique Zeelie mixes biochar and soil.

Picture: SAREL OLIVIER

of nitrogen, particularly in sandy soils, hamper production.

The FSI project is addressing these issues using biochar – an easily accessible, local material – to improve sandy soil. It is using innovative methods of soil fertility management to promote food production and to minimise the polluting effects of fertilizers on surface and ground water.

The research also provides scientific backing for the hypothesis that biochar has the potential to capture and store carbon dioxide and other forms of carbon, thus preventing it from contributing to global warming.

The study set out to investigate the effect of applying locally

produced biochar on the quality of infertile, sandy soil from the Cape Flats area in Cape Town. The research was done on soil samples taken to Welgevallen, SU's experimental farm outside Stellenbosch.

"We found that biochar, when added in moderate amounts, not exceeding 10 tons per hectare, significantly increased wheat growth in sandy soil – by as much as by 21%," says SU soil scientist Dr Ailsa Hardie.

Biochar also further enhances the activity of beneficial micro-organisms in soil, increases soil aggregate stability, and increases nutrient and water retention in sandy soils.

"The availability of plant macronutrients, such as potassium, calcium, magnesium


'Biochar increased wheat growth by as much as by 21%.'

and phosphorous, increased. The soil's water-holding capacity and aggregate stability improved," says Hardie.

And, according to SU microbiologist Prof Alf Botha, the added biochar also stimulated beneficial microbial activity and enhanced nitrogen-fixation in legumes. But caution should be exercised when applying biochar to slightly acidic alkaline soils, as the biochar is alkaline and this can result in over-liming of the soils, inducing nutrient deficiencies in plants.

Biochar's longevity in the soil is much longer than that of other organic residues such as compost – lasting possibly for up to 1 000 years! So, as a bonus, biochar's benefits to the soil will increase over time.

The Western Cape Department of Agriculture has shown a keen interest in the FSI research.

 **Support HOPE:**
www.thehopeproject.co.za/fsi



The Biggerpicture Science Photo Library

Biochar buzz

One billion people worldwide suffer from hunger, according to the UN Food and Agricultural Organisation. It has become more important than ever for researchers to figure out how to feed an expanding world population without decimating the environment and aggravating climate change.

Biochar might be part of the solution. This ancient farming material is made from slow-burned wood (charcoal) that is powdered and used as a medium to trap nutrients and water in soil.

It is currently enjoying a revival for another reason: research claims it draws and stores the carbon in greenhouse gases from the air. A recent study in *Nature* maintains

that sustainable application of biochar can reduce global greenhouse gas emissions by 12%.

12%

The possible reduction in global greenhouse emissions by the sustainable application of biochar.

Source: *Nature*



Gallo Images / Getty Images

Smart transport systems set change in motion

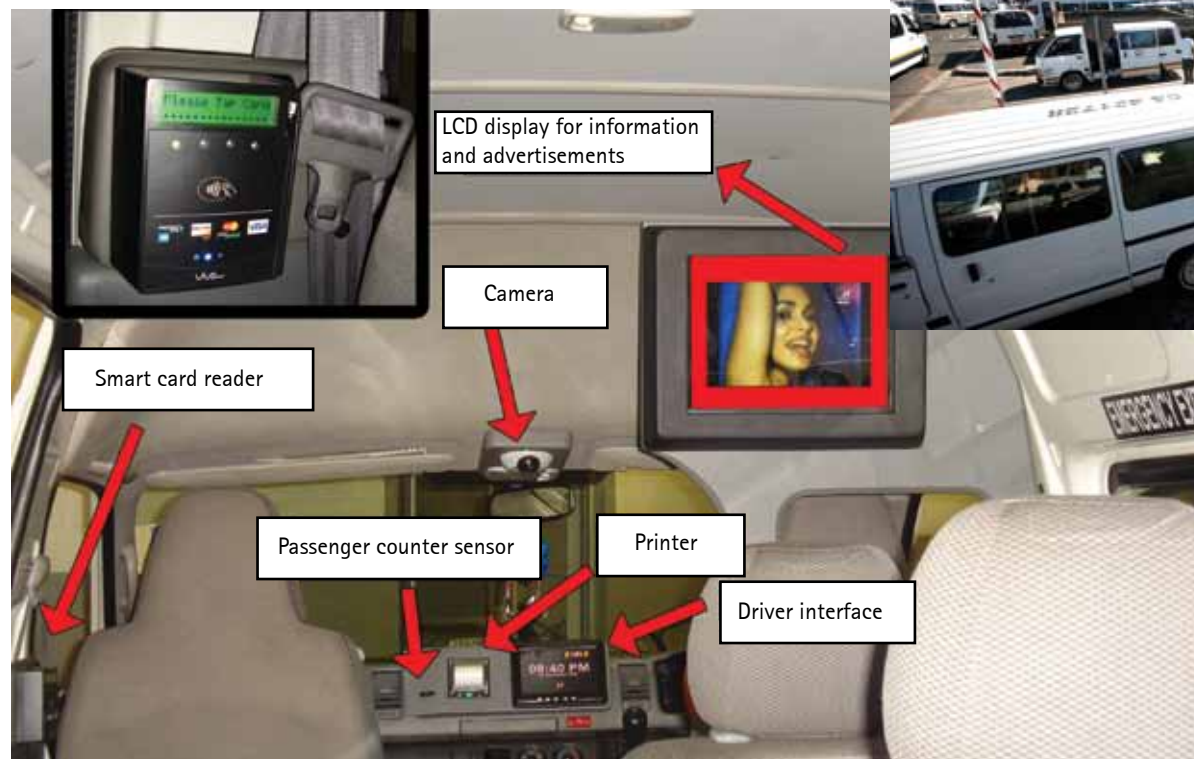
Liesel Koch reports on promising research that can help to make the minibus taxi industry safer and more sustainable.

A bright future is beckoning for minibus taxis thanks to intelligent transport systems (ITS), believes Mr Koos van Zyl, a PhD candidate in Civil Engineering at Stellenbosch University (SU).

His research forms part of the HOPE Project initiative of the Faculty of Engineering, titled Communication and Information Systems. The promotion of competitive industries in the country's economy is one of the themes of the HOPE Project.

The latest trial run on taxis of the Peninsula Taxi Association (PTA) which features in Van Zyl's research entails an electronic payment system, similar to that on the MyCity buses in Cape Town.

Other technology that has already been tested includes a GPS satellite navigation system, cameras with which the driver and passengers can be monitored from a control room, and even the sale of cellphone



The equipment that is installed in the minibus taxis for research on Intelligent Transport Systems.

Picture: KOOS VAN ZYL

airtime and electricity credits.

"My passengers are very impressed. They also appreciate it that advanced technology is being used for their comfort and safety," says Mr Anwar Dustay, a taxi owner and driver with more than 20 years of experience.

Since January 2012, passengers on 40 of the PTA taxis can pay for their journeys with a Tap-i-Fare contact-free bank card. The same card can

be used on MyCity buses, and the City of Cape Town's MyConnect card also works on the taxis.

Van Zyl, a strategic consultant for Saha International, believes the taxi industry will have to become more formal and competitive for the sake of long-term sustainability.

"Intelligent transport systems can make a contribution in this regard," he says.

Mr Ghaalid Behardien, PTA

spokesperson, says: "Many people wrote off minibus taxis as rattling coffins on wheels. This technology proves that our industry can remain up to date with the latest developments."

The taxis used in the study were also equipped with a GPRS unit for live communication, an LCD touchscreen for driver interaction, a ticket printer and a 38 cm LCD screen on which information is



Minibus taxis in Cape Town.

Picture: DIE BURGER / GARTH STEAD

displayed for the passengers.

At the taxi association's offices in the Cape Town city centre is a computer centre that has been set up to control communication with the vehicles, do scheduling per route and time schedule, and gather information.

"The minibus taxi industry is the ideal means of public transport for the majority of South Africans. Our research shows how the industry should be approached from a technical and business point of view in order to bring about change," says Van Zyl.

Implementation is currently being discussed with other businesses that wish to introduce similar systems.

"Many of my passengers say they cannot wait until all taxis are equipped with this technology," says Dustay.

Support HOPE:
www.thehopeproject.co.za/comm-info

The bug that is cleaning our dams

But will the wee weevil be able to withstand the effect of changing weather patterns? By **Engela Duvenage**.

A miniscule water-loving weevil with a long snout has captivated a master's degree student in zoology, Ms Jessica Allen, for the past year.

She has patiently studied the

activity of more than 2 000 Brazilian weevils (*Cryptobagus salviniae*) in an effort to understand how well this insect would cope in changing climatic conditions.

"I wanted to find out how the

weevil would respond to warm and cold snaps and what the critical temperature levels are at which it would cease being active," says Allen.

Her research forms part of a HOPE Project investigation into climate change by the DST-NRF Centre of Excellence for Invasion Biology (C-I-B) based at Stellenbosch University (SU). The investigation is aimed at understanding how plants and animals are being influenced by changing weather patterns, and how it might affect the movement of invasive species.

The 2-mm long subaquatic weevil is one of the most effective natural ways to control the spread of the highly invasive Kariba weed (*Salvinia molesta*). If left to its own devices, this fast-growing water fern can easily clog up dams, lakes and ponds, and also provide the ideal breeding ground for mosquitoes.

The plant, which comes from Brazil, is a major problem in many African countries, New Zealand,

Australia and parts of the USA.

"In many regions the weevil is the only really effective way to control this pest," says Allen.

The weevil has been used as a biocontrol agent in South Africa since 1985. It lays its eggs in the soft plant stems, and the older larvae then tunnel through the stems. It also feeds on the plant's growth tips.

"We need to have a complete picture of the weevil's own ecological responses, to potentially ensure that it will still be effective as a biocontrol agent in future climate

'We need to have a complete picture of the weevil's ecological responses to ensure that it will still be effective as a biocontrol agent.'

scenarios," notes Allen.

Part of her study was done at the South African Sugarcane Research Institute in Durban, where weevils are reared *en masse* in large outdoor ponds to be released in water bodies affected by the Kariba weed.

One of SASRI's latest employees is former Matie Ms Elsje Kleynhans, who started working there earlier

this year after receiving an MSc in Conservation Ecology from SU for a study on the movement of tsetse flies. She was the first student to graduate as part of the C-I-B's HOPE Project investigation into climate change. It was the climate change-related work Ms Allen read about being done by the C-I-B and its director, Prof Steven L Chown that first made her consider further studies at SU.

Ms Allen says it has so far been exhilarating to play a part in the bigger research picture relating to the response of an organism to changing global climate patterns.

Her dedication has already paid off, with her first scientific paper having been published in February in the *Journal of Insect Physiology*. In it, Ms Allen, along with her supervisors Dr Susana Clusella-Trullas and Prof Chown, discuss the effects of changing temperature conditions, the hallmark of climate change, on the temperature tolerance of the Brazilian weevil.

Support HOPE:
www.thehopeproject.co.za/cib



Ms Jessica Allen in the C-I-B lab with a tray of weevil specimens.

Picture: ANTON JORDAAN



The Brazilian weevil up close.

Picture: PLANTS.IFAS.UFL.EDU

Making money the right way

CLAYTON SWART

The on-going global financial and economic crisis has sparked renewed interest in regulation in the business sector, says Mr Daniel Malan, Director of the Centre for Corporate Governance in Africa, an initiative of the HOPE Project.

"Corporate governance and disclosure agreements have moved to the forefront. The last three years have seen the introduction of new reporting guidelines in many countries. What we have been able to do is to ensure that developing countries are kept in the picture."

The Centre is based at the University of Stellenbosch Business School (USB). It collaborated with KPMG, the Global Reporting Initiative and the United Nations Environment Programme (UNEP) on a book entitled *Carrots and Sticks*

– *Promoting Transparency and Sustainability*. Published in 2010, the book offers guidance to regulators and multinational corporations

'Corporate governance does not just affect the business world.'

needing to co-ordinate sustainability reporting across various countries.

"Corporate governance does not just affect the business world. How companies conduct themselves has an influence on democracy and human rights, as well as environmental sustainability. It is therefore crucial that we get this right," says Mr Malan.

He was last year invited to serve on the Global Agenda Council on Values in Decision-making of the World Economic Forum.

"We also worked on a new book with UNEP and Deloitte. It explores the key decision points that will determine the future evolution of reporting," he says.

Making Investment Grade: the Future of Corporate Reporting will be launched in New York and Johannesburg in May 2012, and made available at the UN Global Compact's Corporate Sustainability Forum preceding the Earth Summit Rio+20 in June.

Locally, the Centre, which is an initiative of the HOPE Project, is conducting research for the Johannesburg Stock Exchange (JSE) Socially Responsible Investment Index.

The Centre has also collaborated



Mr Daniel Malan with former US Vice-President Al Gore at a conference in Denmark.

Picture: SUPPLIED

with the Public Investment Corporation on the development of a Governance Rating Matrix for South African companies. Over the last four years, this has entailed

assessment of the environmental, social and governance performance of listed South African companies.

Support HOPE: www.thehopeproject.co.za/corporate

Chancellor endows Chair in Intellectual Property Law

DESMOND THOMPSON

An LLM in Intellectual Property Law will be introduced in the Law Faculty of Stellenbosch University (SU) in 2013 following the establishment of the Anton Mostert Chair of Intellectual Property (CIP) last year.

Dr Johann Rupert, Chancellor of SU and the Executive Chairperson and Chief Executive Officer of Richemont, endowed the funds for the Chair after the public launch of the HOPE Project in 2010.

Prof Owen Dean, considered South Africa's foremost authority in the

field, was appointed the first holder of the Chair. He was previously with legal firm Spoor & Fisher.

"Intellectual Property is increasingly being recognised as valuable in the business world. Brands and trademarks are worth billions. Around the world, universities are beefing up their capacity in this field. We want to be the custodians of Intellectual Property Law in SA," he says.

The Chair is named after late Judge Anton Mostert, who in 1977 became one of the youngest appointments to the then Supreme Court. A year later he would lead a



Prof Owen Dean.

Picture: STEFAN ELS

commission of inquiry into foreign exchange dealings and control. He defied warnings to disclose his findings, thereby exposing large-scale corruption in government circles, later known as the Information Scandal.



Dr Johann Rupert.

Picture: SUPPLIED

"Anton Mostert lived out his high moral values, despite the stress, denunciation and negative consequences for his career as a result of his disclosures," Rupert said.

Dean agrees: "He did not hesitate

to speak his mind on the law. It is this characteristic of his which serves as the credo of the CIP."

The CIP is the first fully endowed chair at the University. It was funded to the amount of R1,5 million a year, with funding levels to be reconsidered in three-year cycles.

"Our new dedicated LLM has an emphasis on the digital environment. Intellectual Property Law is continuously facing new horizons. It has to evolve constantly to keep pace with new developments, such as the electronic media," says Dean.

Two additional fulltime staff members have been appointed, and analyses posted on the Chair's website, www.sun.ac.za/iplaw, are frequently quoted in the media.

Support HOPE: www.thehopeproject.co.za/staffsuccess

Prosperity through peace

CRISTLE MOKWAPE and CLAYTON SWART

A group of 18 mediators from Elsies River, Cape Town recently graduated with certificates from a 12-month training programme aimed at equipping them with the necessary skills to handle and defuse conflicts and disputes in their community.

'If there is peace in an area, companies will consider doing business there.'

The Elsies River Community Mediation Project was run by the Africa Centre for Dispute Settlement (ACDS) at the University of Stellenbosch Business School (USB), in collaboration with the Open Society Foundation for South Africa and the Western Cape Provincial Department of Community Safety.

The ACDS is an initiative of the HOPE Project, through which the University is tackling significant challenges in society.

There is a great need for

intervention in the Elsies River area, which suffers from a lack of socio-economic development. According to ACDS director Prof Barney Jordaan, the findings of an audit indicated that Elsies is "dysfunctional" in many respects.

Problems include violence and problems with discipline in schools; insufficient housing, which leads to poor living conditions due to overcrowding; frequent incidents of assault; domestic violence; alcohol and drug abuse; and child abuse.

The mediators were drawn from the local area, and many of them are linked to nongovernmental and community-based organisations. Their training emphasised the role they can play as neutral mediators in settling disputes by facilitating discussions between parties locked in conflict.

"By introducing mediation skills at this level we believe we can contribute significantly to both the short- and long-term goals of community peace building," Jordaan says.

"If conflict resolution and mediation can become institutionalised in the community, it will contribute significantly to long-term social change."

Comments received from the mediators after their training include: "Our perspectives have changed", and



Mr Jacob Wildebeest of Elsies River proudly receives his certificate from Prof Barney Jordaan.

Picture: CLAYTON SWART

"We were able to embrace the whole community".

Jordaan says the whole community

stands to gain from the intervention.

"If there is peace in an area, companies will consider doing

business there."

Support HOPE: www.thehopeproject.co.za/dispute

Boost for African scholarship

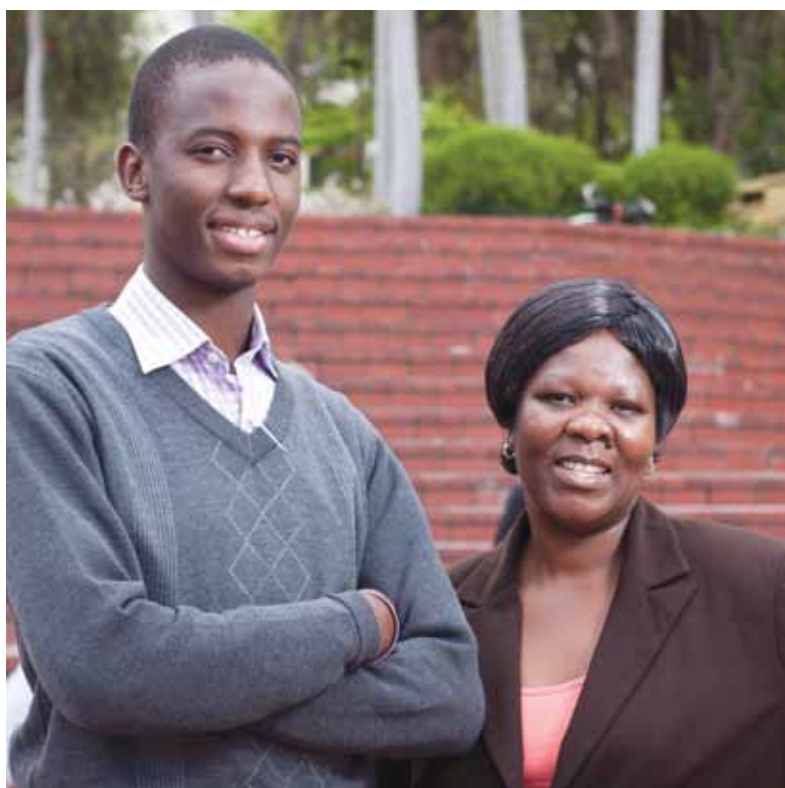
The world's second-most populous continent stands to benefit from home-grown initiatives aimed at stemming the brain drain and regenerating research output, writes **Stephanie Nieuwoudt**.

Injoy being part of a community of scholars from all corners of the African continent, focussed on finding African solutions for African problems in Africa," says PhD candidate Mr Elias Phaahla, who is studying at Stellenbosch University (SU) through the Graduate School in the Faculty of Arts and Social Sciences.

He is one of 76 students who

'Africa needs a strong knowledge base as the integration of the continent into the global economy proceeds apace.'

have enrolled in full-time doctoral programmes through the Graduate School the past three years. Of this number, 17 are from South Africa, 30 from other SADC countries and



Graduate School PhD candidates Mr Elias Phaahla and Ms Emaculate Ingwane.

Picture: JOHANN SWART

29 from elsewhere on the continent.

"The students often meet formally and informally, and these encounters are always inspirational. We get to share the challenges and triumphs of our journey," says Phaahla, a South African.

His research tracks the welfare trajectories of Mauritius and South Africa, with a particular focus on tax-funded social pensions.

"Mauritius feels duty-bound to maintain these schemes because they have become part of the island's social fabric. In South Africa, the schemes have been an indispensable part of the post-apartheid state-building agenda. However, social grants can create a culture of

perpetual dependence."

The Graduate School, an initiative of SU's HOPE Project, recruits and supports full-time doctoral students from all over Africa to study in one of eight research themes relevant to the needs of the continent's one billion people. Incorporated in the School is the African Doctoral Academy (ADA), which provides training in theory and research methodology.

The School is also linked to the Partnership for Africa's Next Generation of Academics (PANGeA), a collaborative network consisting of the universities of Botswana, Dar es Salaam (Tanzania), Makerere (Uganda), Malawi, Nairobi (Kenya)

and Stellenbosch (SA).

"These initiatives are aimed at helping to stem the brain drain from Africa, and to reverse the decline of scholarship on the continent," says Prof Johann Groenewald, Project Leader of the Graduate School.

Africa has lost 11% of its share in world science since 1987, with sub-Saharan Africa's share decreasing by 31%. The continent's research output amounts to only 0,7% of the global total. Yet now, more than ever, "Africa needs a strong knowledge base as the integration of the continent into the global economy proceeds apace," Groenewald points out.

"We strive to make a difference by training a new generation of scholars able to tackle the challenges of a continent in flux."

One of Phaahla's peers is Zimbabwean student Ms Emaculate Ingwane. Her research is on land transactions and rural development policies in the peri-urban communal area of Domboshawa, close to the capital Harare.

"Land issues in Africa are emotional and political," she says.

"Market forces have to be taken into account, but at the same time one cannot sell land defining the identity of a large group of people. I hope that through my research I can

76

The number of doctoral candidates from Africa who have enrolled at SU via the Graduate School since 2010.

Source: Graduate School

help inform the policy debate."

Groenewald says the Graduate School is expected to show "real dividends within the next four years – when the first group of doctoral candidates have graduated and have implemented some changes in their chosen spheres of work."

There is clearly a huge demand for support in the promotion of advanced scholarship and research in Africa. So far, the Graduate School could only accommodate 12% of applicants due to insufficient funding for full-time scholarships.

"We are careful to accept only candidates to whom we know we can give competent supervision. This is a long-term project and we want to make it sustainable," Groenewald says.

Support HOPE: www.thehopeproject.co.za/graduateschool

Africa lecture series a big hit

Three instalments of the Graduate School's Locations and Locutions series of public lectures took place in 2011.

The series is aimed at facilitating critical engagement and debate on Africa in the arts, humanities and social sciences. The overarching theme was "Which Africa? Whose Africa?" The lectures were co-hosted by the *Mail & Guardian*.

The lectures were a success,

with more than 620 academics, postgraduate students, alumni and members of the public attending the events. Panellists were drawn from Africa and the rest of the globe.

In 2012, the overarching theme will be centred on land, the environment and resources.

Visit www.sun.ac.za/lectureseries for more information.

– LYNNE RIPPENNAAR

SIGLA concludes agreement with Africa Forum

CLAYTON SWART

The Security Institute for Governance and Leadership in Africa (SIGLA) at Stellenbosch University (SU) has signed a Memorandum of Understanding with the Forum for Former African Heads of States and Government, or Africa Forum for short.

"This allows us to tap into the experience and knowledge of our continent's elder statesmen and stateswomen for the benefit of the next generation through our Emerging Leaders Programme," says Ms Siphokazi Ndudane, director of SIGLA.

The ascendancy of South Africa to the BRICS economic grouping (Brazil, Russia, India, China and South Africa) brings a renewed focus on good governance, peace and security in Africa.

"SIGLA is very relevant to what the continent needs. It can play

a positive role as a think tank in generating knowledge and disseminating integrated security theory for the continent," Ndudane says.

SIGLA forms part of SU's HOPE Project, which has as two of its themes the promotion of peace and security, and of democracy and human rights. It is based at the University of Stellenbosch Business School (USB), but also maintains strong links with the University's Faculty of Military Science and with its School of Public Leadership.

"I have worked closely with a number of SU researchers in the past, and I know that this is an academic institution with immensely talented people. The mix of expertise available at the University is exciting," Ndudane says.

She took over the reins last year from Lt Gen Louis Matshwenyego Fisher, a former Chief of the Botswana Defence Force, who had



SIGLA Director Ms Siphokazi Ndudane with Prof Russel Botman, SU Rector and Vice-Chancellor, left, and Dr John A Tesha, Executive Secretary of the Africa Forum.

Picture: CLAYTON SWART

acted as Interim Director. Prior to her appointment she headed the International Science Liaison Unit of the National Research Foundation.

Ndudane has also worked closely with the major continental regional bodies, such as the Southern African Development Community, the

African Ministerial Committee on Science and Technology and the African Union (AU).

Ndudane says her focus is on strategically positioning SIGLA through partnerships within the public and private sector environments, and to develop

research and training programmes related to security, governance and leadership in Africa. In November 2011, SIGLA hosted its first colloquium focusing on governance, peace and security in Africa.

Support HOPE: www.thehopeproject.co.za/sigla

Aids and the talk revolution



The HIV prevention revolution will be digitised – if the rising popularity of social media and cellphones is anything to go by, writes **Jan du Toit**.

Social media, like Facebook, Twitter and MXit, are no longer just the talk of the town, it's the way the town talks. They have become many people's primary way of communication and help them to stay in touch with family and friends, express opinions and learn about others' experiences.

*Africa has
333 million
cellphone users and
77 million
internet users.*

Thanks to social media, news spreads across the globe in seconds. And, like cellphones, they have become an essential part of daily life.

One may think that North America, Europe and the Far East are the leaders in the use of these technologies, but Africa is fast becoming a force to be reckoned with. According to the International Telecommunications Union, the



continent has 333 million cellphone users and 77 million internet users.

Nigeria alone has 44 million people connected to the internet, mostly through their cellphones. The

four million people living in Nairobi, Kenya, send more text messages per day than the 18 million citizens of New York City. In South Africa, five million people are online, and 60%

of them use Facebook.

"The fastest growth in social media is in Africa," MTV Executive Director Bill Roedy said at a United Nations Programme on HIV/AIDS (UNAIDS) conference hosted by Stellenbosch University's (SU) Africa Centre for HIV/AIDS Management last year.

However, the prevalence of HIV/AIDS in Sub-Saharan Africa is also skyrocketing. In 2010 an estimated 22,9 million people were living with HIV, up from 22,5 million the year before. Of those in the age group 15 to 49, an estimated 17% are HIV positive. Prevention through education has become a priority.

Social media and cellphones are suitable communication channels for this target audience. Most users of social media are young people, exactly the group who should receive messages on prevention. It is estimated that, globally, only one in three young people has complete knowledge of how HIV is transmitted.

However, young people should not be underestimated – they probably know more than most people give them credit for. They interact on and react to what is happening in the social media, and it is this type of interaction that is needed to create an HIV prevention revolution.

Knowing where we should focus our efforts is one thing; talking to the youth is another. Stale and

3 000

People trained in HIV/AIDS management since 2003.
Source: Africa Centre for HIV/AIDS Management

Big impact

- The Africa Centre for HIV/AIDS Management offers comprehensive academic training programmes, including a Postgraduate Diploma and MPhil in HIV/AIDS Management.
- More than 3 000 graduates from 48 countries have been trained since 2003.
- Through its graduates, the Centre is estimated to have spread the prevention message to 12 million people.

boring language is certainly not what they use in their social media conversations. Our communication style should be dictated by how young people interact on social networks.

It is time for social media to start buzzing with appropriate messages on HIV/AIDS prevention.

- *Prof Jan du Toit is Director of the Africa Centre for HIV/AIDS Management, an initiative of the HOPE Project.*

 Support HOPE: www.thehopeproject.co.za/aidscentre

Rural Clinical School produces first medical doctors

MANDI BARNARD

The first medical doctors in South Africa who completed their full sixth-year clinical training in rural areas graduated from Stellenbosch University last year. These eight Maties had been involved in the Ukwanda Centre for Rural Health of the Faculty of Health Sciences (FHS) in the Boland and Overberg.

Ukwanda is currently being expanded under the banner of the

*'Students can't
get better
exposure in
primary health
care than at
Ukwanda.'*

University's HOPE Project through the establishment of a fully-fledged Rural Clinical School (RCS) in conjunction with the Western Cape Provincial Government.

The hub of the school is situated in Worcester and it has its spokes in Ceres, Robertson, Caledon, Hermanus and Swellendam.

The Ukwanda RCS is the first initiative of its kind in the country. It is aligned with international

trends indicating that training undergraduates within rural areas helps to recruit students from and to establish graduates in those areas.

Dr Owen Wiese, who was part of the Worcester group, believes that "students can't get better exposure in primary health care than at Ukwanda".

Wiese says, "Our training enables us, as doctors, to treat our patients in the context in which they live. I feel fully equipped to work in any hospital in the country."

Dr Therese Fish, FHS Vice-Dean for Community Services and Interaction, points out that the health of people in rural communities is often poorer than that of people in cities. There are various reasons for this, with poverty being a main factor. There are also often simply not enough facilities, services or staff for efficient health care in rural areas. Ukwanda serves to combat this. "Our students gain essential rural experience and the health care that rural communities receive will improve in the long term."

Dr Elsabe Smit, who completed her training in Ceres, says that her experience was "incredible" and that she does not "have a moment of regret". She adds, "It was an excellent work environment and the personal relationships that you build up with your mentor and the staff are unique."

Dr Frans Krige, Project Manager

of the Ukwanda RCS, says that a second group of 21 MB,ChB students has accepted placement for 2012. Worcester will get 17 of these students and Robertson and

Swellendam two each.

The first seven final-year medical students already moved into the new Ukwanda residence in Worcester in March. The rest of the

RCS's buildings are expected to be completed by June 2012.

- See story on p. 2.

 Support HOPE: www.thehopeproject.co.za/ukwanda



The first crop of doctors to come out of the Ukwanda Rural Clinical School, back row from left, Drs Mikhail Barday, Owen Wiese, Calvino Watt, Johan Gebhardt and Louwallen Volmink. In the front row with Ukwanda's Prof HOFFIE Conradie are, from left, Drs Nicholas Fortuin, Elsabe Smit and Montenique Jeffries.

Picture: ANTON JORDAAN

People are people are people

By focusing on human dignity, we can change the conversation on disability, writes **Juliana Claassens**.



Prof Juliana Claassens.

Picture: JAC DE VILLIERS

Among the challenges facing people living with disabilities, some of the most daunting are the stereotypes and misperceptions regarding disability that are so pervasive in society.

One of the most harmful stereotypes is the portrayal of disability as monstrous or punishment. The message of Victor Hugo's *The Hunchback of Notre Dame* or Mary Shelley's *Frankenstein* is that people living with disabilities are misfits to society – not fully human.

The Bible is not always helpful in this regard. Religion has done more than its share of reinforcing negative stereotypes. In Leviticus 21:16-23, several of the conditions that today may be classified as “disabled” are described in terms of the Hebrew word for “blemish”. Those who suffered from some sort of ailment or disability were to be precluded from bringing sacrifices or belonging to the priestly class.

Most disturbing is the way in which disability is used as a curse. In Deuteronomy 28:28-29 it is said that God will punish the transgressor with madness and confusion of mind so that he or she will be like a blind person.

At a conference on theology, disability and human dignity hosted by Stellenbosch University (SU) in 2011, these stereotypes were challenged. The conference was an extension of the Faculty of Theology's Focus on the Promotion

of Human Dignity, an initiative of SU's HOPE Project. The Faculty of Health Sciences was the co-host.

Delegates sought to find new ways to talk about God and about human beings, who are created in the image of God.

One moment that stood out was when Ms Rachel Kachaje, a deputy chairperson of Disabled Peoples' International, proclaimed that she, in her wheelchair, reflected the glory of God.

This reminded me of the story in John 9 where one sees a radical

*To look beyond
the disability
and truly see the
face of the other
is what changes
people.*

change in the way in which the Bible speaks about disability. When the people asked Jesus if it was due to his sins that the man before them was born blind, Jesus responded by saying that it was neither his own nor his parents' fault, but rather for the glory of God.

Time and again, the message at the conference was: “Do not think of me as a person in need of help or as a monster, but see me as a human being who can contribute to society.” Focussing on the person's capabilities and contributions to society changes the way we think about people with disabilities.

To look beyond the disability and to truly see the face of the other is what changes people. For, when the blind, the deaf and the physically and mentally challenged become people who are merely incidentally also blind, deaf or physically or mentally challenged, the world changes for the better.

• Prof Juliana Claassens heads up the Faculty of Theology's HOPE Project initiative, entitled *Focus on the Promotion of Human Dignity*.

Support HOPE: www.thehopeproject.co.za/humandignity

Focus on the Promotion of Human Dignity

- Conference on Disability and Human Dignity (18-20 May 2011).
- Workshop on Gender Equality in Africa and the role of the church in promoting it (1-3 August 2011).
- Publication of *Sacred Selves: Essays on Gender, Religion and Popular Culture*, a book of the Circle of Concerned African Women Theologians (April 2012).
- Conference on “The Reformed Churches in South Africa and the struggle for justice: Remembering 1960-1990” (14-16 May 2012).
- Two symposia on cultural diversity and human dignity (one in Amsterdam and one in Stellenbosch) are planned for 2012.



Archbishop Emeritus Desmond Tutu, centre, with doctors who participated in the 2012 Argus Cycle Tour to raise awareness about the fight against TB, from left Nulda Beyers, Jamie Scriven and Kirsten Black.

Picture: KIM CLOETE

TB's Arch-enemy

The indomitable Desmond Tutu hopes to see tuberculosis beaten in his lifetime, writes **Kim Cloete**.

As patron of the Desmond Tutu TB Centre (DTTC) at Stellenbosch University (SU), Archbishop Emeritus Desmond Tutu is passionate about raising awareness about tuberculosis (TB).

His fervent commitment and deep feelings about finding a cure and better ways to treat TB go back many years, to a time when he was a teenager and living in Sophiatown, Johannesburg.

As a 15-year-old, his dreams of immersing himself at school were put on hold when he was diagnosed with TB and hospitalised. The young Tutu realised he was seriously ill.

“I began coughing up blood and I had seen in the ward that almost everyone who coughed blood ended up being carried out to the mortuary,” he says.

Tutu says his two-year stint in hospital convinced him that he wanted to become a doctor. “I thought: I want to engage in research to find a cure for TB.”

Tutu's life path took him in a different direction, into the ministry, and today's he is one of South Africa's most loved and respected citizens.

He takes his position as patron

of the DTTC very seriously, always willing to go the extra mile in a bid to break the stigma attached to tuberculosis.

He has frequently spoken out about treating TB patients with care and dignity, as well as about finding ways to reduce TB.

“TB can be cured – and so we urge people: Engage in working for greater economic justice and equity, help eradicate poverty. I hope that in my lifetime, if we all work together, we will see a real reduction in TB.”

Prof Nulda Beyers, Director of the Centre, says, “Everyone who works at the DTTC is hugely grateful to Archbishop Tutu for his involvement

*‘I hope that in
my lifetime,
we will see a
real reduction
in TB.’*

and support, and for being a wonderful role model.”

The Desmond Tutu TB Centre is part of SU's HOPE Project. It has

Big impact:

- The Desmond Tutu TB Centre recently wrapped up the biggest community randomised trial ever into decreasing the prevalence of TB and HIV. The study involved about 1,2 million people in the Western Cape and Zambia.
- More than 50 000 schoolchildren throughout the country have learnt about TB through the innovative and fun Kick TB campaign, which the Centre conceived to raise awareness about TB.

received recognition for its ground-breaking research in childhood tuberculosis and has conducted the most advanced research on childhood Multidrug-Resistant TB (MDR TB) in the world.

Prof Beyers says the Centre's research focuses on the goal of making possible a generation of children free of TB infection. It engages closely with the community, supporting people in poverty-stricken areas. In so doing, it leaves the scientific footprint of SU behind.

Support HOPE:
www.sun.ac.za/tb



Mr Isak Botha is planning to start his own home industry. The MCS cooking course is helping him fulfil this dream. Picture: JUSTIN ALBERTS

A second chance

ILSE ARENDESE

"You need structures that can give you direction when you come out of prison – and that's what Matie Community Service is doing for me."

So says Mr Isak Botha of Ida's Valley, who has been attending literacy and skills-development classes at Matie Community Service (MCS) since 2010.

"If you are used to getting things in a dishonest way, it's a big adjustment to live honestly. Matie Community Service is guiding me to a better future."

MCS is a flagship project of the Division for Community Interaction of Stellenbosch University. With its new head, Mr Gareth Cornelissen, at the helm, it has been working under the banner of the HOPE Project since October 2011.

Botha, 41, says that he never had the opportunity to reach his potential. His domestic circumstances were such that they drove him onto the streets: he was one of four children and his mother was a single parent who abused alcohol.

He turned to crime and was in and out of prison for 10 years. When he was released for the last time in 2005, he began to change his life.

"I realised you need a qualification, so that's why I turned to MCS."

Botha is currently doing matric. The subjects that he has already completed are Afrikaans, Life Orientation, Health Care, Mathematics, and Travel and Tourism – mostly with a mark of between 60% and 69%.

Botha enjoys cooking and his dream is to have his own home industry one day. This is why he enrolled for MCS's cooking course, which includes business skills. He was one of the best bakers in the 10-week course and already has many satisfied clients.

Botha is a role model for both young and old at MCS and in the broader community.

"To empower yourself, you have to do something yourself," he says. "You have to have a vision of where you want to end up and, if you get the chance to improve yourself, you have to grab it."

Cornelissen adds, "It makes a lot of sense that we focus on opportunities that enable people to make an economic contribution to our country."

Support HOPE: www.thehopeproject.co.za/mcs

Healthy bodies, healthy minds



STEPHANIE NIEUWOUT

For Mr Litha Bhebheza (19), involvement in youth programmes has opened doors more than once.

"I come from an area where tik (crystal methamphetamine) is a problem and where most of the parents drink. Things are tough. The only way to really make a difference is by leading through example."

He knows what he is talking about. As a teenager, he had started drinking himself.

"Fortunately one of my teachers saw the potential in me and enrolled me for a camp where I learnt all sorts of life skills. This taught me to have respect for myself and for others."

This young man, who once had no vision of the future, would in time become head boy of his high school. After school, he started helping out at the Youth Sport Initiative (YSI) of Stellenbosch University (SU).

The YSI has two legs. In the After School Programme children

40%
The improvement in school attendance of participants in the YSI After School Programme, which is related to the YSI Outreach Programme.
Source: Youth Sport Initiative

from the Stellenbosch region learn sport, numeracy and life skills twice a week. And in the Outreach Programme children from farms and settlements in surrounding areas get together once a week for soccer practise at Weber Gedenk Primary in Jamestown.

"We don't have a lot of time because we only get the kids for an hour at a time, but we incorporate life skills into all our sport and fun-based activities," says Programme Manager Mr David Kappel.

Bhebheza's work with younger children so impressed YSI co-ordinators that he has now been offered a full-time job.



Mr Litha Bhebheza with a learner participating in the Outreach Programme of the Youth Sport Initiative. Picture: STEFAN ELS

Driven by the Stellenbosch University Sport Performance Institute (SUSPI), the YSI harnesses sport for education and development. It forms part of the HOPE Project and is presented in partnership with Stars of Tomorrow, a German NGO.

At Weber Gedenk, 9-year-old Tanaka flits across the sport field, rushing from here to there.

"I watch how the bigger children help us and I also want to help other children when I am older," she says.

"The project is teaching me to play

soccer and netball. And I am learning to care for everyone around me."

Mr Terence Moses, Deputy Principal of Weber Gedenk, says the project has contributed to keeping dozens of children off the streets. The school is one of 18 in the Cape Winelands District participating in the YSI.

"Some of the children previously had no motivation. Now they are interested in what is happening around them."

Support HOPE: www.thehopeproject.co.za/youthsport

The value of leadership



An example worth following

- Dr Frederik Van Zyl Slabbert (1940–2010) was a sociologist, politician and businessman.
- He was a student and lecturer at Stellenbosch University (SU), and later became Chancellor.
- He dedicated his life to building democracy and non-racism.



Van Zyl Slabbert was a strong leader from early on. He was elected as head student of the Wilgenhof residence at the end of his second year at Stellenbosch.

Stellenbosch University wants to empower a new generation of young people through the Frederik Van Zyl Slabbert Institute for Student Leadership Development. Stephanie Nieuwoudt reports.

Participation in the activities of the Frederik Van Zyl Slabbert (FVZS) Institute for Student Leadership Development enables young people not only to make a contribution to society, but also gives them an advantage in the workplace. This is the view of those involved in the FVZS Institute, launched in 2011.

More than 3 500 students – about 15% of the student body of Stellenbosch University – have already participated in activities of the Institute.

"We train young people in leadership, communication, conceptual and management skills. These are important things that are

ploughed back into communities," says Dr Leslie van Rooi, Head of the Institute.

"On completion of a course, the students receive certificates – official recognition by a respected higher education institution. These carry great weight in the outside world and they're an advantage to students when they apply for work."

One of the students involved at the Institute is Ms Danene Wiggill, former house committee member of the women's residence Erica. She participated in the FVZS Institute's short course in leadership and community interaction.

"I realised you should be a critical citizen of the country – but you



Danene Wiggill with Laurelle Fernandez of Cloeteville.

Picture: CLARISA LAITHNA

can't just sit back and expect the government to do everything. You have to jump in yourself and make things happen."

As an honours student she was involved in a "Big Sister" project at a high school in Cloeteville last year. The project is run by Erica and

Nemesia residences and the girls at the school are taught life skills by the university students.

The schoolgirls subsequently decided – on their own – to plough back into the community by helping farm workers' children of the Middelvlei wine estate with reading and learning skills.

"This is an example of a community taking responsibility for doing things themselves to make things better," says Danene.

The Institute's short course in leadership and community interaction covers such issues as the meaning of social responsibility and citizenship. Student leaders are also taught how to plan projects, to organise volunteers and to draw up budgets.

The FVZS Institute is the first of its kind in higher education in South Africa. It is an initiative of Stellenbosch University's HOPE Project.

Support HOPE: www.thehopeproject.co.za/fvzs

'Maties forever' more than just a catchy slogan

Alumni participation is one of the cornerstones of any university's continued success, reports **Liezl Scholtz**.

The saying, "Old loyalties die hard", is alive and well in the Faculty of Engineering. Since the launch of its Dean's Fund in 2010, the Faculty has raised R200 000 from alumni, with further pledges to the value of R300 000 in the pipeline. The second of its annual reunions took place at Montecasino in September last year. "The dearth of engineering skills in South Africa and the rest of the continent is a significant challenge. To address this need, we have established a Dean's Fund to employ world-class academics in an inspiring academic environment that will attract the best student talent," says Prof Arnold Schoonwinkel, Dean of the Faculty of Engineering.

"We also want to be able to provide financial support to meritorious but needy engineering students. And we want to maintain the Faculty's excellence by creating an exceptional learning environment with modern lecture rooms and well-equipped laboratories."

According to Ms Bev Witten, Director: Alumni Relations, alumni participation is one of the cornerstones of any university's continued success.

"Deans' Funds enable regular giving by those keen to help their faculty maintain a positive reputation. And they allow

faculty leadership to engage with professional alumni.

Mrs Louise Enslin, Annual Fund Officer at SU, emphasises the importance and impact of alumni support.

"No matter how big or small, your donation can make a difference. It can buy a textbook or a computer, provide a bursary for a talented young accountant, engineer, teacher, scientist or entrepreneur in the making, sponsor a chair in a relevant specialty, or help secure the best tools needed to establish excellent learning laboratories for engineers of the 21st century."

Support HOPE: www.thehopeproject.co.za



What is a Dean's Fund?

A Dean's Fund is a stock of financial resources at the disposal of a particular faculty to help it meet its strategic goals. This could include research reinforcement, key initiative expansion and academic development.

Several SU faculties have already established a Dean's Fund, and others are in the process of doing so. Please contact Louise Enslin of the Alumni Office at enslin@sun.ac.za if you would like contribute to the Dean's Fund of your old faculty.



ABOVE: An old photograph of Engineering students at Stellenbosch University. Picture: SUPPLIED

LEFT: The Dean of Engineering, Prof Arnold Schoonwinkel, middle, with alumni of the Faculty, from left, Dr David Johnson, Mr Jan Lategan, Mr Andrew Rossouw and Mr Roland van Rooyen, at a reunion in September 2011. Picture: LIESEL KOCH

Candle-holder initiative sparks interest

MARTIN VILJOEN

An initiative to make safe candle holders available to vulnerable communities, has received new impetus with a Cape Town business committing financial support to the "Candle of HOPE" initiative.

Fires in communities that do not have access to electricity and dependent on candle light claim the lives of many every year.

A total of 200 of the candle holders were handed over to the community of Macassar at its launch in 2011.

"This is a good example of how SU's HOPE Project focuses on finding ways in which science can provide

solutions for everyday problems that communities struggle with," Dr Jerome Slamet, Senior Director: Community Interaction, said.

"When a candle is knocked over the flame often comes in direct contact with the molten wax and causes the fire to spread fast," explains Prof Wikus van Niekerk, Director of the Centre for Renewable and Sustainable Energy Studies. He is the driver of the initiative.

"The safe candle holder, which is made from wire, supports the candle when it falls over and prevents the flame from making contact with the molten wax. Even if we only save one life with this initiative, it will be worth it."

The candle holder is the invention of Mr Conrad Stoffberg, a former student of the Paul Roos Gymnasium, who designed it for the Eskom Expo for Young Scientists when he was in Grade 9. The Stellenbosch expo, which serves as a regional gathering, is organised by SU's Institute for Mathematics and Science Teaching, in cooperation with the Faculty of Science.

Feedback from the community is that candle holders – also presented as an entrepreneurship project – are increasingly being used.

Support HOPE: www.thehopeproject.co.za



His blood is maroon

ALEC BASSON

Many young people would give their right arm to study in America, but not Mr Jason Biel (18). This first-year student from Mitchells Plain must have maroon blood in his veins, because he declined an offer to study with the software company Microsoft for the chance to become a Matie.

558

The number of recruitment bursaries awarded in 2012.

Source: Undergraduate Bursaries and Loans

Last year, in matric at Oval North High School, Microsoft spotted his potential and flew him to America. There, he visited the University of Denver and was offered a bursary.

"Of course I was impressed, but I have a passion for electric and electronic engineering, and Stellenbosch University (SU) is the leader in this field," he explains.

"This is also the one and only university in Africa to have launched a satellite into orbit around the earth."

SU's first microsatellite, Sumsat, was launched in 1999, followed by SumbandilaSat in 2009.

Biel has had his eye on Maties for quite some time. He was one of the achievers who were admitted to the Maties on the Plain tutor programme. With this initiative, the Centre for Education Leadership and Management (CELEMUS) and the Centre for Prospective Students offer talented Grade 12 learners extra tuition on Saturdays in subjects that relate to the professions they wish to pursue one day.

In September last year, Biel and another 13 learners from nine schools in Mitchells Plain received study bursaries to the value of R32 000 each. Biel says this made up his mind for him.

"I would not even have been able to pay the registration fees. The bursary encouraged me to work even harder." Thus far, he is doing well at university, and has his mind set on a career in telecommunications and informatics.

Dr Trevor van Louw, CELEMUS Director, says that "through bursaries and programmes such as Maties on the Plain, SU creates hope in the lives of dedicated students, who would otherwise not have had the opportunity to achieve their full potential".

Mr Arrie Hanekom, Head: Undergraduate Bursaries and Loans, says SU has awarded the following bursary amounts this year:

- R14,1-m in merit bursaries.

- R19-m in support of financially needy students.
- R40,4-m for the recruitment of (generic) black students.

"Needy students are welcome to enquire from the Customer Service Centre. Phone 021 808 9111 or e-mail info@sun.ac.za. Help is available."

According to Ms Annamie van den Heever, Director of Development and Alumni Relations, many of the donations that the University receives from foundations, companies and individuals go towards bursaries.

Support HOPE: www.thehopeproject.co.za



Mr Jason Biel at his home in Stellenbosch, the Helderberg men's residence.

Picture: ANTON JORDAAN

The man with the plan

At the beginning of his second term, Prof H Russel Botman, Rector and Vice-Chancellor of Stellenbosch University, shares his thoughts on the course that the University has followed thus far and the challenges that still lie ahead with *HOPE TIMES* readers.

What is it that Stellenbosch University is celebrating now?

We are celebrating the depth of the academic transformation of the University in the sense that we have left our ivory tower behind us. Stellenbosch has always been a place of excellence but our successes have now been turned outward, in the service of the community.

The HOPE Project has made the right investment in academia in the broader sense – in research,

learning and teaching as well as in community interaction – in order to tackle the great and serious challenges of our country, of our continent and of our world.

We are also celebrating the largest single fundraising campaign in higher education on our continent. Philanthropy has been extended, not only among our alumni but also among foundations, companies and individuals. They

generously supported the University in the implementation of its HOPE Project and its various initiatives. And we are celebrating the success of a significant number of students – undergraduate students but particularly master's and doctoral students. This growth could not have taken place without the HOPE Project's focus on the development agenda of the world or without the investment of so many.

What have been some of the highlights so far?

Through the HOPE Project, the University has invested in all three its core activities. This has not only been an investment in research. Things have also been happening in the classroom that have renewed thinking and activities in that sphere. And this has connected our staff and students with other people in the community.

In other words, the HOPE Project has been the tide that lifted all the boats.

At the beginning of my first term in 2007, Stellenbosch was already established as one of the best universities on the continent. Now, I am starting my second term in the knowledge that we have surpassed others and now hold second place in three rankings of the top universities in the world: the QS and Times

Higher Education World University Rankings and the Leiden Ranking.

I said then that we had to move from success to significance and I think that we have achieved this – within a very short time.

I also said that we had to strive to make the University's significance more comprehensive, bound up with the future of all the people of both our country and our continent.

This we have done through ensuring that the five themes of the HOPE Project, derived from international and national development agendas, direct all three core activities of the University. We can take pride in the results that we have attained.

Every time that a mother somewhere in Africa will be able to give her children water to

drink, purified with the SU Water Institute's "teabag" water filter, we will see hope at work.

Every time that someone somewhere in the world reaches out over the internet to our library and gains open access to our premier research sources, hope is happening for that person.

Every time that a black student from a poor environment proudly enters the professional world as a Stellenbosch alumnus, it is hope that is at work.

Every time that someone in a rural town, such as Worcester, goes to the Ukwanda clinic for treatment, it is hope at work.

Our challenge is to make hope sustainable. The foundation has been laid; the walls now have to be erected.

What was the deciding factor for the HOPE Project?

Behind everything that we have done, a lot of work went into pulling the academic community and support services into one powerful engine of development.

We have built a very strong and professional team in our Division for Advancement, including Alumni Relations, Development and

Communications & Liaison.

University Advancement as we have experienced, is a team effort. What we are celebrating is a successful team effort – a team that includes academics, managers, executive deans, and people in the support services.

I look back at these five years

and see the unity that we have achieved in pooling our strengths, in getting the best minds and ideas together, and *innovate* a programme and a project at this university that will have its impact far beyond the confines of the beautiful mountains within which this university is nestled.

Whereto from here for the University?

The first phase of the HOPE Project – the part that we are now rounding off – coincided with my first term as Rector and Vice-Chancellor. The next phase corresponds with my second term – as do the challenges that we face.

The challenges of a 21st-century university will come into sharper focus. The greatest of them will be the challenge of sustainability.

In the 21st century, serious efforts are needed worldwide to rectify the damage caused in the 20th century. Energy saving, water security and climate change will all have to enjoy the attention of our best academics and researchers.

The challenge of sustainability will also have to be reflected in the further development of the

University. The existing buildings on our campuses will have to be adapted and our new buildings will have to be sustainable, 21st-century buildings.

Our carbon footprint will have to become smaller. The number of motor vehicles will have to decrease; more people will have to get about by walking and cycling.

This will mean building very strong partnerships with companies in our town, our country and the world, companies that have made sustainability part of their own values and characters, part of their trademark. Sustainability will become our trademark, and we will forge stronger bonds with others who have the same trademark.

But it is not only about research

that has to combat climate change. It is not only about buildings – it is also about the establishment of a certain kind of critical thinking in our students, a specific kind of attitude that embodies the values of a sustainable humankind. We want Maties to go green. Green is becoming the new maroon.

In short, it is about the thinking and the facilities and the people of a new era, about leaders and social entrepreneurs for a completely new epoch.

In the 21st century, excellence must have the character of sustainability. It is in this way that we will make hope happen for our country and continent. It is in this way that we will make hope happen for future generations.



Prof H Russel Botman.

Picture: WERNER ROUX

SU strategic objectives 2012 – 2016

- Knowledge base
- Student success
- Diversity
- Systemic sustainability

Source: SU Institutional Plan 2012–2016