

The background of the entire page is a composite image. It features a silhouette of a person in mid-jump, arms raised in a 'V' shape, set against a vibrant sunset or sunrise sky with orange and yellow clouds. Overlaid on this is a pattern of light blue and white concentric circles and spirals, creating a sense of motion and energy.

ACHIEVEMENT SEEMS TO BE CONNECTED WITH ACTION. SUCCESSFUL MEN
AND WOMEN KEEP MOVING. THEY MAKE MISTAKES, BUT THEY DO NOT QUIT.

- CONRAD HILTON -

Source: <http://www.dailyinspiringquotes.com>

OUR JOURNEY TOWARDS THE FUTURE WILL BE A LIVED EXPERIENCE
AND INFORMED BY SOUND EVIDENCE. THIS ENSURES THE CONSISTENT
APPLICATION OF A QUALITY IMPROVEMENT ESTABLISHMENT. ACHIEVING
VISION 2020 WILL ADVANCE AND SUPPORT DEVELOPMENT NEEDS, AND
AS A UNIVERSITY OF TECHNOLOGY OUR FOCUS WILL BE ON OUTCOMES
AND IMPACTS IN SOCIO-ECONOMIC DEVELOPMENT.

TABLE OF contents

ABOUT THIS ISSUE

EDITORIAL

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Editorial	4
Message from the Vice-Chancellor and Principal	5
Fibre-Optic Technology can have great impact on development in the Free State	6
Open Days for learners to experience CUT	7
HEAIDS survey results	7
Spring Graduation	8
Presitge Guest Lecture - Justice Zakeria Yacoob adds value to CUT	11
CUT takes the lead in new MRC Project	12
Tourism town of the year	13
Grassroots football	14
Career Fair for graduates	15
Sustainable Development becomes the corner stone of activities	16
Health and Wellness at CUT	18
Students at CUT get a slice of the action while learning	19
Step by step we are changing CUT's curriculum	20
OECD visit	22
2nd National Entrepreneurial Conference	23
Research and Innovation Workshop Series	24
Young farmer of the year award	25
Three finalists from CUT in national IPSA competition	26
Public Lecture Series 2010	27
Technology and creative design become one	30
Organic Acids and Food Preservation - new book publication	31
John van der Riet Medal awarded to CUT staff member	32
Mr and Miss CUT winners	32
Testing of foodstuffs that gets delivered to schools	33
Winter and Summer Schools	34
Technology students build a geodesic dome for emergency shelter	35
Casual day	35
AHI breakfast hosted by CUT	36
HELKA - Mentor Workshop	37
Exchange student programme	38
Women's Day	39
Faculties host Prestige Research Seminars	40
Vision 2020	42

Editorial

I have googled – yes, that is now a verb, something you do, and not something you use or browse and search with – the word *Achieve*. I know what it means – I have achieved things; riding a bike, completing my first published article, and many other smaller or bigger goals. How it works for me is to set the goal; meet the goal, therefore which you have achieved. Simply stated, the reason why I googled the term was to see what I could find, as the term *achieve* is perhaps somewhat of an enigma, it can mean so many different things to different people. I love the first answer I found – what a gem. To achieve is *to gain with effort*.

Most of your life you work hard to achieve various things. It takes time; it takes effort; it takes determination. Take the Millennium Development Goals, for instance: across the world people are working tirelessly to reach goals and targets on income, poverty, hunger, maternal and child mortality, disease, inadequate shelter, gender inequality and environmental degradation – a better life for all.

The theme of this *Gratia* issue is Achieve. After I had revised the work that had been reported on at CUT during this semester and throughout 2010, no other concept came to mind except Achieve. Projects were concluded, new ones were negotiated, students completed their programmes and researchers have worked tirelessly to achieve their goals.

In this issue, sustainable development is a topic of importance, for example, the Winter and Summer School that supports our matric learners, the STEPS Project moving forward swiftly with its objective to revise our current curriculum, the Mentorship Workshop, the CUT engaging with the Free State community through the Tourism Town of the Year project, and our public lecture series that bring intellectual discourse to Bloemfontein.

I wish you a happy festive season; and may you have success in achieving your own goals, whatever they may be.

Leandra Jordaan



Message from the Vice-Chancellor & Principal

This is the year-end issue of *Gratia*. We end this year with great excitement that our Vision 2020 has already begun to bear fruit, albeit painstakingly.

Building foundations of a young university is an industrious exercise. As reported in the June 2010 issue, the Strategic Transformation of Educational Programmes and Structures (STEPS) is a series of meticulous steps that should assure that our curricula are relevant, responsive and exciting. In this issue, as will be the case in a number of successive ones, there is a follow-up report on the August 2010 STEPS workshop. About twelve task teams are now hard at work to produce blueprints in a number of areas of our curricula.

As you will see, the rest of the articles showcase our initiatives, and the results thereof, in research and innovation and in teaching and learning, both at national and international level. A number of special awards, both internal and external have been awarded in the area of teaching and learning, including the Toyota and AgriSA's Young Farmer of the Year Award, which CUT students seem to have made our own because of repeated wins from year to year.

Most remarkable is that at the Spring Graduation Ceremony, we graduated five doctorates in various scientific fields, all of which are women. Actually, thanks to our researchers and research managers, CUT punches way above its weight in both research and postgraduate outputs. For example, in the area of postgraduate outputs, CUT graduated 11 doctorates in 2008, the best rate of outputs per capita amongst our peers. The Medical Research Council has also recently recognised a growing niche of CUT research and innovation in the area of medical devices by making CUT one of the national nodes, for which they will provide multi-million rand support.

Our public intellectual engagement through public lectures and seminars continues to grow from strength to strength. We have had exciting lectures and seminars. Most notably, Justice Zac Yacoob, a judge of the Constitutional Court, gave a riveting, incisive and witty lecture about our collective responsibility to make constitutional imperatives a reality for all our people. He challenged us to ensure that, from the time our first-year students enrol, programmes should be in place to ensure that they understand the imperatives and the obligations they impose on them and all of us.

Even though Vision 2020 refers to the contributions we should make at regional level, we are fully cognisant of



the strategic partnerships and outcomes that should reverberate across the nation and the world. The recent visits by our students to Germany and sabbaticals by our academics and researchers in the U.S.A., where we have partnerships with various universities, will ensure that their horizons are expanded and that there is cross-pollination of ideas and innovations. Through some of these partnerships, notably from German Universities of Applied Science in Aalen and Ulm, CUT is initiating a new initiative in Education for Sustainable Development. Highly scientific and technological work in alternative energy will ensure, just as we will ensure that as a corporate citizen we behave in a manner that sustains our environment. We still have a long way to go on this. However, with all our partners, we are certain that we will get far soon.

Still on the international front, early in October, we had a visit by the Paris-based Organisation for Economic Cooperation and Development (OECD) as part of its review of how universities in our region contribute to regional development. This visit dovetails very well with many of our new initiatives on regional innovation.

As you take that well-deserved rest and vacation, and enjoy this issue at leisure, I hope you will be inspired to heed our calls to have you in 2011 as one of our strategic partners on this arduous journey to excellence. This is a journey that started humbly in 1981. Without doubt, this makes the year 2011 our 30th anniversary. We hope you will celebrate with us in style.

Prof. Thandwa Mthembu
Vice-Chancellor and Principal

FIBRE-OPTIC TECHNOLOGY CAN HAVE GREAT IMPACT ON DEVELOPMENT IN THE FREE STATE

INTERNET CONNECTIVITY CAN CUT DOWN ON URBANISATION

Michael Kleeman

On 3 June 2010, CUT hosted a seminar on Fibre-Optic Telecommunication Technologies as part of the Regional Innovation Centre (RIC) project. A particular focus of the seminar was to highlight the advantages of fibre optics and what socio-economic relief such technological upliftment may bring to the Free State and South Africa as a whole.

The Free State Provincial Government (FSPG) realised the potential value in the establishment of a formal innovation programme to alleviate the socio-economic plight of its constituency, which led to talks with CUT as one of the leading role players in Science, Engineering and Technology in the Free State. The RIC was launched in February as part of a partnership project called Aha Bokamoso (*Build the future*) – joining minds for skills development, between the FSPG, CUT and partners in industry.

The guest speaker, Michael Kleeman, is an expert in bridging the gap between technical and business issues; as a consultant he has worked in several countries, including Russia and India. He was part of the company who deployed the first fibre-optic network in America (from San Francisco to San José, 100 km) in 1986.

He is of the opinion that a broadband network that is readily available positively affects employment, but if only a small section of industry has access, employment can suffer as a result. Broad diffusion creates economic opportunity for more people. Currently it costs R200 to R250 per metre in South Africa to lay cable, taking other costs such as civil works, concrete, and physical installation of the fibre-optic cables into consideration. Studies conducted in other countries have shown that as the Information and Communication Technology (ICT) industry grows, so do those countries' economies.

Connectivity to the internet can assist rural areas by making doctors available to the community (without their physical presence being required) and can cut down on urbanisation, because rural communities do not have to go to cities to work, as job creation can happen in their area. However, networks are just a connectivity tool; one needs applications to create value and connect one to content; an example is the tourism industry where more than 50% of the bookings are now made online.

South Africa has almost the same amount of network connectivity as one of the frontrunner countries, India, which will put South Africa in a very good position, as we have a lot of other infrastructure in place that India still struggles with.



Mr Tshepo Motiki, Chief Information Officer in Free State Premier's Office; Prof. Talvin Schultz, Deputy Vice-Chancellor: Institutional Planning, Partnerships and Communications; and Michael Kleeman.



Front Row: Dr Ray Ngcobo, Economic Advisor at the FSPG; Prof. Mojalefa Ralekhetho, Executive Liaison: Institutional Restructuring; Prof. Rocky Ralebipi-Simela, Deputy Vice-Chancellor: Academic at CUT; Mr Mpho Mphake, ICT Advisor at the FSPG.

Back Row: Prof. Talvin Schultz, Deputy Vice-Chancellor: Institutional Planning, Partnerships and Communications; Mr Joshua Moela, CellC Executive Director; and Michael Kleeman.

Photographer: Johan Roux



Photographer: Johan Roux



CUT OPEN DAYS

SCHOOL LEARNERS COME AND SEE FOR THEMSELVES

On 30 and 31 July 2010 CUT opened its doors to school learners from across the Free State and surrounding regions.

Deciding on what to do with the rest of your life can be a daunting and difficult decision for any person. If you are young and the world is your oyster, perhaps even more so. That is why CUT opened its doors to school learners – allowing these young minds to come and see what CUT is about, and giving them the opportunity to find out more about the type of academic excellence and social life they can expect at CUT. ■

HEAIDS SURVEY RESULTS SHARED WITH CUT'S STUDENTS

Higher Education HIV/AIDS Programme (HEAIDS) is a government initiative to reduce the prevalence of HIV among students and staff, and CUT was one of the institutions who took part in the national survey.

In November 2007, a survey was commissioned by the Higher Education Statistics Agency (HESA) to establish the knowledge, attitudes, behaviours and practices related to HIV and AIDS and to measure the prevalence levels of HIV among staff and students. Higher Education HIV/AIDS Programme (HEAIDS) is an initiative of the Department of Higher Education and Training (DHET) undertaken by HESA to reduce the prevalence of HIV among students and staff and to mitigate the impact of the disease with a view to maintain the core functions of teaching, training, research and community engagement.

The study population consisted of students and staff at 21 Higher Education Institutions (HEI) in South Africa where contact teaching takes



Pictured are: Ms Masentle Mathibe, CUT Social Worker; Dr Gift Vinger, Registrar; Ms Criselda Kananda, Metro FM Presenter/Positive Talk Services; Mr China Kokoana, Head: Governance & Student Life; and Dr Pakiso Tondi, Deputy Registrar of Student Services.

place. CUT was one of the institutions that took part in this “unlinked, anonymous HIV survey with informed consent”. Self-administered questionnaires obtained demographic, socio-economic and behavioural data. The HIV status was determined by laboratory testing of dry blood spots obtained by administering finger pricks to participants. A total of 450 students, 45 academic staff and 81 administrative and service staff provided completed questionnaires and blood specimens for this survey. The survey results were made available to all 21 institutions. On 15 September 2010, Student Services, through the Wellness Centre, arranged a gathering of all the students in order to disseminate the student survey results to them. The Registrar, Dr Gift Vinger, presented the survey results to students, comparing the CUT students’ results with those of students in the broader Higher Education sector. A well-known HIV/AIDS and radio personality, Chriselda Kananda, presented a motivational talk entitled *It is all in the mind*. ■



Photographer: Johan Roux



Photographer: Johan Roux



Photographer: Mandie Niemann

CON-GRADUATIONS TO ALL CUT GRADUATES

The Spring Graduation Ceremony held at CUT in the Boet Troskie Hall on 10 September 2010 conferred a total of 279 certificates and degrees. Nine master's degrees and five doctoral degrees.

As an institution of higher learning, CUT prides itself on producing high-quality graduates – students of excellence, with a strong theoretical and research-based education, as well as extensive practical knowledge.

Three master's degrees were conferred in the Faculty of Engineering and Information Technology. The graduates are also employed by CUT. Mr Rangith Kuriakose received his MTech in Electrical Engineering. His study was entitled, *Automatic student management system utilizing radio frequency identification*. Mr Marinus Potgieter received his MTech in Mechanical Engineering with the title *Rapid tooling for carbon fibre compression moulding*. Mr Tichaona Kumirai also received his MTech in Mechanical Engineering. His study is entitled *Energy efficiency interventions for residential buildings in Bloemfontein using passive energy techniques*. >>

Left: Mr Rangith Kuriakose, Mr Marinus Potgieter and Mr Tichaona Kumirai.

DOCTORANDI

In August the country celebrated women, and CUT continued this celebration into the month of September, awarding not 1 or 2 doctoral degrees, but 5! And they were all women. The newly conferred women come from various fields, including Biomedical Technology, Environmental Health and Education. Martie de Wet received the degree Doctor Technologiae in Biomedical Technology by studying the possible effects of the long-term intake of different combinations of colonic release short-chain fatty acid supplements on lipid, carbohydrate and haemostatic risk markers in Westernised African men. As a mother of three small children, this is no small

versus cheddar cheese manufactured from a mixture of milk from different cattle breeds. Wendy Setlalentoa completed her study in Education by exploring the implementation of Whole School Evaluation at selected primary schools in the Motheo and Xhariep Education Districts in the Free State Province. The last of our doctorandii, Esme-Joan Redpath, studied the effect of learners that lead passive lives and as a result have movement deprivation and poor motor development. The aim of the study was to determine the influence of a 10-week Judo intervention programme on Grade 1 learners with motor restraints. >>



Photographer: Mandie Niemann

Profs. Linda de Jager, Dean of Health and Environmental Sciences and Rocky Ralebipi-Simela, Deputy Vice-Chancellor: Academic present the Doctorandi to the guests.

feat. Dédé Olivier received the degree Doctor Technologiae in Biomedical Technology as well. Her study looked at the influence of thermal and non-thermal food preservation methodologies on the liberation and ultrastructure of bacterial endotoxins. Tania Venter, newest doctor in Environmental Health, studied the unique biochemical, physicochemical and microbiological properties of branded Ayrshire cheddar cheese



Above: Profs. Laetus Lategan, our Dean of Research and Innovation; and Mabokang Monnapula-Mapesela, CUT's Dean of Academic Development and Support.

Prof. Rocky Ralebipi-Simela, Deputy Vice-Chancellor: Academic, commended the women on their tremendous achievement, stating that they now form part of a small and elite group in South Africa. All the women are juggling full-time careers and motherhood. CUT strives to shape and ensure the highest quality niche-focused academic future, and would like to congratulate these phenomenal women on their magnificent achievement. ■



Photographer: Mandie Niemann



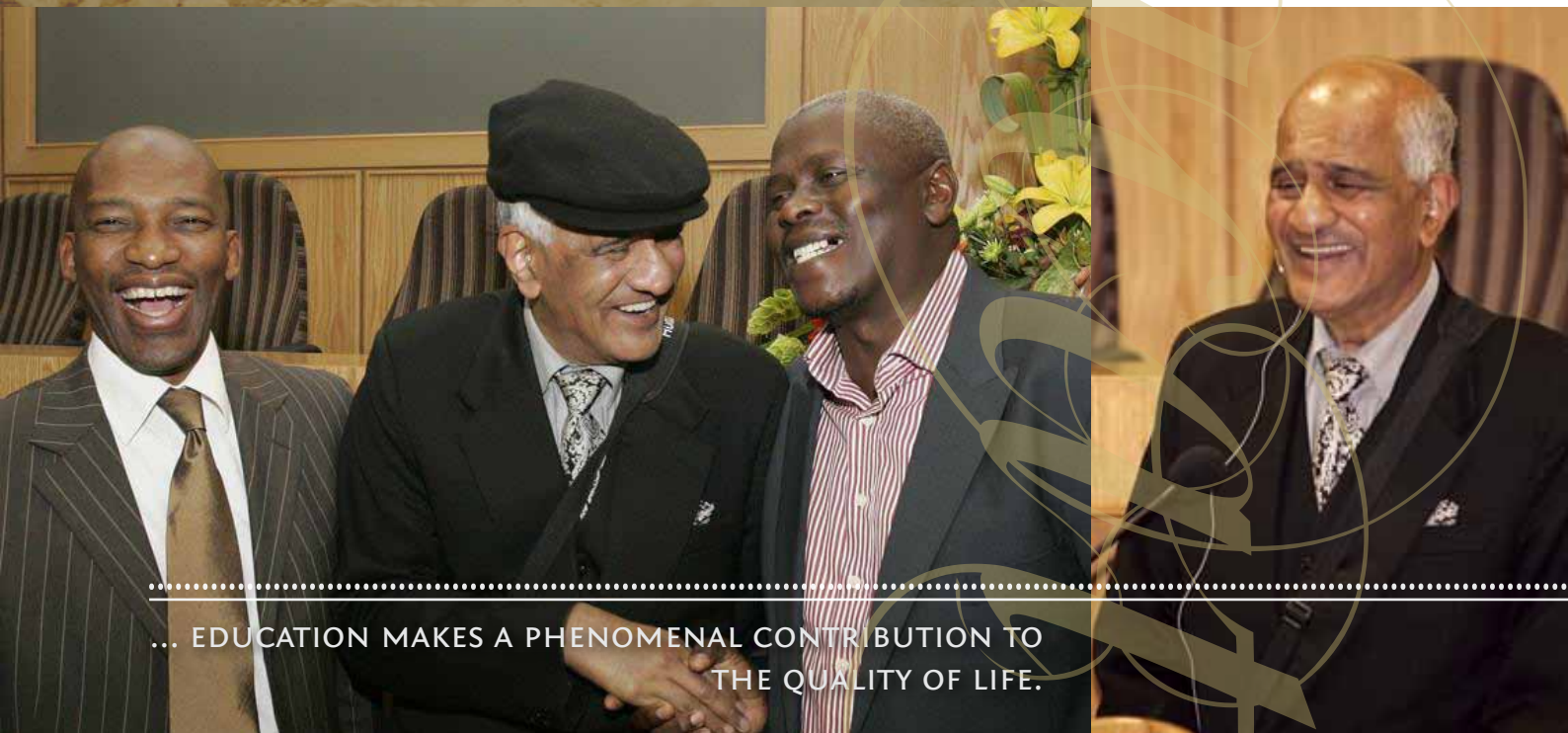
Prof. Thandwa Mthembu CUT's Vice-Chancellor and Principal takes the place of honour in the middle of the Doctorandi women. Drs Tania Venter, Esmé-Joan Redpath, Prof. Mthembu, Drs Dédre Olivier and Wendy Setlalentoa. Dr Martie de Wet's doctorate was awarded in absentia.

JUSTICE ZAKERIA YACOOB ADDS VALUE TO CUT

CUT presented its annual Prestige Lecture at the Japie van Lill Auditorium on 22 July 2010. The topic for the evening was “Adding value to our constitutional democracy”.

The Honourable Justice Zak Yacoob is a well-known Constitutional Court Judge who was actively involved in the struggle for equality in South Africa. As a young child a serious bout of meningitis left Justice Yacoob blind and that makes his accomplishments in the fields of law and politics even more remarkable.

The Constitution of South Africa was approved by the Constitutional Court in 1996, and although it is one of the most progressive constitutions in the world, we must not assume that all South Africans automatically have equality in their daily lives, were the words from Justice Yacoob. He added that we should continue our struggle against inequality and become a civil society that cares for the plights of the less fortunate. Expecting the government to fix and uplift the people on their own is an impossible task. “Let’s us add value to our society,” said Justice Yacoob.



... EDUCATION MAKES A PHENOMENAL CONTRIBUTION TO
THE QUALITY OF LIFE.

Pictured are Prof. Thandwa Mthembu; Justice Zak Yacoob; and Mr Mxolisi Dukwana, Free State MEC of Economic Development, Tourism and Environmental Affairs.

Photographer: Johan Roux

The role of universities is imperative, according to Justice Yacoob. We as an institution of higher education must produce students that will add value by giving something back. He continued by stating that education makes a phenomenal contribution to the quality of live. CUT supports this in its Vision for the year 2020. The institution is working towards becoming an engaged university that focuses on producing quality social and technological innovations in socio-economic developments, primarily in the central region of South Africa. ■

CUT TAKES THE LEAD IN NEW NATIONAL MEDICAL DEVICE INNOVATION PLATFORM

MAIN GOAL IS TO DEVELOP
INNOVATIVE MEDICAL DEVICES FOR
COMMERCIALISATION PURPOSES



Photographer: Johan Roux

Pictured is CUT's research team, comprising Dr Kobus van der Walt, Mr Gerrie Booysen, Profs. Michele Truscott and Jorrie Jordaan.

CUT has been accepted as the only University of Technology (UoT) that will be a full member of the newly-established National Medical Device Innovation Platform (MDIP).

The Board of the Medical Research Council (MRC) approved the establishment of the platform – represented by four traditional universities and CUT – at its meeting held on 18 and 19 June 2010. Prof. Michele Truscott from the Faculty of Engineering and Information Technology will lead the CUT's team working on this activity.

The MDIP has been established with the main goal of developing innovative medical devices for commercialisation purposes. CUT's inclusion in the core group came as no surprise, because for a number of years, the availability of specialised

expertise and state-of-the-art manufacturing facilities have enabled staff and students to be involved in the development and manufacture of such devices on behalf of the MRC as well as external partners.

A business model will assist the MDIP functions, and the MRC will financially support projects where inter-institutional collaboration – preferably between a traditional university and a UoT – is evident in the development of medical devices. The support function will include intellectual property right protection, if and when it should arise.

In order to guarantee constant advancement as a UoT, CUT has to ensure continuous contact with government, business and industry; continuously forging strategic partnerships. ■

CUT PLAYS A MAJOR ROLE IN THE FREE STATE TOURISM TOWN OF THE YEAR AWARD

CUT, along with various other partners, played a major role in the Free State Tourism Town of the Year award 2010.

Small towns in the Free State had to adhere to 25 criteria sets developed by Mr Johan Hattingh, lecturer at the Tourism School, and published in the *Volksblad* for a period of 12 weeks. The criteria sets were used by the towns to get ready for the adjudication process, which took place at the Hotel School in September 2010.

The judges ruled Gariep Dam as the winner of the Tourism Town of the Year award for 2010. A decisive factor was the level of interaction between local municipalities and the local tourism organisations, and it was good to see that this competition resulted in these parties forging relationships to benefit all the local communities. Gariep Dam has approached the Tourism School to assist in preparing a marketing plan and provide training in the running of a tourism information centre.

Community engagement, participation and building strategic partnerships are an important part of the CUT's Vision 2020. ■



A DECISIVE FACTOR WAS THE
FEELING OF INTERACTION
BETWEEN LOCAL MUNICIPALITIES
AND THE LOCAL TOURISM
ORGANISATIONS



GRASSROOTS FOOTBALL PROGRAMME HOSTED AT CUT

Ten schools from the Free State Province and 9 football clubs came together for the Grassroots Festival held at CUT's Bloemfontein Campus on 18 September 2010.

The second phase of the Grassroots Football Programme was a success, with 746 children (between the ages of 6 and 12) being taught the basics of football, including heading, trapping, passing and kicking. The children were lead by 30 SAFA instructors who had just completed a week-long seminar in Bloemfontein. The purpose of the course was to introduce basic football skills, with fun activities included in the programme, as well as how to organise the grassroots festivals. Mr Thando Mboxwana, CUT Sports Manager, attended the course and is now a SAFA instructor for the FIFA Grassroots Football Programme. ■

“THIS PROGRAM IS IMPORTANT BECAUSE IT ADDRESSES BASIC ISSUES OF FOOTBALL DEVELOPMENT FROM AN EARLY AGE. THIS IS WHERE WE GET THEM TO HAVE FUN AND GET THE FEEL OF THE BALL,” SAID KIRSTEN NEMATANDANI, PRESIDENT OF THE SOUTH AFRICAN FOOTBALL ASSOCIATION (SAFA).

CUT CAREER FAIR 2010

CUT's Career Fair 2010 took place on 11 and 12 August 2010 and the primary purpose of the fair was to facilitate graduate recruitment – giving students and employers the opportunity to meet face to face.

The Career Fair 2010 is not only for final-year students who are looking for an opportunity to enter the world of work, but is meant for all CUT students who are serious about developing their future careers. It was an exciting two days of recruiting, networking and learning for both students and employers. 3 000 students took up the opportunity to meet with employers from different sectors of business and industry, find out about the latest trends in the employment market, learn what companies have to offer future employees, and discover how they can improve their skills for successful entry into the labour market by taking part in a mock interview session. CUT also offered a Curriculum Vitae (CV) clinic to assist students with the conceptualisation and compilation of their CVs.

3 000 STUDENTS TOOK UP
THE OPPORTUNITY
TO MEET WITH EMPLOYERS FROM
DIFFERENT SECTORS OF BUSINESS
AND INDUSTRY



CUT provides this important opportunity to students in order to ensure they know what to expect and can do proper career planning, ensuring that they have the necessary information to prosper and achieve great heights in their future. ■

Photographer: Johan Roux



Prof. Ulrich Holzbaur

SUSTAINABLE DEVELOPMENT MUST BECOME THE CORNERSTONE OF ALL ACTIVITIES

A workshop on Sustainable Development to discuss and share information and what it means for CUT was held on 30 August 2010.

Prof. Thandwa Mthembu



“SUSTAINABLE DEVELOPMENT THAT MEETS THE
NEEDS OF THE PRESENT WITHOUT COMPROMISING THE NEEDS OF THE
FUTURE GENERATION TO MEET THEIR OWN NEEDS.”

The topic of the workshop was “Sustainable Development and the Corporate Social Responsibility. What does it mean for a University?” Prof. Thandwa Mthembu, Vice-Chancellor and Principal, opened the session and stated that a definition of sustainable development is “sustainable development that meets the needs of the present without compromising the needs of the future generation to meet their own needs”. >>

CUT became a full member of the Association of African Universities (AAU) in 2009 and is currently a member of good standing. During the AAU Conference in June 2010, the main focus was on sustainable development. CUT envisages that sustainable development will be implemented across the campus in teaching and learning, research, and community engagements. Projects are also underway to look at greening the campus. The possibility of greening our buildings, including renewable energy which is part and parcel of sustainable development, is being explored.



Profs. Ulrich Holzbour, Thandwa Mthembu; Rocky Ralebipi-Simela, Deputy Vice-Chancellor: Academic.

Prof. Ulrich Holzbour, visiting Professor from the University of Aalen delivered a paper on what he had done to promote and improve the sustainable development drive at his university. He brought his vast sustainable development project knowledge to CUT, educating and informing our university on why such projects are vital. "Think global and act local" is his philosophy and he stated that a university can impact in two ways; directly and indirectly. Directly would be through buildings and operations and indirectly would be through people and products. The bottom line will always have three parts, namely people, planet and profit. The people section is how we act socially; planet, of course, is our ecology and as things stand now, we are losing that battle; and finally profit indicates the effect on the economy. At the University of Aalen they have incorporated sustainable development as part of research and development, and various projects in engineering (chemical and electrical), computer science and economics are taking place. Each faculty at the University of Aalen already has sustainable development projects, and Prof. Holzbour heads more than 20 projects in the field, utilising students on campus to run the projects as part of their studies.

A lively debate took place during the workshop and the importance of sustainable development cannot not be overestimated. ■



Prof. Linda de Jager, Dean: Faculty of Health and Environmental Sciences.

Photographer: Rian Horn



HEALTH AND WELLNESS OF CUT COMMUNITY

A healthy body and mind are vital to good living and that is why various campaigns to promote and assist students and staff with their health and wellness are mounted throughout the year, in order to ensure that CUT Campuses are healthy and well-functioning and that students and staff get the support they need from a holistic wellness perspective. The Centre for Health and Psychological Services is focused on



Above from top to bottom: Prof. Rocky Ralebipi-Simela during her voluntary testing.

CUT's students, staff and executive team get tested.

Fun and games during WASB week.

Photographer: Johan Roux

the main areas of wellness, i.e. physical, social, mental, emotional and spiritual wellness. Support is given to students at an individual level, which includes psychological and therapeutic interventions as well as group sessions.

During 2010, WASB (Wellness Approach to Student and Staff Behaviour) Week, the Scrutinize Campaign, and Health Week took place on the Bloemfontein and Welkom Campuses, helping CUT's community to know their status and live a healthy life. Over 4 100 CUT students and staff attended the events taking place and 4 200 tests were performed during the three campaigns, including HIV/AIDS, blood pressure, cancer, BMI, family planning, dental screenings, glucose and cholesterol as well as blood group testing. ■

STUDENTS AT CUT GET A SLICE OF THE ACTION WHILE LEARNING

CUT's philosophy and approach to education is what makes our teaching and learning in a university of technology different from all other forms of higher education. We offer education to students that have the necessary theoretical background, and also the opportunity to apply the theoretical concepts in practice. Here follows a photo gallery of some of their experiences with practical training during 2010! ■



1



2



4



5

Photographs above, from left to right: 1) The Sports Management programme had the privilege to engage with the well-known sport commentator Christo Olivier, an expert in the field of sports media relations. Eileen Redgard, second-year student, Ms Willien Fourie, Programme Head: Sports Management, Mr Christo Olivier; Neo Tshipa, second-year student; and Elzani Olivier, second-year student.

2) Second-year Environmental Health students, visited the Enviroserv facilities to gain more knowledge about hazardous waste handling and to learn how spills should be treated, as well as what actions can be taken to contain such spills.

Amantle Phonnne, Maleago Seepe, Tshitso Mohatlane and Kgolaetsile Lesetedi observing how to manage a spill.

Photographs on the right, from top to bottom: 3) EMC students practised their skills by hoisting a medic and his patient (a dummy in this case) up and across from the Hotel School Building to the Library and Information Services Building.

4) A major training exercise took place in Bloemfontein on 27 October 2010, including CUT's Emergency Medical Care students for the first time this year. The Air Force, the Free State Department of Health and CUT took students on training, allowing them to experience their future careers first-hand. Luke Mynhardt and Moosa Tarr, second-year EMC students, running towards the helicopter, supervised and guided by their EMC lecturer, Mr AJ Nundall.

5) A successful strapping course took place at the Sport Academy, adding value to the knowledge of students. A short theoretical introduction laid the foundation for the practical session where the students, under the supervision of Ms Liliola v Wyk, Biokineticist at MediClinic and sponsored by BSN Medical & Leuko, could practise and learn a new skill. According to Glen Lang, the prevention of injuries through strapping is one of the most fascinating information sessions he has ever attended.

Glen Lang, third-year student, learning to strap the knee of Evan Labuschagne. Looking on is Ms Liliola v Wyk (Course Leader), Jeanette Nel, Jacques Bussack and Patricia Molisana, third-year students.

6) As part of their Service Learning, Radiography third-year students interacted with the community by visiting high schools in the Bloemfontein area, informing Grade 12 learners about the availability of medical imaging services in the region, as well as examinations like mammography, obstetric ultrasound and bone densitometry.

The group of third years before heading out for a school visit and their lecturer in Radiography, Mr René Botha.

7) Final-year students in the Marketing learning programme were given the opportunity to train with the Bloemfontein Chamber of Commerce and Industry (BCCI). Exposure to a minimum of five prescribed marketing activities was required. The purpose of the training is to expose students to different real-time work situations and in doing so develop them holistically as well as allowing them to demonstrate certain life skills.

Front: Motusi Motoase, Malefu Mofokeng, Masande Mbuli, and in the back: Ms Rochelle Fourie, secretary at the BCCI and Ms Nancy de Sousa, President of the BCCI.

8) Students sketched inanimate objects in front of the Art and Graphic Design building. They were part of the extended programme for Graphics, Fine Arts and Clothing, busy with their practicals in Paint Illustration and Object Drawing.

Photographer: Johan Roux



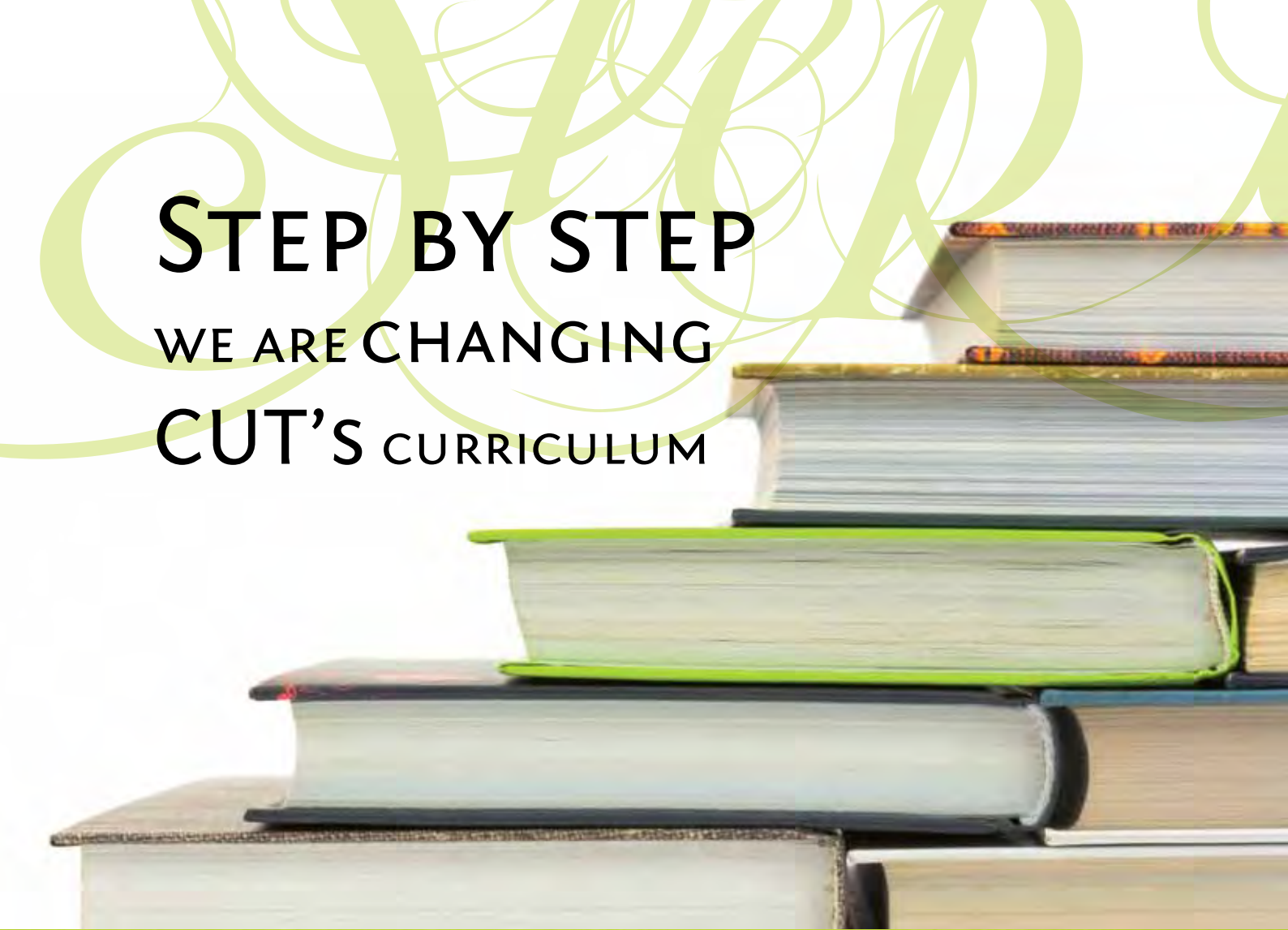
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STEP BY STEP

WE ARE CHANGING CUT'S CURRICULUM

In the June 2010 edition of *Gratia* we did an article about the STEPS Conference that took place in May 2010. The Strategic Transformation of Educational Programmes and Structures (STEPS) project entails reviewing the courses offered by CUT to ensure that as an institution of higher learning we deliver on our core business of teaching, learning research and innovation. STEPS has been one of CUT's main focus areas this year. It started in February with a knowledge-sharing session, a conference in May, a workshop in August and the month of October saw the documentation of the process as well as Task Teams taking up their positions to design and plan the implementation of specified new curricula and structures at CUT.

The conference was directly aligned with the institutional Vision 2020 strategy of contributing to the socio-economic advancement of our region. Speakers included Prof. Thandwa Mthembu, who opened the conference and explained the purpose of the STEPS project in detail; Dr Charles Nwaila, Director-General of the Free State Provincial

Government; and Prof. Mary Metcalfe, Director-General of the Department of Higher Education and Training.

On 2 and 3 August 2010 CUT held a two-day STEPS workshop to further the process of curriculum transformation. During the intensive two-day workshop, in addition to sharing knowledge, participants were actively involved in changing the trajectory of CUT's curricula, the goal for teaching and learning ensuring the highest quality, niche-focused academic institution. On day one the workshop focused on existing programmes, and two groups were formed per faculty, totalling eight groups. The groups, which were very focused, passionate and determined, looked at many aspects in the curriculum, including more criteria for relevant academic programmes, what graduate attributes (determined by a national project) will be relevant to us taking our location into account, as well as the qualifications and graduates that we produce. The relevance of programmes was also discussed. On day two the groups were reorganised

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REVIEWING THE COURSES OFFERED BY CUT TO ENSURE THAT
AS AN INSTITUTION OF HIGHER LEARNING WE
DELIVER ON OUR CORE BUSINESS OF
TEACHING, LEARNING RESEARCH AND INNOVATION.



Prof. Thandwa Mthembu engages with STEPS conference delegates during tea time, Drs Molapo Qhobela, Department of Science and Technology and Charles Nwaila.

– breaking up the per faculty format used on day one of the workshop, to an inter-faculty group system. The focus consequently shifted as well, looking at interdisciplinary solutions to development challenges.

Another aspect of the goal is that we be set apart as a university of technology, and an element that has come out of the workshop (that could make this goal a reality), is an interdisciplinary focus for the faculties. According to Prof. Mark Orkin, Project Consultant for STEPS, the ongoing STEPS process will generate new strategic options for CUT that would ensure we move forward. ■

Photographs above, from left to right: Prof. Annabel Fossey, Faculty of Health and Environmental Sciences, and Prof. Mabokang Monnapula-Mapesela, the Dean for Academic Development and Support partaking in a group session.

Group session taking place during Workshop. Profs. Laetus Lategan, Dean of Research and Innovation; Rocky Ralebipi-Simela, Deputy Vice-Chancellor: Academic; and Mojalefa Ralekhetho, Executive Liaison: Institutional Restructuring. Seated on the left is Ms Thandeka Mosholi from the Free State Department of Education and part-time lecturer at CUT.

Prof. Nicky Morgan, Deputy Vice-Chancellor: Resources and Operations, takes the lead in the session; while Profs. Thandwa Mthembu and Rocky Ralebipi-Simela are taking it all in.

Photographer: Johan Roux

CUT HOSTS INTERNATIONAL DELEGATION FROM THE OECD VISITING THE FREE STATE



Back: Profs. Talvin Schultz, Deputy Vice-Chancellor of Institutional Planning, Partnerships and Communications; Jairam Reddy, member of the OECD team; Philip Wade, OECD team member; Patrick Dubarle, member of the OECD team; Prof. Akilagpa Sawyerr, OECD team member. Front: Holly Hart McKiernan, member of the OECD team; Prof. Thandwa Mthembu, Vice-Chancellor and Principal; and Jaana Puukka, OECD team leader.



Prof. Thandwa Mthembu and Patrick Dubarle, member of the OECD team.

Photographer: Johan Roux

LEARN HOW WE CAN DO WHAT WE DO EVEN BETTER

The Organisation for Economic Co-operation and Development (OECD) recently reviewed South Africa's education, economic and innovation policies and strategies. CUT played host to the OECD delegation on 5 October 2010.

The OECD is the world's largest reliable source of comparable statistics and economic social data. They provide comparative data and analysis on education policy-making to help build efficient and effective educational systems and improve learning outcomes. The purpose of their evaluation is to assist in comparing policy experiences, seek answers to common problems, identify good practice and coordinate domestic and international policies.

Between them, the team has decades of experience in Higher Education, regional and rural development, law (to mention but a few), consisting of Vice-Chancellors, Administrators, reviewers and consultants for organisations such as the United Nations, World Bank, and UNESCO. CUT had the honour of hosting the OECD team – as they primarily focus on European Union countries – and was given the opportunity to brain-storm with them and learn how we can do what we do even better. The OECD is in the Free State Province to investigate higher education's contribution to regional and local innovation and development. ■

2ND NATIONAL ENTREPRENEURIAL CONFERENCE HOSTED BY CUT



Pictured are Mr Bernhardt du Toit, Keynote speaker, Ms Grace Magashoa, lecturer in Accounting at the School of Teacher Education, and Prof. Ulrich Holzbaaur.



Dr André van den Berg from the School for Entrepreneurship and Business Development.

Photographer: Johan Roux

On 24 and 25 August 2010, CUT hosted the 2nd National Entrepreneurial Conference (NEC). The conference theme was “The development of entrepreneurial skills on Higher Education level”.

The aim of the conference was to critically explore and focus on aspects to promote and encourage entrepreneurial skills, incorporating aspects like knowledge management and accounting skills in the business world within the learning and teaching environment.

Various national and international experts attended the conference, including Prof. Ulrich Holzbaaur, a researcher and lecturer in sustainable development at the University of Aalen in

Germany. A strong partnership exists between the two institutions, including an academic exchange programme, and Prof. Holzbaaur spent a week on campus as a visiting Professor. Mr Bernhardt du Toit, Farmer of the Year 2009 and keynote speaker at the conference, undertook the largest empowerment transaction in the Western Cape in 2008, empowering 224 farm workers to become co-owners of the company. ■

Pictured below: Prof. Laetus Lategan; Prof. Benito Khotseng, liaison for HELSKA Project at CUT; and Prof. Deseré Koko, Research Professor in the Faculty of Management Sciences.

Photographer: Mandie Niemann



RESEARCH AND INNOVATION WORKSHOP SERIES

On Friday, 05 March 2010, a large group of CUT staff and students gathered for the first Research and Innovation Workshop.

Prof. Laetus Lategan, Dean of Research and Innovation, has instituted a new workshop series for research and this workshop was the first of four in a series. The second one took place in May, followed by one in August and one in October. The second workshop, held in May, was facilitated by Prof. Deseré Koko, and not only did it deal with intellectual tools for academic writing, but it was also aimed at providing students and staff with a practical approach to academic writing. In August the workshop on sustainable development was concerned with corporate social responsibility and how that impacts on the university. The final

Photographer: Rian Horn



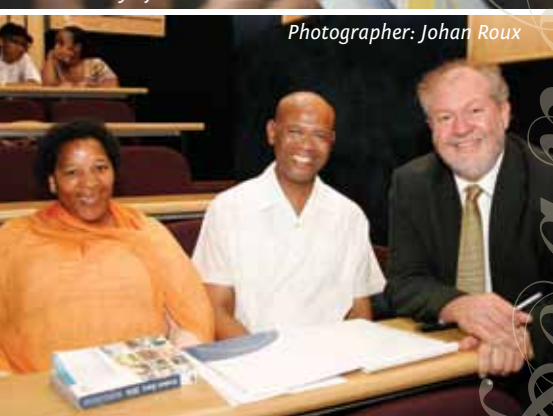
Prof. Ulrich Holzbauer, Visiting Professor from the University of Aalen.

Photographer: Johan Roux



Photograph above: Profs. Sam Masehele, and Hesta Friedrich-Nel from the Faculty of Health and Environmental Sciences.

Photographer: Johan Roux

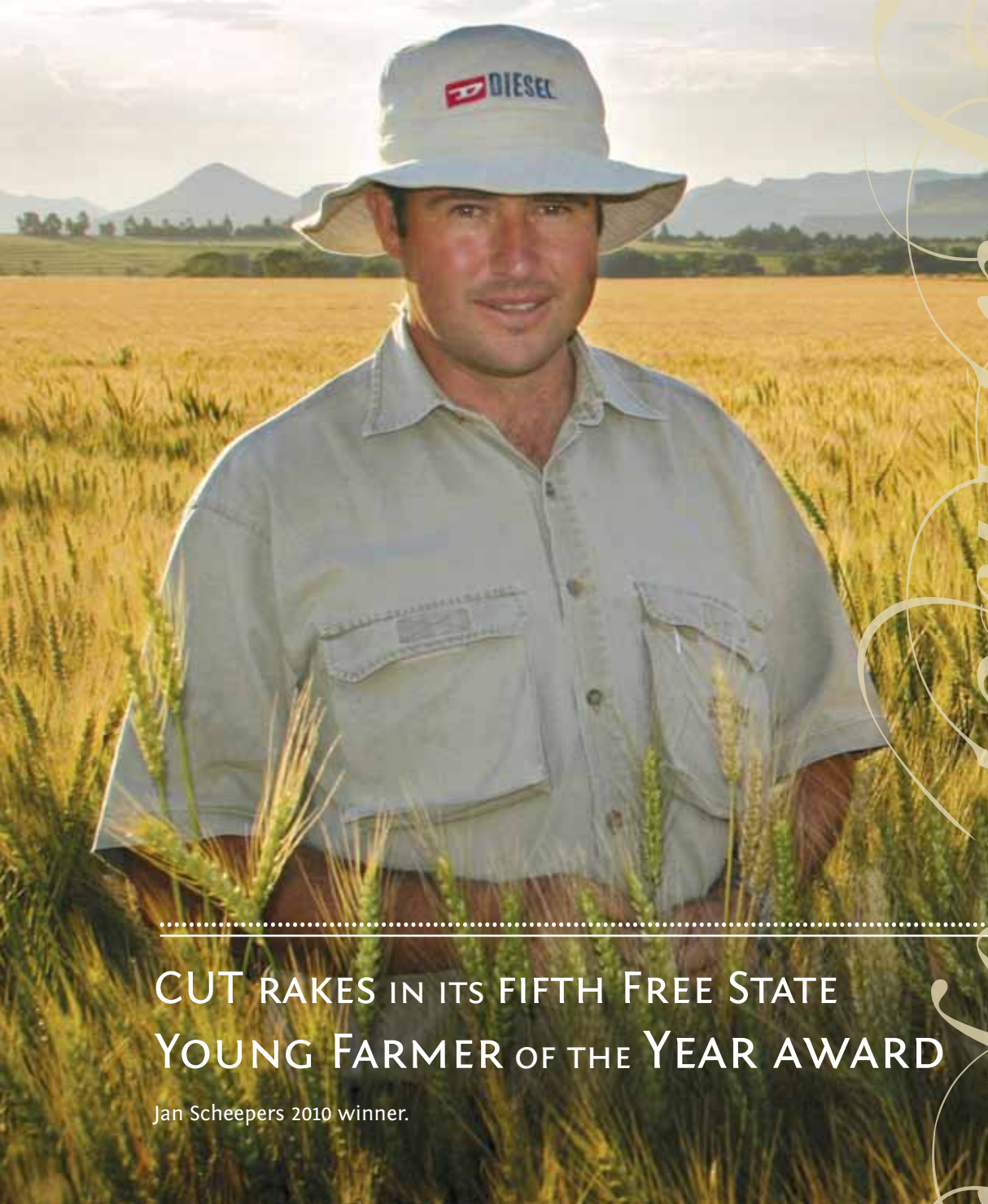


Lecturers from the School of Teacher Education enjoy the How to write for publication workshop: Ms Joy Lebata, Mr Bulelani Mtyamde and Prof. Laetus Lategan.

... MOTIVATE RESEARCHERS TO BE MORE ADVENTUROUS IN THEIR RESEARCH.

workshop in the series took place in October and dealt with writing for publication, Prof. Lategan shared some insights on why it is important to publish, how to plan and structure a research paper, and what challenges the author could expect to face during the process.

The objective of the workshop series was to motivate researchers to be more adventurous in their research, offer them support, advice and skills on how to conduct successful research. The Office of Research and Innovation was rated the best research centre in the country during 2010.



CUT RAKES IN ITS FIFTH FREE STATE YOUNG FARMER OF THE YEAR AWARD

Jan Scheepers 2010 winner.

The SA Young Farmer of the Year award was established 25 years ago and is a very prestigious competition which is adjudicated by eight judges representing the agricultural industry. The goal is to acknowledge the role played by the country's farmers and to motivate young farmers, aged between 18 and 35, to excel in their profession.

Eight young South African farmers were selected to participate in the final round in 2010 and a CUT graduate, Mr Jan Scheepers, who is currently farming on the Zandvallei farm in the Fouriesburg area was the Free State winner that will compete against all nominees from other provinces for the title. The finalists were evaluated on a number of strict criteria, including their farming skills and their financial and business acumen. Mr Scheepers is the fifth agricultural student who graduated at CUT to receive this prestigious award. Previous recipients are Messrs Ters Pretorius, Willem Du Plessis, Jacques Swart and LPJ Fourie (winner 2009). ■



Nineve van Zyl, Michelle Campbell and Machaha Taleng.

THREE OF CUT'S STUDENTS BECOME FINALISTS IN INTERNATIONAL COMPETITION

CUT is proud to have three of our third-year Graphic Design students as part of the top 25 finalists in the Institute of Packaging, South Africa's (IPSA) annual competition.

Each year IPSA creates the opportunity for students in the fields of Graphic Design, Food Science and Packaging Technology to enter into their annual Student Gold Pack competition. This year they received more than 1 000 Gold Pack entries from all over Africa. The top 25 entries were invited to the IPSA Awards Luncheon on 14 October 2010, where these outstanding and innovative packaging entries were showcased.

Three of our Graphic Design students were part of the top 25 finalists: Nineve van Zyl, winner of the award for Innovative use of Rigid Plastic; Michelle Campbell, finalist as a Packaging Technology Student; and Machaha Taleng, finalist as a Graphic Design Student. This achievement has laid the foundation for a career as Graphic Designer in the Industry of Packaging or a Packaging Technologist as occupation.

The School of Art and Design is the only Graphic Design Department in South Africa that incorporates the IPSA One-Year Diploma in Packaging Technology as part of their programme. ■

CUT'S 2010 PUBLIC LECTURE SERIES

As part of CUT's initiative to encourage critical discourse, the university initiated a public lecture series to encourage and support an institutional culture of dialogue and diversity.

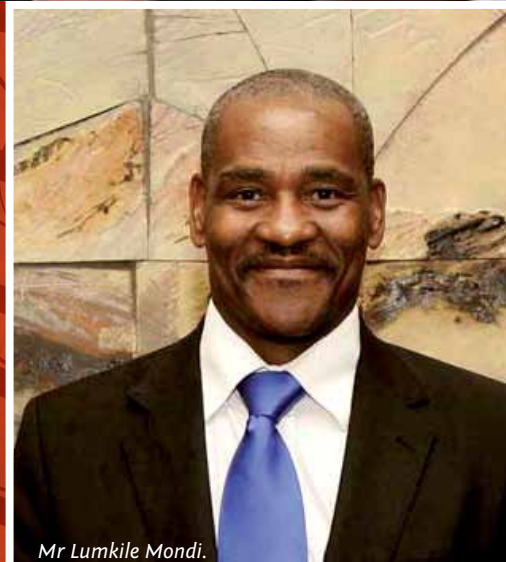
An array of experts in fields such communication and marketing, economics, gender and political analysis, education, socio-economic development and medical research, shared their knowledge, findings and thoughts with us.

Here follows a short recap of each guest lecture presented.



FIRST LECTURE IN SERIES ON SOCIO-ECONOMIC DEVELOPMENT

Mr Lumkile Mondi, Chief Economist at the Industrial Development Corporation in Johannesburg, presented the first lecture for 2010. The lecture, entitled *Recession and Economic Recovery: A Perspective*, took place on 24 February 2010. Some of the issues that emanated from the discussions were the fiscal and monetary efforts the South African government employed to counter-act the economic downturn. The aftershocks of the worst economic slump since the Great Depression appear to have subsided, with the current domestic economic forecast indicating continued recovery in 2010, with a GDP growth of 2,3%. >>



Mr Lumkile Mondi.

Photographer: Johan Roux

CUT COMMUNITY COMMEMORATES HUMAN RIGHTS MONTH



Ms Nomboniso Gasa and Prof. Rocky Ralebipi-Simela, Deputy Vice-Chancellor: Academic.

The guest speaker, Ms Nomboniso Gasa, a well-known gender and political analyst, presented the second guest lecture for the year on Human Rights on 25 March 2010. During the talk, Ms Gasa touched on various subjects, which included human dignity, the Bill of Rights as contained in the Constitution – considered to be the cornerstone of democracy in South Africa – and cultural aspects. She also spoke about how our country can move numerous cultural aspects into the 21st century. One of her points of emphasis was why so many South Africans still do not have access to basic needs such as housing, healthcare and water, even though it is stipulated in the Constitution of our country. A key factor for her was the universal need for students to learn from one another, no matter what culture, race, gender or religion they are. It is thus imperative for students to use their time at university optimally by learning as much as possible about various areas. This is the proverbial “the world is my oyster” time for students when the world filled with ideas is open to them.

AUTHOR AND BUSINESS MAN LOUIS SEECO DELIVERS GUEST LECTURE



Louis Seeco

Louis Seeco, one of South Africa’s marketing and communications experts, delivered a guest lecture on 22 April 2010. At first, Louis Seeco seems like your typical “Jo’burg” business man, nice suit, clean-cut and all the rest, but when he starts his talk by sharing that he wrote his book after a doing a two-year brand study called the *Brand Pilgrimage*, during which he lived in the homes of strangers, observing their interaction with products, you know that there is nothing typical about him. The journey connected him with ordinary and extraordinary people and the end result was a publication called *Marketing, the same difference*. The title of his lecture was *Cultural and Language Dichotomy in Advertising and Communication*, and various aspects of South Africa’s cultural and language diversities were discussed. One of these aspects was that we cannot make assumptions about people based on where they come from. According to Mr Seeco, our behavioural changes are based on where we are now. He also stated that advertising is a form of communication and not about changing people’s behaviour. On an educational front, Mr Seeco suggested that marketing students should have the subject Social Anthropology as part of their programme. He asserted that if one understands who and what people are, one is able to communicate better. >>

EDUCATION SYSTEM IN SOUTH AFRICA

On 8 June 2010, education specialist, or rather, education activist, Mr Graeme Bloch, was a guest speaker in our public lecture series. The title for the evening's lecture, *Fixing our schools and universities*, invoked strong feelings from lecturers, teachers, and government officials in the audience, who were there because they care about the education of our youth. As a self-proclaimed education activist, Mr Bloch put thought-provoking issues on the table, for instance, the fact that outcomes-based education (OBE) might not be a success story and that the time for revision is right now. He commended CUT on the energy and efforts that are being made to reposition the institution in the higher education arena. Mr Bloch has a theory that three factors, which he calls the toxic mix, must be given serious consideration in order to improve the throughput rates of both high school learners and university graduates. In order to improve our current education levels in South Africa, we must prioritise and look for simple solutions. Also, solving some pressing issues can take the education system forward quickly, and as a developing country we need to look at how we can go forward and make a difference.



Prof. Nicky Morgan, Deputy Vice-Chancellor: Resources and Operations and Graeme Bloch.

WOMAN LEADERS REDEFINING SUCCESS

The guest speaker, Ms Lisel Erasmus-Kritzinger, is a woman with leadership qualities of note – voted top woman leader in SA by the *Mail & Guardian* newspaper. Published author, mentor, panel judge and editorial advisor are just some of her many accolades. The guest lecture, *Woman Leaders Redefining Success*, brought to the fore proven success strategies shared by prominent SA women leaders. Ms Erasmus-Kritzinger undertook a pilgrimage of sorts from Cape to Cairo and brought back the lessons of leadership found along the way.



Lisel Erasmus-Kritzinger and Prof. Thandwa Mthembu.

GUEST LECTURE GIVES CUT A COMPREHENSIVE OVERVIEW OF TUBERCULOSIS

Prof. Gilla Kaplan was the guest speaker at the public guest lecture on 7 September 2010. She is a Professor in Medicine at the University of Medicine and Dentistry of New Jersey. She devoted considerable time to the research of prevalent medical conditions caused by mycobacterial infections in Brazil, India, Nepal, Bangladesh, Thailand, the Philippines and, most recently, South Africa, where she is developing a vaccine for newborns at the behest of the Bill and Melinda Gates Foundation. The title of her lecture was, *Can lab-based research help control tuberculosis and improve management of AIDS?* Prof. Kaplan has done research, more specifically, in a community outside Cape Town, on the relationship between TB, HIV and anti-retroviral drugs and the results have shown that anti-retroviral drugs impact positively on TB. One important aspect about TB that was highlighted in the discussions is that TB is an infectious disease that grows slowly and therefore must be stopped slowly. ■



Prof. Nicky Morgan, Deputy Vice-Chancellor: Resources and Operations, Prof. Kaplan and Prof. Talvin Schultz, Deputy Vice-Chancellor: Institutional Planning, Partnerships and Communications.

TECHNOLOGY AND CREATIVE DESIGN BECOME ONE

CREATIVE AND SCIENTIFIC
THINKING IS EXACTLY THE SAME.



Creative Technology



Dr Michaella Janse van Vuuren

Dr Michaella Janse van Vuuren found a way to integrate engineering and art and soon stumbled upon infinite applications for rapid prototyping. She was awarded an NRF Post-Doctoral Fellowship (promoter Prof. Deon de Beer) in 2007. It all started when she joined CUT's Centre for Rapid Prototyping and Manufacturing (CRPM) under the supervision of Prof. Michele Truscott, creating custom implants and prostheses, using additive fabrication (rapid prototyping) methods. It was there that she saw an opportunity to combine technology with her love for creative design.

Dr Janse van Vuuren started her studies in the field of art, but after six months she changed her field, ultimately completing her doctorate in electrical engineering. She soon saw a way to combine her love of art and engineering by utilising CRPM's 3D printer. The Chrysanthemum Centerpiece, designed by Dr Janse van Vuuren and grown at CRPM, was voted "The most beautiful object in South Africa" at the Design Indaba in 2009. ■

CUT RESEARCHERS PUBLISH IMPORTANT BOOK ON ORGANIC ACIDS AND FOOD PRESERVATION



Prof. Ryk Lues and Dr Riki Theron

Photographer: Johan Roux

The importance of her research was not realised by Dr Rikki Theron, researcher at the Unit for Applied Food Science and Biotechnology (UAFSB), until she was invited by a renowned international publisher (CRC Press, in the Taylor and Francis Group in the USA) to author a book with Prof. Ryk Lues as co-author. This invitation came in response to a review article written by the two authors on the same topic. The book is on the organic acids and their application as food preservatives and the research on the organic acids being done in the UAFSB. The research is one of a kind in South Africa and has grown into a sustainable project, accommodating numerous postgraduate students. Dr Theron is currently steering the project on “Organic Acids as Antimicrobials in Food Preservation” within

Organic Acids and Food Preservation IS THE FIRST BOOK WRITTEN THAT FOCUSES SOLELY ON THE ORGANIC ACIDS AND THEIR APPLICATION IN THE PRODUCTION OF SAFE AND QUALITY FOOD.

the research niche area of the UAFSB, funded by the National Research Foundation (NRF) of South Africa. Prof. Lues is not only the co-author and a Category C NRF-rated researcher, but also a full professor and Acting Director of the School of Agriculture and Environmental Sciences. His field of specialisation comprises organic acid biotechnology and social-behavioural aspects impacting on food microbiology and hygiene.

Organic Acids and Food Preservation is the first book written that focuses solely on the organic acids and their application in the production of safe and quality food. In this book, research findings from industries and laboratories around the globe are combined with specific application regimes and future prospects that are vital to the successful use of organic acids as food preservatives. Assessing challenges that the food industry faces from modern consumer trends, food legislation and other obstacles, this book explores possible solutions that are applicable not only to food science, but also to microbiology, food technology and biotechnology. ■

JOHN VAN DER RIET MEDAL AWARDED TO CUT STAFF MEMBER

The John van der Riet Medal is annually awarded for the best peer-reviewed clinical article in the field of Health Sciences.

Articles published by members of staff and post-graduate students qualify for the prize and the nominated articles are evaluated by a panel of experts. Dr Zorada Hattingh, a lecturer at CUT in the School of Tourism, Hospitality and Sport, won top honours for an article published during 2009. The article, *Socio-demographic risk factors for HIV infection in women living in Mangaung, Free State*, was named the best article, thereby bestowing the John van der Riet Medal upon Dr Hattingh. ■



Photographer: Mandie Niemann



Palesa Liphoko and Teboho Moloji

MR AND MISS CUT CROWNED

The Mr and Miss CUT Beauty and Attitude Pageant was held on 3 September 2010 as part of the annual Carnival, a Student Representative Council project.

The Carnival is a festive occasion for every CUT student, during which funds are raised to support the less fortunate in our society, and this exercise presents students with an opportunity to become involved in community engagement. The Mr and Miss CUT Beauty and Attitude Pageant is the crowning event of the Carnival, and the winners are chosen after weeks of interviews, unobtrusive observation and various other activities to ensure that the candidates are up to the test and life in the public eye. The queen bee, or rather, Miss CUT, is Palesa Liphoko and Mr CUT is Teboho Moloji.

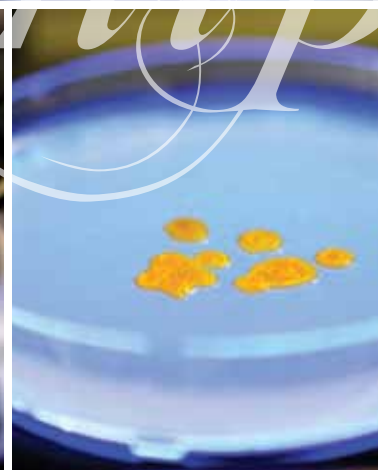
Palesa is in her second year, studying towards her National Diploma in Language Practice, and Teboho, also busy with his second year, is working towards a National Higher Diploma in Accounting. ■



CUT VISITS UNIVERSITY OF FORT HARE TO FORM PARTNERSHIP

In CUT's Vision 2020, one of the research goals is to establish long-term mutually beneficial partnerships. It is on this premise that a delegation from CUT visited the University of Fort Hare (UFH), situated in the Eastern Cape Province during July 2010.

Good nutrition is a key factor contributing to learner attendance and performance at school, especially for orphans, vulnerable children and children living with HIV and AIDS. The Nelson Mandela Children's fund supports a project called the Primary Schools Nutritional Programme and their goal is to deliver food parcels to primary school children countrywide that were identified as vulnerable. The purpose of the UFH visit was to establish collaboration between CUT, the UFH and Agriparks. CUT will be tasked with testing the product delivered by the service providers to ensure that the production of and the foodstuffs delivered to schools in the Eastern Cape Province are of a good quality.



Pictured from the left at the UFH's well-known Freedom Square is: Prof. Pierre Venter, Prof. Annabel Fossey, Prof. Ryk Lues, Dr Nicolaas Luwes and Mr Johan Pretorius.

HELPING HANDS FOR MATRICS

WINTER AND SUMMER SCHOOLS ASSIST GRADE 12 LEARNERS

Since 2008, CUT's School of Teacher Education presented a Winter School during the July holidays to assist Grade 12 learners with their final year of school, and this year they extended the Winter School to a Summer School that was held in September 2010 for the first time, due to the phenomenal success of the Winter School.

The Winter and Summer Schools are presented in partnership with Standard Bank. During the June/July 2010 holidays, an average of 1 200 learners attended the Winter School and in September about 1 600 learners attended the Summer School. An array of schools, including St Michael's, Ntemoseng Secondary, Lenyora la Thuto, Strydom Secondary, Hodisa High School, Atlehang Secondary, Ntumediseng Secondary, St Joseph, Grey College, Sediti Secondary School and Mpatleng High School were in attendance. Due to the labour action that continued for a number of weeks, the matrics of 2010 needed even more assistance in preparing for their final examinations and CUT as well as Standard Bank, as dedicated partners of the Free State Department of Education, wanted to play a role in this regard. The focus of the Summer School was on strategic examination preparation for Grade 12 learners.

Experienced CUT lecturers as well as education practitioners assisted learners in the nine subjects that were on offer: Economics, Mathematics, Accounting, Life Sciences, Business Studies and Physical Science, History and Geography, as well as Engineering and Graphics Design. Between classes the Grade 12 learners could take a breather and play games on the soccer field next to the Boet Troskie Hall. CUT and Standard Bank will continue to invest in the leaders of tomorrow.



Learners in the classroom: Billy Phitsane and Karabo Mokoena, both Grey College learners; Teboho Tyuntyuthwa from Hodisa Technical High School; and Tshepo Brand from Grey College.



A group of learners from Thaba Patchoa Combined School.



Right: Learners taking part in the games set up by Standard Bank during breaks.

Photographer: Johan Roux



TECHNOLOGY STUDENTS DESIGN GEODESIC DOME FOR EMERGENCY SHELTER

The second-year Technology Education students in the School of Teacher Education have recently come up with innovative idea. They designed a geodesic dome – a spherical or partial-spherical shell structure based on a network of great circles – that can be used as an emergency shelter to accommodate people affected by natural disasters such as heavy storms, floods, fire and so on. ■

Photograph on the left: Pictured in the Technology Lab working on their geodesic dome model are Teboho Moahloli, Kagisho Sebatana and David Modise.

CUT STAFF CELEBRATES CASUAL DAY



Staff members from the School of Accounting who took up the challenge.



Another group which had fun with the theme was the staff members from the ZR Mahabane Building.

Photographer: Johan Roux

The biggest fundraising project for persons with disabilities in the country took place on Friday, 3 September 2010, and CUT supports the initiative wholeheartedly or, as was the case this year, laughingly. The ticket sales were doubled from last year and we hope to continue the trend next year.

The personnel from the ZR Mahabane Building challenged one another to live the theme for this year “Dress for laughs”. ■



CUT HOSTS THE MONTHLY AHI BREAKFAST

The School of Tourism, Hospitality and Sport had the honour of hosting the monthly AHI (Afrikaanse Handelsinstituut) meeting on 17 September 2010, and the Hotel School prepared a scrumptious breakfast for the event.

Ms Christine Prinsloo from the Department of Local Economic Development and Housing was the guest speaker at the event and her presentation touched on the Local Development Programme of the Free State Government. The role provincial governments play in the implementation and monitoring of the Local Economic Development programmes of local governments were highlighted and some successes and failures were alluded to.

CUT and AHI have been partners in the Volksblad Tourism Town of the Year Competition for the past two years and are looking forward to continuing their mutual beneficial partnership. ■



Photographer: Mandie Niemann

Prof. Albert Strydom, Dean of Management Sciences; Adv. Manie Moolman, Acting Director of the School of Tourism, Hospitality and Sport; Ms Christine Prinsloo; and Mr Stoffel Meyer, Regional Manager in Free State for the Industrial Development Corporation (IDC).



Photographer: Johan Roux

WORKSHOP INSPIRES CUT MENTORS

Pictured are: Profs. Linda de Jager, Dean of the Faculty of Health and Environmental Sciences; Talvin Schultz, Deputy Vice-Chancellor for Institutional Planning, Partnerships and Communications; and Benito Khotseng, liaison for the HELSKA Project at CUT.

As part of the HELSKA project to perpetuate and grow the positive effects of mentorship, CUT presented a Workshop on Mentorship on 20 October 2010.

The term “Mentor” has various meanings, but it comes from a story in Greek mythology. King Odysseus instructed his close friend Mentor to educate and raise his only son and heir during his absence due to war.

In higher education, the concept of mentoring has been used to refer to a close working relationship between a professor (researcher) of high repute with noted achievement in the discipline, and a young colleague or student, i.e. mentee. The mentor’s role in the relationship is to encourage and guide the mentee to engage in research and publish their findings. As part of the Higher Education and Leadership Skills Academy (HELSKA) project – a strategic leadership programme – CUT intends to

CUT’S COMMITMENT TO ENSURING THAT OUR FUTURE GENERATION OF LEADERS IS KNOWLEDGEABLE

take a brave step and break new ground by not only focusing on the mentee, but also on the mentors, ensuring they have the skills needed to improve their mentoring capabilities, taking CUT forward in our endeavour to create a culture of excellence.

The HELSKA project is managed by Prof. Benito Khotseng, and reflects CUT’s commitment to ensuring that our future generation of leaders is knowledgeable, informed, educated and equipped for the task of entrenching and sustaining democracy and improving socio-economic and human conditions in this province and beyond.

For more information on the HELSKA Project visit:
<http://www.cut.ac.za/helska/homepage> ■

The group of students from Germany, Rwanda, Netherlands and Belgium are proud country men and woman but they have become South African supporters during their stay in our beautiful country. They were here during the World Cup 2010.



The group of students will be studying at the University of Aalen until February 2011. Pulane Coangae and Vuyolwethu Mayezana are both studying towards their BTech in HR Management on the Bloemfontein Campus. Mokeke Mokoena is busy with his NDip Internal Auditing and Pitso Mohlomi enrolled for his NHC Accountancy. Both students are studying at the Welkom Campus.



Seated: Prof Albert Strydom, Dean of the Faculty of Management Sciences; and Mr Alexander Grohmann. Back: Prof. Deseré Kott, Chairperson of the Faculty Research Committee; and Dr Hannes van der Walt, co-supervisor.



Nomakhosi Sello and Stefanus Coetzer

WORLD CLASS EXPERIENCES FOR CUT'S STUDENTS

During the year, exchange students from all over the world come to CUT, and students from CUT are also afforded the opportunity to travel to and experience other universities.

During 2010, various student exchange programmes took place within cooperation agreements between: CUT, the ULM University, the University of Aalen and the Mittweida University of Applied Sciences, respectively. Such strategic partnerships help to shape CUT's academic future as an institution of high quality that will continuously advance.

In March the first group of four students participated in the exchange programme, followed by a second group in September and the third group in October. On their return, the first group of students were debriefed and their experiences during their three-month visit extended beyond their expectations. One student, Mpepuoa Siimane-Moeletsi, had this to say on her return to South Africa: "This course has taught and given me substantial knowledge and other skills which I am now able to utilise to the benefit of my university."

The second group of four students went to the University of Aalen in Germany in September and will return in February 2011. At the beginning October two more students from CUT began their studies in Germany at the Mittweida University of Applied Sciences. Stefanus Coetzer is studying towards his BTech in Electrical Engineering and is focused on Automation Technology, while Nomakhosi Sello is studying towards her NDip in Graphic Design. Her studies will be focused on Swan Lake and Game Cast Projects in the Faculty of Media. In recognition of their achievements, CUT sponsored the return airfares, visa expenses and health insurance for all the groups.

The Faculty of Management Sciences welcomed Mr Alexander Grohmann from the University of Aalen in July. He registered for his DTech in Marketing at the School for Entrepreneurship and Business Development and his study *Influences of Market Response Time (MRT) on sales planning in different industries – a comparative study*, had the motor industry as its focal point. Mr Grohmann returned home during September. ■

CUT'S PHENOMENAL WOMEN ARE
TREATED AS THE JEWELS THAT THEY ARE



IF YOU DON'T LIKE
SOMETHING, CHANGE IT

The Japie van Lill Auditorium turned into a pink and black celebration (not black and blue as the saying goes) on 5 August 2010, because in South Africa women are celebrated for an entire month every August.

The women at CUT were treated to an amazing day of food, song and inspiration. The dress code was pink and black, and with the inspirational words, "If you don't like something, change it. If you can't change it, change your attitude," by Maya Angelou, the stage was set for what was to come – change.

Chef Suné Niemand and her team changed the "healthy is boring" thought pattern we so easily fall into, by giving a simple cooking demonstration of wonderfully healthy meal options, after which, of course, they served a superb (healthy) lunch.

Ms Lisel Erasmus-Kritzinger, a truly phenomenal woman and author of the book *Inspirational Women at Work*, was the guest speaker at the Women's Day event. In her book she pays tribute to those women who have paved the way for women today. She tells the stories of 52 dynamic South African women – their lives, the challenges they face in life and business, and how they are making a difference in the lives of other women and to South Africa as a whole.

CUT purchased a few copies of this book and in doing so made a contribution to the Miriam Makeba Home for Girls – a place of safety for girls between the ages of 11 and 18. All proceeds from sales of the publication during the month of August were donated to women's empowerment projects.

Photographer: Johan Roux



Chef Suné Niemand



Dr Wendy Setlaletoa and Ms Lisel Erasmus-Kritzinger



Ms Lisel Erasmus-Kritzinger



CUT Women enjoying their lunch.

PLATFORM FOR RESEARCHERS TO PRESENT THEIR WORK AT ANNUAL PRESTIGE RESEARCH SEMINARS



*Dr Martin van Veelen and
Prof. Herman Vermaak.*

An event that is a highlight for every faculty at CUT is the annual research seminars. Faculties prepare for the occasion throughout the year, affording post-graduate students and staff the opportunity to present research papers to their peers.

The Faculty of Engineering and Information Technology hosted their 13th seminar on 14 October 2010. This year the faculty focused on sustainable development and the guest speaker, Dr Martin van Veelen, discussed energy and the environment, particularly focusing on how this shapes the national transportation master plan for South Africa. A total of 20 papers were delivered, including topics such as: *Patient specific radiation field shaping masks through low temperature thermal-spray*; *Impact of rainwater harvesting on catchment water balance*; and *Artificial intelligence with simultaneous neural network and search tree abilities*. >>



The Faculty of Management Sciences hosted their 8th Annual Prestige Research Seminar, entitled *Research imperatives for the Knowledge Age*. Prizes were awarded in two categories, namely Best Presentation and Best Research, and an adjudicator panel, which consisted of Prof. Dennis Umesiobi of the Faculty of Health and Environmental Sciences and Dr Shiela Matoti of the Faculty of Humanities, evaluated the presentations. Dr René Haarhoff received the prize for Best Research. Her topic for the seminar was *Measuring destination price competitiveness: a travel price index for South Africa* and Mr Adriaan Taylor received the prize for Best Presenter.



Photographer: Johan Roux

Pictured are the winners of the two categories and the adjudicators for the day: Mr Adriaan Taylor (Best Presentation), Dr Shiela Matoti, Dr René Haarhoff (Best Research) and Prof. Dennis Umesiobi.

The newly established Faculty of Humanities held their first Prestige Research Seminar on 21 October 2010. The guest speaker was Prof. Mabokang Monnapula-Mapesela, the Dean of Academic Development and Support. Seven papers were presented by academic staff from the Faculty, with topics such as *How do language varieties come about in South Africa?*; and *An investigation of the use of [Voice over Internet Protocol] VoIP system as an answer to the digital divide in Africa*.



Prof. David Ngidi, Dean of the Faculty of Humanities; and Dr Victor Teise, from the University of the Free State served as a panellist for the seminar.

The Faculty of Health and Environmental Sciences hosted their Prestige Research Day on 3 November 2010, and had the honour of having Prof. Joyce MacKinnon from Indiana University-Purdue University Indianapolis (IUPUI), as guest speaker. She delivered a paper at the research day entitled *Vietnam Veterans with Combat Amputations: 40 years of Reflection*. Both novice and established researchers are afforded the opportunity to deliver papers, and some titles of the papers were: *Origin of life: Microbial beginnings to evolution*; and *Evaluation of near-infrared spectroscopy in patients with acute coronary syndrome undergoing on and off pump coronary artery bypass graft surgery*.



Photographer: Johan Roux


Prof. Sam Mashele, Biomedical Technology, Prof. Anne-Marie Pretorius, Clinical Technology, Prof. Joyce MacKinnon and Prof. Annabel Fossey, research professor in Biotechnology.

The ideal is that all papers delivered at the research seminars be submitted to accredited publications. One example of such a publication is CUT's *New Generation Sciences* (JNGS), an accredited journal that is administered by CUT's Research and Innovation Office. ■

VISION 2020

1. WHAT IS THE VISION 2020 STATEMENT?

By 2020, Central University of Technology, Free State, shall be an engaged university that focuses on producing quality social and technological innovations in socio-economic developments, primarily in the Central region of South Africa.



2. WHY DO WE HAVE A NEW STRATEGIC VISION?

The following are important enablers for adopting a longer-term strategic vision (for the development) of the University.

- ♦ Since the adoption of the national higher education policy the intervening three general elections have not modified this policy. There is, therefore, sufficient reason to expect national policy stability in the coming years, a stability which makes it possible for longer term planning.
- ♦ The very nature of any university's business is long-term. While there is a need for short-to-medium term development gains, these opportunities must not redefine a university's longer term goals of developing human and intellectual capital and deploying these in the interest of socio-economic development, within a very competitive global economic context. As our transformation position paper stresses, the transformation of the University is a long-term goal where its' engagement with staff and students is constantly redefined. The participation of staff and students in these engagements must be supported, encouraged and stimulated.
- ♦ The nature of the University's transformation requires steady and determined development of its capacities - especially its human resources and infrastructure - to consistently deliver the desired outcomes.

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3. HOW IS IT DIFFERENT AND HOW DOES IT RELATE TO THE TRANSFORMATION AGENDA FOR 2020?

In August 2008 CUT adopted a transformation position paper called “Year 2020: Vision of the transformation agenda”, which should not be mistaken for Vision 2020, the all encompassing vision of the University. The Transformation Agenda describes the founding aims of transformation within the University as an on-going process of operational renewal and adjustment, and outlines a set of general transformation projects. These transformation projects will continue but will be guided by the strategic vision described herein.

CUT remains committed to its core values of customer service, integrity, diversity, innovation and excellence as well as its transformation agenda; these will continue to guide daily operations and services offered. The impact value of our operations and services on the lives of the people we intend to be in the service of, must be the highest consideration.

4. HOW DO YOU ENGAGE AND CONTRIBUTE?

The following is the strategic sets along which we will develop to our elected destiny in 2020.

1. **Building the foundations** to make CUT fit for the purpose;
2. **Innovating on the academic projects**, especially in SET; and
3. **Building strategic partnerships** (to realise internal, regional, national and international goals especially socio-economic development through regional innovation).

The following diagram represents the dynamic relation and characteristics under the three strategic sets.

