



Central University of
Technology, Free State

GRATIA

Liaison Journal • Central University of Technology, Free State (CUT) • December 2013

Achieving Greatness

GRATIA

Our people, our greatest asset



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Message from the Vice-Chancellor and Principal

CUT has been in the process of implementing Vision 2020 in earnest since 2011. For this purpose, we have designed an implementation framework we call, the 4Ps, namely, Plans, People, Products and Pennies. This framework guides us towards achieving our strategic objectives stated in our plans for Vision 2020.

We have, by now, laid a solid foundation (PLAN) upon which we shall continue to build our people and our products, and earn our pennies. In this respect, we have also put some mechanisms, systems and processes in place to drive our implementation framework. For example, we have a rolling strategic planning cycle for monitoring and evaluating our plans and strategies; a new consultation framework; and an improved decision making process.

During the year 2013 we were able to surpass our expectations in achieving a number of important milestones, as I will shortly point to. Emanating from our vision, CUT has in place new plans and strategies to build a purposeful and innovative university of technology.

Vision 2020 helped us to initiate the Strategic Transformation of Educational Programmes and Structures (STEPS) process. This process has enabled CUT to fully grasp how to be more responsive to new and pressing needs in the job market, our regional and national economy, and development, more broadly.

The process has now become an outcome. It has yielded nine (9) new demand-driven and user-oriented programmes already approved by the Department of Higher Education and Training (DHET), of which four will be rolled out in 2014 and the rest in 2015. The implementation of STEPS requires a great deal of external support from our stakeholders and partners. Such support will allow us to contribute to socio-economic development through focused, applied knowledge and innovation in social, technological and environmental spheres.

It is important to note that STEPS is more than curriculum reform – it is also a strategy for more effective and efficient academic management for better delivery of our PRODUCTS – the academic, research, innovation and engagement products of our intellectual labours. In this respect, STEPS has provided CUT a new, lean, flat and less bureaucratic academic structure consisting of only two-layers. The two-tier academic structure was implemented successfully in January 2013.

The establishment of the Institute for Continuing Education (ICE) is a major achievement. We look forward to implementing and realising it in 2014. As the name suggests, this institute is geared towards providing education and training to the working adult. A number of these working adults never had opportunities during their youth to enrol at any university. And, rightfully, they wish to upgrade their skills so that they could participate more productively and innovatively in our economy. Given our major focus on contact-based education of younger students, for quite some time CUT has been constrained in offering quality short courses to the working adult. The establishment of ICE will make this possible.

Amongst our considerable achievements in 2013 regarding PEOPLE was the implementation of the concept of the A-Team, a group of at least 50 members

of staff and students at all levels who contribute their 'crazy ideas' towards the university's advancement. A-Team activities are in full swing to support the realization of Vision 2020.

For example, the A-Team cluster on talent management consisting of two groups, one from the academe and another from support services, is now playing an active role in the recruitment process to assist the university to identify the best talent. A-talent attracts other A-talents! The aesthetics cluster is beginning to change the face of the university's look, feel and ethos; something that we hope will contribute to our institutional culture, too.

“We look forward to an exciting year 2014 when we will do even better and produce many more 'crazy ideas'.”

Our strategy on revenue generation and allocation has yielded fruit. Our revenue has increased considerably through careful enrolment planning and a focus on Science, Technology, Engineering and Mathematics (STEM).

The strategic (development) budget continues to be an important instrument for allocating resources (PENNIES) to support strategic priorities and projects that directly align with Vision 2020. From our savings, a rolling annual amount equivalent to about 20% of our total revenue has been grown over the years and set aside over and above the normal annual budget. In addition, a Resources Allocation Model (RAM) has been developed to ensure more efficient allocation of resources and to strengthen the linkage between planning and budgeting. The model was fully tested in 2013 and is ready for implementation in 2014 in the academic division.

For a number of years, CUT has been battling with student accommodation and state-of-the-art academic infrastructure, especially at our Welkom campus. However, we have finally managed to make headway in this regard. The DHET, and CUT's Council from our own university reserves, have allocated funds towards infrastructure development that will, in addition to academic infrastructure, create approximately 500 beds on both Welkom and Bloemfontein campuses by 2015.

We are exploring avenues to create more beds through partnerships with business and industry. This much anticipated development is a great milestone for the years 2014 and 2015. There are many other achievements in 2013 upon which we will continue to build in 2014 and beyond. Amongst others, CUT proudly hosted a successful International Education Association of South Africa (IEASA) Conference 2013 and an international colloquium in August, both of which attracted delegates from around the globe.

During the IEASA conference CUT also launched its internationalisation strategy which is to be implemented in 2014. As alluded to above, one of our priorities is to improve our enrolment in STEM fields. We have developed a STEM strategy aimed at increasing student enrolment in these fields. Through this strategy, we shall provide educational opportunities to students, enhance their chances of access and success, and equip them with skills required for the region and the country. For projects in these areas we have support from a number of our major partners including Standard Bank, the Telkom Foundation, Mutual & Federal, and SETAs like the MerSETA and the ETDPSETA.

As a university, we have made great strides in implementing Vision 2020 and all its attendant elements. The year 2014 is therefore, yet another year of purposeful implementation that will show that we have reached maturity and are ready to soar.

All these achievements and milestones would have not been possible without the contribution and dedication of our beloved staff members and students alike, and our partners and stakeholders. Thanks to all of you for assisting us to realise our vision.

We look forward to an exciting year 2014 when we will do even better and produce many more 'crazy ideas'. ■

Prof. Thandwa Mthembu

Vice-Chancellor and Principal

customer service ▀ integrity ▀ innovation ▀ diversity ▀ excellence

Building the Foundation

CUT TAKES A STEP FORWARD WITH INNOVATIVE CLASSROOM TECHNOLOGY

The Active Learning Centre (ALC) is a collaborative learning space with a plethora of technologies such as iPads, interactive white boards, audio-visual equipment and multiple display surfaces to aide and enhance the learning experience of learners at the Central University of Technology, Free State.

"The availability of technology in the classroom greatly enhances the instruction capabilities of lecturers and in a world where students are exposed to technology from a young age, this type of engagement creates an environment they can relate too." said Mr Johan Badenhorst, Director of the Centre for eLearning and Educational Technology.

A project has commenced at CUT to implement Active Learning Centres (ALC's). The first faculty to be equipped was Management Sciences to be followed by the faculties of Health and Environmental Sciences, Engineering and Information Technology and Humanities.

The large scale long term project has been undertaken by Academic Development and Support, with the Centre for eLearning and Educational Technology at the helm, as the experts in active learning and educational technologies.

One of CUT's Accounting lecturers, Mr Christo Hurter said that the new Active Learning Centre creates a stimulating collaborative environment. "Students engage, compare, debate sometimes argue – the class is alive, vibrant. I think the technology has dramatically improved the student participation, and technology skills."

This innovative Active Learning Centre is truly a step beyond. ■



During the launch in the first semester of the year, Mr Nico Baird, Centre for eLearning and Educational Technology, trained lecturers and other staff members on how the smart classroom can change the way instructional offering takes place.

Smart Classroom in action!



Every cloud has a silver lining



Construction of the brand new extension to the Dirk Coetzee Building was completed at the end of 2012. The state-of-the-art facility houses CUT's Faculty of Health and Environmental Sciences.

The past two and half years have seen the staff and students rise up to create an institution that stands for honesty, integrity and determination. CUT is determined to use the experience to grow as an educational facility and provide all those who walk its halls with support and understanding.

"I believe that most of our people have learned that integrity, truth and principle are virtues to live by," said Professor Thandwa Mthembu. "I think that through this process our staff and students now have a better understanding of the importance of the rule of law and how disputes need to be resolved, which is through reason and logic."

Allegations against CUT

The allegations began in February 2011 when an anonymous letter was submitted to the minister of higher education and training, Blade Nzimande, alleging that there was maladministration, financial mismanagement, misuse of public funds, violation of human rights and labour laws, violation of CUT's policies and procedures, and a culture of fear, intimidation and victimisation and nepotism.

The minister sent this on to CUT council for investigation and it duly appointed audit, tax and advisory firm KPMG to undertake a thorough analysis of the situation.

When KPMG failed to produce a report by 2 September 2011 when the next Council meeting was to be held, Council terminated its mandate. It then subsequently appointed Adv. Jannie Lubbe to continue with the investigation. In 2012, the minister appointed Professor Julian Smith as an independent assessor and later attempted to appoint Professor Stanley Ridge as an administrator for CUT.

"I am grateful that during this whole period there was not a single disruption of the university activities."

The council did not permit the latter to take up his role within the university and the entire issue was remanded to court to be reviewed by Justice Johann Daffue. On 13 August 2012, Daffue found in favour of the CUT council, placing both the members of the council and Mthembu back in authority and clearing their names. Subsequent to the Daffue ruling, the minister was granted leave to appeal at the Supreme Court of Appeals, however he withdrew this on 2 May 2013 and the judgement is now the final resolution on the matter.

Furthermore, on August 13 2012 Judge Daffue noted in his judgement that the Council should further investigate some matters and they immediately appointed one of the most experienced lawyers at the Bloemfontein Bar, Advocate Hans de Bruin, to investigate. De Bruin submitted his report to the council on 31 May 2013 and found no evidence or cause for concern on all the matters, and June 7 finally saw the end of this issue for CUT when Council accepted the de Bruin report.

Exciting change

CUT believes that this decision was in the best interests of the ministry and the university, allowing everyone to put 2012 firmly in the past and strive towards a shared vision of the future. Both the ministry and CUT believe in providing quality education to the youth of South Africa and have been working together to approve nine new user-focused and demand driven academic programmes for 2014 and 2015.

“The Minister and his department are an important stakeholder in higher education and CUT hopes that 2013 will see an enhanced relationship between us and the department of higher education and training,” said Prof. Mthembu. “CUT welcomes the support that he has been providing to the students since 2010 and appreciates the fact that young people in this province are given educational opportunities that they would not otherwise have.”

Throughout the years that led to the resolution of the claims, and the subsequent investigations into the allegations laid out by the anonymous letter, CUT and the council worked hard to provide as much documentation and evidence as possible. “Administrative and financial prudence, evidence-based transactions and engagements and impeccable record keeping, among others, are what won CUT this case,” he said. “I am grateful that during this whole period there was not a single disruption of the university activities.”

CUT seeks to uphold strong educational values and continues to provide students with the highest levels of teaching and qualifications. The university did not allow the situation to impact their continued development of the university and some sterling initiatives took flight during this difficult time.

The silver lining

“The allegations found us in the middle of a curriculum transformation exercise called Strategic Transformation of Educational Programmes and Structures (STEPS),” said Prof. Mthembu. “We are not aware of any university in this country that has recently undertaken a similar and as radical an exercise, other than the usual tweaks and revisions of curricula.”

The period also coincided with CUT's rollout of vision 2020, an exciting programme that allows staff and students creative flexibility and explores their ideas in a supportive environment.

The ordeal has not created a time of stagnation and fear, but rather of exciting growth and change. For Mthembu the negativity caused by the investigation saw some remarkable student responses that still resonate with him today.

“Some of the student leaders wrote very principled newspaper articles calling for calm, rationality and a fair chance for CUT to deal with the matter without the minister's interference,” he says. “To me, this exhibited a level of maturity and adherence to principle that you don't easily find in a student movement. They didn't blindly come to a leader's defense; instead they wanted the right processes to take their course.” “What was most impressive with our students is that in the midst of the June 2012 gazette, in which an administrator was appointed, our students were in the middle of their mid-year examinations and proceeded without a glitch”. he continued.

The experience may have held a dark cloud over CUT for several years, but the mood of the university is almost at odds with what you would have expected after such a grueling process. There was, for this university, a silver lining after all. The council and management have dissuaded strikes or protests, they encouraged faith in the system and processes, and it worked. ■





A curriculum for the *21st* Century

Students looking for a future in a technologically advanced South Africa are offered a plethora of programmes that have been designed to transform their lives. “We are proud to announce nine new programmes in 2014 and 2015 through our Strategic Transformation of Educational Programmes and Structures (STEPS). “These form part of our plan to revolutionise our curriculum to offer our graduates the best possible foundation in life,” said Professor Thandwa Mthembu.

The university offers opportunities in a number of technology fields that include science, technology, engineering and mathematics (Stem) and in which around 45% of CUT's students enrol. The student body consist of about 12 500 people across two campuses — Bloemfontein and Welkom — and the qualifications on offer fit into one of four faculties: Faculty of Health and Environmental Sciences, Faculty of Humanities, Faculty of Engineering and Information Technology and the Faculty of Management Sciences.

“We offer certificates and diplomas at the undergraduate level as well as BTech degrees at honours level, MTech degrees and DTech degrees to develop and manage research at postgraduate level,” said Mthembu. The studies will equip them with knowledge, education and practical understanding.

“Since the restructuring started, CUT's engineering diplomas and BTech degrees have achieved accreditation from the engineering council of South Africa,” said Prof. Henk de Jager, Deputy Vice-Chancellor: Academic. “Of the new courses to come through over the next two years we have a higher certificate in renewable energy technologies and a diploma in sustainable energy.” These new courses in renewable energy solutions will provide students with the necessary skills to assess and maintain the renewable energy systems within the industry. Sustainable renewable energy, and design and studio art are cutting-edge because CUT is the first university in the country to offer them.

Another initiative by CUT is its inclusion of a compulsory business ethics module in the first semester of all BTech programmes offered by the departments of accounting and internal auditing, and financial information systems. The accounting and auditing industry increasingly emphasises the importance of business ethics and this course will ensure that students are able to make informed decisions when faced with ethical dilemmas once they join the workforce. “The real beauty of this course is its practical component, an incentive-driven project devised in collaboration with international audit firm PwC. “It has final year students integrating their theoretical knowledge into real life ethical dilemmas,” said Prof. Mthembu. “CUT is still the only university of technology in the country to offer this level of practical learning as part of its curriculum.”

Academic excellence

This focus on knowledge and innovation across all faculties has seen a record level of diplomas and degrees awarded in 2013 and close to 520 graduates in the engineering field alone. Considering the government's goal to attain 30 000 developers by 2014, this is exactly in line with what the country needs.

“We are proud to have achieved this important milestone that sets the tone for the university to become an important resource, not only in the region, but to South Africa, Africa and beyond,” he said.

On the same path of providing for students beyond a rich curriculum and support infrastructure, CUT has formed a relationship with international company, Bell Equipment, which seeks to invest in CUT students for work-integrated learning, and now holds a seat on the engineering advisory committee, which will advise on the curriculum to ensure it has relevance in the current job market.

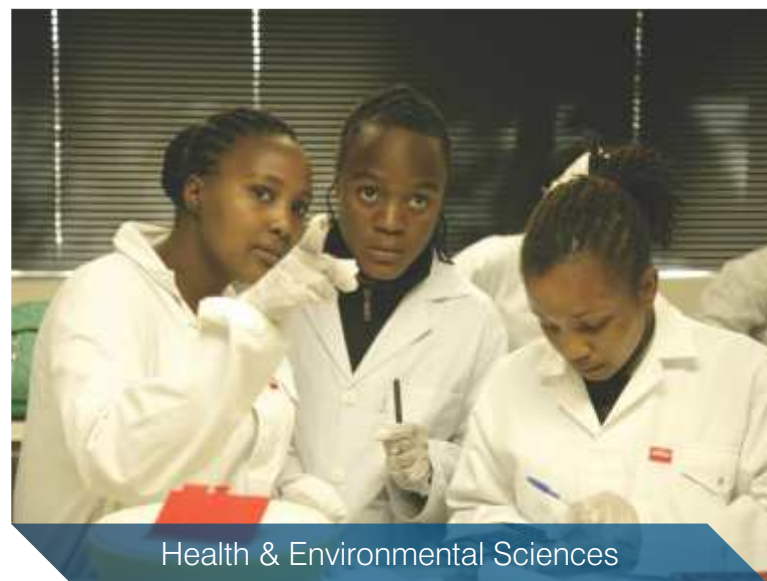
The university has also established a merSeta Chair in engineering development from 2014 to 2016, which will play a significant role in developing skills and taking engineering to the next level, both within the graduate environment and outwards towards secondary schools and encouraging more women to engage in this fulfilling career.

“Our curriculum is at the heart of who we are and is about ensuring excellence in education, the development of talent and making strategic connections to build a strong institution that inspires and creates successful graduates,” said Prof. Mthembu. ■



Design & Studio Art

“Central University of Technology delivers the values, vision and curriculum that students need to succeed.”



Health & Environmental Sciences

Achieving Greatness through determination

The new Teacher Education Building opened in 2013.



As an institution based in the heartland of South Africa it should come as little surprise that management, staff and students have formulated a strategic vision for the future that is all about the heart. Ideas and goals that are supported and inspired by the university across all platforms and programmes, we call it Vision 2020.

Vision 2020 states that by 2020, CUT shall be a university that focuses on producing quality social and technological innovations for socioeconomic development, primarily in the central region of South Africa.

This vision has four pillars: plan, people, product and pennies, and each describes an important aspect of the university's future.

“When a university creates a principled ethos by which all activities are undertaken, the results can be nothing short of remarkable.”

“This represents our aspirations and our determination as a university of technology,” said Professor Thandwa Mthembu. “Through it we seek to contribute substantively to addressing the developmental needs of the Free State, central region, South Africa as a whole and the continent, and it will do this by graduating an industry-leading workforce and entrepreneurs.”

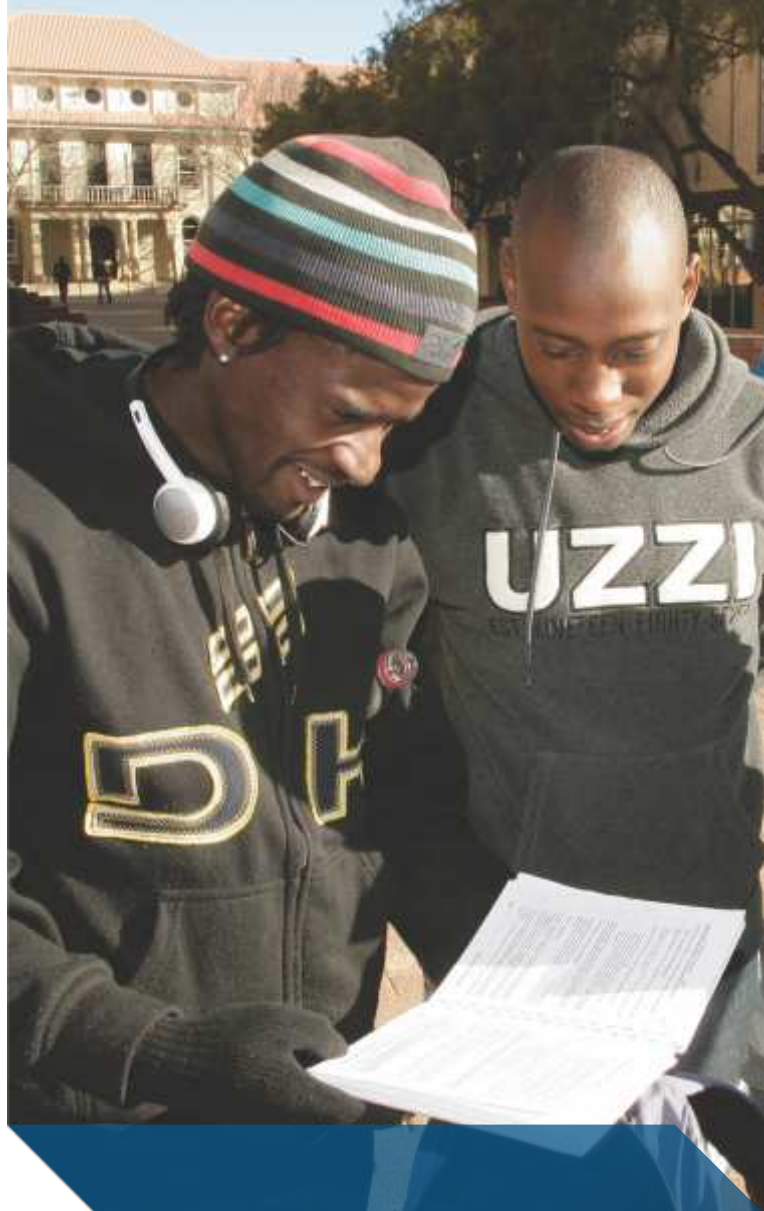
The university's goal is to educate by example, to be a leader in areas of social and technological innovations and research. CUT believes that no successful geographical region has established a technology-based industry without a leading educational institution in its midst and CUT wants to become this institution.

Pillars

In this lies the strength of the plan pillar that outlines step-by-step implementation and review of the main practices and outcomes of vision 2020. "The rollout of vision 2020 energised the staff and students and we had road shows across the university, unpacking it and getting plenty of crazy ideas that have led to projects that truly make vision 2020 a reality," he said. "This is a boldly and unashamedly utilitarian vision, fit for a university that has students who need to be out there in the world of business, industry and the workplace."

The second pillar, people, sees the university introduce programmes that focus on the development of staff and students. One of the primary issues facing graduates today is the lack of employment opportunities, especially for those without hands-on industry experience. Many students struggle to even get placements for their internship and are unable to complete their qualifications. CUT is managing this issue for its students through a variety of initiatives, such as Work Integrated Learning (WIL), which exposes students to experimental training opportunities.

The product pillar shows that CUT's products are not students but its academic programmes, research and innovation outputs.



The institution has initiated various equity and excellence programmes from its own funds: for emerging academics and researchers; for leaders, be they in the support staff services, alumni or students. We have assembled a team of about 50 staff and students, irrespective of hierarchy, who we call A-Teamers. They provide us with their crazy ideas that are beginning to inspire and change the whole university.

In 2007, CUT was on the edge of financial ruin with an unaffordable salary bill that constituted 75% of the total of subsidy and tuition fees. This has now been reduced to the current maximum of 62%. CUT has created a target- and ratio-based financial management system which helps to contain the salary bill and our operational expenditure, while it enhances our capital expenditure, and expenditure on academic versus support staff. Our pennies have had clean financial audits for the past few years, and the institution has grown from strength to strength financially. ■

Innovative Classroom Technology



CUT contributes to betterment of central region schools

CUT officially launched the Schools Advancement Academy (SAA) on 29 October 2013, in order to support the Department of Education to meet their set targets and to lend a helping hand to schools, teachers, and learners to improve their performances.

This academy takes us another step further towards the establishment of a sound partnership that will not only sustain our working relationships, but also enable all of us to accomplish much more in terms of academic excellence in our schools,” said MEC for Education, Honourable Tate Makgoe when he delivered a keynote address at the launch.

“Every year we review our targets for the Grade 12 pass rate. Last year another success story of the NSC examinations reaffirmed our commitment when an overall pass rate of 81% was reached, rating the Free State third among the nine provinces,” MEC said. He said that the Province will once again show a notable improvement as a result of direct interventions of CUT in helping schools; particularly, learners to improve their performances. He also commended new partnership efforts between Ex-model C schools and the disadvantaged schools in Mangaung which will allow teachers from these schools to exchange lesson plans, advise and discuss innovative methods of improving teaching.

The concept of the Schools Advancement Academy (SAA) was adopted in 2011 to give effect to a more holistic approach on intervention programmes and to manage them in one basket.

“CUT and partners assist schools to meet their set targets and to lend a helping hand to teachers, and learners to improve their performances.”

It is the culmination of a series of engagements between CUT community, Department of Education, external partners such as Standard Bank, Interstate Bus Services, Telkom Foundation and Mutual and Federal after showing interest to partner with CUT on these respective programmes. It was brought into existence to consolidate Saturday Classes for Grade 11 and 12, the Winter School and Spring School Programmes including EMDP (Educator Mentoring and Development Project).



At the official launch of CUT's Schools Advancement Academy, left to right is: Ms Nontando Seopa, CEO NLA Project Consulting; Prof. Henk de Jager, Deputy Vice-Chancellor: Academic; Ms Thando Lepele, PRO for Interstate Bus Lines; MEC Tate Makgoe, Department of Education, Free State; Mr Giel de Villiers, Director of CUT-SAA; Ms Selloane Malie, Head: Business Banking at Standard Bank South Africa; Prof. Thandwa Mthembu, Vice-Chancellor and Principal of CUT; and Ms Angeline Mdakane, Programme Manager of Kagiso Shanduke Foundation Trust.



Educator Mentorship Development Programme: in 2012 School educators received teaching support materials to improve Math and Science. Pictured is Ms Sarah Mthintso, CEO of the Telkom Foundation, Mr Tau Seheri, Principal Bainsvlei Combined School, Ms Brenda Lebetsa, Chairperson of Governing Body Bainsvlei Combined School, and Miss Marlise Viljoen, Teacher Intermediate Phase at Bainsvlei Combined School with a group of school learners from Bainsvlei Combined School.



Winter School 2013: school learners undergo a two-week winter-school programme. The Free State province has set the 2013 target at 85 percent pass rate. CUT and partners, Department of Education, Standard Bank South Africa ensure that a rigorous time-table include seasoned teachers/lecturers, tutors, motivational talks, wellness programmes and a nutritional programme to give matrics a helping hand. Improvements in pass rates are noted in schools that join the Winter/Spring Schools.

Vision 2020 gives clear focus not only on technological but also social innovation, and the SAA are exactly such an initiative. Prof. Thandwa Mthembu, Vice-Chancellor and Principal of CUT, stated that the innovation is not new, but rather consolidating what has been active in the university, using expertise to support and direct contributions to the education in the central region.

“Taking the statistic of country's education sector into consideration; the idea behind SAA is in response to the vast needs we have seen.” said Prof. Mthembu. “Today, we are not launching an idea, there are already tangible products being delivered in the academy.” said he.

During the launch key partners in various project took the opportunity to voice their support for CUT's SAA “We will continue to hold hands with CUT partnering in the Winter/Spring School project – we are proud of the successful initiative,” said Ms Selloane Malie, Head: Business Banking at Standard Bank South Africa; Telkom Foundation Operational Project Manager, Mr Gallant Roberts stated “70% of the budget is spent on education showing the partnerships commitment to projects. Telkom is proud to be part of the EMDP project, and look forward to furthering the venture.”, Ms Thando Lepele, PRO for Interstate Bus Lines said “we wish you well in future endeavours, after a 7 year fruitful partnership, let me reassure you that we will further invest in the future of learners in the province with CUT.” Mr Giel de Villiers, Director of the SAA at CUT highlighted the fact that the academy took cognizance of research, and other reports including the new National Development Plan 2030 when planning initiatives.

He also highlighted that the involvement of civil society with education and trust played a major role in the success of SAA. “Improving Science, Technology, Engineering and Mathematics (STEM) outcomes, and learner retention is a major focus of the academy.” said de Villiers.

It is envisaged that SAA will be extended to CUT Welkom Campus where the need is equally if not much greater. ■



Hotel School Service Learning: CUT students ploughed back their skills by teaching learners from surrounding schools about hospitality industry. A basic course in hospitality management offered by the students afforded them the opportunity to be actively involved in the socio-economic development of the community; providing skills to school learners from various high schools which include: Petunia, Heatherdale, Martie Du Plessis, Navalsig, Jim Fouché and Eunice. 29 third-year students and 160 Grade 11 learners were involved in 2013

MENTORSHIP PROGRAMME EXPANDS SAFETY NET FOR FIRST-YEAR STUDENTS

In 2013 CUT embarked on a campus-wide pilot project called the Peer Mentorship Programme, aimed to assist students with the difficult transition into higher education.

The programmes aim to support first-years cope with the demands of their studies towards developing their employability with the assistance of student and specialist mentors. The idea was originally initiated by a student, Mr Admire Mblaba. The recommendation reached the Office of the Deputy Vice-Chancellor: Academic who requested that the Academic Development and Support team investigate the possibility. The rest as they say is history.

Faculties commenced with the initiative in earnest this year. Support staff and mentors were identified and training took place. "Mentors are A-students, they are performing well academically and that makes them the best calibre of student to motivate, share tips, and support other students or rather mentees as they are referred to in the programme" said Dr Ben van der Merwe, the Director of Teaching and Learning who was tasked with identifying A-students and initiating the first workshop.

True mentoring is more than just ad hoc assistance; it is a relationship of learning, dialogue and challenge. The Peer Mentors are offered support as well, to build their trust and confidence. This is done through initial training sessions, online support, regular meetings, and follow-up training. Traits of a good mentor was identified as someone who enjoy helping others, flexible, empathetic, encouraging, inspiring, able to stimulate the mentee's thinking and reflecting. "The training will empower the mentors to effectively carry out their roles and at the same time enhance the academic performance of our first year students." said the Dean of the Faculty of Management Sciences, Prof. Albert Strydom.

Through projects like the Peer Mentorship programme, CUT will weave a strong academic support structure fabric for students. Bonds of friendship and community are formed, ensuring the institution works together to deliver on the vision of being an engaged. ■



The Management Sciences mentors are in training!



But do not think it is all work and no play; the Clinical Technology team enjoyed a social session on the Bloemfontein Campus.



The Radiography mentors also enjoyed the great outdoors during a social session.

Community Engagement sector gathers at CUT to discuss NDP 2030

Bloemfontein campus became a hubbub of exciting conversation on 17 and 18 October 2013, as CUT hosted the country's community engagement forum SAHECEF. South African Higher Education Community Engagement Forum (SAHECEF) brings together university staff responsible for a broad typology of community engagement expressions in Higher Education.

During the second day the very important newly launched National Development Plan 2030 (NDP 2030) was dissected and analysed incorporating the views from various stakeholders. NDP 2030 is South Africa's long-term plan that aims to eliminate poverty and reduce inequality. Commissioner Pascal Moloi, member of the National Planning Commission, discussed the collaborations between universities, government departments, business, industry, and civil society at the workshop. "Higher Education has unmatched obligation, both internally and in the community, to advance globalisation and strengthen ethos of a democratic nation," said he.

According to Commissioner Moloi, there are five areas universities should focus on: quality teaching and training; robust curriculums with diverse programmes; providing for flexibility and innovation; strong system of science, technology, engineering and math education as well as training systems; and finally the national need for differentiated institutions - that means each institution should find their own niche.

Commissioner Moloi stated that universities were uniquely positioned to get industry/business, and government to work together and to better manage the collaborations. The throughput rate of the South African student cohort must be a top priority of all institutions. Get support programmes in place to help us achieve the 75% goal", he concluded.



Throwing their weight behind the new National Development Plan, from left: Prof. Laetus Lategan; Ms Jeeva Munsamy, Manager: Community Engagement; guest speaker Commissioner Pascal Moloi who is the Managing Director of the Resolve Group; Dr Darren Lortan, Chair of SAHECEF; and Ms Percy Moleke, Secretariat: National Planning Commission.

"Universities are the engine room of society, it is where we grow ideas and knowledge."

Professor Laetus Lategan.

Prof. Laetus Lategan, CUT's Dean of Research and Innovation, added that the NDP will focus on growing the postgraduate cohort, and will show the important role the higher education sector must play in contributing to the knowledge economy. NDP is a long term plan for South Africa, which now enters the roll-out phase. NDP has evaluation and monitoring in place to ensure it goes beyond planning, steps that were lacking in previous plans.

Important to know about NDP 2030

- The NDP is a plan for the whole country. Government will engage with all sectors to understand how they are contributing to implementation, and particularly to identify any obstacles to them fulfilling their role effectively.
- The Plan will shape budget allocation over the next 17 years.
- Three phases have been identified for implementation.
- The plan consists of four themed areas: rural economy, social protection, regional and world affairs, and community safety.
- Three priorities that stand out:
 - o Raising employment through faster economic growth.
 - o Improving the quality of education, skills development and innovation.
 - o Building the capability of the state to play a developmental, transformative role.
- Planning and implementation should be informed by evidence-based monitoring and evaluation.
- The President and Deputy President will be the lead champions of the Plan within Cabinet, in government and throughout the country. Premiers and Mayors will need to be visible and active champions of the Plan, with their offices being the catalytic agencies to drive implementation at provincial and municipal levels. ■

Visit <http://www.info.gov.za/issues/national-development-plan/> **for full details on NDP 2030.**

Partnership supports economic growth in SMME's

CUT and the National African Federated Chamber of Commerce and Industry Free State (NAFCOC) officially signed a Memorandum of Understanding on 20 September 2013.

"This is a long-term initiative which over time will bear fruit" said Prof. Mabokang Monnapula-Mapesela, Dean of Academic Development and Support whom the university depended upon with her team for their commitment, and dedication to make this partnership possible.

"Exploiting the institutional strengths and capabilities of the two organisations for the benefit of the socio-economic development and advancement of the central region."



Professor Henk de Jager (Deputy Vice-Chancellor: Academic), and Mr Dikgang Mentoro (President of NAFCOC, Free State) represented the individual institutions and signed the agreement on behalf of CUT and NAFCOC.

The agreement states that CUT and NAFCOC will collaborate in the development of Small Medium, and Macro Enterprises (SMME's) and will focus predominantly in the Free State as well as central region, thus promoting economic growth. "This new partnership forms part of the very important work we do at CUT in socio-economic and skills development of the region," stated Monnapula-Mapesela.

The collaboration is intended to bring CUT and NAFCOC together to focus on exploiting the institutional strengths and capabilities of the two organisations for the benefit of the socio-economic development and advancement of the central region.

Integrity



This collaboration will widen the scope of cooperation in areas such as their perennial projects, business profiling, executive development programmes, business support, and incubation.

“CUT has the facilities, expertise and experience to support economic growth projects and assist NAFCOC in achieving its objectives of developing commercial processes for the production of agricultural products and manufacturing incubators across the province”, said Mr Dikgang Mentoro, President of NAFCOC.

Prof. Henk de Jager, Deputy Vice-Chancellor: Academic, stated that partners are pivotal to a university's success; hence a strong focus on partnerships in Vision2020. “We are part of the Regional Innovation Forum of the Free State, currently developing the strategy and foresee a great number of collaboration opportunities. Another focus for the new partnership will be proposal creation to uplift the region, and promote economic empowerment,” he said. ■



At the official signing, Profs. Mabokang Monnapula-Mapesela (Dean of Academic Development and Support), Henk de Jager (Deputy Vice-Chancellor: Academic), Mr Dikgang Mentoro (President of NAFCOC, Free State), and Mr Phaladi Matsole (Deputy President of NAFCOC).



Customer Service





CUT welcomes the new Council members

The University Council is the highest decision-making body at the institution, and consists of twenty five members.

Over the past year several industry experts have been appointed to council, and the university would like to take this opportunity to present the newest members.

Sixty percent of the members who serve on CUT's council are external members. They represent various fields such as Technology, Law, Finance, Marketing, and Agriculture. The Department of Higher Education and Training also has appointed ministerial representatives.

Here is a quick guide to the new members:

				
	Cllr Justice Mahube Molemela	Cllr Nick Nicholls	Cllr Pearl Munthali	Cllr Tim Modise
Council seats	Law	Finance	Technology	Marketing
Current positions in industry	Judge of the High Court (Free State Division) since 2008.	Owner of Professional Audit and Accountancy Practice. Lecturer / Facilitator	Group Executive of Business Development at Passenger Rail Agency of South Africa	Presenter of M-NET investigative programme Cart Blanche.
Background	She obtained her tertiary education at various institutions where she obtained the following degrees and diplomas: B.A & B Proc (University of Fort Hare); LL B; LL M (in Mercantile Law) (University of the Free State). Her professional career commenced in 1987 when she was appointed as a prosecutor at Thaba Nchu Magistrate's Court.	Studied B.Comm at Rhodes University, and is currently a Practising Chartered Accountant and a qualified Internal and External Auditor both IRBA registered (Registered Accountant and Auditor) and a CIA with his own accounting practice. He has served on South African Weather Service, Western Cape Gambling and Racing Board, as well as Film and Publication Board to name a few.	MCOM (Masters in Commerce, Information Systems Major) from Wits University. She is a member of the CIO Executive Board, Gartner S.A; and EGN Top 25 South African CIOs. Cllr Munthali also served as the Group Manager: ICT of Airports South Africa (ACSA).	Multiple award winner, Cllr Modise, is a well-known and respected journalist, as well as various other communication platforms. He has also held a number of senior positions in governmental and non-governmental organisations, including chairing the 2010 FIFA World Cup Organising Committee and advising the Department of Environmental Affairs and Tourism. His awards include "SABC Best Broadcaster in Radio" in 1999, GQ Magazine "Presenter of the Year" and the Institute for Justice and Reconciliation's "Reconciliation Award" in 2001 respectively. He is also featured interviewing Nelson Mandela in the video Experience Ubuntu.
Interesting facts	She was appointed as a Military Judge in 2004. Her hobbies are reading and travelling.	His company offers SAIPA learnerships, and he is also a lecturer / facilitator in Commercial, Finance, Accounts, Auditing for institutes and business. He enjoys gym, toastmasters, and he describes himself as player 23 in his favourite rugby team.	Founder of the AWICT - African Women in ICT. She enjoys mountain trail runs, reading, travelling, and coaching.	One of his personal highlights was being the MC at President Nelson Mandela's 85 birthday party. He loves jazz music and appreciates the time he gets to spend with his family and friends.



University Life

vision 2020 ■ people ■ plan ■ pennies ■ product

IEASA Conference 2013

CUT responds to Internationalisation in a changing world

Is higher education responding effectively and quickly enough to internationalisation challenges and developments?

CUT hosted the 17th International Education Association of South Africa (IEASA) Conference 2013 on 21 to 24 August 2013 at the Bloemfontein Campus with the aim of answering the emerging question about higher education's response to internationalisation in a changing world.

IEASA, a non-profit organisation, was established as a result of the need for universities in South Africa to respond to international educational trends. "If South Africa is to remain competitive within the global economic environment it is important that our higher education provides opportunities for students to obtain a global perspective and become global citizens", said Prof. Thandwa Mthembu, CUT's Vice-Chancellor and Principal and the Regional Chair: Sub-Sahara Africa of the International Association of University Presidents (IAUP).

The theme for the conference was Internationalisation in a Changing World: Higher Education's Response. The conference was focused on knowledge sharing with discussions on best practices, challenges and opportunities, and the critical role leadership and support services has to play in successful internationalisation.

Further interesting topics included the interlinking role of indigenous knowledge management, the transition from the Millennium Development Goals (MDGs) to the Sustainable Development Goals (SDGs), and special student issues, such as xenophobia, ethical considerations and other diversity challenges.

The IEASA Conference opened up international doors for the central region of South Africa, and focused on creating cross-border partnerships, which will benefit students of tertiary institutions and will contribute to South Africa's status as a competitor and participant in world markets.

"As part of CUT's internationalisation strategy, we continue to reach out to students and academics from the rest of the SADC states, Germany, Belgium,



Prof. Henk de Jager, Deputy Vice-Chancellor: Academic at CUT; Prof. Alvaro Romo, Secretary General-elect of IAUP; Dr Lavern Samuels, IEASA President; Prof. Rosa Meyer from Catholic University of Rio in Brazil; Dr Nico Jooste, IEASA Vice President; Mr Ramo Damodaran, Deputy Director: Outreach Division representing United Nations and Dr Jimmy Ellis, CUT Internationalisation Consultant.

Photo supplied by Volksblad



Dr. John Dzimba, Lesotho Institute of Public Administration and Management

Finland, The Netherlands and China and others” said Prof. Mthembu.

“These partnerships ensure that our students are not only industry-ready, but that they have a global perspective to their studies and an understanding of international challenges and opportunities.” CUT launches a brand-new Internationalisation strategy. Global citizenship is no longer an obscure terminology, we are not working towards becoming global citizens any longer – we are global citizens. This is mostly due to technology tools such as smart phones, tablets, wi-fi connectivity giving us international passports.

CUT hosted a two-day intensive colloquium on 19 and 20 August to discuss various aspects of Internationalisation including CUT's new strategy, partnerships, and how to move beyond paper agreements.

International guests included Dr Alvaro Romo, Secretary General-elect of the International Association of University Presidents (IAUP), who was also a partner in the colloquium, along with the United Nations Academic Impact (UNAI), represented by Mr Ramu Damodaran, Deputy Director: Outreach Division.

Over the course of the colloquium the field of internationalisation and what it entails of Higher Education was explored, institutions shared their current perspectives, their success stories as well as how they intend to expand partnership ventures on the international front.

During the colloquium, CUT presented the new Internationalisation Strategy for the institution which in essence will focus on CUT's three Vision 2020 strategic sets namely, building a strong foundation (internal values, relations and organisational design); enhancing the academic project, and establishing strategic partnerships and enterprises.

“Internationalisation at CUT is the process of integrating an international, intercultural and global dimension into the purpose, functions or delivery of programmes in science, technology, engineering and mathematics and other key niche areas, that will promote and produce quality social and technological innovations in socio-economic developments” said Prof. Thandwa Mthembu.



Delegates from North America, South America, India, European Union, Australia, West Africa, SADC region in attendance at the Global Citizenship and International Partnership Colloquium hosted by CUT in August 2013.

Graduation

Education is the premise of progress, CUT delivers



The three doctoral candidates are congratulated by their seniors on their graduation day: pictured are Dr Brenton Fredericks, Dr Augustinus Kolobe, Prof. Thandwa Mthembu, Dr Willien Fourie and Prof. David Ngidi, Dean of the Faculty of Humanities.

"People who are crazy enough to think they can change the face of higher education, as CUT is doing, are the ones that can actually make it happen." said Professor Thandwa Mthembu, Vice-Chancellor and Principal during his State-of-the-University Address 2013.

CUT has a curriculum consisting of 40 academic programmes, 13 masters and 21 doctoral programmes, and each year strives to improve the impact the institution has on social and technological innovation in the region. CUT's objective of making our university a first-rate institution, well-equipped to play a robust role in the socio-economic development of our region and the country by providing excellent education focused on science, technology, engineering and mathematics (STEM) are reaping the rewards.

On 6 September 2013, CUT graduates a total of 480 graduates, of which 22 are Master level and 3 new Doctorates in the fields Education and Language Practice.

A Doctorate is the highest academic qualification and is a revered qualification to achieve. All three candidates are CUT staff members, which will lead to a better educated staff component - knowledgeable in their fields, and in turn more stellar delivery of education to the central region. Currently, CUT has the most doctorates in academic staff of all the Universities of Technology in South Africa.

Dr Brenton Fredericks completed his Doctor Technologiae in Language Practice. His study entitled "The influence of communication factors on learner achievement in the Mangaung area, South Africa." made an invaluable contribution in identifying how poor communication practices negatively influence learner performance and vice versa. He was joined by Dr Willien Fourie who completed her Philosophiae Doctor: Educationis entitled "The development of a track and field management manual for local organising committees in South Africa". The doctoral study was undertaken after a lack of knowledge amongst track and field event organisers were identified.

The final doctoral candidate, Dr Augustinus Kolobe was conferred with his Philosophiae Doctor in Education. His study entitled “Teacher perceptual and conceptual idiosyncrasies with regard to the implementation of the integrated quality management system (IQMS) in the foundation phase” explored the probable dilemmas and hurdles confronting teachers.

CUT's Master graduates possess advanced knowledge in an assortment of fields including Electrical Engineering, Biomedical Technology, and Environmental Health. Their high order skills in analysis, critical evaluation, professional application, and ability to solve complex problems, will be an asset to society – as co-creators of research, and innovation. ■



Thakane Koelane received her MTech in Marketing, her study was entitled “Reflecting on Information Communication Technology (ICT) from a marketers and student perspective”, and her study supervisor was Prof. Deseré Koko, research professor in the Faculty of Management Sciences.

“CUT has the most doctorates in academic staff of all the Universities of Technology in South Africa.”



An astounding six MTech's were awarded in the learning programme Biomedical Technology to (from left) Michelle Wiese, Geta de Wet, Mari van Wyk; Moira Hattingh, Louisa Moshoeshoe, and Eltony Mugomeri who received the degree Cum Laude. The study fields included HIV, milk products, immunological response, iron and mineral deficiencies, and immune stimulation.



Rudolph van Nieuwenhuizen received his MTech in Electrical Engineering; his study was entitled “Development of an automated robot vision component handling system.” He was joined by his study supervisor, Mr P Veldtsman, and co-supervisor Prof. Herman Vermaak, acting Dean of the Faculty of Engineering and Information Technology.



New graduates celebrated their success! On Facebook students were asked what they plan to do with their hard earned qualification, one respondent said “earn more and create a better future for myself and others surrounding me”.

Reconnecting with Alumni

Sometimes, life is busy. You lose touch with family, friends and old colleagues, but once you take a moment and reconnect, it like no time has passed. CUT has since August embarked on numerous engagement sessions in order to reconnect with its graduates. These engagements served as an important platform to revive, to build, to advance and strengthen the establishment of a dynamic alumni programme for CUT without which no university that is worth of its name can do. The graduates included graduates of the former Vista University, Welkom Campus who were incorporated into CUT which was then called Technikon Free State.

In August, the first alumni function was held in Gauteng Province, where a number of CUT graduates attended. Following the successful alumni function in Gauteng, the second visit by CUT delegation was in Northern Cape, followed by North West in November 2013. Eastern Cape and Limpopo Provinces will be visited in the near future.

The university believes that a series of engagement of this nature will help CUT to create conducive environment for the alumni association to operate smoothly at CUT and to provide valuable feedback to the university on how to serve the alumni and what kind of information they wish to receive from their university.

What is key to the successful alumni programme is the issue of alumni database, which for the past six months, a team of dedicated call centre agents was trained and worked around the clock to engage with the graduates. To date, over 17 000 alumni have been contacted.

“We expect you our alumni to help us to constantly improve our course offerings, to scout and recruit the best students for the university. Most importantly among other things, we believe that you will contribute and provide support and resources towards the advancement of the university in terms of placement of our graduates, mentorship and development of our students, said Dr Nothemba Mrwetyana, CUT Registrar at the alumni function held in Klerksdorp, North West.

Surely, this initiative is a long term investment for both the university and its alumni and will continue to bear fruits in time.

If you are part of CUT's (including Vista University Campus in Welkom, and Technikon Free State) Alumni and would like to get in touch, you can make you use of the online form at www.cut.ac.za/the-alumni ■



Prof. Thandwa Mthembu addressing the Gauteng Alumni at Moyo Zoo Lake.



The newly reconnected Kimberly Alumni Chapter.

CUT students to represent SA at Cross Country Championship 2014



Thabang Masihleho and Bongani Mokoloba – CUT Welkom and Bloemfontein Campuses.

CUT hosted the 2013 University Sport South Africa (USSA) Cross Country Championships on 27 and 28 September 2013. This prestigious tournament was hosted for the 43rd time in 2013 and for the first time ever by CUT's Welkom Campus.

The tournament comprised of two main race divisions; Senior Men 10km marathon, as well as Senior Ladies 8km marathon. The two main contests were followed by the 4km Senior Men and Ladies marathon respectively. Out of 20 institutions of higher education who attended the event, 18 participated in the USSA Cross Country Championships, as well as the Road Relay Race respectively.

About 283 students from various universities across South Africa participated in the events wherein CUT managed to scoop the bronze medal in the Team Prize category. Thabang Masihleho from Welkom Campus was chosen to form part of the squad that will be representing the USSA Cross Country Athletics at the World Student Cross Country Championships due to take place next year March in Uganda.

The event was honoured to host national athletes from the likes of London Olympian; Steven Mokoka (Tshwane University of Technology), the Moscow World Championships 5000m finalist; Elroy Gallant (University of North West), Noeleen Conrad (University of Johannesburg), as well as Gladwin Mzazi (World Moscow Students half Marathon Champion). ■



The race starts!



Ladies race

CUT students join the *South African Navy*

Work-Integrated Learning (WIL) has taken four Electrical Engineering (Heavy Current) students on an unexpected career path. They joined the South African Navy January 2012 and basic training took 3 months at the largest Navy training unit, SAS Saldanha Bay Lagoon.

"Our students did so well that they were selected to continue training and do the Officers course" said Mr André Pawson, Lecturer in Electrical Engineering at CUT.

Midshipman SP Sehloho, Midshipman TJ Moloi, Midshipman BM Mjezu, and Midshipman SD Mayekiso completed the dynamic Officers training in 9 months at Naval College in Gordons Bay.

"We are currently stationed at SAS Wingfield, completing our practical module - P1 in Heavy Current at Armcore Dockyard" said Midshipman Moloi, "for the moment we are still land based, until we complete our National Diploma in Electrical Engineering (Heavy Current), after which we will be deployed onto warships, strike crafts, or submarines. This will be the end of our time together, but we look forward to the new experiences".

The group needs to complete their current practical, P1, and also P2, for their degrees to be conferred. Upon completion, the Midshipman will be ranked either Ensign or Sublieutenant, and they will be deployed as Naval Technical Officer (NTO) on board one of the before mentioned Navy crafts. ■



The four Electrical Engineering students who are in the SA Navy, training and completing their National Diploma at CUT before they are deployed onto warships, strike crafts, or submarines. From left: Midshipman SD Mayekiso, Midshipman BM Mjezu, Midshipman SP Sehloho, and Midshipman TJ Moloi proudly saluting campus in front of the BHP Billiton Building, CUT's Engineering hub.

CUT students nationally recognised for Entrepreneurial Action

CUT students were part of the ENACTUS South Africa team that traveled to the world cup competition, held in Mexico, Cancun 26 September to 4 October 2013. The South African team reached the semi-finals. "Our engagement with other students taught us how to respond to project matters, how to establish sustainable projects that will have a huge impact in our communities" said one ENACTUS team representative, Mixo Hlungwani. Delegates from companies such as Coca-Cola, Microsoft, Harmony and Unilever were present at the world cup, and CUT's entrepreneurial activists took the opportunity to engage with these heavy weights - ensuring support for the group's future endeavours!

Initially, the Entrepreneurial Action by US (ENACTUS) CUT - a group of students that used entrepreneurial initiatives to serve their community, walked away with five trophies at the annual ENACTUS national competition for students that took place in Sandton, Johannesburg on 13 July 2013.



Ariba Ariba! The ENACTUS team arrived in Mexico on 29 September 2013. Mexico is one of the largest economies in the world; it is the tenth largest oil producer, and the largest silver producer on earth!



It was not "all work and no play" for the group, they have become fast friends.

ENACTUS is an international organisation that has established the largest global business and higher education network in the world. A community of student, academic and business leaders committed to using the power of entrepreneurial action to transform lives and shape a better more sustainable world, visit www.enactus.org.

"The ENACTUS national competition encourages students to transform lives and enable progress through entrepreneurial action for a better, more sustainable world," said Prof. Crispin Chipunza, ENACTUS CUT project leader and associate professor in Human Resources Management at CUT.

From 27 competing institutions, ENACTUS CUT received fifth overall place and placed second in the Local Economic Development category sponsored by Harmony Gold.

ENACTUS CUT entered two projects, namely the Lefa La Rona Project and the Hare Kopaneng Project.



Students show school learners the ropes.



Nhlanganiso Sibanda, and Maraka Lefera, BTech students in Human Resources Management with an award won by Entrepreneurial Action by ENACTUS CUT.



A group of students who used entrepreneurial initiatives to serve their community.

The Hare Kopaneng project - addressed the need for business setup and management skills; students assisted with infrastructure setup.



“Students volunteered a 100 hours of their time to combat unemployment, scarce resources, lack of sanitation and malnutrition in Bloemfontein and Welkom regions.”

The Lefa La Rona project assisted a primary school in Chris Hani, Bloemfontein to combat their high water bill, high unemployment in the community and malnutrition among Grade R learners.

With the help of ENACTUS CUT, the school started a garden, which resulted in malnutrition dropping from 10% to 5% under Grade R learners. Four community members, who now play a pivotal role in maintaining the vegetable garden and irrigation, were also trained in Environmental Awareness by CUT's Faculty of Health and Environmental Sciences, to assist with job creation in the community and cutting down on water usage.

The second project, Hare Kopaneng, addressed the need for business setup and management skills in an area where there was a lack of sanitation, operation of unregistered businesses, no infrastructure for business transactions and business owners lacking financial and business management knowledge.

Through the Hare Kopaneng project, businesses in the area saw close to a twofold increase in customers, unemployment has been reduced, there has been an improvement in family income and the municipality provided dustbins and refuse bags, which improved health and environmental conditions the area.

“The ENACTUS CUT students have also committed to a second phase to ensure the sustainability of the projects,” says Prof. Chipunza. “They are not moving through communities and leaving them to sustain the improvements themselves, our students will go back and further develop these projects to the point where they are self-sustainable.” ENACTUS CUT's Lefa La Rona and Hare Kopaneng projects also received recognition in the Capacity Building category, the Sustainability category and the Business Solutions for Community Development category, during the ENACTUS national competition. ■

The Sustainable Building 13 conference provided sub-Saharan Africa a platform for researchers and practitioners from the region to engage on the issues that affect the built environment. "Built Environment is the world's largest user of energy" said Mr Stephen Eromobor, lecturer in Built Environment at CUT, who spoke on the role of respective role players and the impact they can make in reforming and improving processes that would better sustainability.

The Sustainable Building (SB 13): Southern Africa Conference was hosted in the Cape Town International Convention Center from 15 to 16 October 2013. The CTICC was environmentally aware from day one, and worked hard to minimize their impact on the environment, even during construction.

The conference served as a continuation of the Helsinki Conference of 2012 in terms of broad objectives of addressing the issues that face the built environment today and consolidating inputs from speakers and delegates in a wide spectrum of topics such as climate change, regenerative design, development and

building urban resilience for the 2014 Barcelona Conference.

"It's going to get much worse before it gets better", this was a comment made by Prof. Chrisna du Plessis at the SB13 hosted by CUT and partners. Prof. du Plessis, associate professor in the department of construction economics at the University of Pretoria presented her paper on "my role in a regenerative world" in which she proclaimed herself as a regenerative practitioner. She identified areas of focus that required solutions to propel the built environment forward in terms of advancement in construction practices. "Sustainability is the baseline - we need more, we need regenerating which means improving and bettering not only going back to where it was," she said.

Also on the agenda was the Sustainable Development Goals (SDG), which is on the Millennium Development Goals (MDG) committing the world to end extreme poverty by 2030. "In order to reach the goals set, target driven technology solutions are necessary," said Prof. Alfred Ngowi, Dean of the Faculty of Engineering and



After two days of candid discussion and serious engagement, the SB13 Conference delegates show their excitement for sustainability!

Information Technology who shared a common view held by conference delegates and sustainable building sector.

The overall message was that being environmentally responsible and pushing forward with green building could not be the responsibility of a single group, but rather all levels of society; government, business, industry and individuals.

These and many other topics such as urban migration, retrofitting and re-use, creating a green economy, fostering green jobs, eco-effective technologies and infrastructure were the issues and challenges of this conference which enabled participants to share their views through presentations, panel discussions and debates.

Recommendations that will be put forward from the conference for the 2014 Barcelona engagement are the water scarce resource matter, modeling for green building, issues of education in construction and energy resources. ■



The serious discussions at SB13 received interest from the media.



Three keynote speakers and local organising committee members of the SB13 showing their commitment to building a sustainable future; Prof. Alfred Ngowi, Prof. Chrisna du Plessis, and Dr Rodney Milford, Programme Manager: Construction Industry Performance at the Construction Industry Development Board (cidb).



Simulated medical scenarios train CUT students for real world!

The newest addition of technological gains in Faculty of Health and Environmental Sciences is SimMan 3G; a wireless, computer-driven adult human patient simulator which breaths, talks, moans, cries, vomits, sweats, urinates, bleeds, turns blue and fits – simulating real-life patient actions. SimMan not only has a heart rate sound generator, but also breathing and bowel sounds.

Faculty of Health and Environmental Sciences received training in the Emergency Medical Care (EMC) simulation laboratory on 25 July 2013. The EMC laboratory is located in the new wing of the Dirk Coetzee Building. CUT staff are now able to prepare, configure and maintain the SimMan 3G medical scenario simulator after the training by the technical experts from Survival Technology, Gauteng.

“The state-of-the-art simulation laboratory provides students studying to become our next generation health care professionals with realistic opportunities and experiences of patient care, allowing for

interactions in a safe environment without putting real patients at risk is a key factor in medical simulation” said Prof. Hesta Friedrich-Nel, Head of the Department.

She said that numerous simulated patient events have already been conducted in the EMC simulation laboratory exposing the EMC students to a variety of medical and trauma emergencies in various realistic settings such as a residence, a shed, a construction site, an airport, an office, an alley - all set up in the simulation laboratory.

This training enabled human patient simulators to provide realistic anatomical and physiological features and responses, as well as an opportunity for students to develop competence in clinical procedures, patient interaction, professional interaction, etc.

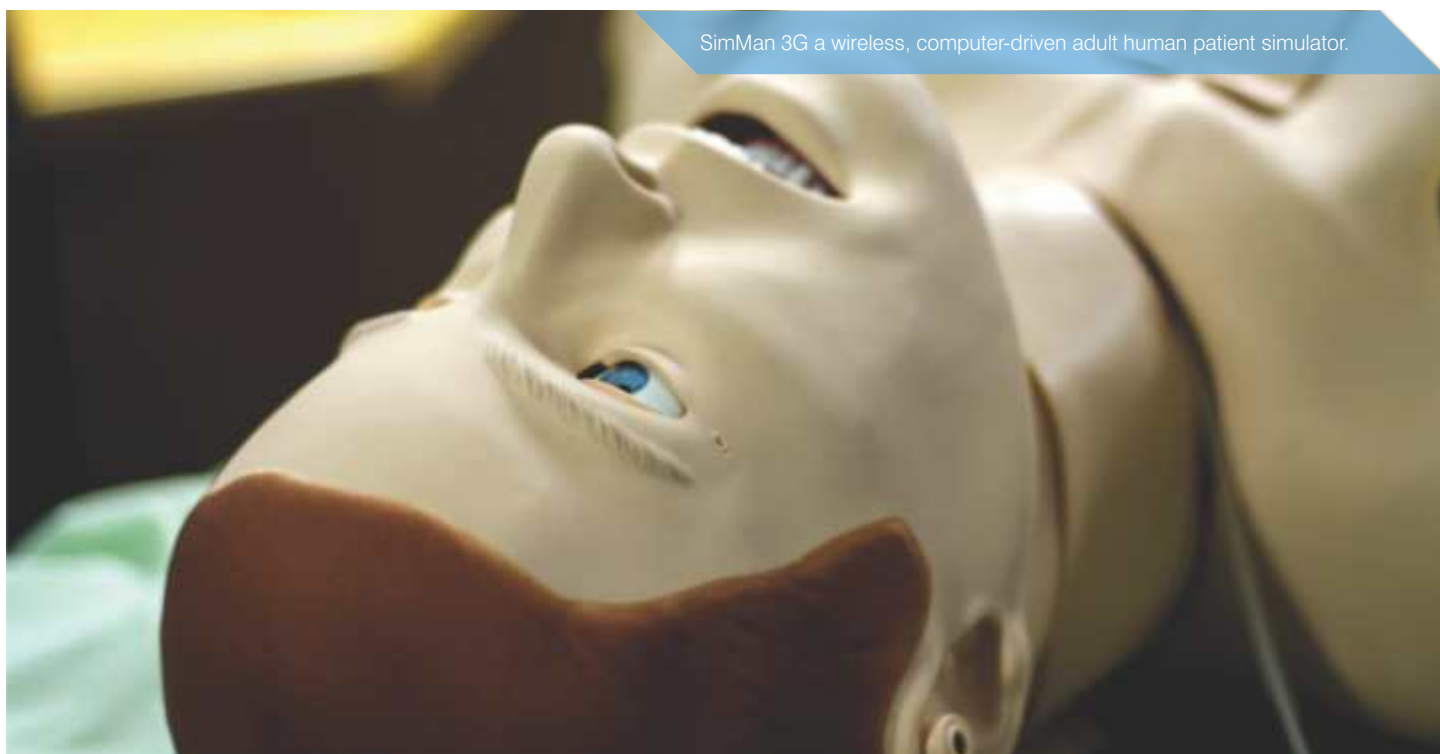
The Department of Clinical Sciences focuses on the programmes Emergency Medical Care (EMC) and Radiography which require students to have exemplary training on patient care. ■



During the training session, CUT staff and Survival Technology team members - Ms Sheila Addison, Survival Technology, Ms Mareli Mitrovich, CUT, Ms Eulandi Ntimane, CUT, Ms Refilwe Nhaladi, CUT, Mr Allan Pollard, Survival Technology, Mr Brian Ngobeni, CUT, Mr Rod Campbell, CUT, Ms Rika Jammie, CUT, and Mr Mark Sierra, Survival Technology.



Students in the new EMC laboratory, taking part in a practical session.



SimMan 3G a wireless, computer-driven adult human patient simulator.

A CUT alumnus honoured

CUT joined scores of soccer loving people across Mzansi in expressing their appreciation and gratitude to Dr Molemela's long standing commitment towards the development of football in this country, and his passion and energy for the sport. The university recently hosted the launch of Dr Petrus Rantlai Molemela's book titled: *I have Seen It All*.

"We are indeed proud of Dr Molemela's achievements as a business person, whose entrepreneurial drive has been an inspiration to all the soccer institutions, including the defunct NPSL, NSL and the current PSL, and everyone who has worked with him over the years," said Prof. Thandwa Mthembu at the book launch.

It is by no means an accident that this event took place on CUT's campus. The university is, in fact, Dr Molemela's intellectual home, as he is a CUT alumnus. Dr Molemela has the many years of association with the university dating back to 2006, when he was awarded his Doctoral Degree in Management for his contribution towards sports development in the Central Region and South Africa.

"Dr Molemela's association with CUT is very dear to us, as we continue to draw so much inspiration and lessons from his life as an intellectual, an entrepreneur, a fearless sports administrator, a soccer scout, a political activist and community leader. We look forward to many more fruitful years of working with you," concluded Prof. Mthembu.

"To Dr Molemela our deepest appreciation goes to you for having been long on the road to share with us this arduous journey as a servant leader, an intellectual, an entrepreneur, a fearless sport administrator, a soccer scout, a political activist and community leader we ever had in this country," said Mr Charley Pietersen who authored the autobiography.

In attendance were Mr Marks Maponyane from SuperSport Channel, community leaders from Bloemfontein region including Rev Mahlatsi and the family members who thanked the soccer fraternity for their long years of support. ■



Dr Petrus Rantlai Molemela at the launch of his autobiography *"I have Seen It All"*.

CUT's Centre for Rapid Prototyping and Manufacturing (CRPM) was praised for hosting the 14th annual conference in innovation, themed Additive Manufacturing (AM) – Improving Your World Layer-by-Layer on 29 October to 1 November 2013, in the gorgeous Eastern Free State, one of South Africa's cultural gems.

Delegates from across the country representing organisations such as TIA, the Department of Trade and Industry (dti), the Department of Science and Technology (DST), Vaal University of Technology (VUT), Sasol, Aerosud, CSIR, 3D Solids AMT, Titanium Centre of Competence (TiCoC) to name but a few, as well as international participants from France, UK, USA, Belgium, Australia, Norway, Germany, Egypt, Switzerland and Poland enjoyed the four day conference at the breathtaking SANParks Golden Gate Hotel situated a stone throw away from Clarens in the rolling foothills of the Maluti Mountains.

The conference presented opportunities for participants from industry, research and development institutions, academia and government to meet with world experts and explore new themes and ideas in a forum that was as inspirational as it was forward thinking.

Speakers included internationally recognised giants such as twins Prof. Zbigniew Keszy, University of Technology and Humanities Radom in Poland, who delivered a paper entitled "Fabrication problems of hydraulic clutch with electro-rheological working fluid"; and Prof. Andrzej Keszy, also from the University of Technology and Humanities Radom in Poland, who titled his paper "Concept of expert system supporting Additive Manufacturing"; and in the middle between the brothers are Prof. Dimitri Dimitrov from the University of Stellenbosch delivered a paper entitled "Developing Capability Profile of Laser Cusing".



Multilayered Additive Manufacturing Conference produces great success for CUT!

Additive Manufacturing (AM), better known as '3D Printing' is revolutionising the way organisations develop products, making it possible to print objects out of almost any material including titanium, sand, nylon, glass and even chocolate.

One of the keynote speakers, Dr Terry Wohlers from Wohlers Associates in the USA, congratulated CUT on a very successful RAPDASA event. Dr Wohlers, is a CUT alumnus, as he holds an honorary doctorate in Mechanical Engineering at CUT. In 2007, he was selected by more than 1 000 industry professionals from around the world as the most influential person in rapid product development and additive manufacturing.

Dr John Barnes from CSIRO in Australia discussed the Australian Additive Manufacturing Initiative.



“The conference was one of the best ever. Many of the presentations and content were excellent. As usual, CUT employees paid attention to all details and made everyone feel welcome” added Dr Wohlers.

The CRPM hosted the conference because it forms an integral part of the ideology and goals for this centre,” said Prof. Henk de Jager, Deputy Vice-Chancellor: Academic, “The conference offers an opportunity for CRPM to forge new relationships, learn new techniques and highlight our country's abilities within the AM arena. It also offered a chance for the South African Additive Manufacturing community to showcase the cutting-edge work that is being carried out and designed in the country.

Professor Doctor Jules Poukens, a cranio-maxillofacial surgeon at the Medical Centre Sittard/Heerlen in the Netherlands was amongst the keynote speakers. He dedicated a large part of his presentation to medical applications and believed that innovation and advanced technology could bring great benefits to people. “This conference is providing me with a chance to really examine medical applications within this arena alongside other experts who share my passion for the field” he added.

At the forefront of research and innovation, CUT was one of three universities to beat 406 applications for a research chair at the South African Research Chairs Initiative (SARCHI), and was awarded funding for the next five years in the field of Medical Product Development through Additive Manufacturing. ■



At the RAPDASA Conference held in Clarens, Free State Province, from left: Dr Terry Wohlers, Principal Consultant and President Wohlers Associates, Colorado, USA; Prof. Laetus Lategan, CUT Dean: Research and Innovation; Mr Garth Williams, Director: Advanced Manufacturing Technologies in the Department of Science and Technology; Mr Montwedi Seane, CUT Trust CEO; Prof. Henk de Jager, CUT Deputy Vice-Chancellor: Academic; Dr Kevin Slattery, senior principal engineer at Boeing Phantom Works and Mr Gerrie Booysen, CRPM Director.



No additive manufacturing conference would be complete without some example products as demonstrated by Dr Christian Desagulier from ASTRUM in France.



Delegates could enjoy the mountain fresh air during tea breaks.



Staff member explain how the multi-million rand 3D printer works to guest at the launch of the new CRPM facilities in 2012.

The artisan skill of **BRONZE** casting

by Leandra Jordaan

Artisans are people skilled in a particular applied art, such as bookbinder, coppersmith, glassworker, stonemason, upholsterer, the list goes on. I for one, have always found this now almost scarce skill of working with your hands to create, enviable. (I suspect my complete lack thereof is causing this green eyed monster.)

At CUT, we have numerous learning programmes teaching students theory and practical application. One such programme is now the newly reworked Design and Studio Art, which formally consisted of Fine Art, Fashion, Graphic Design, Photography, as well as Jewellery Design and Manufacturing. These programmes have combined to become a three year full-time programme - one of the only courses offered for all art forms in South Africa (starting 2014), after which a student can continue to BTech level specializing in the field of their choice.

The institution offers as part of this newly married programmes the scarce artisan skill of bronze casting; in fact CUT is the only university in South Africa that still offers bronze casting as part of the curriculum, and not only in theory, but in practical application – hence our students will graduate as bronze casters able to apply their skills in a foundry.

I was invited to observe bronze casting by CUT's Department of Design and Studio Art, and I grabbed the opportunity to see what exactly that entails as so few opportunities like this present themselves in life.

The technique taught is called lost-wax casting, and is considered an ancient practice dating back thousands of years (of course CUT has incorporated some new technologies such as an electronic furnace). Here is how the process works:

Making the artwork The lost-wax process starts by creating an original artwork model in wax - a material that retains softness, and therefore ideal for maneuvering into desired model. This process includes carving, modeling and moulding and can take a few weeks or months as special care should be taken to perfect the model.



The model in wax by student Marelize van der Merwe.

Gating A gating system is applied to the now sculpted artwork. This is a system of channels that the melted bronze will use to reach the casting cavity. The gating also allows the air and gas to escape from the casting. The system is made from wax components which are also lost during the de-waxing process.

Investing Investing is the process of coating and cloaking the exterior of the model and gating assembly with unruly materials to form a mould thick enough to withstand the thermal shock of the molten metal (the molten metal explains why the materials have to be unruly).



The sandpit with thick investing moulds ready to receive the bronze, from left: Ms Elsabé Dalton, James Shaw, and Marelize van der Merwe, third-year students.

Burn out The next step is de-waxing. I can only imagine that the artists usually find this hard as they have just spent weeks or months even creating the wax model, and now they have to melt it! The investment mould has, if done correctly taken on the outer design of the model (what you will see when finished), and so the wax is melted and removed. No wax should be left behind so this is a very important step in the process.

Foundry Melting the metal is next step. The metal for the casting is melted in a crucible pot made of clay and graphite or silica carbide. The melting point of bronze is 1100 degrees Celsius, at which point great care should be taken as the bronze will burn through human bone like a hot knife through butter. After the investment mould is heated up (as casting into a cold mould will make the metal splash or it might crack the mould) it is firmly embedded in a sand pit, and the molten metal is carefully but quickly poured into the mould.

De-vesting The castings are allowed to cool properly as the bronze will easily break when still hot. At such high temperatures, this takes 12 to 15 hours. Once the cast has cooled sufficiently, the investment mould is broken up by using a mallet and blunt chisel. There is a lot of destroying in the bronze casting business – to create artwork is not for the faint hearted, or weak of shoulders, this process can be very taxing on the human body.



Chasing All the tell-tale signs of the casting process are now removed. Repair work and surfacing commence so that it leaves the artist with their original model!



Patinating The final step is to clean the model, treat the surface with various chemical solutions to reach the desired colour, and finally to polish the new artwork.



Final Products! The bronze castings by Innocentia Gabudi, James Shaw, and Marelize van der Merwe were on display at CUT's annual Art Exhibition.

"An exhausting few weeks of work, but so exciting! I have to admit that I absolutely love this" said Fine Art Lecturer Ms Elsabé Dalton. "Teaching an artisan skill like this is a rare and wonderful thing." Ms Dalton adds that she will not be buying bronze next year as they lose too much product because of impurities, instead they will be making their own! Another skill that CUT's lucky students will add to their already impressive repertoire. ■

technological & social innovation ■ building intellectual capital

Adding *Value*

Research Excellence

Better grow a knowledge economy

CUT's Research and Development Unit, focuses on research skills development and creating an enabling research environment.

As such, a close relationship with the National Research Foundations (NRF) is cultivated and regular interactions take place; one such was recently undertaken with an on campus workshop to assist researcher to apply for NRF evaluation and rating.

"CUT has committed itself as an institution of higher education to improve the socio-economic development in the central region, and one way we intend to do that is through knowledge transfer and innovation" said Prof. Laetus Lategan, Dean of Research and Innovation.

The NRF key objectives include the promotion and support of research, to facilitate the creation of knowledge, innovation, and development in all fields. "The objective of the workshop was to have an interactive session with academic staff to improve their understanding of applying for rating, and the evaluation system used - which in turn will contribute to CUT's overall standing in research and innovation" stated Prof. Lategan.

Prof. Laetus Lategan, Dean of Research and Innovation and NRF Rated Researcher; Prof. Valerie Corfield, Stellenbosch University was the facilitator of the workshop; Prof. Karabo Shale, Research Manager and NRF Rated Researcher at CUT; and Ms Joyce Olivier, NRF Director: Reviews and Evaluation.



He remarked that the interactive sessions are pivotal in the growth of CUT's research community, and are set to continue for the foreseeable future.

In 2013 the unit undertook a number of strategic off-campus engagements toward fulfillment of Vision 2020's committed research and innovation outputs. Ten Research and Development Programmes were approved. These programmes include: undergraduate and graduate, master's and doctoral education, post-doctoral fellowship, the next generation researcher's, emerging researcher's, mid-career researcher's, established career, black female researchers, and rated researcher's.

"Emphasis was placed on moving forward to "the next chapter" in research and innovation. The strategies are aimed at increasing research outputs." said Prof. Lategan. Following from these discussions a Research and Development Plan was drafted, and 19 strategies were approved. These strategies can be grouped into skills and potential development strategies, intellectual capacity building strategies, resources strategies, and supportive institutional structures and policies.

CUT looks forward to the next chapter of Research and Innovation at the institution! ■



Colleagues engage during various sessions taking place off-campus in 2013!



CUT Professor **advocates** **re-centering knowledge**

"A professorial inauguration happens after decades of hard work. This is the university's opportunity to showcase new professors to the community and give the candidate a platform to share their research" with these words, Prof. Henk de Jager opened the Professorial Inauguration of prof. Isaac Ntshoe on 23 October 2013.

Professor Isaac Ntshoe joined the Faculty of Humanities at CUT in July 2010 (the faculty's inaugural year) as a Research Professor in curriculum and pedagogy of vocational and professional fields. His fields of specialisation are education policy, planning, curriculum and sociology of knowledge in education in general, and higher education in particular. The foci of his research at CUT are knowledge differentiation and differentiation of purposes and specialisation in curricula and pedagogy of institutions in differentiated systems. He holds a Bachelors degree and a Higher Education Diploma from the University of South Africa, and a Bachelor of Education (Hons) from the University of the Witwatersrand. He received the British Council scholarship to read for the Institute of Education, University of London, UK, a master's degree (MA) in International and Comparative Education and subsequently earned a PhD from the University of the Witwatersrand, South Africa.

His inaugural address was entitled "Essaying purposes and specialisations of institutional types and division of labour in knowledge and skills production" made a clear case for context-independent knowledge as the basis for curricula design. "Graduates and students need in-depth knowledge of their respective sectoral professions that can only be provided in education institutions so that they are able to exhibit related competency and outcomes when they enter practice." said he.



He took issue with rigid specialisation, and advocated flexible specialisation that would enable graduates to function in emerging new markets, manufacturing, innovation, knowledge, skills, and changing nature of employment. This contrasts producing graduates with context-bound knowledge and skills deemed appropriate for specific careers, specific employment for specific environments.

Professor Ntshoe finally argued that students graduates need to be able to go anywhere in the world and function with confidence in their skills, and knowledge and this they can do provided they acquire universal knowledge and skills comprising principles and concepts and not just memorised facts and content which could pigeon hole them later in life.

CUT will be implementing nine new programmes in 2014 and 2015 through the Strategic Transformation of Educational Programmes and Structures (STEPS), a process started in 2010 as part of the institutions Vision 2020. STEPS aim to provide students with studies that will equip them with knowledge, education and practical understanding. ■



Professors congratulate and welcome Prof. Isaac as a full member within the intellectual community. From left: Profs. Henk de Jager, Deputy Vice-Chancellor: Academic; Hesta Friedrich-Nel, Faculty of Health and Environmental Sciences, Radiography professor and Programme Director for the Inauguration; Isaac Ntshoe, and David Ngidi, Dean of the Faculty of Humanities.



Management Sciences

Prof. Johan Mouton, guest speaker from Stellenbosch University, Prof. Crispin Chipunza, Associate Professor in Human Resources Management, Prof. Sheila Matoti, Associate Professor in Teacher Education, Prof. Albert Strydom, Dean: Management Sciences, and Prof. Laetus Lategan, Dean: Research and Innovation.

Academic Research Seminars in the pursuit of excellence

Space Science, Sustainable Environment, Activity-based Instructional approaches, Research productivity!

Research is defined as the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions by the Oxford Dictionary. It goes without saying that research is the cornerstone of any university. Whether you are traditional, or applied, or even online – research always has and always will be of major importance.

During October, CUT's four faculties each host an annual seminar showcasing their research fields. Here follows a brief overview of each of the events highlighting the importance of research.

Engineering and Information Technology

This was the faculty's 16th annual research seminar, and the day brought together the various engineering fields Civil, Electrical, Built Environment, and Mechanical Engineering, as well as Information Technology.

Students on postgraduate level and senior staff members as well as other universities (Tshwane University of Technology, University of Pretoria) were presenters, and a total of 180 delegates attended the seminar.

The keynote speaker was Dr Gert Lamprecht from South Africa National Space Agency (SANSA). He introduced all present to South Africa's Space Agency and Space Science.

Health and Environmental Sciences

The research seminars has gathered momentum over the years and no longer consist of CUT presentations only, the faculty's research day featured 20 presentations by faculty staff and postgraduate students, poster presentations by students and exhibitions by prominent suppliers of consumables and equipment for Life Sciences research.

Book prizes, gift vouchers and cash were sponsored by IMP, Labotec, Whitehead Scientific and the Research and Innovation Unit. Other sponsors included Separations, Vacutec and Zeiss. The Dean's Trophy for the best research paper, based on impact factor, was awarded to Prof. Annabel Fossey.

Ms Mariette Liefferink, the CEO of the non-profit organisation Federation for a Sustainable Environment, widely recognised as the most prominent of the environmental activist stakeholders in the mining industry, was the keynote speaker. Ms Liefferink has distinguished herself from most activists and CEO's through her unique style for climbing mine dumps, hiking through informal settlements, skirting radioactive lakes and standing in the picketing frontline. Her goal: protecting and preserving our environment. Ms Liefferink has been acknowledged for her passionate and selfless service with the SAB Environmentalist of the Year Award in 2012 and 2013. She has also been awarded the Enviropaedia Eco-Warrior Award in 2011, the North West University's Chancellor's Medal in 2009 and National Association of Conservancies of South Africa award in 2008.

Internationally, she has been nominated for the Goldman Prize for excellence in protecting the environment in 2011 and she was an invited VIP at former US vice president Al Gore's Live Earth Concert in 2007. In the past year she has been acknowledged as one of the 100 most influential people in Africa's Mining Industry. In her keynote address, she shared current knowledge and concerns on the risks and hazards of historical and current gold mining activities on eco- and human health.

Humanities

Humanities, CUT's newest faculty (established in 2010) also host the annual event. A number of presentations were delivered and the following two are considered highlights:

Mr Kleynhans' paper focused on the issue of sustainable development arguing that this is a concept which is generally misunderstood yet it implicates all the different spheres of life. The message was clear, sustainable development was everybody's business and we needed to make a mind shift in order to ensure the survival of mankind.



Engineering & Information Technology

From left: Prof. Herman Vermaak, Acting Dean of the Faculty of Engineering and Information Technology; Dr Gert Lamprecht, keynote speaker from SANSA; Dr Mohamed Mostafa, Research Manager in the faculty.

Lastly, Dr Kolobe - one of CUT's newest doctoral graduates - reflected on the joys and tribulations through the journey to 'doctorateness' and beyond. This paper was particularly relevant given its consistency with our objective of nurturing new researchers (masters' and doctoral students), and enhancing the research capacity of our established researchers – hence beyond 'doctorateness'.

This year's best prize went to Dr Mmushetji Rankhumise, lecturer in education and professional studies, whose presentation was entitled “The effect of activity-based instructional approaches in ameliorating students' alternative conceptions about electric circuits”.

Management Sciences

The research seminar theme was, “Contemporary Research to Harness Future Opportunities”, which made the purpose of the seminar twofold: promote erudite, pragmatic, and contemporaneous research among academic staff and postgraduate students in the Faculty of Management Sciences, and secondly, allow academic staff and postgraduate students the opportunity to showcase their completed research to their peers and the academic community.

The keynote speaker was Professor Johan Mouton, a well-known academic and researcher from Stellenbosch University. His presentation entitled. “In pursuit of excellence in research” was an eye opener to the faculty and university at large in terms of its focus on the meaning of excellence and quality in research, as well as institutional research productivity, and international visibility. ■



Engineering & Information Technology

Delegates at the conference, Mr R Sonopo, Eskom; Mr N Stansfield, best Junior presenter of the day, and Mr P Manditereza, Lecturer in the Electrical Engineering Department.



Humanities

Dr M Mhlolo, Research Manager in the faculty; Mr L Kalobo, a prize winner who is also a PhD candidate, his paper was on statistics in the Further Education and Training (FET).



Health & Environmental Sciences

Dr Olga de Smidt, Researcher and committee chairperson; with the invited guest speaker Ms Mariette Lieferrink, 2013 SAB Environmentalist of the year.

In a globalised world CUT becomes a navigator!

A globalised world exposes us all to culture, traditions, special characteristics, different environments not to mention food! CUT hosted a number of exchange students from across the world and academics. Two countries that have been part of the institutions international engagements for many years are Germany and America.

Engaging with Germany

Two academic staff members, Dr Basie Olivier and Adv. Hein Lambrech from the Department of Government Management have participated in the International Week hosted by Hochschule Harz in Germany to share their intercultural experiences, intellectual discourse and collaborative research with students and staff members in Germany.

They presented guest lectures as part of the internationalisation strategy to expose faculty staff and students to the globalised world and understand its implications for establishing strategic partnerships and enterprises in areas such as research, teaching and learning.

Since 2012 there has been a rigorous exchange programme between the two institutions which allowed staff to share their perspectives on research, teaching and learning. Prof. Wolfgang Beck led a workshop entitled "Local Self-government in Germany Legal Framework and latest challenges" at CUT for staff.

CUT and Hochschule Harz in Halberstadt, Germany, signed a Memorandum of Understanding in 2012 to create opportunities for students and academic staff in areas of research collaborations and exchange programmes.



Prof. Albert Strydom, Dean of the Faculty of Management Sciences, Prof. Wolfgang Beck, and Prof. Tryna van Niekerk (Head of the Department Government Management).



Prof. Hesta Friedrich-Nel, Prof. Joyce MacKinnon, and Dr Saretha Brüssow, Centre for Teaching and Learning at the University of the Free State.

"This international collaboration has many avenues to explore, and it is envisaged to have a few publications as a result of the memorandum of agreement between the two universities." said Prof. Tryna van Niekerk, Head of the Department Government Management.

America and their contagious "can do" attitudes

Indianapolis, known for its motor speedway worldwide is also the home of one of CUT's longest standing partnered university's. Indiana University-Purdue University Indianapolis (IUPUI) has over 30 000 students in more than 200 programmes.

Professor Joyce MacKinnon, a CUT visiting professor was on campus during October 2013 to finalise the manuscript co-authored by the two institutions called 'Formative postgraduate assessment: a USA-South Africa case study perspective'. The first article was also readied for proof reading during the visit.

"If nothing else, Prof. MacKinnon's "can do" attitude has seen the completion of not one but two manuscripts during the visit!" said Prof. Hesta Friedrich-Nel, associate professor in Radiography. The second manuscript has been titled "Expectations in postgraduate supervision: A case study on the perspective of the supervisor and the student". Both the research works stems from the 2011 Fulbright Scholarship Prof. Friedrich-Nel completed at IUPUI.

Prof. MacKinnon's years of international partnership experience was traversed by the institution during her visit. She hosted an interactive discussion on internationalisation. ■



Congratulating Ms Jenny Aucamp, is
Dr Daryl Balia, and Prof. Herman Vermaak.

CUT Engineering walks away with prestigious award for the *2nd* year!

"This is confirmation of the quality of graduates we as a faculty deliver" said Prof. Herman Vermaak, Acting Dean of the Faculty of Engineering and Information Technology.

The Abe Bailey Travel Bursary is based on outstanding academic performance and exceptional leadership qualities, and this year Jenny Aucamp has become the fourth member of this exclusive CUT ambassadorial group. In 2012 Mr Mphikeleli Jele was awarded the prestigious Abe Bailey Travel Bursary.

The objective of the Travel Bursary is to broaden the views of young South Africans, through travel, engagement, and each member will be expected to do a presentation at the Goodenough College where they will be hosted for close to a month. The all-expenses paid trip takes place at the end of each year, with a group of selected South African University representatives traveling to the United Kingdom.

Prof. Henk de Jager, Deputy Vice-Chancellor: Academic said, "It is a great honour for CUT to have one of our students win the ABE Bailey Travel Bursary. This bursary, aims to affect greater understanding and co-operation among those with various language and cultural backgrounds, to promote South African unity and that is perfectly aligned with the values and vision of CUT. Congratulations to Ms Aucamp, master's student in the Department of Information Technology.

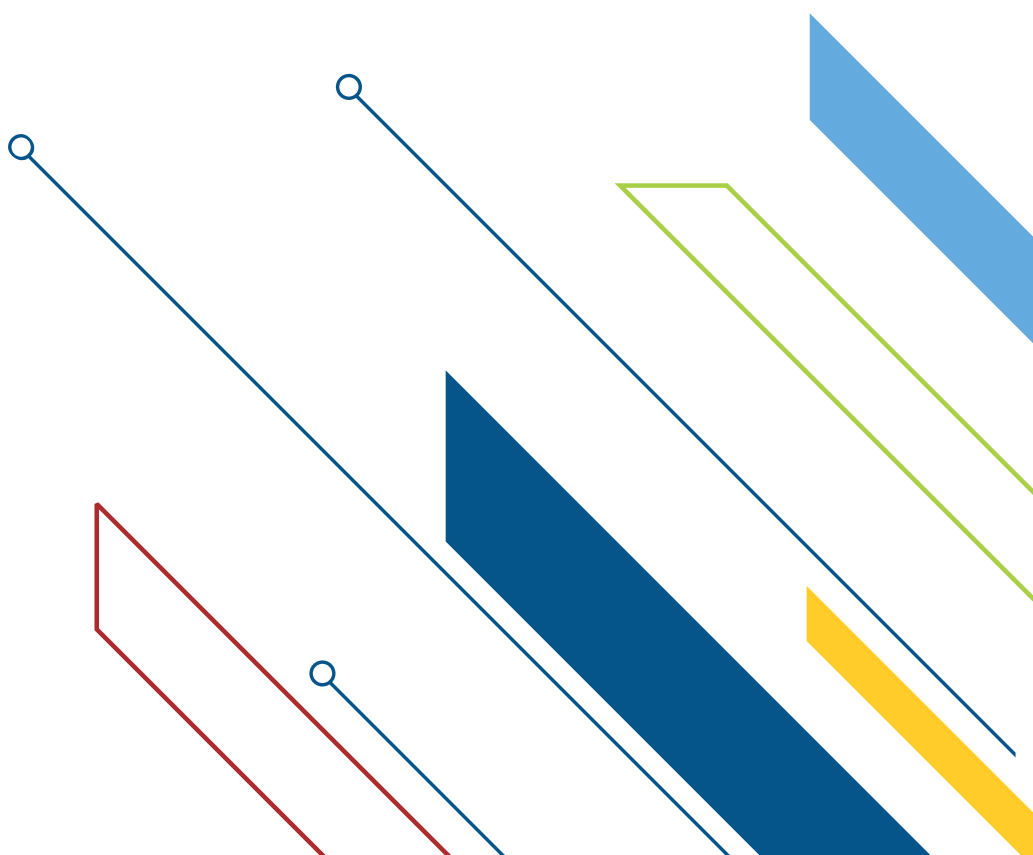
According to the selection panel, chaired by Dr Daryl Balia, Director of Academic Planning Unit, Jenny showed exceptional leadership qualities and a strong service ethic. May you fly the CUT flag high!"

The group of bursars will be given the opportunity to equip themselves with exceptional leadership qualities and strong service ethic. A greater understanding and co-operation among those with various language and cultural backgrounds, and to foster enterprise, commitment and effective participation in a common future are just some of the items on the agenda.

The Abe Bailey Travel Bursary has been in existence since 1951, and so far CUT has been represented three times, Ms Aucamp is the fourth.

This is not a first academic achievement for Ms Aucamp, in 2012 she was awarded the prestigious Vice-Chancellor's Award for best Academic Performance at BTech level, showing, yet again, the calibre of students at CUT! ■

GRATIA





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