

# eish!



NORTH-WEST UNIVERSITY  
YUNIBESITHI YA BOKONE-BOPHIRIMA  
NOORDWES-UNIVERSITEIT

Staff newsletter for the NWU

VOLUME 6 No 3 May 2012

Meet this  
**dynamic  
dean**

NWU supports  
**press freedom**

Accountants  
**balance the books  
beautifully**

New  
**research  
chairs**



# INDEX

- 2 Website project kicks off
- 3 Message from the Vice-Chancellor  
Eish! our graduates are doing well
- 4 Sponsorship celebrates excellent journalism
- 6 Biggest brains strut their stuff
- 7 No time to sit back in new chairs  
Coal's dirty name is undeserved
- 8 iPad thief caught using technology
- 9 NWU accountants balance the books
- 10 She has local roots and a global view
- 12 Focus on... Employers of NWU students
- 13 Campus News: Mafikeng
- 14 Campus News: Potchefstroom
- 15 Campus News: Vaal Triangle
- 16 These experts know their subjects
- 17 Walking the extra mile
- 18 And the winners are ...  
Win! Win! Win!
- 19 Know and celebrate your rights



**Front page:** Turn to p10 to read more about the small and major joys in the life of Prof Elsabé Loots, the dean of the Faculty of Economic and Management Sciences on the Potchefstroom Campus.

**Editorial team:** Nelia Engelbrecht and Marelize Santana, Louis Jacobs, Pheny Mokgothu, Kiewiet Scheppel, Annette Willemse, Elmarie Cronje. **Language editing:** Clairwyn van der Merwe. **Design and layout:** Graphikos. **Printing:** Platinum Press. **Photography:** Maclez Studios, Nelia Engelbrecht, Pheny Mokgothu, Kiewiet Scheppel, Annette Willemse. **Cartoon:** Mynderd Vosloo. **For further enquiries/correspondence:** Nelia Engelbrecht - Tel (018) 299 4937 or Internal box 260. To receive the Eish! in electronic format, kindly send an email to marelize.santana@nwu.ac.za. Eish! is produced and published in English, Setswana and Afrikaans by the Corporate Affairs and Relations department in the Institutional Office of the NWU. Should you need extra copies, please contact Nelia Engelbrecht.

## Website project kicks off

The NWU website's redesign and redevelopment process started on 1 April 2012.

The first step is to conduct a survey among students and role players, including staff and academics. The survey results will be used to determine user needs and compile a general user profile.

The findings of the survey will be summarised in a report which will outline the expectations of the major user groups. This will serve as a point of departure to define user profiles and to model the new web environment.

This information will be used to involve internal role players, with the object to develop an integrated web strategy, content strategy (including navigation and information architecture) and the first layout prototype of the NWU website. This will inform the effective compilation of a business plan for the NWU website.

A system test environment will be used to test the progressive development of the web model before it goes into production.

The redesign and development of the NWU website forms part of a separate process which does not affect the current website. This means users will not yet notice any difference on the website.

The success of this strategic intervention relies heavily on the participation, support and cooperation of all role players.

If you have any comments or suggestions about the NWU website, please send them to Louis Jacobs at [louis.jacobs@nwu.ac.za](mailto:louis.jacobs@nwu.ac.za) or to Cobus Steenkamp at [cobus.steenkamp@nwu.ac.za](mailto:cobus.steenkamp@nwu.ac.za).

## MESSAGE FROM THE VICE-CHANCELLOR

*Dear colleagues*

It's already time for the third edition of Eish! in 2012 and one realises that the year is already well under way.

This time of year is usually the time to take stock of the previous year's activities. The 2011 Annual Report is now being finalised and will be submitted to the NWU Council in June. From the various reports it is evident that the university's footprint is constantly expanding. Thank you to the respective campus managements and staff for the hard work in implementing the campus plans and the Institutional Plan. These things strengthen our NWU brand in a tangible way.

I wish to share with you some examples and trends of the university's achievements in 2011:

- While the large-scale HEQF project is still underway, the steady improvement on key performance scales over the years shows that teaching-learning at the university is still sound. Our module success rate increased slightly to 84% and the graduation rate is still at 26%. It is encouraging to know that
- our drop-out rate has been below 15% for the past four years, while all indications are that the national average is between 20% and 30%. Thank you to each and every academic and support staff member for your continued commitment.
- The rich research harvest for 2011 is astonishing! At this stage it looks as if we published more than 740 articles during the year – almost 30% more than the 578 of 2010! The investment made in recent years in growing capacity among NRF-rated researchers and postdoctoral fellows has had a noticeable effect on research output. The respective campus achievements in this domain are noteworthy too. While the NWU's total research output grew by more than 100% between 2005 and 2011, the Mafikeng Campus's output grew more than 500% during the same period. That is a huge achievement. Congratulations to the rector, Prof Dan Kgwadi, and his team.
- We are somewhat concerned about the decrease in the number of PhDs conferred – 113 as opposed to 129 in 2010. We intend to look into the causes.



- As for the financial scorecard, it looks like we are heading for a moderate surplus of R40 million. Moreover, the value of self-generated revenue showed good improvement – an excellent achievement in these tough economic times.

On this high note, I'd like to take the opportunity to wish you all good luck for what's left of the semester. Stay warm and active and enjoy the mid-year recess when it arrives!

Regards

*Thinus Cloff*

## Eish! our graduates are doing well

The most important people at the NWU are the students – they are, after all, our clients.

The service we deliver to them enables and equips them to succeed in their careers as well-rounded, competent individuals. However, the NWU is about more than education – it's also about the opportunities brought about by edu-

cation. As a place where students can develop their dreams and future successes, the NWU offers them the key to a better future.

This new approach places the spotlight on the NWU as an 'enabler' and not just a provider of higher education.

We enable students to enter the labour market successfully, we enable the country's economy to grow by delivering high-quality graduates, and we enable communities to enhance their quality of life by implementing the results of our research for the benefit of the citizens of South Africa.

This approach of the NWU was recently brought to the attention of staff through an internal brand awareness campaign – read more about this campaign on p6.

In our efforts to deliver high-quality graduates to the market, it is of course important

to know what employers expect of NWU graduates.

In the Focus on... article on p12 we ask Ms Bernice Smit from the Career Centre about the research that has been done to find out which characteristics are important to employers.

Our graduates do not need to stand back for anyone – this is confirmed in the article on p9. There you can read how the chartered accountants who studied at the NWU fared in their national examination and how they are snatched up by employers – in some cases even before finishing their studies.

This proves once again that the NWU is playing a meaningful and valued role. It's heart-warming to know that the university is making such an impact. We at Eish! share your pride in the institution.

Happy reading,  
*Marelize & Nelia*



# Sponsorship celebrates excellent journalism

Offering qualifications in communication and boasting high-quality communication experts on all three NWU campuses, it is no wonder that the university has once again sponsored the National Press Club–North-West University Journalist of the Year awards.

Dr Theuns Eloff, the vice-chancellor of the NWU, handed the prizes to journalism's cream of the crop at a prestigious function held on 23 March 2012 in Pretoria.

With media freedom high on the public agenda these days, he expressed the NWU's concern about this topic: "The university shares the concern held by all journalists that the Protection of State Information Bill might have serious implications for the freedom of information and the freedom of journalists."

He also said that if the awards can assist in further improving the quality of journalism in the country, they will have served their purpose.

The entries were judged by a panel of various independent experts and academics, including Ms Cornia Pretorius, a senior lecturer in journalism at the School of Communication Studies on the Potchefstroom Campus.

According to Cornia the entries reflected the seemingly never-ending variety of extraordinary stories that South Africa continues to offer to journalists and, more importantly, how the journalists succeed in relaying these tales.

"On the news front the power of investigative journalism was confirmed again. As far as features go, there were some wonderfully written articles which gripped you from start to finish. The winning entries were those which must have moved, delighted and angered readers when they were published."

The overall winner of the National Press Club–North-West University Journalist of the Year award received R10 000 while each category winner won R5 000, sponsored by the North-West University.

## SCOOPING THE PRIZES

Mr Barry Bateman of *Eyewitness News* was named Journalist of the Year for 2011. He was recognised for his factually correct reporting and for working under tremendous deadline pressure. His tenacity with the story on the Tshwane Metro Police's use of vehicles with false number plates is a prime example of excellence in journalism.

Mr Nic Dawes, Editor of the *Mail & Guardian*, received the Editor of the Year award for his uncompromising stance on excellence and his commitment to the fight for media freedom.

*One of journalism's best and brightest: Mr Nic Dawes (right), Editor of the Mail & Guardian, and Dr Theuns Eloff, the vice-chancellor of the NWU, attend the award ceremony. For scooping the Editor of the Year prize, Nic receives a luxury weekend break-away.*





**They made headlines**

At the awards ceremony, Public Protector Ms Thuli Madonsela and suspended ANC Youth League President Julius Malema were named joint National Press Club–Aon South Africa Newsmakers of the Year for 2011.

"They both made headlines day in and day out. They dominated the pages of our newspapers and the airwaves. They got us talking, writing and debating," said Mr Yusuf Abramjee, the chairman of the National Press Club.

*Congratulations are in order: Mr Barry Bateman (centre) of Eyewitness News receives his NWU-sponsored Journalist of the Year award from Dr Theuns Eloff, the vice-chancellor of the NWU (left). With them is Mr Yusuf Abramjee (right), the chairman of the National Press Club.*

**DO YOU RECOGNISE THEIR WORK?**

In bringing the news right into the living rooms of the public, journalists often become household names and faces.

Below are some of the category winners. Do you recognise any of these award-winning journalists or their stories?

- Ms Jane Vorster of *You* magazine won the print features category for the first ever face-to-face interview with Pieter Dirk-Uys

and Evita Bezuidenhout – he/she normally only answers written questions.

- Mr Thebeetsile Keameditse of the SABC won the radio features journalist of the year category for his articles on electronic banking in rural areas and modern-day circumcision.
- Ms Odette Schwegler and Ms Nicola de Chaud of M-Net's *Carte Blanche* were joint winners in the category for

television features with their reporting on baby brokering and the investigation of malpractices of the Johannesburg fire chief.

- Mr Taurai Maduna of *Eyewitness News* won the online category for reporting on the abuse of platinum workers on the East Rand.
- Ms Mandy Wiener, also of *Eyewitness News*, won the social media category for her reporting on the Jackie Selebi corruption case.



*Dressed up to the nines: Reflecting the award ceremony's dress code of "black and white, with a dash of red", are from left Mr Phenyio Mokgothu from the Mafikeng Campus's Marketing and Communication department, Mr Louis Jacobs, Institutional Director: Corporate Communication, Ms Leanne Mannas, well-known communication specialist and master of ceremonies, Mr Koos Degenaar, Director: Marketing and Communication on the Mafikeng Campus, and Mr Victor Mothobi, Executive Director: Human Capital.*



*Making a difference: the winning team of the Strut Your Stuff quiz, with their cheques to the value of R10 000 each, which they won for campus projects. From left are Ms Tshepi Molemane from the Mafikeng Campus, Ms Lynette Ferreira from the Institutional Office, Ms Cathleen Diedericks from the Potchefstroom Campus and Ms Annette Willemse from the Vaal Triangle Campus. On the far right is Ms Phumzile Mmope, Executive Director: Corporate Affairs and Relations. Her department was responsible for the internal brand awareness campaign.*

## Biggest brains strut their stuff

The institutional knowledge of a number of staff has earned them generous prizes during the past six-week-long internal brand awareness campaign.

This campaign consisted of several fun and educational activities such as quizzes that tested staff members' knowledge of the NWU.

Ms Andrie du Plessis from the Faculty of Education Sciences on the Potchefstroom Campus won an i-pod in the Biggest Brain online quiz. Her name was selected randomly from a list of participants who correctly answered all of the questions in the six quiz sessions.

The other 50 winners of the Biggest Brain quiz won a selection of promotional items including mp3 players, watches, USB pens, flash drives, travel mice and pouches.

Ms Theresa Louw from the Faculty of Social Sciences on the Vaal Triangle Campus is R3 000 richer because she nominated a participant for the Strut Your Stuff quiz and won the lucky draw.

In the Strut Your Stuff quiz, the winning team were Ms Tshepi Molemane from the Mafikeng Campus, Ms Cathleen Diedericks from the Potchefstroom Campus, Ms Annette Willemse from the Vaal Triangle Campus and Ms Lynette Ferreira from the Institutional Office.

The winning projects of R10 000 each are:

- **Mafikeng Campus:** The purchase of law books for the library.
- **Potchefstroom Campus:** The installation of two parking bays for the disabled together with ramps at the entrance to the Sanlam Auditorium.

- **Vaal Triangle Campus:** A contribution for the construction of the new library.
- **Institutional Office:** A contribution for the "green" community engagement project that started with Earth Hour on 31 March 2012.

*Thank you for everybody's participation in our brand awareness campaign. We hope you enjoyed it, that you learnt a couple of things about the NWU and that you won a prize or two in the process. Keep an eye on our website at [www.n-w-u.co.za](http://www.n-w-u.co.za).*



*Proud promoters: the brand ambassadors on the Potchefstroom Campus were from left Mr Chris van Straaten, Ms Angelique de Jager, Ms Karen Engelbrecht from Marketing and Communication, Ms Chrislemien Groenewald and Mr Retief Scheepers. They promoted the NWU brand on their campus and encouraged participation in the brand awareness campaign.*



*Innovative idea: Ms Christelle Foord from the Institutional Office came up with the creative idea of using her NWU stickers to decorate her office door.*

# No time to sit back in new chairs

The NWU is home to three new research chairs, two funded by the Department of Science and Technology (DST) and one funded by Eskom. All three research chairs are on the Potchefstroom Campus.

The new DST research chair in the Faculty of Engineering focuses on coal research, while the new chair in the Faculty of Health Sciences focuses on early detection and prevention of cardiovascular disease in Africa. Both research chairs have been awarded for a period of five years, with the possibility of an extension for another five years.

The Eskom research chair in emission control involves research and capacity development in both engineering and atmospheric impacts. It is hosted in the research focus area for Chemical Resource Beneficiation in the Faculty of Natural Sciences.

During the DST process, which is administered by the National Research Foundation (NRF), a total of 406 applications were received from 22 higher education institutions for the 62 research chairs available in the 2011/12 round. The NRF research chairs are part of the DST's South African Research Chairs Initiative (SARChI).

This is a government initiative to attract and retain research skills in the science sector.

Factors taken into account for the awarding of these research chairs include compatibility with SARChI objectives, an institution's capacity to host the research chair, the potential for return on investment, and the socio-economic impact of the research.

*Look out for the next edition of Eish! for more information on the early detection and prevention of cardiovascular disease in Africa research chair and the Eskom chair in emission control.*

## Coal's dirty name is undeserved



*Coal collaborators: members of the coal group are, from left, Prof Ray Everson, Prof Quentin Campbell, Prof John Bunt and Prof Frans Waanders. Seated in front are Prof Hein Neomagus and Prof Christien Strydom. They are in the room where the Thermogravimetric analyser (TGA machine) is kept. The TGA is used to study the reactions when coal is heated.*

Coal is not the ogre it is often made out to be – on the contrary, it holds many advantages for humankind.

According to Prof Frans Waanders from the School of Chemical and Minerals Engineering on the Potchefstroom Campus, their research has again and again demonstrated the many advantages of coal, even though some people see this raw material as nothing more than a pollutant.

The new research chair in coal research is aimed at conducting advanced research in the field of coal science and technology. "Seeing as the world's energy sources are limited, it is sim-

ply not practical to rely on just a few of those sources such as sunlight or wind – we need to consider all available sources, including coal.

The secret lies in developing the technology so that we will eventually be able to use coal in ways that are as environmentally friendly as possible."

The objectives with the new research chair are the following:

- Finding innovative ways for using coal reserves to supply energy, fuel and chemicals to the country without jeopardising the environment.

- Training experts in certain fields of coal technology that are relevant for South Africa's industry and economy.
- Expanding the international knowledge base in coal science and technology, for instance through publications, conference papers and collaboration with other experts.
- Expanding the present research group to an international centre of excellence that can deliver postgraduate training and consultation services to the industry.

The three subprogrammes of the chair will deal with the processing of fine coal waste, incineration and gasification and the optimisation of these processes, and waste product utilisation.

"The research conducted in the research chair is a team effort of a number of dedicated lecturers, researchers (even a retired researcher) and under- and postgraduate students. One of our co-workers is from the School of Physical and Chemical Sciences in the Faculty of Natural Sciences – so we do cooperate across faculties. Owing to the good team work between all role players, we are regarded as the leading coal research group in the country," says Prof Frans.

The group works closely with Eskom and Sasol and has agreements with Freiberg University in Germany and with two American universities: the University of North Dakota and Penn State University. They are often involved with the management of international conferences on coal research and uses, and have successfully presented two international coal conferences themselves.

# iPad thief caught using technology

Thanks to tracking technology, Prof Dewald van Niekerk, the director of the Africa Centre for Disaster Studies in the Faculty of Natural Sciences on the Potchefstroom Campus, was able to help catch the thief who snatched his iPad.

Prof Dewald went out for lunch and, upon his return, found that his iPad was gone. He immediately logged onto Apple Mac's iCloud website to locate his iPad. This website enables users to locate their iPads by means of cellphone towers and the global positioning system (GPS).

"My computer was at the Meyer Street entrance to the campus, and by refreshing every couple of seconds, I could see that it was moving, but slowly, from which I deduced that the person was on foot," says Prof Dewald.

He called a friend at the police service, who hurried to where the iPad was moving along. He stayed on the phone with the police the whole time to keep them informed about its movements.

Before long, the police identified a number of people whose movements matched those of the perpetrator. They followed the group until it had thinned out enough to identify the culprit with reasonable certainty.

Prof Dewald then sent a signal to his tablet. "I heard the signal over the cellphone; it was quiet for a while and then I just heard the police making their move."

The suspect was arrested 20 minutes after Prof Dewald started to follow the signal.

## *The wonder of technology*

Apple Mac's i-cloud website offers the application 'Find My iPhone' which can be installed on the iPhone, iPad or iPod Touch. This enables the user to locate his missing device. All you need to do is to log onto icloud.com or to use the 'Find My iPhone' application on another iPhone, iPad or iPod Touch to pinpoint the approximate location of the device on a map.

You can also transmit a message or sound signal to the device. If, for instance, you forgot your iPad in the doctor's waiting room, you can send a message to the device, which will be displayed on the screen, and if you misplaced it in your own office, the sound signal can help you find its hiding place under some pile of paper.

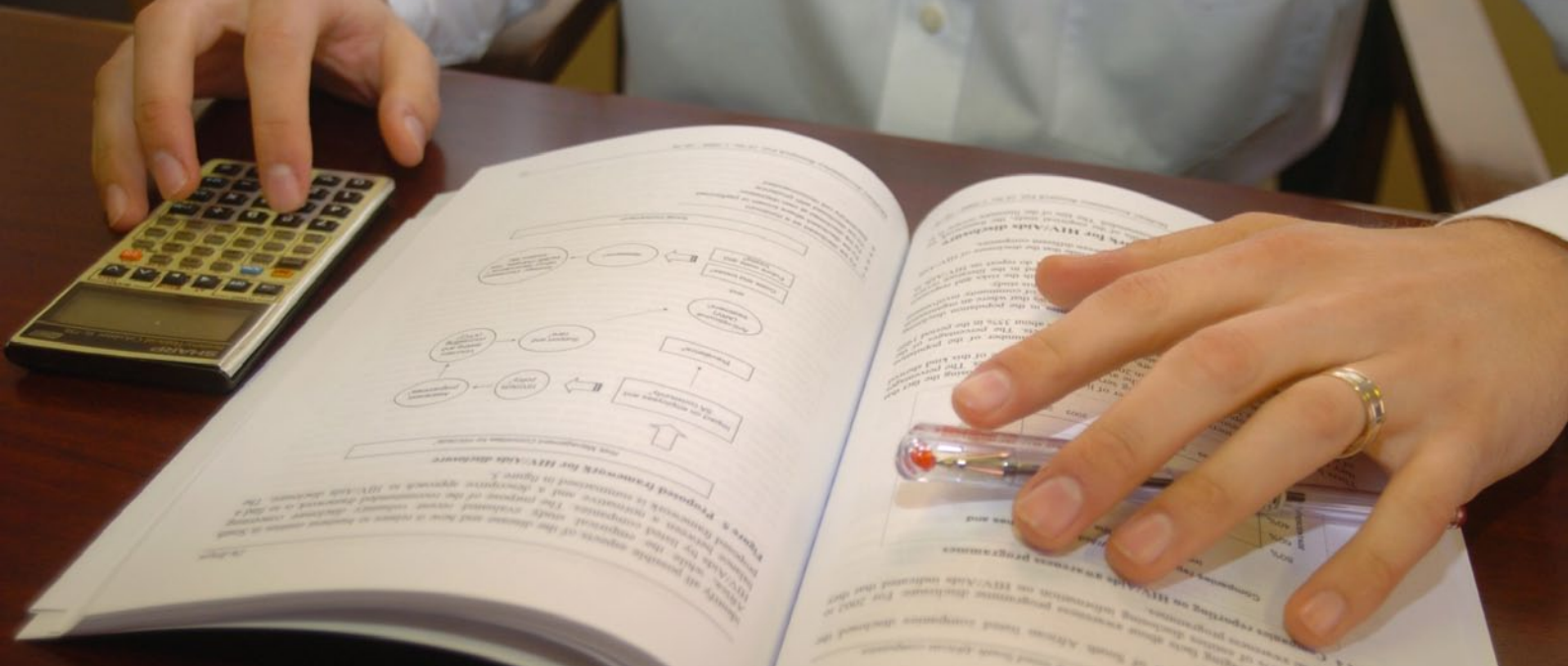
If you've lost your device and wish to save the contents until you can lay your hands on it again, you can set up a passcode lock remotely to prevent somebody from using your device, gaining access to personal information or fiddling with your settings. You can even wipe important and personal information remotely.



*On the right track: with the help of the police and technology, Prof Dewald van Niekerk was able to recover his stolen iPad.*

Photo and copy – Susan Cilliers from Beeld.





# NWU accountants balance the books

Taking into consideration the student numbers and the pass rate of 88%, the NWU's chartered accountant (CA) students who have recently completed their studies, fared better than ever in 2012 in Part 1 of the national qualifying examination of the South African Institute for Chartered Accountants (SAICA).

This pass rate was significantly higher than the national average of 78%. In a question about Financial Management and Management Accounting the NWU students did the best in the country.

In doing so, they were building on the achievements of previous NWU students who fared the best in a variety of subjects.

The results put the NWU in sixth place overall in the country, with the University of Cape Town, Rhodes, Pretoria, Wits and Stellenbosch in the first five places.

A total of 56 NWU students out of 64 passed – the most in the history of the NWU. Of these, 46 were from the Potchefstroom Campus and 10 from the Vaal Triangle Campus.

The programme is also offered at undergraduate level on the Mafikeng Campus, but since 2012 these students complete their honours studies in English on the Potchefstroom Campus.

## ACCOUNTANTS FOR SA

"In view of the country's needs and in order to stay relevant, it is important to deliver a large group of chartered accountants," says Prof Susan Visser, the director of the School of Accounting Sciences on the Potchefstroom Campus.

"The teams on all the campuses did exceptionally well," says Prof Elsabé Loots, the dean of the Faculty of Economic and Management Sciences on the same campus.

Prof Herman van der Merwe, the dean of the Faculty of Economic Sciences and Information Technology on the Vaal Triangle Campus, is equally proud of his faculty's students.

"Before 2009 our campus lacked the capacity to specialise in the different professional fields," he says. "This meant that we could not start in the first year with the intensive specialisation that chartered accounting training requires, because students from all the professional fields were together in the same class. The group that wrote the qualifying exam in 2012 was the last group from such a mixed undergraduate class.

"Since 2009, the three fields of specialisation have been offered separately on our campus, and 2012's BComCA honours group is the first group that is following the CA path from their first year. We are proud to be part of the NWU

team and proud that the number of chartered accountants delivered by the NWU increases every year."

## SOUGHT-AFTER GROUP

Lecturers from both campuses agree that NWU-trained accountants find work easily.

"All of the students already had jobs when they wrote the exams. Most of them start to get job offers in their second year," says Prof Jaco Fouché, programme leader in the School of Accounting Sciences on the Potchefstroom Campus.

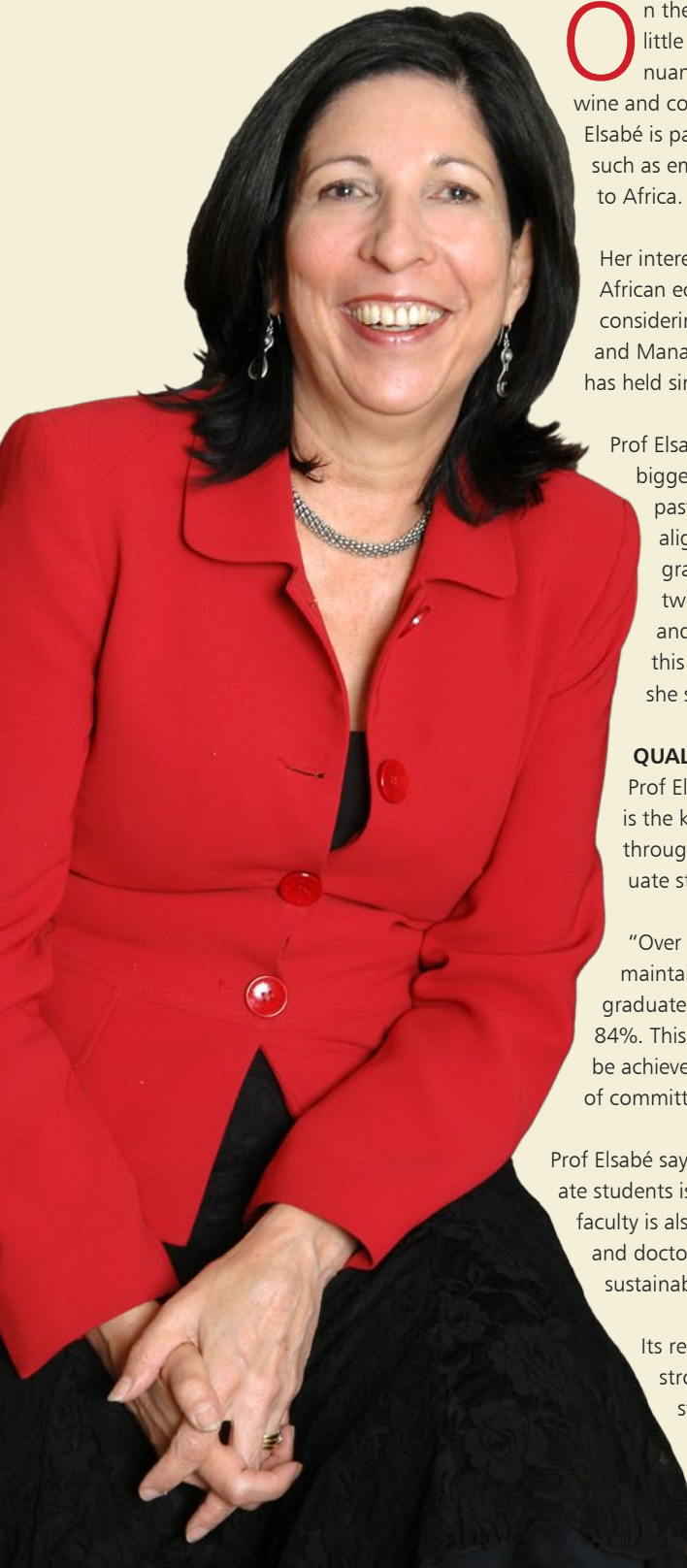
He says employers are very satisfied with the quality of NWU students. "At the annual career expo, hosted in May by the school in collaboration with the Career Centre, the greatest complaint of the more than 30 employers who attended the event was that there were not enough students to employ. Some firms come from as far as Cape Town to recruit NWU students. They are particularly impressed with the students' discipline and good manners."

Prof Heleen Janse van Vuuren, the director of the School of Accounting Sciences on the Vaal Triangle Campus, says most of the present BComCA honours class have already signed contracts to start with their articles next year.

"After their articles, most are snatched up by clients for whom they did audit work."

# She has local roots

*In this continuing series about the deans of the NWU, we find out about the small and major joys in the work and personal life of Prof Elsabé Loots, the dean of the Faculty Economic and Management Sciences on the Potchefstroom Campus.*



**O**n the one hand, she thrives on the little things that make up the subtle nuances of life, such as art films, red wine and cooking. On the other hand, Prof Elsabé is passionate about global issues such as emerging markets and capital flow to Africa.

Her interest in emerging markets and African economics makes perfect sense considering her job as dean of Economic and Management Sciences, a position she has held since 2009.

Prof Elsabé says one of the faculty's biggest achievements during the past years, has been the successful alignment of undergraduate programmes with those of the other two campuses. "The cooperation and commitment of the staff in this regard are just remarkable," she says.

#### **QUALITY TEACHING IS THE KEY**

Prof Elsabé believes excellent teaching is the key to the stable and sustainable throughput of the faculty's undergraduate students.

"Over the past few years we have maintained the throughput of undergraduate students at between 82% and 84%. This excellent performance can only be achieved with a very exceptional pool of committed staff."

Prof Elsabé says the throughput of postgraduate students is improving constantly. The faculty is also working hard to keep master's and doctoral enrolments and outputs at sustainable levels.

Its research outputs are growing strongly too. "The fact that our staff do a lot of teaching makes this all the more remarkable."

*Prof Elsabé Loots*

#### **WHEN EVERYTHING COMES TOGETHER**

Prof Elsabé says the best thing about being dean is seeing a plan come together. "It is wonderful when the staff also buy into new initiatives or strategies, remain involved and eventually also reap the success of the initiatives," she says.

Prof Elsabé received her doctorate in Economics at the former Rand Afrikaans University (RAU) in 1996. After working at the national Department of Finance and then at the Reserve Bank, she started her academic career at the RAU in 1989 as a lecturer in Economics, progressing to professor of Economics in 2001.

From 2005 to 2007 she was involved in the Department of Economics at the Free State University, and then became head of the School for Business and Economics at the South African campus of the Australian university of Monash.

#### **AN INTERNATIONAL PERSPECTIVE**

During her three years at Monash South Africa, she gained a wide perspective of international higher education.

She says that while South African universities are on par with their peers internationally, they can learn a lot from institutions that are already part of the international network of prominent universities.

"What sets these universities apart is that they can run their research at a higher level because of the access they have to national and international research funding. The amounts are simply mind-boggling."

Interestingly enough, there are similarities between the multi-campus model of Monash – which covers three continents – and the multi-campus model of the NWU, specifically with regard to the way the campuses align their academic programmes.

Prof Elsabé says Monash taught her a lot about international competition between institutions,

# and a global view

world rankings and the importance of focused research.

## A CLOSER LOOK

When at home, she makes room in her busy programme to enjoy the finer things of life. "I am mad about swimming, I read recipe books as if they were novels, am addicted to Cinema Nouveau movies, dabble in amateur bird watching if I get the chance, and love a good red wine."

Her husband, Steve, a retired company secretary, is the anchor in her life. The couple have a son and a daughter. Their son, Willem, is an actuary. He is married to Izeldi, who is involved in a family business and is working on her master's degree in Property Studies at the University of Pretoria (UP).

Their daughter, Liana, is a dietician and currently a fourth-year medical student at UP. "Spending time together is very important to us, and we regularly congregate around the cooking pots on occasions like birthdays and Christmas."

Perhaps one of the secrets of a full life is to combine local roots with a global outlook as Prof



*Prof Elsabé Loots and her husband, Steve, relax on their small timeshare trout farm near Belfast.*

Elsabé does. While she is motivated by the closeness of family and colleagues, she is also globally involved. The beauty of this approach is that you can find something like a beautiful sunset as exciting as the progress of emerging economies.

*Prof Elsabé is leaving the NWU at the end of July, having accepted a position as dean at the University of Pretoria.*

## *Africa is on a positive road*

Prof Elsabé, who is passionate about Africa and its challenges, maintains that while certain challenges still exist, a positive shift in emphasis is occurring on the African continent.

"The number of democratic elections is increasing, the number of conflict-ravaged areas and heads of government serving for more than two terms is declining, and the quality of institutions is improving," she says.

Her research focuses mainly on economic development issues, which include capital flow to Africa and studies on emerging market economies. She has been looking closely at various countries that are part of the Africa Peer Review Mechanism of the African Union.

One of her observations is that six of the 10 countries in the world that have grown the most rapidly over the past decade are African countries.

Multinational companies that want to expand their business interests worldwide are looking at the continent through new eyes.

Because China and India are already receiving excessive exposure, the question is which countries will be the next India and China of the world.

In this process the African continent is receiving special attention, and South Africa is regarded as the gateway to the rest of the continent.

## Other interesting facts

**My favourite dish:** Anything that Steve prepares (he is a master cook), but I will sacrifice a lot for Norwegian salmon and any salad with fresh rocket.

**My favourite book or movie:** **Books:** *Memory of Love* by Aminatta Forna, which is set in Sierra Leone and made a special impression on me after I was involved in a Country Review Mission of the African Union there last year. Other all-time favourites are *The Reader* by Bernhard Schlink and *The Poisonwood Bible* by Barbara Kingsolver. **Movies:** the recent *Midnight in Paris* and *The King's Speech* were exceptional, while *Bridges over Madison County* remains an old favourite.

**I would like to talk to this famous person:** Golda Meir, the fourth Prime Minister of Israel. Her term of office from 1969 to 1974 was a particularly stormy period in the political history of Israel. She was also only the third woman in the world to occupy such a position and was known as the Iron Lady long before Margaret Thatcher.

**My favourite holiday location:** Franschhoek and our small timeshare trout farm near Belfast.

**My favourite world city:** Paris, Paris, Paris.



# Employers of NWU students

*In this edition of Eish! we talk to Ms Bernice Smit, manager of the NWU's Career Centre, about the qualities that employers view as important in NWU students they employ.*



**V:** You conducted a survey among employers at the end of last year. Can you tell us more about it?

**A:** In August 2011 we sent an online questionnaire to 521 employers with whom the Career Centre often works. We wanted to know what qualities they would like to see in the NWU graduates they employ. A total of 56 employers participated in the survey – a response rate of 11%.

In the report we subsequently released, we also used the results of a survey conducted by the South African Graduate Recruiters Association (SAGRA) among 98 employers in November 2011. SAGRA asked participants to assess institutions of higher education, including the NWU.

However, our report was only the starting point of our efforts to define the qualities of sought-after graduates; a lot of work still lies ahead.

**V:** What do employers look at when they consider graduates for possible employment?

**A:** Graduates must firstly have the right qualifications and then they must display the following: intelligence, personal skills, the desire and ability to learn and to continue learning, sound values, a positive attitude towards work, and conceptual skills and understanding.

**V:** In the answers you received, what were the most interesting findings?

**A:** I found it interesting to see how the results confirmed that a growing number of employers recognise the quality of NWU graduates.

**V:** What are the strengths of our graduates?

**A:** According to the survey, employers feel that NWU graduates have a sound technical knowledge, maintain a good balance between knowledge and skills, and have stable personal values and a sound work ethic.

**V:** In which areas did our graduates fail to meet the standards?

**A:** As far as practical skills and understanding of the workplace are concerned, employers said our graduates need more exposure to the workplace and should gather more information about the employer.

There was also room for improving their verbal and written presentation skills, reporting skills and proficiency in English.

When it comes to applying their knowledge, aspects needing attention are graduates' approach to problem-solving, their understanding of workplace customs and their ability to view issues in the wider context of the organisation.

There is also scope for improvement in students' CVs and interviewing skills. With this in mind, the Career Centre is already assisting students by holding workshops, preparing manuals and offering online guidance, as well as arranging individual appointments with a career consultant.

Faculties wanting to present workshops to specific groups are welcome to contact the Career Centre.

**V:** Did employers make any suggestions about how the NWU can improve the quality of our graduates?

**A:** They suggested that students should have more exposure to the work environment, that their English should improve, and that self-study and independence should be encouraged.

**V:** Which graduates are the most sought-after among employers?

**A:** The most popular graduates are those with professional or honours degrees in a commercial, business or management field, as well as in the natural sciences, engineering, technology and law.

**V:** Why do some employers deliberately not target NWU students?

**A:** Employers' recruitment budgets are limited and the location of the NWU campuses can be a problem. Despite this, they do consider applications from NWU students, even though they do not specifically recruit these students.

**V:** How can these problems be overcome?

**A:** Because our campuses are not located close to large centres such as those in Gauteng, the Career Centre continually develops online recruitment possibilities.

Examples are the existing internet career portal (CareerZone) and facilities where employers can conduct online interviews, such as video conferences and computer applications like Skype.

**V:** What methods do employers use most often to recruit NWU students?

**A:** Most of them advertise in the career guide that the Career Centre publishes and issues to students on the three campuses every year. From 2012, the guide will be available online too.

Employers also visit the annual career exhibitions that the Career Centre arranges at the university.

**V:** What is the next step in your study on what employers expect of NWU graduates?

**A:** We are now going to provide feedback to management and take steps to address the areas where employers feel graduates can improve. For example, we will develop interventions to improve students' communication skills (oral, written and presentation).

We are also adapting the content of our workshops on writing CVs and interviewing to inform students of specific expectations on the part of employers.

## Commerce and Administration rewards researchers

The Faculty of Commerce and Administration honoured its achievers – both students and staff – at its first research day held on 28 March 2012.

The faculty used the opportunity to promote research and acknowledge achievements in research during the previous year. According to the vice-rector, Prof Mogege Mosimege: “The research output of our campus is good both in terms of quantity and quality. Unlike before, people will no longer measure or judge us by our location or our past performance, but by the progress we make.”

The trophies for the Faculty’s Junior and Senior Researcher of the Year were awarded to Prof Janine Mukuddem-Petersen and Prof Sam Lubbe respectively. The Department of Economics received the floating trophy for Research Department of the Year. The best Honours student in 2011 was Ms Giselle Mah, while the second place went to Ms Christelle Meniago. Both received merit certificates from the dean.

Sixteen academics received recognition because they contributed outputs which qualified for subsidisation. This included the dean of the faculty, Prof Sonia Swanepoel, who remarked: “We are developing a research culture.”

Dr Nehemiah Mavetera was named the Faculty’s Novice Researcher of the Year, with Dr Mike Sikwila and Dr Mulisi Velepini taking joint second place.



Research recognition: Prof Janine Mukuddem-Petersen (left) receives the trophy for the Faculty of Commerce and Administration’s Junior Researcher of the year from Prof Sonia Swanepoel, the dean (right).



Fact-finding visit: a delegation from Sweden’s University of Gävle and the University of Botswana recently visited the Mafikeng Campus Science Centre to investigate the possibility of establishing a science centre in Botswana.

## Foreign delegation visits Science Centre

The Science Centre on the Mafikeng Campus has become a centre of attraction and other international universities are keen to establish similar centres.

The centre opened its doors in 2010 and recently hosted delegates from the University of Gävle in Sweden and the University of Botswana.

These universities are collaborating for the purpose of establishing a science centre at the University of Botswana. The centre will provide science-related support to early childhood, primary and secondary schools in Botswana.

Ms Marea Tsamaase, coordinator of the Child Development Programme at the University of Botswana said: “Our aim is to learn from institutions with similar centres. We also want to make sure that such a centre will be beneficial to our target groups.”

She added that their fact-finding mission presented an opportunity for networking with a university in a neighbouring country and that the Mafikeng Science Centre might serve as a benchmark for the Botswana project. Mr Goran Nordstrom of the University of Gävle said they intend working closely with the NWU on the project.

## Community development workers graduate

More than 320 community development workers have successfully completed a 12-month course in community development.

The aim of the course was to equip unemployed youth with the necessary skills to become role players in social cohesion and local economic development. The programme was conducted by the North-West Provincial Department of Social Development, Women, Children and People with Disabilities in partnership with the campus’s Faculty of Human and Social Sciences.

During the conferment ceremony held on 20 March 2012 in the Great Hall, 329 *masupatsela* (as development workers are popularly known in their communities), came from all over the province to officially receive acknowledgement for their hard work.

In her keynote address, the mayor of the Mafikeng Local Municipality, Ms Lena Miga, (below), addressed the graduates: “You are the agents of change. Go out and change peoples’ lives, because the development of our communities depends on you.”



## Ride-a-Bicycle project starts a new cycle on campus

The Faculty of Education Sciences has introduced a Ride-a-Bicycle project at the Potchefstroom Campus to help create a "greener" campus. A number of bicycles were purchased and are available free of charge to students and staff wanting to move quickly from one point to another on campus. The bicycles are parked in front of the Faculty of



Education Sciences main building (C6). Dr Schalk Raath of the School of Curriculum-based Studies says that to use a bicycle, all one has to do is collect a key at the Education Council's office on the ground floor in Building C6, use the bicycle, return it and hand in the key at the Ampie kiosk again.

This novel idea is part of a project, Mobility and the Environment, sponsored by the Flemish Foundation for Traffic Science (FFTS). The project consists of two legs: making bicycles available free of charge for people to move around on campus and a research project on the physical impact that cycling has on the human body. If anyone would like to participate in the research project, they can contact Dr Schalk at 018 299 4733.

*Ride-a-bicycle project kicks off: Mr Louis Jacobs, Institutional Director: Corporate Communication and his wife, Ms Triens Jacobs, secretary in the Financial Support Department on the Potchefstroom Campus, support the Ride-a-bicycle project. Photograph: Noordwes Beeld*

## Disabled people complete project management course

The Potchefstroom Business School (PBS) recently presented a course in project management to a group of 10 people with disabilities. This event took place at the Mafikeng Campus and was made possible by the Education, Training and Development Practices Sector Education and Training Authority (ETDP-SETA). It follows on previous projects where the PBS presented the same course to unemployed individuals.

Training people with disabilities poses unique challenges in terms of accessibility of venues, ablution facilities and adjustments to accom-

modate the blind, among others. This specific project management course was presented by Prof Stephan van der Merwe and Prof Christo Bisschoff. Although the course is taxing, the participants with disabilities tackled it with a good work ethic and great perseverance. At the end of the course, the whole group successfully submitted a portfolio proving competency.

This project is part of the greater future vision of the Business School in the field of community service.

*The Potchefstroom Business School is continually reaching out to the community and recently presented a project management course to a group of people with disabilities.*



*All set for science: Prof Corrie du Toit and his colleague, Ms Marié du Toit, from the Faculty of Natural Sciences on the Potchefstroom Campus with the compact science apparatus that they developed.*

## Unique science kits fill a vacuum

Chemists from the Faculty of Natural Sciences have designed unique laboratory apparatus to help learners in primary and secondary school with the practical aspects of science subjects. This apparatus has been exported to Norway and Ethiopia where it is being used with great success.

In 2011, Prof Corrie du Toit, and his colleague, Ms Marié du Toit, developed a compact chemistry and natural sciences set, called MyLab, for science instruction in grades 4 to 12. According to Prof Corrie, these sets can make a huge contribution towards successful science teaching in schools – even schools without laboratories.

The researchers believe that practical work is a very important component of science teaching and so they developed the MyLab apparatus to assist teachers with practical work. They came to the conclusion that teachers' need for chemicals, apparatus, instruction booklets, memoranda and preparation material is even greater than for laboratories, electricity and running water.

The MyLab sets are for sale at a very reasonable price and the revenue generated is ploughed back into research. Please visit the website ([www.mylab.co.za](http://www.mylab.co.za)) for more information. Prof Corrie du Toit can be called at 076 377 8989 or Marié du Toit at 082 392 0883.

## Campus celebrates World Happy Day

The Vaal Triangle Campus was one of only three venues in South Africa chosen to screen the film *Happy* in celebration of World Happy Day on 11 February 2012.

*Happy* is an inspiring documentary from Academy Award-nominated director Roko Belic and aims to inspire us to discover what really makes us happy.

The movie was screened by the Optentia Research Programme which is headed by Prof Ian Rothmann. "The screening of the movie is a pro-active attempt to unite people from all walks of life to come together – on the same

day – and start the conversation about happiness and begin to live happier, more fulfilling lives," he said.

According to Prof Ian, happiness is not solely the result of an individual's genetic makeup (50%), but also of a person's immediate circumstances (10%) and his or her internal efforts to be happy (40%).

By adopting happiness as an ever-present emotion you will, according to the latest research, live longer, be more likely to care for the environment, less likely to commit a crime and more likely to find creative solutions to problems.

## Intercampus Sports Day is a winning initiative

Team spirit ran high when the Vaal Triangle Campus hosted the Intercampus Sports Day for students.

The event was a way of celebrating sport and the unity and diversity of the NWU, as all three campuses came together to make the day a success.

Sports teams from all three campuses displayed good team spirit in a variety of sporting codes such as netball, soccer, rugby, chess and hockey.

The day's festivities were set into motion by a hearty welcome from Mr Jacob Simango, Director: Student Affairs, and Mr Sean McCallaghan, Sports Manager.

Dr Edward Sedibe, Institutional Director: Student Affairs and Sports said, "This is the best organised event in five years. This event portrays truly how culturally diversified we are".

The event and activities were well supported by students and friends who came to watch the various teams play.



*Reading to victory: the recent library read-a-thon not only challenged students to work together in teams, but also to brush up on their reading ability.*

## Reading around the clock

The campus library recently embarked on its first-ever read-a-thon and judging by the overwhelming interest from the student community, this initiative is set to become an annual event.

According to Ms Hendra Pretorius, Library Manager, the aim of the event was to reintroduce students to the joys of reading – especially for the purpose of relaxation and enjoyment. The read-a-thon coincided with National Library Week from 17 to 24 March.

The library challenged the eight residences to see who would wear the crown as first-class readers and the rules of engagement were clear: teams consisted of 15 members who had to take turns reading aloud.

The South African bestseller, "Spud" (written by John van de Ruit), was chosen as the featured read and this tongue-in-cheek look at South Africa during the early 1980s set the scene for fun-filled hours in the library. The reading commenced at 17:00 on 23 March and the last page was turned at 06:00 on 24 March.

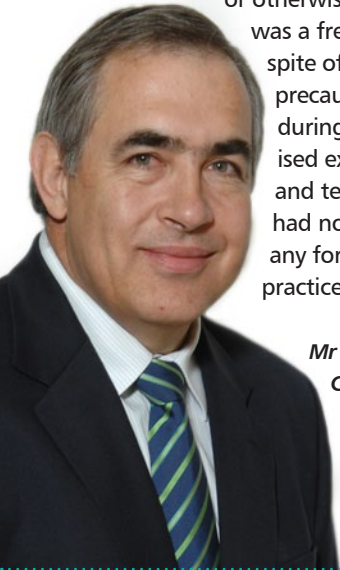
To make sure that concentration and attentiveness accompanied the reading process, a comprehension test decided the winning residence and the spoils went to Santrust, one of the off-campus residences.

# These experts know their subjects

In recent weeks, several members of the NWU community have once again shared their expertise with the community – in speeches or during interviews with the media. In our ongoing series, we wish to share the following quotes with our readers.

“No particular person or entity can be held responsible for the death of Thabang Makhoang due to negligence or otherwise. The drowning was a freak accident in spite of every conceivable precaution; it occurred during an event organised exclusively for fun and teambuilding, which had nothing to do with any form of initiation practice.”

**Mr Peet van der Walt,**  
Chairperson: NWU Council  
Beeld, 3 April 2012



“People in general resist talking about sexual deviations, particularly paedophilia. They view talking about these things as an attempt to excuse or justify child molesters’ actions. This is absolutely not the case. However, we need to realise that these cruel offenders may well have been victims themselves. They also need help and the transgression is very often a symptom of what they themselves went through. We cannot simply leave the problem to the state, police or the government; the community will also have to play a pivotal role. When we talk about sexually deviant behaviour, we do so to prevent these things from happening.”

**Dr Stella Potgieter, Faculty of Theology,**  
Potchefstroom Campus  
RSG, 13 March 2012



“I find it important to convey factual knowledge to the students, and also to ensure that they know how, and where, the necessary information and literature can be obtained. One of my greatest concerns was that pharmaceutical knowledge is not always readily available in the working environment, and neither is there a “helpline” that can be called.”

**Ms Mariëtta Fourie, School of Pharmacy,**  
Potchefstroom Campus  
SA Pharmaceutical Journal,  
1 March 2012

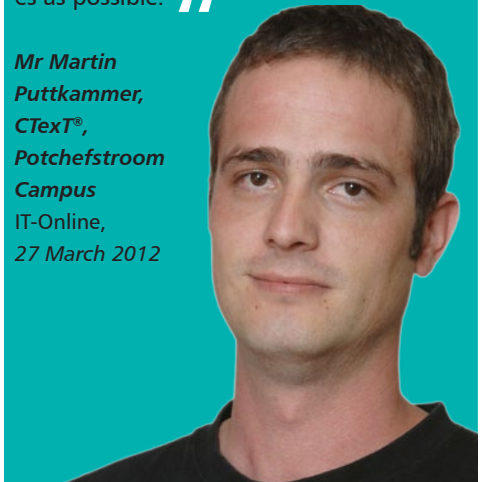


“Combining humour and religion in a cheeky ad could easily land a company in troubled waters. In a deeply conservative society where many people feel strongly about using the Lord’s name in vain, such an ad could easily cross the line. I reckon Red Bull took it a bit too far at the end of the ad where the Jesus character slips... which probably increased the controversy.”

**Ms Cornia Pretorius, School of Communication Studies,**  
Potchefstroom Campus  
Volksblad, 14 March 2012

“The establishment of the Resource Management Agency (RMA) is the realisation of a vision to develop and administer language resources for all South African languages on a global scale. The RMA will facilitate the development and promotion of the official languages of South Africa and the enhancement of the linguistic diversity of the country. This puts us one step closer to achieving the ideal of more smartphone applications, literacy tools, translation software and other developments in as many South African languages as possible.”

**Mr Martin Puttkammer,**  
CTexT®,  
Potchefstroom Campus  
IT-Online,  
27 March 2012





# Walking the extra mile

*If you consider the first mile as your duty, it's fine. But it's good to know that there are many people at the NWU who are willing to go the second and even the third mile, simply because they enjoy giving more than what's expected of them. We once again take this opportunity to give recognition to all our NWU colleagues who go the second mile.*

Mr Louis Jacobs, Institutional Director: Corporate Communication in the Institutional Office nominates **Ms Ria van Deventer**, a senior administrative assistant at IT Central, without hesitation. According to Louis, Ria goes out of her way to help people, but she also ensures that guidelines are adhered to. "That is an aspect that makes Ria's service delivery all the more valuable. You know exactly what to expect, how and when the service will be delivered, and, needless to say, that it will exceed your expectations. Ria's service speaks of dedication, and the interests of the institution always take priority," says Louis.

According to his colleagues in the Creditors Section of Financial Administration in the Institutional Office, **Mr Frikkie Venter**, senior accountant, deserves a pat on the back for his hard work. "He is always patient, friendly and helpful – even if he's buried in work. Even external clients are very pleased with his service-delivery – keep up the good work, Frikkie!"

**Mr Johannes Lesabe**, locksmith in the Protection Services Department on the Potchefstroom Campus deserves a compliment. Ms Leoni Coetzee, an administrative assistant in the School of Nursing on the same campus, says that Johannes really goes out of his way to help and no task is ever too big or too small for him. "Johannes is always patient and helpful – he'll do 'problem keys' over and over again until he's completely satisfied. Thank you Johannes – it is much appreciated."

Ms Suzette Weidemann, Coordinator: Psychological Health at the Health Care Centre on the Potchefstroom Campus, nominates the campus fire brigade, which functions as part of the Protection Services Department. "I would like to thank (from left to right on the photograph below) **Messrs Frank Raubenheimer, Corrie Bornman, Riaan Cremer, Mark Greeff, Francois van den Berg, and Justinus Lubbe** for their extraordinary and selfless work. These men are all volunteers, so this important task is something that they do over and above their normal day jobs. They render a 24-hour service to the campus, which includes fire, rescue and emergency services, and their reaction time and competence are of international standard. Your passion for assistance is exemplary – thank you!"

Ms Roxanne Bailey, a junior researcher in the research focus area: Teaching-learning organisations in the Faculty of Education Sciences on the Potchefstroom Campus, seconds the nomination of **Ms Louise Meyer** in the previous edition of Eish! and wishes to make use of the opportunity to nominate **Ms Christelle van Rensburg**, a senior administrative assistant in the School of Curriculum-based Studies.

According to her, both of these women are outstanding staff members. "Both are helpful, friendly and highly competent. They're a great example to have in my life," says Roxanne.

**Mr Klasie Botha**, a laboratory assistant in the School of Information Technology on the Vaal Triangle Campus is also a true stalwart. "Klasie is always willing to help; he'll even work on weekends if his assistance is required," says Mr Frans Roodt, IT helpdesk assistant on the same campus. "The computer lab on the campus is his responsibility. If something goes wrong, it is always sorted out quickly and there are no half-measures with him."

*If you would like to nominate a colleague who always goes the second mile, please send an e-mail to [marelize.santana@nwu.ac.za](mailto:marelize.santana@nwu.ac.za). Remember to give your job title and the name of your department or school as well as the particulars of the person that you wish to nominate.*

RIA VAN DEVENTER



FRIKKIE VENTER



JOHANNES LESABE



CHRISTELLE V RENSBURG



KLASIE BOTHA



# And the winners are...

Congratulations to the following colleagues who each won a corporate gift:



**Institutional Office:**

Ms Christelle Foord, labour relations practitioner, Human Capital: Labour Relations



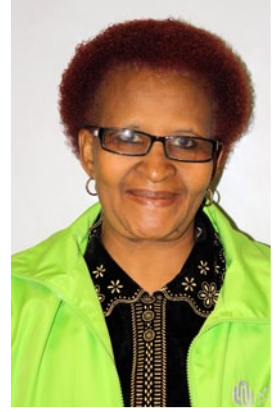
**Mafikeng Campus:**

Ms Jasmine Eyman, secretary, Centre for Business and Management



**Potchefstroom Campus:**

Mr Diederiks Diseko, general assistant, PUK-Arts



**Vaal Triangle Campus:**

Ms Johanna Montshonyane, assistant residence manager, Residence and Catering Services

We would like to thank everyone who participated. If you were not so lucky the first time, here is another opportunity to take part in our exciting competition:

# Win! Win! Win!

You can **win** a corporate **gift** – just find the answers to the following **10 questions!**



1.

2.

3.

4.

5.

Identify the close-ups and provide the relevant page numbers on which they appear.

6. Which award of the National Press Club did the NWU sponsor?
7. How many research chairs did the NWU get from the Department of Science and Technology?
8. How many chartered accountant students passed Part 1 of their national qualifying examination?
9. At which university did Prof Elsabé Loots obtain her PhD?
10. Which project was started at the Faculty of Education Sciences on the Potchefstroom Campus?

**SEND YOUR ANSWERS TO:**

**Post: Marelize Santana, Internal box 260.**

**Email: [marelize.santana@nwu.ac.za](mailto:marelize.santana@nwu.ac.za) with Eish! in the subject field.**

**Remember: Please supply your staff number, title, name, surname, job title, and the name of your division and campus.**

The first correct entry per business unit that we receive, will win a prize!

# Know and celebrate your rights

Acknowledging that human rights are one of the most important building blocks of a society guided by respect and integrity, the NWU joined the rest of South Africa in celebrating human rights day.

On 20 March 2012, two topics were explored during the event at the Institutional Office, namely sexual harassment as a human rights violation and infringement of the "right to work".

Three speakers gave addresses on these subjects. Ms Lizelda Goslin, a practising psychologist from Klerksdorp, gave a psychological perspective on sexual harassment, while Adv Prakash Roopa, a legal expert from Potchefstroom, explored the issue from a legal point of view.

An alumnus of the former Potchefstroom University for Christian Higher Education, Prof



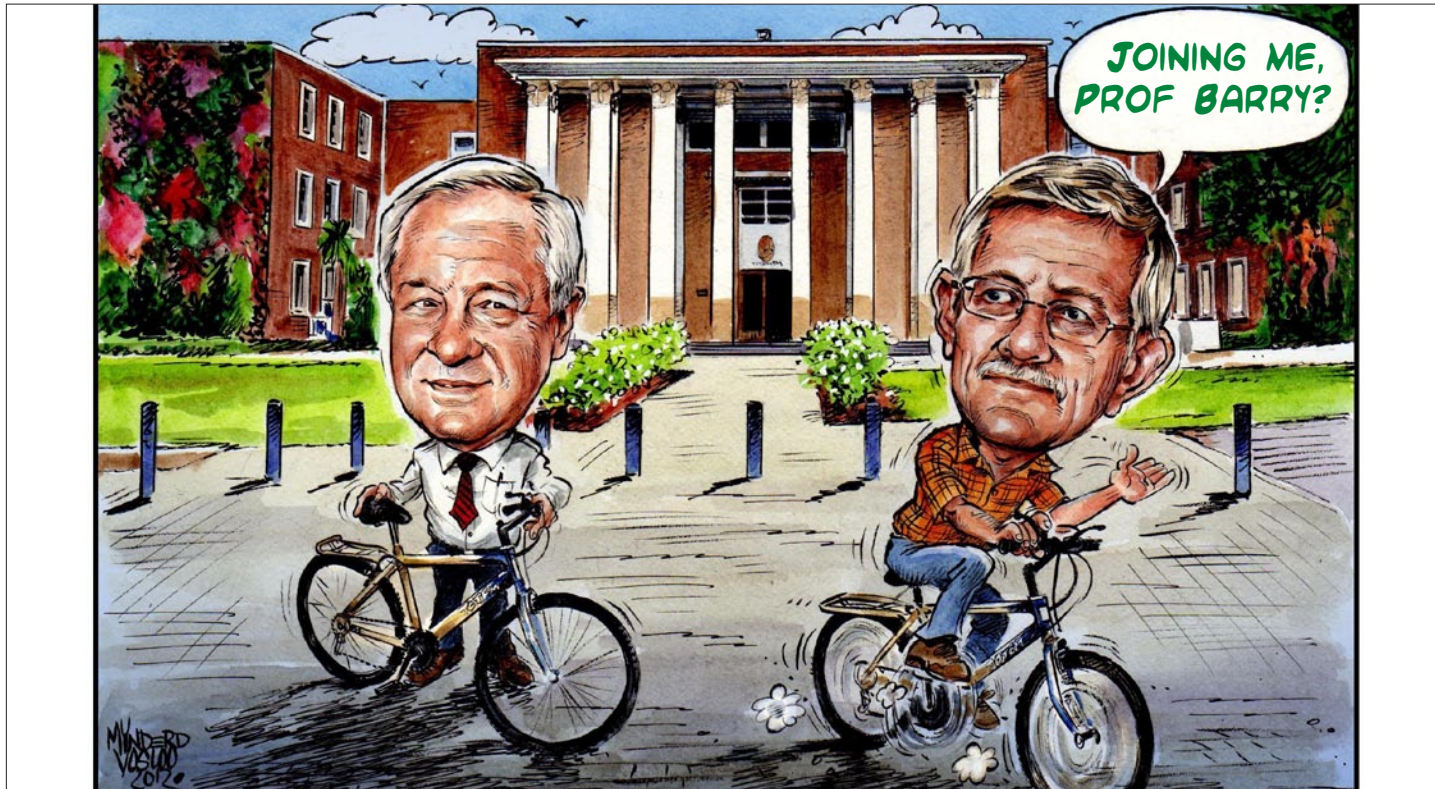
Present at the NWU's human rights day celebrations were from left Adv Solly Sithole, chairperson of the NWU Human Rights Committee, Mr Anton Scheppel, Manager: Labour Relations, Prof Elda de Waal from the Vaal Triangle Campus and member of the NWU Human Rights Committee, Prof Hugo Pienaar from Glyn Marais Inc in Sandton, and Prof Christo van Wyk from the Vaal Triangle Campus and chairperson of the NWU's Institutional Forum.

Hugo Pienaar from Glyn Marais Inc in Sandton, also highlighted the way in which the right to work is infringed upon.

Prof Christo van Wyk, the chairperson of the NWU's Institutional Forum, hailing from the Vaal Triangle Campus, facilitated the question and discussion sessions. Also in attendance were Adv Solly Sithole, the chairperson of the NWU Human Rights Committee, and Prof

Melvin Mbaio, the dean of the Faculty of Law on the Mafikeng Campus. Some 42 NWU staff members as well as a few student leaders attended this year's celebrations.

As part of the event, bursaries sponsored by the NWU Human Rights Committee were handed to two Law students. They are Mr Brews Soaypi from the Mafikeng Campus and Mr Ramafala Ramatshosa from the Potchefstroom Campus.



The Faculty of Education Sciences recently launched a Ride-a-Bike project on the Potchefstroom Campus. Here are Prof Barry Richter, the director of the School of Curriculum-based Studies, and Dr Schalk Raath from the same school, doing their part for a "greener" campus. More about this on p14.



Prof John Botha, associate professor in Art History and Film Studies in the School of Communication Studies on the Potchefstroom Campus, often shares the following advice with his students:

“You have to learn how to **listen to paintings** and how to **look at music ...**”

Do you have a favourite quote that is near and dear to your heart? Please share it with us; we would like to use it in the next edition of Eish!. Please send your quote, its origins or author, your short motivation why this has made an impact on you, as well as your name, surname, job title and department/school to [marelize.santana@nwu.ac.za](mailto:marelize.santana@nwu.ac.za).

[www.nwu.ac.za](http://www.nwu.ac.za)