

#### STELLENBOSCH UNIVERSITY ANNUAL INTEGRATED REPORT 2016



UNIVERSITEIT•STELLENBOSCH•UNIVERSITY jou kennisvennoot•your knowledge partner

#### It all starts with connecting to ideas, people and places.

The symbols seen in the Annual Integrated Report 2016 are extensively used in Africa and reflect the strong connection that Stellenbosch University has with the continent.

Apart from its decorative function, the symbols represent objects encapsulating evocative messages that convey traditional wisdom, aspects of life or the environment.



#### Our institution

symbol of knowledge, life-long education and a continued quest for knowledge "He who does not know can know from learning"



#### Governance

symbol of unity and human relations



Our performance against our strategic priorities symbol of endurance and resourcefulness



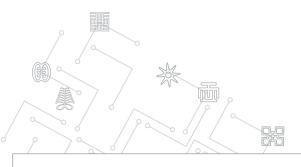
Report on risk exposure, evaluation and management symbol of guardianship



The University acknowledges excellence symbol of excellence, genuineness and authenticity



Financial Report symbol of examination and guality contro



Since embarking on its journey to integrated reporting a few years ago, Stellenbosch University is publishing its second integrated report on 2016. On this journey we realised that a far wider range of interconnected factors determine the value and future of an organisation than financial profitability alone.

Some forms of capital (resources) that contribute to the value of an organisation are tangible, and therefore easy to add up or subtract, such as our financial capital, but many others are not so easy to account for. In a university environment, our intangibles predominate – consider our intellectual expertise (intellectual capital), our talented students and capable staff (human capital), our supporting environment of natural resources (natural capital), our infrastructure (manufactured capital), our indispensable partnerships (social and relationship capital), and our brand and evolving reputation (intellectual capital). These, and more, make up the sum total of assets with which we create and sustain value.

Through our integrated reporting, we hope to show our numerous stakeholders how we try to allocate resources, manage risks and grasp opportunities in the best possible way. Stellenbosch University – like so many other organisations, both corporate and public – is still en route ... We plan to improve our understanding of true materiality and true accountability across the board of our multiplicity of operations, and we anticipate that integrated thinking will eventually become second nature to us, so that we may make better decisions and manage efficiently and sustainably, as befits a knowledge-driven institution such as ours.

#### OUR SCOPE AND BOUNDARIES

This report is published annually and covers the full scope of University operations over the reporting period, 1 January to 31 December 2016. To this we add a few months more – until March 2017 – to enable us to include all our graduation data for the year under review.

Our report contains financial facts and figures about our operations over the 2016 financial year, and for the reader's convenience our full financial report is still published as part of our integrated report. The University's financial statements, including the subsidiaries, associate companies and trusts, are prepared in accordance with the relevant policies of International Financial Reporting Standards (IFRS), and also comply with the Department of Higher Education and Training's Regulations for Reporting by Public Higher Education Institutions as published in the *Government Gazette* No. 37726 of 9 June 2014.

You will also find the customary reports of the Chancellor, Chair of the University Council, Rector and Vice-Chancellor, Chief Operating Officer, Vice-Rectors, and Deans of

### Our journey towards INTEGRATED REPORTING

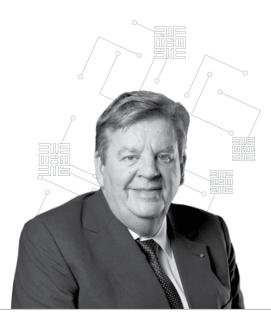
faculties on their fields of care and supervision. Most of these reports however now highlight the value created over the reporting period in line with selected strategic priorities identified in the University's Intent and Strategy document for 2013–2018. This focus on value accords with the principles provided by the *International <IR> Framework* of the International Integrated Reporting Council (IIRC), which believes that "communication about value creation should be the next step in the evolution of corporate reporting".

In short, in this report our stakeholders will find information to give them a better understanding of:

- the context of the higher education landscape and the University's outlook;
- our mission, values, stakeholder groups and institutional intent and strategy;
- how we govern the University;
- our value-creation activities learning and teaching, research and innovation with social impact in an international landscape, and their effect on our capitals as mentioned above (in particular our financial and intellectual capital);
- our performance measured against our strategic priorities, goals and management indicators (SMIs);
- how we take our stakeholders' needs into consideration;
- the challenges and high-order risks faced by our institution in the year under review and the actions undertaken to mitigate their effect on our capacity to create value;
- the activities of our faculties to realise their strategic goals as set out in the Institutional Plan; and
- the University's acknowledgement of excellence by awarding deserving individuals.

# APPROVING OUR ANNUAL INTEGRATED REPORT

The Rector and his Management Team are closely involved in the writing and compiling of the annual integrated report. Our Audit and Risk Committee of Council examines the report and, with adjustments, recommends the report to be tabled at the University Council meeting in May, where the report is considered and finally approved for publication.



These days, university councils and managements find themselves in an unenviable position. External factors along with stakeholder groups' unrealistic and even contradictory expectations put South African universities under huge financial and operational pressure.

## Foreword by THE CHANCELLOR

ollowing government's announcement of no increase in student fees in 2015 – possibly to avert a South African version of the Arab Spring – it came as no surprise when students again opposed increases in 2016. This time, the demands went a step further, insisting on free higher education, and were accompanied by protest action so as to put pressure on government through universities.

In our society with its vast socioeconomic inequalities, tertiary studies are regarded as a quick fix for poverty and a guarantee of upward mobility. This perception is not unique to South Africa. Following World War II, the demand for university admission in Britain increased sharply and eventually saw academic admissions criteria being introduced. Yet, the elite universities with the best research reputation and social stature still attracted the best students, primarily from the aristocracy and the affluent middle class. In the 1970s and 1980s, the so-called polytechnics (or technikons) emerged as the training centres for the working class with the main aim of conferring qualifications instead of producing new knowledge.

For more than a decade, South African universities have seen state subsidies dwindle, and have come under increasing pressure to admit even more students, a large portion of whom have not been sufficiently prepared for higher education. Protest action and the concomitant cost of damaged infrastructure, additional security staff, lost academic time, legal action and incomplete studies are some of the factors that pose further challenges to academic institutions.

Globalisation, internationalisation, the knowledge economy, partnerships and collaboration agreements, innovation, as well as information and communications technology

are buzzwords in the higher education sector of our time. For universities to be regarded as part of this league, they require stability, systemic sustainability, an excellent academic reputation, an impeccable governance and management structure, and proven research and development successes. Such an institution does, however, make huge demands on financial and intellectual capital.

Can South Africa afford 26 such universities? Or, considering local realities, should we perhaps reconsider the higher education landscape and what it must look like to meet our very specific needs? In our country, more so than in many others, one would expect empathy with frustrations based on historical exclusion from study opportunities due to an earlier political regime and, to this day, the constraints of socioeconomic background. Funding higher education and facilitating equitable access to universities, especially for students from working class families, are vital.

Robert Anderson\*, an emeritus professor of history at Edinburgh University, offers three potential scenarios for the "idea of a university which combines teaching and research and develops the general powers of the mind as well as giving specialized training". Such a comprehensive offering along with mass university admissions, he says, would place excessive pressure on resources.

An alternative would be to cast all universities into a utilitarian and managerial mould. For a developing economy, the first option would not be sustainable; from an academic perspective, the second is equally unacceptable. His third scenario is a system in which universities have different mission statements, with the freedom to interpret "the idea of a university" in their own way.

Anderson also expresses the view that it would be better

not to see the "idea of a university" as a fixed set of characteristics, but rather as a set of permanent tensions managed differently according to time and place – context, in other words.

Perhaps we should be developing a truly diversified model for South Africa, suited to this day and age and our local context, provided that access to research universities is equitable, democratic and without elitist motivations. That would work on the assumption that research universities receive adequate state funding in order to prevent marketoriented fees or privatisation from simply excluding students from working class families yet again.

Stellenbosch University already is an esteemed research institution with a strong emphasis on innovation. This report offers numerous supporting facts, such as those on research outputs, research partnerships and research income, the increase in postdoctoral fellows, endowed research chairs and centres of excellence, a new record number of master's and doctoral degrees conferred, and an unequalled number of patent registrations and licensing agreements generated. In fact, SU's number of patent applications even exceeds those of other respected research institutions (see page 59). Research results in new products, services and agreements in the field of, amongst others, agricultural science, health sciences and technology, for the benefit of the country. In 2016, for instance, SU and Africa's very first massive open online course (MOOC) on an African philosophy of education (Teaching for change: An

African philosophical approach by Prof Yusef Waghid) was introduced.

All of this means that Stellenbosch University will be facing a huge challenge in drafting its new institutional strategy in the course of 2017: how to position itself so as to maintain its proven status as an excellent research-driven institution, broaden access and remain financially sustainable amidst financial constraints, without becoming an elitist institution for only those students able to afford high tuition fees. SU will have to carve out its own, new, feasible "idea of a university".

\* Robert Anderson is emeritus professor of history at Edinburgh University. He is a fellow of the Royal Society of Edinburgh and of the Royal Society of Arts. The reference is from a policy paper The 'Idea of a University' today – www.historyandpolicy.org.

**STELLENBOSCH UNIVERSITY** already is an esteemed research institution with a strong emphasis on **INNOVATION**.

### CONTENTS

	OUR JOURNEY TOWARDS INTEGRATED REPORTING	1
	FOREWORD BY THE CHANCELLOR	2
	OUR INSTITUTION	6
	Vision 2030	6
	Mission	6
	Our institutional intent and strategy	6
	Values	7
	Stakeholder groups	< 0.7
60	Our institutional business model	8
	GOVERNANCE	П
	Report of the Chair of the University Council	12
	Our Governance Structure	14
	University Council	15
	University Council's statement on corporate governance	17
	Report of Senate to Council	22
as	Report of the Institutional Forum	24
36	OUR PERFORMANCE AGAINST OUR STRATEGIC PRIORITIES	27
26	The Rector's Management Team	28
<u></u>	REPORT OF THE RECTOR AND VICE-CHANCELLOR	30
	Setting the scene	30
	Key business remains healthy to the core	30
	An increasing outward focus	31
	Rooted in Africa	31
	United, cohesive and aligned	31
	Reposition, for it's the right thing to do	32
	Being ecologically sound, socially just and financially viable	32
	A future of meaningful engagement	32
	Monitoring on the way forward – strategic management indicators	34
hūh	OVERVIEW OF OUR FINANCIAL CAPITAL	36
	Reporting standards	37
	Summary of consolidated financial information	38
	Available funds	41
256		42
38	REPORT OF THE CHIEF OPERATING OFFICER	43
	The sharpening of business processes and fundraising for financial sustainability	43
	The development of a campus mobility plan	47
	Commercialising of intellectual property and creating of business opportunities	47
	The pursuit of environmental sustainability	49
	Integrated planning, budgeting and reporting	49
Ħ	REPORT OF THE VICE-RECTOR (LEARNING AND TEACHING)	<b>50</b>
	Excellence in learning and teaching	50
	Student access with success	51
	Size and shape of SU student body	52

	Furthering programme renewal	54
	Information and communications technology for learning and teaching	54
	Increase multilingual programme offering	54
	Tapping into new knowledge markets	55
	Raising bursary donations	55
	REPORT OF THE VICE-RECTOR (RESEARCH, INNOVATION AND POSTGRADUATE STUDIES)	57
25	Appointing young academic stars	57
	Promoting research output	57
	Extending research innovation	59
	Establishing research focus areas	59
	Generating sustainable research income through research partnerships	60
	Sustaining postgraduate student success	61
	REPORT OF THE VICE-RECTOR (STRATEGIC INITIATIVES AND INTERNATIONALISATION)	63
36	Strategic initiatives	63
	Internationalisation	63
	Looking ahead	65
an	REPORT OF THE VICE-RECTOR (SOCIAL IMPACT, TRANSFORMATION AND PERSONNEL)	<b>66</b>
36	Promoting society-centred scholarship	66
		67
	Broadening access and creating development opportunities	
	Managing knowledge and other partnerships	67
M	Adding to our value proposition with an improved staff corps	68
202	REPORT ON RISK EXPOSURE, EVALUATION AND MANAGEMENT	71
	Exposure to external risks	71
	Internal strategic risk management	71
	FACULTY REPORTS	75
	Faculty of AgriSciences	76
	Faculty of Arts and Social Sciences	78
	Faculty of Economic and Management Sciences	80
	Faculty of Education	82
	Faculty of Engineering	84
	Faculty of Law	86
	Faculty of Medicine and Health Sciences	88
	Faculty of Military Science	90
	Faculty of Science	92
	Faculty of Theology	94
75	THE UNIVERSITY ACKNOWLEDGES EXCELLENCE	96
	Honorary degrees	97
	Chancellor's medal	99
	Chancellor's Awards	100
	FINANCIAL REPORT	102
	BEREE P	
	GLOSSARY	145
	Terms and definitions	145
	Strategic management indicators explained	146
	Abbreviations	148

5



#### **VISION 2030**

We see Stellenbosch University as an inclusive, innovative and future-oriented place of discovery and excellence, where staff and students are thought leaders in advancing knowledge in service of our stakeholders.

#### MISSION

We strive to achieve our vision for Stellenbosch University through sustained transformation and, on our journey of discovery through academia in the service of our stakeholders, we have resolved to:

- create an academic community in which social justice and equal opportunities will lead to systemic sustainability;
- investigate and innovatively implement appropriate and sustainable approaches to the development of Africa;

- align our research with a wide-ranging spectrum of challenges facing the world, Africa, our country and the local community;
- maintain student-centred and future-oriented learning and teaching that establish a passion for lifelong learning;
- invest in the innovative scholarship and creative ability of all our people;
- · leverage the inherent power of diversity; and
- establish and extend synergistic networks in which our University is a dynamic partner.



#### VALUES

#### Leadership in service of others

We promote the well-being of people and the world by leading with humility, responsibility and understanding.

#### Shared accountability

We realise and accept that, in the interests of the stakeholders we serve, we are jointly responsible for the achievement of the University's Vision.

#### Empathy

We promote human dignity through a culture of respectful behaviour - self-respect, respect for other people, and respect for the physical environment.

#### Innovation

We think and act in new and different ways and make good choices and decisions for ourselves, and for our stakeholders, the country, the continent and the planet.

#### Excellence

Everything we do is characterised by excellence.

#### STAKEHOLDER GROUPS

We serve our stakeholders, who are:

- prospective students, students and parents;
- employees and pensioners;
- government, regulators and professional bodies;
- alumni;
- donors; and
- the community (civil society, non-governmental organisations, industry, other universities, schools, advisory councils, service providers and the media).

STRATEGIC THEMES	STRATEGIC GOALS	VISION 2030
Increase access to new knowledge markets	<ul> <li>Expanding parallel-medium instruction and interpreting</li> <li>Furthering programme renewal</li> <li>Incorporating information and communication technologies for learning and teaching</li> <li>Building capacity for experimental learning and for a graduate attribute programme</li> </ul>	•••
Diversify profile of students and personnel	<ul> <li>Expanding parallel-medium instruction and interpreting</li> <li>Appointing young academic stars</li> <li>Broadening access and creating development opportunities</li> <li>Tapping into new knowledge markets for greater value extraction</li> <li>Raising bursary donations</li> <li>Improving personnel profile</li> <li>Managing knowledge and other partnerships</li> </ul>	
	Promoting research outputs	
Position as the leading research institution in Africa	<ul> <li>Promoting society-centred scholarship</li> <li>Extending research innovation</li> <li>Establishing research focus areas</li> <li>Commercialising intellectual property and business opportunities</li> <li>Generating extra income through research partnerships</li> </ul>	
Maintain student success rate	<ul> <li>Establishing comprehensive rural platforms</li> <li>Incorporating information and communication technologies for learning and teaching</li> <li>Sustaining postgraduate student success</li> <li>Implementing the Mobility Plan</li> </ul>	
	Advocating justice and equal opportunities	•
Advance committed visionary leadership	<ul> <li>Sharpening business processes and fundraising for financial sustainability</li> <li>Managing knowledge and other partnerships</li> <li>Pursuing environmental sustainability</li> <li>Instituting integrated planning, budgeting and reporting</li> </ul>	
	Inclusive Innovative Future orientated Transformative	

### Our institutional **BUSINESS MODEL**

he University's aspirational business model is shown below. In essence it all starts with a connection as the University focuses on its key stakeholders and how to satisfy their needs by means of value-adding activities, such as learning and teaching, research and innovation, social impact, internationalisation and enabling professional support. The degree to which the University manages to do this in a sustainable manner, determines the revenue streams to the University. At the same time, the offering of its various value-adding programmes requires resources and also requires the University, where appropriate, to partner with other organisations. This obviously has cost implications for the University.

### Dimensions of our **Business Model**

#### **PARTNERS**

- I. Government and governmental agencies
- 2. Industry (local and international)
- 3. Alumni
- 4. Donors (local and international)
- 5. Association of African Universities
- 6. SU Council
- 7. International networks
- 8. Town Council and Municipality
- 9. Sport bodies (including Stellenbosch Academy of Sport)
- 10. South African Police Service and private security firms
- II. Selected supplier networks

#### COST STRUCTURE

- (as % of total expenditure)
- I. Employee cost: 47,5%
- 2. Operating cost: 45,8%
- 3. Other (depreciation and finance charges): 6,7%

#### **ACTIVITIES**

- I. Research and innovation (basic and applied)
- 2. Learning and teaching (on-campus, off-campus)
- 3. Social impact
- 4. Internationalisation
- 5. Enabling professional and administrative support services (Human Resources, Finances, Facilities Management, Safety and Security, Student Support, Information Technology, Sport, Mobility, Student Accommodation, Commercialisation, Quality Assurance)
- 6. Technology Transfer and Business Development
- 7. Corporate Communication and Public Relations
- 8. Development and Alumni Relations

#### RESOURCES

- I. SU brand / reputation
- 2. People (employees) capabilities and engagement, including ability to innovate
- 3. Faculties with need-driven and functional academic offering
- 4. Student ability to co-create value and be co-accountable
- 5. Facilities (academic and student housing, well-equipped laboratories, ITC facilities)
- 6. Intellectual capital
- 7. Funding resources
- 8. Well functioning administrative systems
- 9. Alumni
- 10. Industry
- II. Government
- 12. Supplier networks
- 13. Welcoming institutional culture

In essence relationships starts with a **CONNECTION.** 

#### VALUE PROPOSITION

A function of:

- I. Reputation, global ranking and networks
- 2. Preferred higher education partner in Africa
- 3. Higher education gateway to Africa
- 4. Relevance and engagement: Local, Africa, Global
- 5. Quality, success and expansive academic footprint
- 6. Accountability, affordability and inclusivity7. Innovation and entrepreneurship: inputs,
- processes and outputs (Learning & Teaching; Research; Social Impact)
- 8. Systemic sustainability
- 9. Governance
- 10. Leveraging geographical location
- 11. Sport: Facilities, science, variety of codes, expertise, reputation
- 12. Safe and nurturing environment
- 13. Employer of first choice
- 14. University in service of society
- Technology transfer: Patents, Licences, Innovus, LaunchLab, Portfolio of Spinout companies
- 16. Multilingualism
- 17. Co-curricular activities

#### **INCOME STREAMS**

(as % of total income)

- I. First-stream: Government grant: 33,7%
- 2. Second-stream: Student and accommodation fees: 21,3%
- 3. Third-stream: Research, investments, commercialisation and sales: 38,6%
- 4. Fourth-stream: Philanthropic donations and bequests: 6,4%

#### **RELATIONSHIPS**

- (per stakeholder group)
- I. Enticing advantage
- 2. Enabling success and ensuring employability
- 3. Credibility, excellence and international recognition
- 4. Accessible and transferable higher education
- 5. Flexibility and relevance
- 6. Safety, affordability, quality and accessibility
- 7. Competitve employee value proposition
- 8. Recognised as a national higher education asset
- 9. Partnership with industry to generate and disseminate new knowledge in a relevant effective manner
- 10. Governance, leverage for big issues
- 11. Quality, information and communication
- 12. Sustainable cooperative existence with SU and alignment of goals
- 13. Well-governed world-class university
- 14. Co-ownership and promoting quality of HE in Africa
- 15. Enabling environment for highperformance sport

#### LEAD CHANNELS

(for primary service rendering) Delivery - Learning and Teaching

- 1. On campus face-to-face teaching
- 2. Blended learning (including web,
- telematic, experiential, action learning)
- 3. Virtual (including via partnerships)

#### Delivery - Research

- I. Publications
- 2. Seminars

#### **KEY STAKEHOLDERS**

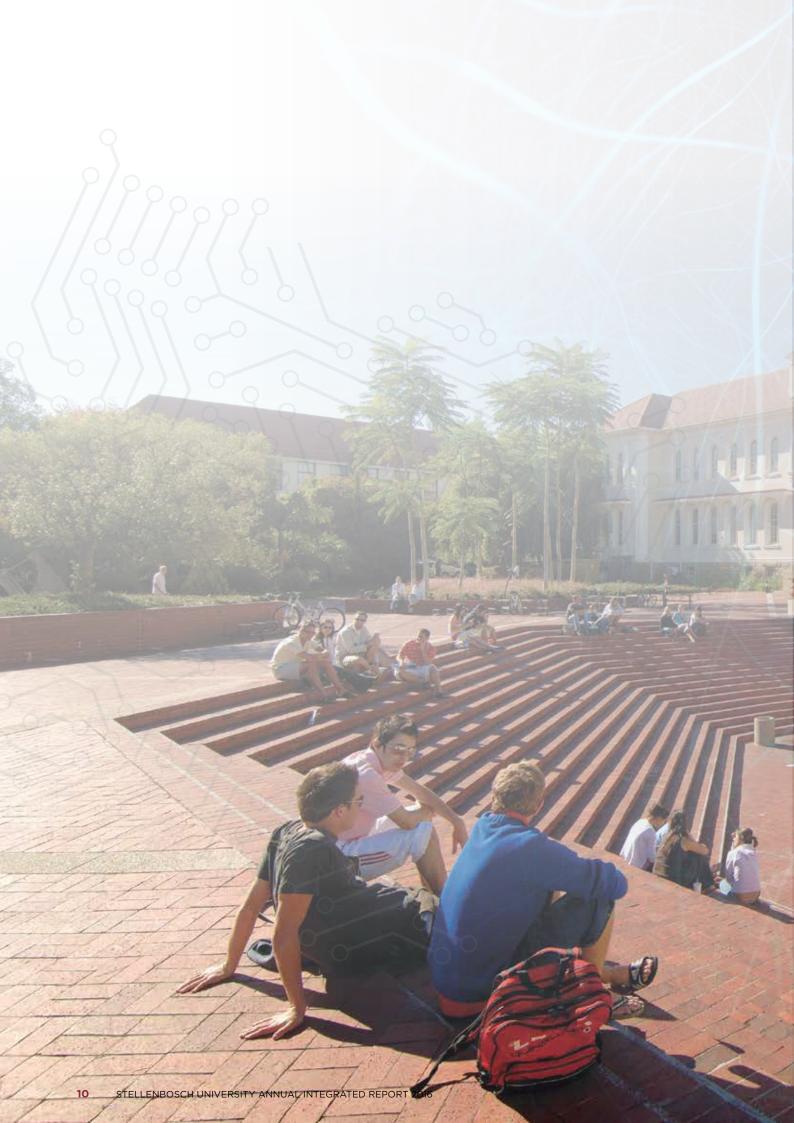
- I. Staff
- 2. Prospective students
- 3. Students
  - Undergraduate students
  - Postgraduate students
- 4. International students
- 5. Mass market (diplomas)
- 6. Learn and earn students
- 7. Parents
- 8. Government
- 9. Industry
- 10. Donors
- II. Alumni
- 12. Stellenbosch Municipality and Town
- 13. SU Council
- 14. Trade unions
- 15. International funding agencies
- 16. Association of African Universities
- 17. Sport local and international
- 18. Service suppliers through viable sourcing
- 19. Venture Capital Companies
- 20. Investors
- 3. Books
- 4. Learning and teaching
- 5. Innovus (technology transfer, LaunchLab, commercialisation)

#### Delivery - Social impact

I. Blended with learning and teaching

9

2. Joint projects with communities



### GOVERNANCE

COLUMN STREET



Although events in the higher education sector in South Africa dominated the reporting year, Stellenbosch University (SU) nevertheless managed to have a smooth student registration process, deliver quality teaching, and finalise the end-of-year examinations and graduation ceremonies on schedule and without disruption.

### Report of the CHAIR OF THE UNIVERSITY COUNCIL

George Steyn, Chair of Council

ike the 25 other South African universities, SU too did not escape the financial impact of no increase in student fees announced by the president in 2015, student protests and further student calls for free university education (the #FeesMustFall movement). In addition, institutions come under increasing pressure to expand their student intakes and improve throughput rates.

Given Council's responsibility to oversee good governance and management as well as long-term financial sustainability, we remain perturbed by the uncertainties in the sector, including in relation to the new subsidy formula, backlogs due to chronic underfunding by the government, and demands for free higher education towards the end of 2016. In respect of the 2016 financial year, Council contributed R15,2 million from its discretionary funds to make up the deficit on the main budget. The University faces unprecedented financial challenges.

It was encouraging that, despite the pressure of urgent, unforeseen and even external challenges, SU could still focus on important matters to advance systemic transformation in the long-term interest of the institution. Apart from the new Language Policy, an Employment Equity Policy, the Policy on Unfair Discrimination and Harassment, and the new Student Disciplinary Code were adopted in the reporting year. Council also commented extensively on SU's proposed Admissions Policy in the course of the year, and the final document will be adopted in early 2017 at a special meeting. This new policy will take effect in 2018.

In 2016, SU's Language Policy and use of language were again in the firing line for the umpteenth time since 2004, particularly in the Afrikaans media. A successful court

application was brought against SU to ensure that the Language Policy adopted by Council in 2015 would be implemented in faculties in 2016. That Language Policy was reviewed in the first semester of 2016, and Council adopted it in June with the concurrence of Senate. This was followed by another court application to have SU's new Language Policy set aside. SU is opposing this application, and the matter was yet to be finalised by the end of the reporting year.

In the meantime, SU continued to put plans in place for the new Language Policy to be implemented in 2017. Although the adoption of the new Language Policy resulted in the resignation of two Council members, the majority of members supported SU's premise, namely that no student or staff member must ever be excluded from the academic offering or activities of the institution on the grounds of language. Students who prefer receiving tuition in Afrikaans are still free to do so at SU, while those with little or no proficiency in Afrikaans may study in English.

Council supports management's point of view, that the new Language Policy gives effect to SU's vision as contained in its Institutional Intent and Strategy – to be an accessible and inclusive institution. This is also the objective of the other policies that Council approved in 2016, as well as the Admissions Policy soon to be finalised.

Despite financial and operational challenges as well as turbulent socio-political times, management, staff and students successfully completed the 2016 academic year. As Chair of Council I am very proud of achievements such as 427 researchers rated by the National Research Foundation in 2016 (as opposed to 302 in 2012), a record number (8 339) of qualifications awarded, including a phenomenal number of doctorates (278), along with high module success rates and continuously increasing research outputs.

More than half of the planning horizon of SU's Institutional Intent and Strategy (2013–2018) has already lapsed. For this reason, Council in 2016 also approved the appointment of a new Vice-Rector: Strategic Initiatives and Internationalisation, and requested management to start drafting a new institutional strategy in 2017.

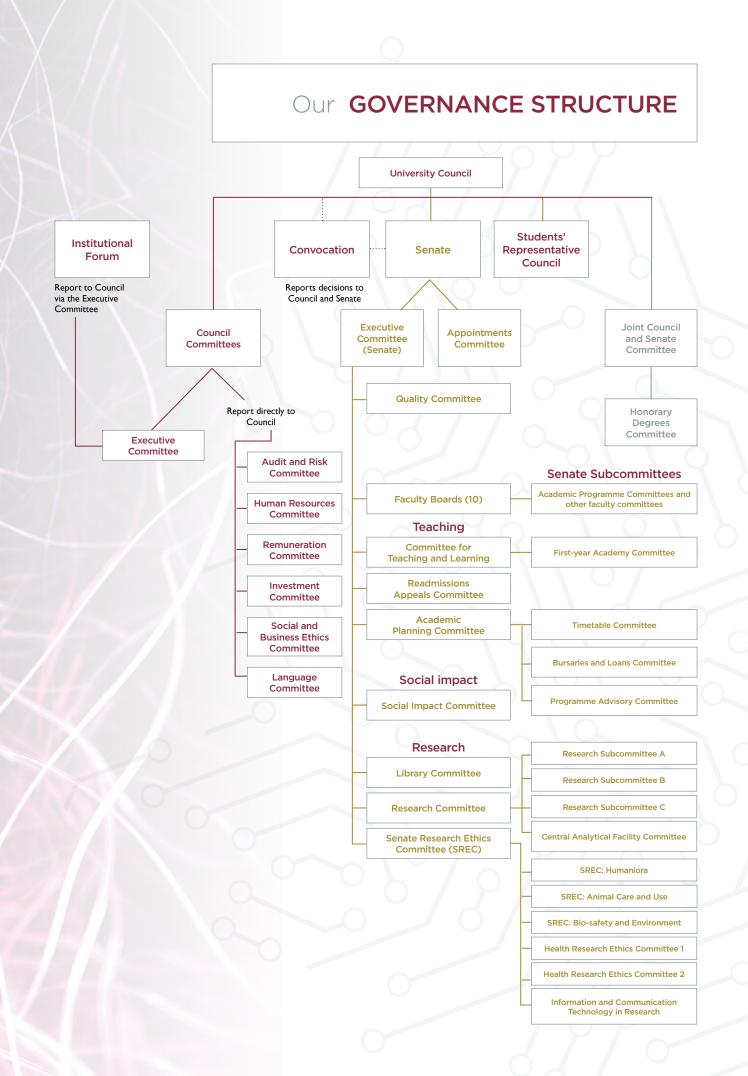
As part of its oversight role and its management and governance function, Council is mindful of its responsibility to ensure the integrity of integrated reporting. Although this report on the activities of 2016 is largely seen as SU's second integrated annual report, the publication still contains certain elements of a conventional annual report, for example the chapter "University Council's Statement on Corporate Governance" on page 17. This is to allow for compliance with the Department of Higher Education and Training's new guidelines for reporting by higher education institutions published in the *Government Gazette* no. 37726 of 9 June 2014. Council members satisfied themselves as to the framework and contents of this report before Council finally signed off on the document on 8 May 2017.

SU subscribes to the principles of leadership, sustainability

and corporate citizenship in terms of the King Code of Governance (King III), and our consolidated annual financial statements are drafted in accordance with the applicable prescripts of International Financial Reporting Standards (IFRS).

On behalf of Council, I sincerely thank the University community for their hard work and loyalty towards the institution. Council too had a particularly busy year, with a special meeting called in addition to its scheduled gatherings, as well as a range of task teams who had to report back on their activities. I appreciate the dedication of the Vice-Chair, Prof PW van der Walt, and all Council members, as well as the highly knowledgeable members of the various Committees of Council. Thank you very much for your support.

George Steyn Chair of Council



### University **COUNCIL**

The University Council governs Stellenbosch University subject to the Higher Education Act (Act 101 of 1997) and the institutional statute. The functions and composition of Council are set out in the Statute of Stellenbosch University. Council members are listed below as at 8 May 2017, the date on which Council approved for publication the Stellenbosch University Annual Integrated Report 2016.

- Members of the Executive Committee of Council
- Members of the Audit and Risk Committee of Council
- Members of the Human Resources Committee of Council
- Members of the Investment Committee of Council
- Members of the Remuneration Committee of Council
- Members of the Social and Business Ethics Committee of Council

Our statutory Council and Senate committees are shown in the diagram on the previous page. For information on the roles of the above-mentioned committees, see "University Council and sub committees of Council", page 17.

	Name	Age	Qualifications	Term of office
	MEMBERS			
lector and Vie	ce-Chancellor			
•••• F	ProfWJS de Villiers	57	MB,ChB, MMed (Int) (Stell), FCP(SA), DPhil (Oxon), MHCM (Harv), DSc hc (Coventry)	1.4.2015–31.3.2020
Chief Operati	ng Officer			
• • F	Prof L van Huyssteen	66	MScAgric, PhD (Agric) (Stell)	1.4.2013-31.12.2017
/ice-Rector (S	Social Impact, Transformation and	d Personnel)		1
F	Prof NN Koopman	55	BA, DTh (UWC)	1.7.2016-30.6.2021
ice-Rector (l	Learning and Teaching)			
F	Prof A Schoonwinkel	62	BEngHons, MEng (Stell), MBA (UCT), PhD (Stanford), PrEng	1.9.2012–31.8.2017
ice-Rector (l	Research, Innovation and Postgra	duate Studies)		
F	ProfTE Cloete	59	MSc (UOFS), DSc (Pret)	1.9.2012-31.8.2017
LECTED B	THE PERMANENT ACADE	1IC STAFF (N	ON-SENATE MEMBERS)	
•	Prof J Fourie	34	MCom, PhD (Utrecht)	1.9.2016-31.8.2018
LECTED B	THE PERMANENT NON-AG		NFF	
1	1s G Arangies	53	BCom (UPE), MBA (Stell)	6.4.2016-5.4.2018
LECTED BY	THE INSTITUTIONAL FOR	UM		
N	/acant			
	BY THE MINISTER OF HIGH	IER EDUCATI	ON AND TRAINING	
	1r AR Diedrich	57	Dip Fine and Commercial Art (CT Tech); Cert DevStud (Zimbabwe Open Univer- sity); PGCerts Globalisation (GLU Kassel), DevEcon (BSE, Germany), (EdMethod and La- bour Ed) (ACTRAV, Turin), Empl and SocSecur Law, and Adult Ed (UCT)	23.3.2017–22.3.2021
F	Prof A Keet	52	MEd (UWC), PhD (Pret)	1.12.2014-30.11.2018
F	Prof PG Maré	71	BAHons (UN), BAHons, MA (Wits), PhD (UN)	25.9.2014–24.9.2018
	1sTS Lingela	60	BA, UED (Fort Hare), BEd (Rhodes), MEd (UDW, USA)	1.1.2014-31.12.2018
	/acancy		-	-
LECTED B	THE CONVOCATION			
F	Prof WAM Carstens	65	MA, DLitt (Stell)	2.4.2014–1.4.2018
F	Prof AR Coetzee	66	MB,ChB, MMed (Anes), PhD, MD, PhD, DSc (Stell), FCA(SA), FFARCS	2.4.2016-1.4.2020
F	Prof GJ Crafford	39	MSc QS (UPE), PhD (NMMU), MBA (Stell)	4.11.2016-1.4.2020
N	1r H Gonzales	29	LLB (Stell), registered attorney	2.4.2016-1.4.2020

	Name	Age	Qualifications	Term of office
EC1	TED BY THE CONVOCATION Continue	ed		
	Prof JH Hambidge	60	BAHons (Stell), MA (Pret), PhD (Rhodes), PhD (UCT)	22.6.2016-1.4.2018
	Mr JG Theron	53	BA Law, LLB (Stell)	2.4.2014-1.4.2018
.EC	TED BY SENATE			1
	Prof UME Chikte	63	PhD (Stell), MSc (UCL), MDent, DHSM (Wits), BChD (UWC)	1.1.2016–31.12.2017
	Prof A Gouws	58	MA (RAU), PhD (Illinois, Urbana- Champaign)	1.1.2016–31.12.2017
	Prof MA Fataar	51	BA, HDE, BAHons, MPhil, PhD (UWC)	3.6.2016-30.6.2018
PPO	INTED BY THE COUNCIL OF THE MU		TY OF STELLENBOSCH	
	Adv GMM van Deventer	58	Dip Viticulture and Botany, Dip Cellar Master and Wine Maker (First Class) (Elsenburg), BA Law, LLB (Stell)	1.12.2016–30.11.202
EC	TED BY THE DONORS			
•	• • Mr GM Steyn (Chair from 2.4.2012)	58	BA Law, LLB (Stell)	2.4.2014-1.4.2018
•	• • Prof PW van der Walt (Vice-Chair from 7.5.2012)	70	BScBEng, MEng, PhD (Stell)	2.4.2014–1.4.2018
•	• • Mr JJ Durand	50	BAccHons (Stell), MPhil (Oxon), CA(SA)	2.4.2016-1.4.2020
EC	TED BY THE PREMIER OF THE WESTE	RN CAPE I	PROVINCIAL GOVERNMENT	
•	• • Mr AP van der Westhuizen	58	BCom, HED, MEd (Stell)	1.8.2014–31.7.2018
.EC	TED BY COUNCIL			1
	Mr AV Moos	39	BA, BPhil Journalism, MBA (Stell)	5.5.2014-4.5.2018
	• Ms K Njobe	46	Biology (UCLA, USA), MSc (Zoology) (Pret), MTE (IMD, Switzerland)	5.5.2014-4.5.2018
.EC	TED BY THE STUDENTS' REPRESENTA	ATIVE COL	JNCIL	<b>'</b>
	Ms LA Julies	23	-	24.4.2017-31.12.201
	MrTM Mlangeni	19	-	10.3.2017-31.12.201
ne fo	ollowing non-Council members were app	ointed as a	dditional members of the Audit and Risl	< Committee
	• Prof DP du Plessis		BSc (UCT), MBA, DBA (Stell)	
	Mr JP Bester	6	BComHons (Acc) (Stell), BComHons (ManAcc), BComHons (InformSys) (UCT), CA(SA)	
	Mr BHJ Wessels		BCompt (Unisa), GIA(SA)	
	Mr H van der Ahee	0	BEng (Chem), BAcc, BComHons (Taxation) (Stell), BComptHons (Unisa), CA(SA)	
ne fo	ollowing non-Council members were app	ointed by (		`ommittee
	• Prof DP du Plessis		BSc (UCT), MBA, DBA (Stell)	
	Mr GT Ferreira		BCom, MBA (Stell)	
	Prof JD Krige		MCom (Stell), FIA (Lond)	
	Mr DK Smith		BSc (Stell), FASSA, ISMP (HBS)	
	Mr PG Steyn		BCom, LLB (Stell)	
	Mr MM du Toit		BScAgric, MBA (Stell)	
	• Ms E de la Harpe-Meaker		BAHons (Stell)	
	ollowing non-Council members were app	ointed by C	ouncil as members of the Social and Busi	ness Ethics Committe
ne fo			BComHons (Acc) (Stell), BComHons	
he fo	• • Mr JP Bester		(ManAcc), BComHons (InformSys) (UCT), CA(SA)	
he fo	Mr JP Bester     Dr T Theron			

# University Council's statement on **CORPORATE GOVERNANCE**

Stellenbosch University was established in 1918 under Act 13 of 1916 when the Victoria College was converted into a university.

#### UNIVERSITY COUNCIL AND SUBCOMMITTEES OF COUNCIL

The University Council (hereafter referred to as Council) is comprised of academic and non-academic members, duly appointed and nominated in terms of the Statute of the University, the majority of whom are not staff members or current students of the University. The role of the Chair of Council is separate from the role of the Rector and Vice-Chancellor of the University. The Chair of Council was re-elected during 2013 to serve a further term as Chair of Council from 2 April 2014 to 1 April 2018. Business allocated to Council for consideration and decision making is set out in the Statute of the University, either by established practices or in terms of the Higher Education Act, 1997. Council is accountable to its various interest groups. Council ensures that the University is managed in a responsible and transparent manner and is committed to sound management principles.

Council consisted of 28 members during 2016 (two positions are vacant). Council is comprised of five executive Council members, 13 independent non-executive Council members, five employees of the University, three members appointed by government and two appointed by the students. The names of the members, their qualifications and terms of office appear on pages 15 and 16.

Council officially met six times during the reporting year. The University reports with pride that the average Council meeting rate of attendance by Council members was 90% for the year under review. The lowest rate of attendance was 85%.

Council has created structures to ensure that its obligations to all interest groups are duly met at all times. The following committees of Council play a direct role in the effective functioning of the University: the Executive Committee of Council; the Human Resources Committee of Council; the Remuneration Committee of Council; the Audit and Risk Committee of Council, the Social and Business Ethics Committee of Council, the Investment Committee of Council and the Language Committee of Council. All the committees are formally constituted with written mandates and are mainly comprised of members of Council who are not staff members or students of the University.

The Council committees meet at different intervals, with some meeting before every Council meeting and others as and when required.

#### THE UNIVERSITY COUNCIL AND SUBCOMMITTEES OF COUNCIL: MEMBERSHIP AND ATTENDANCE OF MEETINGS

	Number of members	Positions filled	Number of meetings during 2016	Average attendance during 2016
University Council	30	28	6	90%
Executive Committee	7	7	7	83%
Audit and Risk Committee	7	7	3	89%
Human Resources Committee	5	5	2	90%
Remuneration Committee	4	4	2	88%
Investment Committee	8	8	4	59%
Social and Business Ethics Committee	5	5	4	84%
Language Committee	8	8	2	71%

The Executive Committee of Council, which meets at least five times a year, within its delegated powers makes decisions on behalf of Council, deals with business on behalf of Council, advises Council on policy decisions and, in the period between Council meetings, liaises with senior management on matters impacting the functions of Council. The Executive Committee of Council consists of seven members, who are also members of Council. Currently seven positions are filled. The Committee also fulfils a monitoring and control function on behalf of Council in that it makes recommendations on the University's transformation targets and monitors implementation, makes recommendations on the annual operating and capital budgets, and monitors progress in terms of the approved budgets and results. The committee is also responsible for ensuring that the University is financially sound and remains a going concern. This Committee met seven times during the reporting year. The Committee has no matters pending. Pending matters on the agendas of other committees reporting to Council through the Executive Committee will ultimately be included on its agenda and handled at that stage.

The Executive Committee rate of attendance for 2016 averaged 83%.

The **Audit and Risk Committee of Council**, whose Chair and members are also members of Council or are external individuals who have the required financial expertise to assist the Committee in the efficient execution of its duties, has been functioning since 31 October 2005 and consists of seven members, as set out on pages 15 and 16. Currently seven positions are filled. The committee meets at least three times a year and the meetings are attended by the internal and external auditors and the University's senior management. Unrestricted access of the internal and external auditors of the University to the Audit and Risk Committee ensures their independence. The Audit and Risk Committee functions in terms of a written Council mandate and is accountable to Council for the following:

- The safeguarding of assets.
- The operation of suitable systems of internal control.
- Risk management and risk control measures.
- Internal and external audits.
- Compliance with statutory requirements.
- Accounting policy.
- Financial reporting.
- The position of the University as a going concern.

The Audit and Risk Committee's regulations and matrix were updated and approved by Council during 2014.

The **Human Resources Committee of Council's** mandate includes recommendations to Council regarding general strategy and broad policy on employee matters as well as appointments and promotions of senior employees. The committee also communicates appointments and promotions of employees on job grade 4 in terms of its delegated authority by Council. The committee consists of five members, as set out on pages 15 and 16. Currently all five positions are filled. The committee met twice during 2016. The **Remuneration Committee of Council** is comprised of the Chairman of Council (not as chairman of the Remuneration Committee), two Council members who are not employees of the University, the Rector and Vice-Chancellor and two ex officio members (without voting rights), namely the Chief Director: Strategic Initiatives and Human Resources and the Manager: Remuneration and Benefits. The Remuneration Committee is responsible for setting general strategy and broad policy on matters concerning staff remuneration and fringe benefits and makes recommendations to Council regarding general remuneration increases.

The **Social and Business Ethics Committee** (SBC) of Council was formed at the end of 2014 and started functioning in 2015. The key function of the committee is to serve as the social conscience of the University, and to ensure that the institution acts as a responsible corporate citizen. The SBC is therefore responsible for overseeing how ethical the University conducts its business. The Committee has overall responsibility for establishing ethical values and associated codes of conduct and policies, to ensure that the principles of ethical business practice are adhered to and the impact thereof evaluated. The Committee makes the necessary announcements and recommendations in terms of its findings to Council.

The Committee is comprised of five members, namely two non-executive Council members, two representatives from University management and one external member. At least one of the members must also be a member of the Audit and Risk Committee. The Chair is a non-executive Council member. The Committee met four times during 2016.

The Committee focused on training the Committee members in its first year of existence to ensure that the Committee members are empowered to interpret and perform the committee's function and duties correctly.

The key aspects that were considered in 2016 include, among others, the use of an ethical code, ethical aspects regarding the in- and outsourcing of workers, the "purple face"- incident and report and the role, responsibilities and power of the ombud.

#### COMPLYING WITH LAWS, CODES, REGULATIONS AND STANDARDS

The University's internal auditors commenced with a compliance function assessment towards the end of 2016 and a report is due early 2017. Action plans and a road map have been agreed with management, which will be actioned in 2017 through 2018.

#### SHARING INFORMATION ACCORDING TO PAIA

Stellenbosch University is committed to fostering a culture of transparency and accountability through compliance with the Promotion of Access to Information Act (No. 2 of 2000) (PAIA) and to information sharing when appropriate. On 9 February 2016, the Rector's Management Team approved the institution's updated PAIA manual, which was submitted to the South African Human Rights Commission on 19 February 2016. The University submitted its compulsory section 32 report for April 2015 to March 2016 on 22 April 2016. From January to December 2016, the University received 11 requests made under the Act. Of these, five were granted, three were refused as the requested records do not exist (section 23 of PAIA), two were refused as the requests for access were not made in the prescribed form and the requestors did not make use of the opportunity to amend their requests (sections 18 and 19 of PAIA), and one was refused due to the mandatory protection of records privileged from production in legal proceedings (section 40 of PAIA).

#### **REPORTING UNDER KING III**

The King Code of Governance Principles (King III) has been

applicable to all business entities, including universities, since I March 2010. In August 2010, the University performed an independent internal audit of the extent of compliance with the applicable King III principles. At that stage the University had already complied with the majority of the principles and since compiled a complete action plan with a view to implementing the outstanding applicable principles.

The University subscribes to the philosophy of leadership, sustainability and corporate citizenship as set out in King III. King III requires an explanation of areas of non-compliance by business entities who declare that they comply with the principles. As at 31 December 2016 the University did not comply with the following:

Area	Explanation
Statute of the University	Where the amended Statute, which complies with the Higher Education Act, does not meet the requirements of King III, compensating measures will be put in place for observing the purpose of the guidelines.
Succession planning and talent management of Council members	Given that Council members are appointed by various interest groups based on spe- cific expertise, talent management is not possible. Succession planning is done by the respective interest groups responsible for the appointment of their representatives in Council.
Council committees	King III requires the various Council committees to review their regulations to perform a self-assessment annually. Taking into consideration that some of the committees by nature require only biannual meetings, which makes the annual review of these regulations and self-assessment impractical, the regulations are reviewed and adjusted as and when necessary.
Remuneration disclosure	Remuneration disclosure meets the requirements as set by the Regulations for Reporting by Higher Education Institutions and King III requirements are currently not being met.
Training register for Audit and Risk Commit- tee members	Given the expertise of the members and the positions they hold, additional training for Audit and Risk Committee members is not deemed necessary. Members will be required to confirm their continuous professional training and development on a regular basis.
Combined audit insurance framework and reporting	A combined audit insurance framework was developed by management and the internal auditors and will be considered for approval by the Audit and Risk Committee of Council during 2017.
Ensuring compliance with legislation	The appointment of an additional legal advisor in the Legal Services Division supporting the Director, provides the capacity for the development of a compliance function including the drafting of a legal compliance policy, plan and framework. The internal audit assessment of the compliance function will provide guidance for further steps and action to be taken.
	The responsibility for compliance remains at an operational level in line with the embedded risk management model.

Complying with the King III requirements is an ongoing process and complying with corporate governance principles is therefore evaluated continuously. The University already has processes in place to evaluate the impact and implementation of King IV in order to ensure compliance.

#### FINANCIAL AND CORPORATE MANAGEMENT

Effective, efficient and transparent financial management and internal control systems are used to ensure the accuracy of the University's accounting records and the integrity of the data used for the preparation of financial statements.

There are inherent limitations to the efficiency of any internal control system, including the possibility of human error and the circumvention or subversion of control measures. Consequently even an efficient system of internal control can at best only provide reasonable assurance as far as financial information is concerned.

The internal and external auditors assess the effectiveness, efficiency and reliability of financial management and internal control systems. Weaknesses in the systems are brought to the attention of management and, where applicable, to the attention of the Audit and Risk Committee. Steps are taken diligently to rectify deficiencies of control and offer the opportunity to improve the system as and when deficiencies are identified. The University also has a formal procedure in place for reporting possible anomalies or fraud.

The University functions in terms of a value system that is set out in its Strategic Framework and has been adopted by the University community. Financial management is based on a set of principles that was adopted by Council on 19 May 2003. The University also has an Assurance and Promotion of Ethically Accountable Research Policy. This policy is applied by three ethics committees (one each for research in relation to human participants, the care and use of animals, and environmental and biosafety) to ensure that researchers act in accordance with laid-down ethical norms in every relationship with subjects and objects during their scientific research. The ethical norms set out in the policy already apply at the time of assessment of the purpose of the particular research and the formulation of the subject of research, and are also binding in respect of finance resources; clients; the community; the physical, biological and social environment; the safety of researchers and collaborators and the personal responsibility of the researcher.

The UNIVERSITY functions in terms of a value system that is set out in its STRATEGIC FRAMEWORK and has been adopted by the University community.

# PURCHASING AND TENDERING PROCEDURES

The Purchasing and Provision Services Department is responsible for the development and implementation of a centralised purchasing policy and procedure that is based on ethics, fairness, impartiality, transparency and competitive cost-effectiveness. In this way, the Department wishes to offer all service providers from all communities the opportunity to do business with the University, irrespective of race, gender or faith.

Price limits determine when service or product purchases need to be put out to tender or how many quotations should be obtained. A distinction is also made between institutional, strategic and capital tenders, as well as tenders that do not affect the operations of SU as a whole, such as the purchasing of research equipment. These purchases are each subject to their own set of rules in terms of the approvals needed before tenders may be invited and awarded. The rules are contained in SU's Purchasing and Tender Policy as well as the Rules with regard to Delegation of Authority and Responsibilities. Prior to each tender adjudication, members of the tender committee are expected to complete a declaration-of-interest form. If any member appears to have conflicting interests, that member does not take part in the adjudication.

In 2016, the Rector's Management Team resolved that all tenders for continuous services, including cleaning services, should in future be dealt with in terms of a new so-called viable sourcing model, commencing in 2017. This model will enable the University to transparently determine the optimal solution for the supply of these services to SU, considering various stakeholders' inputs. The underlying principles of the model include:

- human dignity;
- sustainability of SU;
- financial feasibility;
- transparency and confidentiality;
- stakeholder inputs;
- signing of a code of conduct;
- corporate governance; and
- best mutual benefit.

In addition, tenders awarded during 2016 included those for the purchase of various types of desktop and laptop computers as well as the installation of lecture hall seats and work surfaces. Tenders were also invited for various capital projects, the largest of which was the renewal of HBThom Theatre. See the tables on the following page for the tender committee members.

In all instances above, the adjudication and appointments occurred in terms of the provisions of SU's Purchasing and Tender Policy, as well as the Rules with regard to Delegation of Authority and Responsibilities.

#### **INFORMATION TECHNOLOGY**

Information and Communication Technology (ICT) Management helped establish improved control mechanisms over the past few years. Examples of this include the formation of various committees for liaising with key stakeholders on learning and teaching, and research, as well as infrastructure. The ICT function is currently undergoing an extensive self- and peer assessment process. Any gaps in respect of management

#### MEMBERS OF THE TENDER COMMITTEE FOR THE PURCHASE OF THE DESKTOP AND LAPTOP COMPUTERS

Name	Position
Mr A Meyer	Manager: Infrastructure, IT
Ms L Pharaoh	Senior computer technician, IT
Ms Z Davidse	Manager: Learning Technology, IT
Mr J van Rooyen	IT manager: Faculty of Economic and Management Sciences

### MEMBERS OF THE TENDER COMMITTEE FOR THE INSTALLATION OF LECTURE HALL SEATS AND WORK SURFACES

Name	Position
Mr K Matthew	Research development and quality assurance: Strategic Initiatives
Mr AC Kriel	Manager: Capital Projects
Mr S Opperman	Director: Planning and Development
MrVS Daguanno	Faculty of Engineering
Ms M Nell	Senior planner

#### MEMBERS OF THE TENDER COMMITTEE FOR THE RENEWAL OF THE HB THOM THEATRE PROJECT

Name	Position
Ms C Skeen	Project Manager: Capital Projects
Mr AC Kriel	Director: Planning and Development (Acting)
Ms N van den Eijkel	Chief Director: Facilities Management
Ms M Malan	Senior accountant

and/or control highlighted during this process, will be addressed. Finally, an extensive set of information-related policies and regulations was recently developed and reviewed and is being submitted for approval. Matters on ICT control are currently placed on Council's agenda by way of the Audit and Risk Committee's accountability for risk management.

#### STUDENT PARTICIPATION

The participation of students in decision making is important to the University, as also set out in the Strategic Framework.

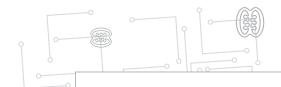
At a macrolevel, students have a seat in the highest formal structures of authority, such as the Students' Representative Council (SRC) representation in Council, the Senate and the Institutional Forum. Students are also members of the faculty boards, the Student Fees Committee, the Honorary Degrees Committee, the Social Impact Committee and the selection committees for the appointment of the Rector and Vice-Rectors. Furthermore, students serve in various important working committees, such as the Bursaries and Loans Committee, the Central Disciplinary Committee, the Quality Committee, the Library Committee and the Student Accommodation Committee. Student representatives are appointed from the faculties to form the Academic Affairs Council (AAC), the Chairman and Vice-Chairman of which perform various representative functions in the area of the Vice-Rector (Learning and Teaching). They serve, among others, on the Academic

Planning Committee and the Learning and Teaching Committee.

Various advisory forums – for instance for students with special learning needs or HIV/Aids or who are harassed or suffer from substance abuse – also avail themselves of students' skills and knowledge. The Welcoming and Monitoring Work Group, who manages the welcoming of newcomer students, consists of various student representatives and all but one of the monitors are from student ranks. The Stellenbosch University Advisory Forum for Student Support Services also includes student representatives.

The Student Councils of Stellenbosch, Tygerberg and the Military Academy assist with the leadership development of students. The Frederik van Zyl Slabbert Institute for Student Leadership Development at the Centre for Student Affairs presents leadership development opportunities for both positional leaders (also from residences and private student wards) and non-positional leaders. The constitution of the Societies' Council makes provision for student societies, under the leadership of a member of the SRC, to play a more structured role in the development of a diverse and healthy student community.

The Chairs of the SRC and the AAC have bimonthly fixed meetings with the Vice-Rector (Learning and Teaching), in addition to ad hoc meetings arranged as and when required. Furthermore, the Executive Committee of the SRC meets at least 10 times with the Management Team of the Rector annually for discussing general management matters.



### Report of **SENATE TO COUNCIL**

A s a statutory body, Senate made an important contribution to the positioning of Stellenbosch University as a full-fledged 21st-century university in the reporting year. Senate met four times during 2016 to discuss contributions by its various committees, namely the Executive Committee of Senate, the Appointments Committee, the Quality Committee, the faculty boards, the Committee of Learning and Teaching, the Readmissions Appeals Committee, the Academic Planning Committee, the Social Impact Committee, the Library Committee, the Research Committee, the Senate Research Ethics Committee and the Honorary Degrees Committee (see "Our governance structure" on page 14). These discussions were followed by specific recommendations to Council.

Matters that received attention at the Senate meetings included the recommendation to Council of a number of new academic programmes, a number of policies (including the amended Admissions Policy), as well as the appointment or reappointment of deans and vice-rectors. The latter included recommendations on the appointment of deans for the faculties of Engineering, Military Science, Law, and Theology, the reappointment of the vice-rectors for Learning and Teaching as well as Research, Innovation and Postgraduate Studies, and the appointment of vicerectors for Social Impact, Transformation and Personnel, as well as Strategic Initiatives and Internationalisation. In addition, Senate approved doctoral research topics and discussed a range of teaching and community activities in connection with academia.

Due to limited capacity and the large quantity of applications received, all the University's undergraduate programmes have been selection programmes for the past number of years already. In order to ensure improved student diversity at SU without excluding anyone based on language, the Language Policy was reviewed and subsequently adopted by Council with the concurrence of Senate (see "Increase multilingual programme offering" in the report by the Vice-Rector (Learning and Teaching), page 54).

#### CHANGE IN ACADEMIC STRUCTURES

In consultation with the faculty board of Medicine and Health Sciences, Senate approved the unbundling of the Department of Interdisciplinary Health Sciences (DIHS) into the following four departments:

- Department of Nursing and Midwifery;
- Department of Family and Emergency Medicine;
- Department of Health and Rehabilitation Sciences; and
- Department of Global Health.

The posts for the new executive and divisional heads were advertised internally, and Prof Usuf Chikte, former DIHS head, will be serving as interim acting head of a number of departments and divisions.

#### FURTHERING PROGRAMME RENEWAL

The Department of Higher Education and Training and the Council on Higher Education respectively approved and accredited the following new programmes in 2016:

#### Undergraduate

- BEd in Foundation Phase Teaching;
- AdvDip in Education in Further Education and Training Life Sciences Teaching;
- AdvDip in Education in Further Education and Training Mathematics Teaching; and
- AdvDip in Education in Senior Phase Mathematics Teaching.

#### Postgraduate

- PGDip in Transdisciplinary Health and Development Studies;
- Master of Urban and Regional Planning;
- BEdHons in Educational Psychology;
- BEdHons in Educational Support;
- BEdHons in Foundation Phase Education;
- MPhil in Rheumatology;
- MPhil in Emergency Medicine;
- MPhil in Family Medicine;
- MPhil in Medicines Development;
- PGDip in Agronomy;
- MSc in Food and Nutrition Security;
- PGDip in Film Music;
- MPhil in Film Music;
- MPhil in Development Demography;
- MPhil in Minimally Access Gynaecological Surgery;
- Master of Addiction Care;
- Master of Public Health Nutrition;
- MSc in Biostatistics;
- MPhil in Cancer Science;
- MPhil in Infant Mental Health; and
- PhD in Urban and Regional Science.

#### COMPOSITION OF SENATE

Senate has been constituted as prescribed by the Stellenbosch University Institutional Statute and comprises:

- the Rector and Vice-Chancellor, Prof WJS de Villiers (chair);
- the Rector's Management Team, namely: ProfTE Cloete (Vice-Rector: Research, Innovation and Postgraduate Studies);

Prof HC Klopper (Vice-Rector: Strategic Initiatives and Internationalisation);

Prof NN Koopman (Vice-Rector: Social Impact, Transformation and Personnel); Prof A Schoonwinkel (Vice-Rector: Learning and Teaching); and Prof L van Huyssteen (Chief Operating Officer);

- the Registrar, Dr RR Retief (Secretary);
- two members of Council (each for a two-year term), namely Ms M Arangies and Prof PW van der Walt;
- all full professors of the University;
- five associate professors;
- four members of the Students' Representative Council;
- two academic staff members who are neither professors nor associate professors;
- two administrative staff members;
- two technical staff members;
- departmental chairs who are not full professors;
- two secundus deans in the Faculty of Military Science; and
- all vice-deans who are not full professors.

Council also declared the following persons members of Senate:

- The chief directors of Facilities Management; Finance; Sport; and Strategic Initiatives and Human Resources.
- The senior directors of the Library and Information Service; Information Technology; Innovation and Business Development; Institutional Research and Planning; Corporate Communications; Learning and Teaching Enhancement; the Postgraduate and International Office; Research; Development and Alumni Relations; Social Impact; Student Affairs; and Prospective Students.
- The director of the Centre for Teaching and Learning.

#### CONTRIBUTION TO VICE-RECTORS' PORTFOLIOS

Finally, it can rightly be said that Senate made a comprehensive and expert contribution to the portfolios of Learning and Teaching; Research, Innovation and Postgraduate Studies; Social Impact, Transformation and Personnel; and Strategic Initiatives and Internationalisation during the reporting year. For more information on these portfolios, please turn to the respective vice-rectors' reports (pages 50 to 70). The University also acknowledges excellence by awarding honorary degrees, a Chancellor's Medal and Chancellor's Awards – for more on this, consult page 96.

14 de Villier

Prof Wim de Villiers Chair of Senate

### Report of the **INSTITUTIONAL FORUM**

he Institutional Forum (IF) is an advisory body that, in terms of section 31(1) of the amended Higher Education Act 101 of 1997, advises the University Council on policy matters, including the implementation of provisions of the aforementioned act and of national policies on higher education.

IF activities consist of meetings to consider advice to Council, as well as opportunities for discussion between the IF Executive Committee and the Rector's Management Team. From time to time, the IF utilises three task teams on diversity and equity, institutional planning, and institutional culture respectively to finalise its activities more swiftly. Members volunteer to serve on the task team(s) of their choice. The task teams are mandated to properly investigate the matters assigned to them and report back to the IF, which then provides well-considered advice to Council.

#### COMPOSITION OF THE INSTITUTIONAL FORUM

According to the Statute of the University, the IF consists of 32 members. Eight members are appointed as prescribed from each of the four sectors of governance and management, staff, students and the community.

#### ACTIVITIES

The IF is expected to advise Council on policy documents and to comment on the University management's implementation of the Higher Education Act. To this end, the full IF and its Executive Committee each meets four times a year. At each Executive Committee meeting, the agenda of the following IF meeting is finalised. The Executive Committee also endeavours to meet with the Rector's Management Team prior to each IF meeting.

Moreover, the IF continuously seeks to focus on specific matters in addition to its legally prescribed duties and responsibilities so as to provide Council with proactive advice for its consideration and further investigation. The strategic priorities of the University are considered paramount throughout.

#### Transformation on campus

The IF remains committed to actively take part in accelerated transformation in order to establish a culture of inclusivity on the University's campuses. In this regard, an IF representative serves on the Transformation Committee, chaired by the Vice-Rector (Social Impact, Transformation and Personnel) and reporting to the Rector's Management Team.

#### Appointment of senior staff

As provided for by the applicable rules, the IF took part in the processes for senior staff appointments, namely those of the Vice-Rector: Social Impact, Transformation and Personnel, and the Vice-Rector: Strategic Initiatives and Internationalisation, as well as the reappointment of the Vice-Rector: Learning and Teaching, and the Vice-Rector: Research, Innovation and Postgraduate Studies. IF members also serve on the selection committees for the appointment of various deans.

#### Comment on proposed policies

University policies on which the IF advised Council by way of formal reports included:

- the Postdoctoral Policy;
- the first draft of the Admissions Policy;
- the Language Policy;
- the Policy on Unfair Discrimination and Harassment;
- the Trademark Policy;
- the Employment Equity Policy;
- the Student Disciplinary Code;
- the Records Management Policy; and
- the Plagiarism Policy.

The IF supports the overall intentions of the policies above. The Forum proposed technical and editorial amendments to some of the policies, and emphasised the urgent need for training and empowerment to enable effective policy implementation. It was also recommended that Council in each instance determine whether the Afrikaans or English version of a policy should be regarded as the operative version. In light of the University's Vision 2030, in terms of which the institution seeks to be welcoming and inclusive, the IF will continue to recommend necessary amendments to policies and regulations in order to realise this vision.

#### **CLOSING REMARKS**

As in the past, the IF feels very strongly that codes of conduct for staff and students should continue to receive attention in order to expedite the establishment of an inclusive culture on campus. In this respect, the pursuit of a listening, tolerant culture is particularly important.

With a view to the future, the IF will continue its normal, legally prescribed activities in 2017, while also actively focusing on encouraging campus discussions on aspects of diversity promotion and transformation. Feedback will be provided to Council by way of formal reports.

Mr Le Roux Burrows Chair of the Institutional Forum



# Our **PERFORMANCE** against our **STRATEGIC PRIORITIES**

In this chapter, the report of the Rector and Vice-Chancellor presents an overview on the University's performance as measured against its strategic priorities, strategic management indicators and its Council's targets for the year under review. The Chief Operating Officer and the Vice-Rectors report in more detail on how their responsibility centres fared with their strategic goals. The reports provide an outline of how their integrated plans - encapsulating the business plans of the various entities that they manage - contribute to the strategic direction that Stellenbosch University has embarked upon as a 21st century university. The direction is in line with the strategic priorities, themes and objectives as set out on page 7.

### The Rector's MANAGEMENT TEAM

The Rector, Chief Operating Officer and Vice-Rectors form the executive management of the University. They are ex officio members of Senate and, with the exception of Prof Klopper, of Council. The Registrar is responsible for the academic administration of the University and is ex officio a member of Senate. The Team is given below as at 31 December 2016.



#### **RECTOR AND VICE-CHANCELLOR**



Prof Wim de Villiers MB,ChB, MMed (Int), FCP(SA), DPhil, MHCM, DSc hc Joined the University in 2015 with his appointment as Rector and Vice-Chancellor

#### CHIEF OPERATING OFFICER

**Prof Leopoldt van Huyssteen** MScAgric, PhDAgric Joined the University in 1999; appointed as Chief Operating Officer in 2013

#### VICE-RECTOR (LEARNING AND TEACHING)

**Prof Arnold Schoonwinkel** BEngHons, MEng, MBA, PhD, PrEng Joined the University in 1988; appointed as Vice-Rector (Learning and Teaching) in 2012





#### VICE-RECTOR (RESEARCH, INNOVATION AND POSTGRADUATE STUDIES)

#### Prof Eugene Cloete BScHons, MSc, DSc

Joined the University in 2009; appointed as Vice-Rector (Research and Innovation) in 2012 and his portfolio expanded in 2015

VICE-RECTOR (SOCIAL IMPACT, TRANSFORMATION AND PERSONNEL)

**Prof Nico Koopman** BA, DTh Joined the University in 2001; appointed as Vice-Rector



(Social Impact, Transformation and Personnel) in 2016

VICE-RECTOR (STRATEGIC INITIATIVES AND INTERNATIONALISATION)

**Prof Hester Klopper** MCur, PhD, MBA, DNurs hc, FAAN, ASSAf Joined the University in 2016 with her appointment as Vice-Rector (Strategic Initiatives and Internationalisation)

### SUPPORT STAFF

#### EXECUTIVE MANAGER: RECTORATE

Dr Jerome Slamat BCom, HED, MEd, PhD Joined the University in 2004; appointed as Executive Manager: Rectorate in 2015





#### REGISTRAR

**Mr Johann Aspeling** BComHons, MCom, HED Joined the University in 1979; appointed as Registrar in 2001 and retired on 31 December 2016

> REGISTRAR DESIGNATE Dr Ronel Retief

> > BAHons, MA, DLitt





CHIEF DIRECTOR: STRATEGIC INITIATIVES AND HUMAN RESOURCES

Joined the University in 1998; Registrar designate from 1 September 2016 and assumed position on 1 January 2017

**Prof Tobie de Coning** MBA, PhD Joined the University in 1983; appo

Joined the University in 1983; appointed as Chief Director: Strategic Initiatives and Human Resources in 2007

Dr Phumzile Mmope BAHons, MA, PhD Joined the University in 2016 with her appointment as Senior Director: Corporate Communication in 2016





#### CHIEF DIRECTOR: SPORT

Ms Ilhaam Groenewald

PGDip (BusAdmin); PGDip (Ed); BTech (Business Admin); M Sport Man Joined the University in 2014 with her appointment as Chief Director: Sport

CHIEF DIRECTOR: FINANCE

**Mr Manie Lombard** BAcc, BComHons, BComptHons, CA(SA) Joined the University in 1995; appointed as Chief Director: Finance in 2007





CHIEF DIRECTOR: FACILITIES MANAGEMENT

#### Ms Nicolette van den Eijkel

BCom Joined the University in 2015 with her appointment as Chief Director: Facilities Management

SENIOR DIRECTOR: DEVELOPMENT AND ALUMNI RELATIONSHIPS

Ms Karen Bruns BA, LLB, LLM Joined the University in 2015 with her appointment as Senior Director: Development and Alumni Relations





DEAN OF STUDENTS AND DIRECTOR: CENTRE FOR STUDENT LEADERSHIP AND STRUCTURES

#### Ms Tonia Overmeyer

BSocSci, PgDip Management (Marketing), MBA Joined the University in 2016 with her appointment as Dean of Students and Director: Centre for Student Leadership and Structures

### SENIOR DIRECTOR: CORPORATE COMMUNICATION





We managed to keep our vital signs positive by remaining focused on the outcomes we wanted to achieve, and registered considerable successes in all three areas of our core business – research and innovation, learning and teaching, as well as social impact.

### Report of the **RECTOR AND VICE-CHANCELLOR**

Prof Wim de Villiers

#### SETTING THE SCENE

S imilar to the previous year, 2016 too was a period of significant turbulence in South African higher education, mainly due to student protests. Calls were again made for transformation in the sector – still with regard to student fees, but also including outsourcing, rape culture and decolonisation. Pressure was again applied not only on national government, but equally on individual institutions.

At times, the protesters' strategies and tactics made rational conversation very difficult. The high levels of violence and destruction were especially worrying. However, compared with many other institutions, Stellenbosch University (SU) navigated the year relatively well, although a number of serious incidents forced us to take security precautions and disciplinary steps.

We put in place certain measures to ensure that we complete the 2016 academic year. This was taxing on all concerned, including management, with a draining effect across the institution. Our priority, however, was to safeguard students, staff, facilities and the academic programme. Our approach was to be firm, but fair. I am grateful to report that we concluded the year without serious disruption. Scheduled examinations ran their course and graduation ceremonies proceeded as planned.

Despite the turbulence, SU set three new records in the 2016 academic year. We awarded 8 348 qualifications, 5,6% more than the year before. This included 1 468 master's degrees, the most ever awarded by SU. This also goes for the number of doctoral degrees awarded – 278, of which 47% went to black, coloured and Indian candidates, compared to 39% in 2015. This confirms SU's valuable contribution as a national asset.

### KEY BUSINESS REMAINS HEALTHY TO THE CORE

We managed to keep our vital signs positive by remaining focused on the outcomes we wanted to achieve, and registered considerable successes in all three areas of our core business – research and innovation, learning and teaching, as well as social impact.

### TRAILBLAZERS WITH RESEARCH AND INNOVATION

SU was the only research-intensive university in South Africa that managed to improve its position on the QS World University Rankings for 2016/17, moving up to 395th place from the 401–410 band in 2015. We take note of rankings, as they seem to be the global academic currency of our time. However, we do not compromise on excellence, we put quality first, and we do not try to influence our position artificially.

Relevant research generated positive results for us in 2016. This included studies showing that indigenous foods can contribute to food security; that the poor's health will suffer most from climate change; that people in Africa might be living longer, but lifestyle diseases are on the rise; that soccer helps young men live healthier lives, and that SU researchers have developed a rapid diagnostic test for tuberculosis.

SU has been a forerunner in terms of innovation for some time. I can now report that from 2009 to 2016, Stellenbosch registered more patents than any other university in the country - 98, to be exact.

As a share of total income, state funding of universities is decreasing. In order to reduce the pressure on the human resources budget, alternative ways of funding our staff component have to be found. A sustainable way is to expand the endowed research chair programme. Sponsored research chairs at SU have now reached a total of 41, including the six chairs added in 2016.

SU now has the country's second-highest number of scientists rated by the National Research Foundation (NRF), including a total of 12 A-rated researchers regarded as world leaders in their respective fields. The total number of NRF-rated academics at SU increased from 306 in 2012 to 427 in 2016.

Appointing young academics with a focus on the future has been a priority for the University. The expansion of the postdoctoral fellowship programme has been a strategic intervention to ensure a solid knowledge base going forward. This has resulted in an increase in the number of postdoctoral fellows from 168 in 2012 to 308 in 2016.

#### SUSTAINED STUDENT SUCCESS

Besides qualifications awarded, another measure of academic success is whether a significant portion of students pass their modules. It is pleasing to note that SU's module success rate has been above 85% since 2013, peaking at 86,7% in 2015. The 2016 figure of 85,9% is in line with our long-term objective to sustain a high success rate. See "Our strategic management indicators" on page 34.

### ENTRENCHING AND ENHANCING SOCIAL IMPACT

A highlight was when Senate approved our Social Impact Strategic Plan (SISP) towards the end of 2016. This important document provides the background to our transition from community interaction to social impact at SU, a theoretical and conceptual framework, as well as a frame of reference for the implementation of social impact at the institution. Two of the most important steps mandated by the approval of the SISP are the establishment of a Social Impact Committee of Senate and a Social Impact Knowledge Platform, which is currently under way.

In the main, a 21st-century university engages with three groupings, namely government, industry and civil society. This makes up the quadruple helix of engagement. And the best way for any university to engage is based on its teaching, learning and research expertise. This is engaged scholarship, which in turn has an impact on society – even across borders.

SU's African Doctoral Academy plays a critical role in building research capacity across the continent by offering summer and winter schools. In 2016, these were for the first time rolled out to a partner institution elsewhere on the continent, namely Makerere University in Uganda. This indicates SU's increasing outward focus. It is our intention to be not only locally relevant, but also global in reach, with a regional impact.

#### AN INCREASING OUTWARD FOCUS

To further bolster its outward focus, the University in 2016 created a new post at executive management level, namely that of Vice-Rector (or Deputy Vice-Chancellor) for Strategic Initiatives and Internationalisation. This signals just how important this area is to us. Expanding internationalisation is one of our main institutional strategies.

Through increasing internationalisation, we aim to equip our graduates and academics to prosper as citizens of a potentially more volatile and a fast-paced technologically advancing world. We want to empower them to make internationally significant contributions that have a positive social impact worldwide.

In 2016, SU had 4 324 international students out of a total of 30 854 students. This equalled 14% of our student body, which is double the national average. They came from 114 countries worldwide, although 58% were from elsewhere on our continent.

#### **ROOTED IN AFRICA**

An important theme that has returned to the agenda of higher education globally is the decolonising project. In the reporting year, this featured prominently in discussions at SU about what it might mean to frame the institution as a 'new African university'.

Decolonising higher education was characterised as a three-way challenge. Firstly, we need to put Africa at the centre of knowledge production, not at the periphery. The continent's universities should not be seen as a mere extension of the West. In 2016, SU embarked on a process of curriculum renewal that paid particular attention to this matter. Secondly, being rooted in Africa, we need to bear fruit for the people of the continent. SU is producing thought leaders and knowledge for human development in Africa in many ways, but we can do even more. Thirdly, our institutional culture must reflect our location in Africa and must therefore be open and welcoming to all.

#### UNITED, COHESIVE AND ALIGNED

At the start of 2016, we crossed the halfway mark of our current guiding policy framework, SU's Institutional Intent and Strategy 2013–2018. We started thinking about a new vision and strategy to take us into the future. Circumstances have changed – both at SU and in the broader higher education sector. We therefore need a new framework to guide us, particularly since SU will be celebrating its centenary as a public university in 2018.

We had initial discussions about what the future might look like and how we would need to adapt, and towards mid-2016, a task team was formed to lead the process of developing a new vision and institutional strategy for the University.

This points to a new way of working at SU – breaking out of the silos of separate responsibility centres towards institution-wide collaboration on particular challenges (known as the matrix model). This is accompanied by a move away from hierarchical lines of authority in support of structures of cross-sectional cooperation in the common interest.

In keeping with the matrix model, the task team working on a new vision and institutional strategy consisted of staff members from different SU environments, each bringing to the table their view of the institution and their particular expertise. Three other major task teams were also formed in this way: one on SU's budget model, one on our indirect cost-recovery rate and one on bursaries and loans. Working in this way offers greater institutional cohesion. This should bear fruit and stand us in good stead in years to come.

Considerable unity was achieved in SU management

31

and staff circles in 2016. The deans of our ten faculties functioned as a cohesive whole, integral – and not separate – to the institution's executive management. The challenge is to replicate this in 2017, when most of our deans will be replaced by new appointments.

Contributing to the smoother functioning of management was the fact that a number of senior positions were filled – whether with new appointments, temporary appointments made permanent, or the reappointment of incumbents. This has strengthened management's capacity to run Stellenbosch University properly as the five billion rand institution it has become.

In my own responsibility centre, I pulled in a number of key divisions servicing the institution as a whole, namely Corporate Communication, Development and Alumni Relations, as well as the Registrar's Office. This was done with a view to greater effectiveness and cohesion.

### REPOSITION, FOR IT'S THE RIGHT THING TO DO

The year under review was a period of repositioning SU as an institution, as is evident from the adoption of new policies in key areas.

The most significant of these was a new **Language Policy** adopted by Council, with the concurrence of Senate, in July 2016, for implementation from 2017. The document is geared towards a more inclusive SU. Inclusivity goes hand in hand with broadening access for all students who wish to study at SU. Since 2013, our BCI student intake has increased from 30% to 35%. We hope that our new Language Policy – as well as a new **Admissions Policy**, which was also being finalised in 2016 – will further advance this process. A diversity of people and ideas broadens the mind and enhances our output as a place where knowledge is discovered, transferred and applied.

Various factors contribute to the exclusion of students, such as academic performance, financial challenges, as well as language of instruction. Not all our students are proficient enough in Afrikaans to receive tuition in that language. Similarly, some students lack English skills. We wish to cater for both these groups by providing them with full access to SU's valuable knowledge base. This will be achieved by using both Afrikaans and English as languages of instruction.

The new Language Policy promotes inclusive multilingualism and the broadening of access. It represents a further step on our journey of systemic transformation – not because of subservience or as a reflex in response to student protest, but because it is the right thing to do.

In 2016, we saw the transformed **Residence Placement Policy** of 2014 bearing fruit in terms of greater diversity (in respect of race, language, first-generation status, international students and socio-economic [dis]advantage) across residences. It has also allowed more academically vulnerable students to be placed in SU residences to improve their chances of graduating. In 2012, for example, only 28% of all students in undergraduate residences were first-years; by 2016, this percentage had increased to 34%. In 2012, only 29% of SU residence students were from the BCI population groups. For the 2016 intake, this number had risen to 40%.

In terms of staff, Council in September 2016 approved a new **Employment Equity Policy** (dealing with fair and equitable employment) with the earlier concurrence of

Senate and the Institutional Forum. The policy enables SU to comply with the provisions of the Employment Equity Act of 1998. The document has been drafted following extensive consultation on campus as well as an external audit of employment equity practices at the University, and focuses on the imperative of building a diverse and transformation-competent staff corps.

Council furthermore approved a new **Policy on Unfair Discrimination and Harassment**, which applies to both staff and students. The document aims to establish a new campus culture. While it takes a firm stance against unacceptable conduct, it also encourages conversation and dispute resolution. The policy operates in tandem with related instruments.

One of these instruments is a new **Student Disciplinary Code**, which was also approved in 2016. The code is in keeping with the Constitution of the Republic of South Africa, 1996, as well as SU's values and principles as contained in the University's Institutional Intent and Strategy. Particular emphasis has been placed on strengthening the administrative nature of the disciplinary process and moving away from quasi-judicial proceedings.

### BEING ECOLOGICALLY SOUND, SOCIALLY JUST AND FINANCIALLY VIABLE

To us, sustainability is a systemic concept that relates to the continuity of the economic, social, institutional and environmental aspects of human society. We also recognise that the core activities of a higher education institution must be ecologically sound, socially just and economically viable and should continue to be so for future generations. I think the information in this report will show that improving SU's systemic sustainability is a focus area of the University, and that we are on course to achieve it.

In terms of the financial aspects of sustainability, our budgeting process for 2016 was influenced by the 2015 protests as part of the #FeesMustFall campaign. No increase in student fees for 2016 fundamentally affected the budgets of all universities. It left us with a deficit, which was only partially covered by a subsequent contribution from the state. We also had to make cuts in certain institutional costs and dip into our discretionary funds and reserves.

In the pursuit of science, universities tend to focus on facts and figures, quantity and quality, as well as empirical research. In addition, security measures along with disciplinary and legal action to end violence, disruption and infringement of others' right to study can create a perception that we have no empathy with the financial plight of our students. Nothing could be further from the truth, however. I have made it a personal priority to raise funds for student bursaries, and in the year under review, 24% of our students received financial assistance, which improved access.

#### A FUTURE OF MEANINGFUL ENGAGEMENT

The year 2016 was a complex and tough one for higher education institutions. The University expressed support for affordable quality education for the poor and provided substantial financial assistance to students in need, but we still experienced some disruption, violence and damage to property – though less so than many other universities.

However, if there is one thing we have learnt from the turbulence of both 2015 and 2016, it is the importance of

engagement. It is crucial for the University to constantly liaise with its key stakeholders and obtain their input on key matters. In the spirit of inclusivity, such engagement must be authentic and meaningful.

Engaging with protesters helped shed light on the bigger picture. The issues we face are not unique to SU. And the #FeesMustFall movement is not only about the financing of higher education. It is a symptom of a deeper, underlying national political crisis that is being expressed in young people's anger, disillusionment and frustration about ongoing problems such as poverty, unemployment, inequality and corruption. SU certainly has a long way to go to become truly inclusive, but it is a journey to which we remain committed. I have acknowledged before that our journey is imperfect, but we are making progress.

As we continue this journey in 2017 and beyond, we aim to steer clear of adversarial relationships, as they are lose-lose relationships, with high costs for all parties. It is important that we find new ways of engaging one another. And for this reason, we are intent on engaging purposefully with a range of stakeholders in the long-term interest of our students, staff and the University as a whole.

### MINISTERIAL ENROLMENT AND EFFECTIVENESS TARGETS FOR 2019 AND STELLENBOSCH UNIVERSITY'S (SU) PERFORMANCE, 2014–2016

	Ministerial Target	SU in 2014	SU in 2015	SU in 2016
Head count	27 510 in 2012 to increase to 30 809 in 2019, annual increase of 1,6% between 2012 and 2019	28 869	29 613	30 1 60
Full-time equivalent students	22 193 in 2012 to increase to 25 330 in 2019	22 476	23   28	23 745
Funded teaching input unit (weighted full-time equivalent)	77 965 in 2021/22 (the funded teaching input share will change from 5,38% in 2015/16 to 5,33% in 2021/22)	71 639	73 615	75 005
First time entering first-years	5 230 in 2019, average annual increase of 4,1% from 3 936 in 2012	5  6	5 285	5 025
Major fields of study %				
Science, engineering and technology	52% in 2019	48,2	48,7	48,3
Business and management	22% in 2019	21,5	21,1	21,6
Education	5% in 2019	5,8	5,3	4,4
Humanities	21% in 2019	24,4	24,9	25,7
Levels of study %				
Undergraduate	63% in 2019	61,5	62,5	63,3
Postgraduate below master's	12,9% in 2019	13,9	I 2,8	12,3
Master's	16,6% in 2019	16,5	l 6,6	16,3
Doctoral	4,7% in 2019	5,0	5,2	5,2
Occasional students	2,8% in 2019	3,0	2,9	2,8
Total graduates	To increase from 7 681 in 2012 to 8 130 in 2019	7 570	7 816	8 208
Graduates in scarce skills				
Engineering	455 in 2019	487	507	525
Life and physical sciences	404 in 2019	447	444	488
Animal and human health sciences	438 in 2019	336	403	408
Initial teacher education	355 in 2019	444	428	336
Graduates at different levels				
Postgraduate below master's	2 706 in 2019	2 605	2 629	2 554
Research master's	867 in 2019	883	927	877
Doctoral	231 in 2019	234	267	278
Targeted success rate %	84% in 2019	85,1	86,7	85,9

## INTERPRETATION OF COMPARATIVE ENROLMENT AND EFFECTIVENESS VALUES AND THE MINISTERIAL TARGETS FOR 2019

The table above shows how Stellenbosch University fared in 2014, 2015 and 2016, measured against the enrolment and effectiveness targets set for the University for 2019 by the Minister of Higher Education and Training. These statistics are extracted annually from the Higher Education Management Information System (HEMIS) and submitted to the Department of Higher Education and Training, who compares the performance of universities in South Africa. Stellenbosch University's success rate performance of 85,9% for 2016 again exceeds the Minister's target of 84%.

#### MONITORING ON THE WAY FORWARD - STRATEGIC MANAGEMENT INDICATORS

The Institutional Plan contains key overarching strategic management indicators (SMIs) with which we measure how we are faring in the realisation of our institutional goals. For each of our Institutional Intent and Strategy's priorities, themes and goals, we describe specific strategic actions that are stipulated by each faculty and professional service individually. The complete details are contained in the separate plans of each responsibility centre for putting the actions into operation. In these plans the faculties and professional service divisions indicate how they will achieve the goals of the institution by way of their action plans. All faculties and professional services are jointly responsible for achieving the targets in the Institutional Plan and therefore work in an integrated manner according to our business model.

Strategic	Strategic Management								2022
Priority	Indicator	2010	2011	2012	2013	2014	2015	2016	Target
S	Share of students from black, coloured and Indian population groups (%)	32,9	32,9	33,1	34,6	36,6	37,8	38,7	46,8
Broaden Access	Share of permanent staff from black, coloured and Indian popu- lation groups (%)	39,4	40,0	41,0	43,0	43,2	43,8	45,6	55,0
ader	Share of female permanent staff (%)	52,5	53,5	54,0	54,9	55,9	56,0	56,6	60,0
Bro	Share of undergraduate module credits taught in Afrikaans and English to PARALLEL class groups (%)					l 6,6	15,4	17,5	25,0
ellence	Share of undergraduate module credits taught in BOTH Afrikaans and English to the SAME class group (%)					62,9	69,5	69,5	60,0
Sustain momentum of excellence	Share of undergraduate mod- ule credits taught in EITHER Afrikaans OR English to a class group (%)					20,4	15,1	13,0	15,0
entul	Permanent teaching and research staff with doctorates (%)	57,0	60,5	61,3	60,8	61,8	60,6	60,3	65,0
ain mom	Ratio of weighted research out- puts per full-time equivalent teaching and research staff member	١,75	١,83	2,41	2,33	2,50	2,53	*	2,44
Sust	HEMIS-based success rate of undergraduate and postgraduate students (%)	83,2	83,4	84,9	85,9	85, I	86,7	85,9	85,0
ll impact	Ratio of full-time equivalent students, weighted per level of study, per full-time equivalent teaching and research staff member	25,53	25,39	25,85	24,57	25,44	26,16	*	24,00
Enhance social	Third-stream income share of SU's total income (%)	28,2	28,0	29,4	27,7	31,4	26,4	30,1	32,3
ance	Fourth-stream income share of SU's total income (%)	6,1	6,5	5,9	5,6	5,2	5,4	7,3	10,0
Enh	Share of personnel remuneration not funded via the main budget** (%)	38, I	36,4	36,6	38,1	35,9	40,8	41,7	45,0

\* 2016 results will be reported in 2017.

\*\* Funds consist of restricted and unrestricted funds. The difference between future restricted and unrestricted funds may affect the feasibility of the 2020 target. See "Available funds" further on under Financial Overview.

For definitions of the indicators, see the Glossary on page 147, under "Strategic management indicators explained".

## INTERPRETATION OF THE STRATEGIC MANAGEMENT INDICATORS IN THE TABLE

Our strategic management indicators (SMIs) serve the purpose, among others, of determining to what extent the University realises its strategic priorities, themes and goals, as defined in the Institutional Intent and Strategy 2013–2018 (see page 6–7), during a given year.

We have progressed steadily with broadening access to the University. The wider implementation of parallel-medium instruction and interpreting together with purposeful marketing and recruitment, contributed towards the 2,1% rise in student diversity to 38,7% over the past three years (2014–2016).

Staff diversity (45,6% in 2016) has improved systematically, indicating that, despite the challenges, the University's efforts are bearing fruit (see "Adding to our value proposition" in the report of the Vice-Rector (Social Impact, Transformation and Personnel) on page 68). Female permanent staff has again increased slightly to 56,6%, although equitable representation at executive management and senior academic levels has not been realised yet.

The University is working hard to sustain its momentum of excellence. The University's capacity to offer postgraduate supervision and to generate publishable research results depends mainly on academic staff having doctoral qualifications. After dropping to 57% in 2010, the percentage of academic staff with doctorates increased to an all-time high of 61,8% in 2014, but systematically sank back to 60,3% in 2016 due to academic staff retiring and the appointment of younger staff members to ensure sustainability. In 2015, each full-time equivalent teaching and research staff member produced an average of 2,53 weighted research outputs (accredited publications and master's and doctoral graduates), exceeding the previous best of 2,50 in 2014.

The success rate of our students, in other words, the percentage of full-time equivalent students who passed the modules for which they had registered, was 85,9% in 2016, lower than our all-time record of 86,7% in 2015, but still higher than our target of 85% (see "Student access with success" in the report of the Vice-Rector (Learning and Teaching) on page 51).

Growing into its role as a responsible corporate citizen, the University enhances its impact on society through integrated planning for financial and environmental sustainability. With an average of 26,16 weighted full-time students serviced by each full-time permanent research and teaching staff member, the University falls short of its target ratio of 24 which is SU's measure of a healthy long-run balance between cost-effectiveness and a positive student experience. To keep student fees as low as possible and to be able to offer bursaries to more students, the University managed to increase its income from sources other than the government grant, for example income from contract research, sales of services and products, investments and commercialisation (38,6% of our income) and from philanthropic donations (6,4% of our income). The percentage of staff remuneration from these sources was 41,7% in 2016, compared to 35,9% in 2014, demonstrating that the University increasingly tries to lessen its reliance on state subsidies and student fees.

Mu de Villiers

Prof Wim de Villiers Rector and Vice-chancellor

The **UNIVERSITY** is working hard to sustain its momentum of **EXCELLENCE**.

The University succeeded in ending the 2016 financial year successfully amidst various factors which led to financial challenges that had to be overcome. These factors included the student protests against student fees and accessibility, protests by workers from outsourced services against service benefits, volatility of international economies and the impact thereof on exchange rates, third- and fourth-stream income and the current state of the South African economy.



## Overview of our FINANCIAL CAPITAL

Mr Manie Lombard, Chief Director: Finance

S tellenbosch University is committed to strategic financial planning and management in view of the long-term financial sustainability of the institution. This strategic financial planning for sustainability is directed by the management mandate for the next five years. Since 2014 the systemic emphasis has been falling on the priorities of the Institutional Intent and Strategy for 2013 to 2018. The Institutional Intent and Strategy is currently being reviewed. In terms hereof, the allocation of resources is directed by three strategic priorities and the accompanying objectives as drivers for sustainability, namely broadening access, maintaining momentum of excellence and enhancing social impact.

The University succeeded in ending the 2016 financial year successfully amidst various factors which led to financial challenges that had to be overcome. These factors included the student protests against student fees and accessibility, protests by workers from outsourced services against service benefits, volatility of international economies and the impact thereof on exchange rates, third- and fourth-stream income and the current state of the South African economy.

The budget process at the end of 2015 with respect to 2016 was characterised by countrywide marches and sit-ins as part of the #FeesMustFall campaign, which led to an announcement by President Zuma that there will be no increase in student and accommodation fees for 2016 (against the University's budgeted adjustments of 11,5%). The impact thereof is reflected in the annual financial statements for 2016, and is described in the notes below. The budgeted deficit for 2016 as a result of no increase in student and accommodation fees for the main and accommodation budgets, amounted to R85,3 million and R28,2 million respectively, thus a total deficit of R113,5 million. Shortly after the announcement, all universities were requested to forward a statement of their deficits, as a result of this announcement, to the Department of Higher Education and Training (DHET)

in order to determine what contribution they can make to the universities' deficits. The University received a contribution of R79,2 million. The rest of the deficit on the main budget was funded from the Council's discretionary funds (R15,2 million), a R10 million cut on new institutional expenditure that was provided for the central funding of certain remuneration benefits from 2016 and the balance of the deficit on the accommodation budget from accommodation reserves.

On 7 September 2016, the University received a ministerial declaration explaining the treatment of the carry-through effect of the 0% adjustment in student fees in 2016 to 2017/18. An additional R2,552 billion (compared to the budgeted amount of R2,6 billion) was added to the 2017/18 block grant of the sector. This amount is allocated pro rata to the teaching input, teaching output and institutional factor sub-blocks. No funds have however been added to the research output block, despite verbal communications by the DHET to that effect, which means that research master's and doctoral students are not taken into account as was the agreement. Furthermore, an additional earmarked grant of R300 million was added to the 2016/2017 subsidy allocation for the 0% increase in 2016.

For planning purposes, the University worked on the assumption that the bailout of the 0% adjustment of 2016 would also provide for student-linked research outputs (thus, excluding publications). The impact of the abovementioned ministerial declaration which did not take these into account, resulted in a R16,2 million decline in the budgeted subsidy for 2017. It was dealt with in the budget from the funds reserved within the contingency reserve for the equalisation of guaranteed subsidy unit values for the period 2015–2016 (currently R24,4 million). However, this has no carry-through effect and can only be done in a financially sustainable way if the University pays particular attention to what it can cease doing and do differently after 2017. Regarding the additional earmarked grant given for the phasing out of the 0% increase in 2016, the University received R1,1 million (2017) and R0,5 million (2018). This impact will only reflect in the 2017 financial statements.

Shortly afterwards, on 19 September 2016, Minister Nzimande made the announcement regarding the student fee adjustments for 2017. The announcement inter alia provides that each university's Council is autonomous and can decide what the increase in fees for 2017 should be. The proposal is that all increases will be limited to 8%.

On 14 December 2016, the University received the final ministerial statement regarding the 2017 subsidy. The actual versus budgeted subsidy for 2017 has been reconciled to the information received from the DHET. The recommendation is that the additional subsidy of R0,5 million for 2017 be transferred to the contingency reserve for dealing with possible shortages since the subsidy unit values are guaranteed as part of the budget model.

There are currently many uncertainties in the sector, especially with regard to the new subsidy formula and funding of higher education against the background of the student protests and claims for free higher education. The latest indication (April 2017) from the DHET is that information regarding the proposed amended subsidy formula will soon be distributed to universities, as well as indications of the implementation date.

The University's 2017 budget, as approved by the University Council on 28 November 2016, is not a financially sustainable budget, with deficits from 2019 according to current projections. This is a one-year budget and a longer-term view cannot be taken now given all the uncertainties, especially in respect of the subsidy formulae and the restrictions currently being placed on the increases in tuition fees. Actions must be launched in 2017 after more certainty about the funding of higher education (subsidy and student fees) is obtained, in order to address the shortages in the future and ensure financial sustainability. Meanwhile, management is taking serious steps to achieve sustainable savings without harming the quality of the academic project.

The pressure on this income stream and the consequent pressure on other income streams put a lot of pressure on the University's expenses and sustainable funding thereof. In the next few years, the University should look institutionally and at faculty level as to which expenses supports the core business and strategies and which might need to stop. It does, however, present opportunities for the growth of other revenue streams, especially with regard to the fifth-stream, namely income from commercial activities and innovation. It also includes the optimal exploitation of the University's assets.

The 2016 reporting year was mainly characterised by:

- an increase in total income of 5,5% (2015: 2,1% decrease) to R5 311,4 million (2015: R5 032,8 million);
- an increase in income growth from grants and research contracts by 33,0% (2015: 4,8% increase) to R1 210,2 million (2015: R910,2 million);
- an increase in income growth from private donations by 57,2% (2015: 4,4% increase) to R338,4 million (2015: R215,3 million);
- an increase in expenditure of a recurring nature by 12,5% in 2016 (2015: 11,2% increase) to R4 570,6 million (2015: R4 063,1 million);
- a total surplus of R740,8 million, against the surplus of R969,7 million in 2015;

- a surplus of R95,5 million (2015: R76,3 million) if investment income and realised profit on investments are excluded; and
- a surplus of R46,1 million (2015: R36,1 million) on the main budget, thus the University's academic business as funded by the subsidy and student fees (the main components are explained below).

A total of R511,1 million of the abovementioned surplus of R740,8 million is attributable to restricted funds over which the Council has no discretion. The balance of the surplus of R229,7 million in unrestricted Council funds can be attributed to, among others:

- actual expenditure for, among others, utility services, electricity costs, banking fees and postage that is less than the budgeted expenditure in the main budget (R24,9 million), thus a total surplus of R46,1 million on the main budget;
- actual recovery of indirect costs of R9,7 million more than budgeted;
- factors such as higher than budgeted income from investment income and realised profit on the sale of investments totalling R227,8 million; and
- conservative spending with respect to operating expenditure as a result of uncertainty about longterm income expectations for the University, where the subsidy formula for higher education institutions is currently being reviewed.

The 2016 financial results are furthermore the result of, among others:

- conservative, integrated budget planning within a rolling six-year financial plan, including a contingency reserve to be able to manage unforeseen events;
- continuous redesigning and aligning of operating processes to ensure greater cost-efficiency, especially in the area of physical facilities; and
- provision of strategic funds in support of new initiatives directed at realising the vision and objectives of the University.

The abovementioned financial successes offer a good base for continued proactive financial planning and the refining of the financial model serving the University's strategic objectives and focus areas.

## **REPORTING STANDARDS**

The consolidated annual financial statements for the year ended 31 December 2016 were prepared in accordance with the Regulations for Annual Reporting by Higher Education Institutions. In terms of Section 41(2) of the Higher Education Act, 101 of 1997 (as amended up to the Regulations for Annual Reporting by Higher Education Institutions dated 9 June 2014), universities are required to submit annual financial statements to the DHET that comply with International Financial Reporting Standards (IFRS). The University elected to apply IFRS even before the new regulations were published, with transitional date on I January 2004.

In terms of Section 4(3)(b) of the Public Audit Act, 25 of 2004, the Auditor-General can audit any institution that receives public funding. The Auditor-General has, however, elected not to audit Stellenbosch University personally,

but has given additional instructions to the University's appointed external auditor, PricewaterhouseCoopers Inc., that must receive attention. These additional instructions include the audit of compliance legislation applicable to financial matters, financial management and other related matters, as well as the audit of performance against predetermined objectives, as agreed by the University and the Minister of Higher Education and Training. For the year under review, the ministerial enrolment targets as indicated in the table on page 33 were the only contracted objective with the Minister of Higher Education and Training.

# SUMMARY OF CONSOLIDATED FINANCIAL INFORMATION

The composition of the University's income per main component, expressed in value and ratio, appears in Table I, with comparative figures for previous years.

Table I         GROWTH AND COMPOSITION OF INCOME, TOTAL AND PER MAIN COMPONENT, 2012-2016											
		2012	2013	Increase / (Decrease) 2012/2013 %	2014	Increase / (Decrease) 2013/2014 %	2015	Increase / (Decrease) 2014/2015 %	2016	Increase / (Decrease) 2015/2016 %	
Total recurring income, of which:	Rm	3 332	3 849	15,5	5 140	33,6	5 033	(2,1)	5311	5,5	
Government grants	Rm	1 202	355	2,7	I 552	14,6	I 576	I,5	I 788	I 3,5	
% of income	%	36,1	35,2		30,2		31,3		33,7		
Student accommodation and other fees	Rm	863	986	14,3	1 074	9,0	233	14,8	30	(8,4)	
% of income	%	25,9	25,6		20,9		24,5		21,3		
Grants and contracts	Rm	667	690	3,4	869	25,9	910	4,8	1210	33,0	
% of income	%	20,0	17,9		16,9		8,		22,8		
Private donations	Rm	178	185	3,8	206	11,5	215	4,4	338	57,2	
% of income	%	5,3	4,8		4,0		4,3		6,4		
Sales of services and products	Rm	68	79	16,2	193	144,3	182	(5,6)	191	4,7	
% of income	%	2,0	2,1		3,8		3,6		3,6		
Realised profit of sale on investments	Rm	132	303	129,5	947	212,5	546	(42,4)	327	(40,1)	
% of income	%	4,0	7,9		18,4		10,8		6,2		
Interest and dividends earned	Rm	214	237	10,7	289	22, I	348	20, I	318	(8,5)	
% of income	%	6,4	6,2		5,6		6,9		6,0		
Other	Rm	8	14	80,7	10	(32,5)	23	144,0	9	(61,6)	
% of income	%	0,2	0,4		0,2		0,6		0,3		

As is shown in **Table I**, total income increased with 5,5% (2015: 2,1% decrease) to R5 311,4 million (2015: R5 032,8 million).

**Government grants consist** of unearmarked subsidy income and earmarked grants, where the unearmarked subsidy income is earned based on a calculation according to a formula of the DHET. This formula is currently being reviewed and it is still uncertain what the impact of the amended subsidy formula will be on the income of the University. The unearmarked subsidy income is brought into account in the income for the University's main budget. Government grants also include grants from related government institutions, for example the National Research Foundation (NRF). Government grants increased with 13,5% (2015: 1.5%). The budgeted deficit for 2016 as a result of no increase in student and accommodation fees for the main and accommodation budgets amounts to R85,3 million and R28,2 million respectively, thus a total deficit of R113,5 million. The contribution from DHET of R79,2 million for no increase in 2016, was added to the subsidy allocation of the University.

**Grants and contracts** increased with 33% (2015: decrease of 4,7%) to R1 210,2 million (2015: R910,2 million). There is currently a large focus on diversifying the historical funding sources, with a particular focus on international opportunities.

Given the uncertainty regarding the unearmarked subsidy income, it is important that the income stream in respect of grants and contracts, as well as the exploitation of commercial revenues, will contribute more to the University's total income over time. The recovery of support and institutional costs from third-stream income activities through the indirect cost recovery rate is bringing relief to the main budget and also realised reasonable surpluses against the budget this year. A challenge remains the under-recovery of these costs due to restrictions imposed by funders on the recovery of costs.

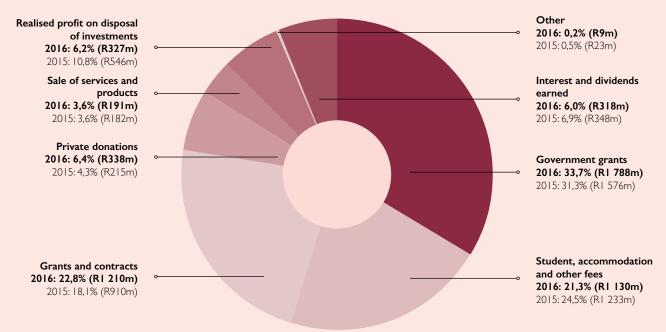
Revenue from **private donations** increased by 57,2% (2015: 4,4%) to R338,4 million. In the last few years a major focus has been placed on this income stream with relative success. Most of the funding is received for restricted usage. The challenge, however, remains to collect unrestricted donations, which can bring relief to the University's main budget activities.

**Income from student and other' fees** decreased by 8,4% (2015: increase of 14.8%). This was mainly due to no increase in student fees for 2016 (2015: 9,5% increase). The deficit was funded by a contribution from the DHET (as a supplement to the subsidy allocation) and the balance from the Council's discretionary funds and thus reflect on other line items in the income statement. Due to no increase, there was also an adjustment in the University of Stellenbosch Business School programme cost structures. All other fees that students are charged with could increase

by 6%, while no increase applied to tuition fees. Other fees are reflected under grants and contracts.

Although outstanding student debt does not grow faster than tuition fees, it remains a challenge to collect outstanding student debt. This pressure also increased at the end of 2015 due to the #FeesMustFall protests and students' expectation for free higher education. The University has certain measures in place to manage outstanding student fees, including the following: Students can, among others, not register for the next year of study before the previous year's outstanding fees are not settled, unless special arrangements are made. Students also do not receive their degree certificates before outstanding study fees are paid. The establishment of a collection office at the University during 2013 is already paying dividends, together with improved control over methods to avoid anniversary of debt.

The University does not have much more space to grow student numbers substantially. The pressure on the sector for adjusting student and accommodation fees and the uncertainty regarding government funding will put a lot of pressure on this income stream in the future.



## FIGURE 1: INCOME PER MAIN COMPONENT, 2016

**Figure I** shows the composition of the University's income per main component, as well as the relative ratio to total income. If the profit realised on the sale of investments and exchange rate profits are not taken into account, there was no material change in the contribution year on year.

<sup>1</sup>Other fees include accommodation and membership fees, as well as other items which can be levied against student accounts, as approved by the Student Fee Commitee.

## EXPENDITURE

The composition of the University's expenditure per main component, expressed in value and ratio, appears in Table 2, with comparative figures for previous years.

Table 2 GROWTH AND COMPOSITION OF EXPENDITURE, 2012–2016											
		2012	2013	Increase / (Decrease) 2012/2013 %	2014	Increase / (Decrease) 2013/2014 %	2015	Increase / (Decrease) 2014/2015 %	2016	Increase / (Decrease) 2015/2016 %	
Total expenditure of recurring nature, of which:	Rm	3 090	3 321	7,5	3 653	10,0	4 063	11,2	4 571	12,5	
Staff costs		I 455	I 602	10,1	I 730	8,0	1 939	2,	2 172	12,0	
% of expenditure	%	47,1	48,2		47,3		47,7		47,5		
Depreciation	Rm	200	222	11,0	241	8,6	252	4,7	288	4,	
% of expenditure	%	6,5	6,7		6,6		6,2		6,3		
Finance charges	Rm	14	13	(7,1)	23	75,7	17	(24,6)	18	4,7	
% of expenditure	%	0,5	0,4		0,6		0,4		0,4		
Bursaries (net)	Rm	270	316	17,0	338	7,0	403	9,	442	9,7	
% of expenditure	%	8,7	9,5		9,3		9,9		9,7		
Rent, maintenance and repairs	Rm	123	129	4,9	147	4,	212	44, I	212	(0,2)	
% of expenditure	%	4,0	3,9		4,0		5,2		4,6		
Other operating expenditure	Rm	1 028	1 039	,	175	13,0	1 240	5,6	439	6,	
% of expenditure	%	33,3	31,3		32,2		30,5		31,5		

### FIGURE 2: EXPENSES PER MAIN COMPONENT 2016

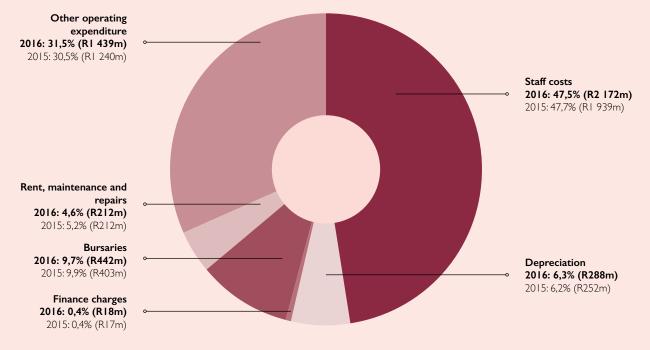


Figure 2 shows the composition of the University's expenditure per main component.

Total expenditure for 2016 increased with 12,5% (2015: 11,2% increase) to R4 570,6 million (2015: R4 063,1 million). The University's continued improvement of budget and operating processes is aimed at greater cost-efficiency and improved service delivery. Furthermore, a large component of expenditure is also linked to direct

expenditure on research contracts, so it will fluctuate in line with research income. Material additional expenses which were incurred in 2016, relates to additional security costs due to student protests. There was also an increase in costs due to the viable sourcing agreement which was entered into at the end of 2015. The increase in staff costs of 12% can be attributed to, among others, a salary adjustment of 7% in 2016 for all qualifying staff, an increase in the average growth in the number of fulltime permanent staff and the adjustment of remuneration levels relative to the base remuneration levels. There was also an increase of R35 million in the post-retirement medical liability. An allocation of R70 million over three years is also made from the strategic fund for the diversification of the workforce with some appointments already made in 2016.

Bursary expenditure represents bursaries funded from external as well as internal sources. The composition thereof is as follows:

Table 3 GROWTH AND COMPOSITION OF BURSARIES, 2012–2016											
		2012	2013	Increase / (Decrease) 2012/2013 %	2014	Increase / (Decrease) 2013/2014 %	2015	Increase / (Decrease) 2014/2015 %	2016	Increase / (Decrease) 2015/2016 %	
Total expenditure of recurring nature, of which:	Rm	3 090	3 321		3 653		4 063		4 571		
Bursaries paid		482	531	10	588	11	659	12	725	10	
% of expenditure	%	15,6	l 6,0		6,		16,2		15,9		
Principal	Rm	270	316	17	338	7	403	19	442	10	
Agent		212	215	١,6	250	16,3	256	2,3	283	10,4	

The University makes a large contribution to bursaries from the main budget annually. For 2016, it amounted to R119,7 million (2015: R115 million) and the spending thereof is included in the bursaries where we act as principal. In 2013 the Council also made a contribution of R25 million from discretionary funds over 5 years from 2014 to 2018 for granting recruitment bursaries. 24% of all students at the University receive bursaries and it covers 76% of their debt on average.

## AVAILABLE FUNDS

Stellenbosch University places a high premium on good corporate and financial management and does everything in its power to ensure that finances are managed in a transparent manner. Part of sound financial management is to manage responsible levels of reserve funds with a view to long-term systemic sustainability (e.g. including that academic quality is maintained throughout). Reserve funds are, however, contrary to public perception, not a lump sum of funds put aside to earn interest, but funds in various environments to be used only according to specific guidelines and conditions.

Funds consist of restricted and unrestricted funds. Restricted funds, amounting to R8 553,3 billion, consist of operating funds (received for e.g. long-term, external contracts with industry), loans (student loans - which return to further student support), donations (with conditions of donors) - and fixed asset funds with specific conditions for application (for e.g. the development of facilities) and it is

not available to the Council for discretionary use. The funds can only be used in accordance with the given provisions. Unrestricted funds are those funds that the Council has discretion over. Unrestricted funds, which amounts to the balance of R1 161,1 billion, is further divided into funds earmarked for a specific purpose (R701,7 million) and unearmarked funds for the Council's discretionary use (R459,5 million). An example of earmarked funds include the University's insurance reserve fund for which separate regulations exist, determining the application thereof, as well as the strategic fund of the University and the balance funds of environments earmarked in accordance with approved environment plans for strategic and operating objectives. The balance of R459,5 million is available for discretionary use by the Council. This amounts to 8,7% of the University's total annual revenue, representing a month's income, which is a very low level of contingency (compared with an international standard of 3 months).

**Table 4** below shows the growth in available funds andlong-term investments over the past five years.

Table 4 GROWTH IN AVAILABLE FUNDS AND LONG-TERM INVESTMENTS, 2012–2016											
		2012	2013	Increase / (Decrease) 2012/2013 %	2014	Increase / (Decrease) 2013/2014 %	2015	Increase / (Decrease) 2014/2015 %	2016	Increase / (Decrease) 2015/2016 %	
Available funds, of which:	Rm	8 344	9 639	8,2	10 636	15,5	11 824	10,3	12 254	3,6	
Long-term investments		4 930	6 067	41,2	6 631	23,1	7 684	9,3	7 893	2,7	
as % of available funds	%	59,1	62,9		62,3		65,0		64,4		

Table 5 COMPOSITION OF AVAILABLE FUNDS, 2012–2016												
		2012	2013	Increase / (Decrease) 2012/2013 %	2014	Increase / (Decrease) 2013/2014 %	2015	Increase / (Decrease) 2014/2015 %	2016	Increase / (Decrease) 2015/2016 %		
Total income	Rm	3 332	3 849		5 1 4 0		5 033		5311			
Restricted funds		4 963	5 856	l 8,0	6 792	l 6,0	7 624	12,3	8 553	12,2		
Unrestricted funds		1 032	1 243	20,4	I 287	3,6	I 663	29,2	6	(30,2)		
Earmarked reserves		515	836	62,4	1 060	26,7	1 240	17,0	702	(43,4)		
Unearmarked reserves		517	406	(21,4)	227	(44,0)	423	86, I	459	8,6		
Total funds available at market value		5 995	7 099	8,4	8 079	13,8	9 287	15,0	9714	4,6		
Unearmarked reserves as % of total income	%	15,5%	10,6%		4,4%		8,4%		8,7%			

**Table 5** shows the composition of the University's funds, as well as the percentage of total income constituted by unearmarked reserves (thus available for application by the Council).

Included in earmarked reserves is R297 million earmarked for maintenance backlogs and strategic gearing-up of the University's physical facilities by the Council during 2014.

The University's available funds and net asset value increased and is financially sound, but there are certain risks that have to be taken into account. Some of the most important risks identified are the unknown effect the expected change in subsidy formula will have on the University's first income stream, the impact of the poor global economic situation on income from donations and research contracts, as well as students' ability to meet account commitments. The University will tackle these challenges through its strategic approach to financial planning and management.

## LIQUIDITY

Transparent liquidity risk management implies the maintenance of sufficient cash and marketable securities, as well as the availability of credit facilities.

	2016	2015
	R000	R000
Current assets	0 8 273	943 660
Current liabilities	885 253	822 669
Ratio current assets to current liabilities	1,15	1,15

The University had R752,1 million (2015: R617,6 million) in cash and cash equivalents on 31 December 2016, invested mainly in demand deposits. The available cash, plus net cash flow in 2017, will be sufficient to fulfil capital and other obligations. The University has the ability to realise the majority of long-term investments at short notice in order to address possible liquidity risks.

Mr Manie Lombard Chief Director: Finance

The Chief Operating Officer leads a multidimensional responsibility centre that is in its entirety aimed at creating and adding value for the operational activities of Stellenbosch University (SU). All functions in the responsibility centre of Operations and Finance – from providing appropriate physical infrastructure to accountable operating practices, a sustainable budget and the commercialisation of intellectual property – are future-focused and geared towards making and keeping SU an esteemed knowledge partner and particularly also a systemically sustainable institution.



## Report of the CHIEF OPERATING OFFICER

Prof Leopoldt van Huyssteen

he following sections describe how this responsibility centre, being an enabler of most SU campus activities, pursued its strategic objectives in 2016.

### THE SHARPENING OF BUSINESS PROCESSES AND FUNDRAISING FOR FINANCIAL SUSTAINABILITY

BUDGETING AND PLANNING FOR A SUSTAINABLE FINANCIAL FUTURE

The Finance Division delivered a 2017-2022 budget and financial plan that are fully aligned with the University's integrated strategic planning. Yet, uncertainties about the new subsidy formula and the impact of the #FeesMustFall campaign have brought the sector, including SU, at a crossroads in terms of financial sustainability in the medium to longer term. This will require priority planning as soon as the future of these two key funding streams has been clarified. In the meantime, as room for cross-subsidisation of activities is fast diminishing, those activities that SU chooses to undertake must be self-sufficient, either through subsidies, student fees or the third or fourth income stream.

One way of creating some financial leeway has been the indirect cost recovery rate, which allows the University to recover from its clients the indirect costs associated with externally funded projects. In 2016, SU decided to revise this rate so as to more accurately reflect the value proposition associated with the University's brand.

In contrast with a number of other South African universities, SU did not raise student fees aggressively to compensate for the relative decline in government subsidies in the course of the last 15 years. As a result, SU is not among the most expensive South African universities in terms of fees and total cost per student, as studies by Universities South Africa (USAf) recently confirmed. Nevertheless, SU has expanded its financial support for students, with bursary expenditure in 2016 totalling R724,5 million.

Bursary support to students	2000	2014	2015	2016
Percentage of students assisted	19%	24%	24%	24%
Percentage of beneficiaries' student fees settled by bursaries	47%	76%	78%	76%

Student debt is managed responsibly. Total debt for both registered and non-registered students, which amounted to R197,5 million at the end of 2016, has remained at approximately 18% of total annual student and accommodation fees levied since 2007.

## EFFICIENT BUSINESS PROCESSES ENSURE INTEGRITY

Good progress has been made with the analysis of the new management operating system, Kuali Financials (KFS). The risk posed by the outdated and increasingly unsupported programming language of internal financial and student systems is being addressed as part of this project. In addition, enhanced processes for collecting outstanding student fees, student loans and trade debtors have yielded good results.

Existing mechanisms to ensure the integrity of SU's business processes and financial information remained in place. These include the external ethics hotline, the Audit and Risk Committee of Council, the Finance Committee, as well as internal and external audits. The office of the Chief Operating Officer also strives to comply with King III and other reporting requirements, including those particularly aimed at higher education institutions.

To strengthen this already solid base, the drafting of a plan for timeous compliance with King IV has commenced. In another significant step, SU established its first combined assurance model based on an approved risk management framework and plan. This formed part of work done with Deloitte to enhance the University's risk management processes. The combined assurance model will be populated and refined on an ongoing basis (see page 71).

## PROVIDING AND UPGRADING FUNCTIONAL, SUSTAINABLE FACILITIES

Roll-out of the first undertakings of the Campus Renewal Project, a seven-year initiative approved by Council at the end of 2014, has started as illustrated below, representing a major boost to SU's manufactured capital.

CAMPUS RENEWAL PROJECT UNDERTAKINGS ROLLED OUT	г
Project description	Commencement and progress
<b>Van der Sterr Building:</b> Densification and construction of new lecture hall complex. (Budgeted and planned for in the Campus Renewal Project. Brought forward as a consequence of the fire in 2015; insurance money added to the budget.)	Reaching completion, occupation at the start of 2017 academic year.
<b>Drama Building:</b> Complete renewal of electrical and electronic infra- structure, densification, new small theatre, freeing up HBThom theatre to generate third-stream income.	Construction started September 2016, occupation January 2018.
First-year Chemistry lecture facilities: Complete upgrade of two lecture halls, as well as foyer area.	Construction started August 2016, occupation January 2018.

These projects will go a long way towards relieving the pressure on lecture halls, which the University has identified as a medium-term risk, and will in time be supplemented with the projects below.



New lecture hall complex being added to Van der Sterr building.

Upgraded Drama facilities being constructed.

CAMPUS RENEWAL PROJECT UNDERTAKINGS PLANNED	
Project description	Planning and progress
Bellville Park Campus: New lecture space and office extensions.	Master plan completed in April 2016; draft plans being reworked due to budgetary constraints.
<b>Fisan research facility, Tygerberg:</b> Upgrade of existing building and construction of new three-storey addition with underground parking.	Crucial project to sustain medical research and generate income, total project cost estimated at R750 million.
<b>Engineering Faculty:</b> Upgrade and renewal, including laboratories Upgrade of old IT building to house Industrial Engineering.	Detailed master plan completed end October 2016 Concept design completed end November 2016, commencement of construction planned for June 2017.
Arts and Social Sciences Faculty: Densification and new annexe.	Design of annexe in process, and high-level sketch plans for densification to be aligned with departments' needs.
Teaching and Learning Centre: Erection of new building.	Plans with Stellenbosch Municipality for approval; construction to start during 2017; total estimated budget R240 million. Additional private donation has helped safeguard the project against a potential underfunding risk.

Another ongoing project across Stellenbosch campus is the provision of new fibre-optic data routes. Phase two, the stretch from the Dutch Reformed Church to the HBThom Theatre and Administration Building B, was completed towards the end of 2016.

### MINIMISING RISK THROUGH WELL-MANAGED MAINTENANCE

The Operations and Finance responsibility centre is part of the front line defending against the risk of unsustainable facilities maintenance.Vital maintenance projects under the Campus Renewal Project continued, for which additional capacity was provided through the internal transfer of a senior project manager and the commissioning of a project management consultant in the Property Services Division.

In terms of maintenance and improvements to the University's sports facilities, cost estimates for most of the urgent projects were completed and approved in 2016. Coetzenburg athletics track has for example been identified to receive a surface replacement by mid-2018, while both Lentelus B and Coetzenburg C fields will boast new floodlights towards the end of 2017.

In addition, Facilities Management has renewed its focus on the total cost of ownership when providing new or upgrading existing assets. This entails enhancing the performance of all plants, equipment and technologies, while simultaneously reducing SU's environmental impact. The approach includes a consolidated plant provision strategy essentially aimed at 'doing more with less', while still mitigating risk in a financially and environmentally sustainable way. The ultimate aim is to align all operational and backlog maintenance, as well as all upgrade and capital projects for maximum consolidation.

Upgrades, densification and new development at SU over the past few decades have placed significant stress on site services and municipal mains. Electricity and water supply, fire water supply, storm-water systems, solid waste removal as well as heating, ventilation and air conditioning have all been identified as potentially at risk. For this reason, Facilities Management has initiated a number of master planning processes on all SU campuses to map out the optimum financial and environmental solutions over a 30-year horizon. The first phase of these reports, the Energy Master Plan for SU, was delivered towards the end of 2016.

COMPARATIVE OVERVIEW OF FACILITIES MANAGEMENT ACTIVITIES, 2014–2016										
Description	2014	2015	2016							
Total funding, including funds from Department of Higher Education and Training	R704 m	R625 m	R590 m							
Number of maintenance calls completed	45 959	47 290	55 450							
Number of small capital projects completed	424	668	707							
Expenditure (Rm) on building maintenance	RI78 m	R215 m	R248 m							
Total funds (Rm) committed to capital projects	R127 m	R261 m	R284 m							

### HARNESSING MOBILE TECHNOLOGY FOR IMPROVED FACILITIES MANAGEMENT

Following its second year of operation, uptake of SU's mobile facilities application is increasing. Users access the application to obtain building details, view floor plans and locate examination venues. Downloads increased from 3 354 at the end of 2015 to 6 343 at the end of 2016.

## SHARPENING STAFF, STUDENT AND VISITOR SECURITY

In managing the potential risk of increased exposure to crime, the Operations and Finance responsibility centre continued to strengthen its grip on the 'moving target' of crime prevention. In 2016, the focus shifted to curbing petty crime, and the SU strategy of adapting capacity in response to specific needs again paid dividends.

To help the institution safeguard its operations against the risk associated with the student activism recently experienced, additional security capacity was required. This necessitated an increase in security expenditure, most notably an additional R28 million for protest-specific measures.

A constant stream of other security-related projects have also seen another R58 million spent over the past five years. These included the expansion of camera networks, installation of additional fencing at particularly Tygerberg and Bellville Park campuses, upgrades to the security control room on Stellenbosch campus, and the introduction of building access control. A constant stream of other **SECURITY-RELATED PROJECTS** have also seen another **R58 MILLION** spent over the past five years.

### STREAMLINED MATIES SPORT ON A WINNING STREAK

With its more efficient operational structure, Maties Sport continues to produce and sustain excellence. For the exceptional achievements of the High Performance Sport Unit recorded in 2016, see the table below.

SPORT UNIT'S EXCEPTIONAL A	CHIEVEMENTS
Sporting event	Maties Sport achievement
Varsity Sports	Maties Rugby Sevens won Varsity Sports Maties Cycling dominated first ever Varsity Sports mountain bike competition Maties Rugby ended second in Varsity Cup final Maties Hockey Men ended third Maties Netball ended third
University Sport South Africa (USSA)	Gold for Steinhoff Maties Hockey Men, Maties Cycling, Maties Gymnastics, Maties Judo, Maties Swimming and Maties Rugby Sevens Silver for Maties Rugby, Maties Surfing, Maties Badminton and Matie Squash Bronze for Maties Hockey Women
Rio Paralympic Games, 2016	15 members of Maties Parasport Club and three coaches included in Team SA Maties Parasport athletes returned home with 11 medals – five gold, three silver and three bronze
Rio Olympic Games, 2016	SU representation in 200 m and 400 m, triathlon and cycling road race



Maties Sport continues to produce and sustain excellence. Seen here is Ilse Hayes, Rio Paralympic Games 2016 silver medallist. Apart from success on the sports field, SU places a high priority on the academic success and the diversity of its student athlete community. To raise the percentage of competitive student athletes who also achieve academic success, the PACER programme – which is aimed at holistic student athlete wellbeing – identified 21 sport bursary recipients for assistance, and also hosted eight workshops for more than 180 student athletes and coaches. In terms of sport transformation, the aim is for the first teams of all SU's high-performance sports clubs to have 50% black, coloured and Indian (BCI) representation. To this end, bursary funding for BCI athletes increased by 20% in 2016. Huis Neethling, the high-performance sports residence allocated to Maties Sport since the start of 2016, has a current diversity profile of six black, 28 coloured, two Indian and 36 white residents.

Through its Recreation and Active Lifestyles Unit, Maties Sport also continued to encourage all SU students to be physically active. Its residence cluster programme has managed to increase participation in physical activity by 60% since 2014. A highlight was the launch of the mobile application aimed at improving communication with students and staff to promote physical wellness and active lifestyles. In addition, outreach actions to local learners continued in the form of sport clinics and holiday programmes hosted by Maties Sport's Unit for Recreation and Active Lifestyle.

Mindful of the risk of insufficient investment in sport, Council voted funds specifically for this purpose. To ensure sound financial management, the Operations and Finance responsibility centre subsequently appointed two new accountants at Maties Sport. In further efforts to boost sport funding, the appointment of a sports fundraiser is under way, as is the drafting of action plans for all students to pay a nominal amount for SU's value proposition in terms of sport and recreation. Students who take part in organised sport are also required to pay club fees.

## IMPLEMENTING THE CAMPUS MOBILITY PLAN

In terms of mobility, the SU's transport approach was reviewed during the reporting year. In this regard, SU management and Stellenbosch Municipality both approved the founding principles of a new integrated transport plan aimed at increased accessibility and integrated transport modes. The plan foresees the creation of a network of transport nodes across campus where users will be able to transfer from one transport mode to another, such as from cycling to the shuttle service, or from private car to cycling or walking. The nodes may also link up with public transport in future.

As part of regular transport operating activities in 2016, planning for the next phase of access control at parking areas has been completed, with implementation scheduled for 2017. A shopping shuttle was introduced on Tygerberg campus for residence students, while an electronic booking system for the Stellenbosch night-time shuttle and the Tygerberg shuttle has also been implemented. Some other highlights of SU's existing Mobility Plan included:

- the purchase of 500 new maroon Matie bicycles for rental with effect from 2017 – the old blue bicycles will then be sold;
- a 22% growth in users transported daily by the campus shuttle service;

- an average of 186 users per night transported by the night-time shuttle service; and
- a 14,3% growth in users of Maties Findalift, an online lift club.

## COMMERCIALISING INTELLECTUAL PROPERTY AND CREATING BUSINESS OPPORTUNITIES

The SU company Innovus is responsible for technology transfer, entrepreneurial support and development, as well as innovation at the University, thereby safeguarding and boosting intellectual capital.

Under Innovus' guidance, SU's innovation portfolio and intellectual property are protected and commercialised through patenting, licensing and the establishment of spinout companies. Nine new licence agreements were signed in the reporting year, and the Innovus group of companies have had a combined turnover of R206 million and employed 226 people. The University's equity stake in these companies are estimated at over R80 million, representing a significant asset to the University.

In bringing SU technologies to the market, Innovus received 37 new technology disclosures. Significant progress was also made with existing innovation projects, of which only a few are highlighted below.

## SU TRANSFORMS SOCIETY WITH ONE BRIGHT IDEA AFTER ANOTHER

### CubeSpace explores the thermosphere

The CubeSpace team's ZA-AeroSat satellite, which forms part of the international QB50 project, has been delivered at its first stopover in the Netherlands. Its final destination will be the International Space Station, where it will be launched along with 49 other satellites, each smaller than a shoebox, to gather data on the lower thermosphere, 200 to 400 km above the earth.

### Nano wires detect pathogens

A biosensor nanochip uses zinc-oxide nanowires to detect pathogenic infections at an early stage. The biosensor can also detect pathogens in water, which is particularly relevant to a developing-country context. Possible applications include water treatment and diagnostic tests in health care.

### S'coolBeans spreads goodness

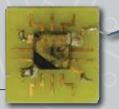
Steady progress has been made with the commercialisation of this nutritional chocolate and hazelnut-flavoured sandwich spread made from sweet potato and red-speckled beans. This innovation by a group of 2015 final-year Food Science students has generated significant media coverage and interest from various food manufacturers and retailers.

## Antimicrobial biocontrol compositions fight against destructive fungal diseases

Microbial infection of fresh produce is a huge threat to the food industry. Researchers at the Department of Biochemistry developed biodegradable, natural antimicrobial compositions aimed at combating fungal plant pathogens, including two of the most destructive fungal

The CubeSpace team with their ZA-AereoSat satellite.

A biosensor nanochip that detects pathogenic microorganisms in minutes.



Nutritious sandwich spread designed by Food Science students.

> Cut flowers benefit from antimicrobial composition.



47

Smart battery system increases range of Mellowcab electric vehicles.

> Thorny bush tree good for skeletal muscle injury.

App piloted by SU turns summarising into child's play





diseases associated with grapevine decline, namely Black Foot Disease and Petri Disease. Innovus had productive discussions with one of the world's largest suppliers of specialty chemicals in the agriculture sector about evaluating these antimicrobial compositions. An Instant Access<sup>™</sup> licence has also been extended to another company for assessing its use in their products, and excellent results were obtained.

### Battery management system fills gap in market

The project has seen the development and pilot testing of an intelligent battery management system (BMS) for Mellowcabs – L2-class electric vehicles – to decrease their weight and increase their range. Forty BMS units are being manufactured for installation. The project has received uYilo kick-start funding as part of an agreement between SU, Mellowcabs and the uYilo E-mobility Programme, an initiative of the Technology Innovation Agency.

## Use of Prosopis glandulosa in muscle treatment and enhancement

Based on the reported 'miracle' properties of the genus Prosopis (thorny bush trees), a Stellenbosch research team investigated the effect of Prosopis glandulosa in treating skeletal muscle injury and enhancing muscle tissue. Following successful studies on mice, patent applications were filed. Discussions with a local company keen to license the registered intellectual property continue. The first samples are to be marketed at the world's largest nutraceutical event, Vitafoods, in 2017.

## Web application Abstrahere improves critical reading skills

This text analysis software web application aims to improve critical reading skills and may be applied in academic institutions as well as industry. Guided by online prompts to analyse the content of an uploaded text, you make your own summaries for inclusion in, for instance, a literature survey, theoretical conclusions or a discussion. A next version of the software is aimed at high-school learners. It is currently being piloted at SU, and an Instant Access™ licence has been granted to a local company for testing.

Moreover, the Innovus team manages one of the most successful Technology Innovation Agency (TIA) Seed Fund project portfolios in the country, raising significant funding to get researchers' projects market-ready. In 2016 alone, Innovus raised R3,3 million from this source for nine projects, bringing the total raised since 2014 to R14,3 million. Considerable progress has also been made with establishing an investment fund dedicated to commercialising SU technologies, and the fund should materialise in 2017.

In turn, the Nedbank Stellenbosch University LaunchLab, the business incubator falling under Innovus, attracted the business of four large corporates. The LaunchLab also helped resident companies raise R76 million in investments, and increased the number of entrepreneurs and their employees housed in the incubator to 160. Several investments in start-ups, including some of those listed above, can be traced back to introductions made by LaunchLab staff. Both Innovus and LaunchLab expanded their footprint in 2016 and opened satellite offices at respectively Tygerberg campus and the University of Stellenbosch Business School, in both instances at the request of the academic environments.

In terms of short-course management – another Innovus responsibility – considerable progress was made with the development of technology platforms that will enable the delivery of blended-learning and virtual short courses. This is set to expand SU's accredited online short-course offering as well as its short-course student registrations globally. In 2016, 15 399 candidates applied for short courses; of these 5 794 were USB-ED candidates from Africa, including South Africa, taking courses in leadership and management. In this way SU contributes to building management capacity in Africa.

## PURSUING ENVIRONMENTAL SUSTAINABILITY

Enhancing SU's environmental capital, sustainability activities focused on energy, water, waste, as well as biodiversity and landscaping, as contained in the Strategy for Creating an Environmentally and Ecologically Sustainable Campus at Stellenbosch University 2013–2018.

Switching to a 'time of use' electricity tariff structure resulted in significant savings. Through various initiatives, energy consumption per student also dropped from 2 750 kWh in 2009 to 2 411 kWh in 2016. Further initiatives to optimise energy efficiency included a feasibility study for a rooftop photovoltaic (PV) installation at the Neelsie Student Centre, a district-based water cooling system, as well as research on generating energy from a concentrated solar power plant and stationary PV installation at Mariendahl experimental farm. Whilst SU has already switched to energy-efficient lighting in landscapes and building upgrades, energy-efficient principles will also be incorporated in the construction of new STAG (Student Accommodation Group African) student residences at Tygerberg. A central heating, ventilation and air-conditioning system implemented at the Schumann complex has reduced energy demand. Finally, the Energy Master Plan was developed, investigating the consolidation of supply points, co-generation, and incorporating renewables into SU's energy mix.

Water leaks testing and repairs continued, as did the use of permeable ground cover to allow rainwater to feed underground aquifers. A new, efficient computerised irrigation system now covers 60% of Stellenbosch campus. Various investigations have been launched, including into the number and position of bulk meters required for better water monitoring, and to locate where storm water is lost into the sewage system. At Tygerberg, an investigation was launched into storm water runoff reduction, rainwater harvesting and greywater reuse. Moving beyond campus, SU took part in a river collaborative programme with Stellenbosch Municipality and other stakeholders aimed at invasive vegetation control along the Eerste River. Meters were also installed on all pumps from the Eerste River to monitor SU's water use for irrigation and cooling.

On the waste front, the three-bin system and further waste sorting continued to maximise recycling and reduce waste to landfill. As a result, recycling increased by 441 tonnes. All biomass generated from landscaping and sports fields is composted and reused in the University's gardens. The amount of food waste diverted from the campus waste stream through composting and fly larvae production increased by 82 tonnes. A waste plan will also govern all future approved events on campus.

SU continued its focus on including indigenous and endemic vegetation in landscapes to suit the local semiarid climate. Altogether 6 140 m<sup>2</sup> of Stellenbosch campus was upgraded to more hardy, indigenous landscapes. Tygerberg campus saw 8 000 m<sup>2</sup> being covered with Cape Flats sand fynbos, and also benefited from the donation of 147 indigenous trees. Mindful of SU's fire exposure risk, Stellenbosch Mountain, including the well-frequented *Bergpad*, is managed according to best practice for fire prevention and biodiversity conservation.

## INSTITUTING INTEGRATED PLANNING, BUDGETING AND REPORTING

The University's integrated budgeting model contains approved operational inputs and outputs, guaranteed subsidy-unit values and operational targets for a rolling three-year period to ensure improved planning and stable execution.

Apart from further improving the management model for third- and fourth-stream income, the budgeting process in 2016 required meticulous planning after the ministerial announcement that 2017 student fee increases should be limited to 8%. The minister further announced gap funding for students in the so-called 'missing middle' – all students from households with a combined annual income below R600 000 – which will in effect see qualifying students experience a 0% fee increase. Students with a combined household income below R122 000 still fully qualify for National Student Financial Aid Scheme (NSFAS) support. Presentations at meetings of the Students' Representative Council, Prim Committee, residence clusters and faculties, as well as a dedicated webpage, ensured that the SU community remained fully informed of these developments.

Following Council approval, SU timeously submitted all required reporting to the Department of Higher Education and Training in December, including its 2017–2022 integrated budget, cash flow projections and Institutional Plan, its 2016–2021 capital plan, and its enrolment targets and risk register. The responsibility centre for Learning and Teaching (L&T RC) is among the most important contributors in establishing Stellenbosch University (SU) as the preferred institution for tertiary teaching and learning among all South Africans.



## Report of the VICE-RECTOR (Learning and Teaching)

Prof Arnold Schoonwinkel

This involves a sustained emphasis on relevant teaching pedagogies for the modern-day student and the delivery of world-class graduates equipped to make a difference in Africa. Therefore, the L&T RC, through its divisions, ensures that the University's teaching function is effectively supported and both student and staff learning promoted. In this way, intellectual capital is transferred and optimised.

While pursuing its own aims, the L&T RC remains committed to the strategic priorities and themes in the University's Institutional Intent and Strategy 2013–2018 (IIS). The RC retains the overall responsibility to sustain the institution's momentum of excellence in learning and teaching, which requires quality academic programmes, skilled and dedicated academics and essential support services to the entire University. In particular, the RC plays a key role in the co-curricular development and wellness of students, student recruitment, efficient academic administration, institutional research and planning, learning and teaching enhancement, as well as the sustained professional development of SU staff.

SU's 2014 Strategy for Teaching and Learning attempts to keep pace with the changing tertiary education landscape: On the one hand, it needs to take account of South African students' socio-economic realities; on the other, it must ensure that SU graduates are able to deliver world-class services and products. Mediating between this strategy and implementation is the L&T RC Business Plan, which presents eight specific strategic focuses. The following sections report on the core activities undertaken in 2016 to achieve these eight focuses in support of the University's priorities and themes.

## EXCELLENCE IN LEARNING AND TEACHING

GUARDING THE QUALITY AND EFFICIENCY OF PROGRAMME DELIVERY

The quality and efficiency of academic programmes was

further bolstered in 2016 with nine academic departments and two support services divisions of SU having undergone a comprehensive self-assessment and external evaluation as part of the University's fourth quality assurance cycle. Two departments also went through on-site reaccreditation reviews by their professional bodies.

In addition, the Council on Higher Education's peer review panel, which was hosted at SU as part of the first phase of the national Quality Enhancement Project, commended the University for its sound teaching and learning practices.

## CONTINUOUSLY HONING ACADEMIC STAFF'S SKILLS

Excellent learning and teaching goes hand in hand with skilled and dedicated academic staff. Various initiatives implemented in partnership with faculties in the year under review ensured that the skills sets of SU's academic staff remained on a par with the best internationally. These included the newly revised year-long PREDAC (Professional Educational Development for Academics) programme, the redesigned short course on blended teaching and learning, as well as the ninth annual Scholarship of Teaching and Learning (SoTL) conference. The Fund for Innovation and Research in Learning and Teaching (FIRLT) also continued to lend much-needed financial support for teaching and learning research, having received 34 proposals in the course of the year.

To reward teaching and learning excellence among SU academics, significant progress was made laying the groundwork for an institutional awards initiative, which will be launched in 2017.

## FURTHER STRENGTHENING OF SUPPORT SERVICES FOR ALL-ROUND EXCELLENCE

In delivering essential support services to the University as a whole, the L&T RC has made a few organisational changes to better meet all stakeholders' needs. It is now home to the Centre for Student Communities, which focuses on creating a living and learning environment that ensures full access to all facets of university life for all students. The Centre for Student Counselling and Development has gained the capacity of the Equality Unit to address issues of HIV/Aids, equality, harassment and discrimination on campus via its dedicated helpline. To complement these two entities, the Centre for Student Leadership and Structures has been introduced, inter alia to take charge of leadership development among all SU students.

At a systems level, support has been strengthened by the further expansion of the electronic record-keeping system SUNRecords, data-capturing on the Postgraduate Administrative Support System to improve postgraduate student administration, and overall enhancement of service delivery through process refinement and automation.

## STUDENT ACCESS WITH SUCCESS

Every aspect of SU, and certainly of the L&T RC, contributes to student access with success. Yet, a general quantitative measure of student success in academic terms remains the module success rate.

SU STUDENT MODULE SUCCESS RATE (%)

## 

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
83,2	83,4	84,9	85,9	85,1	86,7	85,9	85,3	85,2	85,1	85,0	85,0

An overview of other components of the value chain aimed at providing students with the type of access that facilitates success follows below.

## SHAPING A CLIMATE AND CULTURE CONDUCIVE TO SUCCESS

Various student movements shaped the campus experience in 2016. The L&T RC recognises its responsibility to limit the potential risk of unchecked campus activism that causes harm to persons and property or derails the academic project. Therefore, it has purposefully set out to turn the risks associated with undisciplined actions such as those seen in 2016 into opportunities for positive student development. The Division for Student Affairs strives to cultivate responsible activism and produce responsive citizens who can help find shared solutions to shared problems – not only at SU, but in society at large.

## STUDENT ENGAGEMENT AND THE CO-CURRICULUM

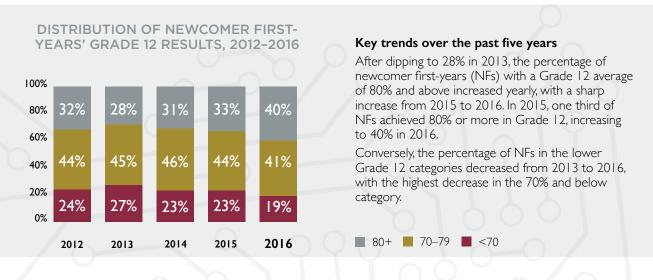
Apart from classroom learning and interaction, campus life offers various other engagement opportunities that help develop graduate attributes and teach SU's students to be active and engaged citizens. To ensure that all students optimally benefit from these co-curricular activities, the L&T RC in 2016 commenced with research on student and institutional engagement practices. The results will be used to improve students' sense of belonging, their participation in institutional life and, thus, their chances of success.

Establishing the newly created Centre for Student Leadership and Structures has further boosted this vital component of the SU student experience and will see the co-curriculum being expanded and formalised.

Finally, student engagement was further enhanced through the addition of another cluster hub, Wimbledon, which serves as a meeting, study and recreational space shared by residence and commuter students.

## ADMITTING STUDENTS WHO REPRESENT A DIVERSE SOCIETY AND HAVE THE POTENTIAL TO GRADUATE SUCCESSFULLY

SU's recruitment advisors visited more than 320 targeted schools in 2016 and reached thousands of Grade 11 and 12 learners through information sessions, career expos and the SU Open Day. The focus was on recruiting top achievers, while also reaching the University's set diversity.



The Diversity Recruitment Bursary Project continued to provide impetus to this recruitment drive, enabling SU to financially support a significant portion of its first-year black, coloured and Indian (BCI) student intake. More than 44% of the top BCI first-years who enrolled in 2016, received these sought-after bursaries. The L&T RC also collaborated with other SU entities on an acceleration project in township-based high schools, demonstrating strong recruitment potential to increase the number of BCI top-achiever applicants for the 2017 intake.

## SIZE AND SHAPE OF SU STUDENT BODY

A particular focus in 2016 was to improve admissions processes in order to increase the number of complete applications received, especially from BCI applicants. This included more accurate receipt and capturing of application documents, as well as enabling applicants to view their application status online throughout the process. As the table below illustrates, the target has been reached. Although the overall number of applications decreased, the percentage of complete applications relative to total applications continued its upward trend.

) O	PERCENTAGE OF COMPLETE APPLICATIONS RELATIVE TO TOTAL APPLICATIONS									
	Incomplete applications Complete applications Total applicatio			tions	Growth rate complete applications					
Year of intake	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015-2017
BCI	4 610	5 594	4914	5 949	8 994	8310	10 559	14 588	13 224	40%
White	4 2	1 069	734	7 266	8 289	8 401	8 678	9 358	9 135	16%
Total	6 022	6 663	5 648	13 215	17 283	16711	19 237	23 946	22 359	26%

BCI = black, coloured and Indian students

Our student profile in numbers are presented on pages 55-56.

## WORKING TOWARDS A MORE DIVERSE STUDENT BODY COMPOSITION

Residence placement is a key driver in SU's pursuit of a diversified student body composition, by broadening access to students from many different communities. Some 8 000 students vied for the 2 000 first-year residence places on offer. Eventual placements reached the 40% BCI placement

target, the 5% international student placement target, as well as the 40% first-generation placement target. The table below provides the figures for all undergraduate residences in Stellenbosch. Placement figures for Tygerberg campus residences were equally on target, with 48% white and 52% BCI first-years having secured place in residence.

	Numb	Numbers		
	2015	2016	2015	2016
Population group				
White	I 238	I 203	60,7	59,
BCI	802	819	39,3	40,
Black	302	334	14,8	16,5
Coloured	445	425	21,8	21,0
Indian	55	60	2,7	3,0
Total	2 040	2 022	100,0	100,0
Language				
Afrikaans	I 048	I 043	51,4	51,6
Non-Afrikaans	992	979	48,6	48,4
English	774	743	37,9	36,7
SA languages	183	201	9,0	9,9
Other	35	35	1,7	1,7
Total	2 040	2 022	100,0	100,0
Nationality				
South African	1918	I 920	94,0	95,0
Other	122	102	6,0	5,0
Total	2 040	2 022	100,0	100,0
First-generation status				
l	805	829	39,5	41,0
2	139	I 156	55,8	57,2
Unknown	96	37	4,7	1,8

BCI = coloured, black and Indian students

The following table shows the share of both undergraduate and postgraduate black, coloured and Indian students at Stellenbosch.

ALL BLACK, COLOURED AND INDIAN (BCI) STUDENTS AT SU (%)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>32,9</b>	<b>32,9</b>	<b>33,1</b>	<b>34,6</b>	<b>36,6</b>	<b>37,8</b>	<b>38,7</b>	<b>41,1</b>	<b>42,7</b>	<b>44,5</b>	<b>45,8</b>	<b>48,3</b>

Whereas the above table contains the share of all BCI students, the diversity of undergraduate students is largely determined by the intake of first-year students. Despite these and other efforts, however, the stated institutional registration target of 37,2% BCI newcomer first-years was not met, even though BCI admissions were up 9% compared to the previous year. Following the final registration period, the number of BCI newcomer first-

years was 7% lower than in 2015, and also fell 7% short of the stated June target. Recognising that the reasons for this need to be explored to prevent a potential student diversity risk going forward, a poll was conducted among BCI students who had been provisionally admitted for registration in 2016, but eventually decided against it. The poll offered respondents 14 possible reasons of which they could select a maximum of three each. The findings are summarised on the next page.

REASONS FOR NON-REGISTRATION					
Most common reasons cited for not registering	Coloured students	Black students			
Distance between SU and their homes	34%				
Inability to secure study finance	26%	26%			
Transport problems	25%				
Use of Afrikaans in undergraduate teaching		44%			
Negative media reports on SU		33%			

The Diversity Recruitment Bursary Project, along with other financial support initiatives, should manage to attract more of these students in future. With regard to language of instruction, SU's new Language Policy, which takes effect in January 2017, is precisely aimed at improving access for all South African students by means of a multilingual offering.

## TELEMATIC TEACHING OFFERINGS ADDING A NEW DIMENSION TO SIZE AND SHAPE

Information and communications technology (ICT) development creates alternative teaching and learning possibilities, and could potentially meet the needs of students whose circumstances do not allow participation in SU's full-time teaching mode. Through its telematic services, SU in 2016 continued to provide a platform to a number of postgraduate programmes, employing innovation such as simultaneous broadcasts of learning events via satellite and live internet-streaming. These programmes have boosted the University's postgraduate diversity profile and continue to achieve good throughput rates.

### FURTHERING PROGRAMME RENEWAL

Ensuring that SU presents relevant programmes in a costeffective way requires regular reflection on the programme offering. In this regard, the Programme Advisory Committee in 2016 tabled 16 new programme submissions for external accreditation with a view to introduction in 2018. (For programmes approved and accredited in 2016, see page 22.)

In addition, a forum of vice-deans (teaching) or similarly positioned faculty representatives was established to conceptualise an institution-wide strategic programme renewal plan. This holistic initiative will involve multiple roleplayers from centres both within and outside the L&T RC, also including the many co-curricular programmes offered at SU.

MODULE CREDITS BY MEDIUM OF TUITION								
	2014	2015	2016	2017	2018	2019	2020	2021
% module credits taught in English and Afrikaans parallel medium	l 6,6	15,4	17,5	18,5	20,5	22,0	23,5	25,0
% module credits taught in English and Afrikaans in same class	62,9	69,5	69,5	68,3	66,0	64,0	62,0	60,0
% module credits taught in either English or Afrikaans	20,4	15,1	13,0	13,2	13,5	14,0	14,5	15,0

## INCREASE MULTILINGUAL PROGRAMME OFFERING

A well-documented milestone in 2016 was the review of the Language Policy. Following extensive consultation, it was adopted by Council, with Senate's concurrence, towards mid-year. As mentioned earlier, the policy will help the L&T RC manage a potential student diversity risk, ensuring that no student is excluded from SU on the grounds of language.

Meanwhile, the Language Centre continued to contribute significantly by offering credit-bearing courses on academic literacy, language acquisition and professional communication (4 276 students), writing consultations (4 313 students), short courses on academic writing (1 500 students), reading skills development (3 600 students), educational interpreting (13 700 lectures), translation, editing and document design services (1 400 transactions) and courses on isiXhosa in Education and Health Sciences. IsiXhosa was further developed as an academic language with the introduction of an online audio phrase book for the health sciences.

### INCORPORATING INFORMATION AND COMMUNICATION TECHNOLOGIES FOR LEARNING AND TEACHING

As ICT is undoubtedly a requirement for 21st-century learning and teaching, the University Council in 2014 made available R218 million for a project to entrench ICT in SU's learning and teaching. Evidence of the excellent progress made with this project in 2016 includes facultyspecific lecturer support such as a short course on blended learning, expanded student support and a new videostreaming platform.

In a significant step, SU also introduced its first massive open online course (MOOC), Teaching for Change: An African Philosophical Approach. The MOOC was presented on the FutureLearn platform and elicited active participation and positive feedback from the 2 400 enrolled students.

In terms of infrastructure, good progress has been made with the roll-out of Wi-Fi in all classrooms on campus. SU is also thankful to have received a donation of R50 million towards the state-of-the-art Learning and Teaching Centre planned for construction in 2017 from Mr Jannie Mouton, SU alumnus and founder of the investment management company, the PSG Group. This donation has strengthened the University's resolve to secure the remainder of the funding required to execute this project and bodes well for what has been described as a potential risk for the L&T RC (see page 72).

### TAPPING INTO NEW KNOWLEDGE MARKETS

The institution's established expertise in interactive satellitebased technology, and now also internet live-streaming, offers new ways of ICT-supported teaching and learning to expand SU's knowledge base to new markets.

In this regard, the University's telematic programme offering has gained a substantial following and is an important precursor of the envisaged Mode 2-type offering. Mode 2 will require students' presence on campus at only certain times of the year, with academic support mostly provided through satellite, web and other learning technologies.

Yet, while shifting from a single-mode to a two-mode institution is a long-term objective by 2030, telematic learning centres are already being used to enable SU staff to interact with their peers at other universities. Most notably, such centres were established in Uganda and Kenya in the year under review, connecting SU faculties and departments with their counterparts on the continent.

## **RAISING BURSARY DONATIONS**

SU remains committed to support qualifying students with undergraduate merit and recruitment support bursaries for students in financial need, and postgraduate bursaries. The University also manages various bursary awards on behalf of external contributors, including the National Student Financial Aid Scheme (NSFAS), corporates and philanthropists.

In 2016, amidst calls for 'free education' and special assistance for the 'missing middle', SU managed to support the majority of its students in financial need, as determined by a means test, by way of assistance bursaries and loans in excess of R36 million. More than R100 million was also made available in the form of merit and recruitment bursaries to respectively reward excellence and promote student diversity. To assist the missing middle – those who are considered too rich to qualify for state support, but are too poor to afford tuition fees – bursary loans are awarded to students from families with a gross annual household income of up to R240 000. Another initiative that will go a long way towards assisting the missing middle, is the Department of Higher Education and Training's announcement in late 2016 that it would support all students with household incomes of less than R600 000 per year so as to effectively experience no student fee increase in 2017.

Clearly, many SU students rely on bursaries and loans. In turn, SU heavily relies on state sources such as the NSFAS, as well as its own main budget, to provide this assistance, particularly to undergraduates. To diversify its bursary sources and guard against the potential risk of overreliance on any one source, the L&T RC, in collaboration with SU's Development Office, has embarked on a concerted drive to increase the University's share of private-sector bursary donation agreements. It is anticipated that a sustained reputation of quality education and the development of top-quality graduates, specifically also BCI graduates, for scarce-skills professions will go a long way towards attracting philanthropic donations and private-sector recruitment bursary support.

#### COMPOSITION OF STUDENT BODY BY FIELD AND LEVEL OF STUDY, June 2016 Number of Levels per faculty % students **AgriSciences** 2 059 100,00 515 25,01 Postgraduate Occasional 48 2,33 1 496 72,66 Undergraduate Arts and Social Sciences 5 188 100,00 1 352 26,06 Postgraduate 6,59 Occasional 342 3 494 Undergraduate 67,35 **Economic and Management** 8 577 100,00 **Sciences** Postgraduate 3 328 38.80 Occasional 243 2,83 Undergraduate 5 006 58.37 1 723 100,00 Education 729 42,31 Postgraduate 5 0,29 Occasional Undergraduate 989 57,40 Engineering 3 829 100.00 908 23,71 Postgraduate 72 1,88 Occasional 2 849 74,41 Undergraduate 817 100,00 Law Postgraduate 379 46,39 9 1.10 Occasional 52.51 429 Undergraduate **Medicine and Health Sciences** 100,00 4 4 1 3 Postgraduate 1 663 37,68 Occasional 316 7,16 Undergraduate 2 4 3 4 55.16 643 100,00 **Military Science** Postgraduate 100 15,55 7 Occasional 1,09 Undergraduate 536 83,36 Science 3 074 100,00 894 29,08 Postgraduate 2,05 Occasional 63 2 1 1 7 68,87 Undergraduate 100,00 Theology 53 I Postgraduate 286 53,86 Occasional 13 2.45 232 43.69 Undergraduate

30 854

10 154

1118

19 582

100,00

32,91

3,62

63,47

**Grand Total** 

Total postgraduate students

Total undergraduate students

Total occasional students

### QUALIFICATIONS AWARDED BY TYPE, 2016 (Data extraction March 2017)

Qualification type	Number awarded	%
Undergraduate diplomas and certificates	17	0,20
General first bachelor's degrees	2 501	29,96
Professional first bachelor's degrees	5 3	18,12
Postgraduate bachelor's degrees	81	0,97
Postgraduate diplomas and certifi- cates	1 195	14,32
Honours degrees	I 295	5,5
Master's degrees	I 468	17,59
Doctoral degrees	278	3,33
Total	8 348	100,00

## COMPOSITION AND SIZE OF STUDENT BODY BY GENDER, June 2016

Gender	Number of students	%
Female	16 406	53,17
Male	14 448	46,83
Total	30 854	100,00

## COMPOSITION AND SIZE OF STUDENT BODY BY RACE, June 2016

Race	Number of students	%
Coloured	5 443	17,64
Black	5 629	18,24
Indian	875	2,84
White	18 907	61,28
Total	30 854	100,00

## COMPOSITION AND SIZE OF STUDENT BODY BY HOME LANGUAGE, June 2016

Home language	Number of students	%
Afrikaans	12 545	40,66
English	14 219	46,08
Afrikaans/English	284	0,93
IsiXhosa	954	3,09
Other official SA languages	I 660	5,38
Other languages	92	3,86
Total	30 854	100,00

## COMPOSITION AND SIZE OF STUDENT BODY BY SA PROVINCE, June 2016

Province	Number of students	%
Western Cape	18 691	60,57
Gauteng	3 695	11,97
Unknown	2 819	9,14
Eastern Cape	I 924	6,24
Kwazulu-Natal	I 533	4,97
Northern Cape	593	1,92
Limpopo	494	1,60
Mpumalanga	465	1,51
Free State	416	I,35
North West	224	0,73
Total	30 854	100,00

## COMPOSITION AND SIZE OF STUDENT BODY BY NATIONALITY, June 2016

Nationality	Number of students	%
South Africa	27 318	88,53
SADC (excluding South Africa)	I 844	5,98
Other African Countries	554	1,80
Rest of the World	38	3,69
Total	30 854	100,00

Stellenbosch University (SU) aims to be a leading research-intensive university on the African continent.

## Report of the **VICE-RECTOR** (RESEARCH, INNOVATION AND POSTGRADUATE STUDIES) Prof Eugene Cloete

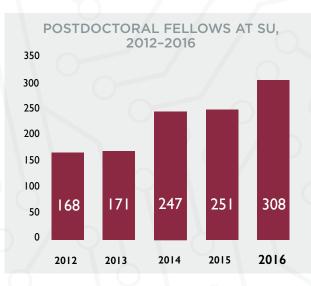
he institution wishes to achieve this by pursuing excellence, remaining at the forefront of its chosen focus areas, gaining standing based on its research outputs, and being enterprising, innovative and selfrenewing. At the same time, however, SU research must be socially relevant. Ultimately, our research efforts are not only aimed at success, but also significance.

In this twofold pursuit of sustained academic excellence as well as social relevance, the responsibility centre for Research, Innovation and Postgraduate Studies (RI&PS RC) is a key player. Through the activities of its various environments, the RI&PS RC in 2016 further strengthened the University's status as a leader in the field of research and bolstered the institution's intellectual capital. The following sections provide an overview of what has been achieved in this regard.

### APPOINTING YOUNG ACADEMIC STARS

By developing a new generation of academics, the RI&PS RC enhances the University's research capacity, rejuvenates the researcher cohort, and fulfils a key role in defending SU against the risk of slow institutional transformation.

One way in which this is accomplished is through a structured support programme for early-career researchers. Various components of this programme have been implemented over the past six years. These are further strengthened with funding from the Department of Higher Education and Training's research development grant. The mentorship programme for early-career researchers, which has thus far matched 140 young researchers with experienced research mentors, also continued. This programme equips mentees to develop into established researchers by, among others, supporting them through their PhD studies as well as the process of obtaining an official rating from the National Research Foundation (NRF).



Another tool utilised to expand the young researcher corps at SU is postdoctoral research fellows, which in 2016 totalled 308 (see figure above). As the responsibility centre anticipates further growth in this cohort, Council adopted a new policy on postdoctoral fellows in November, for implementation with effect from 1 January 2017.

### **PROMOTING RESEARCH OUTPUT**

According to the Department of Higher Education and Training's official report regarding the 2014 publications (assessed in 2015), the weighted research output per fulltime SU staff member (both publications and postgraduate students) was 3,03, and its publication output per capita 1,5. This made SU the most research-productive institution nationwide, and also put it first in terms of per capita publication output for the particular reporting year.

SU RESEARCH OUTPUTS, 2012–2015				
Research outputs	2012	2013	2014	2015*
Weighted research output per capita	3,08	2,97	3,03	*
Research publication output per capita	1,36	I,47	I,50	*
Ratio of weighted research outputs per full-time equivalent teaching and research staff member (SMI)	2,33	2,50	2,53	*

\*Results of the 2015 publications (assessed in 2016) to be released mid-2017.

SU stood firm in a range of international rankings and retained its position among the top five institutions in the country.

Moreover, the annual institutional research report, Research at Stellenbosch University, received an excellence award for the fifth consecutive year at the 2016 MACE (Marketing, Advancement and Communication in Education) conference.

These excellent achievements were made possible through the special mechanisms implemented by the RI&PS RC to support and promote research outputs by dedicated and productive staff.

### CONDUCIVE LIBRARY SYSTEMS, OPEN ACCESS AND INNOVATIVE COLLECTIONS

Easy access to scholarly research material is critical in order to sustain and grow research. To this end, the Library and Information Service has upgraded its website to SharePoint 2016, now boasting a mobile responsive site with improved information architecture and usability. At the same time, the redesign enables users to distinguish more clearly between learning enhancement and specialised research support services. The Library also successfully implemented a unique author identifier system, ORCID (Open Researcher and Contributor ID). Being an ORCID member, integration with other systems on campus may follow. As a first step, the Library had to ensure that researchers' ORCID identities were connected with their SU identities. Since the roll-out started in May, 975 clients have connected.

Highlights of the Library's open-access initiatives in the reporting year included the addition of three new journals to the SUNJournals platform, which brings the total number of journals hosted to 21. The institutional repository, SUNScholar, continued to grow, with usage having increased by a projected 142 000 downloads. SUNScholar also landed SU the top position in Africa in the 2016 July edition of the open-access repositories ranking performed by the Ranking Web of World Repositories. In addition to its first position on the continent, the repository is ranked an overall 84th out of 2 275 systems worldwide.

The Library continues to support the University's focus areas of research and innovation through the acquisition, creation, dissemination and preservation of research material. In recent years, however, the volatility in the rand exchange rate as well as the imposition of VAT on imported electronic resources has had a considerable impact on the materials budget. To limit this risk, the Library has had to embark on a subscription cancellation project to reduce spending on information resources in 2016 and beyond. This is primarily aimed at financial sustainability and a continued high-quality information service. Yet, fully aware of the crucial service it provides to the SU research environment, the Library will maintain strategic core information resources that support academic staff and students' research and information needs.

## BUILDING ICT CAPACITY AND EXPERTISE

The institutional software solutions portfolio in the Information Technology (IT) Division was consolidated and reorganised to more optimally manage the University's substantial software applications. As part of the Councilfunded Systems Renewal Programme (SRP), the IT Division completed its re-engineering of the institution's middleware integration and reporting platforms, and is establishing the systems integration capability that will carry a digitally enabled campus into the future. Various software applications that support key SU processes were also implemented or improved, most notably enabling the electronic submission of supporting documents by applicants and the provision of automated, online provisional quotations to prospective international students.

Moreover, the findings of a comprehensive self-evaluation of the institution-wide information and communications technology (ICT) function were externally endorsed, and went on to serve as the basis for the ICT Strategy 2017–2021, which the Rector's Management Team has approved in principle. The enhancements and expansions that will result from this strategy will help SU further protect its unique IT-based institutional processes and data from the risk of insufficient capacity and isolated pockets of expertise.

In terms of meeting the growing demand for network capacity and accessibility, more than 50% of schedulable classrooms have already been equipped with Wi-Fi connectivity, while coverage in academic buildings increased from 30% to 40% in 2016. Central data storage infrastructure was also upgraded.

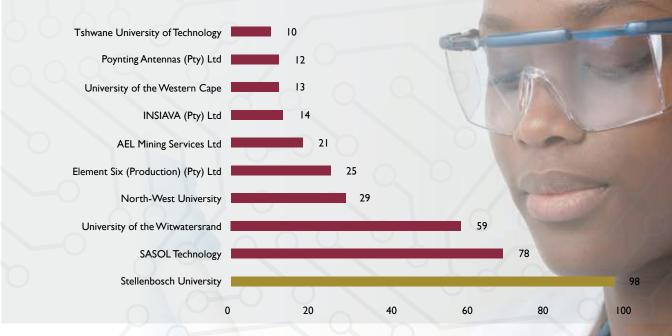
The learning technology team's efforts to expand ICT support for academic functions included a major emphasis on establishing the video-streaming platform to deliver live lectures and learning content via the internet, as well as strengthening the learning management system and creating support structures – particularly between the IT Division, the computer user areas, the Centre for Learning Technology, and Facilities Management. The emerging ICT in Research Strategy is expected to identify new service requirements, and the current support team's capacity and skills will need to keep pace.

To further enhance SU's hosting architectures, more applications have been migrated to cloud-based platforms, which is in line with global trends. Also looking beyond its own borders, SU formed part of a consortium of Western and Northern Cape universities that submitted a proposal to the Department of Science and Technology for the establishment of a regional data-intensive research facility. This has now been approved with a three-year grant of R30 million and SU's researchers stand to derive huge benefit from the facility.

## EXTENDING RESEARCH INNOVATION

Innovation constitutes a vital component of SU's research success. It positions the University as a place of opportunity, attracting the best researchers and students from across Africa and the rest of the world. A good indicator of the state of innovation is the number of patent applications submitted by SU researchers, as depicted in the figure below.

## NUMBER OF SOUTH AFRICAN APPLICATIONS FOR PATENT COOPERATION TREATIES (PCTs), 2009–2016



The University's dominance in the field of innovation demonstrates that the institution is creating new products and services that may contribute to economic and social improvement in the country. Through the facilitation of SU's technology transfer company Innovus, various patents were registered and licence agreements concluded for valueadded products in the fields of agriculture, medicine and technology, to name but a few. For more information on SU innovations, please consult "Commercialising intellectual property and creating business opportunities" in the report of the Chief Operating Officer, page 47.

### ESTABLISHING RESEARCH FOCUS AREAS

As the following table shows, SU currently has a total of 24 research chairs that form part of the NRF South African Research Chair Initiative (SARChI) and are funded by the Department of Science and Technology. These chairs focus on areas in which SU is regarded a leader. The University also has another 17 chairs, five of which were new externally sponsored additions in 2016, namely those of the South African Institute for Chartered Accountants (SAICA), the Competition Commission, the Eskom Power Plant Engineering Institute (EPPEI), the South African National Roads Agency Limited (SANRAL) and the Alexander von Humboldt Foundation. Furthermore, SU made available funding from its own budget to create the new chair in Studies in Historical Trauma and Transformation.

#### SPONSORED RESEARCH CHAIRS AT SU. 2013-2016 2014 2015 2016 **Research chairs** 2013 SARChl research chairs 18 19 24 24 Other sponsored 5 9 17 research chairs

23

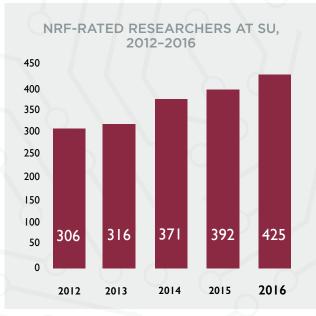
28

41

35

Total

In terms of specialised research capacity, SU has 425 NRFrated scientists, including 12 A-rated researchers.



Further testimony to the University's eminence in focused research is the range of accolades garnered by its academics. In 2016, these included:

- two Department of Science and Technology Women in Science awards;
- six nominations as finalists for the prestigious National Science and Technology Forum awards, and ultimately two wins – one in the 'Lifetime Award' and the other in the 'NSTF-GreenMatter Award' category;
- an Academy of Science of South Africa (ASSAf) Science for Society gold medal; and
- five sought-after SA Akademie vir Wetenskap en Kuns awards.

In addition, in line with the 2014 White Paper for Post-School Education and Training, which places particular emphasis on niche research areas of national importance, the RI&PS RC in 2016 continued to establish research entities and capacity that can have a real impact on the execution of the National Development Plan.

The following is a brief outline of some of these entities created at SU:

RESEARCH ENTITIES AT SU PROMOTIN	IG THE NATIONAL DEVELOPMENT PLAN
Unit for Construction Materials (UCM)	Strives to be a centre of excellence and leading institute for teaching, research and consulting on construction materials. Activities include academically and industry-relevant research, student training and a consulting service.
Africa Open Institute	An interdisciplinary and transdisciplinary institute for music research and innovation. Activities focus on the contribution of South African and African music to the local, continental and international music scene over centuries.
Biomedical Engineering Research Institute	Serves as an overarching research institute, integrating the research efforts of various SU departments and faculties to deliver biotechnological innovation aimed at solving or improving health-related problems.
Gender Research Centre	Geared towards changing perceptions on gender, race, poverty and sexual orientation by means of education and research.
Eskom Power Plant Engineering Institute (EPPEI)	Part of a funding agreement signed with SU and five other South African universities. Phase 2 of the programme, with an initial budget of R155 million, will run from 2017 to 2021, and is inter alia aimed at funding master's and PhD studies to enhance the electricity utility's niche engineering skills.
Complex Systems in Transition	An NRF flagship programme that seeks to understand how complex systems can be changed for the benefit of society and the environment. Activities include applied and solutions-oriented research on energy, water, food and urban systems to propose strategies for managing what the National Development Plan calls a "just transition to a sustainable development pathway".

### GENERATING SUSTAINABLE RESEARCH INCOME THROUGH RESEARCH PARTNERSHIPS

The strategic objectives of the RI&PS RC include generating sustainable research income through partnerships. Potential sources of research income are contract research (third stream) and philanthropic donations (fourth stream).

Total third-stream income generated through the 882 new research contracts processed in 2016 amounted to R1,78 billion, whilst outgoing subcontracts to the value of R68,6 million were signed. Through the new Technology and Human Resources for Industry Programme (THRIP), which is under Department of Trade and Industry (dti) administration since 2016, SU's partnerships with industry were further strengthened. The University submitted 17 project proposals, five of which were selected for due diligence investigations, and two projects valued at R15,37 million were eventually awarded. This was good news seen against the risk of the alleged discontinuation of THRIP funds that came to light in 2015. SU will, however, continue to monitor the situation to hedge against any future risk.

THIRD-STREAM INCOME FROM CONTRACT RESEARCH, 2012–2016									
Contract	2012	2013	2014	2015	2016				
Research contracts	R531,5 m	R477,1 m	R585 m	R637,2 m	RI,78 bn				
NRF/THRIP		R160,3 m	R198,3 m	R224,1 m	R367 m				
Total	R531,5 m	R703,4 m	R878,9 m	RI,18 bn	R2,158 bn				
Realised yield	R531,6 m	R669,1 m	R864,2 m	R866,6 m	RI 113,8 m				

In addition, SU researchers successfully applied for funding from the NRF's bilateral collaboration programme, securing a total of R13 million in awards in the course of the reporting year. In vying for the extremely competitive European Union (EU) Horizon 2020 research funding programme, academics from primarily the faculties of Medicine and Health Sciences, Science, and Engineering took part in 11 EU-related programmes to the value of some R87 million. Researchers and students from the University were also involved in 19 Erasmus+ awards for mobility and capacity-building.

The most significant risk in raising third-stream research income in particular relates to human resources: firstly, the human resources required to administer and raise awareness of research integrity and ethics, which is both a national and international legislative requirement, and secondly, having a sufficient number of expert staff to manage research contracts. Considering that the number of contracts has grown by 75% between 2008 and 2016 (with a concomitant increase in monetary value from R1,18 billion in 2015 to R2,158 billion in 2016), and that at least six new or amended laws directly applicable to the management of research contracts have been promulgated since 2010, the Division for Research Development is overstretched, and increasing staff capacity is regarded a strategic priority.

## SUSTAINING POSTGRADUATE STUDENT SUCCESS

A substantial and successful postgraduate student body is an important building block of any research-intensive university. SU had 4 919 master's and 1 497 doctoral students in 2016. A recent study has also shown that the institution boasts the country's highest doctoral student retention rate as well as the highest PhD success rate (65%).

## NUMBER OF ENROLLED MASTER'S AND PhD STUDENTS AT SU, 2013–2016

	2013	2014	2015	2016
Master's students	4 735	4717	4 848	4919
Doctoral students	33	I 385	I 473	497
Total	6 066	6 102	6 321	6 4 1 6

Also, similar to the two prior years, 2016 again saw a record number of master's and doctoral degrees conferred.

MASTER'S AND DOCTORAL DEGREES AWARDED BY SU, 2013–2016											
	2013 2014 2015 20										
Doctoral degrees	225	234	267	278							
Master's degrees	30	I 293	I 378	I 468							

Mindful of the RI&PS RC's key role as part of the first line of defence against the risk of insufficient student diversity at SU, black, coloured and Indian (BCI) students represented a solid 48% of the postgraduate student body in the year under review, whilst just over 19% of the postgraduate cohort were international.

POSTGRADUATE STUDENT DIVERSITY, 2013–2016									
	2013	2014	2015	2016					
Percentage BCI students	46,0	46,0	47,0	48,0					
Percentage international students	I 8,3	17,8	19,0	19,2					

Included in the range of focused support mechanisms implemented to further increase SU's number of postgraduate students, as well as ensure their success, is the newly created stand-alone Postgraduate Office (PGO). This office has resulted from a process of organisational realignment to separate the functions of postgraduate support and internationalisation, which now falls under the new Stellenbosch University International (SUI). The PGO provides services throughout the postgraduate lifecycle, including full enrolment support to all (including international) postgraduate students, postgraduate student funding support, postgraduate skills development, as well as the management of joint degree programmes.

In the area of postgraduate funding and support, the PGO administered bursaries worth R221 million in 2016 – R22 million more than the year before. This increase can be attributed to additional bursaries emanating from industry. SU itself contributed R23 million of total postgraduate bursaries.

The PGO's skills development programme conducted 24 orientation sessions for 1 285 new postgraduate students across SU faculties. Workshops designed for generic skills development, for example on avoiding plagiarism and writing theses, dissertations and articles, reached 890

participants, including students from across all postgraduate study levels, postdoctoral researchers as well as academic staff. The PGO also serves as a partner in an EU Erasmus+ programme called Enhancing Postgraduate Environments (EPE). EPE aims to use the expertise and experience of a consortium of six South African and six European universities to develop a set of resources for strengthening postgraduate environments in the South African context, and to share practices across the 12 participating institutions. Tangible outputs from the project in 2016 were joint institutional training seminars hosted amongst the consortium members, and the sharing of online resources for postgraduate student support and development.

In terms of joint degree programmes, enrolments under existing agreements – such as those with KU Leuven and Vrije Universiteit – increased significantly. The resultant steady stream of student movement between SU and its partner universities has proven these programmes sustainable in the long run. Three joint PhD students graduated in December 2016, with a further three candidates graduating in March 2017. Two new joint degree agreements were also concluded, with Hasselt University in Belgium and the University of Groningen in the Netherlands, and discussions with other potential partners are ongoing.

The resultant steady stream of **STUDENT MOVEMENT** between **SU** and its partner universities has proven these programmes **SUSTAINABLE** in the long run.

Continuously self-assessing its efficiency in responding to the needs of a 21st-century higher learning institution, Stellenbosch University (SU) in 2016 added the responsibility centre (RC) of Strategic Initiatives and Internationalisation (SI&I) to its management structure. The first deputy vice-chancellor heading up this RC, Prof Hester Klopper, was appointed in August.



## Report of the **VICE-RECTOR** (STRATEGIC INITIATIVES AND INTERNATIONALISATION) Prof Hester Klopper

he creation of the new RC can be seen as a natural corollary of SU's pursuit of relevance, which has been an integral part of the University's strategies and plans, particularly since the turn of the century. Both portfolios attached to the RC are aimed at keeping SU relevant – to the changing higher education landscape, to the needs of both the modern-day student and the labour market, as well as to the country, region and globe.

In crafting higher education strategies relevant to the 21 st-century university and aligned with the needs of the institution, the SI&I RC will inform institutional decision making and identify key strategic opportunities, also exploring how these could tie in with SU's academic and research programmes. Taking charge of the University's multi-year strategic business planning process, the RC will also conceptualise innovative strategies to advance SU's institutional plans at the University itself, but also within the broader community.

In addition, SU has long acknowledged that increasing internationalisation is promoting the worldwide mobility of people, of knowledge and of ideas, with associated demands on and opportunities for universities. The brief for the internationalisation portfolio of the RC may therefore be summarised as bringing SU to the world and the world to SU – enhancing the international profile and prestige of the University across the globe, while at the same time promoting SU's international agenda across the University. In addition, the purpose is to add an international and intercultural dimension to existing programmes, processes and systems, leaving SU firmly rooted in Africa, though embracing the rest of the world.

The overall aim of the functions and activities of the SI&I RC will therefore be to further transform SU into a future-fit and globally competitive institution.

### STRATEGIC INITIATIVES

Among the first tasks successfully completed by the

SI&I RC in 2016 was the coordination of the updated Institutional Plan, which was submitted to the Department of Higher Education and Training in December, as required. Another strategic initiative that will gain momentum in the year ahead is the 2018 centenary project. SU formally received university status on 2 April 1918 in terms of the University Act of 1916. Throughout 2018, the University will celebrate this important milestone with a centenary programme including both formal and informal events aimed at bringing together academics, alumni, students as well as all stakeholders and partners from across the globe.

### **INTERNATIONALISATION**

To enhance SU's positioning as a major role-player in Africa and the globe, the former Postgraduate and International Office was reorganised into Stellenbosch University International (SU International), which has in turn been divided into six centres.

The Centre for Collaboration in Africa focuses on SU's bilateral and multilateral partners in Africa in order to maintain and extend the University's footprint on the continent. The management of SU's international networks beyond Africa resorts under the Centre for Partnerships and Internationalisation, with a particular focus on key partnership development and participation in multilateral networks. Collaborating closely with the two aforementioned centres, the Global Engagement Centre implements inbound and outbound non-degree student mobility within a framework of global engagement. The African Centre for Scholarship houses the African Doctoral Academy and is aimed at building doctoral education and scholarship on the continent. The Confucius Institute continues to teach Chinese language and culture courses at SU and schools in and around Stellenbosch. Finally, to underpin internationalisation activities with financial, administrative and logistical support, the offering of the SU International Services Centre ranges from housing services

and immigration to international student support at both undergraduate and postgraduate level.

On the whole, SU International provides direction and support to all faculties involved in international activities. To ensure optimal integration and coordination, it also operates within the broader network of support services divisions at the University. The following paragraphs contain a brief summary of current activities by some of the centres mentioned.

## FURTHER EXPANDING OF SU'S AFRICAN FOOTPRINT

In the reporting year, SU International supported the conference of the Regional Universities Forum for Capacity-building in Agriculture (RUFORUM) (see page 76), which was co-hosted by SU.The event brought together more than 100 delegates from across the continent. Keynote speakers included the chair of the African Union Commission, Dr Nkosazana Dlamini-Zuma and the president of Mauritius.

The Centre for Collaboration in Africa (CCA) has commenced with an evaluation of SU's 19 bilateral partners in 15 African countries, and the institutional African Collaborations Grant supported 18 inbound and five outbound staff exchanges. In the reporting year, priority was given to SU's partnerships with the universities of Namibia and Ghana. Also in the CCA, the SU-hosted NEPAD Southern African Network of Water Centres of Excellence (SANWATCE) launched a R1,8 million research grant to support postgraduate students in studying issues relevant to the water sector of the Southern African Development Community (SADC). Grants were awarded to ten partner institutions in Zambia, Botswana, Zimbabwe, Mauritius, Malawi, Mozambique and Namibia. In addition, the CCA helped identify 40 interested SU researchers to serve in various topical working groups of the Alliance for Research Universities in Africa (ARUA).

In the context of the African Centre for Scholarship (ACS), 370 delegates representing 23 nationalities participated in the summer and winter schools of the African Doctoral Academy (ADA) in Stellenbosch. Through the generous funding of the Carnegie Corporation of New York, the ADA also presented two joint doctoral schools at Makerere University, Uganda, where 140 delegates received training in doctoral supervision and academic career development. Further advancing African scholarship, the ADA provided funding for the Pan-African Doctoral Academy at the University of Ghana, as well as partial funding for a writing workshop in Malawi in collaboration with SU's Psychology Department.

### BUILDING INTERNATIONAL ACADEMIC NETWORKS BEYOND AFRICA

The Centre for Partnerships and Internationalisation manages and implements SU's bilateral agreements with partners from 39 countries beyond Africa. These collaborations are complemented by 19 European Union-funded Erasmus+ agreements, creating mobility opportunities in especially central and eastern Europe. In 2016, SU's already strong European footprint was expanded with the conclusion of additional institutional agreements with the University of Stockholm in Sweden and Tilburg University in the Netherlands. Outside Europe, new initiatives have started with Macquarie University in Australia and Virginia Polytechnic Institute and State University (Virginia Tech) in the United States.

Institutional funding assisted staff mobility programmes with the universities of Ghent, Hamburg, Helsinki and Leipzig, Humboldt University Berlin, as well as KU Leuven. The SU-KU Leuven collaboration also entails the flagship Think Tank project. For this purpose, 15 top-achiever students from KU Leuven visited their counterparts at SU in November to conclude the year-long project imagining "A Brave New World" with a presentation at the Stellenbosch Institute for Advanced Studies (STIAS). Furthermore, KU Leuven recruited presenters for the ADA 2017 summer school.

Research collaborations were established with Bath University in the field of civil engineering, psychology, economics and education, and negotiations for a joint PhD programme are under way. This Bath connection has further seen SU being included in the emerging U4C (Universities on Four Continents) network along with Bath, as well as the University of Campinas in Brazil and the University of Zhejiang in China. In November, SU researchers and PhD students joined their U4C peers for a workshop on sustainable energy, environment and policy systems in São Paulo.

Being one of the institutions of higher learning representing South Africa in the BRICS Network University, SU looks forward to BRICS-related interactions as well as a strengthening of ties with other Brazilian, Russian, Indian and Chinese institutions. Furthermore, SU's membership of the steering committee of the Academic Consortium 21 (AC21) (www.ac21.org) saw the Rector participate in the AC21 international forum hosted by Chemnitz Technical University in Germany. SU also received AC21 special project funding, and research collaboration was initiated with North Carolina State University and the University of Minnesota, both in the United States.

A number of discussions on new agreements for joint degree programmes commenced or continued in the reporting year. Agreements were eventually signed with Hasselt University in Belgium and the University of Groningen in the Netherlands. Existing joint degree programmes, such as those with KU Leuven and Vrije Universiteit Amsterdam, also attracted significantly higher enrolments, confirming programme viability and success. Three candidates who had completed the joint PhDs graduated in December 2016, with a further three graduating in March 2017.

## FACILITATING INBOUND AND OUTBOUND STUDENT MOBILITY

Non-South African students not only contribute to diversity in the classroom and research environment, but represent an important source of income to fund internationalisation activities at SU. Residential non-South African students annually pay an international registration fee (IRF). In 2016, IRF income totalled R10,9 million and accounted for more than 60% of SU International's salaries and operating budget. Similarly, the international offices at Tygerberg campus and the University of Stellenbosch Business School received R2 million and R600 000 respectively. In the course of the year, the Student Fees Committee also approved a lower IRF to be charged for non-residential non-South African students so as to further broaden the income base and sustain service delivery by the three campuses' internationalisation structures.

A total of 4 324 non-South African students were

registered at SU in the reporting year, of whom 57,8% were from other African countries. (For the composition and size of our student body by nationality, see page 56.)

NON-SOUTH AFRICAN STUDENTS REGISTERED AT SU										
	Under- graduate	Honours/ post- graduate diploma	Master's	Doctoral	Post- graduate bachelor's	Non-degree short-term				
Africa	618	408	902	381	7	185				
Rest of the world	175	49	154	107	I	I 337				
Total	793	457	I 056	488	8	I 522				

The Global Engagement Centre (GEC) arranges both inbound and outbound non-degree student mobility. In the reporting year, it coordinated a range of non-degree programmes for 868 incoming international students.

NON-DEGREE PROGRAMMES FOR INCOMING INTERNATIONAL STUDENTS								
Programme	Number of students							
Short programmes (tailor-made according to home institution's requirements)	101							
Summer school (three-week programme June/July)	102							
Exchange programmes (from partner institution; involves tuition waiver)	342							
Free movers (Study Abroad students, paying full fee)	231							
Affiliate students (short-term research stays/internships)	92							
Total	868							

Apart from the IRF income generated by these students, revenue of R8,2 million was generated through the courses and programmes offered, as well as credits on the Freemover student accounts.

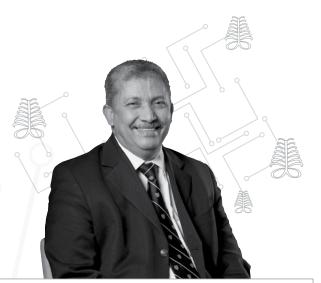
With the above revenue, SU International could inter alia support outbound student mobility, and awarded R3,2 million in travel and exchange bursaries. Outbound mobility programmes coordinated by the GEC created opportunities for 222 SU students to add an international dimension to their Stellenbosch academic experience.

OUTBOUND MOBILITY COORDINATED BY THE GLOBAL ENGAGEMENT CENTRE (GEC)								
Programme	Number of students							
Exchange programmes (to partner institutions; tuition waiver; plus other benefits)	89							
Summer/winter schools (to partner institutions and independent schools)	98							
Short programmes (e.g. Global Citizen programme visit to India)	35							
Total	222							

### LOOKING AHEAD

To guide internationalisation activities at SU, the SI&I RC will be developing a strategic plan for internationalisation with a planning horizon up to 2021. Important elements of this plan will likely include alignment of the international support structures on SU's different campuses, a decision about potentially increasing tuition fees for certain categories of international students, as well as possibly setting enrolment targets to grow the number of non-South African students enrolling for undergraduate studies, which is currently at a fairly low 14%. SU International also foresees enhanced collaboration within BRICS and other consortia to extract maximum benefit, and the establishment of a formal presence in Africa and increased activities in and with institutions elsewhere on the continent. Improved networking with the diplomatic and consular corps in South Africa will be another key strategic aim.

Yet, in drafting this strategic plan, the SI&I RC will also be mindful of certain external eventualities that may affect its ability to create value for the University through internationalisation activities in future. Being heavily reliant on income generated through the international registration fee and the different programmes, any potential decrease in inbound international student numbers may affect SU International's staffing and programming. One such external factor that could prove crucial in maintaining and growing international student numbers is the efficiency of Home Affairs in issuing study permits and additional requirements, such as locally registered medical insurance. This will have to be closely monitored to safeguard SU International's programme of action. Finally, the complete shutdown of university business over the South African summer holiday and the slow start at the beginning of the year may need to be revisited, as this may hamper projects relating to the ADA, international short programmes and the arrival of international students.



The year under review was the first full operating year for the renamed and reorganised responsibility centre (RC) for Social Impact, Transformation and Personnel (SITP).

## Report of the **VICE-RECTOR** (SOCIAL IMPACT, TRANSFORMATION AND PERSONNEL) Prof Nico Koopman

he responsibility centre places renewed emphasis on promoting the social impact of Stellenbosch University (SU), encouraging institutional transformation and maintaining a well-equipped, healthy and well-managed staff corps. It makes a distinctive contribution to SU's institutional quest to have a transformative impact on society through its human resources, including its staff, students, alumni, stakeholders, role-players and institutional partners.

The SITP RC adds value to SU's programme of action by supporting the academic project, rendering professional, accessible, relevant and expert services, and tailormaking its service delivery approach to suit the unique circumstances of those it collaborates with or serves. This is done through the various interdependent divisions of Human Resources, the Transformation Office, Social Impact, Campus Health Services, the University Museum, as well as the SU Woordfees.

As the following paragraphs show, SU in 2016 continued to make an impact on society and transform itself and others through its staff and students as well as its partnerships with a range of stakeholders. This has significantly boosted the institution's human and relationship capital.

## PROMOTING SOCIETY-CENTRED SCHOLARSHIP

### INSTITUTIONALISING SOCIAL IMPACT

SU's strategic priority of enhancing societal impact, as per its Institutional Intent and Strategy 2013-2018, was conceptualised as social impact in 2015, in line with the Higher Education Quality Committee's Community Engagement Policy. A large part of 2016 was therefore devoted to fully understanding and embedding social impact at the University.

Activities included research by a task team who set out to define the concept of social impact and facilitated institution-wide consultation. The process also entailed an institutional symposium and visits to individual faculties. It culminated in a Strategic Plan for Social Impact (SISP), which Senate approved towards the end of the year. The SISP will now guide the implementation of social impact at SU, providing a theoretical and conceptual framework, clear objectives, strategies to reach those objectives, as well as guidelines to evaluate social impact. The plan also provides for governing and management structures across SU.

The SISP identifies the Division for Social Impact as the primary entry point for SU society interaction and partnership development. The Division will broker, maintain and develop relationships into sustainable institutional partnerships with various stakeholders in civil society, business and government. These activities will be partially funded from SU's main budget, coupled with revenue generated from training courses, research grants and specific development programmes.

The strategic planning process was further accompanied by preparations for the establishment of a social impact knowledge platform. The platform will enable social impact stakeholders to connect electronically by offering and taking up opportunities for collaboration, and is being developed in response to repeated requests for such a system by both internal and external stakeholders.

Finally, capacity-building courses and workshops commenced to ensure that faculties' teaching and research are geared towards social impact. This will see to it that the concept becomes a vital part of SU's training offering and, thus, its graduates' skills sets.

## ENGAGING COMMUNITIES THROUGH SCHOLARSHIP

Divisions of the responsibility centre continued their efforts to encourage society-centred scholarship by both drawing in and reaching out to communities in the course of their activities. A major contributor in this regard was the University Museum, which attracted 23 086 campus and off-campus visitors with exhibitions, film screenings, lectures and learning events. The various exhibitions included resistance art, work by Mary Sibande, a group exhibition curated by Alex Hamilton, artefacts from the ancient world, as well as an exhibition celebrating 100 years of geography teaching. The exhibition Ubuntutu in honour of emeritus archbishop Desmond Tutu saw the University Museum featured on SABC prime-time news and formed part of a collaboration with Michigan State University Museum and the Desmond and Leah Tutu Foundation.

The museum was also honoured to host the late Ahmed Kathrada, one of the Rivonia trialists imprisoned on Robben Island, as part of his birthday celebrations. This coincided with the screening of the film Ahmed Kathrada – A man of all seasons produced by Anant Singh, which was followed by an intergenerational dialogue. In collaboration with SU International, the University Museum also screened Action Commandant, a film on the life and times of Ashley Kriel, an anti-apartheid activist from Bonteheuwel.

Lectures and learning events included the annual e'Bosch prestige lecture delivered by Prof Mamphela Ramphele on building a new heritage together through responsible citizenship, and the Nelson Mandela colloquium, which will become an annual event hosted in collaboration with the Nelson Mandela Museum. Finally, in celebrating Heritage Month, the museum introduced Wednesday art walkabouts, which took the form of guided art walks conducted every Wednesday in September at lunchtime.

Making its impact felt far beyond campus, Campus Health Services (CHS) assisted elite student athletes with clinical services, including sports medicine and physiotherapy, in the build-up to the 2016 Olympic and Paralympic Games in Rio. This occurred in terms of a memorandum of understanding with the Institute of Sport and Exercise Medicine (ISEM) located in the Faculty of Medicine and Health Sciences. A CHS physiotherapist was also included in the medical support team selected to assist Team SA during the Paralympics. Still on the global stage, three articles generated by the CHS based on its research projects appeared in international peerreviewed journals. The CHS also presented at the international conferences of the American College Health Association (in association with SU's Centre for Student Counselling and Development) and the American College of Sports Medicine. Another CHS initiative that is set to benefit society at large is an application for the advanced management of concussion, which is currently being developed in collaboration with SU's Biomedical Engineering Research Group and funded by the University's technology transfer company Innovus. The product ensures objective scoring of current tests. Other novel techniques such as neuro-vestibular rehabilitation will be included in the post injury management, a first in SA. The CHS physiotherapist is already being trained in this technique and the student and school athletes participating in the concussion programme will benefit directly. Further research may follow initial implementation of the product.

## BROADENING ACCESS AND CREATING DEVELOPMENT OPPORTUNITIES

The Department of Higher Education and Training's recently released National Policy on Community Colleges provides for universities to become community education

and training centres. In the past year, the new position of civil society relations in the Division for Social Impact proved instrumental in furthering this objective. Close collaboration with community forums and networks enabled SU to provide vocational and educational opportunities to those who otherwise would not have been able to access them. In particular, support was rendered to schools in the form of matric classes aimed at youth and adult learners who had dropped out or failed Grade 12 on their first attempt, while capacity-building and skills development for community leaders in their local context was also offered for the first time. Plans are also afoot to explore opportunities for sports development with Maties Sport, as well as to develop livelihood skills in collaboration with the Faculty of AgriSciences and private organisations.

In their bid to create development opportunities in the communities surrounding SU, Campus Health Services trained eight teachers involved with sport coaching as World Rugby level I first-aiders. The University Museum's programme Access to Visual Arts, in turn, was grateful to have received a cash injection of R50 000 from the Het Jan Marais Nationale Fonds. These funds will be utilised to pay for even more disadvantaged learners to visit the museum, introducing them to the world of visual art. The programme offers learner transport, a guided tour of the museum, and educational discussions on selected artworks.

The annual SU Woordfees, another proud component of the SITP RC, virtually throws open SU's doors, inviting the broader community to come and enjoy the arts. Woordfees 2016, which was hosted from 4 to 13 March, again provided an excellent platform for the arts and promoted multilingualism in an inclusive, welcoming environment. Ticket sales reached an all-time high of 74 355, an astonishing 27% more than in 2015. The biggest achievement, however, is that the Woordfees managed to broaden the diversity profile of festival-goers, with black, coloured and Indian attendance improving from 11,8% to 20%. Woordfees also provided access to more than 600 temporary job opportunities in the run-up to and during the festival, while the local economy benefited from a significant boost of over R100 million. One of the newer additions under the Woordfees umbrella, the Buya! theatre outreach project, also hosted 40 schools from as far as Ceres and Robertson at the Bellville Civic Theatre in May. This project teaches theatre skills to isiXhosaspeaking learners and empowers them to stage their own productions.

Finally, the SU Choir offers valuable national and international exposure to many students who otherwise would not have had the opportunity. Number one on the *Interkultur* world ranking, the choir successfully defended its title at the World Choir Games in Sochi, Russia, and also came out tops in the first Varsity Sing competition aired on the DStv channel kykNET.

## MANAGING KNOWLEDGE AND OTHER PARTNERSHIPS

The SITP RC continued its work in 2016 to manage SU's partnerships with schools and other civil society organisations so as to ensure that the University's unique scientific resources become indispensable to its partners, thereby contributing to SU's sustainability.

The WOW project is SU's largest schools partnership

project and the only one using language and the written and spoken word to reach and develop underprivileged learners. In the reporting year, the project's reading, literacy and arts activities reached a total of 226 429 learners across all nine provinces, more than 200 000 of whom participated in the Sanlam WOW Spelling Competition.

### ADDING TO OUR VALUE PROPOSITION WITH AN IMPROVED STAFF CORPS

## GOOD PROGRESS WITH EMPLOYEE VALUE PROPOSITION

As a key stakeholder in the sustained improvement of the SU staff corps, the Division for Human Resources continued its work to establish the University as the preferred employer in the South African higher education sector. In this regard, SU's employee value proposition (EVP) remained vital, and informed most of the Division's activities. The EVP is a function of interaction between the elements of affiliation, work content and workload, talent management, remuneration, benefits and systemic wellness.

The primary focus is to ensure that the University has the right workforce in terms of numbers, competencies, post levels and attitude to be able to execute selected strategies and thereby meet the requirements of SU's Institutional Intent and Strategy. In this regard, 2016 saw good progress being made.

A few new senior appointments were made in the course of the year. These have boosted the abilities and diversity of the staff corps to support SU's quest to make a transformative impact on society through the academic project. Prof Nico Koopman was appointed as Vice-Rector of Social Impact, Transformation and Personnel, whilst Prof Hester Klopper now serves as Vice-Rector of the newly created responsibility centre of Strategic Initiatives and Internationalisation. Profs Nicola Smit and Wikus van Niekerk were respectively appointed as the new deans for the faculties of Law and Engineering. Taking over as SU Registrar from 2017 is Dr Ronel Retief, the first female to occupy this position. Ms Tonia Overmeyer is the newly appointed incumbent of the reconceptualised position of Dean of Students. Finally, Prof Stan du Plessis has been named as successor to current Chief Operating Officer Prof Leopoldt van Huyssteen upon the latter's retirement at the end of 2017.

## BUILDING A DIVERSE AND TRANSFORMATION-ORIENTED STAFF

SU's staff corps constitutes a major transformative instrument at the University. Therefore, in gauging transformation at the institution, shifts in staff diversity are closely monitored. To ensure optimal diversity in all appointments and promotions, and to accelerate the representation of employees from underrepresented groups across SU, the multi-year workforce plans were further fine-tuned and expanded. Extensive strategic recruitment actions were also launched in addition to normal advertising to ensure the diversity of applicant pools. A further significant development in the reporting year was Council's approval of the new Employment Equity Policy and the Employment Equity Plan.

Black, coloured and Indian (BCI) staff constituted 22% of the total academic establishment at SU, up from 19% in 2015. White academic staff dropped from 81% to 78% over the same period. In terms of employment equity levels among SU executive and non-academic staff, the percentage of BCI personnel increased from 54% in 2015 to 57% in 2016, while white representation dropped from 45% to 43%. Therefore, while the staff diversity profile does seem to be moving in the right direction, it is occurring at a rather slow pace.

EMPLOYMENT EQUITY PROFILE OF ACADEMIC STAFF AT STELLENBOSCH UNIVERSITY												
		Foreign nationals							Percentages %			
Faculty/division	BCI	White	Total	BCI	Other	Total	Grand total	Staff with disabilities	BCI	White	Foreign nationals	Staff with disabilities
AgriSciences	15	63	78	4	10	4	92	2	19	81	15	2
Arts and Social Sciences	39	144	183	5	12	17	200		21	79	9	0
Economic and Management Sciences	28	182	210	10	3	13	223	I	13	87	6	0
Education	25	23	48				48		52	48	0	0
Engineering	9	108	117	6	5	11	128	I	8	92	9	1
Law	6	24	30		2	2	32	I	20	80	6	3
Medicine and Health Sciences	54	83	137	3	6	9	146	I	39	61	6	I
Science	30	106	136	10	34	44	180		22	78	24	0
Theology	7	15	22				22		32	68	0	0
Total	213	748	961	38	72	110	1 071	6	22	78	10	

BCI = black, coloured and Indian staff

## EMPLOYMENT EQUITY PROFILE OF EXECUTIVE AND NON-ACADEMIC STAFF AT STELLENBOSCH UNIVERSITY

		Forei	Foreign nationals				Percentages %					
Faculty/division	BCI	White	Total	BCI	Other	Total	Grand total	Staff with disabilities	BCI	White	Foreign nationals	Staff with disabilities
Division of the Rector	3	2	5				5		60	40	0	0
Academic Administration (Registrar)	42	42	84				84	2	50	50	0	2
AgriSciences	66	44	110				110	2	60	40	0	2
Arts and Social Sciences	55	45	100				100	2	55	45	0	2
Chief Operating Officer	310	148	458				458	5	68	32	0	I
Development and Alumni Relations	15	12	27				27		56	44	0	0
Division for Corporate Communication	6	9	15				15		40	60	0	0
Economic and Management Sciences	56	64	120				120		47	53	0	0
Education	32	19	51	I		I	52		63	37	2	0
Engineering	62	47	109	4		4	113		57	43	4	0
Law	8	11	19				19		42	58	0	0
Medicine and Health Sciences	245	160	405	6	7	13	418	l	60	40	3	0
Military Science	I	2	3				3		33	67	0	0
Science	83	88	171	2	3	5	176		49	51	3	0
Theology	7	9	16				16		44	56	0	0
Vice-Rector: Learning and Teaching	104	112	216	I		I	217	I	48	52	0	0
Vice-Rector: Research Innovation and Postgraduate Studies	128	140	268	I		I	269	I	48	52	0	0
Vice-Rector: Social Impact, Transformation and Personnel	77	36	113		I	I	114	I	68	32	I	I
Vice-Rector: Strategic Initiatives and Internationalisation	18	18	36	I		I	37		50	50	3	0
Grand total	3 8	1 008	2 326	16	11	27	2 353	15	57	43	I	

BCI = black, coloured and Indian staff

The SITP RC forms part of SU's first line of defence against the risk of lacking staff diversity and institutional transformation. For this reason, it has implemented a number of initiatives to develop a more diverse and transformation-competent staff corps. These include the establishment of the Transformation Office, reconstituting the Institutional Transformation Committee, and the development of the Transformation Plan. Establishing a Transformation Office and refining its role during a time of institutional turbulence proved both challenging and valuable, and it is encouraging to see that the Transformation Office has been welcomed and supported by both students and staff. Having secured an institutional budget, three permanent staff positions and central office space, a major priority for the Transformation Office was to reconstitute the Institutional Transformation Committee with mandated representation from all

SU faculties. In 2016, the committee focused on the development of a Transformation Plan. The draft plan, which offers a synergised framework for monitoring and recording transformational progress at the institution, was well received by the Rector's Management Team. The Transformation Plan will now be discussed across campus before it is submitted to Senate for approval during the first semester of 2017.

Further efforts by the Transformation Office to embed transformation competency in SU's staff corps entailed training sessions with 395 professional and academic staff members in the course of the year, including the development of institutional terminology, definitions and reading lists. Altogether 988 students were also engaged in discussions and workshops. Public events coordinated for both students and staff centred on Human Rights Day, Youth Day, a Matie identity project, Women's Day and Casual Day.

## RESPONDING TO PERSONNEL NEEDS IN TURBULENT TIMES

Mass action regarding the sourcing of services as well as student fees, and the trauma suffered by staff as a result, again placed significant pressure on the wellness function of the Human Resources Division. Yet, recognising the need to defend against the potential risk and side effects of campus activism, the issue of the sourcing of services was addressed efficiently and professionally, with management committing to viable, and responsible, sourcing in future.

Pressure on staff, students and service capacity continued not only due to protests, but also the security responses thereto, incidents of racism and sexual assault, social media debates and more complex student support needs. Therefore, the Transformation Office supported the establishment of the Equality Unit housed in the responsibility centre for Learning and Teaching. The Office specialises in managing incidents of discrimination and sexual harassment involving staff and students.

## STAFF AND STUDENT HEALTH

Campus Health Services (CHS) supported the core business of the University by advancing the wellness of SU's human capacity – its staff and students. In 2016, clinical CHS personnel conducted 28 512 consultations on the Stellenbosch and Tygerberg campuses to treat and prevent injury and illness. An adult immunisation programme, a diabetic foot clinic as well as exercise guidance for disease prevention and treatment were also implemented. This integrated approach to staff wellness was formalised with the approval of SU's Health and Wellness Policy, which was jointly developed by CHS and Human Resources.

The increase in particularly mental health conditions spurred closer collaboration and saw CHS working with the Centre for Student Counselling and Development as well as ER-24 to implement a 24-hour crisis service covering both mental and physical health crises.

Following the establishment of a comprehensive radiology service on campus in 2015, CHS in 2016 implemented a radiation policy in terms of the Occupational Health and Safety Act, thereby guarding against the risk of statutory non-compliance and unsafe working conditions. Ongoing health risk assessments and medical surveillance of personnel across all campuses further supported the goal of ensuring a safe and healthy working environment.

Ongoing **HEALTH RISK ASSESSMENTS** and medical surveillance of personnel across all campuses further supported the goal of ensuring a safe and **HEALTHY WORKING ENVIRONMENT**.

Like any other organisation, Stellenbosch University (SU) faces occasional risk exposure that may disrupt its efforts towards achieving its strategic and operational objectives, and hamper sustainability.

## Report on **RISK EXPOSURE**, **EVALUATION AND MANAGEMENT**

Acting Chair of the Risk Management Committee, Mr Manie Lombard

ver the past seven years, the University has developed risk management into a key aspect of corporate overview. In 2009, the institution adopted an embedded risk management model, which assesses risk in all areas and then manages it at source as far as possible. This model, which had been further refined over time, was subjected to an internal audit in 2013. Proposals from the audit have since been implemented and risk evaluation has been improved to provide for both initial and post-intervention assessment. Council's adoption of the Risk Management Policy in 2015 laid the foundation for an enhanced risk management framework for SU. In the reporting year, a draft risk framework was therefore developed, which comprises the following elements:

- defining the risk context;
- risk assessment with a view to prioritisation;
- risk management through action plans;
- monitoring, review and control in line with a combined assurance model;
- communication and consultation; and
- establishing risk appetite and tolerance.

Deloitte, the University's internal audit service provider, assisted in developing the combined assurance model as recommended by the King III code and the Institute for Internal Auditors (IIA) and in expanding from three to five defending lines, as recommended by the King IV draft report. The model clarifies roles and functions, thereby reflecting the latest developments in the area and contributing to improved communication and more efficient risk management and control.

Risk management supports institutional management processes by continuously capturing risks in the University's electronic risk register for managerial overview. Risks that require institutional managerial overview are then referred to the Risk Management Committee, followed by the Rector's Management Team. The risk register is annexed to the Rector's risk management report that serves before Council's Audit and Risk Committee.

#### EXPOSURE TO EXTERNAL RISKS

In addressing risk, one should be mindful of the interconnectedness of internal and external risks. According to Sanlam, the seven most prominent international issues facing higher education in 2016 were:

- · operating in a world of international e-communications;
- rising costs;
- students' rising expectations, such as the demand for reduced fees in South Africa;
- an increasing demand for new technology;

- allowing for all facets of student interaction in institutional strategy;
- remaining research-sustainable; and
- attracting and retaining the best talent.

#### INTERNAL STRATEGIC RISK MANAGEMENT

In dealing with internal risk, the Risk Management Committee maintains a careful balance between the demands of all the strategic objectives in the Institutional Intent and Strategy, and the following substantial strategic focus areas:

- internationalisation;
- human resources matters, such as retaining expertise as well as the diversity and transformation of the staff corps;
- inclusivity and establishing a Transformation Office;
- the corporate image and brand; and
- further development of sport as an institutional asset.

Institutional risks are reviewed every six months. Where it makes sense, high-order operational risks are linked to the University's strategic priorities (see following page) and assigned to a responsibility centre. In an effort to reduce exposure to these risks, they are strategically managed to acceptable levels of tolerance in the medium to long term. The table below provides a synopsis of SU's high-order risks during the reporting year, and the measures the institution has put in place to manage them. SU's financial risks are addressed in the finance report.

Internal risks that have been mitigated to acceptable levels are space constraints on campus, the sustainability of corporate entities and other centres, and insufficient IT expertise. By budgeting for the imposition of VAT on imported resources, fines are avoided.

Mr Manie Lombard Acting Chair of the Risk Management Committee

Strategic			Responsibility
riorities	High-order risk	Our response	centre
	Insufficient lecture hall capacity for increasing student numbers*	SU received a private donation towards the Learning and Teaching Centre's funding shortfall, for which Council has in the meantime also made available approximately R121 million. Construction of the facility to commence soon.	Chief Operating Officer
ccess	The transfer of THRIP from the NRF to the Department of Trade and Industry (dti)*	Immediate contact with the NRF and dti regarding impact on exist- ing THRIP projects. Communication with researchers and industry partners to assess impact. Strengthening partnership with dti through new THRIP programme.	Vice-Rector (Research, Innovation and Postgraduate Studies)
Broadening of access	Staff diversity	R70 million allocated for the diversification of particularly the senior academic corps. Aiming for 40% representation of designated groups in academic staff.	Vice-Rector (Social Impact, Transformation and Personnel)
Broade	Student diversity	Council already set 2016 targets in February 2009. Top-up bursaries from some faculties' budgets to supplement recruitment bursaries. Ongoing efforts to establish inclusive student culture. Developing a compulsory 12-credit first-year module on transformation competence.	Vice-Rector (Learning and Teaching)
	Reduction in NSFAS bursaries	Negotiations on NSFAS funds already disbursed. R10,7 million made available from SU's reserve bursary loan funds to enable students in need, primarily BSI students, to register. Request for additional funding from NSFAS.	Vice-Rector (Learning and Teaching)
	Sustainable maintenance of physical facilities *	Sustainable maintenance factored into the Campus Renewal Project. Capacity enhancements through the internal transfer of a senior project manager to the Campus Renewal Project, and the sourcing of a project management consultant for Property Services to assist with upgrade projects.	Chief Operating Officer
	Exposure to building and mountain fires*	An expert group of diverse stakeholders are on standby as a contingency committee for fire management. Ongoing attention to fire exposure. MARSH Risk Services performed an audit to assess exposure in order to obtain the most affordable insurance.	Chief Operating Officer
ence	Funding shortfall for Learning and Teaching Centre due to rising building costs*	SU Development Office is actively recruiting more donors while calling for tenders to determine the potential shortfall. Aiming to open the Learning and Teaching Centre in 2018 to coincide with SU's centenary.	Vice-Rector (Learning and Teaching)
Momentum of excellence	Heavy burden on professional support services*	Implementation, in collaboration with Human Resources, of systemic and integrated solutions according to business plans of the relevant divisions, which in turn have been based on the Institutional Intent and Strategy. Task team exploring adjusted staffing formula for both academic and support services environments.	Vice-Rector (Social Impact, Transformation and Personnel)
Moment	Insufficient IT expertise and capacity*	Investigation into organisational structure. Clustering specialist knowledge sources. Creating additional position for the core functions of security management development. Creating space for core functions in the IT budget.	Vice-Rector (Research, Innovation and Postgraduate Studies)
	Potential disruption of University activities by student activism*	Finding legal alternatives and developing guidelines to promote lawful protest action. Establishing task teams to investigate activism triggers, such as alleged rape culture, student fees and sourcing. Appointing contingency committees to manage situations that may disrupt core activities.	Chief Operating Officer
	Increased exposure to violent crime in particular*	Collaborating with external partners through Stellenbosch Security Initiative, of which SU is a founding member. Continuous implementation of a comprehensive preventative and reactive security strategy with visible patrols and campus community awareness through an extensive communication initiative.	Chief Operating Officer

Societal impact	Criticism against state of transformation and Language Policy	Council's adoption of an inclusive Language Policy on 22 June 2016, which has significantly reduced the potential for language-related protests. Appointed a vice-rector whose portfolio includes transformation on I July 2016. Submitted a report to the Department of Higher Education and Training (DHET) on 20 June 2016 on SU's progress with implementing the resolutions of DHET's 2015 transformation summit. Constituted a representative Institutional Transformation Committee.	Vice-Rector (Social Impact, Transformation and Personnel)
	Insufficient investment in sport	Upgrades to sports facilities with funding from Facilities Manage- ment's maintenance budget as well as from the Campus Renewal Project. Appointing a high-level liaison officer who will also take charge of fundraising. Appointed an overarching advisory committee to rework the sports strategy. Levying club fees for students who take part in organised sports.	Chief Operating Officer

VALUES > Excellence • Shared accountability • Empathy • Innovation • Leadership in service of others

\* These risks affect our systemic sustainability.





## FACULTY REPORTS

The core business of Stellenbosch University is carried out by our ten faculties. Collectively, this core business comprises teaching and learning, research and innovation, internationalisation and social impact.

Our core business produces beneficial outcomes as follows:

- The business of teaching and learning delivers academically qualified students equipped for the world of work.
- The business of research and innovation generates new knowledge essential for the advancement of humankind.
- The business of internationalisation enhances excellence through partnerships and intellectual capital exchange.
- The business of social impact enables the practical two-way sharing of knowledge with society to the benefit of society and the University.

Eight of our University's ten faculties are situated on our main campus at Stellenbosch, namely AgriSciences, Arts and Social Sciences, Education, Engineering, Law, Science, Theology and the larger part of Economic and Management Sciences. The rest of the Economic and Management Sciences Faculty is situated on the Bellville Park Campus in the form of the University of Stellenbosch Business School and USB Executive Development Ltd. The last two faculties are the Faculty of Medicine and Health Sciences at the Tygerberg Campus and the Faculty of Military Science at the coastal town of Saldanha Bay. Details about these faculties may be obtained on the University's website at www.sun.ac.za.



The Faculty of AgriSciences is a key stakeholder in addressing the growing challenges of South African agriculture and forestry, and ensuring that the country's natural resources are utilised and managed both ethically and scientifically.

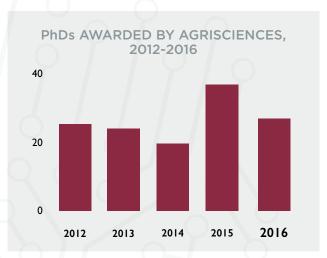
griSciences is still acknowledged as the top faculty for studies in agriculture and forestry on the African continent. It is also ranked 27th among the BRICS countries and among the top 50 globally on the 2016 QS world rankings. This acknowledgement strengthens the Faculty's resolve to continue to offer quality education and applied research in agricultural sciences.

## SUSTAINING OUR MOMENTUM OF EXCELLENCE

In terms of teaching excellence, the Faculty continued its focus on programme renewal with an in-depth review of the programme offering and academic module content in the fields of, among others, crop production, forestry and wood science, animal sciences as well as viticulture and oenology. This occurred in close collaboration with external stakeholder groups, including the South African agricultural sector as well as international collaborators and moderators. The programme renewal process is supported by the ongoing development of pedagogy and didactics led by the Faculty's blended learning coordinator, Dr Kathryn Wirth. Horticulture's Dr Michael Schmeisser adds further momentum in his role as a research fellow of the University's Centre for Learning and Teaching. The accreditation of the Department of Food Science's training programme by the International Union of Food Science and Technology is also regarded as further testament to the excellence of the Faculty's teaching.

The Faculty is home to a large postgraduate student cohort. Postgraduate throughput rates also improved considerably. During 2016, 295 master's and 208 PhD candidates registered, while a total of 93 master's and 28 PhD students graduated at the end of the year.

A number of researchers garnered accolades in the year under review. These include Prof Michael Samways of Conservation Ecology and Entomology, who received the gold medal from the *Suid-Afrikaanse Akademie vir Wetenskap en Kuns*; Prof Umezuruike Linus Opara of Horticulture (see picture), who was honoured with Faculty of **AGRISCIENCES** Prof Danie Brink, Acting Dean: Faculty of AgriSciences



RUFORUM's award for excellence in research and human resources development in Africa, as well as Prof Nick Vink of Agricultural Economics, who was elected to the South African Reserve Bank board. Furthermore, nine researchers improved their National Research Foundation ratings.

Fully aware that its staff are its biggest asset, the Faculty continues to develop systems aimed at enhancing the working environment and conditions of staff within tight budgetary confines.



Prof Linus Opara of Horticulture received RUFORUM's award for excellence in research and human resources development in Africa.

#### **BROADENING ACCESS**

Providing the broadest possible access to a diverse pool of students and staff remains a priority. In 2016, the Faculty further boosted academic staff diversity with three appointments made possible by funding from the Rector's Strategic Personnel Fund and government's nGAP initiative. This now offers these appointees the opportunity to pursue an academic career and improve their employability at Stellenbosch University and other tertiary institutions.

Turning to student diversity, whilst AgriSciences managed to successfully implement the stricter admission requirements applicable from 2016, it still achieved the enrolment targets of the University and the Department of Higher Education and Training. Combined with continued academic student support in the form of monitoring and tutor programmes, this is aimed at increasing student success and throughput rates into postgraduate studies. Student recruitment drives were also expanded with a particular focus on agricultural schools in the Western Cape, which saw academic merit bursaries awarded to the top performers of Boland Agricultural High School, Augsburg Agricultural Gymnasium and Oakdale Agricultural High School, amongst others. Other focused student diversity initiatives included events such as the AgriFoods expo on campus, which the Faculty hosts in partnership with the Product Marketing Association, as well as the recruitment and marketing initiatives of the University's Centre for Student Recruitment. Moreover, for the past three years, the Faculty has been hosting the June holiday programme AgriSciences@Maties aimed at high-school learners. With the assistance of various agricultural industries, financial support to students could also be further expanded with 48 bursaries awarded to undergraduate students, including 12 to students in financial need.

The Faculty also strives to provide educators and counsellors with access to important resources and information. To this end, the 2016 AgriFoods expo included an information session for career counsellors and science and agricultural science teachers, briefing them on career opportunities and the increasing demand for expertise in the food production sector.

#### ENHANCING OUR SOCIAL IMPACT

Committed to finding solutions to the development challenges of the country, the Faculty is actively engaging in industry, government and community interaction initiatives. The Faculty maintains strong ties with key industry stakeholders. The completion of the 'industry hub' at the Welgevallen experimental farm will further strengthen relations between SU and industry, enhance the Faculty's applied research focus, and develop additional outputs that are of value to agricultural sector industries. Apart from Faculty staff, research managers from organisations such as Hortgro Science, Citrus Research International and Winetech will be based at this complex once completed.

Beyond South African borders, the Faculty strengthened its impact by extending its collaborative network to more universities and research institutes in various African countries and the East, where its academic interests continue to grow. A particularly noteworthy event in 2016 was the RUFORUM biennial conference, which AgriSciences helped host. Altogether 152 African universities and 960 delegates participated in various training sessions, presentations and discussion forums as part of the conference. The programme also included visits to Stellenbosch campus, research laboratories and the respective departments.

In addition, a number of staff members serve on the management structures of international academic associations, where they further extend the Faculty's reach. Prof Linus Opara was elected president of the International Commission for Agricultural and Biosystems Engineering. Prof Louw Hoffman of Animal Sciences now serves as honorary council member of the Southern African Wildlife Management Association, while Prof Pieter Gouws of Food Science was named the South African representative on the International Committee on Food Microbiology and Hygiene. Finally, Prof Gunnar Sigge, also from Food Science, was included in the scientific advisory panel of the International Institute for Food Technology.

#### LOOKING FORWARD

In an effort to build research potential, the Faculty will in 2017 continue to contribute to investments in equipment, to obtain research funding for young academics, and support postdoctoral bursary applications. In the years ahead, AgriSciences will also seek to increase its number of postdoctoral fellows, which stood at 47 in the reporting year.



The RUFORUM 2016 biennial conference, co-hosted by AgriSciences, was inter alia addressed by then chair of the African Union Commission, Dr Nkosazana Dlamini-Zuma. The vision of the Faculty of Arts and Social Sciences is to excel and to be globally recognised and locally relevant. A survey of the Faculty's strengths conducted in 2016 indicated that it is well on its way to realise this vision.



## Faculty of ARTS AND SOCIAL SCIENCES

Prof Anthony Leysens, Acting Dean: Faculty of Arts and Social Sciences

he Faculty's high number of subsidy-bearing research outputs and academic staff rated by the National Research Foundation (NRF) attests to sustained excellence. The successful and robust doctoral programme offered through the Faculty's Graduate School broadens access to postgraduate education, while a number of active and integrated social impact projects ensure that Arts and Social Sciences positively influences society.

#### SUSTAINING OUR MOMENTUM OF EXCELLENCE

As the following two tables illustrate, the Faculty sustained its academic and research excellence, conferring a total of 1 447 qualifications in 2016 and delivering 216,84 DHET accredited research outputs for the 2015 publication year (2016 outputs will be made available in 2017).

DEGREES CONFERRED IN THE 2016 ACADEMIC YEAR	
Doctorate	52
Master's	197
Honours	261
Postgraduate diploma or certificate	97
First professional bachelor's	116

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Master's	197 Prof S	
Honours	261	on hi
Postgraduate diploma or certificate	97	receiv
First professional bachelor's	116 a doc Busuk 707 debu	
First general academic bachelor's		
Undergraduate diploma or certificate	17 child	

RESEARCH OUTPUT FOR 2015 ACADEMIC YEAR		
Books	5,18	
Chapters in books	11,78	
Journal articles (subsidised)	196,08	
International proceedings	2,85	
National proceedings	0,95	
Grand total	216,84	

Equally notable are some exceptional achievements by staff members. Prof Catherine du Toit, chair of the Modern Foreign Languages Department, received the medallion of the Order of Arts and Literature from the French ambassador to South Africa, Her Excellency Elisabeth Barbier. Prof Pierre du Toit from the Political Science Department was honoured with the prestigious lifetime achievement award from the South African Association of Political Studies (SAAPS) for his work on democratisation and South Africa's democratic transition. The annual prize-giving ceremony of the Suid-Afrikaanse Akademie vir Wetenskap en Kuns also yielded a fine crop for members of the Faculty: The Akademie bestowed the Gustav Preller prize for literature science and literary criticism on Prof Louise Viljoen; the Hertzog prize for prose on Dr Willem Anker for Buys: 'n Grensroman; the Eugène Marais prize on Prof Stephanus Muller for Nagmusiek, and the Stals prize for historical science on Prof Ernst Stals. In addition, Ms Fiona van Kerwel, project manager of the Words Open Worlds (WOW) initiative, was awarded the Neville Alexander prize.

Steven Robins's book Letters of Stone, a deeply onal historical account of the impact of the Holocaust is family, was published in the course of the year and ived high accolades and excellent reviews. Moreover, ctoral candidate in the Department of English, Sindi ku-Mathese, published Loud Yellow Laughter, her It poetry volume containing a personal reflection on hood.

Finally, as excellence also implies keeping pace with the digital age, a comprehensive blended learning project was launched in 2016 to enable the Faculty's departments to optimally utilise the latest online and audio-visual learning techniques. The project was managed by the Faculty's recently appointed blended learning coordinator in conjunction with support staff from the University's Centre for Teaching and Learning.

#### **BROADENING ACCESS**

The issue of student access was particularly pertinent

in the reporting year, which saw an increase in protests focused on the accessibility, the affordability and relevance of the universities' academic offering. This will require careful reflection on how the Faculty can renew its academic content and improve the relevance of its curriculum with respect to the challenges facing South Africa and the continent. To this end, the Faculty has thrown its weight behind the inter-university research project "Unsettling paradigms: The decolonial turn in the South African tertiary humanities curriculum", which is funded by a R35 million grant from the Andrew W Mellon Foundation. This supra-institutional collaborative programme involves seven research-intensive universities across the country and will stimulate and strengthen existing work with regard to the transformation of the higher education landscape. Another opportunity to pursue greater inclusivity is through Arts and Social Sciences' language implementation plan, which is based on Stellenbosch University's new Language Policy adopted in the course of 2016.

Further driving the Faculty's renewal process is the need to transform its staff corps to become more diverse, also providing access to talented graduates from groups currently underrepresented in the staff establishment. This must be done by taking advantage of the natural attrition process to absorb talented graduates into the Faculty and provide them with opportunities to pursue doctoral studies. To achieve its staff diversity goals, the Faculty also proactively applies for external funding. In this regard, four staff members currently benefit from the inclusive professoriate initiative, which is made possible through a R5,2 million three-year grant from the Mellon Foundation aimed at the career advancement of black staff members.

Apart from broadening access for all South Africans, the Faculty also significantly contributes to greater access to PhD studies in the arts, humanities and social sciences for candidates from across the continent. This occurs through the Partnership for Africa's Next Generation of Academics (PANGeA). PANGeA was founded in 2010 by the universities of Botswana, Dar es Salaam (Tanzania), Malawi and Nairobi (Kenya), as well as Stellenbosch University and Makerere University (Uganda), with the universities of Ghana and Yaoundé I (Cameroon) joining four years later. Since 2010, a total of 74 candidates have been nominated by PANGeA partners and enrolled for PhDs with the Graduate School located in the Faculty of Arts and Social Sciences at SU. To date, 49 have completed their studies and resumed their academic positions at their home universities, 81% of whom graduated in three years or less. In 2016, generous grants from the Robert Bosch Foundation and Gerda Henkel Foundation enabled the Faculty to further collaborate with its African partners in launching the training and skills development arm of the PANGeA network, PANGeA-ED.

#### ENHANCING OUR SOCIAL IMPACT

Part of the Faculty's mission is to utilise its knowledge to enrich and enhance the quality of life of not only the people of South Africa, but also those across the African continent.

In this regard, the Faculty's African impact has been strengthened through the Research Alliance for Disaster and Risk Reduction (RADAR). RADAR serves as SU's coordinating centre for the Periperi U initiative (Partners Enhancing Resilience for People Exposed to Risks). Thanks to a R60 million grant from the United States Agency for International Development (USAID) announced in 2016, RADAR is leading one of Periperi U's largest continentwide collaborations in the field of disaster risk management to date. The centre has partnered with 11 other African universities to provide disaster risk management training to more than 8 000 students and practitioners in 12 African countries by 2019.

In another high-impact initiative, a R12 million Mellon Foundation grant has led to the establishment of Africa Open – Institute for Music, Research and Innovation, also housed in the Faculty. The institute is founded on the understanding that knowledge generation in South Africa should not be bound by the epistemologies and theories that have created so-called Western modernity. Instead, the institute is committed to challenging these ideas, undertaking research and teaching on innovation in contemporary African music. In time, Africa Open will provide the largest, safest and technologically most advanced open-access music archive on the continent. It will also serve as a leading-edge intellectual space for research and innovation on creative music projects in an African context.

#### LOOKING FORWARD

The past year was indeed turbulent and posed some serious challenges. Yet, the Faculty of Arts and Social Sciences embraced them and managed to achieve outstanding results in graduate throughput, research outputs, and securing external funding for innovative projects. In the year ahead, the Faculty hopes to continue its trajectory of success, while also intensifying its renewal project to ensure greater access and greater relevance.



#### Working together to combat fire risk

The Western Cape Disaster Management and Fire and Rescue Services, Santam, Wallacedene Community members and Stellenbosch University have come together in a joint project to install and monitor smoke detectors in 1 200 homes in Wallacedene TRA. Volunteers, pictured here, have conducted baseline household surveys in each of the homes and will be monitoring the effectiveness of the smoke alarm. Several alarms have already warned occupants of fire outbreaks, giving people more time to take action.



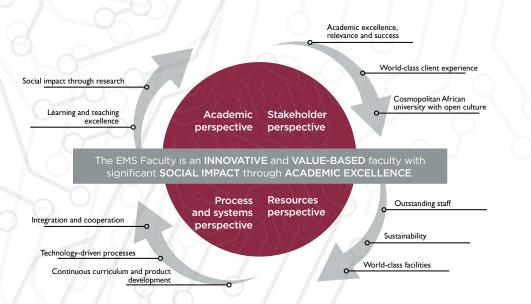
The Faculty of Economic and Management Sciences enthusiastically pursues Stellenbosch University's Institutional Intent and Strategy 2013-2018. To this end, it employs a four-pronged strategy consisting of an academic perspective (what we are doing), a stakeholder perspective (what our clients think we should be doing). a process and systems perspective (how we wish to do it) and a resources perspective (what resources we are using).

## Faculty of ECONOMIC AND MANAGEMENT SCIENCES

Prof Stan du Plessis, Dean: Faculty of Economic and Management Sciences

#### SUSTAINING OUR MOMENTUM OF EXCELLENCE

he Faculty's excellent academic programmes attracted students from all over South Africa, Africa and the world, and saw the registration of the maximum number of first-time entering undergraduates that can sustainably be accommodated, namely 1 500, and a total student number of 8 814. Altogether 2 793 degrees were conferred. The average pass rate for all undergraduate modules in the Faculty is a superb 86,1% (2015).



Numerous faculty projects have contributed to sustained academic excellence. These include a module mentoring programme, which conducted over 950 mentorships in 2016, as well as tutorial programmes. OPTIMUS, a co-curricular top students project launched in 2016, develops and positions 33 top students as graduates of excellence over a period of two years and will take in its second cohort in 2017. Innovative teaching techniques, including the 'flipped classroom' and technology platforms, are successfully utilised in large classes to facilitate blended learning and improve the classroom experience. Lecturers remain at the forefront of teaching and learning

innovation by attending teaching seminars, short courses in information and communication technology, and various training opportunities. The Faculty also continues to renew its programmes: In 2016, students were for example able to enrol for the newly introduced undergraduate BCom in International Business and the undergraduate Diploma in Public Accountability.

Having experienced phenomenal growth in PhD enrolments in the past decade, the Faculty conferred a record number of 38 PhD degrees in the 2016 academic year. The first five students of the Faculty's Graduate School for Economic and Management Sciences (GEM), which helps shorten the average time taken to complete a PhD degree, also successfully completed their PhD studies in 2016 within the minimum three-year period. This initiative has since been expanded to afford permanent staff members the opportunity to complete their PhD studies in a structured manner, and 20 young academics are currently participating. The programme will significantly increase the number of staff holding PhDs.

In 2016, the Faculty had 221 academic staff members, including 32 with National Research Foundation ratings, and 113 permanent ancillary staff members. Research outputs in accredited publications reached a high of 0,52 per academic staff member, despite the staff complement having almost doubled over the past decade. The Faculty's teaching and research outputs are truly world-class: The University of Stellenbosch Business School (USB), for example, was again ranked South Africa's top business school by the business journal Professional Management Review based on a survey of employers. Economic and Management Sciences also gained top academics in the past year, including Professor Johann Kirsten, the new director of the Bureau for Economic Research (BER), who is an internationally esteemed academic leader and highlevel participant in national policy matters.

Also enhancing its excellence with expertise from outside, the Faculty was privileged to host Dr Ronald N Kahn for the three Thys Visser memorial lectures. Dr Kahn, an expert in the field of portfolio management and quantitative investment, is the international head of scientific equity research at BlackRock, which manages institutional portfolios, hedge funds and other investments valued at more than \$5 trillion for institutions and individuals globally. Some 400 alumni, personnel and industry partners attended the lecture series.

At an operations level, the Faculty managed to turn the initial setback of the fire in the Van der Sterr building in 2015 into an opportunity to rejuvenate and upgrade its facilities. A large new lecture hall complex with four lecture rooms and a total capacity of 1 000 seats was erected in the Van der Sterr quad and will become operational in early 2017. Upgrades have also provided additional office space. Despite the #FeesMustFall events, the Faculty is thankful to have maintained its income from subsidies, class fees and third-stream funding. The Faculty's large student cohort contributes to a cost-effective lecturer-to-student ratio, which is currently at 30,6 students per academic staff member.

#### **BROADENING ACCESS**

In terms of broadening access to include more students from the black, coloured and Indian (BCI) population groups, 34% of the Faculty's total student corps and 24% of undergraduates represented these groups in 2016. The target is to increase the undergraduate BCI proportion to 40% by 2020. A range of projects are aimed at achieving this, including the Project Zero bursaries, student ambassador project, focused recruitment projects and expanding the parallel-medium offering. In 2016, Project Zero in particular was made significantly more sustainable when external partners directly allocated almost R1 million to this project, which reduces to zero the actual cost of studying for talented students. The Faculty also concluded new agreements with the Thuthuka bursary project for BAcc students, further enhancing accessibility. Yet, slow progress is made with attempts to increase the diversity of the Faculty's academic personnel. At present, 22,1% of the academic personnel and 27,5% of the total staff complement are from the BCI groups. Recruiting and retaining BCI academics for the specialised subject areas remains one of the biggest challenges.

The Faculty has aligned its language plan with SU's new Language Policy with a view to promoting academic access and success. Where possible, more modules will be offered separately in English and Afrikaans classes. Where this is not possible, either financially or operationally, support for both languages is enhanced by means of facilitated learning opportunities. To a large extent, this strategy enables students to study in their preferred language and supports multilingualism as a valuable asset.

#### ENHANCING OUR SOCIAL IMPACT

Diverse initiatives of the Faculty have an impact on the public sector, business, schools and communities, and address social matters in a relevant and topical manner. Professor Pregala Pillay was appointed as the Faculty's vice-dean for social impact and transformation to lead the portfolio to new heights. She is a professor in the School for Public Leadership and director of the SU's Anti-Corruption Centre for Education and Research (ACCERUS).



Sandwiches for 200 Armed with a variety of groceries collected by undergraduate Bachelor of Accountancy students, Thuthuka scholars of the School of Accountancy visited the Jessie Keet Creché in Ida's Valley, Stellenbosch. They played games with the children and handed out sandwiches, before presenting the groceries to the creché.

#### LOOKING FORWARD

The Faculty is optimistic about having a substantial impact on quality teaching, research and the community in the run-up to its centenary in the next decade. Specific focuses in the years ahead are to expand the third income stream to ensure sustainability in the longer term, make more extensive use of technology to enhance teaching capacity and quality, have more industry collaboration to stay relevant for the next century, as well as address the space constraints at Bellville Park campus caused by growth in student numbers and academic activities.

The Faculty of Education strives to be acknowledged and respected as a leading and engaged research-driven education faculty. To this end, it seeks to integrate research, teaching and learning by advancing the scholarship of teaching and learning, and producing high-quality research on key educational issues. Moreover, the Faculty's commitment to enhancing social impact is evident from the excellent graduates it produces for the fields of education and sport, as well as its efforts to stimulate knowledge production on both local and global educational issues.



### Faculty of **EDUCATION** Prof Maureen Robinson, Dean: Faculty of Education

## SUSTAINING OUR MOMENTUM OF EXCELLENCE

he Faculty makes a significant contribution to the training and development of quality primary and high-school teachers for the country. At the end of the reporting year, 212 BEd and 173 Postgraduate Certificate in Education (PGCE) teachers received their qualifications. Postgraduate graduations have also remained at a constantly high level, with 151 honours, 34 master's and 17 PhD degrees conferred in 2016.

The year saw the introduction and consolidation of a number of faculty-wide developments and innovations in excellent teaching, learning and research. Much work has for example been done in the past five years to align programmes with the new Higher Education Qualifications Framework (HEQF) and the minimum requirements for teacher education qualifications. In 2016, the Faculty finally received approval for four new BEd Honours programmes and provisional approval for the BEd, PGCE and Advanced Diploma in Education (ADEs). These new programmes involve certain innovative new approaches. The BEd, for instance, draws on the graduate attributes (see Glossary on page 145) of Stellenbosch University (SU); the honours programme will be presented through blended learning, and the ADEs will be offered as accredited and aligned short courses.

In a further bid to sustain the Faculty's excellence, postgraduate days for master's and doctoral students were introduced and relationships with alumni strengthened.

Students and staff of the Faculty were acknowledged in various ways for their excellent contributions to the field of education. Prof Eli Bitzer received a Chancellor's award for his long-standing exceptional involvement in education scholarship. Dr Nuraan Davids and Profs Yusef Waghid and Elmarie Terblanche were honoured with institutional awards for being the researchers who had made the biggest contribution to accredited publications and/or doctoral education in 2014 as figures audited in 2016 show. The Faculty's Heinrich Grobbelaar, Michael le Cordeur, Doria Daniels, Karen Horn and Francois Cleophas all received official ratings from the National Research Foundation (NRF), while the Psychological Association of South Africa award for graduate teaching excellence was made to Ronelle Carolissen. Illustrating the Faculty's emphasis on all-round excellence, Sport Science's Suzanne Ferreira was named Maties coach of the year and nominated as South African coach of the year for having coached athletes to eight medals at the Rio Olympic Games. Four education students won medals at the Paralympic Games. One of them, honours student Charl du Toit, was named sportsman of the year with a disability at the South African Sports Star Awards. Finally, the new chair of the Faculty's student committee, Mr Euwen Etson, along with two fellow education students formed part of the Stellenbosch University Choir that won the first ever Varsity Sing competition.

#### **BROADENING ACCESS**

In addition to sustaining the Faculty's momentum of excellence, the new blended-learning programmes and short courses described above also serve as a tool to broaden access. Further use of technology in teaching and learning also continues to receive attention in an effort to make the Faculty's offering more accessible. For example, working within the parameters of SU's new Language Policy, the Mobilex project led by Dr Michele van der Merwe advances multilingualism and access to knowledge by providing students with subject-specific terminology in English, Afrikaans and isiXhosa on their cellphones. Thus far, terminology lists have been developed for the teaching of History, Geography, Mathematics, Science, Educational Psychology and Curriculum Studies. This project is run in collaboration with the Faculty of Theology and has recently received a R1,5 million three-year award from the Department of Arts and Culture.

Breaking ground for SU as well as the continent, Prof Yusef Waghid launched and presented the massive open online course (MOOC) Teaching for change: An African philosophical approach. The course was not only the University's first, but also the first such course devoted to the African philosophy of education. It provided access to further studies for a large number of participants, having attracted more than 2 500 registrations.

The Stellenbosch University Centre for Pedagogy (SUNCEP), in turn, continues to play a leading role in broadening access to the University, in particular through its SciMathUS and Hope@Maties programmes.These programmes offer supplementary education to learners who show potential to achieve the required results to access tertiary education. In 2016, 39 former SciMathUS students and 38 former Hope@Maties students graduated from SU, 19 of them with postgraduate qualifications.

Further efforts to improve access to training and development included the establishment of a Dean's bursary for a final-year education student who shows potential to make a significant difference as a future teacher, as well as the hosting of the Student Leadership in Education conference, which was run in conjunction with SU's Frederik Van Zyl Slabbert Institute for Student Leadership Development.

#### ENHANCING OUR SOCIAL IMPACT

The Faculty delivered numerous articles on topical issues, which appeared in the public media in the course of the year, particularly on *The Conversation*, an online resource that reaches thousands of readers across the world. Research in the Faculty was also released into the public domain with the publication of two research bulletins and the comprehensive research document *Reimagining Education*. Together, these publications have greatly extended the Faculty's intellectual reach and helped establish its role as a thought leader in society.

In addition, members of the Faculty continue to be very active as members of policy forums and editorial boards, as invited speakers, as authors of books and journal articles, and as convenors of scholarly events. An example of this was Prof Aslam Fataar's role as convenor of the fourth annual conference of the South African Educational Research Association (SAERA) hosted by the Faculty, which attracted nearly 500 delegates.

Furthermore, Sport Science students' participation in the high-impact Kinderkinetics programme received a welcome boost when the German consulate donated a Toyota minibus to the programme to transport these students to various communities as part of their teaching and learning experience. The Kinderkinetics programme helps children up to the age of 13 develop holistically by stimulating, remedying and promoting specific motor skills.

#### LOOKING FORWARD

In 2017, the Faculty of Education looks forward to introducing its BEd Honours programme through blended learning, expanding its growing network of partnerships with schools, and continuing to utilise its teaching and research to contribute to the many education-related issues and debates in the country.



**Parasport Sportswoman and Sportsman of the Year** Education students Anruné Liebenberg en Charl du Toit with their coach Dr Suzanne Ferreira (middle), who again received the award for Coach of the Year for individual sport. At the Paralympic Games in Rio, Anruné won silver for the 400 m (T47) and Charl won gold for both the 100 m and 400 m (T37) items. (Photo: SSFD). The Faculty of Engineering is one of South Africa's leading producers of top-quality engineers. Over the past year, the Faculty further strengthened its position at the cutting edge of excellent teaching as well as basic and applied research, and as a partner of industry. Highlights include the expansion of its research profile, further support for students, and largescale infrastructure improvements.



Faculty of **ENGINEERING** Prof Hansie Knoetze, Dean: Faculty of Engineering

## SUSTAINING OUR MOMENTUM OF EXCELLENCE

he Faculty's students again maintained a high module pass rate and graduation rate. A total of 494 BEng, 15 Postgraduate Diploma, 214 master's and 36 doctoral qualifications were conferred in 2016. The exceptional academic record of one of these graduates, Riccardo Swanepoel, who was awarded his BEng (Chemical Engineering) degree cum laude in December, was recognised with the Chancellor's Medal. Swanepoel maintained an average of 94,1% over his four years of study. He made history by becoming the first chemical engineering student to score 100% for his design project, and also passed 42 of his 44 modules with distinction (see also page 99).

Since excellence in engineering no longer solely relies on strong technical and cognitive skills, but also requires competence in verbal and written communication at all levels, the Faculty's students are properly trained in this field through the Professional Communication module. A subsection of the module entails the improvement of reading skills and comprehension by way of the reading programme Labonline. In 2016, more than 600 students completed this reading programme, and exit assessments revealed a dramatic improvement in students' reading speed, level and comprehension.

In a further step to support excellence, Engineering opened its spacious, modern and purpose-built study centre in August. This outstanding facility offers the ideal conditions for engineering students to study on their own or in groups, or just to relax. The centre contains individual workstations, a few computer terminals and an informal seating and social area, among others. One of the most important features is the nine workrooms intended for group work, which constitutes an important component of the training of engineers and also aligns with the requirements of the Engineering Council of South Africa (ECSA).

In addition, the Faculty has purposefully started implementing information and communications technology over the past two years, which now enables blended learning. Lecturers' teaching skills are constantly honed with annual teaching forums on interesting and useful topics so as to better equip them for their task.



Highest honour for student Riccardo Swanepoel, 2016 recipient of the Chancellor's Medal. **Excellence in the making in new study centre** Below left: One of the workrooms intended for group projects in the new study centre.

Priyan Bhawan (left) and Oscar Chang with their tutor Tawanda Ewing (middle) in the study centre.





The momentum of excellence is further sustained by annual improvements in the Faculty's research profile. In the reporting year, the number of research degrees (MEng and PhD) again showed steady growth. Apart from a marked improvement in numbers, however, the international profile of especially publication outputs has also been significantly strengthened. Over the past four years, the Faculty's Scopus footprint has more than doubled.

To ensure sustained excellence, Engineering continues to seek ways in which to further support the sustainability of its activities. For example, academic as well as support staff experienced an exceptionally heavy workload in the past couple of years, and academics in particular show signs of fatigue. Concerted efforts over the past four years to alleviate the workload include the appointment of 60 new, mostly young academics. This has helped reduce the burden on the academic corps by 20–25%.

Preparations for drafting the Faculty's master plan and the refurbishing of the buildings complex were also completed in 2016. This comprehensive plan entails a complete refurbishment, upgrade and densification of the facilities so as to accommodate more students and staff more costeffectively. Of course, sustained excellence also requires sustainable funding.

Continuing excellence requires sustainable funding. In 2016, the Faculty's third- and fourth-stream income totalled a solid R185,4 million, 37% more than in 2015. A highlight was the award of R30 million from the South African Road Agency Limited (SANRAL) for the research chair in pavement engineering. Even without counting this once-off donation, comparable growth from 2015 to 2016 was just over 15%, which still is quite an achievement in the current tough economic climate.

#### **BROADENING ACCESS**

The Faculty is particularly serious about the University's aim of providing students with the type of access that enables them to study successfully. Therefore, students receive ample academic and emotional support to give them the tools to cope with the challenging and demanding engineering programme. This support includes the tutor programme for first-years struggling with technical modules and, for the past two years, the appointment of two part-time educational psychologists who assist students academically and emotionally. In 2016, an alumna of the Faculty, Ms Aphiwe Jikazana, was especially appointed to serve as mentor for first-years. Due to her first-hand experience as an engineering student, she has been able to assist and advise students, as well as refer them to experts in the event of more complex problems requiring specialist attention. Over the past decades, it has also become custom for the Dean of Engineering to be regarded as the 'father' of all first-years, and first-years and their parents are encouraged to contact him in the event of any problems that may be hampering students' academic success.

Moreover, with its language implementation plan, the Faculty wishes to ensure that language does not serve as a barrier for access to engineering studies. In terms of the Language Plan, the first year (and the second year as far as possible) is offered in parallel medium, and knowledge transfer in the senior years occurs in at least English, with support for Afrikaans-speaking students. The Faculty wants to remain equally accessible to all students, regardless of whether they prefer Afrikaans or English as their language of teaching.

#### ENHANCING OUR SOCIAL IMPACT

Apart from its established collaboration with, and contract research for, the engineering industry, the Faculty of Engineering also strengthens its impact on society through various social impact projects. These include various interactions with the school community, the largest of which is TRAC. This successful programme seeks to support and improve science, applied mathematics and technology teaching at secondary-school level, and further aims to motivate learners to pursue careers in science, engineering and technology. In 2016, TRAC received nearly R14 million in funding.

#### LOOKING FORWARD

In the year ahead, the Faculty of Engineering will enthusiastically take part in reviewing Stellenbosch University's Institutional Intent and Strategy towards realising Vision 2030. The Faculty will also actively collaborate to make SU a full-fledged African university.



In pursuing its objective of delivering worldclass yet socially relevant research and teaching, the Faculty in 2016 continued to produce excellent students of law in the interest of the administration of justice and the country, and to promote the science of law through relevant, quality scholarly outputs.

## Faculty of LAW Prof Sonia Human, Dean: Faculty of Law

# SUSTAINING OUR MOMENTUM OF EXCELLENCE

ne of the most significant strengths of the Faculty of Law at Stellenbosch University (SU) is its dedicated and motivated staff members, who remain at the forefront of their discipline. This excellence was again recognised in a number of ways in the reporting year.

Prof Sandra Liebenberg, incumbent of the HF Oppenheimer Chair in Human Rights Law, was elected as African states representative to the United Nations Committee on Economic, Social and Cultural Rights (CESCR) for a three-year term starting in January 2017. Profs Juanita Pienaar and Geo Quinot received Chancellor's awards for respectively research, and learning and teaching. Legal Aid Clinic manager Theo Broodryk was recognised as one of 13 young researchers at SU who had contributed most to the Department of Higher Education and Training's accredited scientific publications. The year also saw Profs Zsa-Zsa Boggenpoel and Henk Botha respectively receiving a YI and B3 rating from the National Research Foundation, whilst staff members Mss Mary Nel and Lize Mills both obtained their doctorates. In a further step to build the knowledge base, it was announced that former



The winning team of the 25th African Human Rights Moot Court Competition including SU's LLB final-year student Mudzuli Rakhivane (third from the right at the back) and LLB pre-final year student Avuyile Gasela (far right), pictured here with Constitutional Court Judge Raymond Zondo (on the left). Public Protector, Adv Thuli Madonsela, would be joining the Faculty in 2018 as incumbent of a chair in social justice.

In terms of sustaining undergraduate student excellence, the Faculty ensures ample room for innovative teaching practices, also incorporating information and communications technology. In 2016, the Faculty conferred 152 LLB degrees. In addition, like all other law faculties across South Africa, SU's Law Faculty has completed a reaccreditation process of all programmes culminating in the LLB qualification so as to ensure compliance with the standard adopted by the Council on Higher Education in 2015. This included in-depth reflection on module content, assessment methods and learning outcomes. The Faculty's students also maintained excellence outside the classroom. Two LLB students formed part of the team who emerged as ultimate winners of the 25th African Human Rights Moot Court Competition held at the Constitutional Court, namely Mudzuli Rakhivane and Avuyile Gasela.

At postgraduate level, the Faculty conferred 60 master's and 7 doctoral degrees, as well as two postgraduate diplomas. It remains challenging, however, to strike the right balance between the taught LLM programme, the two postgraduate diplomas in respectively Tax Law and Intellectual Property Law, and the research LLM and LLD. The structured LLM programme is particularly important to promote internationalisation, encourage growth in postgraduate student numbers from specifically Africa and China, expand diversity and serve the learn and earn market. To this end, the Faculty is developing an international marketing strategy, whilst talks with potential foreign university partners are under way.

Even former students of the Faculty continued to excel. A 2015 graduate, Ms Emily van Heerden, was awarded a Rhodes scholarship. This achievement she credited to the education she had received at SU's Law Faculty, which "instilled in me a love of the law, of studying and of striving for justice through excellence ... I know that I can go to Oxford confident in my ability to cope with the academic pressures there thanks to the high standard of law at Stellenbosch". In turn, Advocate Rina Meyer, who obtained her LLB from Maties, finds herself back at her alma mater since November 2016 as SU's newly appointed ombud. Being relatively small in terms of staff and student numbers, any minor shift has a disproportionate impact on the Faculty's financial sustainability. This renders the Faculty particularly dependent on the third- (research) and fourth-(philanthropic donations) income streams. In this regard, the Faculty is especially thankful towards its loyal alumni who continue to support the Dean's Fund and the Law Faculty Trust, which serve as primary fourth-stream income sources.

#### **BROADENING ACCESS**

Attracting staff from the designated groups poses some specific challenges, including the small pool of available candidates as well as the cost implications of making the Faculty a financially attractive option. It is hoped that the development of a systemically sustainable employment equity plan for the Faculty will provide practical solutions.

Moving to student diversity, given the Faculty's small size alluded to above, the non-registration of just a few newcomer first-years from the designated groups results in a significant shift in the Faculty's enrolment targets. In addition, student diversity cannot be viewed in isolation from the University's budgeting model. In simple terms, this means that the Faculty should not merely be chasing newcomer enrolment targets, but should also ensure throughput. To this end, a shift in strategy is envisaged rather to provide financial support to academically strong students in need, which will not focus solely on admitting diverse candidates, but also on ensuring their academic success.

#### ENHANCING OUR SOCIAL IMPACT

The Faculty's Legal Aid Clinic continued to offer free legal services to those in need, whilst providing final-year students and articled clerks with hands-on experience. The clinic also fosters a culture of responsible citizenship by hosting workshops on eviction, debt relief and domestic violence.

As one of its contributions to science for society, the Faculty's African Procurement Law Unit (APLU) – formerly known as the African Public Procurement Regulation Research Unit (APPRRU) – started rolling out training to staff of the South African Public Protector's office. This forms part of APLU's shift from performing research only to providing training initiatives and assistance to policy makers in designing public procurement law regimes. The training offered to the Public Protector's office focuses on the typical issues to be investigated by Public Protector staff. The initiative involves a partnership between APLU, the Public Protector of South Africa and the Konrad-Adenauer-Stiftung (KAS) in South Africa.

In turn, reaching out to female learners at Kayamandi, Makupula and Luckhoff high schools through an inspiring talk, the Faculty's Professor Sandra Liebenberg touched on the deep interconnections between poverty and gender inequality in South Africa. She emphasised, however, that through hard work and dedication, each person can be empowered and play a role in transforming society for the better. She also encouraged the students to seek out mentors and complete their studies.

#### LOOKING FORWARD

Thankful for its sustained performance in the reporting year, the Faculty is set to expand research income, increase master's and doctoral student throughput, and stabilise undergraduate student success in 2017 and beyond.



Partnership to train staff of the South African Public Protector's office Pictured from left to right are APLU Director Prof Geo Quinot, Adv Kevin Malunga (Deputy Public Protector of South Africa), Ms Benita Young (Public Protector's office), Dr Holger Dix (head of the KAS office in South Africa) and Mr Tilmann Feltes (also from KAS).



**Adv Thuli Madonsela**, former public protector, has been appointed to the chair in social justice.



## Faculty of **MEDICINE AND HEALTH SCIENCES**

Prof Jimmy Volmink, Dean: Faculty of Medicine and Health Sciences

# SUSTAINING OUR MOMENTUM OF EXCELLENCE

he past year saw the Faculty's excellence further bolstered by quality staff appointments and academic accomplishments.

Having celebrated its 60th anniversary in 2016, the Faculty of Medicine and Health Sciences is as committed as ever to produce medical and health sciences professionals who will promote health, prevent disease and provide optimal healthcare through innovation and leadership. With a student enrolment figure of 4 536 in the reporting year, the Faculty has come a long way since its first intake of 24 in 1956. The new Medicine and Health Sciences logo reflects this journey, symbolising the Faculty's roots and traditions,

while also signifying a shared future of

and beyond.

advancing health and equality in South Africa

The reappointment of Dr Therese Fish, former Deputy Dean: Community Service and Interaction, in the renamed portfolio Vice Dean: Clinical Services and Social Impact, as well as the appointment of Prof Julia Blitz, an associate professor of Family Medicine and Primary Care, as Vice Dean: Learning and Teaching will help ensure that the Faculty delivers fit-for-purpose graduates.

As part of the 60th anniversary celebrations, the 106 oral and 129 poster presentations at the annual academic day showcased some of the ground-breaking research that has emerged from Tygerberg campus since 1956. Yet, while mindful of precisely how far it has come, the Faculty also remained future-focused and opened a new research unit aimed at making tuberculosis (TB) drugs safe and accessible for children. The Paediatric Pharmacokinetics Unit at the Desmond Tutu TB Centre will test how best to use TB drugs in children with drug-sensitive and drug-resistant strains of this disease. The Unit is assisting with the first ever trial of a new TB drug (delamanid) for children, and their research has already helped identify its paediatric dosing in children aged six and older.

Further testament to the Faculty's academic excellence includes the appointment of its Centre for Evidence-based Healthcare as the World Health Organisation's African regional centre of excellence in implementation research. This recognises the Centre and Faculty's reputation for translating research evidence into policy and practice. Being one of only six such centres globally, it will help build capacity in implementation research across the African continent.

The Faculty also opened its new Sunskill laboratory in the reporting year. This state-of-the-art, integrated clinical training laboratory was made possible by a longterm collaboration between Stellenbosch University and global medical technology corporation Medtronic, which resulted in an investment of over R120 million. The facility offers eight fully simulated theatre operating stations, a 'dry' laboratory, a 100-seater lecture theatre and a virtual intensive care unit – all connected with breakthrough audio-visual capabilities. Geared to train up to 1 200 physicians within its first year of operation, Sunskill has already attracted specialists and other healthcare professionals from across the continent to learn new techniques and hone their skills.

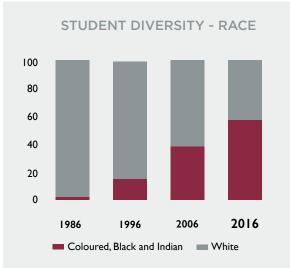
Ten focused research chairs – ranging from tuberculosis and post-traumatic stress disorders to cancer science and bioinformatics – as well as 59 researchers rated by the National Research Foundation (NRF) further kept the Faculty at the forefront of medical research and innovation.

#### **BROADENING ACCESS**

In response to the growing need for financial assistance amongst its students, the Faculty established its Bursary and Loan Fund. This support is in addition to the existing funding provided by the University, and the primary beneficiaries are students who do not qualify for financial assistance from other sources.

In terms of student diversity, the Faculty has in the past few years progressed significantly in growing its black, coloured and Indian (BCI) student cohort, as the graph on the next page illustrates.

To ensure that Medicine and Health Sciences remains an environment that is welcoming to all, future diversity and inclusivity decisions will be guided by the newly established Dean's Advisory Committee on Transformation. A relational coach has also been appointed to actively work with students and staff on creating a culturally competent, transformative social learning environment that fosters a sense of belonging and acceptance for all.



#### ENHANCING SOCIAL IMPACT

A significant contributor to the Faculty and University's social impact in 2016 was the Vula app developed by Dr William Mapham of the Division of Ophthalmology.Vula enables primary healthcare workers to capture photos and clinical data on a smartphone, which are then sent to an on-call healthcare professional for advice or referral. Its value in addressing the lack of specialist healthcare professionals in remote rural areas continues to be acknowledged worldwide. The United Kingdom's Nominet Trust, for example, named it as one of the world's top 100 most inspiring social innovations using digital technology to drive global social change.

The Faculty's Ukwanda Rural Clinical School remains a model of excellence. In addition to training health professionals on a rural platform, it also has a considerable social impact. In 2016, a delegation from the National Council of Provinces visited the facility. The Ukwanda Centre and the Worcester campus also held their sixth annual Sustainable Rural Health research day themed "Illuminating health impact for social innovation". Moreover, the groundwork is being done for the implementation of a ten-year strategy at Ukwanda that will introduce – and study the social impact of – interventions to strengthen human resources for rural health.

The Faculty actively participated in commemorating Mandela Day, when staff and students distributed over 500 comfort packs to patients at Tygerberg Hospital, as well as blankets and toys to the mothers of children admitted to Tygerberg Children's Hospital. Medicine and Health Sciences undergraduates also distributed nearly 2 000 chocolates, each wrapped with a special message, to the nursing staff at Tygerberg Hospital in acknowledgement of nurses' contributions to their education.

Finally, acutely aware of its African roots and the need to remain relevant to the continent's needs, the Faculty commemorated Africa Day with a well-attended symposium on the meaning and impact of African universities. A strong call for African universities to work together to find solutions for, and create knowledge relevant to, the continent emerged from this event.

#### LOOKING FORWARD

Grateful for its many successes and its reputation as one of the most research-intensive medical faculties in the country, the Faculty of Medicine and Health Sciences looks forward to entering its next 60 years. However, in a challenging higher education environment, this will no doubt require the ability to draw on all available resources, remain nimble and view change as an opportunity for renewal and progress.



Some of the cutting-edge technology of the Faculty of Medicine and Health Sciences' new **Sunskill laboratory**.

89

Located in the South African Military Academy in Saldanha Bay, the Faculty of Military Science strives to be a leader in the field of military science by offering worldclass military higher education, research as well as professional military development, while also having a positive impact on society.



Faculty of **MILITARY SCIENCE** 

Prof Sam Tshehla, Dean: Faculty of Military Science

uring 2016, the Faculty continued its efforts to deliver soldiers with the level of knowledge and strong character demanded by the 21st-century security context, serving their country as capable strategists and adaptive leaders.

# SUSTAINING OUR MOMENTUM OF EXCELLENCE

In the reporting year, the Faculty successfully achieved its goals of ensuring excellence in its core business as well as top international academic stature.

In terms of student success, the Faculty conferred 89 BMil, 18 BMil honours and four master's degrees. Four of the BMil students graduated cum laude. Candidate Officer Charlene Woodcroft-Brown also received a sword of honour from the Military Academy. The sword of honour is awarded to a student who has served as outstanding scholar and disciplined soldier over the three years of the degree programme. In his address to outgoing students during the Military Academy's passing-out parade, the corporate services chief of the South African National Defence Force (SANDF), LtGen Vusi Masondo, emphasised the need for the Faculty's graduates to personify the values of the SANDF and display a warrior ethos in all aspects of military operations and peace management. He further highlighted the importance of education in shaping military leaders who are capable of conducting themselves professionally and effectively in a rapidly changing security environment.

In addition, the Military Academy was honoured to receive the South African minister of defence, Ms Nosiviwe Mapisa-Nqakula, and the Rector and Vice-Chancellor of Stellenbosch University (SU), Prof Wim de Villiers, at its academic awards evening celebrating the academic achievements of both Faculty staff and students.

Illustrating that the Faculty of Military Science seeks to deliver well-rounded graduates who are able to participate in society at all levels, a three-member student team from the Military Academy for the first time entered the 2016 Young Economist of the Year competition, and went on to win second place. This annual competition sponsored by Die Burger and managed by SU's Department of Economics tests students' ability to forecast economic indicators. In the field of staff excellence, the Faculty's assistant professor Francois Vreÿ has been promoted to the academic rank of professor of military strategy. The chair of the School of Security and African Studies, assistant professor lan van der Waag, has been promoted to the academic rank of professor of military history, and also received a B2 rating from the National Research Foundation (NRF). The NRF also awarded a C3 rating to Commander Dr Jacques Bezuidenhout, chair of the School of Science and Technology, while Ms Lindiwe Khoza, chair of the Educational Technology Department, graduated with a PhD in Education at the end of the reporting year. Moreover, the director of the Centre for Military Studies (CEMIS), Prof lan Liebenberg, co-edited the book A far-away war: Angola 1975–1989, while Dr Justin van der Merwe, also from CEMIS, co-edited the publication Emerging Powers in Africa.

Further confirming the Faculty's key role in the national and regional security sector, and its ranking as one of the ten most prestigious military academies in the world ( www. onlinecollege.org/10-most-prestigious-military-academiesin-the-world/), the dean of Military Science, Prof MS Tshehla, received a continental leadership award as best professor of military science. He was also promoted to professor of mathematics.

Not faltering on the excellence of its programme offering, the Faculty submitted two new academic programmes to the Department of Higher Education and Training for approval and accreditation.

#### **BROADENING ACCESS**

As its contribution to broadening access to higher education for all, the Faculty is the sole provider of tertiary education for officers of the SANDF. This academic partnership with the SANDF through the MPhil programme in Security Management offers senior officers of the Department of Defence and senior managers within the security cluster an opportunity to gain access to further training and, consequently, better career prospects in the military. The programme is the most senior officer's course of the SANDF, and successful members are usually promoted to the military rank of brigadier general in line with international and African military trends. Two students graduated from this MPhil programme in the year under review.

In addition, the interactive telematic education (ITE) platform makes the Faculty's programme offering available to all members of the Department of Defence who wish to study part-time, broadening access in a way befitting the 21st century. ITE teaching involves live broadcasting sessions from Stellenbosch main campus to learning centres across the country, where students have real-time interaction with lecturers and fellow students through the SUNLearn platform. The Faculty of Military Science has vast experience in offering ITE sessions in, for example, the BMil (Security and Africa Studies), BMil (Human and Organisation Development) and BMil (Organisation and Resource Management) programmes.

#### ENHANCING OUR SOCIAL IMPACT

As the Faculty is located in the community of Saldanha Bay, this is where its community interaction is at its most active. Among others, the Faculty serves as an advisor for various Saldanha Bay small business enterprises. In terms of a memorandum of understanding signed between Stellenbosch University and Saldanha Bay Municipality in 2014, the Faculty also continued to contribute to development in the area in the reporting year. The establishment of a good governance forum is one example of how the Faculty and Saldanha Bay Municipality work together to find knowledge solutions that could lead to a better life for all living in the municipal area. Beyond Saldanha, Prof Ian van der Waag delivered a key note address on the South Africa-Angola-Namibia border war at the 7th War and Society Conference jointly organised by the Faculty's Department of Military History and SU's Department of History. CEMIS too reached out beyond the Faculty's borders and successfully co-hosted international security courses with the Dutch defence force.

The Security Institute for Governance and Leadership in Africa (SIGLA) further strengthened the Faculty's impact on society by taking part in various scholarly activities in the field of maritime security along with the Royal Danish Defence College (RDDC). These included participation in the Danish Maritime Forum 2016, a seminar on Africa, and a roundtable discussion on European Union conflict prevention in Africa, which all took place in Copenhagen, Denmark. A joint workshop with RDDC on South Africa's role in relation to the African peace and security architecture was hosted locally with funding from the Royal Danish Embassy in South Africa. SIGLA also presented the 13th Security Watch Africa lecture series in Stellenbosch, where a memorandum of understanding was signed between the two organisations.

#### LOOKING FORWARD

To further advance its academic excellence, the Faculty looks forward to co-hosting a conference on Africa's security triad – leadership, landward safety and maritime safety – in 2017 in Ethiopia in partnership with the RDDC. Military Science will also host three students from Saint-Cyr Military Academy in France and two from the University of North Georgia in the United States for a semester:



**Cooperation strenghthens social impact in Africa** A memorandum of understanding was signed between Stellenbosch University and Security Watch Africa, a high-level Nigerian-based security NGO. From the left are Prof Eugene Cloete, Vice-Rector (Research, Innovation and Postgraduate Studies), and Mr Patrick Agbambu, CEO of Security Watch Africa, and Prof Sam Tshehla, Dean of the Faculty of Military Science signing the MOU. The Faculty of Science is acutely aware of its responsibility not only to equip graduates with the high-level skills demanded by the socalled Fourth Industrial Revolution, but also to remain cognisant of current socio-political challenges. To this end, the Faculty initiated various opportunities for staff and students in 2016 through increased collaboration and enhanced visibility of its scientific work.



Faculty of **SCIENCE** Prof Louise Warnich, Dean: Faculty of Science

## SUSTAINING OUR MOMENTUM OF EXCELLENCE

A new advisory board has been established with prominent members from industry. With this engagement, the Faculty aims to unlock new research and collaboration on multidisciplinary projects, and to provide industry-based training opportunities to both graduate and postgraduate students.

Due to the growing demand for high-level skills in big-data analytics, an expert has been appointed to lead Science's bioinformatics initiative and coordinate efforts across Stellenbosch University (SU) faculties. The aim is to grow expertise and develop curricula that will equip graduates with a sought-after skills set. Capacity in this field will be further strengthened with the establishment of a German research chair in big-data analysis, which will be sponsored by the Alexander von Humboldt Foundation and jointly hosted by SU and the African Institute for Mathematical Sciences.

In addition, the Science Teaching and Learning Forum continued to provide a platform for programme renewal, implementation of formative and summative e-assessment, and integrative learning. This includes opportunities for the ongoing professional development of academics, teaching assistants and tutors.

Several staff members received recognition for research excellence in the reporting year. Prof Bert Klumperman received the National Science and Technology Forum (NSTF)/South 32 lifetime award for his outstanding contribution to science, engineering, technology and innovation, as well as the SU Chancellor's award for research excellence. Another SU Chancellor's award went to Prof Leon Dicks. Prof Brian van Wilgen was awarded a gold medal by the Academy of Science of South Africa for outstanding achievement in scientific thinking for the benefit of society. Prof Guy Midgley was recognised by the National Research Foundation as a leading international scholar in global change, bringing the total number of A-rated scientists in the Faculty to six. Dr Karl Storbeck received a silver medal from the Society for Biochemistry and Molecular Biology, and Prof Anna-Mart Engelbrecht the Lasec award from the Physiology Society of Southern

Africa. Moreover, a new yeast species was named after Prof Alf Botha in recognition of his contribution to the field of yeast ecology, while a new Oxalis species from the Richtersveld was named after Prof Léanne Dreyer.

The Faculty's students also excelled, particularly at postgraduate level. Matthew Mayne and Jean Loock respectively received the John Handley award for the best MSc thesis and the award for the best honours thesis in earth sciences in 2015 from the Geological Society of South Africa. Xavier von Stein was awarded the Southern Africa Association for the Advancement of Science's medal for the best MSc student in natural sciences at SU in 2016. Finally, Penelope Dobrowski and Dr Raquel Garcia were honoured with the Loréal-UNESCO regional fellowship for women in science in sub-Saharan Africa. With its honours, MSc and PhD students having increased by some 15% across the board over the past five years, the Faculty hopes to see many more of its postgraduate students excel in the years ahead.

To ensure sustained income for sustained excellence, the Faculty makes every effort to increase its research outputs, the throughput rate of both undergraduates and postgraduates, and the strategic application of reserve funds to promote excellence in core activities. This is paying off, as third- and fourth-stream income had grown from 32% to 42% of total Faculty income from 2012 to 2015. The bulk of the third-stream income directly supports research and postgraduate student bursaries.

#### **BROADENING ACCESS**

Albeit from a small base, the number of undergraduate black students has increased by 16% from 2012 to 2016. Yet, diversity remains a challenge. The enrolment numbers of Indian students remain low, while coloured student enrolments have shown a mere 7% increase. An analysis of 2016 registration trends indicates that a large number of provisionally admitted black, coloured and Indian (BCI) students eventually decide against registering. In response to this challenge, the Faculty has identified several initiatives to convince more of these provisionally accepted students to take the final step and register. BCI representation among administrative and support staff, in turn, has increased from 32% to 53% during the past five years, but has grown only marginally for academic staff. As a further contribution, three positions to enhance staff diversity were funded by the Rector's Strategic Fund in 2016. Close monitoring of staff diversity against the Faculty's staff Equity Plan will continue in 2017.

#### ENHANCING OUR SOCIAL IMPACT

The Faculty of Science endeavours to provide strategic community-based support through its research and teaching programmes. One example of this is research by the Department of Botany and Zoology on the poor genetic diversity and dwindling numbers of great white sharks along the South African coastline, which received widespread national and international media coverage.

The Department of Science and Technology (DST)/ National Research Foundation (NRF) Centre of Excellence for Invasion Biology (C-1-B), in turn, contributed to a landmark report about the challenges facing the Cape floral region over the next century. This research programme constitutes the world's longest history of concerted scientific effort aimed at the conservation of an entire region and its vegetation and animals.

As their contribution to social impact, researchers from the DST/NRF South African Centre for Epidemiological Modelling and Analysis hosted a Science for Society lecture on World Aids Day. The lecture, which dealt with ways in which to end the HIV/Aids epidemic in the country, was broadcast live on SAFM. Throughout 2016, researchers also participated in various science communication activities to facilitate public understanding of the role of science and research in society.

#### LOOKING FORWARD

With Vision 2030 in mind, the Faculty will continue its efforts in 2017 and beyond to deliver innovative, critical thinkers who are able to play an active role in the development of a successful, multicultural South African society.



Prof Bert Klumperman, distinguished professor in the Department of Chemistry and Polymer Science, upon receiving the NSTF/South 32 lifetime award for his outstanding contribution to science, engineering, technology and innovation.

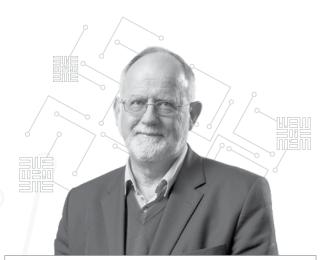




**Research excellence** Prof Brian van Wilgen (left), a leading conservation ecologist from the DST/NRF Centre for Invasion Biology (C I ·B), receiving his gold medal from the Academy of Science of South Africa. It was handed over by Dr Phil Mjwara, director-general of the National Department of Science and Technology.



In the news Dr Sara Andreotti collected 302 genetic biopsies and over 5 000 photographs of the dorsal fins of great white sharks for her doctoral research at SU. She collaborated with well-known shark conservationist, Mike Rutzen, to track down the sharks along the South African coast line. The findings of the study received widespread international media coverage. Photo's: Götz Froeschke and Elsa Hoffman



The Faculty of Theology is one of only four theology faculties in the country, and the only one south of the Orange River. It is also the second oldest in Africa, offering quality theological training since 1859.

Faculty of **THEOLOGY** Prof Hendrik Bosman, Acting Dean: Faculty of Theology

Indful of its African context and the interests of various traditions of the Christian faith, the Faculty aims to practise theology in service of the church, science, and society. In the past year Theology has therefore continued to strive to strengthen academic excellence amongst its students and staff, facilitate easier access to theological training for a more diverse group of students, and engage with social issues.

# SUSTAINING OUR MOMENTUM OF EXCELLENCE

Alumni of the Faculty occupy leading academic and church positions across the continent. Examples include the vice-chancellor of the Justo Mwale Theological College in Zambia, Dr Edwin Zulu, and the moderator of the Reformed Church in Zimbabwe, Dr Enos Chomutiri. The Faculty's own staff members are also exceptionally competent: Prof Mary-Anne Plaatjies-Van Huffel, for example, simultaneously served as moderator of the Uniting Reformed Church and as an executive committee member of the World Council of Churches. The reporting year saw further efforts to sustain this excellence.

Boasting the highest percentage of academic staff with PhDs at Stellenbosch University (SU), the Faculty of Theology also produces the highest number of research outputs per staff member: The country's highest accolade for a theological publication, the Andrew Murray-Desmond Tutu award, was made to Prof Elna Mouton and Dr Len Hansen in 2016 for their collective work *Living with Dignity*. In addition, Dr Nadia Marais received the international Goodwin prize for her research on the role of confession as resistance to injustice. Four staff members either received or improved their National Research Foundation (NRF) ratings, which brings the NRF-rated percentage of the Faculty to over 40%.

In 2016 the Faculty conferred 124 qualifications of which 22 were diplomas and certificates, 41 bachelor's degrees, 41 master's degrees and 20 doctorates.

To further expand excellence, the Gender Studies and Research Unit was established. This unit, made possible by the support of the Swedish Church and SU's Vice-Rector (Research, Innovation and Postgraduate Studies), Prof Eugene Cloete, will explore vital yet neglected gender themes in a theological context.

The Faculty was also a preferred destination for leading international academic conferences, excellently organised by staff. The biennial international conference of Societas Homiletica, the society for teachers and researchers of preaching and homiletics, was hosted in Stellenbosch in March. In September, the Faculty was the first African host of the triennial conference of the International Organisation for the Study of the Old Testament (IOSOT), closely followed by the consultation of the Global Network for Public Theology in October.

#### **BROADENING ACCESS**

The Faculty has managed to build a highly diverse demographic student profile. In 2016, the overall student body of 559 comprised 160 black, 197 coloured and 202 white students.

Despite this, the Faculty continues to look for ways in which to further broaden access. In this regard, an arrangement with Huguenot College in Wellington now allows applicants who do not meet the Faculty's BTh or BDiv admission requirements to first complete a certificate programme in theology and ministry at Huguenot College so as to improve their chances of being admitted to the Faculty the following year.

The Mobilex theology project, which involved the development of a mobile application that provides Afrikaans, English and isiXhosa translations and definitions for some 400 theological terms, has received significant support from the Department of Science and Technology in order to also include other African languages. As the Faculty's postgraduate cohort includes a large number of students from elsewhere on the continent, adding terminology in languages such as Chewa and Swahili will go a long way towards facilitating broader access and, thus, improved student success.

The challenge remains to continue to improve access for disadvantaged students. In this regard, the above-mentioned IOSOT conference produced an unexpected injection for SU's Vlakte bursary fund. Due to the weakening of the rand, the conference registration fees, which were paid in euro, delivered a higher yield than expected and the organising committee consequently decided to donate the R60 000 surplus to the Vlakte bursary fund. SU Rector and Vice-Chancellor Prof Wim de Villiers established this fund in 2015 as a form of redress and development for the descendants of those who were forced to leave their homes in the area called Die Vlakte bordering mid-town Stellenbosch in terms of apartheid laws in the sixties and seventies. Up to five bursaries per year are awarded to persons who were either residents themselves, or their children and grandchildren, offering financial assistance for studies in an undergraduate or a first postgraduate programme.

#### ENHANCING SOCIAL IMPACT

The Faculty also strengthened its engagement with society in the reporting year. Besides existing agreements with the Anglican, Dutch Reformed, Presbyterian and Uniting Reformed churches, a partnership was also formed with the *Volkskerk van Afrika* in the course of 2016. This agreement will allow considerable networking and social impact in society at large.

Moreover, the Faculty is home to the organisational hub of NetACT, a network of more than 40 theological colleges and seminaries across Africa. In the past year, NetACT

officials of the Faculty reached out to other members on the continent, including visiting one of the NetACT founding members in Kenya, the Reformed Institute for Theological Training (RITT), as well as the easternmost NetACT institute in Africa, the Bishop Hannington Institute for Theology on Mombasa Island.

Many conferences and workshops held in faculty context also tackled relevant social issues. The implications of the Soweto uprising of 1976 were for example the topic of the Faculty's first Hector Pieterson memorial lecture, followed by deliberations on the decolonisation and Africanisation of theology later in the year.

#### LOOKING FORWARD

In 2017 and beyond, the Faculty will maintain a productive research environment and continue to renew its curricula and teaching. However, no journey towards excellence will be complete without a strong emphasis on Africa's unique contextual challenges. For this reason, funding has been obtained to facilitate collaboration with leading universities on the continent and address distinctly African issues. The Faculty will continue to pursue improved multidisciplinary research on SU's campus, in the region and on the continent, so as to produce academic articles and monographs that further encourage Africanisation and decolonisation.





**Broadening access** The diverse 2016 Theology group showing their lighter side.

New partnership with Volkskerk van Afrika Dr Donald Katts (Volkskerk moderator), Prof Hendrik Bosman (acting Dean) and Prof Wim de Villiers (Rector) upon signing the agreement between SU and the Volkskerk van Afrika, the Faculty of Theology's fifth church partner.

# The University acknowledges **EXCELLENCE**

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## Honorary **DEGREES**

In the reporting year, the University awarded six honorary degrees – to Prof Jan du Plessis, Drs Dirk Mudge, Franklin Sonn and Johan van Zyl in December 2016, and to Prof Kofi Agawu and Dr Monique Nsanzabaganwa in March 2017.

Victor Kofi Agawu, professor of musicology and music theory at Princeton University and newly appointed extraordinary professor in the Department of Music at Stellenbosch University, is honoured for his ground-breaking research on African music and is known for crossing numerous traditional boundaries in musical scholarship. Often setting the standard for scholarship in this field, his list of accolades, including the prestigious Dent medal awarded in recognition of outstanding contributions to musicology, attest to the global respect he commands in the music world. As one of the most respected scholars to have come from Africa he embodies the type of scholar that Africa can and must deliver.

Jan Johannes du Plessis is honoured for his sustained, innovative contributions to computing and satellite technology with a range of technology firsts, thereby inspiring many engineering students, paving the way for South Africa's booming technology and respected microsatellite industries, and bringing both Stellenbosch University and the country international acclaim. As technology trailblazer and innovator of note, he introduced South Africa to parallel-processer computing and large computer user areas, and created a national satellite capacity. His longstanding pursuit of the innovative and the new placed SU and South African technology on a rapid development trajectory. The University proudly associates itself with the innovation and future focus to which his career attests.

Dirk Frederik Mudge is honoured for his ingenious yet humble leadership in service of his country. He left an indelible mark as transformation leader by helping to guide the former South West Africa to independence, and reconciling white and black. His extraordinary change management abilities served his country well in his role of drafting the constitution for an independent Namibia and continued service to his country in the realigned legislature in the fields of agriculture, finance, public works and infrastructure development. He helped guide his country to freedom with extraordinary vision, yet humble grassroots leadership. His role as peacemaker and creator of hope for the continent deserves recognition.

> Monique Nsanzabaganwa is honoured for her role in developing academically sound economic policies for Rwanda, for her contribution in creating world-class state institutions, and for her activism to establish women as key players in the African economy. As minister in various portfolios, she initiated Rwanda's economic development and poverty alleviation strategy and its regulatory framework for microfinance, founded the National Institute for Statistics, and campaigned for a more balanced Rwandese economy. Serving as deputy governor of the Rwandese National Bank, she regulates financial and monetary policy, serves on the African advisory board for Women's World Banking, and heads up Ms Graça Machel's New Faces New Voices, helping African women find their economic voice.

97

Franklin Abraham Sonn, opinion shaper, educationist, and businessman, was appointed as chair of the National Education and Training Forum. His many achievements include serving as chancellor of the UoFS, SABC board member and vice-chair of the Urban Foundation, the country's first black ambassador to America, the president of the Afrikaanse Handelsinstituut, and vice-president of the South African Chamber of Commerce and Industry. He currently holds five directorships and is a trustee of the Desmond Tutu Peace Trust. His achievements has earned him 12 honorary doctorates, the National Order of the Baobab and the Western Cape Order of the Disa. Stellenbosch University honours him as an example worthy of emulation by all Maties.

> Johan van Zyl, Sanlam group chief executive, achieved a miraculous corporate turnaround at a particularly challenging time for Sanlam by ensuring that the needs of the emerging African market are provided for. His illustrious career is highlighted by being rector of the University of Pretoria at the early age of 40, being a professor at Michigan State University and a World Bank consultant and then joining Sanlam in 2003. Under his leadership, the Sanlam share price had grown from R6 to more than R70 per share, and the company's market value from R14 billion to R170 billion. SU honours Dr Johan van Zyl as a standard bearer for business with a social conscience.

Mr Riccardo Swanepoel, who obtained the BEng in Chemical Engineering cum laude, is the recipient of Stellenbosch University's Chancellor's Medal for 2016 – the highest honour that the University can bestow on a student. The medal is awarded annually to a final-year or postgraduate student for outstanding achievements.

## Chancellor's **MEDAL**

Prof Eugene Cloete, who read Swanepoel's commendation at the graduation ceremony on 7 December, said that "in a university nearly 100 years old, it is an almost impossible feat to achieve something no one else has done before", but that Swanepoel indeed "literally made history at Stellenbosch University". He described Swanepoel as "an eminently worthy recipient".

Swanepoel, who hails from Port Elizabeth and is a former learner of High School Framesby, made history at Stellenbosch University when he received 100% for his final-year capstone Design project – a mark never achieved before. Not surprisingly, his Design project has been described as "perhaps the all-time pinnacle of undergraduate achievement" in the Faculty of Engineering.

This is by no means the only achievement for which Mr Swanepoel will be remembered. In another first for engineering at Stellenbosch University, he earned 93% for his final-year project, also the highest mark ever. So outstanding was his work on this project that he will submit it as an invited paper for a special edition of the international *Journal of Chemical Engineering Data*.

Swanepoel completed his four-year BEng degree with an average of 94,1%. This is the second-highest mark ever achieved in this programme at Stellenbosch University. Only 0,9% separated him from the highest mark to date, 95%. During his four years at Stellenbosch University, Mr Swanepoel received distinctions for all but two of the 44 modules he took.

Mr Swanepoel was also editor of the Eendrag Men's Residence newspaper from 2013 to 2015, as well as manager and founder of the residence's language and translation committee.

It would be a mistake to consider his talents as purely cerebral. On the dance floor, he has skills that are second to none, having held gold-level honours for ballroom dancing from 2008 to 2011.

Swanepoel described the award as an "enormous honour" and that he only fully processed the news when people on the street congratulated him on his achievement. He attributes his academic success to "a lot of nights without sleep" and perseverance. Swanepoel will continue with master's studies at SU and hopes to later convert it to a PhD. Stellenbosch University's Chancellor's Awards recognise some of the leading academics at the institution for their sustained contributions to excellence in the fields of research, learning and teaching, and social impact.

## Chancellor's **AWARDS**

**PROF ANTON BASSON** held the position as chairman of the Department of Mechanical and Mechatronic Engineering for three terms. He became Vice-Dean in 2012 and ensured a perfect score for its BEng programmes for an ECSA accreditation in 2013. He is a regular member of ECSA accreditation teams and a dynamic author, producing some 25 journal articles and 45 conference papers. He has been named the Faculty's lecturer of the year and received a Rector's Award for excellence in teaching.

**PROF ELI BITZER**, director of the Centre for Higher and Adult Education, has made a significant contribution to capacity building in the higher education community, quality assurance of higher education programmes, the scholarship of higher education and has established himself as a leader in the tertiary sector. He has produced over 100 publications, has received the SAARDHE's Johann Pauw memorial award and has been named one of the University's 50 most productive authors by the Vice-Rector (Research, Innovation and Postgraduate Studies).

The research of **PROF LEON DICKS**, distinguished professor of microbiology, resulted in the unique probiotic entiro<sup>M</sup>, which was commercialised by Cipla Medpro in 2005 and patented in 65 countries. His research has afforded him world recognition and a number of prizes, among which, a silver medal from the South African Society for Microbiology, the National Science and Technology Forum/BHP Billiton TW Kambule award, and the Havenga award for life sciences from the *Suid-Afrikaanse Akademie vir Wetenskap en Kuns*.

**PROF RONEL DU PREEZ**, Vice-Dean in the Faculty of Economic and Management Sciences (EMS), has produced exceptional innovations for the benefit of both EMS and the University at large. These include the four-year BCom (International Business), the OPTIMUS co-curricular development programme, and the Dean's List. Her pursuit of innovative ways to use ICT in teaching and learning has led to the design of the Student Ambassador Programme, which links prospective students with current Maties via social media.

**PROF RUFUS GOUWS** has grounded African lexicography in science. He is editor-in-chief of the HAT and the bilingual *Prisma Groot Woordenboek Afrikaans en Nederlands* and has produced 107 articles, 68 chapters in scholarly publications and 17 books in Afrikaans, English and German. His extensive contribution to lexicography is evident from accolades such as the CJ Langenhoven award for linguistics and the Elisabeth Eybers bursary from the SA Akademie vir Wetenskap en Kuns, an award from the Linguistic Society of Southern Africa, a grant from the Vilhelm Kann Rasmussen Foundation and honorary membership of the African Association for Lexicography.

**PROF BERT KLUMPERMAN**, incumbent of the research chair in advanced macromolecular architectures, is considered a world leader in the field of free radical polymerisation. One of only three A-rated chemists in South Africa, he is frequently invited to deliver lectures at international conferences and is the editor of international journals. His scientific contributions have won him a gold medal of the South African Chemical Institute, the Sasol Chemistry Innovator of the Year award, and the National Science and Technology Forum's lifetime achievement award.

**MR EBEN MOUTON**, Director: Business Management in the Faculty of Medicine and Health Sciences, has made outstanding contributions in areas such as strategic planning, financial management and human resource development. Among others, he was instrumental in establishing a faculty managers' forum for SU, was appointed by the National Deans Committee to an investigative team, designed an executive leadership programme for senior academics, and has lectured in general management to postgraduate diploma students. His influence on all SU's core functions has won him Rector's awards annually since 2011.

The Faculty of Law's **PROF JUANITA PIENAAR** is an internationally recognised researcher and the leading South African scholar on the law of land reform. Rated by the NRF, she has produced 145 articles, 13 book chapters, one monograph, one encyclopaedia, three source books and two textbooks. She served on the Law Commission's land legislation advisory committee and was acting judge in the Land Claims Court. Her membership of the NRF's expert panel for law attests to her reputation as a respected authority in her field.

**PROF GEO QUINOT**, Vice-Dean of the Faculty of Law, is a leader in SA legal education. He initiated a comprehensive writing strategy considered to be the most significant teaching innovation in the history of the Law Faculty. His focus on developing a SA pedagogy of law also saw him participating in the recent national fellowship programme. His contribution to innovative legal education models have been recognised on various occasions, inter alia with the Council on Higher Education/HELTASA's National Excellence in Teaching and Learning award. **PROF MICHAEL SAMWAYS** of the Department of Conservation Ecology and Entomology is recognised as an international expert on biodiversity and the world's most prolific researcher on insect conservation with more than 320 articles, 57 book chapters and 15 books. This A-rated researcher's contributions have been recognised with a citation of excellence from the World Conservation Union's Species Survival Commission and a gold medal for achievement in natural sciences from the SA Akademie vir Wetenskap en Kuns.

**DR THERINA THERON**, Senior Director: Research and Innovation, has been a key player in establishing an effective research and innovation support platform at Stellenbosch University. She participated in drafting and implementing the SU policies on research ethics and contract management, plagiarism and conflict of interest. Under her guidance, proposals for research funding are facilitated at institutional, national and global level, and all research contract management is monitored. As a member of the International Accreditation Committee, she contributes to capacity-building for research managers in the Southern African region. **PROF SERVAAS VAN DER BERG** is an economics professor and incumbent of the SARChI research chair in the economics of social policy. He was also closely involved in economic policy discussions during the country's political transition, and has remained an influential participant. The global database RePEc, which analyses the research of over 48 000 economists worldwide, ranks him highest of all South African economists working locally. He was also the first African to be honoured with a fellowship by the International Academy of Education.

**PROF ANTON VAN NIEKERK**, director of the Centre for Applied Ethics, was a pioneer in establishing the field of applied ethics as an independent research area in South Africa. He is an international expert in the field of biomedical ethics and has published extensively on ethics issues relating to HIV, reproductive rights, patient autonomy, informed consent, and technologies of human genome enhancement. At the intersection between moral philosophy and practical decision making, his research has had a significant social impact and has influenced social policy nationally and internationally.

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UNIVERSITY COUNCIL'S RESPONSIBILITY FOR FINANCIAL REPORTING	
INDEPENDENT AUDITOR'S REPORT TO THE COUNCIL OF STELLENBOSCH UNIVERSITY	105
ACCOUNTING POLICIES	108
CONSOLIDATED STATEMENT OF FINANCIAL POSITION	114
CONSOLIDATED INCOME STATEMENT	115
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME	116
CONSOLIDATED STATEMENT OF CHANGES IN FUNDS	117
CONSOLIDATED STATEMENT OF CASH FLOWS	118
NOTES TO THE CONSOLIDATED ANNUAL FINANCIAL STATEMENTS	119



The University Council accepts responsibility for the integrity, objectivity and reliability of the consolidated annual financial statements of Stellenbosch University. The responsibility for the preparation and presentation of the annual financial statements has been delegated to management.

he Council is of the opinion that Stellenbosch University, including the subsidiaries, associate companies and trusts included in the consolidated annual financial statements, is operated as a going concern, and consequently the annual financial statements have been prepared on this basis.

It is the responsibility of the external auditor to express an independent opinion on the fair presentation of the consolidated annual financial statements, based on their audit. They had unrestricted access to all financial records and related data, including minutes of meetings of the Council and all Council committees.

The Audit and Risk Committee has confirmed that adequate internal financial control systems are maintained and that there were no material defects in the functioning of the internal financial control systems during the year.

The Council is satisfied that the consolidated annual financial statements fairly present the financial position, the results of operations, changes in funds and cash flows in line with the relevant accounting policies based on International Financial Reporting Standards (IFRS).

Between the year-end and the date of this report, no material facts or circumstances have arisen that materially affect the financial position of Stellenbosch University.

The consolidated annual financial statements on pages 108 to 144 were approved by the Council and were signed by:

Crean Steyn

Mr GM Steyn Chairperson of the University Council

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**Prof L van Huyssteen** Chief Operating Officer

**Prof DP du Plessis** Chairperson of the Audit and Risk Committee

8 May 2017

#### REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS OPINION

Phave audited the consolidated financial statements of Stellenbosch University set out on pages 108 to 144, which comprise the consolidated statement of financial position as at 31 December 2016, and the consolidated income statement, statement of other comprehensive income, statement of changes in funds, and statement of cash flows for the year then ended, as well as the notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of Stellenbosch University as at 31 December 2016, and its consolidated financial performance and consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards and the requirements of the Higher Education Act of South Africa, act no. 101 of 1997.

#### **BASIS FOR OPINION**

We conducted our audit in accordance with the International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the consolidated financial statements section of our report.

We are independent of the University in accordance with the International Ethics Standards Board for Accountants' Code of ethics for professional accountants (IESBA code) together with the ethical requirements that are relevant to our audit in South Africa. We have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### **RESPONSIBILITIES OF THE COUNCIL**

The Council is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards and the requirements of the Higher Education Act of South Africa and for such internal control as the Council determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Council is responsible for assessing Stellenbosch University's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless the Council either intends to liquidate the University or to cease operations, or has no realistic alternative but to do so.

#### AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of the consolidated financial statements is included in the annexure to the auditor's report.

# REPORT ON THE AUDIT OF THE ANNUAL PERFORMANCE REPORT

#### INTRODUCTION AND SCOPE

In accordance with the Public Audit Act of South Africa, 2004 (Act No. 25 of 2004) (PAA) and the general notice issued in terms thereof we have a responsibility to report material findings on the reported performance information against predetermined objectives for selected objectives presented in the annual report. We performed procedures to identify findings but not to gather evidence to express assurance.

Our procedures address the reported performance information, which must be based on the approved performance planning documents of the University. I have not evaluated the completeness and appropriateness of the performance indicators included in the planning documents. Our procedures also did not extend to any disclosures or assertions relating to planned performance strategies and information in respect of future periods that may be included as part of the reported performance information. Accordingly, our findings do not extend to these matters.

We evaluated the reliability of the reported performance information for the following selected objectives presented in the annual report of the University for the year ended 31 December 2016:

Objectives	Pages in the annual report
Objective I – to achieve the approved headcount enrolment target	33
Objective 2 – to achieve the approved first time entering enrolment target	33
Objective 3 – to achieve the approved graduate output rate target	33
Objective 4 – to achieve the approved research output per instructional/ research professional staff target	34

We assessed the reliability of the reported performance information to determine whether it was valid, accurate and complete.

We did not identify any material findings on the reliability of the reported performance information for the following objectives:

- to achieve the approved headcount enrolment target;
- to achieve the approved first time entering enrolment target;
- to achieve the approved graduate output rate target; and
- to achieve the approved research output per instructional/research professional staff target.

#### ACHIEVEMENT OF PLANNED TARGETS

Refer to the annual report on pages 33 and 34 for information on the achievement of the planned targets for the year.

# REPORT ON AUDIT OF COMPLIANCE WITH LEGISLATION

#### INTRODUCTION AND SCOPE

In accordance with the PAA and the general notice issued in terms thereof we have a responsibility to report material findings on the compliance of the University with specific matters in key legislation. We performed procedures to identify findings but not to gather evidence to express assurance.

We did not identify any instances of material noncompliance with specific matters in key legislation, as set out in the general notice issued in terms of the PAA.

#### **OTHER INFORMATION**

The Stellenbosch University Council is responsible for the other information. The other information comprises the information included in the annual report other than the financial report and the University Council's responsibility for financial reporting included in the financial report. The other information does not include the consolidated financial statements, the auditor's report thereon and those selected objectives presented in the annual report that have been specifically reported on in the auditor's report.

Our opinion on the financial statements and findings on the reported performance information and compliance with legislation do not cover the other information and we do not express an audit opinion or any form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements and the selected objectives presented in the annual performance report, or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed on the other information obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact.

#### INTERNAL CONTROL DEFICIENCIES

We considered internal control relevant to our audit of the consolidated financial statements, reported performance information and compliance with applicable legislation; however, our objective was not to express any form of assurance thereon. We did not identify any significant deficiencies in internal control.

#### **OTHER REPORTS**

We draw attention to the following engagements conducted by various parties that had, or could have, an impact on the matters reported in the University's financial statements, reported performance information, compliance with applicable legislation and other related matters. These reports did not form part of our opinion on the financial statements or our findings on the reported performance information or compliance with legislation.

We issued 22 agreed-upon procedures engagement reports during the year ended 31 December 2016 on funding from various donors and Department of Higher Education and Training funding. These reports covered periods ranging from 1 January 2013 to 19 August 2016. We issued 17 donor funding audit and non-audit assurance reports during the year ended 31 December 2016 covering periods ranging from 1 January 2014 to 15 September 2016.

Fricewaterhouse Gopers Inc.

PricewaterhouseCoopers Inc.

D Adriaans Registered Auditor Stellenbosch 31 May 2017

## Annexure - AUDITOR'S RESPONSIBILITY FOR THE AUDIT

s part of an audit in accordance with the ISAs, we exercise professional judgement and maintain professional scepticism throughout our audit of the consolidated financial statements, and the procedures performed on reported performance information for selected objectives and on the University's compliance with respect to the selected subject matters.

### **FINANCIAL STATEMENTS**

In addition to our responsibility for the audit of the consolidated financial statements as described in the auditor's report, we also:

- identify and assess the risks of material misstatement of the consolidated financial statements whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control.
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Council.
- conclude on the appropriateness of the Council's use of the going concern basis of accounting in the preparation of the financial statements. We also conclude, based on the audit evidence obtained, whether a material

uncertainty exists related to events or conditions that may cast significant doubt on Stellenbosch University's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements about the material uncertainty or, if such disclosures are inadequate, to modify the opinion on the financial statements. Our conclusions are based on the information available to me at the date of the auditor's report. However, future events or conditions may cause a University to cease to continue as a going concern.

- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

## COMMUNICATION WITH THOSE CHARGED WITH GOVERNANCE

We communicate with the Council regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also confirm to the Council that we have complied with relevant ethical requirements regarding independence, and communicate all relationships and other matters that may reasonably be thought to have a bearing on our independence and where applicable, related safeguards.

## Accounting **POLICIES**

The principal accounting policies applied in the preparation of these consolidated annual financial statements are set out below. The policies are applied consistently for all periods covered by these consolidated annual financial statements.

## I. BASIS OF PREPARATION

The consolidated annual financial statements of Stellenbosch University are prepared in accordance with International Financial Reporting Standards (IFRS). The consolidated annual financial statements are prepared on the historical cost basis, as amended by the revaluation of investments available for sale, endowments and investment properties.

In the preparation of these consolidated annual financial statements in accordance with IFRS a number of critical accounting estimates are relied upon. Application of the University's accounting policies is at management's discretion. Areas requiring greater discretion, and areas involving significant assumptions and estimates, are discussed in note 1 to the consolidated annual financial statements.

## STANDARDS, INTERPRETATIONS AND AMENDMENTS TO PUBLISHED STANDARDS APPLIED FOR THE FIRST TIME DURING THE YEAR

Certain new standards, amendments and interpretations relating to existing standards that have become compulsory for the financial year starting on 1 January 2016, have been applied by the University for the first time. None of these had a material impact on the consolidated annual financial statements. The amendments to and interpretations of the standards are as follows:

Amendments to IFRS 10       'Consolidated financial statements' and IAS 28, 'Investments in a ventures' on applying the consolidation exemption         Amendment to IFRS 11       'Joint arrangements' on acquisition of an interest in a joint oper	,
	ation
Amendments to IAS I 'Presentation of financial statements' disclosure initiative	
Amendment to IAS 16 'Property, plant and equipment' and IAS 38, 'Intangible assets', or amortisation	on depreciation and
Amendments to IAS 16 'Property, plant and equipment' and IAS 41, 'Agriculture' on be	arer plants
Amendments to IAS 27 'Separate financial statements' on equity accounting	
Amendment to IFRS 5 'Non-current assets held for sale and discontinued operations'	
Amendments to IFRS 7 'Financial instruments: Disclosures'	
Amendment to IAS 19 'Employee benefits'	
Amendment to IAS 34 'Interim financial reporting'	
IFRS 14 'Regulatory deferral accounts'	

## STANDARDS AND AMENDMENTS TO EXISTING STANDARDS NOT YET EFFECTIVE

Certain new standards and amendments to existing standards that have become compulsory for accounting periods commencing on or after 1 January 2017 or later and that the University has not yet applied, have been published. The University will apply these in the applicable period, if relevant. The new standards and amendments to existing standards are as follows:

Standards and	amendments to existing standards which will affect the consolidated annual financial statements
IFRS 9	'Financial instruments' (2009 & 2010), on financial liabilities, derecognition of financial instruments, financial assets and general hedge accounting (effective date of 1 January 2018)

IFRS 9 addresses the classification and measurement of financial assets and replaces the multiple classification and measurement models in IAS 39 with a single model that has only two classification categories: amortised cost and fair value. IFRS 9 includes guidance on financial liabilities and for the derecognition of financial instruments.

IFRS 15 and	'Revenue from contracts with customers' (effective date of 1 January 2018)
amendment to	
IFRS 15	

IFRS 15 is a single, comprehensive revenue recognition model for all contracts with customers to achieve greater consistency in the recognition and presentation of revenue. Revenue is recognised based on the satisfaction of performance obligations, which occurs when control of the goods or service transfers to a customer.

IFRS 16 'Leases' (effective date of 1 January 2019)

The new standard addresses the definition of a lease, recognition and measurement of leases and establishes principles for reporting useful information to users of financial statements about the leasing activities of both lessees and lessors. A key change is that most operating leases will be accounted for on the statement of financial position of lessees.

Management is currently investigating the impact of these new standards and amendments, but there will not be a material impact on the consolidated annual financial statements of the University in the following year.

Standards and amendments to existing standards which will not have a material effect on the consolidated annual financial statements						
Amendments to IFRS 10	'Consolidated financial statements' and IAS 28, 'Investments in associates and joint ventures' (effective date postponed)					
Amendment to IAS 12	'Income taxes' (effective date of 1 January 2017)					
Amendment to IAS 7	'Cash flow statements' (effective date of 1 January 2017)					
Amendments to IFRS 2	'Share-based payments' (effective date of 1 January 2018					
Amendment to IFRS 9	'Financial instruments' (effective date of 1 January 2018)					
Amendments to IFRS 4	'Insurance contracts' (effective date of   January 2018)					
Amendments to IAS 40	'Investment property' (effective date of 1 January 2018)					
IFRIC 22	'Foreign currency transactions and advance consideration' (effective date of 1 January 2018)					
Amendments to IFRS 1	'First-time adoption of IFRS' (effective date of 1 January 2018)					
Amendments to IFRS 12	'Disclosure of interests in other entities' (effective date of 1 January 2017)					
Amendments to IAS 28	'Investments in associates and joint ventures' (effective date of 1 January 2018)					

## 2. BASIS OF CONSOLIDATION

### **SUBSIDIARIES**

All entities in which the University, directly or indirectly, has an interest of more than half of the voting rights, or otherwise is able to exercise control over activities, are included in the consolidated annual financial statements. The purchase method is used to bring the acquisition of subsidiaries to book. The cost of an acquisition is measured as the fair value of assets transferred and liabilities assumed at the date of the transaction, including any transaction costs. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at fair value.

The surplus of the cost of acquisition over the fair value of the group's share of identifiable net assets is accounted for as goodwill. The results of subsidiaries acquired during the year are included from the date on which effective control has been obtained. Subsidiaries are deconsolidated from the date on which effective control ends.

The University recognises any non-controlling interest in the acquiree on an acquisition-by-acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the recognised amounts of the acquiree's identifiable net assets.

Intergroup transactions, balances and unrealised profits on transactions between the University and its subsidiaries are eliminated. Unrealised losses are also eliminated and are treated as a potential indicator of impairment of the underlying asset. The accounting policies of subsidiaries are adjusted during consolidation, where necessary.

## ASSOCIATE COMPANIES

An associate company is a company, other than a subsidiary, in which the University holds an investment

and on which it can have a significant influence due to the nature and size of its investment. The results of associates have been accounted for by using the equity method. The equity method involves the recognition of the interest of the University and its subsidiaries in the postacquisition profits and losses of associate companies in the consolidated income statement and the postacquisition movements in reserves in the consolidated statement of comprehensive income.

The cumulative postacquisition movements are adjusted against the carrying amount of the investment in the associate company. The recognition of the share of the University and its subsidiaries in losses of associate companies is limited to the interest in the associate company. Additional losses are only recognised to the extent that the University and its subsidiaries have guaranteed the debt of the associate company.

Intergroup transactions, balances and unrealised profits on transactions between the University and its associate companies are eliminated to the extent of the University's interest in the associate companies. Unrealised losses are also eliminated and are treated as a potential indicator of impairment of the underlying asset. The accounting policies of associate companies are adjusted, where necessary, in applying the equity method.

## 3. FOREIGN EXCHANGE

## FUNCTIONAL AND PRESENTATIONAL CURRENCY

Items included in the consolidated annual financial statements are measured by using the currency of the primary economic environment in which the University operates (the functional currency). The consolidated annual financial statements are presented in South African rand, the functional and presentational currency of the University.

## TRANSACTIONS AND BALANCES

Foreign exchange transactions are accounted for at the exchange rate ruling on the date of the transaction. Profits and losses arising from the settlement of such transactions and the conversion of monetary assets and liabilities denominated in foreign currency are recognised in the consolidated income statement. These balances are converted at exchange rates ruling at year-end.

## 4. PROPERTY, BOOKS AND EQUIPMENT

Land and buildings mainly consist of stands, lecture halls, laboratories, residences and administrative buildings. Land and buildings are shown at historical cost less accumulated depreciation, excluding donations of land and buildings valued at fair value by sworn valuers at the date of donation. The University has applied the IFRS I exemption in terms of which the fair market value of buildings at the date of conversion (I January 2004) is the deemed cost.

Historical cost includes direct costs associated with the acquisition of the item. Postacquisition costs are added to the original cost, or recognised as a separate asset, only when it is probable that future economic benefits associated with the item will flow to the University and the cost can be measured reliably. All other repair and maintenance costs are recognised in the consolidated income statement in the period in which they are incurred.

Books and equipment are shown at cost, excluding donations of books and equipment that are valued at fair value by sworn valuers at date of donation.

Government grants received for infrastructure are recognised by subtracting the grant from the value of the asset.

Land is not depreciated, as it has an unlimited useful life. Other assets are depreciated by using the straight-line method to write off cost or revalued amounts to residual values over their useful life.

	Residual 2016 %	Depreciation 2016 %	Residual 2015 %	Depreciation 2015 %
Land	100	-	100	-
Buildings	-	1,3-20,0	-	1,3-20,0
Computer equipment	-	33,3	-	33,3
Other	0-40	5-25	0-40	5-25
Library books	-	100	-	100

Residuals and depreciation rates are as follows:

The useful life of property, books and equipment is reviewed annually and, if necessary, adjusted.

If the carrying value of an asset is significantly in excess of its realisable value, it is written down to the realisable value.

Profits and losses on the sale of assets are recognised in the consolidated income statement and represent the difference between the proceeds and the carrying amount at the date of sale.

## 5. INTANGIBLE ASSETS

Purchased computer software licences are capitalised at the cost incurred to obtain and use the specific software. This cost is amortised over the expected useful life of the software. The expected useful life of software falling into this category at year-end is 10 years. Postacquisition costs incurred in the maintenance of computer software are recognised as expenditure in the period in which incurred.

Intangible assets include only computer software licences.

## 6. FINANCIAL INSTRUMENTS

Financial instruments include cash and cash equivalents, derivatives, investments, loans and receivables, trade and other payables and borrowings. Financial instruments are initially recognised at fair value, including transaction costs. Conventional buying and selling of financial assets are recognised at date of trade.

The University classifies its financial assets in the following categories: loans and receivables; investments

available for sale and financial instruments carried at fair value, with adjustments in the consolidated income statement through profit and loss. The University classifies financial liabilities in the following categories: trade and other payables and interestbearing borrowings. The classification is determined by the purpose for which the asset or liability has been acquired. Management determines the classification at initial recognition.

## LOANS AND RECEIVABLES

Loans and receivables are non-derivative financial instruments with fixed or determinable repayments not quoted in an active market. Loans and receivables are initially measured at fair value. Where amounts are only payable 12 months from year-end, they are included in non-current assets, otherwise in current assets.

Loans and receivables are shown at amortised cost by using the effective-interest-rate method and after provision for impairment of the outstanding amount. An allowance for credit losses is raised in the event of objective evidence that outstanding amounts will not be collected in accordance with the original terms. The amount of the provision is the difference between the carrying amount and the recoverable amount, being the current value of the expected cash flows, discounted at the effective interest rate.

Significant financial difficulty and failure to pay outstanding debt are deemed indicators of impairment. The carrying amount of the asset is decreased by raising a provision. The amount of the impairment is recognised in the consolidated income statement as operating expenditure. When the debt or loan becomes irrecoverable, it is written off against the provision. Subsequent recoveries of any amounts previously written off are credited to the consolidated income statement against operating expenditure.

Trade and other receivables, excluding forward foreign exchange contract assets, are classified as loans and receivables.

Cash and cash equivalents, classified as loans and receivables, consist of cash on hand, call deposits, investments in money market instruments and bank overdrafts.

## **INVESTMENTS AVAILABLE FOR SALE**

Investments are classified as 'available for sale' and are shown at fair value by using relevant valuation methods. Investments are included in non-current assets, unless the University intends to dispose of the investment within 12 months from year-end. Purchases and sales of investments are recognised at the date of trade, ie the date on which the University commits itself to the purchase and sale. Changes in fair values are shown in the statement of comprehensive income. The difference between the net sale proceeds and the cost of the investment is transferred from the fair-value reserve to the consolidated income statement on disposal.

Investments are derecognised when the right to cash flow expires or is transferred or the University has transferred the significant associated risks and benefits of ownership.

A distinction is made between changes in value resulting from exchange rate changes and fair-value changes in instruments denominated in foreign currency and classified as 'available for sale'. Exchange rate gains and losses are recognised in the consolidated income statement. Movements in the fair values of these investments are recognised in the statement of comprehensive income.

The fair values of listed investments are based on current market prices. The University determines the value of unlisted investments and investments in respect of which there is no active market by using relevant valuation techniques.

The University determines at each year-end whether a financial asset has been impaired, provided objective evidence can be provided. A significant decline in the fair value of the investment below its cost over a period is indicative of impairment. If there is such evidence for investments available for sale, the cumulative loss is transferred from the fair-value reserve to the consolidated income statement.

The cumulative loss is calculated as the difference between the acquisition cost and the current fair value net of any impairments recognised in previous periods. Impairment losses recognised in the consolidated income statement are not reversed on later recovery.

#### **DERIVATIVE INSTRUMENTS**

Derivative instruments, including forward foreign exchange contracts, are classified as 'at fair value with adjustments through the consolidated income statement'. These instruments are recognised at fair value at the date the derivative contract has been entered into. In subsequent periods it is revalued at fair value. Profits and losses on derivative instruments are recognised in the consolidated income statement.

### TRADE AND OTHER PAYABLES

Trade and other payables, excluding forward foreign exchange contract liabilities, are initially recorded at fair value. Thereafter they are shown at amortised cost by using the effective-interest-rate method.

## **INTEREST-BEARING BORROWINGS**

Borrowings are initially recognised at fair value, taking into account any transaction costs incurred. After initial recognition borrowings are carried at amortised cost. Differences between the initially recognised amount and the redemption amount are recognised in the consolidated income statement over the term of the borrowings by using the effective-interest-rate method. Borrowings are shown as current liabilities, except where the University has an unconditional right to defer payment for at least 12 months after year-end, in which case these are shown as non-current liabilities.

## 7. RESEARCH AND DEVELOPMENT COSTS

Research and development costs are recognised as expenditure in the year in which incurred, since both are inherent in the normal operations of a university.

## 8. DONATIONS

Donations are recognised at fair value at the date of the donation, based on external valuations.

#### 9. INVENTORIES

Inventories, mainly comprising consumer goods and stationery, are shown at the lower of cost, on the basis of average cost, or net realisable value.

Cost excludes finance charges. Net realisable value is the estimated selling price in the normal course of business, less selling costs.

## **10.IMPAIRMENT OF NON-FINANCIAL ASSETS**

Assets with an indefnite useful life are not depreciated or amortised and are subject to annual testing for impairment. Assets subject to depreciation or amortisation are tested for potential impairment if an event or change in circumstances indicates that the carrying amount of the asset may not be recoverable. An impairment loss is recognised for the amount by which the carrying amount of the asset exceeds its recoverable amount. The recoverable amount is the higher of the fair value of an asset, less any selling costs, or its value in use. In the test for impairment, assets are grouped at the lowest level for which there is a separate identifiable cash flow (cash-generating units). Non-financial assets previously impaired are reviewed at every year-end for potential reversal of previously recognised impairments.

### **II. REVENUE RECOGNITION**

Income is recognised at the fair value of the amounts or goods received.

Donation income is accounted for when it accrues.

Student and accommodation fees are recognised as and when the service is provided.

Central government grants are recognised in the period for which they are received. Government grants are recognised where there is reasonable certainty that the grant will be received and that the University will meet all the associated conditions. Government grants received for infrastructure are included in liabilities as deferred government grants and are credited to the asset when the asset becomes availabe for use, resulting in a decrease in the depreciation recognised in the consolidated income statement over the expected lives of related assets.

Research grants are recognised over the term of the research and based on the terms of the individual contracts.

Interest income is recognised on a time apportionment basis by using the effective-interest-rate method. On impairment of a debtor the University reduces the carrying amount to the recoverable amount. The recoverable amount represents the future cash flow, discounted at the original effective interest rate. This discount is recognised as interest over time. Interest income on loans in respect of which an impairment has been recognised, is recognised at the original effective interest rate.

Interdepartmental income is eliminated.

Other income earned by the University is recognised on the following bases:

- Dividend income when the shareholder's rights to receive a dividend vest, ie on the last day for registration in respect of listed shares, and when declared in the case of unlisted shares.
- Rental income receipts in respect of operating leases are recognised in the consolidated income statement on a straight-line basis over the period of the lease.
- Accidental sales and services are recognised in the period in which they accrue.

#### **12. LEASES**

If the lessor retains the significant risks and benefits associated with ownership of a leased item, the item is classified as an operating lease. Payments in respect of operating leases are recognised in the consolidated income statement on a straight-line basis over the period of the lease.

The University leases property and equipment. Lease agreements where the University, as lessee, receives all the significant risks and benefits of ownership, are classified as leases. Finance leases are capitalised at the beginning of the lease term at the lower of the market value of the leased property and the current value of the minimum lease payments. Each lease payment has a liability and finance charges element and is apportioned accordingly. The corresponding lease liability, net of finance charges, is recognised in the consolidated statement of financial position. Property and equipment acquired by means of finance leases are depreciated over the shorter of the useful life or the lease term of the asset.

## **13.INVESTMENT PROPERTIES**

Investment properties are held to generate rental income and to achieve capital growth. Owner-occupied properties are held for administrative, tuition and research purposes. Differences in use distinguish owneroccupied properties from investment properties.

Investment properties are deemed long-term investments and are carried at fair value determined annually by external sworn valuers. Investment properties are not depreciated. Any change in value is recognised directly in the consolidated income statement.

Owner-occupied properties are recognised and measured in accordance with the accounting policy for property, books and equipment.

## **14. PROVISIONS**

Provisions are recognised when the University has a current statutory or constructive liability as a result of a past binding occurrence that will probably lead to an outflow of resources in the form of economic benefits to meet the liability, and a reasonable estimate of the amount of the liability can be made. Provisions are measured at the current value of the expected future expenditure to meet the liability, discounted at the market-related rate for similar provisions. Changes in the value of provisions due to passage of time are recognised as interest.

## **15.STAFF BENEFITS**

## POSTRETIREMENT MEDICAL BENEFITS AND GROUP LIFE INSURANCE SCHEME

Retired employees receive postretirement medical benefits. Access to this benefit is restricted to employees appointed prior to 1 June 2002. All employees are required to participate in the group life insurance scheme. The expected costs of these benefits are recognised over the period of employment. The liability in respect of postretirement medical benefits is the present value of the liability at year-end less the fair value of plan assets and any adjustments for actuarial profits or losses and past-service costs. The liability is calculated actuarially by independent actuaries at least once every three years. Actuarial profits and losses are recognised immediately in the consolidated statement of comprehensive income.

#### **PENSION LIABILITIES**

Contributions are made monthly to the US Retirement Fund, a defined-contribution plan for permanent employees of the University. A defined-contribution plan is a pension plan in terms of which the University makes fixed contributions to an external fund.

## LONG-SERVICE BENEFITS

After 25 years' service employees qualify for a gratuity valued at 50% of the employee's monthly salary (with

a minimum value of R400 and a maximum value of R5 000). The University recognises a liability and the concomitant expenditure as and when the liability accrues.

## **16. DEFERRED TAXATION**

Deferred tax is provided by using the liability method. Deferred tax represents the tax effect of temporary differences between the tax bases of assets and of liabilities and their carrying values for financial reporting purposes. Deferred tax assets and liabilities are determined using tax rates (and laws) that have been enacted or substantively enacted by the statement of financial position date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled. Deferred tax assets are only recognised to the extent of their recoverability. Deferred tax is not provided if it arises from the initial recognition of assets and liabilities from transactions other than business combinations and at the date of the transaction does not impact accounting profits or losses or taxable income or determined losses.

## CONSOLIDATED STATEMENT OF FINANCIAL POSITION AT 31 DECEMBER 2016

			Restated (*)
		2016	2015
	Notes	R000	R000
ASSETS			
NON-CURRENT ASSETS		12 895 559	12 386 466
Property, books and equipment	4	4 782 785	4 456 719
Intangible assets	5	2 144	2   44
Long-term investments	6	7 893 329	7 684 108
Investment properties	7	-	29 860
Investment in associate companies	8	5 254	6 405
Long-term portion of trade and other receivables	9	208 410	199 110
Deferred tax	10	2 875	2 934
Operating lease asset	12	761	5 186
CURRENT ASSETS		018 273	943 660
Inventories	11	4 932	4 086
Trade and other receivables	9	261 150	317612
Short-term portion of operating lease asset	12	67	4 368
Cash and cash equivalents	25	752 124	617 594
TOTAL ASSETS		3 9 3 832	13 330 126
FUNDS AND LIABILITIES			
AVAILABLE FUNDS		12 254 208	823 82
Unrestricted funds: Earmarked funds	2	701 654	239 77
Unrestricted funds: Unearmarked funds	2	459 461	423 237
Restricted funds	2	8 553 334	7 624 133
	2	9 714 449	9 287 141
Property revaluation reserve	2	2 538 731	2 538 731
Non-controlling interests	2	I 028	(2 051)
NON-CURRENT LIABILITIES		774 371	683 636
Interest-bearing borrowings	3	144 790	2 53
Staff benefits	27	629 581	571 105
CURRENT LIABILITIES		885 253	822 669
Trade and other payables	13	871 206	820 236
Deferred taxation	10	598	_
Short-term portion of interest-bearing borrowings	3	13 449	2 433
TOTAL FUNDS AND LIABILITIES		13 913 832	3 330  26
		13 713 032	15 550 126

## CONSOLIDATED INCOME STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2016

		Educational & general	Educational & general	Educational & general	Student and staff accom- modation	2016 Total	Restated (*) 2015 Total
	Notes	Unrestricted R000	Restricted R000	Total R000	Restricted R000	R000	R000
TOTAL INCOME		2 436 535	2 590 168	5 026 703	284 725	5 311 428	5 032 843
RECURRING ITEMS							
Government grants		29  4 5	476 901	768 3 5	19 597	1 787 912	1 575 520
Student, accommodation and other fees		803 296	71 684	874 980	254 986	1 129 965	233 054
Grants and contracts		105 382	04 837	1210219	-	1 210 219	910 196
Private donations		11 553	326 890	338 442	-	338 442	215 336
Sale of services and products		66	190 610	190 676	-	190 676	182 091
Subtotal		2 211 711	2 170 921	4 382 632	274 583	4 657 215	4     6   97
Interest and dividends earned	19	30 258	277 849	308 107	10 134	318 241	347 688
Profit on disposal of property, books and equipment		_	6     8	6     8	-	6     8	6 379
Profit realised on disposal of investments	20	197 545	129 505	327 049	-	327 049	545 744
Equity profit in associate companies			370	370		370	590
Foreign exchange gain		(2 979)	4 405	426	8	434	15 245
		2 436 535	2 590 168	5 026 703	284 725	5 311 428	5 032 843
TOTAL EXPENDITURE		I 993 780	2 361 975	4 355 756	214 849	4 570 604	4 063 129
RECURRING ITEMS							
Staff costs	15	32  568	819 451	2  4  0 9	31 183	2 172 202	938 846
Academic professional		717 289	244 638	961 927	-	961 927	870 033
Other Other operating		604 280	574 813	79 093	31 183	1 210 276	1 068 813
expenditure	17	557 216	362   3	9 9 347	173 142	2 092 489	I 854 695
Depreciation	17	114 871	168 448	283 319	4 553	287 872	252 363
Subtotal		I 993 656	2 350 029	4 343 685	208 878	4 552 563	4 045 904
Loss on disposal of property, books and equipment		124	( 32)	(8)	8		
Finance charges		-	12 078	12 078	5 963	18 041	17 225
		1 993 780	2 361 975	4 355 756	214 849	4 570 604	4 063 129
APPORTIONMENT TO/ (FROM) RESERVES			84 433	84 433	(84 433)	<u> </u>	
TRANSFERS (FROM)/							
TO RESERVES		(213 006)	198 449	(14 557)	14 557	-	
		(213 006)	282 882	69 876	(69 876)	-	
SURPLUS FOR THE YEAR		229 748	511 075	740 823	-	740 823	969 714
Attributable to holding company		229 748	511 302	741 050	-	741 050	977 431
Attributable to non-controlling interest		-	(227)	(227)	-	(227)	(7 717)
SURPLUS FOR THE YEAR		229 748	511 075	740 823	-	740 823	969 714

# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2016

Educational & general	Student and staff accom- modation	Subsidiary companies	Loan funds	Endowment funds	Fixed-asset funds	Non- controlling interests	Total
R000	R000	R000	R000	R000	R000	R000	R000
Restated (*))							
977 431	-	-	-	-	-	(7 7   7)	969 714
income							
(162 660)	(12 870)	_	-	(334 001)	(36 212)	-	(545 744)
262 743	20 204	-	-	424  87	57 558	-	764 691
(830)	-	-	-	-	-	-	(830)
(777 228)	80 536	4 586	(2 440)	437 330	269 779	(12 563)	-
72 528	(42 443)	-	31 829	(153 892)	91 979	-	-
371 984	45 427	4 586	29 389	373 623	383 103	(20 279)	87 83
741 050	-	-	-	-	-	(227)	740 823
income							
(99 608)	(7 872)	-	-	(197 307)	(22 262)	-	(327 049)
20 622	I 588	(195)	-	9 755	4 982	-	36 752
(23 447)	-	-	-	-	-	-	(23 447)
(137 500)	73 900	23 078	22  3	393 780	(375 389)	-	-
72 528	(42 443)	-	31 829	(153 892)	91 979	-	-
573 646	25 173	22 883	53 960	52 335	(300 690)	(227)	427 079
	& general R000 Restated (*)) 977 431 income (162 660) 262 743 (830) (777 228) 72 528 371 984 371 984 (99 608) 20 622 (23 447) (137 500) 72 528	Educational & general       staff accom- modation         R000       R000         Restated (*))       -         977 431       -         977 431       -         income       (12 870)         262 743       20 204         (830)       -         (777 228)       80 536         72 528       (42 443)         371 984       45 427         741 050       -         (99 608)       (7 872)         20 622       1 588         (23 447)       -         (137 500)       73 900         72 528       (42 443)	Educational & general         staff accom- modation         Subsidiary companies           R000         R000         R000           Restated (*))         .         .           977 431         -         .           977 431         -         .           (162 660)         (12 870)         .           262 743         20 204         .           (830)         -         .           (830)         -         .           (777 228)         80 536         4 586           72 528         (42 443)         .           741 050         -         .           (99 608)         (7 872)         .           (99 608)         (7 872)         .           (137 500)         73 900         23 078           (137 500)         73 900         23 078           72 528         (42 443)         . <td>Educational &amp; general         staff accommodation         Subsidiary companies         Loan funds           R000         R000         R000         R000           Restated (*))         977 431         -         -           977 431         -         -         -           income         (162 660)         (12 870)         -         -           (162 660)         (12 870)         -         -         -           (162 660)         (12 870)         -         -         -           (830)         -         -         -         -         -           (830)         -         -         31 829         -         -           72 528         (42 443)         -         31 829         -         -           371 984         45 427         4 586         29 389         -         -           741 050         -</td> <td>Staff &amp; general         Subsidiary modation         Loan Companies         Loan funds         Endowment funds           R000         R000         R000         R000         R000           Restated (*))         977 431         -         -         -           977 431         -         -         -         -           (162 660)         (12 870)         -         -         (334 001)           262 743         20 204         -         -         424 187           (830)         -         -         -         -           (777 228)         80 536         4 586         (2 440)         437 330           72 528         (42 443)         -         31 829         (153 892)           371 984         45 427         4 586         29 389         373 623           741 050         -         -         -         -           (99 608)         (7 872)         -         -         9 755           (23 447)         -         588         (195)         -         9 755           (137 500)         73 900         23 078         22 131         393 780           72 528         (42 443)         -         31 829         (153 892)</td> <td>Staff &amp; general         Subsidiary modation         Loan funds         Endowment funds         Fixed-asset funds           R000         R000         R000         R000         R000         R000           Restated (*))         977 431         -         -         -         -           977 431         -         -         -         -         -           income         (12 870)         -         -         (334 001)         (36 212)           262 743         20 204         -         -         424 187         57 558           (830)         -         -         -         -         -           (777 228)         80 536         4 586         (2 440)         437 330         269 779           72 528         (42 443)         -         31 829         (153 892)         91 979           371 984         45 427         4 586         29 389         373 623         383 103           741 050         -         -         -         -         -           (99 608)         (7 872)         -         -         (197 307)         (22 262)           20 622         1 588         (195)         -         9 755         4 982</td> <td>staff &amp; general         subsidiary modation         Subsidiary companies         Loan funds         Endowment funds         Fixed-asset funds         Non- controlling interests           R000         R000         R000         R000         R000         R000         R000           Restated (*))         977 431         -         -         -         R000         (7 717)           income         (162 660)         (12 870)         -         (334 001)         (36 212)         -           262 743         20 204         -         424 187         57 558         -           (830)         -         -         -         -         -           (777 228)         80 536         4 586         (2 440)         437 330         269 779         (12 563)           72 528         (42 443)         -         31 829         (153 892)         91 979         -           371 984         45 427         4 586         29 389         373 623         383 103         (20 279)           741 050         -         -         -         -         -         -           (99 608)         (7 872)         -         -         (197 307)         (22 262)         -           (23 447)</td>	Educational & general         staff accommodation         Subsidiary companies         Loan funds           R000         R000         R000         R000           Restated (*))         977 431         -         -           977 431         -         -         -           income         (162 660)         (12 870)         -         -           (162 660)         (12 870)         -         -         -           (162 660)         (12 870)         -         -         -           (830)         -         -         -         -         -           (830)         -         -         31 829         -         -           72 528         (42 443)         -         31 829         -         -           371 984         45 427         4 586         29 389         -         -           741 050         -	Staff & general         Subsidiary modation         Loan Companies         Loan funds         Endowment funds           R000         R000         R000         R000         R000           Restated (*))         977 431         -         -         -           977 431         -         -         -         -           (162 660)         (12 870)         -         -         (334 001)           262 743         20 204         -         -         424 187           (830)         -         -         -         -           (777 228)         80 536         4 586         (2 440)         437 330           72 528         (42 443)         -         31 829         (153 892)           371 984         45 427         4 586         29 389         373 623           741 050         -         -         -         -           (99 608)         (7 872)         -         -         9 755           (23 447)         -         588         (195)         -         9 755           (137 500)         73 900         23 078         22 131         393 780           72 528         (42 443)         -         31 829         (153 892)	Staff & general         Subsidiary modation         Loan funds         Endowment funds         Fixed-asset funds           R000         R000         R000         R000         R000         R000           Restated (*))         977 431         -         -         -         -           977 431         -         -         -         -         -           income         (12 870)         -         -         (334 001)         (36 212)           262 743         20 204         -         -         424 187         57 558           (830)         -         -         -         -         -           (777 228)         80 536         4 586         (2 440)         437 330         269 779           72 528         (42 443)         -         31 829         (153 892)         91 979           371 984         45 427         4 586         29 389         373 623         383 103           741 050         -         -         -         -         -           (99 608)         (7 872)         -         -         (197 307)         (22 262)           20 622         1 588         (195)         -         9 755         4 982	staff & general         subsidiary modation         Subsidiary companies         Loan funds         Endowment funds         Fixed-asset funds         Non- controlling interests           R000         R000         R000         R000         R000         R000         R000           Restated (*))         977 431         -         -         -         R000         (7 717)           income         (162 660)         (12 870)         -         (334 001)         (36 212)         -           262 743         20 204         -         424 187         57 558         -           (830)         -         -         -         -         -           (777 228)         80 536         4 586         (2 440)         437 330         269 779         (12 563)           72 528         (42 443)         -         31 829         (153 892)         91 979         -           371 984         45 427         4 586         29 389         373 623         383 103         (20 279)           741 050         -         -         -         -         -         -           (99 608)         (7 872)         -         -         (197 307)         (22 262)         -           (23 447)

# CONSOLIDATED STATEMENT OF CHANGES IN FUNDS FOR THE YEAR ENDED 31 DECEMBER 2016

	Educational & general	Student and staff accom- modation	Subsidiary companies	Loan funds	Endowment funds	Fixed-asset funds	Non-con- trolling interests	Total
	R000	R000	R000	R000	R000	R000	R000	R000
BALANCE AS AT I JANUARY 2015 (Restated (*))	3 071 225	147 369	(4   26)	285 156	2 893 191	4 224 946	18 229	10 635 990
Surplus for the year	977 431	-	-	-	-	-	(7 717)	969 714
Other comprehensive income for the year	(605 447)	45 427	4 586	29 389	373 623	383 103	(12 563)	218   17
BALANCE AS AT 31 DECEMBER 2015	3 443 209	192 796	460	314 545	3 266 814	4 608 049	(2 051)	823 82
BALANCE AS AT I JANUARY 2016	3 443 209	192 796	460	314 545	3 266 814	4 608 049	(2 051)	823 821
Surplus for the year	741 050	-	-	-	-	-	(227)	740 823
Movement of in- terest in subsidiary Other comprehen- sive income for the	-	-	-	-	-	-	3 306	3 306
sive income for the year	(167 405)	25 173	22 883	53 960	52 335	(300 690)	-	(313 744)
BALANCE AS AT 31 DECEMBER 2016	4 016 854	217 969	23 343	368 505	3 319 149	4 307 359	I 028	12 254 208

# CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2016

		2016	Restated (*) 2015
	Notes	R000	R000
CASH FLOW FROM OPERATING ACTIVITIES			
Cash received from government grants		1 822 912	I 575 520
Cash received from student, accommodation and other fees		1 104 889	98 787
Cash received from private donations		362 734	215 336
Cash received from grants and contracts		330 921	910 196
Cash received from sale of services and products		190 676	90 383
Cash paid for staff costs		(2 152 625)	(  897 021)
Cash paid for inventories and services		(2 192 053)	(1 789 648)
Cash generated by operations	24	467 454	303 552
Plus: Interest received	21	226 855	268 738
Dividends received	22	88 443	76 981
Less: Interest paid	23	(130)	(19 207)
Net cash inflow from operating activities		782 622	630 065
CASH FLOW FROM INVESTMENT ACTIVITIES		(644 874)	(571 708)
Addition to investments		(361 402)	(767 299)
Surpluses realised on investments		327 049	560 399
Addition to property, books and equipment		(613 938)	(367 711)
Proceeds from sale of property, books and equipment		3 417	2 903
CASH FLOW FROM FINANCING ACTIVITIES			
(Decrease)/Increase in interest-bearing borrowings		(3 218)	2 659
NET INCREASE IN CASH AND CASH			
EQUIVALENTS		134 530	61 015
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR		617 594	556 579
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR	25	752 124	617 594

## Notes to the Consolidated Annual Financial Statements FOR THE YEAR ENDED 31 DECEMBER 2016

## I. CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The estimates and judgements made by management are evaluated continuously and are based on past experience and other factors, which include future expectations and are deemed reasonable under the given circumstances.

Management makes estimates and assumptions about the future. Consequently, the accounting estimates used in the consolidated annual financial statements will not necessarily be in line with the actual outcome in subsequent periods. The estimates and assumptions below may have a material effect on the carrying amounts of assets and liabilities.

## **STAFF BENEFITS**

A number of assumptions are made in the provision for staff benefits. Refer to note 27 for the assumptions.

The main assumption is a medical inflation rate of 9,3% (2015: 10,3%). The effect of a 1% change in medical inflation on the 2016 consolidated annual financial statements will be as follows:

Increase of 1%	11,6% (2015: 11,6%) increase in past-service liabilities
	12,9% (2015: 12,9%) increase in service and interest costs
Decrease of 1%	9,8% (2015: 9,8%) decrease in past-service liabilities
	10,8% (2015: 10,8%) decrease in service and interest costs

The University's policy on retirement age states that employees retire at 65 years of age. After age 65 employment may be extended to a maximum age of 70, based on uninterrupted satisfactory performance. For computation purposes the normal and expected retirement age is therefore deemed 65 years.

## IMPAIRMENT OF OUTSTANDING STUDENT FEES AND LOANS

The annual provision for the impairment of student loans is based on the assumption that students can obtain loans in the market at prime (2015: prime) on average. This assumption is based on enquiries made at various financial institutions. Students are categorised as redeemable or non-redeemable. A provision for impairment of their loans is based on historical information according to the category of the student. Overdue student loans are considered annually for possible creation of an allowance for credit losses.

Provision for impairment of outstanding student fees is based on historical trends. The probability of collection is taken into account and based on that an allowance for credit losses is recognised. The probability of collection decreases with the ageing of debt and consequently a higher allowance for credit losses is recognised for older debt. A higher percentage is applied to debt handed over for collection.

## **IMPAIRMENT OF INVESTMENTS**

The University determines the significance of a fairvalue decrease to below market value by taking into account the volatility of the specific instrument. A decrease to 20% lower than the market value, or lasting longer than 12 months, is deemed significant.

## USEFUL LIFE AND RESIDUAL VALUE OF PROPERTY, BOOKS AND EQUIPMENT

Land is deemed to have an indefinite useful life. Consequently, land is not depreciated. The useful life of other assets is estimated in terms of past experience and the features of the specific items.

The residual value of assets other than land is estimated in terms of past experience and the features of the specific items.

#### MARKET VALUE OF BUILDINGS

Two methods are applied in determining the market value of buildings. The first is the directly comparable method, in terms of which value is determined with reference to the actual selling price of comparable property. The second is to base an evaluation on the potential rental income, taking into account the unique nature of the properties of the University and occupation rates.

The revaluation of buildings as at 1 January 2004 in terms of IFRS 1, First-time adoption of International Financial Reporting Standards, is based on the following key assumptions:

- The buildings will be placed on and traded in the market under normal market conditions.
- All the properties of Stellenbosch University will not be placed on the open market at the same time.
- Where there are title restrictions registered against properties that restrict or prohibit their sale, such title restrictions will be removed, where possible, by means of the Removal of Restrictions Act, 84 of 1967, before the properties are placed on the market.

## **LEAVE PROVISION**

Employees are entitled to take their annual leave within 12 months (2015: 12 months) following the end of the relevant leave year. In addition, employees appointed before 1 January 2008 are entitled to accumulate a number of days, based on their post level, or to have those days paid out. The balance expires after 12 months (2015: 12 months). In the case of employees appointed after 1 January 2008, annual leave not taken expires after 12 months (2015: 12 months). The leave provision of employees older than 60 years, however, is restricted to the leave entitlement applicable to their post level at the age of 60. No leave may be accumulated post the age of 60. Historical trends in the number of days that has expired are used in calculating the leave provision.

## 2. FUND BALANCES

The accumulated balances as at 31 December are as follows:

Restricted R000	Unrestric- ted R000	Property revaluation reserve R000	Fair-value reserve R000	Non- controlling interests R000	Total R000
2 861 545 148 351 22 369 352 412 2 124 761 2 050 588 - 7 560 026	736 711 - - 268 851 - - 1 005 562	- - - 2 538 731 - - - - - - - - - - - - - - - - - - -	349 607 27 628 974 - 692 516 78 136 - 1 148 861	- - - - 1 028 1 028	3 947 863 175 979 23 343 352 412 3 086 128 4 667 455 1 028 12 254 208
800 23   58 884 (709) 3 4 545 2  86 260   973 902	2 4 38  - - 200 486 - -	- - - 2 538 731	428 597 33 911 1 169 - 880 068 95 416 -	- - - - - - (2 051)	3 443 209 192 795 460 314 545 3 266 814 4 608 049 (2 051)
	R000 2 861 545 148 351 22 369 352 412 2 124 761 2 050 588 - 7 560 026 1 800 231 158 884 (709) 314 545 2 186 260	Restricted         ted           R000         R000           2 861 545         736 711           148 351         -           22 369         -           352 412         -           2 124 761         268 851           2 050 588         -           -         -           7 560 026         1 005 562           1 800 231         1 214 381           158 884         -           (709)         -           3 14 545         -           2 186 260         200 486           1 973 902         -	Unrestric- ted         revaluation reserve           R000         R000         R000           2 861 545         736 711         -           148 351         -         -           22 369         -         -           352 412         -         -           2 124 761         268 851         -           2 050 588         -         2 538 731           -         -         -           7 560 026         1 005 562         2 538 731           -         -         -           7 560 026         1 005 562         2 538 731           -         -         -           7 560 026         1 005 562         2 538 731           -         -         -           7 1800 231         1 214 381         -           (709)         -         -           314 545         -         -           2 186 260         200 486         -           1 973 902         -         2 538 731	Restricted         Unrestric- ted         revaluation reserve         Fair-value reserve           R000         R000         R000         R000           2 861 545         736 711         -         349 607           148 351         -         -         27 628           22 369         -         -         974           352 412         -         -         -           2 124 761         268 851         -         692 516           2 050 588         -         2 538 731         78 136           -         -         -         -           7 560 026         1 005 562         2 538 731         1 148 861           -         -         -         -           7 560 026         1 005 562         2 538 731         1 148 861           -         -         -         -           7 158 884         -         -         33 911           (709)         -         -         1 169           314 545         -         -         -           2 186 260         200 486         -         880 068           1 973 902         -         2 538 731         95 416	Restricted         Unrestric- ted         revaluation reserve         Fair-value reserve         controlling interests           R000         R000         R000         R000         R000         R000           2 861 545         736 711         -         349 607         -           148 351         -         -         27 628         -           22 369         -         -         974         -           352 412         -         -         -         -           2 124 761         268 851         -         692 516         -           2 050 588         -         2 538 731         78 136         -           -         -         -         1 028         -         1 028           7 560 026         1 005 562         2 538 731         1 148 861         1 028           1 800 231         1 214 381         -         428 597         -           .158 884         -         -         33 911         -           .(709)         -         -         1 169         -           .186 260         200 486         -         880 068         -           .1973 902         -         2 538 731         95 416         -

The allocation of the fair-value reserve is as follows:

	Funds at book	Allocation of	Funds at market
	value	fair-value reserve	value
	R000	R000	R000
2016			
Restricted funds	7 560 026	993 308	8 553 334
Unrestricted funds	I 005 562	155 553	161  15
Earmarked funds	701 654	155 553	701 654
Unearmarked funds	303 908		459 461
	8 565 588	48 86	9 714 449

	2016	2015
	R000	R000
3. INTEREST-BEARING BORROWINGS		
One government loan at a fixed interest rate repayable in equal biannual payments		
ending 2018	192	306
Various loans from financial institutions at varying interest rates and terms, repayable in		
biannual payments	41 650	43 968
Bank facility for financing the University's various motor vehicle schemes	40 052	40 837
Lease liability	76 344	29 853
	158 237	114 964
Less: Portion repayable within one year	(13 449)	(2 433)
	144 790	112 531
The maturity dates of interest-bearing borrowings are as follows:		
Within one year	3 225	_

Within one year	3 225	-
Between two and five years	40 244	44   55
After five years	114 768	70 809
	158 237	114 964

The average interest rate on borrowings amounts to 13,6% (2015: 13,6%) at year-end.

Included in interest-bearing borrowings are motor vehicle loans of R0, I million (2015: R0,2 million), for which motor vehicles are encumbered (refer to note 4). Motor vehicle loans owing by employees are included in trade and other receivables (refer to note 9). All the borrowings, excluding the motor vehicle schemes, have fixed interest rates. Motor vehicle scheme rates are linked to prime.

The minimum finance lease payments are payable as follows:

Within one year	10 781	4 472
Between two and five years	54 337	22 830
After five years	310 896	68 331
	376 014	95 633
Total payments	(299 670)	(65 780)
Less: finance charges payable	76 344	29 853
The current value of lease payments is as follows:		
Within one year (additional interest capitalised)	(4 505)	(  492)
Between two and five years	(15 333)	(3 192)
After five years	96 182	34 537
	76 344	29 853

## 4. PROPERTY, BOOKS AND EQUIPMENT

	2016				2015	
	Accumulated Net carrying Cost depreciation amount		Cost	Accumulated depreciation	Net carrying amount	
	R000	R000	R000	R000	R000	R000
Land	15 679	-	15 679	15 679	-	15 679
Buildings	4 992 336	893 939	4 098 397	4 404 245	673 462	3 730 783
Computer equipment	413 853	345 988	67 865	385 736	317 431	68 305
Other equipment and motor vehicles	028   34	427 290	600 843	915 815	273 863	641 953
Library books	673 955	673 955	-	576 588	576 588	-
	7 123 956	2 341 171	4 782 785	6 298 063	84  344	4 456 719

	Land	Buildings	Computer equipment	Other equipment and motor vehicles	Library books	Total
	R000	R000	R000	R000	R000	R000
<b>2016</b> Reconciliation of the carrying amount:						
Cost at the beginning of the year	15 679	4 646 754	385 736	915 815	576 588	6 540 573
Less: Government grant	-	(242 509)	-	-	-	(242 509)
Restated cost	15 679	4 404 245	385 736	915 815	576 588	6 298 063
Accumulated depreciation at the beginning of the year	-	(673 462)	(317 431)	(273 863)	(576 588)	(  84  344)
Net opening carrying value	15 679	3 730 783	68 305	641 953	-	4 456 719
Net additions and disposals	-	453 441	44 088	17 840	98 568	613 938
Depreciation per consolidated income statement	-	(85 827)	(44 529)	(58 949)	(98 568)	(287 872)
Net closing carrying value	15 679	4 098 397	67 865	600 843	-	4 782 785

	Land	Buildings	Computer equipment	Other equipment and motor vehicles	Library books	Total
	R000	R000	R000	R000	R000	R000
<b>2015 (Restated)</b> Reconciliation of the carrying amount:						
Cost at the beginning of the year	15 679	4 765 280	346 067	831 721	509 824	6 468 571
Less: Government grant	-	(211 922)	-	-	-	(211 922)
Restated cost	15 679	4 553 358	346 067	831 721	509 824	6 256 649
Accumulated depreciation at the beginning of the year	-	(700 550)	(280 892)	(422 029)	(509 824)	(  9 3 295)
Net opening carrying value	15 679	3 852 808	65 175	409 692	-	4 343 354
Net additions and disposals	-	(41 880)	48 582	284 632	74 395	365 729
As shown previously	-	305 720	48 582	284 632	74 395	713 329
Prior year adjustment	-	(347 600)	-	-	-	(347 600)
Depreciation per consolidated income statement	_	(80   45)	(45 452)	(52 371)	(74 395)	(252 363)
Net closing carrying value	15 679	3 730 783	68 305	641 953	-	4 456 719

The register containing full details of land and buildings is available at the offices of the University. Included in other equipment and motor vehicles are motor vehicles with a carrying amount of R0,1 million (2015: R0,2 million) that are encumbered in terms of staff motor vehicle schemes at the respective banks (refer to note 3). Included in land is property in Stellenbosch on which a notarial bond of R191,6 million (2015: R191,6 million) was registered. The rights in terms of the lease were ceded to the financier.

Work in progress to the value of R507,4 million (2015: R300,1 million) is included in the cost of buildings. No depreciation is recognised on work in progress.

The University rents property through a lease with a 15-year term and this is included in the costs and accumulated depreciation of buildings.

## 5. INTANGIBLE ASSETS

	2016			2015	
Cost	Accumulated depreciation	Net carrying amount	Cost	Accumulated depreciation	Net carrying amount
R000	R000	R000	R000	R000	R000
13 913	13 913	-	13913	13913	-
2   44	-	2   44	2   44	-	2   44
16 057	13 913	2 144	16 057	13 913	2   44

2016	2015
R000	R000

## 6. LONG-TERM INVESTMENTS

The fair values of long-term investments as at 31 December are as follows:

0		
Government bonds	576 736	682 959
Shares	6 590 649	5 999 848
Listed shares	6 586 485	5 996 293
Unlisted shares	4 164	3 555
Fixed deposits	597 851	326 415
Other	128 093	674 886
	7 893 329	7 684 108

A complete investment register is available to stakeholders at the offices of the University.

The average interest rate for purposes of valuation applicable to government bonds as at year-end was 9,1% (2015: 8,7%) and to fixed deposits 6,5% (2015: 7,7%).

The University's investment portfolios are managed by professional asset managers under the supervision of the Investment Committee of the Council.

7. INVESTMENT PROPERTIES		
Net opening carrying amount	29 860	29 270
Revaluation during the year	-	590
Change in use	(29 860)	
Net closing carrying amount	<u> </u>	29 860

On 7 February 2016, the value of investment properties as at 31 December 2015 was determined by an external sworn valuer familiar with the revaluation of occupied apartment buildings. Income received from investment properties amounted to R1,9 million in 2015.

The investment property has been reclassified as property, books and equipment on 1 January 2016 as the use and management of the building has changed and the building is now managed the same way as the other residences that the University owns.

2016	2015
R000	R000

## 8. INVESTMENT IN ASSOCIATE AND SUBSIDIARY COMPANIES

## 8.1 INVESTMENT IN ASSOCIATE COMPANIES

NameUnder ofEffective voting rightUnset Medical Laboratories (Pty) Ltd35035.0%Stellenbosch Nanoliger Company (Pty) Ltd37029.6%Stellenbosch Nanoliger Company (Pty) Ltd37024.2%Causis Technologies (Pty) Ltd3025.0%Gredgot (Pty) Ltd40040.0%Vulamaz (Pty) Ltd4040.0%Sun Magnetics (Pty) Ltd4840.0%Balance at the beginning of the year5 6614 586Net share in loss of associate company(1 137)(1 438)Balance at the beginning of the year3 2595 661S.1.2 Stellenbosch Nanofiber Company (Pty) Ltd81.3 GeoSUN Africa (Pty) LtdBalance at the beginning of the yearS.1.3 GeoSUN Africa (Pty) Ltd418327Share of faxDividends canned1 162744Share of faxDividends canned1 500-Share of faxDividends canned1 500-Share of faxDividends canned1 500-Balance at the beginning of the yearShare of faxDividends canned1 500-Balance at the ond of the yearShare of laxDividends canned1 500-Balance at the ond of the yearShare of loss(1 157)-Balance at the ond of the year <th></th> <th>Number</th> <th></th> <th>Effection</th>		Number		Effection
Unistel Medical Laboratories (Pty) Ltd     350     35.0%     35.0%       Stelenbosch Nanofiber Company (Pty) Ltd     370     29.6%     29.6%       GeoSUN Africa (Pty) Ltd     30     25.0%     25.0%       Grods Tothologies (Pty) Ltd     30     25.0%     25.0%       Grods Tothologies (Pty) Ltd     400     40.0%     40.0%       Sun Magnetics (Pty) Ltd     40     40.0%     40.0%       Sun Magnetics (Pty) Ltd     48     40.0%     40.0%       Sun State of pretax (loss)/profit of associate company     21.46     (615)       Share of fax     (615)     (613)     (613)       Dividends carned     3259     5.661     4.18       Balance at the beginning of the year     -     -     -       Share of fax     (Pty) Ltd     -     -     -       Balance at the beginning of the year     -     -     -     -       Share of fax     1     -	Name		Interest	
Custos Technologies (Pty) Ltd         370         24.2%         24.2%           GeoSUN Africa (Pty) Ltd         30         25.0%         25.0%           Sindgot (Pty) Ltd         400         40.0%         40.0%           Vulamar, Pty) Ltd         48         40.0%         40.0%           Sun Magnetics (Pty) Ltd         48         40.0%         40.0%           Balance at the beginning of the year         5 661         4 586           Net share in (loss)/profit         (1 375)         2 146           Share of aretax (loss)/profit         (615)         (613)           Dividends carned         (612)         (412)           Balance at the beginning of the year         -         -           8.1.3 GeoSUN Africa (Pty) Ltd         -         -           Balance at the beginning of the year         744         417           Net share in profit of associate company         -         -           8.1.3 GeoSUN Africa (Pty) Ltd         -         -         -           Balance at the beginning of the year         744         417           Net share in profit of associate company         -         -         -           Balance at the beginning of the year         -         -         -           Balance a	Unistel Medical Laboratories (Pty) Ltd	350	35,0%	
CeoSUN Africa (Pty) Ltd       30       25.0%       25.0%         Bridgiet (Pty) Ltd       400       40.00%       40.00%       40.02%         Vulamaz (Pty) Ltd       48       40.00%       40.02%       40.02%         8.1.1 Unistel Medical Laboratories (Pty) Ltd       48       40.00%       40.02%         Balance at the beginning of the year       5 661       4 586         Net share in (icos)/profit of associate company       (1 375)       (2 420)       1 075         Share of tax       (615)       (615)       (613)       (1 428)         Balance at the end of the year       3 259       5 661       4 586         8.1.2 Stellenbosch Nanofiber Company (Pty) Ltd       Balance at the beginning and end of the year       -       -         8.1.3 GeoSUNAfrica (Pty) Ltd       744       417         Met share in profit of associate company       744       418       3227         Share of pretax profit       744       418       3227         Share of pretax profit       1 162       744       418         Balance at the beginning of the year       -       -       -         Balance at the end of the year       -       -       -         Investment made       1 500       -       -     <				
Bridgiot (Pty) Ltd       400       40.0%       40.0%         Vulamar, (Pty) Ltd       48       40.0%       40.0%         Sun Magnetics (Pty) Ltd       48       40.0%       40.0%         Balance at the beginning of the year       5 661       4 586         K share in (loss/profit       (1 375)       2 146         Share of pretax (loss/profit       (613)       (733)         Dividends camed       (412)       (138)         Balance at the end of the year       3 259       5 661         8.1.2 Stellenbosch Nanofiber Company (Pty) Ltd       Balance at the beginning of the year       -         8.1.3 GeoSUNAfrica (Pty) Ltd       Balance at the beginning of the year       -       -         8.1.3 GeoSUNAfrica (Pty) Ltd       Balance at the beginning of the year       -       -         8.1.3 GeoSUNAfrica (Pty) Ltd       Balance at the beginning of the year       -       -         Balance at the beginning of the year       -       -       -       -         Balance at the end of the year       -       -       -       -         Balance at the beginning of the year       -       -       -       -         Balance at the beginning of the year       -       -       -       -         Bala				
Vulamanz (Pty) Ltd     48     40,0%     40,0%       Sun Magnetics (Pty) Ltd     48     40,0%     40,0%       Balance at the beginning of the year     5 661     4 586       Net share in (loss)/profit     (613)     (613)       Dividends earned     (613)     (613)       Balance at the beginning of the year     3 259     5 661       8.1.2 Stellenbosch Nanofiber Company (Pty) Ltd     Balance at the beginning of the year     -       8.1.3 GeoSUNAfrica (Pty) Ltd     Balance at the beginning of the year     -       8.1.3 GeoSUNAfrica (Pty) Ltd     Balance at the beginning of the year     -       8.1.4 Custos Technologies (Pty) Ltd     Balance at the beginning of the year     -       Balance at the beginning of the year     -     -       Share of Itax     1 162     744       Dividends carned     1 162     744       8.1.4 Custos Technologies (Pty) Ltd     Balance at the beginning of the year     -       Investment made     1 500     -       Net share in beginning of the year     -     -       Investment made     1 500     -       Balance at the beginning of the year     -     -       Investment made     1 500     -       Net share in loss of associate company     -     -       Balance at the beginning				
Sun Magnetics (Pty) Ltd     18     40.0%     40.0%       8.1.1 Unistel Medical Laboratories (Pty) Ltd     Balance at the beginning of the year     5 661     4 586       Net share in (loss)/profit of associate company     (2 402)     1 075     (1 373)     2 146       Share of pretax (loss)/profit     (615)     (633)     (412)     (438)       Balance at the end of the year     3 259     5 661     4 586       8.1.2 Stellenbosch Nanofiber Company (Pty) Ltd     Balance at the beginning and end of the year     -     -       8.1.3 GeoSUN Africa (Pty) Ltd     Balance at the beginning of the year     -     -       8.1.3 GeoSUN Africa (Pty) Ltd     Balance at the beginning of the year     -     -       8.1.3 GeoSUN Africa (Pty) Ltd     Balance at the beginning of the year     -     -       Balance at the beginning of the year     1162     744     417       Net share in profit of associate company     418     3227       Share of tax     1     162     744       Balance at the end of the year     -     -     -       Balance at the beginning of the year     -     -     -       Investment made     1 162     744     117       Balance at the end of the year     -     -     -       Investment made     1 500     - <td></td> <td></td> <td></td> <td></td>				
Balance at the beginning of the year       \$ 661       4 586         Net share in (loss)/profit       (1075)         Share of prext (loss)/profit       (1375)         Share of tax       (1375)         Dividends carned       (12)         8lance at the end of the year       3 259         8.1.2 Scellenbosch Nanofiber Company (Pty) Ltd				
Balance at the beginning of the year       \$ 661       4 586         Net share in (loss)/profit       (375)       2 146         Share of tax       (615)       (613)         Dividends earned       (412)       (438)         Balance at the end of the year       3 259       5 661         8.1.2 Scellenbosch Nanofiber Company (Pty) Ltd				
Net share in (loss)/profit of associate company       (2 402)       1 075         Share of pretax (loss)/profit       (1 375)       (2 146)         Share of tax       (615)       (633)         Dividends earned       (412)       (438)         Balance at the end of the year       3 259       5 661         8.1.2 Stellenbosch Nanofiber Company (Pty) Ltd       Balance at the beginning and end of the year       -         8.1.3 GeoSUN Africa (Pty) Ltd       744       417         Balance at the beginning of the year       744       418         3 227       Share of pretax profit       -         Share of pretax profit       418       327         Share of tax       -       -         Dividends earned       -       -         Balance at the end of the year       1 162       744         Balance at the end of the year       -       -         Balance at the end of the year       -       -         Investment made       1 500       -         Investment made       1 500       -         Net share in loss of associate company       -       -         Share of loss       (1 157)       -         Balance at the end of the year       -       -				4.50.4
Share of pretax (loss)/profit       (I 375)       2 146         Share of tax       (G137)       (G137)         Dividends earned       (G13)       (G130)         Balance at the end of the year       3 259       5 661         8.1.2 Stellenbosch Nanofiber Company (Pty) Ltd       -       -         Balance at the beginning and end of the year       -       -         8.1.3 GeoSUN Africa (Pty) Ltd       -       -         Balance at the beginning of the year       744       417         Net share in profit of associate company       418       3227         Share of tax       -       -       -         Dividends earned       -       -       -         Balance at the end of the year       1162       744       927         Share of tax       -       -       -       -         Dividends earned       -       -       -       -         Balance at the end of the year       -       -       -       -         Balance at the end of the year       -       -       -       -         Investment made       1 500       -       -       -       -         Relance at the end of the year       -       -       -       -				
Share of tax       (615)       (633)         Dividends earned       (412)       (438)         Balance at the end of the year       3 259       5 661         8.1.2 Stellenbosch Nanofiber Company (Pty) Ltd       Balance at the beginning and end of the year       -         8.1.3 GeoSUN Africa (Pty) Ltd       Balance at the beginning of the year       -       -         8.1.3 GeoSUN Africa (Pty) Ltd       Balance at the beginning of the year       744       417         Net share in profit of associate company       418       3227         Share of pretax profit       418       3227         Share of tax       -       -         Dividends earned       -       -         Balance at the end of the year       -       -         Balance at the end of the year       -       -         Balance at the beginning of the year       -       -         Investment made       1 500       -         Net share in loss of associate company       (1 157)       -         Balance at the end of the year       -       -         Investment made       1 433       -         Relance at the end of the year       -       -         Balance at the end of the year       -       - <td< td=""><td></td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td></td<>			· · · · · · · · · · · · · · · · · · ·	
Dividends earned       (412)       (438)         Balance at the end of the year       3259       5661         8.1.2 Stellenbosch Nanofiber Company (Pty) Ltd       -       -         Balance at the beginning and end of the year       -       -         8.1.3 GeoSUN Africa (Pty) Ltd       -       -         Balance at the beginning of the year       744       417         Net share in profit of associate company       418       327         Share of tax       -       -       -         Dividends earned       1162       744       -         Balance at the end of the year       1162       744       -         Balance at the end of the year       -       -       -         Balance at the end of the year       -       -       -         Balance at the beginning of the year       -       -       -         Investment made       1500       -       -       -         Net share in loss of associate company       (1157)       -       -         Balance at the end of the year       -       -       -       -         Investment made       1500       -       -       -       -         Balance at the end of the year       -       - <td></td> <td></td> <td></td> <td></td>				
Balance at the end of the year       3 259       5 661         8.1.2 Stellenbosch Nanofiber Company (Pty) Ltd       Balance at the beginning and end of the year       -       -         8.1.3 GeoSUN Africa (Pty) Ltd       Balance at the beginning of the year       744       417         Net share in profit of associate company       418       327         Share of pretax profit       418       327         Share of tax       -       -         Dividends earned       1 162       744         Balance at the beginning of the year       1 162       744         Balance at the beginning of the year       -       -         Investment made       1 500       -         Net share in loss of associate company       (1 157)       -         Balance at the end of the year       343       -         Investment made       1 500       -         Net share in loss of associate company       (1 157)       -         Balance at the end of the year       343       -         Relace at the end of the year       -       -         Net share in profit of associate company       288       -         S1.5 Bridgiot (Pty) Ltd       288       -         Balance at the beginning of the year       -       -				
8.1.2 Stellenbosch Nanofiber Company (Pty) Ltd         Balance at the beginning and end of the year			(112)	(150)
Balance at the beginning and end of the year       -       -         8.1.3 GeoSUN Africa (Pty) Ltd       -       -         Balance at the beginning of the year       744       417         Net share in profit of associate company       418       327         Share of pretax profit       418       327         Share of tax       -       -         Dividends earned       -       -         Balance at the end of the year       1162       744         8.1.4 Custos Technologies (Pty) Ltd       -       -         Balance at the beginning of the year       -       -         Investment made       1 500       -         Net share in loss of associate company       (1 157)       -         Share of loss       (1 157)       -         Balance at the beginning of the year       -       -         Investment made       1 500       -         Roll S       (1 157)       -         Balance at the end of the year       -       -         Balance at the end of the year       -       -         Roll S       1 (1 157)       -       -         Balance at the beginning of the year       -       -       -         Investment made	Balance at the end of the year		3 259	5 661
Balance at the beginning and end of the year       -       -         8.1.3 GeoSUN Africa (Pty) Ltd       -       -         Balance at the beginning of the year       744       417         Net share in profit of associate company       418       327         Share of pretax profit       418       327         Share of tax       -       -         Dividends earned       -       -         Balance at the end of the year       1162       744         8.1.4 Custos Technologies (Pty) Ltd       -       -         Balance at the beginning of the year       -       -         Investment made       1 500       -         Net share in loss of associate company       (1 157)       -         Share of loss       (1 157)       -         Balance at the beginning of the year       -       -         Investment made       1 500       -         Roll S       (1 157)       -         Balance at the end of the year       -       -         Balance at the end of the year       -       -         Roll S       1 (1 157)       -       -         Balance at the beginning of the year       -       -       -         Investment made				
8.1.3 GeoSUN Africa (Pty) Ltd         Balance at the beginning of the year       744       417         Net share in profit of associate company       418       327         Share of pretax profit       418       327         Share of tax       -       -         Dividends earned       -       -         Balance at the end of the year       1 162       744         Balance at the end of the year       -       -         Investment made       1 500       -         Net share in loss of associate company       (1 157)       -         Balance at the end of the year       -       -         Investment made       1 500       -         Net share in loss of associate company       (1 157)       -         Balance at the end of the year       -       -         Investment made       343       -         Balance at the end of the year       -       -         Investment made       1       -         Net share in profit of associate company       288       -         Share of profit       288       -       -         Investment made       1       -       -         Investment made       1       -       - <td>• • • • • •</td> <td></td> <td></td> <td></td>	• • • • • •			
Balance at the beginning of the year       744       417         Net share in profit of associate company       418       327         Share of pretax profit       418       327         Share of tax       -       -         Dividends earned       -       -         Balance at the end of the year       -       -         Balance at the beginning of the year       -       -         Investment made       1 500       -         Net share in loss of associate company       (1 157)       -         Balance at the end of the year       -       -         Investment made       1 500       -         Net share in loss of associate company       (1 157)       -         Balance at the end of the year       -       -         Balance at the end of the year       -       -         Balance at the end of the year       -       -         Balance at the beginning of the year       -       -         Investment made       1       -       -         Net share in profit of associate company       288       -       -         Investment made       1       -       -         Net share in profit of associate company       288       -       - </td <td>Balance at the beginning and end of the year</td> <td></td> <td><u> </u></td> <td>-</td>	Balance at the beginning and end of the year		<u> </u>	-
Balance at the beginning of the year       744       417         Net share in profit of associate company       418       327         Share of pretax profit       418       327         Share of tax       -       -         Dividends earned       -       -         Balance at the end of the year       -       -         Balance at the beginning of the year       -       -         Investment made       1 500       -         Net share in loss of associate company       (1 157)       -         Balance at the end of the year       -       -         Investment made       1 500       -         Net share in loss of associate company       (1 157)       -         Balance at the end of the year       -       -         Balance at the end of the year       -       -         Balance at the end of the year       -       -         Balance at the beginning of the year       -       -         Investment made       1       -       -         Net share in profit of associate company       288       -       -         Investment made       1       -       -         Net share in profit of associate company       288       -       - </td <td>8.1.3 GeoSUN Africa (Pty) Ltd</td> <td></td> <td></td> <td></td>	8.1.3 GeoSUN Africa (Pty) Ltd			
Net share in profit of associate company       418       327         Share of pretax profit       418       327         Share of tax       -       -         Dividends earned       -       -         Balance at the end of the year       1       162       744         Balance at the beginning of the year       -       -       -         Investment made       1       500       -         Net share in loss of associate company       (1       157)       -         Balance at the end of the year       -       -       -         Investment made       1       500       -         Net share in loss of associate company       (1       157)       -         Balance at the end of the year       -       -       -         Balance at the end of the year       -       -       -         Balance at the end of the year       -       -       -         Balance at the beginning of the year       -       -       -         Investment made       1       -       -       -         Net share in profit of associate company       288       -       -         Share of profit       288       -       -       - </td <td></td> <td></td> <td>744</td> <td>417</td>			744	417
Share of pretax profit       418       327         Share of tax       -       -         Dividends earned       -       -         Balance at the end of the year       1 162       744         8.1.4 Custos Technologies (Pty) Ltd       -       -         Balance at the beginning of the year       -       -         Investment made       1 500       -         Net share in loss of associate company       (1 157)       -         Balance at the end of the year       -       -         Investment made       343       -         Rescription (Pty) Ltd       -       -         Balance at the end of the year       -       -         Investment made       343       -         Rescription (Pty) Ltd       -       -         Balance at the beginning of the year       -       -         Investment made       I       -         Net share in profit of associate company       288       -         Share of profit       288       -			418	327
Dividends earned       -         Balance at the end of the year       1162         8.1.4 Custos Technologies (Pty) Ltd       744         Balance at the beginning of the year       -         Investment made       1 500         Net share in loss of associate company       (1 157)         Share of loss       (1 157)         Balance at the end of the year       -         Investment made       343         Share of loss       -         Balance at the end of the year       -         Investment made       -         Net share in profit of the year       -         Balance at the beginning of the year       -         Investment made       -         Net share in profit of associate company       288         Share of profit       288	Share of pretax profit		418	327
Balance at the end of the year       I I62       744         8.1.4 Custos Technologies (Pty) Ltd       Balance at the beginning of the year       -       -         Investment made       I 500       -       -         Net share in loss of associate company       (I I I57)       -         Share of loss       (I I I57)       -         Balance at the end of the year       343       -         8.1.5 Bridgiot (Pty) Ltd       -       -         Balance at the beginning of the year       -       -         Investment made       I       -         Net share in profit of associate company       288       -         Share of profit       288       -	Share of tax		-	-
8.1.4 Custos Technologies (Pty) Ltd         Balance at the beginning of the year       -       -         Investment made       I 500       -         Net share in loss of associate company       (I 157)       -         Share of loss       (I 157)       -         Balance at the end of the year       343       -         8.1.5 Bridgiot (Pty) Ltd       -       -         Balance at the beginning of the year       -       -         Investment made       I       -         Net share in profit of associate company       288       -         Share of profit       288       -	Dividends earned		-	-
8.1.4 Custos Technologies (Pty) Ltd         Balance at the beginning of the year       -       -         Investment made       I 500       -         Net share in loss of associate company       (I 157)       -         Share of loss       (I 157)       -         Balance at the end of the year       343       -         8.1.5 Bridgiot (Pty) Ltd       -       -         Balance at the beginning of the year       -       -         Investment made       I       -         Net share in profit of associate company       288       -         Share of profit       288       -	Balance at the end of the year		I 162	744
Balance at the beginning of the year   Investment made I 500 -   Net share in loss of associate company (I 157) -   Share of loss (I 157) -   Balance at the end of the year 343 -   8.1.5 Bridgiot (Pty) Ltd   Balance at the beginning of the year   Investment made I -   Net share in profit of associate company 288 -   Share of profit 288 -				
Investment made       I 500       -         Net share in loss of associate company       (I 157)       -         Share of loss       (I 157)       -         Balance at the end of the year       343       -         8.1.5 Bridgiot (Pty) Ltd       -       -         Balance at the beginning of the year       -       -         Investment made       I       -         Net share in profit of associate company       288       -         Share of profit       288       -	- · · · ·			
Net share in loss of associate company       (1 157)       -         Share of loss       (1 157)       -         Balance at the end of the year       343       -         8.1.5 Bridgiot (Pty) Ltd       -       -         Balance at the beginning of the year       -       -         Investment made       I       -         Net share in profit of associate company       288       -         Share of profit       288       -			-	-
Share of loss (I 157)   Balance at the end of the year 343   8.1.5 Bridgiot (Pty) Ltd   Balance at the beginning of the year   Investment made   Net share in profit of associate company   Share of profit				-
Balance at the end of the year   343   8.1.5 Bridgiot (Pty) Ltd   Balance at the beginning of the year   Investment made   Net share in profit of associate company   Share of profit			· · · · · · · · · · · · · · · · · · ·	-
8.1.5 Bridgiot (Pty) Ltd         Balance at the beginning of the year         Investment made         Net share in profit of associate company         Share of profit			(1137)	
Balance at the beginning of the year     -     -       Investment made     I     -       Net share in profit of associate company     288     -       Share of profit     288     -	Balance at the end of the year		343	-
Balance at the beginning of the year     -     -       Investment made     I     -       Net share in profit of associate company     288     -       Share of profit     288     -	9   5 Bridgiot (Ptu)   td			
Investment made     I     -       Net share in profit of associate company     288     -       Share of profit     288     -				
Net share in profit of associate company     288     -       Share of profit     288     -			-	-
Share of profit 288			288	_
				-
Balance at the end of the year 289				
	Balance at the end of the year		289	-

	2016	2015
	R000	R000
8.1.6 Vulamanz Water Systems (Pty) Ltd Balance at the beginning of the year		
Investment made	-	-
Net share in loss of associate company	(1)	-
Share of loss		
		]
Balance at the end of the year		-
8.1.7 Sun Magnetics (Pty) Ltd		
Balance at the beginning of the year	-	-
Investment made	1	-
Net share in loss of associate company	201	-
Share of loss	201	-
Balance at the end of the year	202	-
		( 405
Total investment in associate companies	5 254	6 405
8.1.8 Assets, liabilities and profit of Unistel Medical Laboratories (Pty) Ltd		
Non-current assets	9 159	6 277
Current assets	14 355	12 560
Total assets	23 514	18 837
Non-current liabilities	3 272	548
Current liabilities Total liabilities	<u> </u>	2 109
Profit	4 912	6 455
8.1.9 Assets, liabilities and loss of Custos Technologies (Pty) Ltd		10
Non-current assets	134	42
Current assets	3 192	394
Total assets Non-current liabilities	3 326	436
Current liabilities	790   347	100
Total liabilities	3   37	100
Loss	(2 826)	
8.1.10 Assets, liabilities and loss of Stellenbosch Nanofiber Company (Pty) Ltd	1	
Non-current assets	4 301	3 657
Current assets	6 705	1 954
Total assets	II 006	5 611
Non-current liabilities		-
Current liabilities	334	38
Total liabilities	334	38
Loss	(4 575)	(3 585)

	2016	2015
	R000	R000
8.1.11 Assets, liabilities and profit of GeoSUN Africa (Pty) Ltd		
Non-current assets	306	327
Current assets	2 557	5 4
Total assets	2 863	841
Non-current liabilities Current liabilities	- 2	- 61
Total liabilities	2	61
Profit	67	392
8.1.12 Assets, liabilities and profit of Bridgiot (Pty) Ltd		
Non-current assets	6	_
Current assets	713	_
Total assets	719	
Non-current liabilities		-
Current liabilities	-	-
Total liabilities		
Profit	719	
8.1.13 Assets, liabilities and loss of Vulamanz Water Systems (Pty) Ltd		
Non-current assets	10	-
Current assets	536	-
Total assets	546	-
Non-current liabilities	-	-
Current liabilities		
Total liabilities Loss	(1 249)	
LOSS	(1 247)	
8.1.14 Assets, liabilities and profit of Sun Magnetics (Pty) Ltd	<b>.</b> .	
Non-current assets	31	-
Current assets	861	-
Total assets	892	-
Non-current liabilities Current liabilities	- 45	-
Total liabilities	45 45	
Profit	505	

	2016	2015
	R000	R000
8.2 INVESTMENT IN SUBSIDIARY COMPANIES		
8.2.1 Assets, liabilities and profit of Stellenbosch Trust		
Non-current assets	537 603	496 589
Current assets	43 835	21 205
Total assets	<u> </u>	1 517 794
Non-current liabilities		
Current liabilities	90 530	29 107
Total liabilities	90 530	29 107
Comprehensive income for the year	377 764	410 28
8.2.2 Assets, liabilities and loss of InnovUS Technology Transfer (Pty) Ltd		
Non-current assets	7 082	8 217
Current assets	200	1 459
Total assets	8 282	9 676
Non-current liabilities	-	-
Current liabilities	2 569	2 473
Total liabilities	2 569	2 473
Comprehensive (loss)/income for the year	(  49 )	871
<b>8.2.3 Assets, liabilities and profit of USB Executive Development Ltd</b> Non-current assets Current assets	3 774 32 474	3 658 37 198
Total assets	36 248	40 856
Non-current liabilities	<u> </u>	1 158
Current liabilities	10 300	15 629
Total liabilities	12 198	16 787
Comprehensive income/(loss) for the year	90	(  623
8.2.4 Assets, liabilities and profit of Aquastel (Pty) Ltd		
Non-current assets	573	1 010
Current assets	57	70
Total assets	I 630	1 080
Non-current liabilities	-	-
Current liabilities	320	322
Total liabilities	320	322
Comprehensive income for the year	555	432
8.2.5 Assets, liabilities and profit of Sun Media Stellenbosch (Pty) Ltd		
Non-current assets	58	9
Current assets	6   6	5 433
Total assets	6 2 1 9	6 624
Non-current liabilities	-	825
Current liabilities	3 061	3 502
Total liabilities	3 061	4 327
Comprehensive income for the year	861	357

	2016	2015
	R000	R000
8.2.6 Assets, liabilities and profit of Stellenbosch Wind Energy Technologies (Pty) Ltd		

Non-current assets	150	150
Current assets	93	700
Total assets	243	850
Non-current liabilities	5 747	5 720
Current liabilities	41	22
Total liabilities	5 788	5 742
Comprehensive loss for the year	(583)	(2 881)

## 8.2.7 Assets, liabilities and profit of Stellenbosch University Sport Performance Institute (Pty) Ltd

Non-current assets	8 659	7 666
Current assets	3 741	4 952
Total assets	12 400	12618
Non-current liabilities	913	754
Current liabilities	2 089	3 995
Total liabilities	3 002	5 749
Comprehensive income for the year	2 046	362

## 8.2.8 Assets, liabilities and profit of LaunchLab (Pty) Ltd

Non-current assets	8 989	479
Current assets	5 428	9 625
Total assets	4 4 7	21 104
Non-current liabilities	598	-
Current liabilities	2 206	11 666
Total liabilities	2 804	11 666
Comprehensive income for the year	210	9 445

## 8.2.9 Assets, liabilities and profit of The Stellenbosch Development Trust

Non-current assets	33 176	33 176
Current assets	23 386	22 053
Total assets	56 562	55 229
Non-current liabilities	-	-
Current liabilities	4 026	4 026
Total liabilities	4 026	4 026
Comprehensive income for the year	14 933	14 655

## 8.2.10 Assets, liabilities and profit of Stellenbosch Law Faculty Trust

Non-current assets	42 278	40 467
Current assets		
Total assets	42 278	40 467
Non-current liabilities	-	-
Current liabilities		
Total liabilities		
Comprehensive income for the year	201	17 489

	2016	2015
	R000	R000
8.2.1 I Assets, liabilities and profit of Stellenbosch Financing Partnership		
Non-current assets	21 131	53 341
Current assets	52 295	45 016
Total assets	73 426	98 357
Non-current liabilities		4 465
Current liabilities	409	10 866
Total liabilities	409	5 33
Comprehensive income for the year	13 533	15 797
9. TRADE AND OTHER RECEIVABLES		
Student fees	75 482	85 797
Student fees due	197 498	178 351
Less: Allowance for credit losses of student fees	(122 016)	(92 554)
Student loans	112 262	107 504
Student loans due	212 271	191 782
Less: Impairment due to non-market-related interest rates	(21 884)	(19 555)
Less: Allowance for credit losses of student loans	(78 125)	(64 723)
Trade receivables	132 828	163 558
Trade receivables due	136 187	168 225
Less: Allowance for credit losses of trade receivables	(3 359)	(4 667)
Motor vehicle loans	45 173	45 062
Interest and dividends receivable on investments	18 630	15 687
Insurance claim receivable	21 368	43 104
Other	63 817	56 010
	469 560	516 722
	(208 410)	(199   10)
Less: Long-term portion of motor vehicle loans	(30 088)	(27 793)
Less: Long-term portion of student loans, before taking into account allowance for credit losses	(178 322)	(171 317)
anowance for credit IOSSES		(171 317)
	261 150	317 612

Refer to note 29 for amounts outstanding by related parties included above.

All non-current receivables are receivable within five years from the financial year-end.

## **STUDENT FEES**

The largest component of outstanding student fees is due by former students. Debt is evaluated in terms of historical rates of successful collection. The probability of collection is taken into account and based on that an allowance for credit losses is recognised. The probability of collection decreases with the ageing of debt and consequently a higher allowance for credit losses is recognised for older debt. A higher percentage is applied to debt handed over for collection.

The age analysis of outstanding student fees for which an allowance for credit losses has been recognised is as follows:

One year	80 450	81 922
Between one and five years	14 179	16 807
Five years and older	9 276	8 070
Handed over	93 592	71 552
Total	197 498	178 351
The movement in the allowance for credit losses for student fees is as follows:		
Balance at the beginning of the year	92 554	73 178
Increase in allowance for the year	30 61 1	19 621
Amounts written off during the year as irrecoverable	(   49)	(245)
Total	122 016	92 554

The increase in the allowance for the year as well as irrecoverable debts written off, is shown in the consolidated income statement under 'Other operating expenditure'.

2016	2015
R000	R000

#### **STUDENT LOANS**

Student loans are granted at rates below market-related interest rates. An impairment on outstanding student loans is calculated at recognition of the loan.

Students are categorised as redeemable or non-redeemable. A provision for impairment of their loans is based on historical information according to the category of the student. As at year-end student loans that were not redeemable amounted to R74,2 million (2015: R69,0 million) and no further allowance for credit losses was deemed necessary for this group. Redeemable students amounted to R138,1 million (2015: R122,7 million), of which R41,9 million (2015: R43,6 million) had not been overdue. No allowance for credit losses is deemed necessary for non-overdue loans. Overdue student loans amounted to R96,2 million (2015: R79,1 million). Overdue student loans are considered annually for possible creation of an allowance for credit losses.

The movement in the allowance for credit losses of student loans is as follows:

Balance at the beginning of the year	64 723	53 334
Increase in allowance for the year	13 719	11 389
Amounts written off during the year as irrecoverable	(317)	-
Balance at the end of the year	78 125	64 723

The increase in the allowance for the year as well as irrecoverable debts written off is shown in the consolidated income statement under 'Other operating expenditure'

## TRADE AND OTHER RECEIVABLES

As at year-end trade and other fully performing receivables amounted to R144,7 million (2015: R201,3 million).

Other receivables include a number of smaller receivables who do not have a significant history of non-performance and are of good standing. Due to the nature of income levied, mainly consisting of research-related income for which contracts are in place, receivables younger than four months are not considered for the allowance of credit losses. The age analysis of overdue receivables is as follows:

Between one and four months	44 317	61 769
Older than four months	28 996	34 914
Total	73 313	96 683

Receivables older than four months are considered for an allowance for credit losses. The allowance for credit losses of receivables is as follows:

Balance at the beginning of the year	4 677	2 460
Increase in allowance for the year	(589)	10 205
Amounts written off during the year as irrecoverable	(729)	(7 988)
Balance at the end of the year	3 359	4 677

## **MOTOR VEHICLE LOANS**

The recoverability of motor vehicle loans owed by employees is regarded as highly probable and consequently no allowance for credit losses is created for this category (refer to note 3).

## INTEREST AND DIVIDENDS RECEIVABLE ON INVESTMENTS

The amounts are receivable from the University's investment managers. The University's investment portfolios are managed by professional asset managers and hence the amounts are deemed fully recoverable.

	2016	2015
	R000	2015 R000
	K000	Ruuu
I0. DEFERRED TAX		
The movement in the deferred tax asset and liability is as follows:		
Balance at the beginning of the year	2 934	(275)
Movement during the year:	(( 57)	3 209
Temporary differences on property, books and equipment	(657)	
Balance at the end of the year	2 277	2 934
The deferred tax balance consists of the following: Temporary differences on property, books and equipment	2 875	2 934
Temporary differences on property, books and equipment	(598)	-
	2 277	2 934
Balance at the end of the year		Z 734

A deferred tax asset is recognised for tax losses only to the extent that recovery is probable. The movement in deferred tax for the year is included in 'Other operating expenditure'.

## **II. INVENTORIES**

Inventories consist of the following items:		
Stationery	424	424
Consumables	4 508	3 662
	4 932	4 086
12. OPERATING LEASE ASSET		
The net operating lease asset is made up as follows:		
Operating lease asset	828	9 554
Operating lease liability	-	-
	828	9 554
The expected movement in the net operating lease asset is as follows:		
Balance at the beginning of the year	828	9 554
Receivable within one year	(67)	(4 368)
Receivable within two to five years	(761)	(5 186)
13. TRADE AND OTHER PAYABLES		-
Trade payables	29 019	57 821
Student fees received in advance	113 037	98 477
Accrued remuneration costs	53 862	49 039
Accrued expenditure	62 792	46 394
Accrued leave liability	169 353	154 488
Income other than student fees received in advance	212 036	145 701
NRF deposit	71 800	63 400
Interstructure balances (STIAS, WAT, MCS)	80 189	104 470
Other	79   18	100 446
	871 206	820 236

Refer to note 29 for amounts payable to related parties included above.

2016	2015
R000	R000

## 14. COMMITMENTS

As at 31 December commitments relating to capital contracts approved or orders placed for buildings, library books and journals were as follows:

Buildings	270 390	30 143
Library books and journals	356	866
	270 746	31 009

Material non-cancellable rental contracts include the rental of student accommodation and the rental of smaller equipment. These contracts have varying terms.

The following amounts are payable as at year-end in terms of non-cancellable operating leases:

Within one year	11 565	5 190
Within two to five years	54 337	23 614
After five years	310 896	68 331
	376 798	97   35
15. STAFF COSTS		
Remuneration and fringe benefits	2   37   73	1 915 306
Increase in provision for staff benefits in consolidated income statement	34 955	23 532
Increase in provision for long-service benefits in consolidated income statement	74	8
	2 172 202	1 938 846
Increase in provision for staff benefits included in comprehensive income	23 447	830
	2 195 649	939 676

The number of permanent employees (which includes fixed term employees) is 3 441 (2015: 3 285). The number of non-permanent employees is 1 365 (2015: 1 412).

## 16. STAFF COSTS: EXECUTIVE MANAGEMENT

The following information on amounts actually accrued during the financial year is supplied in order to comply with the Higher Education Act (101 of 1997, as amended) and the Regulations for Annual Reporting by Higher Education Institutions (section 7.8).

Name	Position	Nature	Total value 2016 R000	Period	Total value 2015 R000	Period
		Remuneration paid out	4 001	Jan – Dec 2016	2 806	Apr – Dec 2015
Prof W S de Villiers	Rector and	Bonus paid out	300	Jan – Dec 2016	-	
	Vice-chancellor	Additional remuneration paid out	-		50	Apr – Dec 2015
		Remuneration paid out	2 195	Jan – Dec 2016	994	Jan – Dec 2015
	Vice-rector	Bonus paid out	-		113	Jan – Dec 2015
Prof A Schoonwinkel	(Teaching)	Leave paid out	81	Jan – Dec 2016	20	Jan – Dec 2015
		Additional remuneration paid out	-		100	Jan – Dec 2015
	Vice-rector (Research)	Remuneration paid out	2 173	Jan – Dec 2016	972	Jan – Dec 2015
ProfTE Cloete		Bonus paid out	-		3	Jan – Dec 2015
		Additional remuneration paid out	3	Jan – Dec 2016	76	Jan – Dec 2015
		Remuneration paid out	2 794	Jan – Dec 2016	2 520	Jan – Dec 2015
Prof L van Huyssteen	Chief Operating	Bonus paid out	-		155	Jan – Dec 2015
	Officer	Additional remuneration paid out	-		680	Jan – Dec 2015
	Vice-rector	Remuneration paid out	I 735	Jan – Dec 2016	685	Jun – Dec 2015
Prof NN Koopman	(Community	Bonus paid out	-		72	Jun – Dec 2015
	Interaction and Staff)	Additional remuneration paid out	385	Jan – Dec 2016	479	Jun – Dec 2015
Prof HC Klopper	Vice-rector (Strategic Initiatives)	Remuneration paid out	910	Aug – Dec 2016	-	

## Payment to Council members for the attendance of Council and committee meetings:

Paid to	Number of members	Attendance of meetings Average value R000	Reimbursement of expenses Total value R000
Chairperson of the Council	I	-	-
Members of the Council	25	-	147

No remuneration is paid to members of the Council or committees for the attendance of Council and committee meetings.

	2016	2015
	R000	R000
	Kooo	1000
17. TOTAL EXPENDITURE		
Total expenditure includes the following:		
Depreciation		
Buildings	85 827	80   45
Computer equipment	44 529	45 452
Other equipment and motor vehicles	58 948	52 371
Library books	98 568	74 395
	287 872	252 363
Other operating expenditure		
	441.007	400 705
Bursaries	441 887 75 015	402 785 59 030
Rent - Buildings	64 713	59 030
- Equipment	10 302	8 475
Maintenance and repairs	136 565	152 925
Auditors' remuneration	4 629	4 139
For statutory audit		
- Provision for current year	2 315	2   47
- Underprovision in previous year	235	50
For other audit services	I 576	I 785
For other consulting services	503	157
Internal audit	2 759	3 125
Forensic audit	2 106	4 152
Increase in provision for impairment of student fees, student loans and receivables	43 875	32 982
Other expenditure <sup>1</sup>	1 385 653	1 195 557
	2 092 489	1 854 695
Bursaries managed by the University	724 503	658 729
- Own funds and research contracts	441 887	402 785
- Agent relationship (incl. NSFAS)	282 616	255 944
	202 010	233711

<sup>1</sup>Other expenses include, amongst others, research expenses, consultation and other services, travel and accommodation expenses and utility services

2016	2015
R000	R000

## **18. RENT RECEIVED**

Material non-cancellable leases include the leasing of shops and houses. Contracts have varying terms. The following amounts are receivable as at year-end in terms of non-cancellable operating leases for which an operating lease asset has been created:

Within one year	67	4 368
Within two to five years	761	5 186
	828	9 554

## 19. INTEREST AND DIVIDENDS EARNED

Material non-cancellable leases include the leasing of shops and houses. Contracts have varying terms. The following amounts are receivable as at year-end in terms of non-cancellable operating leases:

Interest received - short-term investments	46 693	22   38
- non-operating investments	127 511	97 731
- other	55 594	150 838
Dividends received	88 443	76 981
	318 241	347 688

## 20. PROFIT REALISED ON DISPOSAL OF INVESTMENTS

Profit realised from fair-value reserve	327 049	545 744
21. INTEREST RECEIVED		
Amount receivable at the beginning of the year	15 687	13718
Amount in consolidated income statement	229 798	270 707
Amount receivable at the end of the year	(18 630)	(15 687)
	226 855	268 738
22. DIVIDENDS RECEIVED		
Amount receivable at the beginning of the year	-	-
Amount in consolidated income statement	88 443	76 981
Amount receivable at the end of the year	-	-
	88 443	76 981
23. FINANCE CHARGES PAID		
Amount payable at the beginning of the year	-	1 982
Amount in consolidated income statement	18 041	17 225
Adjustment for non-cash items	( 7 9  )	
Amount payable at the end of the year	-	-
	130	19 207

	2016	2015
	R000	R000
24. RECONCILIATION OF SURPLUS WITH CASH FLOWS		
Surplus according to the consolidated income statement	740 823	969 714
Adjustments for:		
Realised profits on disposal of investments	(327 049)	(545 744)
Interest and dividends received	(318 241)	(347 688)
Finance charges	18 041	19 207
Profit on disposal of property, books and equipment	(6     8)	(6 379)
Reversal of impairment on buildings	(22 565)	-
Increase in provision for leave gratuity	14 865	15 932
Increase in provision for staff benefits	35 029	23 540
Increase in provision for impairment of student fees, student loans and trade receivables	43 875	34 797
Depreciation	287 872	252 363
Foreign exchange gain	-	(15 245)
Increase in investment in associate companies	(   5 )	(1 590)
Adjustment to operating lease asset	(8 726)	-
Donation of property, books and equipment	(4 578)	(46 896)
Operating income before changes in working capital	452 077	352 011
Change in working capital	15 377	(48 459)
Decrease/(Increase) in trade and other receivables	5 189	(142 902)
Less: (Decrease)/Increase in receivables for outstanding investment income	(2 943)	969
(Increase)/Decrease in inventories	(846)	245
Increase in trade and other payables and staff benefits	5 250	88 086
Decrease in operating lease asset	8 726	4   43
Cash generated by operations	467 454	303 552
25. CASH AND CASH EQUIVALENTS		
Favourable bank balances	278 634	280 45
Short-term investments in cash	473 490	337 142
	752   24	617 594

The University's facilities at banks, reviewed annually 171 055 161 700

As at year-end only a portion of the facility for motor vehicle loans was utilised. The portion that has been utilised is included in interest-bearing borrowings. Refer to note 3.

## 26. FINANCIAL RISK MANAGEMENT

The University's activities expose it to certain business and financial risks, namely market risk, credit risk and liquidity risk. The University's overarching risk management programme focuses on both the identified operational risks and the unpredictability of financial markets and is aimed at minimising the potentially negative impact on the University.

## **26.I BUSINESS RISKS**

The main business risks of the University, as identified by Management, are as follows:

- The pace of transformation and broadening of accessibility.
- Growing pressure on the unearmarked government subsidy to universities.
- Infrastructure constraints and the high cost of the ongoing maintenance of facilities and science equipment.
- Pressure on study fees due to sector wide protest actions (#FeesMustFall).

These risks are monitored continuously and appropriate steps are taken to manage them optimally.

2016	2015
R000	R000

## **26.2 MARKET RISK**

The activities of the University expose it to various market risks, including foreign exchange risk, price risk and interest rate risk.

## (a) FOREIGN EXCHANGE RISK

Owing to international transactions in currencies other than the South African rand (the University's functional currency), the University is exposed to foreign currency risk. This risk arises from future financial transactions as well as recognised assets and liabilities denominated especially in US dollar, pound and euro. Foreign exchange risk associated with future financial transactions is managed by taking out forward cover through forward foreign exchange contracts. If the exchange rate had increased/decreased by 5,0% as at 31 December 2016, with all other factors remaining unchanged, the surplus for the year would have increased/(decreased) as follows:

NOK	-	14
CHF	-	2
EURO	39	104
GBP	27	62
AUD	-	4
SEK	2	12
USD	397	958
	465	66

Forward foreign exchange contracts are entered into to manage exposure to exchange rate fluctuations in respect of certain transactions. A cautious approach to forward cover is maintained.

On 30 November 2015, the University Council approved that exchange rate losses which arise due to the difference between the exchange rates used for budgeting purposes, and the actual exchange rate at which the Library's foreign payments are incurred, will be funded from the exchange rate profit generated from foreign investments.

In respect of foreign exchange transactions, the following current assets and liabilities are not covered by forward foreign exchange contracts, as shown in the consolidated statement of financial position:

	Foreign exchange 2016 000	Rand value 2016 R000	Foreign exchange 2015 000	Rand value 2015 R000
vables				
	-	-	170	286
	-	-	3	45
	-	-	25	273
	32	46	135	239
	54	770	126	2 082
	33	542	56	I 247
	588	7 93	260	19 161
		9 289		23 333

## (b) PRICE RISK

The University is exposed to price risk in terms of listed investments available for sale. Should the local securities exchange (JSE) rise/fall by 10,0% as at 31 December 2016 and all other factors remain unchanged, the fair-value reserve for listed shares would have increased/decreased by R658,6 million (2015: R599,6 million). A securities exchange ("bond exchange") rise or fall of 10,0% as at 31 December 2016 would have resulted in an increase/ decrease of R57,7 million (2015: R68,3 million) in the fair-value reserve for government bonds and other interest-bearing listed instruments.

The University is not directly exposed to commodity price risk.

## (c) INTEREST RATE RISK

The interest rate features of new and existing loans are continuously reviewed. The University did not enter into any interest-rate-derivative agreements for the years ended 31 December 2016 and 2015.

Should the interest rate on balances at banks as at year-end increase/decrease by 100 basis points, the surplus for the year would have increased/decreased by R7,5 million (2015: R6,2 million).

Should the interest rate on interest-bearing investments as at year-end increase/decrease by 100 basis points, the surplus for the year would have increased/decreased by R6,0 million (2015: R3,2 million).

Should the interest rate on the bank facility for the financing of the University's various motor vehicle schemes increase/decrease by 100 basis points as at year-end, the surplus for the year would have decreased/increased by R0,4 million (2015: R0,4 million).

### **26.3 LIQUIDITY RISK**

Transparent liquidity risk management implies the maintenance of sufficient cash and marketable securities, as well as the availability of credit facilities.

In order to cover possible liquidity risks, the University is in a position to realise long-term investments at short notice. Cash investments amounting to R109,8 million (2015: R649,2 million) have also been included in long-term investments.

Current assets	I 018 273	943 660
Current liabilities	885 253	822 669
Operating capital ratio	1,15	1,15

## 26.4 CREDIT RISK

Credit risk mainly arises from outstanding student fees and student loans, trade receivables and cash resources. The largest component of outstanding student fees is due by former students. Trade receivables consist of a large number of clients and their creditworthiness is evaluated continuously by the University. Cash surpluses are invested only at reputable financial institutions. As at 31 December 2016 and 31 December 2015, there was no material credit risk for which adequate provision had not been made. Trade and other receivables are shown net of any allowance for credit losses.

#### **26.5 ESTIMATION OF FAIR VALUE**

The fair values of listed investments available for sale are based on quoted market prices as at year-end. The quoted market price refers to the closing price on the last date of business before year-end. The fair values of unlisted investments not traded in an active market are determined by means of applicable valuation methods, based on market conditions as at year-end. Fair values of the remainder of financial instruments are determined on the basis of discounted-cash flow models. The nominal values of trade and other receivables and payables and interest-bearing borrowings less impairments and allowances for credit losses are deemed as their fair values.

Since I January 2009, Stellenbosch University has applied the adjustment to IFRS 7 for financial instruments shown at fair value in the consolidated statement of financial position. This adjustment requires that fair-value measurements are disclosed in accordance with the hierarchy below:

- Level I Quoted prices in terms of active markets for identical assets and liabilities.
- Level 2 Inputs other than quoted prices obtained directly (prices) or indirectly (derived from prices).
- Level 3 Inputs for assets and liabilities not based on available market data.

Assets as at 31 December 2016 shown at fair value:

Level I	Level 2	Level 3	Total
R000	R000	R000	R000
576 736	-	-	576 736
6 586 485	-	-	6 586 485
-	4   64	-	4 164
597 851	-	-	597 851
128 093	-	-	128 093
7 889 165	4 164	-	7 893 329
	R000 576 736 6 586 485 597 851 128 093	R000         R000           576 736         -           6 586 485         -           -         4 164           597 851         -           128 093         -	R000         R000         R000           576 736         -         -           6 586 485         -         -           -         4 164         -           597 851         -         -           128 093         -         -

The fair value of listed investments, government bonds, fixed deposits and other investments is based on current market prices. Other investments mainly consist of cash instruments forming part of the University's long-term investment pool. The University determines the fair value of unlisted investments and investments for which there are not an active market by making use of relevant valuation techniques. As at 31 December 2015 government bonds, listed shares, fixed deposits and other investments were classified as level 1 and unlisted shares as level 2.

The fair value of financial instruments not traded on the securities exchange ("bond exchange") is determined by means of relevant valuation techniques. These techniques mainly take into account available market data. The use of entity-specific estimates is limited. Should inputs comprise available market data only, the instrument is shown at level 2. Specific valuation techniques include the use of quoted or dealer prices of similar instruments, taking risk factors into account.

Should any of the inputs not be based on available market data, the item is shown at level 3.

#### **Financial liabilities**

31 DECEMBER 2016	Carrying amount R000	Contractual cash flow R000	< I year R000	I—5 years R000	> 5 year R000
Interest-bearing borrowings	158 239	486 839	20 374	131 605	334 860
Trade and other payables	871 206	871 206	871 206	-	-
Total financial liabilities	I 029 445	1 358 045	891 580	131 605	334 860
31 DECEMBER 2015					
Interest-bearing borrowings	114 965	216 071	13 300	99 95 1	102 814
Trade and other payables	820 236	820 236	820 236	-	-
Total financial liabilities	935 201	I 036 307	833 536	99 95	102 814

#### 26.6 MANAGEMENT OF AVAILABLE FUNDS

Stellenbosch University manages its funds in order to ensure that it will continue as a going concern. Funds consist of restricted and unrestricted funds. Restricted funds consist of operating, loan, endowment and fixed-asset funds with specific conditions for application. Unrestricted funds are those funds that the Council may use at its discretion.

## **27.STAFF BENEFITS**

#### CONTRIBUTIONS TO THE UNIVERSITY OF STELLENBOSCH RETIREMENT FUND (USRF)

USRF, established on 1 November 1994 and managed in terms of the Pension Funds Act of 1956 (as amended), is a defined-contribution plan for permanent employees of the University. The fund is valued by independent actuaries at least every three years. As at 31 December 2016, USRF members totalled 3 545 (2015: 3 404). Membership contribution rates vary from 10% to 20% of pensionable earnings. The actuaries declared the fund financially sound. Total contributions paid amounted to R208,1 million (2015: R175,4 million). The most recent audit had been done for the year ended 31 December 2016 and an unqualified opinion was expressed.

## **OTHER BENEFITS**

Post-retirement medical benefits are provided to certain retired employees. Access to this benefit is limited to employees appointed before 1 June 2002.

The group life insurance scheme provides life insurance at the death of the member. Membership of the scheme is compulsory for all permanent employees of the University.

Liabilities are calculated by the independent actuaries at least every three years and are reviewed annually. A complete actuarial valuation was performed as at 31 December 2016. The most recent valuation was performed on 8 February 2017. The next actuarial valuation will be performed no later than 1 January 2018.

The actuarial valuation method is the projected-unit-credit method. The main actuarial assumptions are as follows:

	2016	2015
Discount rate	9.9%	10,7%
Medical inflation	9.3%	10,3%
Group life inflation	8.8%	9,8%
Salary inflation	8.8%	9,8%
Retirement age	65,0%	65,0%
Expected average retirement age	65,0%	65,0%
Age difference between principal member and spouse: continued	Actual	Actual
Age difference between principal member and spouse: active	4,0%	4,0%
Income at retirement	75,0%	75,0%
Proportion married at retirement	75,0%	75,0%
Group life proportion married at retirement	90,0%	90,0%
Maximum age for orphan contributions	21,0%	21,0%
Continuation at retirement	100,0%	100,0%

### Reconciliation of the carrying amount:

		2016			2015	
	Medical Group life liability insurance Total		Medical liability	Group life Insurance	Total	
	R000	R000	R000	R000	R000	R000
Liability at the beginning of the year Adjustments in the consolidated income state- ment:	526 491	41 413	567 904	500 358	43   84	543 542
- Current service charges	6 543	2 292	8 835	6 679	2 285	8 964
- Interest charge - Expected contributions payable by the em-	54 573	4 3 8	58 891	41 245	3 577	44 822
ployer Adjustments in the consolidated statement of	(30 767)	(2 004)	(32 771)	(28 170)	(2 084)	(30 254)
comprehensive income	17 081	6 366	23 447	6 379	(5 549)	830
	573 921	52 385	626 306	526 491	41 413	567 904

	2016	2015
	R000	R000
The higher actuarial provision is attributable to the following:		
Change in financial assumptions	(8 893)	12 401
Change in actuarial basis	8 610	(28 378)
Change in demographic assumptions	16 314	23 256
Change in membership numbers and details	7 416	(6 449)
	23 447	830
The liability at the end of the year is as follows:		
Continued members	439 432	397 549
In-service members	186 874	170 355
	626 306	567 904

The expected increase in the liability for the next 12 months is R33,4 million (2015: R35,4 million).

## LONG-SERVICE BENEFITS

After 25 years' service, employees qualify for a gratuity to the value of 50% of the employee's monthly salary, with a minimum value of R400 and a maximum value of R5 000.

The liability at the end of the year is as follows:

Active members	3 275	3 201
Total liability	629 581	571 105

Reconciliation of the carrying amount:

	2016	2015	2014	2013	2012	
	R000	R000	R000	R000	R000	
of liability (gain) due to experience	629 581 8 610	571 105 (28 378)	546 735 10 726	495 756 31 698	484 332 39 755	

## 28. INCOME TAX

The University is exempted from normal income tax in terms of section 10(1)(cA)(i) of the Income Tax Act. Some of the subsidiaries of the University are, however, liable for tax. Refer to note 10.

## 29. RELATED-PARTY TRANSACTIONS

**29.1 THE INSTITUTIONS BELOW ARE DEEMED RELATED PARTIES OF THE UNIVERSITY** The consolidated financial statements as at 31 December 2016 includes the following trusts and partnerships:

TRUSTS AND PARTNERSHIPS		
Name of Trust / Partnership	Nature of activities	Loan R
Stellenbosch Trust	Fund recruiting and investing of donations	Zero
The Stellenbosch Development Trust	Investment of property for educational and research activities	Zero
Stellenbosch Law Faculty Trust	Promotion of Law Faculty for access to members of the general public	Zero
Stellenbosch Financing Partnership	Loan of funds in accordance with partnership agreement	Zero

The University has the following investments in unlisted subsidiaries as at 31 December 2016:

UNLISTED SUBSIDIARIES					
			Book value o	of interest	
Name of company	Nature of activities	Effective shareholding	Investment R	Loan R	
Unistel Properties (Pty) Ltd	Dormant	100%	I 000	Zero	
InnovUS Technology Transfer (Pty) Ltd	Commercialising of intellectual property and sources from the University for research, educational and community interactions	100%	I 000	Zero	
USB Executive Development Ltd	Development and presentation of executive development programmes and provision of consultation services	54,8%	4 317 980	Zero	

InnovUS Technology Transfer (Pty) Ltd, a wholly-owned subsidiary of the University, has the following investments in unlisted subsidiaries and associates as at 31 December 2016:

UNLISTED SUBSIDIARIES AND ASSOCIATES				
			Book value of interest	
Name of company	Nature of activities	Effective shareholding	Investment R	Loan R
Aquastel (Pty) Ltd	Development of aqua culture	100%	I 000	Zero
Sun Media Stellenbosch (Pty) Ltd	Publishing and printing services	55%	I 000	Zero
Unistel Medical Laboratories (Pty) Ltd	Providing human and animal genetic, diagnostic and testing services	35%	4 586 000	Zero
Unistel Technology (Pty) Ltd	Dormant	100%	1 000	Zero
Stellenbosch University Sport Performance Institute (Pty) Ltd	Providing of sport related services	100%	I 000	3 8 000
Stellenbosch Nanofiber Com- pany (Pty) Ltd	Commercialising of nanofiber technology	29,6%	Zero	Zero
Stellenbosch Wind Energy Technologies (Pty) Ltd	Commercialising of wind energy technology	74%	I 000	Zero
GeoSUN Africa (Pty) Ltd	Service providers to the solar power industry	25%	417 000	Zero
LaunchLab (Pty) Ltd	Support on campus through networking opportunities, mentorship and affordable leasing tariffs in an entrepreneurial environment	100%	I 000	Zero
Surfactant Medical Technologies (Pty) Ltd	Development of patented synthetic lung technology	50%	I 000	Zero
Custos Media Technologies (Pty) Ltd	Development of technology to dissuade consumers from illegally sharing purchased media	24,2%	1 000	Zero

UNLISTED SUBSIDIARIES AND ASSOCIATES Continued				
			Book value o	f interest
Name of company	Nature of activities	Effective shareholding	Investment R	Loan R
Sun Magnetics (Pty) Ltd	The development and sale of inductance extraction and magnetic field calculation software for integrated circuit verification (including superconducting integrated circuits)	40%	48	Zero
Bridgiot (Pty) Ltd	The development of an internet of things platform aimed at connecting household and other electronics to the cloud	40%	400	Zero
Vulamanz (Pty) Ltd	The use of a patented Capillary Ultrafiltration Membrane Nanotechnology to produce high quality drinking water	40%	48	Zero

Members of the executive management are also deemed related parties of the University. Refer to note 16 for a list of the executive management members and payments made to them during the year.

2016	2015
R000	R000

## **29.2 TRANSACTIONS WITH RELATED PARTIES**

Transactions with related parties include payment for administrative services and finance charges, as well as investment income earned.

During the year, stakeholders had no material interest in any material agreement of the University or any of its subsidiaries that could lead to a conflict of interest.

Transactions between Stellenbosch University and its subsidiaries are eliminated on consolidation.

The following related-party transactions took place between the University and related parties:

## 29.2.1 Income

From subsidiaries:		
Distribution of earmarked donations from Stellenbosch Trust	375 542	231 340
Services	35 103	19 415
Interest	147	975
	410 792	251 730
29.2.2 Expenditure		
To subsidiaries:		
Services	32 235	2 532
Interest	162	580
	32 397	3     2
29.2.3 Amounts outstanding as at year-end		
Receivable from:		
Subsidiaries	78 234	29 307
Payable to:		
Subsidiaries	3 789	4 912
29.2.4 Loans granted to related parties		
Stellenbosch University Sport Performance Institute (Pty) Ltd	3 8	692

The loan bears interest linked to prime and has fixed terms for repayment.

## **30. CONTINGENT LIABILITY**

The University guarantees a percentage of the outstanding amount on mortgage loans of qualifying employees. The maximum exposure as at year-end amounts to R69 535 (2015: R135 775).

## **31. COMPARATIVE FIGURES**

From 2016 onwards, private donations are being shown separately on the face of the consolidated income statement. The prior year figures were adjusted to reflect this change. The impact is as follows:

Increase in Private donations	215 336
Decrease in Private donations, grants and contracts (subsequently called "Grants and contracts")	(215 336)

Funds in the consolidated statement of financial position are shown at fair-value from 2016 onwards. It was previously shown at book value. The prior year figures were adjusted to reflect this change. The impact is as follows:

Increase in Unrestricted funds	248   44
Increase in Restricted funds	9  0 8
Allocation of Fair-value reserve to Unrestricted and Restricted funds	439   62

## 32. PRIOR YEAR ADJUSTMENT

An annual balancing is performed between assets that are capitalised and assets purchased during the year and building projects that are work-in-progress. A close-off journal is posted on an annual basis between expenses and uncompleted building projects to allocate the latter to property, books and equipment. This allocation is reversed at the beginning of the next year as it is taken into account again at the end of the next year for that year's allocation of uncompleted building projects to property, books and equipment. The 2015 reversal of the uncompleted building projects for 2014 was only reversed in 2016, resulting in expenses of 2015 being understated and property, books and equipment being overstated with the amount of the 2014 reversal. As a result, the 2015 figures were adjusted. The impact is as follows:

Increase in Other operating expenditure	347 600
Decrease in Property, books and equipment	(347 600)

## 33. GOING CONCERN

The consolidated annual financial statements have been prepared on the going concern basis as the Council has every reason to believe that the University has sufficient resources in place to continue with operations for the next twelve months.

## 34. SUBSEQUENT EVENTS

Between the year-end and the date of the approval of the consolidated annual financial statements, no material facts or circumstances have arisen that materially affect the financial position of the University.

## 35. BROAD-BASED BLACK ECONOMIC EMPOWERMENT (BBBEE)

The University measures its BBBEE status against the generic scorecard criteria of the Department of Trade and Industry, excluding the ownership criteria. Per the most recent evaluation of the University's BBBEE status, which was performed in May 2016, the University obtained a score of 58.78 and subsequently attained a level 5 contribution status.

## GLOSSARY

A-rated researcher	Researchers who are regarded as world leaders in their respective research fields.
black	In this report, the word black does not signify "black, coloured and Indian", but black African only.
blended learning	A collaborative system of learning that integrates technologies such as web-based, satellite and mobile applications with face-to-face learning and teaching for greater flexibility (anytime access) and mobility (anywhere access). Blended learning enhances interaction amongst students, and between staff and students, while also improving access to resources.
business model	An organisation's system of transforming its business activities into outputs and outcomes that aims to fulfil the organisation's strategic purposes and create value over the short, medium and long term
cluster hub	All students not staying in residence are assigned to one of the ten wards of the Private Students' Organisation. The wards are grouped into six clusters with nearby residences to form student communities. For each of these clusters, a hub is being built, of which two have already been completed, namely amaMaties and Wimbledon. In this way, day students can enjoy the same benefits as residence students, such as mentor support and a well-appointed place to go to between classes
designated groups	People who are black, coloured and Indian (BCI).
flipped classroom	The flipped classroom is a pedagogical model in which the typical lecture and homework elements of a course are reversed. The term is widely used to describe almost any class structure that provides pre-recorded lectures followed by in-class exercises. ( <i>Educause</i> , February 2012)
graduate attributes	<ul> <li>In order to create sustainable hope in Africa, Stellenbosch University seeks to equip every graduate with desirable and enduring attributes in the course of his or her studies. A Stellenbosch graduate:</li> <li>has an enquiring mind (accepts responsibility for lifelong learning and the application of knowledge; thinks critically and creatively);</li> <li>is an engaged citizen at the local, regional and global level (acts accountably towards society and the environment; exercises efficient leadership; participates in a diverse, multilingual society; creates opportunities for others as a social entrepreneur);</li> <li>is a dynamic professional (applies and communicates knowledge; seizes opportunities and solves problems; innovates; uses sustainable and efficient technologies; behaves ethically); and</li> <li>is a well-rounded individual both socially and intellectually (utilises opportunities for personal growth – cultural, intellectual and in sports; seeks enriching experiences; takes informed and well-considered decisions).</li> </ul>
Horizon 2020	The European Union's biggest research and innovation funding programme to promote excellent science and industrial leadership, and to tackle social challenges. Funding is made available to a variety of projects over a seven-year period – from 2014 to 2020 – generally in a framework of three to four years per project.
income stream	<ul> <li>The University's financial capital is divided into four income (money) streams, which are numbered for ease of reference. The four streams depend upon different financial inputs:</li> <li>first-stream income: state subsidy;</li> <li>second-stream income: student and accommodation fees paid by students;</li> <li>third-stream income: earned from (contract) research, investments, commercialisation and sales; and</li> <li>fourth-stream income: philanthropic donations and bequests.</li> </ul>
indirect cost recovery	Indirect cost recovery, which is currently general practice in the higher education sector, enables the University to recover the indirect costs that are associated with externally financed projects (third-stream income) from its clients by means of a surcharge for services such as legal, financial, human resources, research management, information technology and library services, as well as support for intellectual property matters.
interpreting	The class is presented entirely in either Afrikaans or English, and an interpreter simultaneously translates the lesson into the other language. The interpreter uses a headset or hand microphone, and students listen to the lecture through earphones.
knowledge and other partnerships	The University establishes relationships through formal, institutional partnerships with civil society organisations, local governments or municipalities, the Western Cape provincial government, the Western Cape Department of Health, the national departments of Defence and Military Veterans, churches (Theology), Elsenburg (AgriSciences), etc. These partnerships are usually informed by a formal memorandum of understanding.

Kuali	Kuali is an open source administrative software solution for higher education institutions. It is home to software systems for financial management, research administration, student services, library management, business continuity and workflow. (www.kuali.org)
language policy and plan	Available at www.sun.ac.za/language
module	A module is a set of classes or lectures, seminars or practical sessions forming a unit within a subject
parallel-medium instruction	Instruction is offered in separate classes in Afrikaans and in English. Modules offered in this way are marked with an A&E specification in the University's Calendar.
postgraduate bachelor's degrees	Bachelor's degrees which may be taken as second bachelor's qualifications, e.g. BPhil and the two- and three-year LLB degrees. This excludes Bachelor Honours degrees.
programme	A combination of modules making up a curriculum for a degree qualification, for example BA, BEd, BEng, BAcc, BSc. Also known as learning programme, instructional programme or study programme. We differentiate between undergraduate programmes – the first university qualification in a certain field of study – and postgraduate programmes – programmes that follow on the first qualification, for instance postgraduate diploma, honours, master's and doctorate. We also differentiate between diploma programmes and certificate programmes.
society-centred scholarship	A scientific and societal approach to social impact, utilising transdisciplinary collaborative methodologies to build capacity.
technology disclosure	The submission of an invention to the Technology Licencing Office, providing a description of the invention or development, listing all sponsors of the research and including any other information necessary to begin pursuing protection and commercialisation activities. Published technology disclosures can prevent related patents from being granted in the future and is strategic to intellectual property management.
Technology Innovation Agency	TIA is a national public entity, funded by the Department of Science and Technology, that serves as the key institutional intervention to bridge the innovation chasm between research and development from higher education institutions, science councils, public entities, and private sector, and commercialisation.
Vision 2030	The University, as a 21st century institution, plays a leading role in the creation of an advanced society. Our goal of <b>inclusivity</b> focuses on the talents and contributions of individuals; <b>innovation</b> deals with the need specifically to address the challenges of a more sustainable <b>future</b> creatively; the energy of students and academics is directed at creating the future imaginatively from courageous efforts to tackle current problems and issues actively; <b>discovery</b> happens when theory and practice are interwoven in the education process; and the Stellenbosch experience delivers <b>thought leaders</b> that have a better insight into world issues, an innovative unlocking of creative abilities to solve problems, and an encouragement of meaningful action to serve society through knowledge. This all happens in a context of transforming the University to be future fit and globally competitive. ( <i>Stellenbosch University Institutional Intent and Strategy 2013–2018</i> )

STRATEGIC MANAGEMENT INDICATORS EXPLAINED				
STRATEGIC PRIORITIES	STRATEGIC MANAGE- MENT INDICATOR	HOW THE MANAGEMENT INDICATOR (SMI) IS CALCULATED		
Share of perma Share of perma Share of perma	Share of students from black, coloured and Indian population groups (%)	For a given year, determine the number of students who are registered at the University on the official census date (A). Determine the total number of students from the black, coloured and Indian population groups who are registered at the University on the official census date (B). Calculate the SMI as (B) divided by (A).		
	Share of permanent staff from black, coloured and Indian population groups (%)	For a given year, determine the total number of permanently employed staff members (only primary appointments) on the official census date (A) in the Salaries HR group. Determine the total number of permanently employed staff members (only primary appointments) from the black, coloured and Indian population groups in the Salaries HR group who are in service on the official census date (B). Calculate the SMI as (B) divided by (A).		
	Share of female permanent staff (%)	For a given year, determine the total number of permanently employed staff members (only primary appointments) on the official census date (A) in the Salaries HR group. Determine the total number of permanently employed female staff members (only primary appointments) in the Salaries HR group who are in service on the official census date (B). Calculate the SMI as (B) divided by (A).		
	Share of undergraduate module credits taught in Afrikaans and English to PARALLEL class groups (%) <sup>4</sup>	Add the credits of the modules offered in Afrikaans and English to PARALLEL class groups, excluding NQF level 8 modules and Faculty of Military Science modules (A). Add the credits of all the modules, excluding NQF level 8 modules and Faculty of Military Science modules (B). Then calculate the indicator as (A) divided by (B) × 100.		

## STRATEGIC MANAGEMENT INDICATORS EXPLAINED Continued

STRATEGIC PRIORITIES	STRATEGIC MANAGE- MENT INDICATOR	HOW THE MANAGEMENT INDICATOR (SMI) IS CALCULATED
BU BU BU BU BU BU BU BU BU BU	Share of undergraduate module credits taught in BOTH Afrikaans and English to the SAME class group (%) <sup>4</sup>	Add the credits of the modules offered in BOTH Afrikaans and English in THE SAME class group, excluding NQF level 8 modules and Faculty of Military Science modules (A). Add the credits of all the modules, excluding NQF level 8 modules and Faculty of Military Science modules (B). Then calculate the indicator as (A) divided by (B) × 100.
	Share of undergraduate module credits taught in EITHER Afrikaans OR English to a class group (%) <sup>4</sup>	Add the credits of the modules offered in ONLY Afrikaans or English to a class group, excluding NQF level 8 modules and Faculty of Military Science modules (A). Add the credits of all the modules, excluding NQF level 8 modules and Faculty of Military Science modules (B). Then calculate the indicator as (A) divided by (B) x 100.
	Permanent teaching and research staff with doctorates (%)	For a given year, determine the total number of permanently employed teaching and research staff on the official census date (A). Determine the total number of permanently employed C1 staff with a doctoral qualification on the official census date (B). Calculate the SMI as (B) divided by (A).
	research outputs per full-time equivalent teaching and research	For a given academic year, determine the number of masters' degrees awarded (A), and the number of accredited publication units produced by SU (B). For the same academic year, determine the number of doctoral qualifications awarded (C), and the number of fulltime-equivalent research and teaching staff members (D). Calculate the SMI as $[1x(A+B) + 3x(C)]$ divided by D.
	HEMIS-based success rate of undergradu- ate and postgraduate students (%)	For a given year, determine the total number of fulltime-equivalent (FE) students (A). Then determine the number of fulltime-equivalent (FE) degree credits for the same year (B). Calculate the SMI as (B) divided by (A).
Enhance Social Impact	Ratio of full-time equivalent students, weighted per level of study, per full-time equivalent teaching and research staff member	For a given academic year, determine the number of registered undergraduate and full-time equivalent students (A), the number of registered honours and full-time equivalent students (B), the number of registered master's full-time equivalent students (C), and the number of registered doctoral students (D). For the same year, determine the number of fulltime-equivalent teaching and research staff members (E). Calculate the SMI as $[1x(A) + 2x(B) + 3x(C) + 4x(D)]$ divided by E.
	Third-stream income <sup>1</sup> share of SU's total income <sup>2</sup> (%)	For a given year, determine the total revenue from all income streams (A). Then determine the total third-stream income (B) for the relevant year. Calculate the SMI as (B) divided by (A).
	Fourth-stream income share of SU's total income <sup>2</sup> (%)	For a given year, determine the total revenue from all income streams (A). Then determine the total fourth-stream income (B) for the relevant year. Calculate the SMI as (B) divided by (A).
	Share of personnel remuneration not financed via the main budget (%) <sup>3</sup>	For a given year, determine the total number of fulltime-equivalent (FE) students (A). Then determine the number of fulltime-equivalent (FE) degree credits for the same year (B). Calculate the SMI as (B) divided by (A).

## Notes

- I. Third-stream income excluding return on investments and realised profit from the sale of assets.
- 2. Total income excluding return on investments and realised profit from the sale of assets.
- 3. Stellenbosch University manages its funds to ensure that it remains in higher education as a going concern. Funds consist of restricted and unrestricted funds. Restricted funds consist of operational, loan, donor and fixed-asset funds with specific conditions for use. Unrestricted funds are those which Council uses at its own discretion. In the pool of unrestricted funds are funds which are earmarked for specific purposes and can therefore not be used for other purposes. The difference between future restricted and unrestricted funds may have an impact on the feasibility of the 2017 to 2022 targets which have been set.
- 4. These SMIs are new indicators and replace two former medium of instruction SMIs.

#### ABBREVIATIONS AC21 Academic Consortium 21 ARC Audit and Risk Committee of Council ARUA Alliance for Research Universities in Africa ΒA Bachelor of Arts BEd Bachelor of Education BEng Bachelor of Engineering BSc Bachelor of Science **BScHons** Bachelor of Science Honours **BEdHons** Bachelor of Education Honours BCI black (African), coloured and Indian CHS Campus Health Service CPUT Cape Peninsula University of Technology DHET Department of Higher Education dti Department of Trade and Industry **ECSA** Engineering Council of South Africa EMS Economic and Management Sciences **FMHS** Faculty of Medicine and Health Sciences GEC Global Engagement Centre HEMIS Higher Education Information Management System ICT information and communication technology IF Institutional Forum IFRS International Financial Reporting Standards <IR> Integrated reporting IRF international registration fee IIS Stellenbosch University Institutional Intent and Strategy 2013–2018 nGAP New Generation of Academics programme NRF National Research Foundation NSFAS National Student Financial Aid Scheme PCT patent cooperation treaties PhD Doctor of Philosophy Prof Professor PSO Private Students' Organisation RC responsibility centre RMT Rector's Management Team SANDF South African National Defence Force SARChI South African Research Chairs Initiative SMI strategic management indicator SRC Students' Representative Council STAG Student Accommodation Group Africa Stell Stellenbosch SU Stellenbosch University THRIP Technology and Human Resources for Industry Programme TIA Technology Innovation Agency UCT University of Cape Town USAf Universities South Africa (formerly known as HESA - Higher Education South Africa) USB-ED USB Executive Development Ltd UWC University of the Western Cape Wits University of the Witwatersrand

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