

## “Science can be sexy”

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Remarks by Prof Wim de Villiers, Rector and Vice-Chancellor, Stellenbosch University

Why is “[New Voices in Science](#)” important? Two reasons spring to mind. It is an innovative example of science communication, which is an essential part of situating what we do at universities in the broader context of society. And it is an admirable exercise in capacity building for our emerging researchers who will be carrying the torch of science into the future.

So, well done to everyone involved – both the organisers and the participants. This is a splendid way to kick off graduation week at Stellenbosch University (SU), which is all about celebrating excellence in the pursuit of knowledge. This is always an intense process, never easy. Spare a thought for the scientist, the researcher who wrestles with ideas, seeking truth, pursuing validity, searching for relevance. The new PhD graduates who form part of this programme would have gone through this process, and it is not easy. It is hard work, often lonely and painful to do a PhD. And after all this, we now expect them to take the 220 page dissertation and distil one message to share with you today. Some of the participants might even feel that this second process was harder than the getting the PhD itself!

That is why I want to give a special word of congratulations and encouragement to all of you who participated in this programme. And I do so by quoting Edmund Hillary, who reached the summit of Mount Everest in 1953 with Tenzing Norgay, the first climbers to do so. Hillary said, “It is not the mountain we conquer but ourselves.”

It’s been a tough year – not just at Stellenbosch, but in higher education generally. Initiatives like “[New Voices](#)” and our graduation ceremonies remind us why universities exist in the first instance – to make a positive difference to people’s lives. It also lifts our spirits to see and hear the wonderful insights into the world around us that the next generation of researchers are coming up with – thus energising us for the task ahead and the many challenges that still await us.

So, a big welcome to everyone here this morning. I want to share a few thoughts with you, but I will leave the detail of this initiative and how it works to the organisers. I will confine myself to a few points about the importance of research and science communication at universities in general and how this features at Stellenbosch in particular.

One of the biggest movies of 2015 was *The Martian*, directed by Ridley Scott and starring Matt Damon. Set in the potentially not-too-distant future, it tells the story of a NASA astronaut who gets left behind on the Red Planet when the rest of his crew are forced to evacuate their base due to an intense dust storm. Against the odds, he not only survives but makes it back to Earth in one piece.

It sounds like typical Hollywood stuff, right? “Too good to be true.” And yet this sci-fi blockbuster – and the bestselling novel it is based on – received wide praise for its “exhaustive attention to scientific detail”. I don’t want to discuss that merits of that assertion now. I just want to make the point that **science can be sexy** – and that it is part of our job as researchers to make it sexy.

This is not a new development. Who can forget Prof Carl Sagan of Cornell University’s *Cosmos*? Covering a wide range of scientific subjects, including the origin of life and our place in the universe, it was first broadcast in 1980, yet is still one of the most widely watched PBS series in the world. It has been seen by over 500 million people in more than 60 countries.

More recently, Dr Chris Smith of Cambridge University has become a broadcasting phenomenon as “the Naked Scientist”. The radio show he started producing for the BBC in 2001 has become a massively downloaded podcast, and he is frequently a guest on stations around the world, including South Africa. His stated passion is “to help the general public to understand and engage with the worlds of science, technology and medicine.”

That dovetails nicely with this initiative, [New Voices in Science](#), as well as the many other ways in which science and research at Stellenbosch University is being popularised. For several years now, SU has been named the country's most research-productive university – with the highest weighted research output per capita in South Africa. This measure by the Department of Higher Education and Training has two components – publications produced per permanently employed academic, but also a university's output of research master's and PhD graduates.

We excel in both, but with graduation ceremonies starting tomorrow, it would be appropriate to highlight that we will this week be awarding 1 478 honours and master's degrees. We will also be awarding 127 doctorates, which is the most ever at our December graduation ceremonies.

Why is it important to produce both research outputs and graduates? Because in today's Information Age, knowledge is the most important resource. This is what will make the socio-economic transformation that we need in our country and on our continent attainable and sustainable. But that won't happen if the knowledge we generate gathers dust on library shelves, or languishes in electronic databases. The sharing of scientific output is therefore just as vital as conducting ongoing research of the highest quality and producing graduates with advanced qualifications.

There are numerous ways in which the sharing of research for popular consumption is promoted at SU. [New Voices in Science](#), which is an initiative of the Postgraduate Skills Development Programme of our Postgraduate and International Office, is one example. It specifically develops the science communication skills of young researchers. Other examples include the [STIAS Lectures](#), the [Stellenbosch Forum](#), [Science Café Stellenbosch](#), and [Science Fridays](#), which is an initiative of the [Centre for Research on Evaluation, Science and Technology \(CREST\)](#) at SU, which also houses South Africa's first Research [Chair in Science Communication \(SciCOM\)](#).

All of these initiatives demonstrate the open nature of science, and the importance of dialogue. As popular science author Steven Johnson points out, breakthroughs are not about a solitary genius that is so much more brilliant than anybody else. No, ideas are fundamentally networks of other ideas. We take the tools, concepts and scientific understanding of our time, and then remix them into something new.

And you can't do that if ideas are not shared. It is only once good ideas get into circulation that they can converge with other ideas, be tested against the demand of relevance and open up doors of possibility. That is why [New Voices in Science](#) is such an important initiative – because it is communication that unleashes the power of ideas to transform our world and the way we live.