



The Office Of The Principal and Vice - Chancellor

PROF MS MAKHANYA, PRINCIPAL AND VICE CHANCELLOR
KEYNOTE ADDRESS: GALA DINNER: RESEARCH AWARDS CEREMONY
15 MARCH 2012

- Honoured guests, ladies and gentlemen
- Most importantly, recipients of our research awards.

You might have heard the story of Sherlock Holmes and Dr Watson who went on a camping trip. After a good dinner and a bottle of wine, they retired for the night, and went to sleep.

Some hours later, Holmes wakes up and nudges his faithful friend.

“Watson, look up at the sky and tell me what you see.”

“I see millions and millions of stars, Holmes” replies Watson.

“And what do you deduce from that?”

Watson ponders for a minute. *“Well, he says,*

- ***Astronomically***, *it tells me that there are millions of galaxies and potentially billions of planets*
- ***Astrologically***, *I observe that Saturn is in Leo.*
- ***Horologic ally***, *I deduce that the time is approximately a quarter past three*
- ***Meteorologically***, *I suspect that we will have a beautiful day tomorrow.*

- **Theologically**, I can see that God is all powerful, and that we are a small and insignificant part of the universe. But what does it tell you, Holmes?"

Holmes is silent for a moment.

"Watson, you idiot!" he says. "Someone has stolen our tent!"

I think it would be true to say that research means different things to different people and that the value that one accords it, is similarly influenced. But we need to be very careful not to compartmentalise research into our own limited understandings of what it is or is not, or what it should or should not be, because in reality, research in one form or another, underpins, informs and drives society at its most fundamental level, and it has always done so. It has in fact, ensured our survival and development both as human beings and as humankind.

One of the most fascinating aspects of humans is their awareness - their curiosity - that enduring and insatiable desire to *know*, and linked to that, the drive to put that knowledge into practice; to see how things work (or don't work!). We probe endlessly and we think endlessly, and while the *focus* or *subject* of the probing and thinking may have changed from age to age, the impulse to discover, create and innovate has not. Our hunger for knowledge rages unabated, underscoring the elegant assertion of Eden Phillpots, renowned author, poet and dramatist, who said: "The universe is full of magical things patiently waiting for our wits to grow sharper." And indeed colleagues - it is.

Those of us who have children discover with some amazement, the endless store of love that we have for each new child. We marvel at the never-ending well, or reservoir, which we are able to draw on throughout our lives in good times and bad, that allows us not only to sustain that love but to grow it in perpetuity and then extend the same to the next generation.

And I would like to think ladies and gentlemen that those two aspects of our humanity - curiosity and love – not only characterise us as distinctly human, but they

are also what fuels our quest for new knowledge and our desire to see it applied in an edifying manner.

There is of course quite a mystique around research and innovation because (too often I would suggest) we only hear of the spectacular successes, or the latest amazing innovations when they go viral, or when we see some eminent scientist receiving the Nobel Prize. And of course these awards and innovations are of general interest because they affect and even impact on the world in a way that is obvious and ever present – one thinks here, for example, of the many medications that we take every day, or of the latest technological gadget which everyone scrambles to get.

There are of course other kinds of research and innovation that don't receive as much publicity, but that also play a very significant role in our daily lives. One thinks here for example, of the genetic modification of plants in food production and the research in Social Sciences that fuels much of our advertising and marketing industries. Norman Borlaug, plant scientist and Nobel Prize winner stated: “[For] behind the scenes, halfway around the world in Mexico, two decades of aggressive research on wheat not only enabled Mexico to become self-sufficient with respect to wheat production but also paved the way to rapid increase in its production in other countries.”

So clearly there is a less public face of research, much of which our global citizens are unaware, and which happens quietly and continuously behind the scenes – often at academic institutions such as ours. It is the research that enables and facilitates the great breakthroughs and innovations, because each small gain, each output, contributes to the body of knowledge that is used and built on by our peers - nationally and globally, to inform their own efforts. Much research is also targeted and intentional and allied to specific needs at a given time in a country's socio-economic development. But I think we would all agree that groundbreaking research is possible only because it rests on the foundations laid by generations of other researchers.

Colleagues, within that contextualisation, few of us would disagree that when it comes to research, Africa is trailing the West and even many developing nations, and that we have a long way to go to reach the goals which we have set for ourselves. We all know the socio-economic and political factors that have informed the status quo. Somewhat ironically, it is research that has informed that understanding. We also know that as Africans our research foci may be slightly different to that of other nations even though our aims and goals are similar. We too want research that grows, edifies and innovates, but our needs - the needs of our people - are somewhat different and our resources are far more limited than those of our peers in the more affluent parts of the globe. So like it or not, we need to achieve a balance.

We need simultaneously to innovate, and yet conduct research that will make a concrete, measurable contribution to our development as a people, nation and continent. Much of our research is publicly funded, and given our developmental challenges and the overarching imperative to develop an African expression in the generation of all new knowledge, we do have a moral obligation and indeed, responsibility, to utilise our funding on research that will contribute meaningfully to the amelioration of our situation. For the moment, we do not really have the luxury of conducting research that has a very limited interest and application or that is conducted merely in pursuit of personal edification. Andy Rooney renowned author and journalist expressed this viewpoint succinctly when he said: *"The federal government has sponsored research that has produced a tomato that is perfect in every respect, except that you can't eat it. We should make every effort to make sure this disease, often referred to as 'progress', doesn't spread."*

If we are to cultivate the perfect tomato colleagues, we need to be able to eat it. As much as our hearts and our natural inclination long for the freedom and funding that will allow us untrammelled research, we need to be pragmatic and look at ways of channelling those inclinations and passions into research that will contribute more manifestly to our developmental goals.

The University of South Africa is intent on growing our research capacity and outputs. We are deeply sensitive to the need for innovation in selecting,

channelling and growing our research efforts. In fact that is why we established the portfolio of research and innovation. Inasmuch as we need to ensure that we make a useful contribution to society, we must simultaneously ensure that as part of that balance I spoke of previously, we do so by monitoring and benchmarking against international trends and development and participating in ways that will grow our own capacities while contributing to our development.

Much of that can be done through collaborations and partnerships, so wonderfully demonstrated in our newly forged relationship with India around research into Nanotechnology. You will know that as a university we are targeting stakeholder engagement, collaborations and partnerships as a key growth point for Unisa and we would encourage all of our colleagues to look at ways in which their research efforts could be enhanced through such collaborations.

Marston Bates says [that]: "Research is the process of going up alleys to see if they are blind." We all know that when it comes to research we sometimes feel that we can't see the woods for the trees, so sometimes it sometimes helps to have collaborators who can shine some light into the darkness and perhaps help us to avoid those dead ends and find the solutions that may be staring us right in the face. Rather like the scientists in the famous NASA story.....

When NASA first started sending up astronauts, they quickly discovered that ballpoint pens would not work in zero gravity. To combat the problem, NASA scientists spent a decade and *\$12 billion* to develop a pen that writes in zero gravity, upside down, underwater, on almost any surface including glass and at temperatures ranging from below freezing to 300°C..... The Russians used a pencil.

Colleagues, tonight we have come to honour our brightest and best for their professionalism, their consistent dedication to research and the demonstrable success that they have achieved. As their peers we salute them and we share in their pleasure and pride. But inasmuch as I am so delighted and proud of your wonderful accomplishments and achievements, inasmuch as I am excited about the vibrancy and impetus that our Research and Innovation portfolio continues to

generate, I would like to conclude by issuing you with a personal challenge – and being the go-getters that you all are, I am very curious to see how you respond! I would like you to harness all of your innovate and creative thought in looking at ways in which the research that you are and will be doing, is not only aligned to our institutional goals (and I'm sure that you are doing that already), but that it also makes a concrete contribution to the issues that we are dealing with as educators and Africans, right now. This might require a deeper immersion into the environment and context in which we operate – perhaps a broader social awareness, but I will leave it at that.

One year from now, I would like to see some of you - our brightest and best – perhaps with mentees – taking to this podium and telling us how you have responded to this challenge. Prof Setati, do you believe that our colleagues will rise to the challenge? I have every confidence that they will.

I thank you.