

**‘Creating the 21<sup>st</sup> Century University’, address by Professor Ian Jacobs, President and Vice-Chancellor UNSW Sydney, to the Unsomnia Grand Challenge event, UNSW Sydney, 1 December 2016**

Thank you, and welcome everyone.

- The Grand Challenges program is a key part of the UNSW 2025 Strategy
- This event is one example of how powerful universities can be in leading open and informed debate on the big issues of our time
- My thanks to all those who organised and are taking part in this event
- I am honoured to be contributing.

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So - what keeps me up at night?

- In many ways as Barack Obama said in an interview this year – if you had to choose a moment in human history to live, you would almost certainly choose now.
- Overall it is true that the world is wealthier, healthier, better educated, less violent, more tolerant and more attentive to the vulnerable than ever.
- But the world is also beset by massive problems: war, famine, oppression, economic disparity, bigotry, xenophobia and prejudice, and of course, the themes of our two UNSW Grand Challenges: climate change and mass migration.
- Both very much in the news, along with election result in the United States! These *are* quite worrying times.
- What keeps me up is not *worrying* about these problems, but thinking about how universities can help to *solve* them.
- I am convinced that universities have a critical role to play in resolving our problems, and are central to the future of humanity.
- To do so universities must act as **servants of society locally and globally – not as ivory towers.**
- That overarching ethos must drive everything and inform all decisions.
- If we can get that right *Great* universities - that act as servants of their society and the global community, can be key in shaping a positive future for people around the world.

I will spend the rest of my talk focused on three reasons universities can make such a difference and what we need to do to make sure it happens

**First, delivering the full the power of discovery and invention.**

- Universities are powerhouses where great minds come together to generate and develop ideas that become applications that save lives and improve quality of life.

- Just one example, from my own specialist area in women's cancer: the discovery of the cause of cancer of the cervix a disease affecting over 500,000 women a year, the human papillomavirus, the outcome of some extraordinary research in epidemiology and biology, the understanding of the 15 year natural history of the cancer, the development of a screening test to prevent it and now, an Australian university invention - a vaccine that can prevent the infection and prevent a cancer.
- That's just one extraordinary story of academic success in partnership with healthcare and industry.
- We could talk about endless others – penicillin, oral contraception, the seat belt the computer – or two stellar areas here at UNSW: solar energy and quantum computing.
- None of this could happen without the research infrastructure and economic backing of universities. Discovery, invention, innovation - that's our job.
- Outstanding research builds social progress and also brings great economic benefits. Research funding is not a charitable donation, it's an investment that yields immense social return and an economic return of at least 15% per annum. A lot better than bank interest!
- To harness the full potential we need to ensure that there is **greater investment in research**
- We need to convince governments here in Australia and elsewhere of the fundamental importance of research - and of the vital importance of fundamental research. No easy task when everyone is fixated on national deficits.
- We know that great research can help solve the deficit challenge. A report we commissioned from Deloitte showed UNSW alone contributed \$15 billion to Australia's GDP in 2014, and we can do much more.
- Research really is an investment in our future prosperity.

The second reason why universities are important, now more than ever is **the need and demand for, and the impact of, higher education on individual lives.**

- People everywhere understand just how much difference a good education makes to the quality of individuals' lives, to the opportunities they have and their ability to contribute to society.
- OECD data also suggests that adults with higher qualifications are more likely to report good health, participation in volunteer activities and interpersonal trust. Regardless of gender, age and earnings.
- Not surprisingly demand for higher education worldwide is exploding.
- I am just back from a visit to India, which wants to achieve a higher education participation rate of 30% by 2020 – up from 18% now - which means they'll have to find places for an additional two million students *every year*.
- Globally participation rates in post secondary education are now about 14% and are projected to reach 25% by 2025 and over 40% by the end of the century – that means an extra 2 billion plus participants.

- Established universities have to rise to this challenge and facilitate it not remain outside it.
- We need to **transform the way universities view and approach education.**
- We are in an age where education can now be made available to everyone who wants it.
- Not mediocre education but outstanding education delivered with cutting-edge digital technologies enhanced by personal interaction with other students, mentors and academics.
- We need to use new digital technologies to **remove the barriers to higher education on a global scale.**
- Universities must help to transform societies – not just their own but across the global community.
- For that to happen, we need a transformation too in the respect, prestige and reward we afford to teachers.
- For too long teaching in universities has been treated as secondary to research. That has to change.
- We need our universities to value, respect, reward and promote great teachers equally to great researchers. We need our universities to be both research intensive and teaching intensive.
- Great teachers inspire students, shape their future lives and careers. The world needs a new generation of teachers able to deliver higher education using new technologies in individualised and personalised ways to the millions who want it.
- The more people who can access higher education, the better-off the world will be in the 21<sup>st</sup> century.

And the third reason why universities are essential now?

- **Their role in protecting freedom of expression, the integrity of ideas and in promoting of equality of opportunity.**
- Universities were created on principles of independent thinking and freedom of academic expression - values we need to defend at any price.
- Over the centuries, many academics have paid a heavy price to uphold the right to express new, radical and anti-establishment ideas - a legacy all of us at UNSW and other great universities have a responsibility to uphold.
- Today's universities must be role models, displaying transparency and openness, encouraging freedom of thought, upholding the individual's right to express opposing and often uncomfortable views.
- The importance of independent thought and expression has never been more important and potentially under threat than it is currently all the more so in a globally-connected digital world.

- We need to have **robust protection of the independence of universities, academic independence and the freedom of academic expression** regardless of gender, religion, ethnicity or race.
- These are not lofty ideals, but essential ingredients for a democratic society. Universities must be both exemplars and key defenders of basic human values.

So these are the three reasons why, for me, universities are going to become even more critical to our lives as the 21<sup>st</sup> century unfolds. What keeps me awake is not fear of the challenges but trying to figure out how we can ensure that universities can deliver their potential to help make the world a better place.

If we get this right and enable universities to conduct great research, transformative education on a global scale, translate their work in to social and economic progress, all whilst treasuring freedom of thought, expression and social tolerance universities will be central to human progress and quality of life as we face the challenges of the 21st century. That is what I mean when I say that the great universities of the 21st - and UNSW will be one of them - are those that act in all that they do as servants of their society and the global community.

Thank you.