



Ambassador John Berry – Innovation Roundtable Brisbane

**Ambassador Berry's Remarks for the
Innovation Roundtable
Queensland University of Technology,
Brisbane**

As prepared for delivery, October 16, 2014

Before I begin, I'd like to offer my congratulations and best wishes to all of the finalists in the QUT Innovation Challenge who will be presenting their ideas at the University this afternoon.

Innovation lies at the very heart of what America is. From the beginning, our country was a grand experiment. We believed then – and now – that freedom plus sweat equals progress. And if you add creativity or innovation, you get progress squared.

One of our greatest presidents, Abraham Lincoln, was not just a tremendous leader but an innovator as well. In 1849, he was granted patent 6,469 for a device that would lift boats stuck on sandbars.

He liked to call the U.S. patent system one of the greatest human achievements to spur invention, by adding the “fuel of interest to the fire of genius.”

Lincoln was fascinated by new technology. Before his presidency, he lectured on “discoveries and inventions.” While a member of Congress, he liked to take his son to the patent office to see the models on display. He approved the construction of the USS Monitor – the United States' first armored gunboat.

As president, he pioneered the use of the telegraph as a kind of early smart phone, and he monitored the unfolding of our Civil War daily through telegrams.

Lincoln knew then what many of us know now – innovation, invention, and creativity are necessary ingredients for success.

President's Innovation Initiative

President Obama believes our world is full “of unprecedented perils, but also unparalleled potential.” Because of this, investment in science, technology, and research is the most important guarantee we can make for our future.



Ambassador John Berry – Innovation Roundtable Brisbane

We don't know where our economies will take us. We don't know where the jobs of the 21st century will be. We don't know where the next super storm or pandemic will hit. We *do* know that we need to be prepared.

Innovation is essential for success. It will help us face the challenges of an uncertain climate, an aging population, and a changing energy landscape. Innovation will help us find cures for the most devastating diseases, bring life to new planets, and provide clean water, plentiful food, and safe housing to the billions of people living on this one.

And so, the United States is investing in basic research through the President's Strategy for American Innovation. We are promoting U.S. exports. We are encouraging entrepreneurs. And, we are making historic investments in – among other things – clean energy technology, medical research, and advanced vehicle technologies.

Finally, we are promoting investment in science, technology, engineering and math – or STEM – education, because without the scientists and engineers of tomorrow, none of the rest of this will matter.

STEM Education

And that is because we cannot solve the challenges of tomorrow without the next generation of scientists, astronauts, engineers, and programmers.

This is clearly something you understand very well here at Queensland University of Technology – I don't think anyone visiting The Cube could find STEM anything less than fascinating.

And this is something we really wrestle with in both the United States and Australia. Getting young people interested in STEM fields – and improving STEM education – will be crucial if we want to maintain our competitive edge in the future.

In the U.S., we are trying to address this issue by bolstering federal investments in STEM education, building public-private partnerships, and putting 100,000 more STEM teachers into classrooms over the next decade.

More teachers will help us improve science and math education for all students – especially minorities and those from low-income families whose schools often lack adequate STEM courses. More teachers will help us broaden participation in STEM fields to include more women and girls. We can't remain competitive if we don't get maximum participation across the board.



Ambassador John Berry – Innovation Roundtable Brisbane

We are working with various agencies such as NASA and the Department of Energy to develop mentorships. We are giving students more hands-on experience.

The private sector is stepping up all over the world to do the same. They recognize that getting kids interested and involved now is important to their success in the future.

Microsoft, Intel, and Google are challenging young people from all over the world to develop new and creative technologies with their global science and engineering fairs. Australian students have discovered new ways to screen for anemia and manage diabetes. They have built portable water purifiers that also generate electricity.

These companies are unlocking the extraordinary creative potential in these students.

Innovation Partnerships

Americans, of course, don't have a monopoly on good ideas or talented people. QUT students and faculty demonstrate that every day. Scientists and engineers from every country are revolutionizing the world we live in. And if we want to solve the world's greatest problems, we must look beyond our borders and increase our cooperation.

We could have no better partners in that effort than Australia.

Australians – like Americans – are natural innovators, builders, and creators. Like us, you have drive, ambition, and skill. Like us, you view a problem as an opportunity to come up with a solution. Former Prime Minister Bob Hawke called Australia the “clever country,” and he was absolutely right.

In Brisbane, you are well ahead of the curve when it comes to innovation, research, and problem solving.

Here at Queensland University of Technology, you are doing amazing work in engineering and medicine. You are making huge strides in helping us understand dementia, improve nutrition, regenerate skin and tissue, and investigate the effects of sun exposure.

Over at the Queensland Brain Institute, researchers are making promising breakthroughs in the study of brain disorders like schizophrenia.

Our innovation partnerships in Australia predate even our alliance, especially here in Brisbane. In 1896, General Electric installed the first motors in Brisbane trams when they were converted from literal horse power to electricity.



Ambassador John Berry – Innovation Roundtable Brisbane

GE and other U.S. companies are still big fans of Australian innovators. GE's partnership with CSIRO funds research projects across the country in fields as diverse as aviation, healthcare, and energy. Boeing's largest research facility outside of the United States is here in Brisbane.

ConocoPhillips, Sinopec, and Origin Energy are investing more than \$20 billion to build the largest LNG project in Queensland on Curtis Island. Back in May, I went there with Chinese Ambassador Ma. That visit demonstrated to me more than anything else the vast potential of the clean energy market here in Australia and what we can accomplish when we work together.

U.S. and Australian companies are also working together in Cape York. Rio Tinto, the Australian Renewable Energy Agency, and U.S. firm First Solar are teaming up to build a solar energy plant at one of Rio Tinto's mines. This will help offset the expense of the current diesel fired power plants. In addition to making good economic sense, it also makes good environmental sense.

These partnerships are not unique. Our cooperation in research and development spans universities and government, think tanks and corporations. These partnerships help our economies expand, develop, and compete in the world market. Creative people and creative companies are teaming up to figure out how to deal with a changing world, changing markets, and a changing climate.

Challenges

Sometimes, however, coming up with those new ideas and new technologies is the "easy" part of the equation. Bringing the results of our cooperation to market can be a significant challenge.

QUT recognized this problem almost a decade ago, leading to the establishment of QUT's innovation transfer company, Bluebox. Bluebox gives you a hand up when it comes to negotiating the steps between the drawing board and the board of directors. But not everyone has access to this sort of assistance.

And that is in part why we have begun this series of conversations. We want to look at best practices for getting good ideas out of the realm of theory and into development. And then we want to help get those ideas to market.

And we're not the only ones who are working hard to highlight innovation.

Life Sciences Queensland and Mario Pennisi (PEN-EE-SEE) are working to integrate innovation into the G20 agenda – the world's premier economic forum – by establishing an I20 conference



Ambassador John Berry – Innovation Roundtable Brisbane

ahead of next month's Leaders' Summit. They recognize – as do we – that innovation is a crucial driver of economic prosperity. We're pleased that Mario could be here with us today.

Conclusions

Of course, not all innovation cooperation is – or needs to be – serious.

Some of our most widespread innovation cooperation takes place in the realm of entertainment.

The LEGO Movie – it's awesome! – distributed by Warner Brothers has made nearly half a billion dollars worldwide. The brains behind it are Sydney studio, Animal Logic. This studio is a prime example of the talent and creativity that is typical of Australians. They were the first studio in Australia to make a feature length animated film – *Happy Feet*. That year, Animal Logic's singing and dancing penguins beat out *Cars* – made by those underdog animators at Disney – for an Oscar. Not bad for a first try.

Whether we are making people's days a little lighter with entertainment, or improving their health with medical advances, it is important to remember our greatest responsibility. If we want to give our children a better world, we must pursue the research that will make it happen.

I'd argue that doing so is, in fact, part of our duty as citizens.

In ancient Athens, young people took an oath before they could assume the full rights and responsibilities of citizenship. In it, they swore to leave their city not only not less, but greater, more beautiful, and more prosperous than they found it.

We must hold those words in our hearts. They are the core of civic morality still today. If we do, we will be well prepared to meet whatever challenges the future may bring.