



# REMARKS

BY

SENATOR THE HONOURABLE FAZAL KARIM, MINISTER OF  
TERTIARY EDUCATION & SKILLS TRAINING

AT THE

RESEARCH SYMPOSIUM:

RESEARCH, ENTERPRISE AND IMPACT

AT THE

LEARNING RESOURCE CENTRE AUDITORIUM, ST. AUGUSTINE

ON

WEDNESDAY 2<sup>ND</sup> OCTOBER, 2013

AT 1:00 P.M.

## **SALUTATIONS**

- ❖ Professor Clement Sankat, Pro-Vice-Chancellor - Campus Principal, The University of the West Indies.**
- ❖ Professor Wayne Hunt, Pro Vice Chancellor - Research, The University of the West Indies.**
- ❖ Mr. Ewart Williams, Chairman, Campus Council, UWI St Augustine.**
- ❖ Mr. Indar Maharaj, President, National Gas Company of Trinidad & Tobago Limited**
- ❖ Specially Invited Guests.**
- ❖ Members of the Media.**

## Introduction

Ladies and gentlemen,

It gives me great pleasure to convey these remarks on behalf of the Minister of Tertiary Education & Skills Training, Senator the Honourable Fazal Karim, who unfortunately cannot be here with us today at this momentous occasion.

1. As you may already be aware, the Global Competitive Report 2013-2014 was recently released by the World Economic Forum in a gathering organized by one of the many institutes under the purview of the University of the West Indies, the Arthur Lok Jack Graduate School of Business. This report highlighted an important development that probably went unnoticed by many observers. This development is the transitioning of Trinidad and Tobago's economy from one that is efficiency driven to

one that is *innovation driven*. In fact ladies and gentlemen, Trinidad and Tobago is the **only** Latin-American and Caribbean country in the Innovation-driven category. We would do well to follow the words of Steve Jobs who said, "Innovation distinguishes between a leader and a follower."

2. In the **book entitled Innovation and Growth: Chasing a Moving Frontier**, both the World Bank and the Organization for Economic Co-operation and Development (OECD) noted "Innovation is critical not just for developed countries to sustain growth, but for emerging economies and developing countries to catch up with developed countries". Trinidad and Tobago at this critical juncture must assume a leadership role.

## Main Body

3. Innovation cannot, of course, be done in a vacuum or solely in an academic context. We cannot be content with “*business as usual*” that is the traditional “publish or perish” philosophy. The University of West Indies, as a leading regional institution in not only Trinidad and Tobago but also the Caribbean, must seek a new model. Research must be commercialized and more importantly, greater collaboration must be fostered among agencies conducting research. Abby Cohen, who not only served on the Innovation Advisory Board of the White House but also on Goldman Sachs said, “*Our greatest challenge with regard to fostering innovation cannot be simplistically measured in terms of university degrees granted or*”

**patents rewarded. Rather, the national goal should be to use the extraordinary basic research and creativity and to “translate” them through appropriate development and commercialization.**”

4. One only has to look at Northwestern University’s Innovation and New Ventures Office (INVO) for a meaningful example of commercialization of innovative endeavours.

5. INVO was launched in 2010 and is helping 10 startups a year find success in the commercial markets. You may ask ladies and gentlemen, how did INVO engage in such a process? The answer according to Forbes is that it took “a **little bit of planning and a whole lot of disruption of academia’s business as usual.**” It is no longer business as usual, no longer “publish or perish”.

6. Ladies and gentlemen, the best way to predict the future is to create it. Jobs in the new economy will be predicated on the entrepreneurial and innovative exploits of research institutions like the University of the West Indies. On previous occasions, I have spoken about the “frustrated graduate”, a person unable to access jobs in the new economy. Jim Clifton, the author of “The Coming Jobs War”, warns of the danger of frustrated graduates,

**“The lack of good jobs will become the cause of hunger, extremism , out-of-control migration patterns, reckless environmental trends, widening trade imbalances and on and on.”**

To eliminate this danger of frustrated graduates, research and development must prepare graduates for the jobs of the

future. Here are some of the jobs of the future according to Forbes magazine:

### **A. Logistician**

These professionals use complex computer software to track the movements of goods and products—and brainstorm ways to make the process smoother and more efficient. Some logisticians even work with government agencies to help clean up natural disasters.

### **B. Ethical Hacker**

Many companies hire these experts to purposefully hack systems in order to pinpoint problems in security measures before their less-ethical counterparts get the chance.

### **C. Front End Engineer**



When one clicks a button on your favorite website, it brings one to another page. Front end engineers—also called front end web developers—create what you see online every day.

7. It is in this context that the research and development initiatives of the University of West Indies must be focused on commercialization and entrepreneurship, both pivotal in the creation of sustainable jobs for nationals of Trinidad and Tobago. Despite the fact that unemployment is close to 5%, we understand that one must not look at present successes but keep one's gaze steadfastly on the horizon for future developments. It is with that in mind that not too long ago, on this very campus, the Ministry launched the Centre for Workforce Research and Development

(CWRD), located on this Campus. The CWRD's mandate is to forecast labour market trends, skills gaps, training needs to eliminate the mismatch between industry demand and the tertiary education sector supply.

8. I have often spoken about the economic and industrial prowess of Singapore; Singapore and T&T got independence in the same timeframe and share a similar colonial past. In the Times Higher Education "100 under 50"- the top 100 universities worldwide under 50 years old for 2013, *Singapore's Nanyang Technological University is ranked 8<sup>th</sup> in the world. In the science and technology sub-component ranking, Nanyang Technological University is ranked 12<sup>th</sup> in the world.*

9. According to Times Higher Education, the Nanyang Technological University is a hub of research and

development, being home to several world-class autonomous institutes - the Earth Observatory of Singapore (EOS), the Singapore Centre on Environmental Life Sciences Engineering (SCELSE) and various leading research centres such as the Nanyang Environment & Water Research Institute (NEWRI), Energy Research Institute @NTU (ERIAN) and Institute on Asian Consumer Insight (ACI). Surely, the exploits of Nanyang Technological University can serve as a blueprint for the University of the West Indies, St. Augustine with respect to research and development.

10. **The National University of Singapore (NUS), is ranked 39<sup>th</sup> in the world in social sciences**, thus showing that the prowess of Singapore is not limited to only the hard sciences. With respect to research activities, from a total student population of 37,304 persons, the National

University of Singapore for the calendar year 2011 published **6,353 research papers**. For the fiscal year 2010, from a total staff of 9,764 persons, NUS filed **326 patents** and attained **214 research awards**.

11. Not content with mere academic output, NUS fosters experiential learning to enhance entrepreneurship through the establishment of NUS overseas colleges in Silicon Valley, Israel and India. I am sure the UWI would have examined the road map left by the NUS in its deliberations to enhance the impact of current and future research.
12. Research cannot and should not be driven by public resources alone. The private sector plays a pivotal role in resourcing and commercializing of research within a nation. I will indicate just two examples of the meaningful co-creation initiatives between private industry and universities at the international level.

1. *The Energy Biosciences Institute (EBI)* is a groundbreaking strategic research partnership created in 2007 to tackle the application of modern biology to energy problems. The main focus is on developing sustainable next-generation biofuels and reducing the impact of fossil fuels on global warming. *BP supports the institute with a 10-year, \$500 million grant. Its partners are the University of California, Berkeley, the Lawrence Berkeley National Laboratory and the University of Illinois at Urbana-Champaign. The institute hosts 60 research groups including 129 faculty members and over 300 postdoctoral researchers and graduate students.*

2. In 2004, *Audi proposed a deep and strategic collaboration with the Technical University of Munich*

(TUM), through the establishment of a research institute near Audi headquarters in Ingolstadt that would support over 100 PhD students working on technology and innovation issues vital to Audi's competitiveness.

What was created?

The Ingolstadt Institute of TU(Technical University)

Munich established a large-scale strategic relationship between university researchers and Audi, designed for major impact on teaching and learning as well as the company's competitiveness.

13. We are not the only one reaching out to others based in foreign universities; in fact, Chile has initiated a programme called Start-Up Chile. Start-Up Chile is a program created by the Chilean Government, executed by Corfo via InnovaChile, that seeks to attract early stage, high-potential entrepreneurs to bootstrap their startups in

Chile, using it as a platform to go global. In 2010, the program, at that point just a pilot, brought 22 startups from 14 countries to Chile, providing them with US\$40,000 of equity-free seed capital, and a temporary 1-year visa to develop their projects for six months, along with access to the most potent social and capital networks in the country.

14. Ladies and gentlemen, this is what I mean by impactful research, co-creation and strong industry-university relationships that can only redound to the benefit of Trinidad and Tobago and the Caribbean. The level of engagement between the private sector of Trinidad and Tobago and the UWI needs to be amplified with respect to research and commercialization of such research. The raised profile of the private sector in research will not mean a shrinking of the developmental role played by the Government of Trinidad and Tobago. It is on that note, I

applaud the partnership between the National Gas Company (NGC) and the UWI in not only providing major sponsorship of this Research Week but, also earlier this year establishing the Professorial Chair in Innovation and Entrepreneurship.

15. The Government of Trinidad and Tobago through the Research and Development Impact Fund has, to the tune of \$TT50.38 million from 2005 to 2012, funded research at the UWI, St. Augustine. This funding, though small in terms of the cost of research, has enhanced the research capabilities and more importantly, inculcated a research culture, as evident by the staging of the UWI Research Week. With such a solid foundation being established, the next step now has to be taken. This next step is the establishment of the Higher Education Research Fund (HERF).



16. In New Zealand, the Tertiary Education Commission manages the Performance Based Research Fund (PBRF) with a mandate to encourage quality research and reward research excellence in tertiary education institutions. One year ago, on this very Campus at the Award Ceremony of the Research & Development Impact Fund, I announced the Government's intention to establish a national research fund for Trinidad and Tobago. It is in this regard, that I am pleased to announce that Trinidad and Tobago has joined the distinguished company of Singapore and New Zealand. The Cabinet has not only approved the establishment of the Higher Education Research Fund of Trinidad and Tobago but, has resourced this Fund to the tune of TT\$7 million annually.

17. The Higher Education Research Fund of Trinidad and Tobago will be managed by the Cabinet appointed National

Commission for Higher Education (NCHE) which is chaired by your Campus Principal, Professor Clement Sankat. The Higher Education Research Fund will be guided by the Higher Education Research Agenda of Trinidad and Tobago (HERA). It is my view, ladies and gentlemen, that the HERA and the HERF will rationalize, harmonize and prioritize research in judiciously chosen areas for the greater good of the citizens of Trinidad and Tobago.

18. The Higher Education Research Fund of Trinidad and Tobago will be open to researchers based in tertiary education institutions in Trinidad and Tobago and also individual researchers not affiliated to such institutions. Further to this, Trinidadian scholars based in elite institutions overseas will be able to access the HERF once

their research is aligned to the priority areas identified in the HERA, thus creating a diaspora research network.

19. In this regard, the Ministry and the NCHE will work together to develop the criteria and agenda for research. One of the immediate things we need to do is to resource and operationalize the NCHE.

## Conclusion

20. In closing, I would like to endorse the Research Week and specifically, today's Research Symposium, as a key vehicle in bridging the communication gap between research activities of the UWI and the wider public. Too often research is left to collect dust or hidden from the man in the street, the tax payer and even, might I add other

researchers. I encourage the UWI to build upon the Research Week and leverage upon it to engage in collaboration with other institutions within the sector. I propose to create a forum for presenting the outcomes of the research funded by the taxpayer for the benefit of and the influence of the listening public in what some describe as “from policy to practice, from findings to the future”. The Ministry would like to thank all the stakeholders engaged in the success of this event.

Ladies and Gentlemen, I thank you and God Bless You.