

King's College London : Visit by Taiwan Top University R&D Delegation

Yonhua (Tommy) Tzeng

Professor and Dean
 Department of Electrical Engineering
 College of Electrical Engineering and Computer Science
 National Cheng Kung University
 Tainan, Taiwan
 tzengyo@mail.ncku.edu.tw

[July 14, 2010]

This article first appeared in EECS NCKU

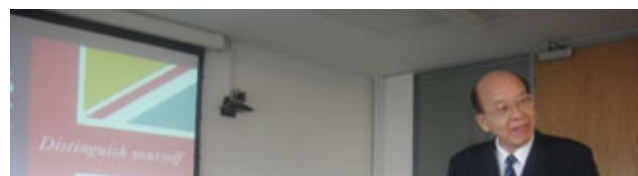
Hosting Delegation:

1. Professor Richard H. Trainor, Principal (principal@kcl.ac.uk)
2. Professor Keith Hoggart, Vice Principal (External Relations) & Professor of Geography (keith.hoggart@kcl.ac.uk)
3. Professor Simon Howell, Director of Research Development and Guy's Campus Dean (simon.howell@kcl.ac.uk)
4. Dr. Mike Shaw, Commercial Director, King's College London Business Ltd. (mike.shaw@kcl.ac.uk)
5. Emma Irving, PA to the Principal (emma.irving@kcl.ac.uk, Tel: 020 7848 3432, 127 Stamford Street London SE1 9NQ)

Taiwan Delegation:

1. Prof. Si-Chen Lee, President of NTU (sclee@cc.ee.ntu.edu.tw)
2. Prof. Ching-Ray Chang, Director General, Department of International Cooperation, National Science Council, Taiwan (crchang@nsc.gov.tw)
3. Ms. Cheng-Tung Tao, Program Director, Department of International Cooperation, NSC (cttao@nsc.gov.tw)
4. Prof. Ji-Wang Chern, Dean of R&D, NTU (jwchern@ntu.edu.tw)
5. Prof. Chao-Tsen Chen, Group Leader of Strategic Planning, Office of R&D, NTU (chenct@ntu.edu.tw)
6. Prof. Yonhua Tzeng, Dean of College of Electrical Engineering and Computer Science, National Cheng Kung University (tzengyo@mail.ncku.edu.tw, tzengyo@gmail.com)
7. Prof. Yeng-Horng Perng, Vice President, National Taiwan University of Science and Technology (vpresident@mail.ntust.edu.tw)
8. Prof. Chen-Yi Lee, Dean of R&D, NCTU (cylee@faculty.nctu.edu.tw)
9. Prof. Tsun-Yee Chiu, Dean of R&D, National Chang Gung University (dtychiu@mail.cgu.edu.tw)
10. Prof. Yen-Hsyang Chu, Dean of R&D, NCU (yhchu@jupiter.ss.ncu.edu.tw)
11. Prof. Chuan-Mu Chen, Dean of R&D, NCHU (chchen1@dragon.nchu.edu.tw)

Taiwan top university R&D delegation led by
 President Lee of NTU visited King's College London



in the morning on July 14, 2010 and was received by Principal Richard H. Trainor and delegates of KCL. Among KCL's delegates, Vice Principal Keith Hoggart was a foreign reviewer for the top university project in Taiwan and had visited NTU and NCKU. Our meeting with a familiar host during the visit of KCL made the discussion and interactions among delegates of both sides more vibrant while in a relaxed and friendly mode.



From left to right are Principal Richard H. Trainor, Vice Principal Keith Hoggart and President Sci-Chen Lee of NTU.

King's College London is the fourth oldest and one of the most prestigious universities in England. It was founded by King George IV and the Duke of

Wellington in 1829 and was one of two founding colleges of the University of London in 1836. While remaining part of the University of London, King's College has enjoyed financial and academic autonomy since 1994 and started to award its own degrees since 2008.

In King's 180 years of history, a number of greatest innovators were produced. They are, for example, Sir Charles Wheatstone, pioneer of current electricity and wireless telegraphy; James Clerk Maxwell, Einstein's predecessor in electromagnetism and relativity; Florence Nightingale, who founded the world's first professional school of nursing; and Lord Lister, who established antiseptic surgery and is known as "the father of modern medicine".

Nine people who taught or studied at King's and its associated institutions have been awarded the Nobel Prize: most recently, Professor Sir James Black OM, inventor of beta blockers and anti-ulcer drugs, and Professor Maurice Wilkins, who, with Rosalind Franklin and other King's colleagues, played a major part in the discovery of the structure of DNA. Many famous writers were educated at King's such as Romantic poet John Keats, novelist Thomas Hardy, William S. Gilbert of Gilbert and Sullivan fame, Virginia Woolf, Somerset Maugham and Arthur C. Clarke.

King's has 23,000 students, of which about 60% are female (8,600 are graduate students) and 5,500 employees. King's has an overall annual income of over 485 M including the research income of 135M. King's College London ranks 23rd in the world by the 2009 Times Higher Education World University Rankings and 65th by the Shanghai Jiao Tong University World University Rankings. Its global strengths are Clinical Medicine and Pharmacy (MED) ranking worldwide the 30th, life sciences and biomedicine worldwide 37th, social sciences worldwide 45th, and Arts and humanities worldwide 40th. Between 2005 and 2008, about 20% of the Department of Health's total spending in universities was awarded to King's scientists.

Among universities in UK, UCL's strengths include the following: Politics: UK 2nd, Food Science: UK 2nd, Law: UK 4th, Dentistry: UK 5th, Nursing: UK 5th, Business: UK 8th, Pharmacology & Pharmacy: UK 17th, Medicine: UK 18th, Communications & Media Studies: UK 21st, Linguistics: UK 24th, Geography & Environment: UK 28th, Computer Science: UK 33rd, English: UK 33rd, and Biosciences: UK 34th.

King's emphasizes on "translation" of health research into patient and economic benefit but maintaining strong science base. King's has invested heavily in translational research infrastructure, in early and late phase clinical trial capacity, and in recruitment and retention of the best translational and clinical scientists. UCL, Imperial and King's together account for 31% by value of all new Medical Research Council (MRC) awards in 2009/10 (UCL and King's alone 23%).



KCL's translational medical research support.

Besides health related research, humanity and science accounts for a little more than 50% of the total students. King's engineering program is small in scope compared to health and humanity. Its physical sciences and engineering students amount to about 9% of the total number of students.

KCL considers the number of doctoral students per academic faculty as one of indices for quality assessment. How many doctoral students each academic faculty member can instruct depends on the funding level, research capacity, and reputation of each individual faculty member. KCL does not set the total number of doctoral students each department is

allowed to admit. However, there is a common sense (rule) that considers six doctoral students as the maximum number of doctoral students each academic faculty member can effectively advise. There are some exceptions to this rule, though.

Apparently, KCL has some of its strengths and weakness in complement with those of NCKU. The strong electrical engineering and computer science and the general engineering disciplines, when combined with the strong health program in KCL will be excellent for collaborative research in medical devices, instruments, and systems. Professor Simon Howell, Director of Research Development, and I will discuss further on this potential subject of complementary collaborative research subject between NCKU and KCL.

With so many great innovators having been produced at KCL, it will be very inspiring for NCKU faculty and students to spend one semester or two studying or conducting research at KCL. Bilateral student exchange will be explored. Through successful interactions, it is hoped that Taiwanese researchers can find collaborators in KCL to carry out their own joint projects or participate in future FP-7 projects led by KCL's project coordinators.

Design & Layout : Ivan Tarn, The Banyan Editorial Office



Professor Simon Howell, Director of Research Development, showing the research power ranking among top universities in UK with KCL being the 2nd, only next to University College of London (UCL).