

University College London (UCL) : Visit by Taiwan Top University R&D Delegation

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[July 15, 2010]

This article first appeared in EECS NCKU

Hosting Delegation:

1. **Professor Malcolm Grant**, UCL President and Provost and President, <http://www.ucl.ac.uk/provost/>, provost@ucl.ac.uk
2. **Professor David Price**, UCL Vice-Provost (Research), <http://www.ucl.ac.uk/research-at-ucl/>, & Professor of Mineral Physics, <http://www.ucl.ac.uk/es/people/price.htm>
3. **Professor Michael Worton**, UCL Vice-Provost (Academic and International), <http://www.ucl.ac.uk/global/worton/>, & Fielden Professor of French Language and Literature, <http://www.ucl.ac.uk/vice-provost/worton/>
4. **Professor Mike Wilson**, UCL Pro-Provost (Europe), <http://www.ucl.ac.uk/global/europe/>, & Professor of Microbiology, Eastman Dental Institute, and Honorary Principal Bacteriologist, Eastman Dental Hospital, http://www.eastman.ucl.ac.uk/research/staff/michael_wilson/, m.wilson@eastman.ucl.ac.uk
5. **Miss Panayiota Zorbas**, UCL International Office, www.ucl.ac.uk/international/, p.zorbas@ucl.ac.uk,

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-Hong 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)

The Taiwan delegation arrived at University College London, located at the heart of London, around 2pm on July 15, 2010 and was greeted at the front gate by Miss Zorbas of UCL International Office and a professional photographer. On behalf of President Michael Lai of NCKU, I joined the Taiwan delegation as a member and participate in all aspects of the visits in UK. Both Miss Zorbas and the photographer accompanied us during the whole visit to provide needed assistance and recording of a series of meetings and activities. It is highly appreciated that UCL administrators considered our visit to be very important and did all they could to make our brief visit very enjoyable and informative.



The front gate of the main campus of UCL.



The Wolfson Institute for Biomedical Research, UCL Medical School.

UCL is the third oldest universities in UK after Oxford University and Cambridge University. UCL was founded in 1826 by a non-religious founder as a radically different university from Oxford University and Cambridge University which at that time admitted only students with strictly religion requirements and those who were related church members. UCL was the first to open up English higher education to people of all beliefs and social backgrounds. That radical tradition remains alive and helps made the proud global reputation which UCL enjoys today. Oxford University, Cambridge University, and University College London formed the Golden Triangle of UK.

Currently, UCL has about 23,000 students, of similar number to that of NCKU. However, UCL has 2000 faculty members, 2000 research staff members and 4000 administrative staff members. The ratios of faculty number and the staff number to student number are both much higher than those of universities in Taiwan. UCL has fifty departments in eight faculties.

UCL was ranked the **4th in the world** in the recent Times Higher Education-QS rankings and the 11th based on the Shanghai Jiao Tong University ranking. Twenty one Nobel laureates, including Charles Kao who was awarded the 2009 Nobel Prize for physics with two other scientists for their work on optical fiber communication, have come from the UCL community. Nobel laureate, Francis Crick, who was among four scientists to discover the DNA structure, earned his B.Sc degree in physics from UCL at the age of 21. The radical tradition UCL inherits from its founder helped lead UCL with a global reach and global vision making it “London’s Global University”. About 34% of UCL students come from nearly 140 countries outside the UK around the globe. UCL’s research also reaches the farthest corners of the globe; from the conservation of antiquities in Iraq to the transformation of engineering research in Kazakhstan.

Among the top ranking strengths of UCL among universities in UK, UCL stands as follows: Art and Design: UK 1; English: UK 2; Medicine: UK 4; Economics: UK 4; Music: UK 4; Architecture: 4; Psychology: UK 5; Linguistics: UK 5; Geography & Environment: UK 5; Law: UK 5; Biosciences: UK 8; Computer Science: UK 12;

Pharmacology & Pharmacy: UK 13; Town Country Planning: UK 14; Politics: UK 17; Business: UK 29. In terms of world ranking, the strengths are for Clinical Medicine and Pharmacy (MED): World 10; Life and Agriculture Sciences (LIFE): World 18; Physics: World 51-77; Economics/Business: World 51-75; Life Sciences and Biomedicine: World 22; Social Sciences: World 28; and Arts and Humanities: World 25.

The formal meeting visit began with brief welcoming remarks by President and Provost of UCL, **Professor Malcolm Grant**. **President S.C. Lee** of the Taiwan delegation introduced our delegation and explained our mission of the UK visit. A series of presentations were then given by **Professor David Price**, UCL Vice-Provost (Research), **Professor Michael Worton**, UCL Vice-Provost (Academic and International), and **Professor Mike Wilson**, UCL Pro-Provost (Europe).

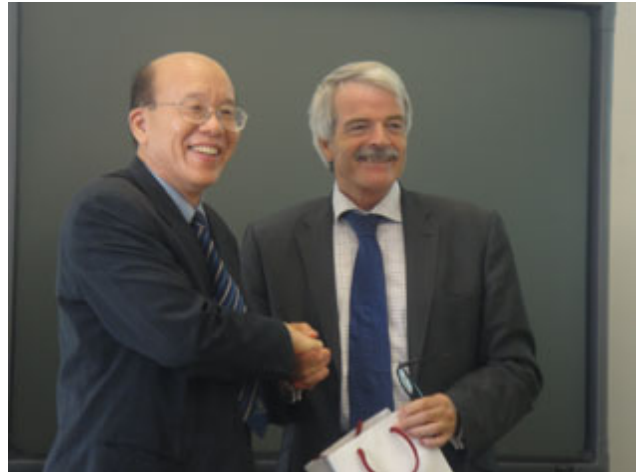
Professor David Price, UCL Vice-Provost (Research) explained the need for “big ideas” for key university strategies. Professor Price emphasized the vision of UCL in solving global problems which face us today by working together right across the university on “grand challenges” in global health, sustainable cities, intercultural interaction, and human wellbeing. UCL believes in undertaking fundamental research and in applying it.

Professor Michael Worton, UCL Vice-Provost (Academic and International) emphasized on “institutional changes”, “people”, “market”, and “geographical context”. The world we face has changed us as educator, changed our students as learners, changed our relationship with stakeholders in business and industry into equal partners. Internet contents have made young people think and learn in a very different way these days. Knowledge economy has evolved into innovation economy.

As far as “people” is concerned, attention is paid to mobility of students, expectations of students, expectations of employers, and different staff makeup. Under the situation with rapid expansion and globalization of higher education and advanced training, it becomes important to find out how best to manage and mediate the challenges. It also becomes necessary to build up international reputation to hold a global brand for advantageous competition among institutions for foreign students.

We also need to decide on both partner institutions and partner countries. UCL has chosen a new focus on China and India as well as emerging economies such as Brazil and Russia. With 34% students being foreign students, the strategies and approaches adopted by UCL apparently are successful and can be learned by us.

Professor Mike Wilson, UCL Pro-Provost (Europe) has been a coordinator for EU FP programmes for many years. He pointed out that UCL grant income from EC Framework Programmes amounted to 170M in 2009. He also introduced various opportunities within EU FP-7 program. Professor Wilson is a Professor of Microbiology in Eastman Dental Institute and a Honorary Principal

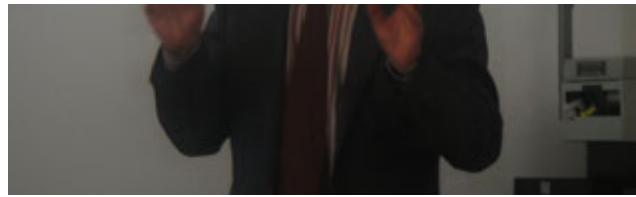


President Lee of NTU (left) and President Grant of UCL exchanged gifts after delivering opening remarks for the meeting.



Bacteriologist in Eastman Dental Hospital.

Professor Wilson welcomes researchers in Taiwan to explore possibilities in collaborating with his research team. Researchers in Taiwan should look up his expertise and interest and communicate with him for possible collaboration. In the meanwhile, the EU NCP office will invite him to Taiwan for workshop to disseminate his knowledge and experiences in EC research programs.



Professor Mike Wilson is making a presentation for Taiwan delegation.

After the formal meeting, the Taiwanese delegation was led to meet with a group of students from Taiwan. Among these students from Taiwan, I met a doctoral student, Ms. Chia-Lin Chen, who graduated from the Department of Architecture of NCKU and is working on her doctoral degree on Urban Planning. Among the members of our delegation, Vice President Perng of National Taiwan University of Science and Technology is an alumnus of Department of Architecture of NCKU. Ms. Chen was happy to meet with us at UCL which is far away from home. Ms. Chen is supported by Taiwanese government for studying abroad.



VP Perng, Ms. Chen, and Dean Tzeng (from left to right) in UCL on July 15, 2010.

students in Taiwan spend too many years for their degrees. More effective means of graduate education and skill training will need to be explored.

The staff-to-faculty ratio of UCL is much higher than that of NCKU. This, when coupled with the low teaching load for faculty members, allows faculty members of UCL to focus on high quality and high impact research. In UK, BS students spend 3-4 years, MS 1-2 years, and Ph.D. 3-4 years for their degrees, respectively. Besides, research graduate students are not required to take a minimum number of credit hours of courses for graduation. Instead, advisors will instruct research graduate students to take certain courses which are relevant to their topics of research. By means of leading graduate students into high quality research quickly within a short period of preparative time, graduate students in UK save one year or so for earning each of their degrees. Graduate

Design & Layout : Ivan Tarn, The Banyan Editorial Office

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