[Panda Lecture] Nobel Laureate Gerardus 't Hooft on How Differences Drive Innovation and Science Transcends Borders

The Department of Physics recently hosted a high-profile Tamkang Clement and Carrie Chair lecture, featuring Gerardus 't Hooft, winner of the 1999 Nobel Prize in Physics and professor at the Institute for Theoretical Physics, Utrecht University, the Netherlands, who delivered a talk titled "Education and Collaboration in Fundamental Science as Bridges Between Nations." The event drew more than 310 attendees from on- and off-campus locations and was also streamed online.

Vice President for Academic Affairs Hui-Huang Hsu noted that the lecture represents a significant achievement of the Taiwan Bridges Program and that Professor 't Hooft is the second Nobel laureate to visit Tamkang University. Dean of the College of Science Hung-Chung Hsueh introduced Professor 't Hooft as one of the most influential particle theorists in the world. He explained that the mathematical model developed by 't Hooft and his advisor successfully predicted the interactions between subatomic particles and fundamental forces, laying the essential groundwork for the revival of high-energy physics. This accomplishment earned them the Nobel Prize.

During the lecture, Prof. 't Hooft used the European Organization for Nuclear Research (CERN) as an example to emphasize that cutting-edge science requires large-scale collaboration across national borders. He highlighted CERN as a model of scientific cooperation that transcends national boundaries, where science itself serves as the common language. He also underscored the importance of "differences," noting that the clash of diverse ideas, methods, and cultures is a key driving force behind scientific progress and the evolution of civilization.

Addressing emerging technological trends, Prof. 't Hooft discussed the potential of Super-Human Artificial Intelligence (SHAI) and emphasized the need for robust ethical awareness within scientific communities. If properly guided, he said, advanced intelligent systems could help enhance global security and cooperation. He encouraged students to be bold in asking questions, to engage actively in academic exchange, and to strive toward becoming true experts in their chosen fields. He concluded by expressing his hope that science will continue to serve as a vital bridge linking nations, fostering mutual understanding, and addressing global challenges together.

[Panda Lecture]Chu Duc Trinh's Bio-MEMS Research Sparks Lively Discussion Among Engineering Faculty and Students

The Department of Mechanical and Electro-Mechanical Engineering recently hosted a Tamkang Clement and Carrie Chair Lecture, inviting internationally renowned scholar Prof. Chu Duc Trinh, Rector of the University of Engineering and Technology at Vietnam National University, Hanoi, to deliver a talk titled "Small Technologies, Big Impact: BioMEMS, Organ-on-a-Chip, and Automated Biosystems."

Prof. Chu began by revisiting Newtonian mechanics and Nobel laureate Richard Feynman's perspectives on modern physics, illustrating how fundamental physics extends into the development and applications of advanced Micro-Electro-Mechanical Systems (MEMS) and Bio-MEMS technologies. His lecture focused on the evolution of miniaturization techniques and the integration of electronic and non-electronic components into microchips. This innovation has driven the emergence of the BioMEMS field.

He also highlighted research in Lab-on-a-chip systems, explaining how microscale devices can accurately simulate human organ functions, providing powerful tools for drug testing, disease modeling, and personalized medicine, particularly in lung cancer cell studies and in the field of female reproductive health, where they are used for oocyte and embryo culture.

During the Q&A session, faculty and students participated enthusiastically, raising questions on topics such as topics such as the ethical considerations of organ-on-a-chip technologies, AI modeling in BioMEMS, applications of biosensors, and the potential of automated lung cancer diagnostic systems, Chu Duc Trinh responded to each question and expressed optimism that future technological advancements are well within reach.

[Panda Lecture] Sonia Nieto Urges Educators to Center Love in Pursuit of Educational Equity

The Department of English recently hosted a Tamkang Clement and Carrie Chair Lecture, inviting Sonia Nieto, Professor Emerita of Language, Literacy, and Culture in the College of Education at the University of Massachusetts Amherst, to deliver a talk titled "Multicultural Education in a Globalized World: Implications for Educational Equity." She shared her extensive international experience in promoting multicultural education and linguistic diversity.

In her opening remarks, Dean Yi-Ti Lin of the College of Foreign Languages noted that Professor Nieto's educational philosophy not only emphasizes respect for differences but also advocates for putting understanding and action into practice to achieve fairness and justice in education. Professor Nieto opened by expressing her strong impression of Tamkang University's mission to "cultivate students' excellence with a soul" and its philosophy of the "Triple Objectives of Education." She spoke about her own experience as a child of Puerto Rican immigrants receiving an education in the United States, revealing that she did not encounter the history and culture of her home country until graduate school. This realization led her to dedicate her life's work to multicultural and bilingual education.

Professor Nieto emphasized that the goal of multicultural education is to ensure that all students receive a high-quality education and achieve their fullest potential while having their unique cultures and languages respected. She stressed that "love must be at the center of any work connected to these aims." She urged all educators to continue learning, discussing, researching, and practicing the ongoing pursuit of educational equity, especially in challenging times.

World University Presidents Forum: Partner Institutions Visit TKU to Discuss Higher-Education Transformation and Sustainable Development

To celebrate Tamkang University's 75th anniversary, a grand World University Presidents Forum was held on campus. A total of 67 guests from 36 partner universities across 11 countries visited TKU to offer their congratulations. Before the forum, they toured the newly renovated Scroll Plaza, featuring inscriptions of the names of 285 sister universities worldwide, attended the anniversary celebration ceremony, and witnessed two important signing events. President Huan-Chao Keh and Julie Chen, Chancellor of the University of Massachusetts Lowell, signed a 2+2 Dual Bachelor's Degree Agreement for the Department of Chemistry. Vice President for International Affairs Hsiao-Chuan Chen and Brett Lovegrove, Pro-Vice-Chancellor of the University of Queensland (Australia), signed a 3+2 Bachelor's–Master's Degree Agreement for the Department of Tourism.

A group photo of the visiting guests from sister universities in front of the newly renovated Scroll Plaza.

The World University Presidents Forum, themed "Digital Transformation and Sustainable Development of Higher Education," focused on two core issues—AI and sustainability. President Keh and Executive Vice President Chun-Hung Lin co-hosted the event. Vice President for Academic Affairs Hui-Huang Hsu, Alojzy Z. Nowak, Rector of the University of Warsaw in Poland, and Chellamuthu Muthamizhchelvan, Vice Chancellor of SRM Institute of Science and Technology in India, are among the speakers who shared how universities worldwide cultivate future leaders with global vision and sustainable mindsets in the AI era through innovative strategies. Additionally, Yuko Takahashi, President of Tsuda University in Japan, and Julie Chen, Chancellor of UMass Lowell, presented their institutions' governance strategies from humanistic and practical perspectives, respectively.