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HIGHLIGHTS

NTU Cancer Center Near Completion

**Lian-Hua Huang Elected AAN
Fellow**

**Forums Seek Solutions to High
Tech Industry**

70 Years of Rugby Team

Special Report

The New D-School



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President's Statement

PAN-CHYR YANG

Taiwan is set to face the world's largest talent deficit by 2021, according to a recent survey conducted by the business consultancy Oxford Economics. This indicates that the nation will suffer a severe brain drain in the coming years. Looking at these statistics, I believe there is an upside and a downside—the upside is that Taiwan's professional talent has garnered global recognition; the downside, meanwhile, implies that we are unable to retain the human capital we develop.

It is my belief that this is a domestic problem from within Taiwan. We need not only to develop talent, but also to provide a stage on which our professionals can put their knowledge to use. NTU bears an unmistakable responsibility to address this issue, and we have been working quietly for years to keep the talent we cultivate here in Taiwan. For example, the D School established in September is an important addition to this effort, as it is our hope that while students strive for excellence in academics, they also give expression to creative thinking and entrepreneurial spirit, and in the future, contribute to Taiwan's society.

As a result, the goal of D School is to create an interdisciplinary platform that enables students and professors from different departments to work together for a common cause. In this space, students can meet friends with similar interests and work with instructors from various fields and business backgrounds. It is my hope that the students of D School can give free rein to their design thinking and take advantage of the school's resources to create innovative designs capable of changing human lives.

Business internships are another element of our effort to keep our graduates in Taiwan. In giving students the opportunity to understand business perspectives and production processes in a real business environment, we are also giving them a chance to explore their own interests and identify their individual shortcomings. For students who wish to study in different areas of specialization to strengthen their abilities, the university has also eliminated most if not all restrictions on minor studies.

For me, the Oxford Economics survey does not indicate a crisis for Taiwan, rather it points to an opportunity for change, a real chance to recognize and resolve this higher education dilemma so as to build a better environment capable of retaining the nation's brain power. Nonetheless, focusing only on keeping Taiwan's talent at home will not be enough; NTU will continue to step up its efforts to recruit outstanding students from overseas in the years to come.

Besides expanding our recruitment of ethnic-Chinese students from Southeast Asia, Hong Kong, and Macao, we also plan to open more short-term programs for international students who desire to study Mandarin and learn about ethnic-Chinese culture in Taiwan. Meanwhile, Vice President for Academic Affairs Rong-Huay Juang and Professor of Electrical Engineering Benson Ping-Cheng Yeh have been working persistently at the Center for Teaching and Learning Development to create online courses designed for ethnic-Chinese learners. As of the autumn of 2015, our over 2,000 online courses have drawn over 11 million visitors. I look forward to NTU becoming a gateway for people from around the world who are interested in ethnic-Chinese culture and I welcome international students to come to NTU to expand their knowledge of ethnic-Chinese society and culture.



▲ Distinguished Alumnus Wen-Hann Wang speaks during the 87th NTU Anniversary Celebration Ceremony.

▶ Distinguished Alumnus Chao-Cheng Chung shows his appreciation during the 87th NTU Anniversary Celebration Ceremony.

NTU CELEBRATES BIRTHDAY DURING 87TH ANNIVERSARY CEREMONY

The NTU Sports Center reverberated with the NTU School Spirit as the university celebrated its birthday during the 87th Anniversary Celebration Ceremony on November 15. With NTU President Pan-Chyr Yang personally presiding over the event, the university recognized nine distinguished alumni and presented this year's Honors Students, Student Social Contribution Awards, and Outstanding Youth Awards. On hand to celebrate with the NTU community were former NTU presidents as well as returning alumni and honored guests from Taiwan and around the world.

Each year during the Celebration Ceremony, NTU honors around nine of our alumni with Distinguished Alumni Awards in recognition of the important contributions they have made to both the university and society. This year's award recipients in the four categories include: in the Arts and Humanities, Chao-Cheng Chung (Department of Chinese Literature) and Hsiu-Mei Chen (pen name Lucy Chen, Department of Foreign Languages and Literature); in Academics, Chain-Tsuan Liu (Department of Mechanical Engineering), Alice Sun-Yung Chang (Department of Mathematics), and Soo-Chen Cheng (Department of Chemistry); in Business, Hsien-Chang Chen (Department



of Chemical Engineering), Ming-Chung Tsai (Department of Law), and Wen-Hann Wang (Department of Electrical Engineering); and in Public Service, Liang-Cheng Han (Department of Medicine).

Chosen for the exceptional ways in which they have demonstrated concern for society and worked for the benefit of others, the recipients of this year's Student Social Contribution Awards were Chi-June Jung of the Department of Atmospheric Sciences, Huan-Po Lin of the College of Management, and Yu-Shan Lin of the Department of Bio-Industry Communication and Development. Meanwhile, Outstanding Youth Awards were awarded to 14 students who have demonstrated exceptional moral integrity while producing remarkable learning achievements.

In addition to the 87th NTU Anniversary Celebration Ceremony, the entire month of November featured a diverse offering of anniversary activities. Besides holding the long-term exhibition "Invisible and Visible NTU," the Gallery of NTU History also extended its

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operating hours to until after dark under the theme Starry Night. NTU Press introduced its new NTU anniversary souvenirs at the NTU Press Bookstore in the Gallery of NTU History and presented a lecture series on the NTU Museums System. NTU Library teamed up with the Taiwan Photo Museum in arranging an exhibition of old photographs depicting Taipei City as well as the NTU campus of yesteryear.

These activities and more, including musical performances, art lectures and exhibitions, alumni lectures, and guided campus tours, filled NTU's anniversary month with a festive atmosphere as members of the NTU family, old and new, from Taiwan and abroad, as well as members of the general public joined together in celebrating the past, present, and future of the oldest as well as most prestigious university in Taiwan.



▲ NTU President Pan-Chyr Yang shares a toast with guests during a banquet celebrating the university's 87th anniversary.

► Staffs help a guest during a tea reception.



NTU RAISES BEAM ON WORLD-CLASS CANCER CENTER



▲ NTU officials and professors as well as honored guests pay witness to the historic beam-raising ceremony for the NTU Cancer Center.

NTU held a beam-raising ceremony at the construction site of the future NTU Cancer Center on November 15, the day of the 87th NTU Anniversary Celebration Ceremony. Numerous NTU officials and professors as well as honored guests turned up at the Keelung Road site near the NTU Main Campus to witness to the historic occasion.

A beam-raising ceremony is a traditional event that marks the near completion of a building's main structure. Construction of the center is scheduled for completion in 2017, and operations are set to commence in 2018.



NTU and the Yong Lin Healthcare Foundation signed an agreement in December 2008 committing the foundation to donate the funding and also cooperate with the university in creating a cancer hospital intended to be not only the finest in the Chinese-speaking world, but also one of the leading cancer treatment facilities in the globe. In addition to providing the Taiwanese public with access to world-class cancer treatment, the center will also observe the Precision Medicine Initiative, a project proposed by United States President Barack Obama in 2015, by offering personalized healthcare and boosting cancer survival rates.

During the ceremony, NTU President Pan-Chyr Yang declared his confidence that the center would be completed on schedule and that it would achieve its goal of becoming the best in the Chinese-speaking community as well as a leader in the world.

Terry Gou, chairperson of Foxconn Group and founder of the Yong Lin Healthcare Foundation, shared President Yang's goal of creating a center that demonstrates innovation in its facilities, technology, and management. He also looked forward to the center setting the global standard for quality cancer healthcare and safety. Meanwhile, the center's director Ann-Lii Cheng noted that the center is a once-in-a-century opportunity for NTU to establish a medical and biotechnology Science Park on the NTU campus.



▲ Using videoconferencing, members of the research team in the United States participate in a press conference announcing the international team's cancer research breakthrough at NTU.

CANCER RESEARCH PROVES THAT METASTASIS CAN BE PREDICTED

Prof. Tang-Long Shen of the Department of Plant Pathology and Microbiology and Center for Biotechnology was recently cited as co-first author in an important new study that could prove valuable in helping doctors predict whether a cancer tumor will metastasize and to which organs it will spread. Published online by *Nature* on October 28, the paper "Tumour Exosome Integrins Determine Organotropic Metastasis" has been hailed by mainstream and science media around the world as a major breakthrough in the field of oncology.

For the past three years, Prof. Shen worked as a member of an international team of scientists led by Dr. David C. Lyden at the prestigious Weill Cornell Medicine in New York City. The interdisciplinary team was comprised of 12 researchers from institutions in the United States, Taiwan, Spain, Portugal, Germany, Norway, and Japan.

The team discovered that cancer cells secrete a large volume of nano-scale extracellular vesicles called exosomes into the bloodstream prior to metastasizing, and on the surface of the exosomes lie binding proteins known as integrins that exclusively target particular organ tissues and transfer biological molecules from within the exosomes into the targeted organs. The researchers also found that the integrins function to create microenvironments within the remote organs, making the tissues fertile for the metastasis and

growth of cancer cells even before the cancer cells spread. The team's findings prove that tumor cells do not metastasize to random organs; instead, they move to predetermined organs that have been prepared for their arrival.

In explaining the significance of the findings, Prof. Shen pointed out that this is the first investigation to provide support for the "seed and soil" hypothesis of cancer metastasis first presented by an English physician named Stephen Paget in 1889. Paget proposed that metastasis does not occur haphazardly; rather, just as seeds require soil that has been fertilized, cancer cells need a suitably prepared tissue environment to achieve metastasis and growth.

Furthermore, Prof. Shen's team discovered that, in addition to preparing organs for metastasis, each type of integrin serves to direct its exosomes to specific organs, like the zip code on a package. For instance, the integrins released by breast cancer exosomes deliver the tumor cells to the liver and lungs.

As metastasis is associated with 90% of deaths caused by cancer, the study serves as a potential gateway to discovering new lifesaving therapeutic approaches. As a result, doctors may be able to identify and measure integrins in blood samples to predict which organs might be targeted by a tumor, enabling them to initiate preventive therapies before the cancer cells have begun to spread.



NEW D-SCHOOL PROMOTES DESIGN THINKING FOR HUMAN-ORIENTED SOLUTIONS

Design Thinking, the most popular program at world-renowned Stanford University, is taking the world by storm. NTU, the leading institution of higher education in Taiwan, has been working on multiple fronts to promote innovative, interdisciplinary thinking in recent years.

On October 17, NTU held a press conference announcing the formal establishment of a new D-School, one of the fruits of the university's innovation drive. At the university's invitation, numerous leaders of the industry, government, and academia were on hand for the event. Among the honored guests were Executive Yuan Ministers without Portfolio Jaclyn Tsai and Joyce Feng, as well as Stanley Wang, founder and CEO of the Silicon Valley microelectronics firm Pantronix Corporation. As an NTU alumnus, Mr. Wang not only promoted the D-School through his Silicon Valley connections, he also generously donated NT\$100 million for the new school's establishment.

During the press conference, NTU President Pan-Chyr Yang pointed out that the notion of innovative design is a novel concept essential in the present age; as a result, NTU has been working continuously to integrate its vast resources to provide students with a rich, comprehensive, challenging learning environment, so they will be well prepared to meet the demands of the new age. Executive Vice

President for Academics and Research Liang-Gee Chen also noted that, while preparing for D-School's launch, NTU recruited some of the finest professors from various colleges to tailor innovative courses especially for the new program; it also sent the school's professors to Stanford to learn about its Design Thinking system.

As a result of these efforts, D-School was officially established in March of this year. All of its courses are built on the foundation of the university's existing departments and graduate institutes. This is because the school seeks to provide its students with training and experience in interdisciplinary cooperation and creative thinking, as well as provide them with practical professional knowledge for the workforce.

The four courses offered during the first semester of its launch are: "Design Thinking," "Seminar on Longevity Smart Living Technology," "Global Innovation," and "Innovative Vehicle Design." These courses were designed to cultivate the students' ability to develop ideas through cooperation, and to provide specialized training in practice and design. Focusing on the essential elements of everyday life, the courses also teach students the importance of generating real-world, human-oriented solutions, and creating designs that effectively meet user needs.

Nursing School's Prof. Lian-Hua Huang Elected American Academy of Nursing Fellow



▲ Prof. Lian-Hua Huang receives her American Academy of Nursing Fellowship certificate from AAN President Dr. Diana J. Mason.



▲ Prof. Lian-Hua Huang smiles after finding her photograph among those of this year's other AAN fellows.

Prof. Lian-Hua Huang of the School of Nursing, College of Medicine, has been elected as a 2015 Fellow of the American Academy of Nursing, which is considered one of the highest honors in the field of nursing and professional care. Prof. Huang was formally inducted at the AAN's annual policy conference in Washington, D.C. on October 17.

Prof. Huang, who previously served as the director of the School of Nursing, has held administrative positions in academia, government, and in the public health sector. Her research interests include gerontological nursing, community health nursing, genetic counseling, and nursing administration. Deeply involved in health care and nursing both in Taiwan and internationally, Prof. Huang has produced many outstanding professional and academic achievements.

Established in 1973, the AAN strives to promote knowledge that benefits the nursing profession, health policy, and the wellbeing of the public. The academy currently has more than 2,300 fellows who include nursing administrators, policymakers, scholars, researchers, and practicing nurses. Nomination for an AAN Fellowship requires that a candidate demonstrate his or her important contributions to nursing and health care, and gain the sponsorship of two current fellows.

▼ Visitors play NTU startup Gelly Bomb Games Studio's augmented reality game "Eleanor of Ayer" during the IndieCade Festival 2015 in California.



AUGMENTED REALITY GAME EARNS NOMINATION TO INDIE GAMING FESTIVAL

some of the world's biggest names in the gaming industry was quite a remarkable feat for Gelly Bomb's young entrepreneurs, considering they had only just established their company at the end of 2014. Among the big-name nominees were Joel McDonald, a designer for the popular shooter games "Call of Duty" and "Wolfenstein," as well as Sam Barlow, the lead designer and writer of the "Silent Hill" game series.

"Eleanor of Ayer" challenges players to find and solve clues that will help them determine the whodunit behind the murder of Shovi, the lead singer of the rock band Lunacy. What makes the hunt for Shovi's killer so intriguing is that the game is designed to be played within the setting of a real-world cafe. The game's mixed reality is provided by a tablet computer that leads players through the game as they search for clues hidden about the cafe's interior. Depending on players' personal playing styles, they may arrive at different conclusions

A game developed by Gelly Bomb Games Studio, a student startup cofounded by fourth-year Department of Business Administration student Terry Chen, earned a spot to compete at the 2015 IndieCade Festival in Culver City, California from October 23- 25. As one of the 36 games nominated to compete across 12 innovation award categories, the startup's mixed reality, multiple ending mystery puzzle, called "Eleanor of Ayer," managed to stand out from a field of 1,200 competitors to make it into what is considered the Oscars of the gaming world.

Not only was Chen's company the only team from East Asia among this year's nominees, it was also the first team from Taiwan to gain an IndieCade nomination in seven years. Winning the opportunity to compete with

Gelly Bomb's IndieCade nomination can be attributed to its early adoption and fluid integration of a technology called augmented reality. AR is a virtual overlaying of our sensory perception of the physical world in the forms of audio, graphic, or text information. In the case of "Eleanor of Ayer," the tablet, computer, or laptop used when playing the game helps turn real objects within the cafe into clues, such as a telephone number, a line of text, or a video clip, to help the players solve the mystery.

Gelly Bomb first set up its studio in September 2014 and formally registered as a company in April 2015. Chen states that although founding the company forced the team to work on unfamiliar tasks, such as generating revenue, becoming an official enterprise opened the door to more opportunities, such as collaborating with other companies, and ultimately, developing its own game, "Eleanor of Ayer."

Augmented reality has already become a major focus for the world's leading technology companies, including Microsoft, which is scheduled to release the first version of its HoloLens in 2016. Intent on being a part of this trend, Chen and his Gelly Bomb team aim to develop creative customized augmented reality gaming platforms as they move step by step into global markets.

PRESIDENT YANG LEADS DELEGATION TO NTU PARTNER UNIVERSITY OF TSUKUBA

NTU President Pan-Chyr Yang led a major delegation to Japan to take part in the University of Tsukuba's 2015 Global Science Week from September 28 - 30. The event featured research presentations by scientists from universities around the world and provided opportunities for substantive exchanges between the participating universities under the conference theme "A Brighter Future through Transdisciplinary Collaborations."

The NTU delegation was made up of more than 20 university officials, professors, and students. Among them included Vice President for Research and Development Fang-Jen Lee, Vice President for International Affairs Luisa Shu-Ying Chang, and Dean of the College of Bioresources and Agriculture Yuan-Tay Shyu.

NTU and UT have been cultivating a close partnership in recent years. To further strengthen their relationship, the two universities organized a special session called "NTU Lounge" for the discussion of common interests. During the session, NTU students served high-quality tea from Taiwan to create a relaxed atmosphere and stir conversation.

Vice President Lee delivered the session's opening statement, while Associate Dean of the College of Medicine Tsai-Kun Li served as moderator. Director Isaac Wen-Yih Tseng of the NTU Molecular Imaging Center then presented a briefing on the operations of his center, and Dr. Tony Hsiang-Kuang Liang, a radiation oncologist and neurologist at the Division of Radiation Oncology of NTU Hospital, next discussed the planning for NTU's Radiation Medicine and Proton Therapy Center. Dr. Liang also introduced the world-



▲ (left to right) University of Bordeaux President Manuel Tunon de Lara, University of Tsukuba President Kyosuke Nagata, and NTU President Pan-Chyr Yang show off their copies of the Global Innovation Program-TRIAD agreement during the signing ceremony.

leading scanning technique of the center's proton therapy system and talked about areas in which NTU and UT could cooperate on proton therapy research.

In addition to academic exchange, the Global Science Week also served to demonstrate the substantial results of NTU's ongoing partnership with UT. For example, NTU, the University of California, Irvine, and France's University of Bordeaux took the opportunity to announce the launch of a joint Overseas Office at UT. Vice President Chang represented the three universities in delivering a statement at the office's unveiling ceremony, during which the three presidents of NTU, UT, and the University of Bordeaux also promulgated the Agreement for the Implementation of the Campus-in-Campus Initiative and the Global Innovation Program-TRIAD.

Earlier in April, UT opened the University of Tsukuba-Taiwan Office to promote international cooperation in Taiwan. It also plans to establish the University of Tsukuba Taiwan Alumni Association, as well. National Taiwan University of Sport President Hua-Wei Lin, who was also present at the Japan event, will serve as the association's first director.

STUDENTS LEARN ABOUT EXCITING OVERSEAS OPPORTUNITIES AT STUDY ABROAD FAIR



Students hoping to learn about the many exciting opportunities for overseas studies available at NTU filled the Second Student Activity Center on November 8 during the 2016/2017 NTU Study Abroad Fair. Organized by the Office of International Affairs, the fair featured scores of colorful booths providing vital information about NTU's international partner universities as well as information sessions regarding NTU's own outgoing exchange student programs and outgoing summer programs.

To provide interested students with first-hand information about studying abroad, the OIA invited NTU students who had studied abroad as exchange students, as well as exchange students from partner universities around the world to set up information booths. These booths offered the curious students important information about our partner universities as well as details about overseas courses and campus life.

Numerous university representatives from colleges around the world also traveled to Taiwan to promote their programs at the fair. Among them were Caroline Rice and Andrew Hemingway of Hertford College, University of Oxford, and Mimi Ahn of South Korea's Ewha Womans University. Participants were also given the opportunity to visit booths manned by personnel from the official Taiwan representative offices of many countries as well as to meet with the representatives of several education and language training centers to learn about overseas studies and language proficiency testing.

The event also featured an orientation meeting to introduce the recruitment procedure for NTU's outgoing exchange student programs. Those who attended the orientation were told the details of the application process, schedules, and other requirements by senior students who had spent the 2014/2015 academic year studying abroad. The seniors were also more than happy to discuss how they prepared their applications while also sharing the unforgettable experiences that were still fresh in their minds.

To help students choose the program that would best suit their needs, the OIA held an information session comparing the various overseas summer programs based on region, country, and university. Students who had taken part in these programs also shared their diverse and enriching experiences.

In addition, the OIA organized a Best Booth Campaign to encourage participation in the fair to go all out. The winners of the Exchange Students category were the booths of Pierre and Marie Curie University and EPF Graduate School of Engineering, the University of Tsukuba, and the University of California and California State University. Meanwhile, the winners of the best summer programs booths were Hertford College, the University of Oxford, the University of California, Berkeley, and the University of Pennsylvania. Also, the lucky winner of a drawing for students who handed in satisfaction surveys won an iPad mini 3.



President Yang Heads Delegation to Attend Matchmaking Workshop at the University of Hamburg

NTU President Pan-Chyr Yang and Vice President for International Affairs Luisa Shu-Ying Chang traveled to the University of Hamburg, Germany with a delegation of 14 professors to take part in a three-day bilateral conference at the NTU partner university from October 13-15. The trip reciprocated the earlier visit of the University of Hamburg's President Dieter Lenzen to Taiwan with eleven Hamburg professors to NTU in October 2014.

Called the "Matchmaking Workshop NTU-Hamburg," the event marked the first time that NTU co-organized a collaboration conference with one of its European strategic partner universities. The workshop included meetings focused on achieving sustainable academic cooperation in the eleven areas of Art-History, Humanities-Chinese Studies, Digital Humanity, Climate Research, Accounting, Proteomic Analytics, Chemistry-Soft Materials, Law, Latin American Studies, Social and Political Sciences, and Physics-Laserphysics. During the meetings, 34 professors from the two institutions worked together to develop cooperation projects in the form of faculty and student exchanges, collaborative research, joint seminars, dual-degree programs, and the European Union's Horizon 2020 project.

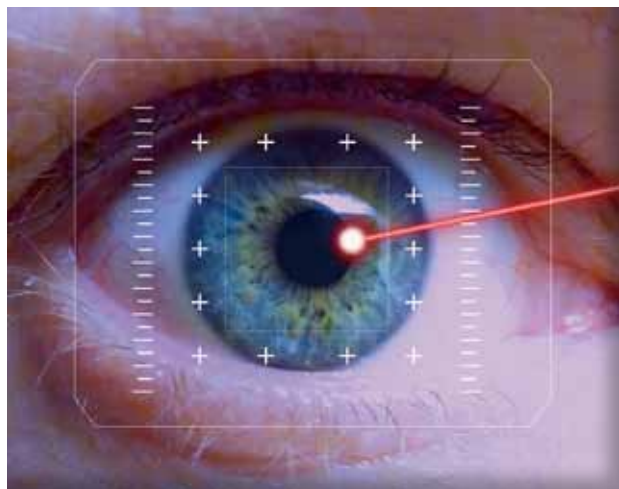
President Yang also held a meeting with Hamburg's Vice President Jetta Frost and Vice President Susanne Rupp to exchange ideas.

As the German university is renowned for its climate research, President Yang presented to the vice presidents a book compiled from a climate research symposium held at NTU. Meanwhile, Vice President Chang called on Department Head Courtney Peltzer-Hönicke of Hamburg's Department of International Affairs to discuss future collaboration programs, including special summer programs, the 2017 Hamburg Transnational University Leaders Council, and cooperation on dual-degree programs.

During the matchmaking workshop, Gebhard Reul of the German Academic Exchange Service (DAAD) presented details concerning 19 of its funding programs that support cooperative research. Each year, the DAAD grants funding totaling EUR 400 million for projects, such as observation visits, visiting lecturships, and research. Representing Taiwan, Dr. Dong-Yih Lin of Taiwan's Ministry of Science and Technology Representative Office in Bonn introduced the ministry's funding programs, which include international joint research collaboration, summer research programs for graduate students, internships, and exchanges.

Having established its partnership with the University of Hamburg in 1998, NTU has designated the German university as a major strategic partner in Europe.

Research Achievements



INTERDISCIPLINARY TEAM DEVELOPS NEXT-GENERATION ARTIFICIAL LENS FOR CATARACT SURGERY

▲ NTU has created a customizable artificial lens to treat cataracts.

► The team's next-generation intraocular lens features optical and biofunctional properties that make it customizable for cataracts patients.

An interdisciplinary team led by scientists of the Department of Chemical Engineering has developed an advanced artificial intraocular lens that can significantly decrease the incidence of medical complications caused by the artificial lenses currently available. Touting the new lens as the next generation of artificial lenses, the team published its research in the American Chemical Society's renowned journal *Chemistry of Materials* in September 2015.

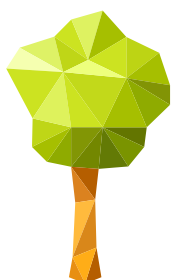


By utilizing a special material valued for its high biocompatibility, the team, which included researchers of the Department of Mechanical Engineering and the NTU Hospital Department of Ophthalmology, achieved a breakthrough allowing them to endow their lens with improved optical and biofunctional properties. The team's design offers a highly balanced functionality that provides cataracts patients with increased eyesight acuity and improved health outcomes.

Currently in Taiwan, myopia associated with cataracts is the primary reason senior citizens seek medical care. The most common treatment for myopia is surgical replacement of the cataract lens with an artificial intraocular lens. Despite growing demand for the procedure, the current prevailing intraocular lens implants often lead to several complications, including postoperative calcification, dislocation, and posterior capsular opacification, also known as after-cataracts or postoperative secondary cataracts.

The NTU team spent the last two years addressing these issues by developing a new prototype based on a chemical vapor deposition encapsulation process that makes use of functionalized poly-p-xylylenes, a substance common in implanted medical devices because of its excellent biocompatibility. With its optimized optical and biofunctional properties, the new device can be customized to suit the needs of different patients.

As to its optical functions, the new model features a high refractive index, a tunable effective focal length, and protection from UV radiation. In addition, it features superior biocompatibility that, according to research, can decrease the occurrence of post-operational calcification caused by eye epithelial cell growth, which is one of the major drawbacks of the current technology.



Campus Scenes

Students Deliver Warmth during Winter to Jibei Island



▲ Children of the Sea volunteers prepare antique tools and living implements for display in order to let tourists learn about Jibei Island's unique history and culture.

▶ A pair of NTU student volunteers share life experiences and stories with an elderly resident who lives alone.

Winters on Jibei Island, an island in the Penghu Islands archipelago that is home to 1,600 residents, are marked by blustery winds brought in by the northeasterly monsoon. The tourists who fill the island's sandy beaches throughout the summer are gone, as if blown away by the frigid winds.

On this particular day, however, a touch of warmth has arrived from the outside world. Making their way along the empty streets are 20 students wearing the club jackets of the NTU Children of the Sea Fishing Village Service Club. In groups of twos and threes, the students pay hospitality visits to elderly residents who live in solitude.

Speaking Taiwanese Hokkien, the volunteers sit and chat with the elders, asking the seniors about their living conditions, their feelings, and the anecdotes of their everyday lives. To show their appreciation for the warm and friendly company, some of the hosts even invite the young visitors to stay for dinner. For their part, the students extend invitations to their new friends to a community dinner banquet to be held at Jibei Elementary School on the upcoming weekend.

Through their conversations, the students learn that even though these seniors still might appear to be healthy, many of the senior residents feel extremely lonely, as the majority of the island's youth leave for mainland Taiwan for schooling or employment. As a result, the seniors welcomed the life vitality the youngsters brought to the island, especially during the cold winters.

In addition to senior care campaigns, the COS also organizes three-day camps and sporting events for elementary and junior high school students to help Jibei's younger generation broaden its outlook. Designed around such topics as daily living skills, reading, design, environmentalism, team competition, community building, and gender issues awareness, these fun activities help the students to develop a fuller awareness of their individual and collective potential.



▲ NTU students share the joy of reading with students at Jibei Elementary School.

Moreover, the student volunteers also put their hearts into cultural restoration projects. For example, the students have been providing assistance to the restoration of the Old Lin House since 2013.

Constructed over a century ago, the building's first owner was the designer of Jibei Island's stone weir tidal fish traps and Chimei Island's famous Twin Heart Stone Weir, Lin Bo. Serving as a venue for cultural events and later as a public affairs office, the Old Lin House was gradually abandoned and stood idle for many years. The students declare that their goal is not just to repair the structure, but also to insert life into a long been forgotten community.



The College of Bioresources and Agriculture's Biodiversity, Agriculture, and Culture of Taiwan Summer Program (BACT Summer Program) reached new heights this year, with four Japanese students joining other students from around the world to bring the total number of international students participating in the program to 21.

The Japanese students came from the CBA's agricultural partner colleges at the prestigious University of Tokyo and the University of Tsukuba, while the other international students hailed from the University of California, Santa Barbara, Texas A&M University, the University of Maryland, Purdue University, and Rutgers University in the United States, National Singapore University and Nanyang Technology University in Singapore, and the University

of British Columbia in Canada. Three local NTU students also joined the program, which was held over four weeks from June 27 to July 26.

The BACT program is designed to provide Taiwanese and international students with the opportunity to learn about the culture, agriculture, and biodiversity of Taiwan through a series of lectures, field trips, and hands-on activities. The program also promotes cross-cultural understanding by facilitating interaction among the local and international students.

Although the arrival of two typhoons forced the organizers to do a bit of last-minute rescheduling and make some itinerary adjustments, the students still managed to visit a number of interesting locations. Besides visiting Turtle Head Island, Taijiang National Park, and An Ping Fort, the students took part in a rice planting activity. And, while it was unfortunate that the students were unable to experience the awe-inspiring Taroko Gorge, they did learn, thanks to the typhoons, just how cold it can get on Hehuan Mountain, even in the summer.

During the guided tours, the students were diligent in taking notes and some even made sketches of the beautiful scenery. They also enjoyed friendly interactions with the guides, the local people, and the NTU students and professors in the program, all of which allowed them to immerse themselves completely in this island country. It is experiences such as these that have made the BACT summer program so popular with international students.

The strong support and active input of the faculty members of the College of Bioresources and Agriculture has ensured that the program is adjusted and improved each year. By adding new elements and covering a wide diversity of knowledge and experiences, the program remains fresh and interesting for international students who hope to learn more about the biodiversity, agriculture, and culture of Taiwan.



Forums Explore Solutions to Nation's Uncertain Future of Technology Industry and Brain Drain

What is the outlook for Taiwan's technology industry? From where will it draw the the intelligent, innovative talents it will need in the years to come? The uncertain future of the nation's technology sector as well as the predicted problem of brain drain are now considered major problems that concern our national security and must be confronted urgently.

In response to these unprecedented challenges to the nation's industry, technology, education, and human capital, the Department of Electrical Engineering organized an education forum and an industry forum as part of its 70th anniversary celebration activities in November. During the two forums, influential leaders in the education and business communities as well as some of the department's most venerable alumni joined forces to brainstorm about future opportunities, as well as to explore solutions to the core issues regarding both the cultivation of technology professionals and the industrial development in Taiwan.

The Department of Electrical Engineering has played a leadership role in the nation's technological and educational development ever since the department's founding. Over the last 70 years, the department has produced innumerable outstanding alumni and academic achievements. While the 70th anniversary celebration activities provided an opportunity

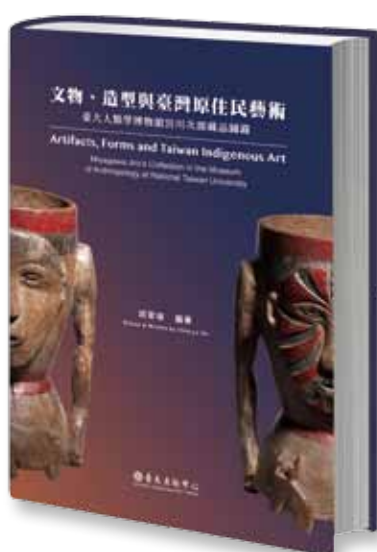
to reflect on the department's remarkable achievements and contributions to society, the two forums looked to the future by focusing on the unprecedented challenges the nation is facing in the areas of industry, technology, education, and human capital.

Former NTU President Si-Chen Lee moderated the education forum, which was held on the morning of November 7. The forum speakers included Senior Advisor to Taiwan's Office of the President Richard Chia-Tung Lee; National Chiao Tung University President Frank Mau-Chung Chang; Chairperson of Taiwan Semiconductor Industry Association and Chairperson of Etron Technology Incorporated Nicky Chau-Chun Lu; and Director of the NTU MOOC (massive open online course) Program Benson Ping-Cheng Yeh.

The industry forum in the afternoon of November 7 was moderated by Powen Hsu, the founding Dean of the College of Electrical Engineering and Computer Science. The forum speakers included Innolux Corporation Chairperson and CEO Hsing-Chien Tuan; Quanta Computer Incorporated Chairperson Barry Lam; MediaTek Incorporated Chairperson and CEO Ming-Kai Tsai; Asustek Computer Incorporated Chairperson Jonney Shih; and Pegatron Corporation chief executive officer Jason Cheng.



Book Shares Story of Japanese Collector's Indigenous Art at Anthropology Museum



This past November, NTU Press published the intriguing book *Artifacts, Forms and Taiwan Indigenous Art: Miyagawa Jiro's Collection in the Museum of Anthropology at National Taiwan University*. Edited and written by Prof. Chia-Yu Hu of the Department of Anthropology, the book exhibits and shares the

story behind the unique and beautiful assemblage of Taiwanese indigenous artifacts collected by the intrepid Japanese entrepreneur Miyagawa Jiro during the early 20th century.

Jiro was unique among collectors of Taiwanese indigenous artifacts during Taiwan's Japanese colonial period because of his particular motivations, viewpoints, and aesthetic preferences. Possessing no academic background in anthropology, the businessman was the first collector to appreciate and select these cultural objects as "primitive art."

From 1933 to 1936, Jiro sold the majority of his collection to the Institute of Ethnology at NTU's predecessor, Taihoku Imperial University. Four decades later, Jiro's artifacts today make up the most beautiful and exquisite collection of the Museum of Anthropology. The collection and transfer of these artifacts as well as the value attributed to them reflect the complicated interwoven relationships between Taiwan, Japan, and the international community during the colonial era.

For her book, Prof. Hu selected 192 of Jiro's 260 artifacts now archived at the Museum of Anthropology. Presented with photographs and explanations, the selections are divided into eight categories: Textile and Costume, Carved Wooden Posts and Statues, Weapons and Shields, Food and Drinking Utensils, Daily Living Instruments, Substances and Manufacturing Tools, Religious and Ceremonial Tools, and Potteryware and Pottery Figures. The author also provides helpful supplemental material at the end of the book, including a Chinese translation of Jiro's 1930 book *Primitive Art of Taiwan*, a complete list of the artifacts collected by Jiro that are archived at the Museum of Anthropology, and a bibliography of Jiro's publications.

This fascinating and beautiful book delves into Jiro's attitudes toward the artifacts. It also explains Jiro's definition of and personal preferences concerning "primitive art," and examines the process by which the concept of "primitive art" was established in Taiwan. Moreover, by relating the artifacts to their own stories to express their special significance, *Artifacts* allows readers to view the styles and aesthetic beauty of Taiwan's indigenous art from new perspectives while directly experiencing and appreciating on a visceral level the value and power of these beautiful cultural objects.

NTU at a Glance

NTU Library and the Taiwan Photo Museum joined hands to co-organize a special photography exhibition in celebration of NTU's 87th Anniversary. Called "Remembrances of Taipei, Impressions of Taida," the exhibition was held on the first floor of the General Library Building from November 5-30.

Featuring images spanning the last century, the exhibition focused the viewers' attention on the ever-changing face of both Taipei City and the architecture and people of NTU campus. In addition to showing the transformations of the city's infrastructure, the photographs of Taipei also highlighted its people and culture through depictions of local residents going about their daily lives.



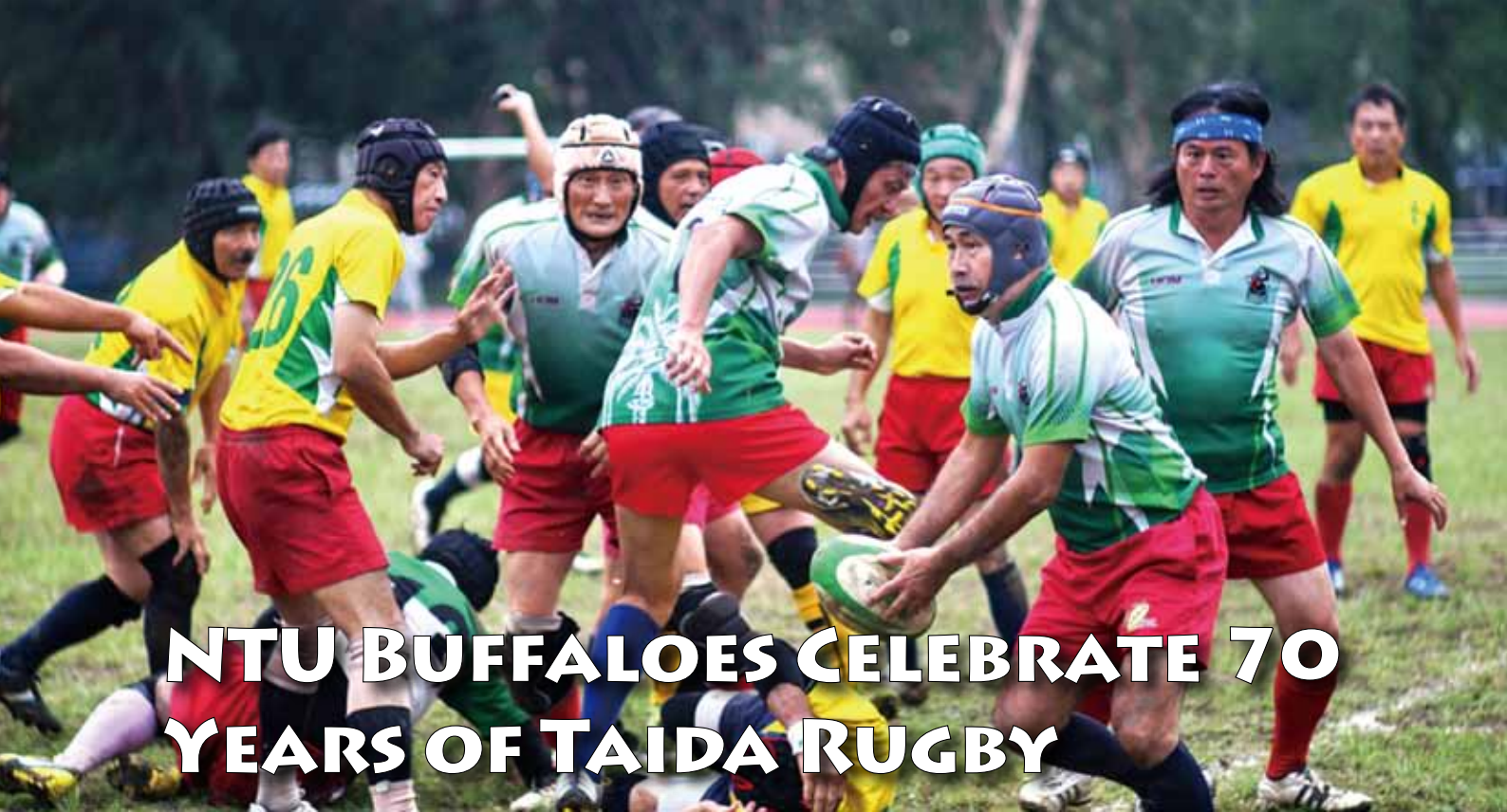
Meanwhile, the images of the NTU campus looked at NTU's beautiful buildings, the activities of its students and professors, as well as many of the contributions that the NTU community has made to society over the years. One photographer even captured extraordinary scenes documenting the architecture of the present NTU campus using a smartphone.

The exhibition photographs were chosen based on the curatorial recommendations and selections of revered photographer Chuang Ling, the honorary director of the Taiwan Photo Museum. The fascinating images on display included works by some of Taiwan's finest photographers from the Japanese colonial period, the decades of authoritarian rule under the Nationalist Chinese, the post-martial law era, and the present day.



Anniversary Photo Exhibit Looks at Century of Taipei and NTU Campus

▲ The photography exhibition "Remembrances of Taipei, Impressions of Taida" was held on the first floor of the General Library Building in November.



NTU BUFFALOES CELEBRATE 70 YEARS OF TAIDA RUGBY

The NTU Rugby Team celebrated its 70th anniversary on Oct. 24. Joined by hundreds of past members, who are called Old Boys, from Taiwan and abroad, some now in their 90s, the team held an anniversary ceremony, banquet, and an afternoon of friendly yet intense rugby games.

Called the NTU Buffaloes, the team was established in 1946, making it one of the most historic rugby teams in Taiwan. On celebration day, some of them donned either red or yellow shorts, representing the over-60 and over-70 categories, respectively, to show their fighting spirit on the rugby pitch once again.

Another highlight was the announcement of the newly-established NTU Women's Rugby Team. Known as the "Eight-Nation Alliance," its players come from up to eight countries. In honor of the historic day, the women lined up against their over-60 counterparts, taking home a 10-0 win against their seniors.



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