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NTU HIGHLIGHTS

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Azalea Festival

Rock Doctors to Anti-Age Queen's Head

Nobel Laureate Visits NTU

Agronomists Develop New Rice Crop

Yong-yih Tseng
Chinese Opera Maestro

Contents

President's Statement

PAN-CHYR YANG

NTU is anticipating the official opening of the D. School in September. This new institute of design aims to bring together students from various disciplines who have the ambition of starting their own companies. Under the guidance of professional instructors, the school's students will put their creativity and ideas into practice and have experiences that will benefit their future entrepreneurial pursuits.

Meanwhile, the university is providing students more flexibility in selecting courses by making reductions in credit hours for required courses. Also, having studied educational systems around the globe, we are planning to shorten NTU's current 18-week academic semester to 15 weeks. Our introduction of flipped classrooms on the other hand is promoting greater classroom discussion and giving students the practical skills they will need to demonstrate the fruits of their learning in the real world. I believe these efforts will foster the creativity of NTU students and cultivate their ability to analyze and respond to problems.

During last year's graduation ceremony, an NTU student from Japan took the stage to share her experience of joining the Taida community. Her words touched me deeply and I felt grateful that she had chosen to study at NTU and was able to benefit from her time here. A major factor that sets NTU most apart from other universities around the world is that we have preserved the quintessential elements of the traditional culture of ethnic-Chinese peoples, such as traditional Chinese characters. Moreover, not only does Taiwan offer an excellent living environment for international students, the environment enables us to freely discuss politics, economics, and culture. I believe it is this atmosphere of freedom in Taiwan that makes NTU the ideal platform for international students to learn about the ethnic-Chinese world. As a result, NTU hopes to attract ever greater numbers of international students to our campus, providing a bridge that allows students from around the world to learn about Eastern culture.

In coordination with the plan to shorten our academic semesters, we will be adding short-term winter and summer courses. These condensed and fascinating courses will draw international students who are interested in gaining insight into the essence of ethnic-Chinese culture.

"Chinese opera lives among the people; therefore, research into the art requires planning archeological investigations that take the researcher into the field in search of folk artifacts."

Chinese Opera Scholar Elected —Yong-yih Tseng

Major academic honors

- The 7th National Awards for Arts (1982, National Culture and Arts Foundation, Literary Theory)
- Outstanding Research Award (1988, 1993, 1995, 1998, Ministry of Science and Technology)
- Excellent Research Award (1987, 1991, Ministry of Science and Technology)
- 28th Sun Yat-Sen Culture and Arts Award (1993, Sun Yat-Sen Academic and Culture Foundation)
- Hu Shih Chair Professor (1997)
- National Taiwan University Chair Professor (2000-2002)
- Director of Specially Contracted Research Project (2000-2007, Ministry of Science and Technology)
- Distinguished Specially Contracted Researcher Award (2008, Ministry of Science and Technology)
- 52nd Academic Award (2008, Ministry of Education)
- Outstanding Scholar Chair Professor (2004-2009, Foundation for the Advancement of Outstanding Scholarship)
- National Chair (2009-2012, Ministry of Education)
- National Taiwan University Distinguished Alumnus (2012)
- 3rd Golden Pen Award (1977, Chinese Cultural Revival Council, Literary Theory)
- 4th Chung Hsing Arts Award (1981, Taiwan Provincial Government Culture and Arts Association, Literary Theory)
- 43rd Television Golden Bell Award for Best Traditional Drama Program (November 2008, "Empress Dowager Cixi and Imperial Consort Zhen," Government Information Office)
- 53rd Chinese Art and Literature Prize "Honorary Art and Literature Prize--Drama Creativity Prize" (2012)
- 24th Golden Melody Awards Best Lyricist for Traditional and Art Music (June 2013, Ministry of Culture)

Honors awarded in China

- 1st National Drama and Culture Award: Opera Theory and Creativity Special Contribution Award (November 2010, Chinese Kunqu Society)
- Kunqu Special Contribution Award (May 2011, Beijing City Intangible Culture Heritage Center)
- 8th National Drama Award: Gold Medal for Historical Theory Book Editor (January 2013)

On contemporary academia, the name Yong-Yih Tseng earns is highly renowned. Besides opera, his research encompasses the poetry, folk literature, and performing arts of China and Taiwan.

Back when Tseng was a student in NTU's Department of Chinese Literature, linguistics and the Chinese Classics reigned as the most popular fields of study. At the time, Chinese opera drew very little interest among the students. Tseng laughs at himself for following his spirit of "taking whatever others don't want" in choosing the path of Chinese opera research. It turned out, he soon discovered, that though it remained a field that no one cared to investigate, "Chinese opera contains supremely sophisticated language and is a complete melding of elegant Chinese literature with precise performing arts. Virtually all forms of Chinese literature are embodied in Chinese opera; it could even be called the quintessential expression of Chinese culture."

When speaking of his approach to Chinese opera research, Yong-Yih Tseng emphasizes that Chinese opera is a living, three-dimensional literary form that transcends the models of pure thought and research contained within the walls of the classroom. The scholar proclaims, "Chinese opera lives among the people; therefore, research into the art requires planning archeological investigations that take the researcher into the field in search of folk artifacts, such as ancient opera stages, statues and figurines, paintings, tombs, and stage props so that confirmation can be achieved based on real cultural items and textual sources. The textual artifacts held within libraries, though fundamental, are only one part of Chinese opera research."

Contrary to the stereotypical image of a literary scholar, Tseng takes great pride in his hands-on skills at conducting field investigations, interviews, and archeological surveys. He stresses, "The subjects of Chinese opera research are usually very passive, so you must fully understand the background culture prior to setting out. Moreover, you must take advantage of influential local heavyweights— local cultural bureau officials and Chinese opera scholars— as they serve as excellent windows through which access to local theater groups can be gained."

The healthy relationships between the cultural officials and scholars in Taiwan and China alike have helped Tseng immensely. For instance, he

The accumulation of wisdom

Tseng's schooling went smoothly. Never one to indulge a trend or bend with the wind, he was afforded great latitude by his parents. As to the conduct of research, he believes that when confronting an academic problem, researchers must rely primarily on their years of accumulated experience to make solid breakthroughs. Only in this way will they be able to "say what they mean to say and create what they intend to create." In all, Tseng maintains that the wisdom of each individual comes only through the accumulation of years of experience and learning.

gained introductions to local theater groups in Guizhou and Guangxi through the director of a traditional opera academy in Shanghai. Moreover, while working in wild mountainous areas of Minnan, Tseng was given an official document provided by the director of the Fujian Provincial Department of Culture ordering the local culture bureaus in each area to dispatch personnel to assist with his surveys. This granted him access to an abundance of local theater culture formerly unknown to the outside world.

Revered Chinese Opera Scholar Elected to Academia Sinica

While Tseng enjoys a reputation as an ardent investigator, he is also revered as a passionate and dedicated educator who has trained many of Taiwan's finest literary and Chinese opera researchers. Tseng believes in teaching students according to their individual qualities, noting, "Energetic students who interact well with others can conduct field investigations; those with physical disabilities, meanwhile, can also find their strengths in textual sources and independent research." Besides research training, he also seeks to bring out his students' talent for the performing arts in helping them develop their performance skills.

Tseng also strives to promote traditional Taiwanese arts. He notes, "Japanese colonialism, American culture, and the cultural policies of the Chinese Nationalist government all served to repress Taiwan's local folk culture. Taiwan's music and folk performances are, in actuality, highly refined and worthy of pride; therefore, it is imperative that we expand the popularity of Taiwanese art in Taiwan and promote it as a 'cultural export' overseas."

Among his promotional endeavors, Tseng co-founded the Chinese Folk Arts Foundation in 1979. To this day, the organization remains dedicated to its mission of developing the talent of outstanding folk arts performers, organizing traditional folk arts performances in Taiwan and abroad, and documenting this valuable culture for future generations.

A most troubling academic challenge: Music

Lacking an understanding of music, Tseng made extra efforts to understand the relationship between Chinese opera and music. Unfortunately, the vast majority of music scholars in Taiwan were educated in only Western music theory, and only a rare few scholars had studied and conducted research on the Chinese art form. Tseng laments, "Following the era of the Daoguang Emperor of the Qing Dynasty (1820-1850), the Chinese people lost their ethnic pride and consequently, the subjectivity of their culture." As a result, Tseng points out, even to this day, there is an excessive inclination to focus on Western music and literatures, adding that while some professors in Chinese music departments come from Western music backgrounds, other Chinese literature researchers simply apply Western literary theory to Chinese literature. "The Westernization of scholarship has become obsessive," says Tseng.

Due to the lack of theoretical research on Chinese music combined with the overly Westernized quagmire of contemporary research, Yong-Yih Tseng had no choice but to forge his own new path. He eventually came to the realization that "Music comes from language, and in Chinese, each character has five elements that are woven together in overlapping layers. This unique feature is highly related to music." Paired with his many years of research, Tseng was gradually able to establish his own theory of traditional Chinese music, which is considered up to par for literary exchanges with music scholars from all across the world.

Record Number of Companies Seek Fresh Talent at NTU Job Fair

This year's campus job recruitment fair drew a record number of companies touting more job openings than ever to NTU on March 8 during the month-long NTU Azalea Festivities.

The annual job fair comes around as a major event on the calendars of leading local enterprises in search of fresh talent. Therefore, online registration for this year's allotments of booth space along Royal Palm Boulevard and Fan Palm Avenue were completely taken in just over three minutes. The eagerness of local enterprises bears witness to the improving economic climate and reflects their need for outstanding talent and strong desire to hire NTU graduates.

Each year in March, the NTU Career Center organizes the job fair and related career counseling and training events for our graduating students. This year's events were a resounding success, attracting a total of 259 companies.

The job fair featured 240 businesses occupying 356 booth spaces. While 70 companies held additional information sessions on campus, 16 enterprises arranged for students to take part in excursions to visit their offices and facilities. Spanning such sectors as technology, finance, media, manufacturing, medicine, and service, and including representatives from the public sectors, such as the Ministry of National Defense as well as state-run enterprises under the Ministry of Economic Affairs, the participants offered a record of more than 20,000 job vacancies.

NTU President Pan-Chyr Yang presided over the fair's opening ceremony, during which Ming-Kai Tsai, the chairman and CEO of Taiwanese chip maker MediaTek Inc., was invited to speak on behalf of the business community. Chairman Tsai, who is an alumnus of the NTU Department of Electrical Engineering, has built MediaTek Inc. into one of the world's top-three fabless semiconductor companies.

As NTU strives to fulfill its educational mission, it will continue to collaborate with the business community to cultivate talented professionals and contribute to local Taiwanese society.

▲ 50-Year Reunion

Azalea Festival Highlights NTU Triangle Alliance

▲ Azalea Festival opening ceremony performance

Each spring as vernal breezes stir the campus back to life, NTU's countless azaleas burst into a profusion of floral fireworks heralding the return of the NTU Azalea Festival. As our university flower, the papery azalea marks the annual celebration of all things NTU during the entire month of March with a colorful offering of fun and fascinating activities.

The month-long festival comes to a climax on March 14-15 with the two-day Departments Expo and Student Clubs Expo. Highlighting the close cooperation being cultivated through the new NTU Triangle Alliance, NTU President Pan-Chyr Yang, President Kuo-En Chang of National Taiwan Normal University, and President Ching-Jong Liao of National Taiwan University of Science and Technology joined together in leading the opening ceremony for

1 Student Clubs Expo

2 Departments Expo

3 Departments Expo

4 The NTU Triangle Alliance Revolving Festival

1

2

3

4

the expositions. Exciting performances presented by the NTU Cheerleading Club and the students of NTU Preschool enlivened the ceremony with pulsating energy and lively fun.

That same weekend, many other events were held in coordination with the department and student club expositions. They included campus tours for senior high school students, exclusive events for returning alumni, as well as NTU's first ever 50-year reunion. The NTU Library and NTU Museums Group also organized an offering of guided tours and activities for the annual event, among them a Solar Terms Workshop at the Agricultural Exhibition Hall and tours of the Prof. Iso Memorial House.

In addition, this year's Azalea Festival featured a special activity designed to symbolize the special relationship that NTU, NTNU, and NTUST are fostering through the NTU Triangle Alliance. Called the Revolving Festival, the event was a first-of-its-kind bicycle tour connecting the three neighboring campuses in the morning of March 14. With the universities' three presidents leading the way, the participants pedaled from the NTU Main Gate to the NTNU and NTUST campuses before returning to the NTU Administrative Building for a giant group photo. Following the bike tour, Presidents Yang, Chang, and Liao joined together in leading the opening ceremony for the Azalea Festival as well as for the historic unveiling ceremony of the NTU Triangle Alliance plaque.

Nobel Laureate Lectures on Link between Endogenous Retroviruses and Immunity

Dr. Bruce Beutler, one of the two recipients of the 2011 Nobel Prize in Physiology or Medicine, visited NTU on February 9 to deliver a lecture, visit our research facilities, and meet with NTU counterpartsandtop officials of the university.

The renowned immunologist and geneticist captivated the NTU audience with his lecture "How Endogenous Retroviruses Have Become an Integral Component of the Host Immune Response."Hosted by NTU President Pan-Chyr Yang, the lecture attracted an enthusiastic and engaged crowd of more than 160 people. In response to the great demand, the Computer and Information Networking Center provided a live internet broadcast of the event. Following the lecture, Dr. Beutler remained the center of attention as he joined in conversation with senior professors and research faculty members to take questions from students seeking his views and advice.

While on campus, Dr. Beutler also attended a luncheon with President Yang, Executive

▲ People line up to seek Dr. Beutler's advice following his lecture.

Vice President for Academics and Research Liang-Gee Chen, Dean of the College of Medicine Shan-Chwen Chang, Deputy Vice President for International Affairs Jiun-HueiProty Wu, as well as Prof. Hsin-Yu Lee, director of the Center for Biotechnology and the College of Life Science's Center for International Academic Exchange.

Dr. Beutler later toured the Technology Commons and Center for Biotechnology at the College of Life Science tohold discussions with the biotechnology researchers. Later, he went to the College of Medicine where he visited the Museum of Medical Humanities andthe Center of Genomic Medicine, and held meetings with the medical research faculty members.

A brief of Dr. Beutler's lecture is as follows:

While the antibody response to type 2 T cell-independent (TI-2) antigens is important for antimicrobial defense, the mechanism whereby TI-2 antigens activate B cells in the absence of T cell help remains poorly understood. Dr. Beutler'sresearch reveals that the cross-linking of the B cell receptors by TI-2 antigens activates a signaling cascade that leads to the transcription of endogenous retroviral DNA. The resulting viral RNAs are directly detected by the RNA sensor pathway or reverse transcribed into DNA that triggers DNA sensor pathways that in turn induce the activation of B cells to produce specific antibodies. Dr. Beutler's findings suggest a possible connection between endogenous retroviruses and autoimmunity and cancer.

Student Takes First Prize in 3rd FineTek Technology Awards

Ming-Che Hsieh, a graduate student working under Prof. An-Bang Wang of the Institute of Applied Mechanics, claimed first prize in the 3rd FineTek Technology Awards in January. Hsieh earned not just the competition's top award, but also a monetary prize of NT$200,000 for the innovative research detailed in his paper "The Design and Analysis of a Novel Microfluidic Control System Based upon a Valveless Micropump with Multi-resonance."

The FineTek Technology Awards are organized by Taiwan's Chinese Microwave Association with the support of the Taiwan Electromagnetics Industry Union, Chinese Institute of Automation Engineers, FineTek Co., Wu Sha Culture Foundation, and numerous university graduate institutes. Now in its third year, the competition is aimed to promote cooperation between academia and industry, as well as encourage young researchers to pursue innovative and practical applications research.

The competition accepts papers that present research and applications in the five areas of fluid mechanics, automated industrial sensors, microwave technology, radar technology, and industrial wireless networking technology, all of which are related to mechanics, electrical engineering, and telecommunications.

Previously, most of the papers that made it into the final round of the competition tended to be in electrical engineering and telecommunications. As Hsieh's paper was focused on an innovative concept in fluid mechanics, his work not only joined the other outstanding papers in the final round, it succeeded in standing out above the rest.

Moreover, Hsieh's achievement testifies to the outstanding research environment at the Institute of Applied Mechanics. It also demonstrates that the FineTek Technology Awards remain open to outstanding young researchers working in any of the competition's categories. In the coming years, the competition is certain to receive submissions from students working in an increasingly broad range of fields, as well as from students who possess the courage to pit their creativity and intellect against others in a competitive setting so as to show they have the right stuff in this era of multidisciplinary research.

▼ Graduate student Ming-Che Hsieh accepts his first prize award at the 3rd FineTek Technology Awards.

Student Entrepreneur First in Taiwan to Make Global Finals

An NTU student entrepreneur has become the first one from Taiwan to qualify for entry into the finals of the Global Student Entrepreneurs Awards. Though he is still pursuing his bachelor's degree in the Department of Mechanical Engineering, third-year student Andy Yu-Hsiang Tseng has already founded the company WeCare, a crowdsourcing platform for charity projects. As CEO of this innovative start-up company, Tseng made it through the competition's Asian regional finals in January, and is set to compete in the global finals in Washington, D.C. this month.

The Global Student Entrepreneurs Awards are organized by the Entrepreneurs' Organization, a non-profit association boasting a membership of over 10 thousand businesspeople with 146 chapters across 47 countries. Now in its 17th year, the competition attracted more than 1,700 student entrepreneurs from more than 20 countries this year alone.

WeCare is an information company that exploits the opportunities of crowdsourcing to connect people with the kinds of non-profit organizations they are most interested in supporting through donations or volunteer work. The company's handy mobile application helps people to easily identify charities they would like to support, track the flow of their donations, and also receive follow-up notifications regarding the projects they have helped. It features another novel tracking function called WeInvolve, which aims to actively facilitate volunteerism by sending notifications to users when they come within the vicinity of a volunteer project.

Tseng's thoughtful combination of crowdsourcing and charity work is already making the world a better place. For instance, WeCare has helped a culture foundation established by the renowned hotelier and philanthropist Stanley Yen to collect more than one thousand iPads that were provided to schoolchildren in remote communities to ensure they could enjoy access to digital learning opportunities.

The platform's tracking system enabled the foundation's benefactors to follow the specific ways each iPad was being used. According to Tseng's research, the great transparency and feedback afforded by WeCare's tracking and notification functions serve to substantially boost people's willingness as well as motivation to continue supporting a charity.

Study Abroad Programs in Canada and France Added This Summer

▲ A Stanford University representative introduces Stanford's ALC summer program to NTU students.

Since the end of last year, the Office of International Affairs organized a series of twelve meetings to introduce students to the diverse range of exciting opportunities for overseas studies. The meetings introduced the various study abroad programs available at NTU partner universities around the globe, providing interested students with an abundance of vital information to help them identify the programs that best suit their needs. Representatives of Singapore's Nanyang Technological University, France's Lille Catholic University, and the United States' Stanford University visited NTU to introduce their summer programs during the OIA meetings.

The OIA, which oversees the university's study abroad programs, continues to coordinate actively with prestigious universities and educational institutions around the world to expand the number of programs offered. Students who take part in NTU's overseas summer programs, which range in duration from three to six weeks, will personally experience the academic atmosphere and campus life at renowned overseas universities while studying and making friends with students from around the world. For the first time this year, NTU students will also have the chance to attend the Vancouver Summer Program at the University of British Columbia in Canada, as well as a language and culture program at Spain's Complutense University of Madrid. Such experiences serve to broaden our students' global outlook and enhance their language skills.

The OIA currently offers summer programs held at eleven overseas universities. Besides the University of British Columbia, Complutense University of Madrid, and Stanford University, partner universities include the University of Oxford, University of California, Berkeley, University of Pennsylvania, University of Hamburg, Heidelberg University, Free University of Berlin, Lille Catholic University, and Ritsumeikan University in Japan.

Meanwhile, in a sign of the close relationship being promoted between NTU and its neighbors through the NTU Triangle Alliance, which includes National Taiwan Normal University and National Taiwan University of Science and Technology, NTU's study abroad programs will be open to NTNU and NTUST students for the first time this summer. Around 200 students from these local partners are expected to participate.

New Concepts Inspire Short-term Spring Programs for International Students

The NTU Office of International Affairs is continuously seeking new ideas and approaches that will help it enhance the experiences of NTU's international students while also bringing greater internationalization to the NTU campus. As part of this effort, Director Jung-Chen Chen of the OIA's Center for International Education and Carol Lin, manager of the Global Alliances Section, traveled to Japan in February to take part in the 10th University Administrators Workshop at Kyoto University.

During the workshop, which included university international affairs administrators from Japan and Taiwan as well as South Korea, Malaysia, China, Thailand, and Indonesia, the two NTU representatives discussed new concepts concerning the flow of short-term international students in their presentation, "Beyond the Student Exchange: Catering to Student Needs with NTU Plus Academy (A+)."

In the presentation, Director Chen focused on the NTU Plus Academy in discussing the novel concepts that are inspiring the design of NTU's short-term exchange programs. According to Director Chen, short-term exchange programs should not solely focus on providing courses on language and culture, as currently offered by many university summer programs. Instead, universities need to consider the full range of situations faced by different types of students, including the amount of time they have to participate as well as their personal subjects of interest and goals. By doing so, administrators would be better able to formulate educational programs that offer greater scheduling flexibility and a richer diversity of subject areas.

This year, the OIA's Center for International Education introduced the university's first spring programs and specialized spring courses. Building on its years of experience gained through organizing our outstanding summer programs, the center custom crafted these new short-term programs to better meet the specific needs of different students groups and ensure that the students come away with the optimal learning experiences within the programs' limited time frames.

NTU Press continues to play a leadership role in organizing collaborative ventures among Taiwan's leading national university publishers. Most recently, NTU press headed a consortium of national university presses in jointly showcasing their works at this year's Taipei International Book Exhibition, which took place at the Taipei World Trade Center during February 11-16.

NTU Organizes Joint Exhibition of University Presses at Taipei Book Fair

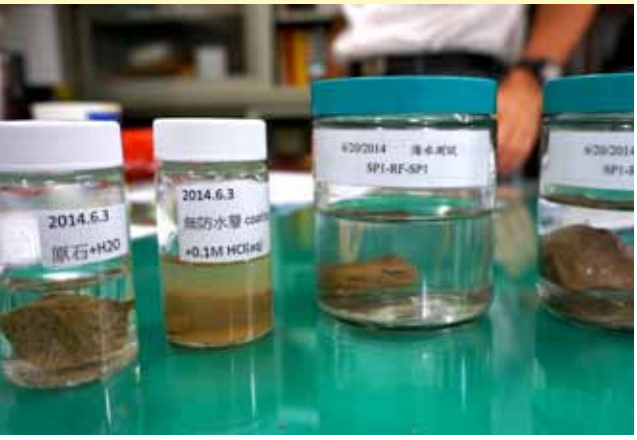
This marks the third consecutive year that NTU Press has organized the Joint Exhibition of National University Presses at Taiwan's premier international book fair. As in years past, NTU was joined by the university publishers of National Sun Yat-sen University, National Central University, National Chiao Tung University, National Chengchi University, National Tsing Hua University, Taipei National University of the Arts, and National Taiwan Normal University. This year, the publishers of National Chung Hsing University and National Cheng Kung University also joined the joint exhibition as featured guests.

Together the ten university publishers showcased nearly 3,000 publications during the six day book fair. They also held 26 forums and lectures aimed at promoting direct interaction between the academic community and the general public.

The publishers also held their first joint press conference ahead of the book fair. During the press conference, NTU President Pan-Chyr Yang pointed out that, as an inheritor of traditional Chinese script, Taiwan enjoys an advantage in understanding the culture, politics, and history of the Chinese speaking world. Consequently, publishers in Taiwan bear an obligation to transfer this knowledge to the world.

During the conference, Minister of Education Se-Hwa Wu spoke of the ministry's efforts to encourage universities to publish books that share their academic research with society, noting that the ministry recently established the Humanities and Social Sciences Education Project and devised plans to expand its financial support for university publishers.

Meanwhile, NTU Press Director Jieh Hsiang refuted the misconception that universities publish only abstruse books, noting that a number of NTU Press publications have performed strongly on the popular market. He also called on more university publishers to join the NTU-led consortium.



STUDENTS RUSH TO SAVE THE QUEEN'S HEAD

1 NTU's rock doctors conduct "anti-aging" experiments on a rock formation in the Yehliu Geopark. (Photo courtesy of the North Coast & Guanyinshan National Scenic Area Administration)

2 The reinforcement team performs a preliminary experiment at the Yehliu Geopark. (Photo courtesy of the North Coast & Guanyinshan National Scenic Area Administration)

3 Prof. Kuo-Huang Hsieh explains the goals of the reinforcement team the Yehliu Geopark.

4 Changes to rocks treated with different nanoglues

Dozens of NTU students are working to save the Queen's Head; however, time is not on their side. Located in the Yehliu Geopark near Keelung City, the iconic rock formation that is one of Taiwan's most visited tourist attractions is suffering the consequences of constant exposure to the relentless seaside elements. If no action is taken soon, the Queen may well lose her head within the next five years.

Under the leadership of Prof. Kuo-Huang Hsieh of the Graduate Institute of Chemical Engineering, the Yehliu Rock Formation Reinforcement Team draws on the diverse talents of students working in a wide range of fields, including chemical engineering, polymer chemistry, mechanics, geology, and geography. In August 2014, this interdisciplinary team of rock doctors commenced a series of preliminary "anti-aging" experiments in which they applied specially formulated protective nanoglues to nearby stones at the Yehliu site. Follow-up tests indicated that the nanoglues had held up well through the wet and windy weather of winter; therefore, the team is optimistic that, if all goes well through the heat and rain of the coming summer, they can expand the project and proceed with formal reinforcement work on the Queen's Head itself.

Surveys conducted by the North Coast and Guanyinshan National Scenic Area Administration indicate that the effect of year upon year of natural weathering is also taking its toll on the Queen's neck. Statistics show that the neck's circumference has shrunk dramatically from 144 centimeters in 2006 to only 126 centimeters at present. In the absence of reinforcement measures, her head could fall within just five years.

Prior to carrying out the experiments, the team spent the past three years observing the natural changes to Yehliu's rocks in analyzing their composition and hardness. It has taken 3D scans of the Queen's Head and analyzed its mechanics. These efforts were made as part of the team's plan to completely preserve the Queen's Head through reinforcement, waterproofing, water conveyance, and preserving its aesthetics. It also intends to apply nanotechnology waterproofing glue to fortify the stone's hardness while preventing wind erosion and permitting moisture within the rock to escape. The transparent and colorless glue will not affect the cherished landmark's appearance.

Young Scientists Discuss Water during Five-Day International Conference

The Graduate Institute of Environmental Engineering enjoyed the honor of hosting the International Water Association's 7th International Young Water Professionals Conference here at NTU during December 7-11. Assembling nearly 350 scholars from Taiwan and around the world, the conference provided the perfect opportunity for young water scientists to present their research, engage in discussions and exchanges, and establish connections with some of the world's leading water scholars.

Both NTU President Pan-Chyr Yang and the IWA's President Helmut Kroiss addressed the audience during the opening ceremony of the conference. Further underscoring the significance of the conference, Taiwan's President Ma Ying-Jeou spoke about the current state of Taiwan's water resources, focusing on the importance of water treatment and water resources in Taiwan's national development.

The five-day conference featured 200 oral and poster presentations as well as four pre-conference workshops, which covered the publication of research papers, career planning, future urban planning, and cross-strait exchanges. During two plenary discussions, the participants brainstormed about ways of communicating their research findings to the general public in clear and simple language.

The conference's keynote speakers were Prof. Jianzhong He of the National University of Singapore and Prof. Richard Valentine of the University of Iowa. Prof. He presented the lecture "Fighting Emerging Contaminants in Groundwater." Meanwhile, Prof. Valentine, in addition to sharing his insights regarding the submission of papers to international academic journals, also gave a speech on "Reactions of Chloramines and Chlorine in Drinking Water."

Besides academic activities, the conference offered a number of social events, including dinner parties, a happy hour, and several technical tours. The activities gave the young scientists the chance to build personal contacts with scientists working in a range of water related fields around the globe.

Japanese High School Students Visit College of Public Health

The College of Public Health opened its arms to a delegation of visiting high school students from Japan on February 4. Eleven students from Takatsuki Junior and Senior High School visited Taiwan as part of an 18-person delegation headed by their principal, Hajime Iwai, and vice principal, Tsuyoshi Kudo. The students were introduced to the college by Prof. Masahiro Kihara of the School of Public Health at Kyoto University, with which NTU has engaged in research cooperation and exchange visits in recent years.

The students' day at the college began with a briefing on the college's educational and research accomplishments presented by Associate Dean Chang-Chuan Chan. Associate Dean Chan explored issues of public health with the students by comparing the social, economic, and political situations in Taiwan and Japan. Next, five of the visiting students presented reports, covering such topics as the prevention of malaria, proper handling of electronic waste, and rising literacy in developing nations. The students received point-by-point evaluations from Associate Dean Chan upon the conclusion of their presentations. The college's faculty member also came away quite impressed by the English proficiency demonstrated by the students.

The delegation also visited the college's Museum of Medical Humanities where guided tours presented in both Japanese and Mandarin were provided. During the tour, the students learned that the museum's building had once served as a center providing medical training to Taiwanese students during the era of Japanese occupation (1895-1945). The visit gave the students insights into the development of modern medicine in Taiwan as well as the history of medical research and exchanges between Taiwan and Japan.

Alibaba Chairman Jack Ma Shares Story of Success

Jack Ma, the founder and executive chairperson of China's Alibaba Group, visited NTU on March 3 in order to share with the young people of Taiwan the story of how he turned his dreams into a successful business. Ma, who rose from humble beginnings to become an Internet mogul and the wealthiest person in China, spoke at NTU at the joint invitation of the NTU Triangle Alliance and the member universities' student associations. Besides NTU, the Alliance includes National Taiwan Normal University and National Taiwan University of Science and Technology.

Here we share a sampling of the highlights from Jack Ma's speech.

Language is culture

First, I believe that my English has helped me profoundly. The greatest benefit has not been the language itself, but the ability to understand Western thought. In the process of learning English, we are learning not just a language, but the culture as well as the understanding of another country and part of the world.

Education as a form of transcendence

Second, having served as a teacher has been of great help to me. All teachers hope that their students will transcend them. I have incorporated this ideology in running my business, providing an environment where my personnel are able to surpass and outperform me for the betterment of the corporation.

Wealth and failure

My third experience is that the supreme wealth of your life is the accumulation of all of your experiences of failure. I have experienced many unfortunate events and have come to the realization that only by repeated failure can one achieve great success. Most importantly, one should have the ability to endure failure.

The spirit of optimism

Having enjoyed the fortune of knowing and interacting with businesspeople from around the world, I have discovered that successful people share one characteristic in common—the attitude of optimism.

Understanding oneself

At the same time, I have also found that among those who have failed, chances are most of them believe their failure was due to someone else's mistake. Rather than just studying past success stories, people who wish to start a business should focus on learning from others' experiences of failure. This is because success is difficult to reproduce, but examples of failure are all quite similar. As a businessperson, one must know which dead ends not to pursue.

The future is now!

Now more than ever before, the world is experiencing far-reaching and constant change. Change can be seen not only in technology, but also in thought and ideas. While many people feel intimidated by change, I encourage everyone to take on the challenge as an opportunity for success, and to ride the tide of change starting now.

New NTU-Developed Rice Variety Planted on Campus

A special ceremony was held to mark the first planting of a new NTU-developed rice variety at the NTU Experimental Farm here on March 7. During the ceremony, NTU President Pan-Chyr Yang led Dean Yuan-Tay Shyu of the College of Bioresources and Agriculture along with the students and faculty of the Department of Agronomy in praying to the heavens in hopes of bringing pleasant weather and ample rains.

Called Tainan No. 16, the new rice variety was developed by the Department of Agronomy in cooperation with the Tainan District Agricultural Research and Development Station. Tainan No. 16 is the first rice variety in Taiwan to be developed using genomic marker-assisted selection to identify desired agronomic traits. Using this new technique, the development time was just one half of the time required using traditional methods. Boasting a translucent rice grain and a smooth and chewy texture upon cooking, the new rice is expected to perform well on the market.

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