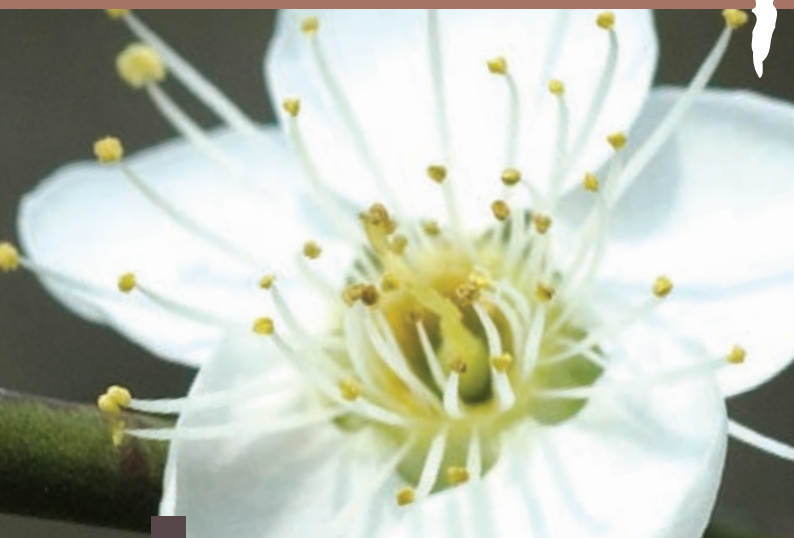




National | Tsing Hua | University



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## NTHU WINS THE NATIONAL QUALITY AWARD

**N**THU excels not only in teaching and research, she is also recognized, with the National Quality Award, as an institution with the best operational system! The National Quality Award is administered by the Executive Yuan annually to recognize industries and organizations that "constantly seek innovative measures and strive for excellence; meet challenges with highest efforts and overcome obstacles in its operational process with most effective measures." As such, the winners of National Quality Award could very well be considered as the leaders in industry and/or model institutions of our country.

A grand total of thirty-seven enterprises and institutions competed for this prestigious award in 2013. After a long procedure of reviews and judgment, only six of the competitors were selected by a panel of judges. Of the six winners, three are industrial organizations, two small and medium size enterprises while NTHU is the only educational institute that received this honor, setting a record as the first university in Taiwan winning this national award.

NTHU was the first university in Taiwan to mobilize her faculty and staff members to pay constant attention to long-term planning.

- a** Vice Premier of Executive Yuan, Dr. Chi-Kuo Mao (right) presenting the National Quality Award to President Chen (left).
- b** Vice Premier of Executive Yuan, Dr. Chi-Kuo Mao (left) presenting the award certificate to Vice President of NTHU, Prof. Ming Chuen Yip (right).
- c** Enthusiastic NTHU cheering squad.

A Long Term Development Committee was first established in 1982 and charged with the mission of updating the university system by setting up SOPs (standard operational procedures) and a Total Quality Management system. This Committee was also charged with tasks of promoting cooperation and cross-fertilization between basic and applied researches, and to develop plans to foster the cooperation between the university and industrial sectors. In addition, the Committee had also developed and successful





implemented projects like the Points of Thousand Lights Project and Tsing Hua Academy that extended learning beyond classroom and laboratory. All these efforts, as we have since learned, were praised by the judges and deemed highly innovative. President Lih J. Chen indicated that NTHU has made strong effort in recruiting first rate scholars and students both domestically and internationally to join the Tsing Hua family and did her very best to retain them on our campus. Such efforts have greatly enhanced NTHU's research capability and upgraded our instructional programs. NTHU has also revitalized the partnership with her alumni and received a great deal of financial support from them. The newly completed multi-functional gymnasium was funded with the generous donation from enthusiastic alumni. In addition, the university

has also been very active in seeking and establishing cooperative research partnerships with industry and research institutes. A case in point is the joint research project between the Tsing Hua nuclear scientists and the physicians at the Taipei Veterans Hospital. They have successfully developed the Boron Neutron Capture Theory to provide new therapies for cancer patients nationwide.

President Chen was very delighted with this award and thanked all the faculty and staff members for their constant effort to seek new and better ways to operate the administrative system as well as to upgrade NTHU's instructional and research programs.



d NTHU students, faculty and staff members at the award ceremony.





## DISCOVERING THE MECHANISMS OF NEURON TRANSMISSION PROCESS

Chair Professor Ann-Shyn Chiang and his research team have expanded their previous research on the map of brain auditory neural network of fruit flies (*Drosophila Melanogaster*) to the transmission process of specific neural circuits and discovered the parallel transmission process of olfactory nerve signals. This new discovery was published in *Science* last June and President Lih J. Chen held a press conference with the research team at National Science Council on June 25<sup>th</sup> to report this significant discovery. In recent years, neuroscience research has become a prime focus in the U.S. and Europe. Prof. Chiang indicated that just this year, the European Union (EU) funded an 11.9 billion EUR to the research on Human Brain Project, while President Barak Obama of the U.S. announced that his government is providing 1 billion USD annually to the project of Brain Research through Advancing Innovative Neurotechnologies

(BRAIN). Prof. Chiang further stated that although the brain of fruit fly is only comprised of around one hundred-thousand nerve cells, but many of the fruit fly's survival patterns and behavior have been regulated and conditioned by DNA in manner very similar to that of humans; this has made the fruit fly an important research subject in neuroscience. After years of research on fruit flies, scientists have established an extensive and comprehensive database, allowing them to create genetic manipulation tools that permit them to freely control and isolate the fruit fly's neuron cells for transmission research. Prof. Chiang pointed out that from their past research, they have discovered that every odor molecule has their own specific olfactory receiver, and the olfactory nerve transmits these odor molecules and neural synapses to the appropriate section of the brain. Applying this finding, the research team at NTHU was able to detect

- 
- a Prof. Chiang surrounded by inquisitive reporters.
  - b President Lih J. Chen with the research team at the press conference at National Science Council. (from left to right: Senior Vice President Da-Hsuan Feng, Dr. Tsai-Feng Fu, Dr. Ann-Shyn Chiang, President Lih. J. Chen, Dr. Hui-Hao Lin, and the Dean of the Office of Research and Development, Dr. Shangjr Gwo).
- 

significant clues on how the human brains process similar smells with different concentrations. Specifically, through the experiments on the brains of fruit fly, the research team found out that the signals for carbon dioxide will first be processed and transmitted by olfactory nerve cells to the olfactory bulb and its glomerulus, after that it will be further transmitted to a higher brain section via multiple projection neurons. Dr. Hui-Hao Lin, a research associate, applied Dr. Tsai-Feng Fu's PaGFP (activated green fluorescent RNA tracking techniques) to highlight all the projection neurons between the glomerulus and higher brain section. He has genetically encoded the calcium indicators (GCaMP) with the transgenic tool which was created by Dr. Barry Dickson at the Research Institute of Molecular Pathology,



and discovered that all projection neurons connecting the glomerulus reacted to high concentrations of carbon dioxide, while unconnected projection neurons have no reaction. Applying this discovery, the team predicted that the projection neurons of the glomerulus could transmit signals using three different pathways to six different higher brain sections.

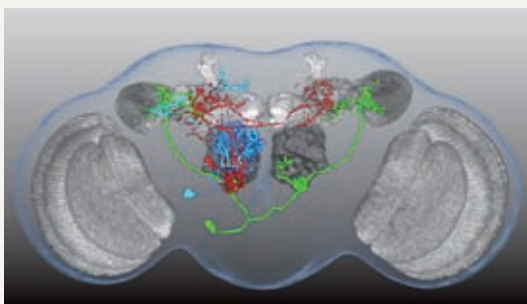
Dr. Lin explained that in cases of low concentration of carbon dioxide, there is only one pathway that reacts. Using a special type of mutated protein that is temperature-sensitive to instantly block neuron signals, the researchers have additionally discovered that two pathways send out signals, one reacts to low concentrations, while the other one reacts to high concentrations, which allows fruit flies to avoid such environments. Moreover, using immunofluorescent indicators, it was also found that

the third pathway possessed the inhibitory indicator gamma-Aminobutyric acid (GABA), which would suppress the signals sent in an environment of low concentrations of carbon dioxide and prevent the fruit fly from misinterpreting an environment that has a high concentration of carbon dioxide with a low concentration. Li-An Zhu, a Ph.D. student in Prof. Chiang's laboratory, built a device that uses blue light channelrhodopsin to stimulate specific neurons. They discovered that if they only stimulate the first pathway with a low concentration of carbon dioxide, or if they only stimulate the second pathway with a high concentration, the fruit fly will take evasive action. On the other hand, stimulating exclusively to the third pathway would incite no reaction from the fruit fly. Furthermore, simultaneously blocking the second and third pathways would force the

to transmit through the first path, which would again lead the fruit fly to evasive action.

These experiments and research findings demonstrated, for the first time, the existence of multiple pathways to the brain as well as the mechanisms used by the transmission processes of neural signals. These types of transmission processes add to the complexity and diversity of neuron signal transmissions, allowing greater flexibility in decision-making processes, challenging the previously accepted theory that certain types of stimulation are processed by only one neural pathway. Because animals possess similar neural transmissions material, it can be surmised that similar transmission mechanisms exist in mammals and humans alike. The researching findings of Prof. Ann-Shyn Chiang and his research team are a great leap in understanding the mechanisms of human decision-making, in developing new ways to treat abnormal behavior, and can even contribute to the design of artificial intelligence in computers and machinery.

high concentration carbon dioxide signal



Prof. Chiang and his research team discover the mechanisms of neural transmission processes in the complex neural network.



## NTHU FACULTY MEMBERS WON THE WU TA-YOU MEMORIAL AWARD

- Ⓐ Dr. Yu-Lun Chueh of the Department of Materials Science and Engineering.
- Ⓑ Dr. Feng-fan Hsieh of the Institute of Linguistics.

National Science Council recently announced the winners of Wu Ta-You Memorial Award of 2013. Four NTHU faculty members won this prestigious award for their outstanding academic achievements. They are: Dr. Sheng-shian Li, Associate Professor of the Institute of NanoEngineering and Microsystems; Dr. Hsing-Yu Tuan, Associate Professor at the Department of Chemical Engineering; Dr. Feng-fan Hsieh, Associate Professor at the Institute of Linguistics as well as Dr. Yu-Lun Chueh, Associate Professor of Materials Science and Engineering. Dr. Sheng-shian Li received his doctorate from University of Michigan, an institute believed to have the best instruction and research programs in the field of microelectromechanical. His main research interest is the application of nano/micro-mechanical resonators in the areas of radio frequency, timing and sensing. Dr. Li was able

to combine Taiwan's strength in semi-conductor manufacturing and IC industry, and successfully built CMOS-MEMS resonators and related high Q-value circuit that effectively resolved the mechanical and circuited connection bottleneck while drastically decreased chip surface and the consumption of power. It is very likely that Dr. Li's innovation will soon replace the discrete passive components currently in use and become the key technology in the mobile communication system. Furthermore, the production process of this new product is simple and low cost. Dr. Hsing-Yu Tuan received his M.S. degree from NTHU and went on to University of Texas, Austin, to complete his doctorate in chemical engineering. His research focuses on the functional design of metal and semiconductor nano-materials synthetics and its applications in photoelectric, energy as well as biomedicine. Using chemical

engineering technology, Dr. Tuan's laboratory has developed high quality inorganic materials to improve the shortcoming in the synthesizing process so that it can be commercialized. Their goal is to apply these nano-materials and optimize their performance in energy storing devices and biological platforms. At the current stage, Dr. Tuan's research team has successfully achieved the results of high yield continuous gas and liquid phase nano-materials manufacturing process; high performance lithium-ion battery electrode nano-wires and electronic components; low cost wet-type solar panel, and three-dimensional nano-developer as well as a substrate for stem cell culture. Dr. Tuan's research results were widely published in influential professional journals in the fields of nano-technology, energy, chemistry, materials science and biomedical engineering. One of his research accomplishments was featured as



the cover story in the *Journal in Material Chemistry*.

Dr. Feng-fan Hsieh is a linguist specialized in the study of phonology and phonic. He received his doctorate from one of the leading institutes of linguistics, the Linguistic Department at MIT. Dr. Hsieh's current research focuses on the phonology of Hokkien, Hakka and Mandarin languages as they are spoken in East and Southeast Asia. His research result has successfully overturned the widely accepted asymmetrical tone co-articulation hypothesis. For the first time, Dr. Hsieh has pinpointed that Chinese low vowel uplifting nature is actually a vowel reduction induced long vowel displacement phenomenon, thus, provided a logical explanation to the classic Chinese phonological conundrum.

In cooperation with leading laboratories, Dr. Hsieh has been using advanced equipment, such as electromagnetic dysarthria recorder to study Hokkienese as it is spoken in Taiwan. He has also utilized electronic laryngoscope to study throat articulation and other sounding conditions of Hokkien speakers in Taiwan. He hopes to

use such materials to develop a new perspective in theoretical phonology and contribute to the preservation of linguistic diversity.

Dr. Yu-Lun Chueh is a proud product of NTHU. He graduated from the Department of Materials Science and Engineering in 2006 and was recruited by his home department in 2009. With a specialty in nano-science, Dr. Chueh concentrates on the study of physical phenomenon in nano-scale and trying to apply his findings to improve component designs and its efficiency. Currently, his research direction includes the application of nanomicrostructure to improve energy efficiency, resistant type memory, grapheme synthesis, seawater desalination and solar thermal energy.

Dr. Chueh has published numerous research papers in leading international professional journals such as *Nature*, *Nature Materials*, *Nano Letter*, *ACS NANO*, and *Advanced Materials*. In addition to being a prolific paper-writer, Dr. Chueh also serves as Associate Editor for *Nanoscience* and *Nanotechnology Letter*, and Assistant Editor for *Nanoscale Research Letter*.

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© Dr. Sheng-shian Li of the Institute of NanoEngineering and Microsystems.

© Dr. Hsing-Yu Tuan of the Department of Chemical Engineering.

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## TSING HUA ACADEMY: AN ON-THE-JOB TRAINING PROGRAM FOR SENIOR MANAGERS IN INDUSTRY AND ENTERPRISE

On July 28<sup>th</sup>, NTHU launched a special education program, *Tsing Hua Academy*, aiming at providing senior managers in industry and enterprise an opportunity to learn from leading industrialists, successful entrepreneurs as well as academics. The first class started from July 28<sup>th</sup> and ended on Sept. 22<sup>nd</sup>. The *Academy* met on Sundays to avoid schedule conflicts of participants. They attended two class sessions on each Sunday, one in the morning and the other in the afternoon to hear and discuss with their mentors/

speakers on various innovative management strategies. It attracted a large group of senior managers who were interested to enroll, but only fifty of them were admitted. These fifty "students" were guided by 12 leading industrialists and entrepreneurs using their own professional experiences as case studies to highlight innovative and successful management strategies. In his opening speech, President Lih J. Chen proudly indicated that *Tsing Hua Academy* is the best program of its kind. All of the mentors/speakers possess rich corporate experience

and are enthusiastic about sharing their success stories with all the participants. The roster of mentors/speakers looks like a who's who in Taiwanese industry. They include: the Chairman of MediaTek, Mr. Ming-Kai Tsai, Chairman Miin Wu of Macronix International, Chairman T.J. Tseng of Unimicron Technology, CEO Thomas Y.S. Shen of Apex Biotechnology, Mr. Biing-Jye Lee, Chairman of Epistar, Chairman of ADATA Technology, Mr. Simon Chen, Dr. Yong-Fen Hsieh, CEO of MA-TEK, Mr. Y. P. Jou, CEO of Wispro IP & Legal, General Manager of E. Sun Bank, Mr.



- a President Lih J. Chen (left) presenting the letter of appointment to Honorary Chairman of Delta Electronics, Dr. Bruce Cheng (right).
- b President Chen (center) presenting Tsing Hua Academy schoolbags to representatives of participants.
- c President Chen at the lectern.
- d Participants of the first class of *Tsing Hua Academy*.





Joseph Huang, the Director of TSMC Education and Culture Foundation, Mr. J.B. Chen, Honorary Chairman of Delta Electronics, Dr. Bruce Cheng as well as Chairman Chi-Jen Chen of Giga Solar Materials Corp. President Chen presented a review on the history of Tsing Hua during the last hundred years and demonstrated how the development and organization of Tsing Hua interlocked with the development of our nation as a whole. How his predecessors, as chief administrators of Tsing Hua chartered the courses of university development to meet the needs of our society. Chairman Bruce Cheng of Delta Electronic shared his experiences of presiding over his enterprise with a detailed discussion on the topic of "Sustainable

Management and Green Energy." Chairman Chi-Jen Chen of Giga Solar Materials illustrated the importance of innovation with cases of leading global as well as Taiwanese industries. In addition to classroom instruction and discussion, the *Academy* also provided a platform for all the participants to interact with their mentors/speakers. They were also admitted to the NTHU Alumni Association so that they gain a ready access to the Hsinchu Tsing Hua Entrepreneur Network (TEN) as well as Beijing Tsing Hua Entrepreneur Executive Club (TEEC).





## PROFESSORS KONG AND CHANG WON THE JUNIOR RESEARCHER AWARD OF ACADEMIA SINICA

**a** Prof. Albert Kong of the Institute of Astronomy.

**b** Prof. Chieh-Yu Chang of the Department of Mathematics.

**A**cademia Sinica recently announced the list of winners of its Junior Researcher Award, Prof. Albert Kong, Institute of Astronomy and Prof. Chieh-Yu Chang of the Department of Mathematics are the two proud winners from NTU.

Prof. Albert Kong specializes in the research of high-energy astrophysics. His current project focuses on the development of multiband astronomical observations, including black hole, neutron stars and white dwarf dense celestial bodies. Over the past few years, Prof. Kong had obtained a large share of observation time from various world-class observatories, such as the Hubble Space Telescope. In January 2008, Prof. Kong was the first scientist to discover X-ray blast originated from supernova and verified a theory that was published some forty years ago. The 2008 discovery was subsequently published in the world renowned journal, *Nature*. Since 2010, he has concentrated his effort on utilizing

Fermi Gamma-ray Space Telescope for an in-depth research on dense celestial bodies. Prof. Kong and his research team had published several important findings ahead of their colleagues at NASA and their discoveries were widely reported internationally.

Prof. Chieh-Yu Chang's research interest is mainly in the area of number theory, especially, the algebraic relations among certain special values. Number theory is a field of study with a long history. The classical transcendental number theory originated from the Hermite-Lindemann Theorem. It proved that  $\pi$  and  $e$  are both transcendental numbers (do not satisfy a nonzero polynomial with rational coefficients), and that the nonzero values of the logarithmic function at algebraic numbers are also transcendental number. One major challenge in the classical transcendental number theory is the Gelfond conjecture which asserts that all the algebraic relations (with algebraic coefficients)

among the logarithms at algebraic numbers are coming from the  $\mathbb{Z}$ -linear relations. However, to date there is no progress concerning the Gelfond conjecture.

Dr. Chang has concentrated on transcendental number theory over function fields in positive characteristic since his Ph.D. dissertation research. One of his award-winning researches is proving the function field analogue of Gelfond conjecture, namely all the algebraic relations among the Drinfeld logarithms at algebraic points are coming from known linear relations. Currently, his research focus is on the characteristic  $p$  multiple zeta values and its arithmetic geometric structure. Prof. Chang would like to thank Prof. Jing Yu who served as the advisor of his doctoral dissertation. Prof. Yu spent a great deal of time and effort guiding his students and his great love for research also served as a model for all who had the chance to study under or interact with him.



## PROF. WEN-HWA CHEN RECEIVED THE ICCES LIFETIME ACHIEVEMENT AWARD

On May 24<sup>th</sup>, at the opening of the International Conference on Computational & Experimental Engineering and Science (ICCES) held in Seattle, USA, NTHU Chair Professor, Dr. Wen-Hwa Chen received the Lifetime Achievement Medal for his numerous achievements and contributions in the field of computational mechanics. Prof. Chen was also invited by ICCES as the Theme Lecture speaker and presented a paper on the "Meshless Analysis for Three-dimensional Problems with Complicated Geometry and Extremely Large Deformation." In addition, a special symposium with 27 research papers was also held during the ICCES Conference in Prof. Chen's honor. The ICCES of 2013 was somewhat unique in that there was a large participation of Taiwanese scientists from major research universities in Taiwan, such as NTHU, National Taiwan University, and National Cheng Kung University were all represented at this year's conference. Prof. Albert Kobayashi of the University

of Washington, an internationally recognized leading scholar in the field of experimental mechanics represented the ICCES and presented the Award. At his acceptance speech, Prof. Chen expressed that his success was made possible by the hard works of his students and the assistances he has received from his mentors and distinguished colleagues. He also stated that without the love and support from his beloved wife throughout all these years, it would not had been possible for him to achieve what he has accomplished and he wished to share this honor with her. In the evening of the award ceremony, a group of some twenty Taiwanese scholars also gave a special party to Prof. Chen for the distinguished honor he has just received. Prof. Ming-Chuen Yip, Senior Vice President of NTHU and the Chairman of the Society of Theoretical and Applied Mechanics (STAM) presented the "Guiding Light of Mechanics Award" to Prof. Chen and thanked him for his leadership and pioneering works in the field of

experimental mechanics. The celebration did not stop with the presentation of awards. Prof. Satya N. Atluri, the Founder and Honorary Chair of ICCES, invited all Taiwanese scholars at the conference to a special tea party in Prof. Wen-Hwa Chen's honor. At this special gathering, Prof. Atluri congratulated his Taiwanese colleagues for their achievements and encouraged them to seek more opportunity to publicize their research accomplishments so that the world will have a better understanding of the excellent scholarship and researches that Taiwanese scientists have accumulated. *Computers, Materials, & Continua*, a prestigious international journal and other publishing house will soon publish a special issue as well as monographs in celebration of Prof. Wen-Hwa Chen's achievement. Likewise, STAM will also publish a special issue to commemorate Prof. Chen's winning of ICCES Lifetime Achievement Award.

- a** Senior Vice President Ming-Chuen Yip (right) presenting the Guiding Light of Mechanics Award to Prof. Wen-Hwa Chen (left).
- b** Professor & Mrs. Wen-Hwa Chen with their Taiwanese colleagues at ICCES.





## LOVE IS IN THE AIR AT NTHU CAMPUS

Once again, NTHU has set a new precedent in Taiwan. The first ever group wedding ceremony held on a university campus, Love at Tsing Hua, paired five couples of alumni, faculty and staff members. President Lih J. Chen witnessed these five couples of newlyweds as they walked down the red carpet and entering into a new stage of their life as married couples. While he had officiated many marriages

in the past, this was the first time that President Chen act as the head of the Tsing Hua family to officiate the wedding of Tsing Hua couples. He happily indicated that he felt fortunate and very happy to witness such a joyful occasion.

World-renowned psychologist, Dr. Tal Ben-Shahar once said that one of the key indexes of happiness is the amount of time one gets to spend with people one loves as well as with people who care about oneself.

Expanding on Dr. Ben-Shahar's thesis, President Chen added that marriage is a process that unifies two persons from different backgrounds and up-brings into a matrimony and it requires them to learn about, adapting to and accept each other for the rest of their lives. He encouraged the newlyweds to reflect on the University Motto and learn to be a roundly educated person who knows how to relate to others and master the art of maintaining a loving



- a** Deputy Chief of Staff, Prof. J.L. Hou, presenting a souvenir to Mr. Tian-Yow Liao and Ms. Ai-Lean Lin.
- b** Vice President and Chief of Staff, Prof. Chen-Fu Chien, and his wife presenting a souvenir to Mr. Bo-Wen Zheng and Ms. Hong-Wen Chen.
- c** President Chen presenting Tsing Hua Honey to Mr. Zong-Han Tsai and Ms. Ni-Yu Liao.
- d** Mr. Yan-Ting Lin and Ms. Zhuo-Zi Tian exchanging vows.
- e** World you marry me?
- f** President Lih J. Chen with the five happy couples, their parents, and Prof. Chen-Fu Chien.



marriage through their lives. Love at Tsing Hua was officially witnessed by President and Madam Chen as well as Vice President and Chief of Staff, Prof. Chen-Fu Chien and Mrs. Chien. Many faculty members, including the Dean of the College of Humanities and Social Sciences, Prof. Ying-Chun Tsai and the Director of Nuclear Science and Engineering, Prof. Jeng-Hong Liang were among the well-wishers who collectively presented the newlyweds with "Tsing Hua Honey," a symbol of sweetness and bliss.

NTHU has a long and distinguished history and is well-known as the cradle of countless elites who received training and earned their credentials to become successful academics and professionals in various fields. Not too many people, however, are aware of the fact that NTHU is also a famous meeting

ground where many of her students met their significant others who eventually became their life-long partners. The five couples who participated in this year's Love at Tsing Hua are: Mr. Tian-Yow Liao (Ph. D. candidate, Electrical Engineering) and Ms. Ai-Lean Lin; Mr. Bo-Wen Zheng (M.S., Physics, class of 2010) and Ms. Hong-Wen Chen (M.S., Engineering Science, Class of 2010); Mr. Zong-Han Tsai (BA., Chinese Literature, Class of 2002) and Ms. Ni-Yu Liao (staff member at the Computer and Communication Center); Mr. Yan-Ting Lin and Ms. Zhuo-Zi Tian (Foreign Languages, B.S. Class 2006); and Mr. Sheng-Wei Zeng (M.S., Engineering Science, Class of 2009) and Ms. Mei-Yu Liu (BA., Humanities and Social Sciences, Class of 2006).





## NTHU VOLUNTEERS EXTENDED THEIR HOSPITALITY

**N**THU has been collaborating with National Science Council in organizing and hosting a student-exchange program, Summer Institute in Taiwan (SIT), for American and Canadian students since 2000. Each summer, a group of graduate students from North America are invited to visit Taiwan for academic projects and to experience Taiwanese culture and society first hand. During this past summer, twenty-nine graduate students were provided with such an opportunity and spent eight weeks in Taiwan. To assist these visitors, NTHU organizes a reception team to accompany them during the early stage of their stay in Taiwan. This year, NTHU's reception team includes twelve volunteers who are fluent in English and known for their excellent ability to organize and host social activities to accompany these visitors during their first week in Taiwan.

Xiao-Jing Hsu, a member of the

reception team said that her colleagues in the team are all very excited to have the opportunity to introduce Taiwanese culture to their visitors. They took the visitors for sightseeing and organized several cultural activities for them to have a taste of Taiwanese ways of life. The group, accompanied by the reception team, visited the Hakka Culture Park in Bei-pu, Lung Shan Temple in Taipei, Ying-ge Ceramic Museum, and, of course the famous Shih-lin night market. The visiting students also participated in Chinese classes to learn conversational Mandarin as well as the art of writing Chinese character with a brush.

Jie Hong Zhong, the leader of the reception team observed that this year's participants were very adventurous. Despite of the fact that they were shocked by the distinctive smell of "stinky tofu" when they visited the night market, these visitors were, nevertheless, brave enough to taste the delicacy

- a Writing Chinese calligraphy for the first time!
- b Visiting students enjoyed the trip accompanied by the reception team.
- c Adventurous SIT students trying out Taiwanese delicacies at the night market.

and learned to appreciate its special flavor. Likewise, they also tried the infamous chicken butt which is known to have scared off countless foreign visitors from the food stands and learned to experience its special texture and taste.

"Taiwan is awesome!" Amit, a graduate student from University of Pennsylvania exclaimed. He also noted that he is most impressed by the friendliness of Taiwanese people he had met and very taken by the beautiful scenery he had the chance to visit.

As their predecessors had done in the past thirteen years, the reception team have done a great job in accompanying their visitors and they are prepared to train their colleagues so that the great hospitality will be continue in the years to come.





## NTHU STUDENTS VISITED CANADA AND FIJI: BRINGING TAIWAN TO DIFFERENT CORNERS OF THE WORLD

**T**wo NTHU student teams stood out from more than 200 competitors and were selected by the Ministry of Foreign Affairs as good-will ambassadors, representing Taiwan to visit Canada and Fiji during the past summer. President Lih J. Chen presented the two teams with the University Flag and encouraged them to do their best in representing the youth of Taiwan and wished them to have a successful as well as a safe and enjoyable visit.

The Fiji team, Taiwan Express, was led by Dr. Tien-sze Feng of the Center of General Education, who is very knowledgeable on Southeast Asian and Pacific cultures. They departed for Fiji on the 25<sup>th</sup> of last July and returned on the 8<sup>th</sup> of August. Team members came from a diverse academic backgrounds but all of them possesses unique talents. One of the team members is an expert of the diabolo headliner and had been invited to perform

many times at the Ilan International Toy Festival. Another student is the champion of Taiwan Marshall Art Competition in the Tai-chi category while the third one is the first guitarist in a famous band on our campus.

"We wish to let our foreign friends understand more about Taiwan through our visit and with our performances," said the leader of Taiwan Express, Jie-Hong Zhong. They brought with them many traditional Taiwanese toys and demonstrated how diabolo, wooden ball, shuttlecock and other games are played in Taiwan with their exquisite skills. In addition, they also treated their hosts with some Taiwanese cuisines expertly prepared by the team members.

Under the leadership of Ms. Wen-hsin Yih of NTHU Language Center, the team "iTaiwan" toured Canada between September 6<sup>th</sup> and 18<sup>th</sup>. They visited university campuses and interacted famously with their

- a** These student-ambassadors are prepared to show the beauty of Taiwanese culture.
- b** President Lih J. Chen with iTaiwan

Canadian counterparts. All of the six team members were female students. Like the members of Fuji team, they come from various academic backgrounds but all of them are expert dancers in their respective styles. In addition to their dance performances, they also presented a series of cultural activities to showcase contemporary Taiwanese culture. These include the demonstration of Chinese calligraphy, tutorial of Chinese folk songs and culinary arts. They also distributed copies of "Girl's Letter" which briefly introduced Taiwanese history as well as highlighting the beauty of contemporary Taiwanese culture.



## NTHU LAUNCHING A LARGE-SCALE ONLINE OPEN COURSE WARE

UST MOOC Project Committee

Open Course Ware (OCW) was an information-sharing project first initiated in 1999 by the Massachusetts Institute of Technology (MIT) that digitalized course material and resources and allowed them to be shared openly online with the public. Recently, Massive Open Online Course (MOOC) has replaced OCW, while maintaining the spirit and essence of the original idea. However, MOOC differs from OCW in that MOOC focuses on interaction, allowing students and scholars from elite schools around the world to interact and learn from each other.

President Lih J. Chen proudly announced that the current NTHU online open course provides 54

different types of curriculum videos. These curricula cover three essential areas of academics and researches: engineering, science, and humanities. The online course ware is designed for students to build a solid understanding of basics which then can extended to more specific and professional courses. Prof. Chuan-Chin Chiao, the Department of Life Science, has happily and passionately supported the project providing 4 full-course videos throughout 2009 to 2012, which has led him to the honor of Distinguished Teaching Award three times in the last ten years. The Dean of Academic Affairs, Prof. Sinn-Wen Chen, expressed that NTHU professors are not only exceptional in research, but are always aiming

to break the boundaries of their teaching quality, and to challenge their students to the highest levels. Director of the Center for Teaching and Learning Development, Prof. Chi-chao Chao, stated that NTHU has been participating in MOOC conferences held by world-class universities and has joined together with the University System of Taiwan (UST) to merge resources for creating a cloud-based UST MOOC system. Through this system, NTHU is offering online courses since September in neurology, computer science, information engineering, optical engineering, and intellectual property law.

UST MOOC website :  
<http://mooc.et.nthu.edu.tw>



### NATIONAL TSING HUA UNIVERSITY NEWSLETTER

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