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In the cyber-technology field, a Taiwan team of hackers won the 2<sup>nd</sup> place at the Japan hackathon, behind a South Korean team. The event's purpose is mainly to determine the strength in cybersecurity.

A Taiwan academician won the Khwarizmi award, from Iran, for his contributions to the advancement of science.

In the field of biomedical sciences, a research team confirmed that circulating blood cells can contribute to heart cells regeneration. Another cardiologist team led a research on hypertension and according to their results, a sodium-free diet is not a solution as good as pretended as it might increase the risk of high blood pressure.

The number of foreign students staying in Taiwan and get a job increased 68 percent in 2014. The cause is a recent new policy set in July 2014. Most of the foreign students deciding to stay in Taiwan come from Southeast Asia.

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### **Taiwanese bank, Line form partnership on mobile payment service**

(Central News Agency, 03 02 2015)

Taiwan's Cathay United Bank teamed up with Japan's Line Corp., the operator of the messaging app Line, to introduce new features of a mobile payment service in Taiwan.

Line Pay, which is expected to be available in the second quarter of this year, will allow Line users to create virtual bank accounts under Cathay United Bank via mobile phones and transfer money directly to friends within the Line app.

Users can also deposit up to NT\$10,000 (US\$316) on their Line accounts through email verification, or deposit up to NT\$100,000 if their Line accounts are integrated with their virtual bank accounts certified by Cathay United Bank.  
<http://focustaiwan.tw/news/ast/201502030032.aspx>

### **Chunghwa Telecom, Toyota to step up connected car partnership**

(Central News Agency, 05 02 2015)

Chunghwa Telecom Co., Taiwan's largest wireless carrier, said it will make a greater push into a connected car project with Toyota as part of its 4G service expansion. The partnership with Japan's Toyota, the bestselling car brand in Taiwan, began in 2014, providing tablet PCs with 4G connectivity for Toyota car models. It allows owners to check tire pressure and monitor images in their cars, even when they're not driving, said Lin Kuo-feng, president of Chunghwa Telecom's mobile business group.

The two companies are expected to discuss integration of their back-end control systems to provide a wider range of fourth-generation (4G)-enabled services and applications, Lin told the Taiwanese media at a year-end gathering. He did not give a timetable for the launch of the services.

<http://focustaiwan.tw/news/ast/201502050020.aspx>

### **NCKU develops pioneering transistor technology**

(Taiwan Today, 06 02 2015)

An international team headed by Tainan City-based National Cheng Kung University has developed the world's first functional spin field-effect transistor for information processing.

Expected to accelerate the progress of semiconductor development ahead of the two-year doubling of computer power as defined by Moore's law, the transistor's creation has met with widespread acclaim and generated considerable interest in the academic and private sectors.

Team leader Chen Tse-ming from NCKU's Department of Physics said that since spin FET was first proposed in 1990, it has been seen as a game changer in the development of information technology. "But spin FET failed to materialize due to technical challenges such as low spin-injection efficiency, spin relaxation and spread of spin precession angles."

According to Chen, the perseverance of team members Chuang Po-jen and Ho Sheng-chin—both doctoral students under his supervision—and researchers from the U.K.'s Cavendish Laboratory and University College London, enabled a solution to finally be found.

<http://www.taiwantoday.tw/ct.asp?xItem=227247&CtNode=436>

### **Taiwan wins 2nd place at Japan hackathon**

(Taiwan Today, 09 02 2015)

A team of hackers from Taiwan claimed second at Japan's biggest hacking contest Feb. 8 in Tokyo, underscoring the strength of the country's cybersecurity environment.

Beating 4,186 contenders from 58 countries, Hitcon trailed South Korea's Toefl Beginner and finished ahead of Plaid Parliament of Pwning from the U.S. at the two-day SECCON Capture the Flag Finals. It was the team's debut in the event organized by nonprofit Japan Network Security Association to cultivate talent and promote international exchanges on IT security.

"We are extremely pleased with the result," team leader Lee Luan-chuan said. "This achievement bears testament to the enormous potential of local computer science specialists on the global stage." Comprising emerging and experienced hackers, the eight-member outfit demonstrated outstanding teamwork at the annual competition. "Our members supported one another throughout the event's defense and attack stages," Lee said. Although the group required several hours to get up to speed on the contest rules, Lee said it soon trumped the competition. "We responded quickly to the moves of our opponents and successfully thwarted their attempts to compromise our system."

First held in 2012, the Tokyo Denki University-staged competition is one of the seven qualifying contests for the high-profile DEFCON Capture the Flag 2015 finals held Aug. 6-9 in Las Vegas.

<http://www.taiwantoday.tw/ct.asp?xItem=227284&CtNode=436>



### Taiwan academician wins Khwarizmi award

(Taiwan Today, 12 02 2015)

An academician from Taipei City-based Academia Sinica recently won a prestigious Khwarizmi International Award for his contributions to the advancement of science. Dr. Liu Fu-tong, a distinguished research fellow and director of AS Institute of Biomedical Sciences, was nominated for the Iranian government-backed honor on the strength of his research in galectins spanning 30 years. He will be presented with the award by Iranian President Hassan Rouhani at a ceremony March 3 in Tehran.

"Taiwan is a front-runner in the study of glycoscience," Liu said. "The award also recognizes the invaluable contribution of AS President Wong Chi-huey in leading and overseeing our country's efforts in this regard."

According to Liu, his team is currently developing potent galectin-3 and galectin-12 inhibitors for the treatment of cancers, inflammatory diseases and obesity. "We have published over 300 scientific papers and review articles, as well as notching up 15,000-plus citations," he said.

An alumnus of National Taiwan University, Liu studied medicine at the University of Miami and earned his doctorate of chemistry from the University of Chicago. He was elected an AS academician in 2012 and a fellow of the American Association for the Advancement of Science 12 months later.

Launched in 1987, the award is named after Mohammad Ibn Mousa Khwarizimi, an eighth century Persian mathematician and astronomer widely hailed as the father of algebra

<http://www.taiwantoday.tw/ct.asp?xItem=227440&CtNode=436>



### Cheers Magazine names top Taiwan universities

(Taiwan Today, 13 02 2015)

Feng Chia, Asia and National Taiwan universities are the ROC's top three tertiary institutions in that order, according to an inaugural survey released by Taipei City-based Cheers Magazine.

The schools were selected on the strength of longstanding management achievements from a field of 152 by 114 participating university presidents.

Diane Yin, publisher of Cheers under her Commonwealth Magazine Group, said the universities deserve full credit for their commitment to creating first-rate learning environments. "It is important to honor their untiring diligence and encourage others to follow suit."

Taichung City-headquartered FCU garnered 22 votes for promoting student body-private sector tie-ups through cooperative projects, outstanding educational performances and administrative proficiency. "We applaud this privately run school for its willingness going above and beyond," Yin said.

Also from Taichung and privately operated, AU attracted 20 votes and was praised by Yin for its pragmatic approach enabling students to apply theoretical knowledge in the workplace as a way of enhancing employment prospects.

Taipei-based NTU collected 16 votes and was lauded by Yin for launching creative educational programs and its top-notch research capability spanning a wide array of fields. "This institution works hard to stay ahead of the curve and warrants full acknowledgement," she said.

"We are confident this survey will inject new vitality into the tertiary education environment in Taiwan," Yin said, adding that her media group will continue encouraging institutions to play an expanded role in preparing the youth for the challenges of an increasingly globalized world.

<http://www.taiwantoday.tw/ct.asp?xItem=227546&CtNode=436>

### ROC sheds light on cardiovascular research

(Taiwan Today, 17 02 2015)

A research team from Taipei City-based Academia Sinica recently confirmed that circulating blood cells can contribute to cardiomyocyte, or heart cell, regeneration.

Using real-time molecular imaging and transgenic mice to pulse-trace label adult heart cells, the team discovered that bone marrow-derived circulating cells assist in heart cell repair by fusing with existing cardiomyocytes or give rise to new ones via direct transdifferentiation.

Patrick Hsieh, team leader and associate researcher at AS Institute of Biomedical Science, said Feb. 16 that the findings are important as they call into question studies to the contrary completed by Stanford University and the University of Washington.

"Our research provides evidence that hematopoietic cells play an important role in repairing cardiomyocytes and may serve as an alternative source for replenishing lost cells."

The team's paper Circulating Cells Contribute to Cardiomyocyte Regeneration After Injury was published in the Feb. 13 issue of prestigious journal Circulation Research.

According to Hsieh, ischemic reperfusion results in heart failure and is a leading cause of death worldwide. The condition is primarily triggered by coronary artery occlusion leading to myocardial infarction.



"The heart is an organ with very limited reparative ability. A better understanding of how circulating stem cells are regulated to give rise to new heart cells would certainly help develop related therapies," he said.

"Going forward, the next goal is to translate the research findings into clinical applications like developing new treatments for heart diseases."

<http://www.taiwantoday.tw/ct.asp?xItem=227620&CtNode=436>

### **Cardiologists debunking myths about hypertension**

(The China Post, 18 02 2015)

Recent studies on the treatment of high blood pressure debunk the myth that patients with hypertension should avoid sodium, according to the Taiwan Society of Cardiology.

Research shows that a sodium-free diet does not lower, but rather increases the likelihood of high blood pressure and related problems, said Taiwan Society of Cardiology Secretary-General Yeh Hung-I.

Yeh recommended a low-sodium diet, along with moderate exercise three to four times a week. He said too little body fat could also worsen high blood pressure. Contrary to a common prescription, the ideal body mass index range is not 18.5 to 24.9 kg/m<sup>2</sup>, but between 22.5 and 25 kg/m<sup>2</sup>, he said.

High blood pressure is an important risk factor behind cardiovascular diseases like heart attacks, coronary heart disease, stroke and peripheral arterial occlusive disease. The number of deaths directly or indirectly caused by high blood pressure exceeds 9 million people a year, according to the society.

<http://www.chinapost.com.tw/taiwan/national/national-news/2015/02/18/429265/Cardiologists-debunking.htm>

### **Tang laureate's scholarship set to aid young researchers**

(The China Post, 18 02 2015)

Chinese American historian and Tang Prize laureate Yu Ying-shih has decided to use his NT\$10 million (US\$319,124) research grant to set up a scholarship in Taiwan with the hope of encouraging young researchers in the field of humanities, according to the Tang Prize Foundation.

Tang Prize Foundation CEO Chern Jenn-chuan and Huang Chin-shing, director of the Academia Sinica's Institute of History and Philology, signed an agreement to formally establish the scholarship. The institute will be responsible for selecting the recipients of the scholarship. The scholarship will be awarded annually to six scholars in Taiwan under the age of 45 who are working on books or doctoral dissertations, according to the Tang Prize Foundation.

They will be selected by the institute and each year, three scholars will receive NT\$360,000 each to assist in their work of writing a book. Three others will each be granted NT\$240,000 to help with their doctoral theses.

Young scholars need financial assistance mostly in the final stages of writing their doctoral dissertations or books, Huang said. Yu is hoping that the scholarship will encourage more young people to study the humanities, Huang said. Yu was awarded the inaugural Tang Prize in Sinology last year. He is one of the five recipients of the first Tang Prize, which covers four categories — sustainable development, biopharmaceutical science, Sinology and rule of law.

The biennial award comes with a cash prize of NT\$40 million and a research grant of up to NT\$10 million to be used within five years. The laureates can decide how they wish to use the NT\$10 million grant, once it is in the field of research, according to the foundation. The award was established by Taiwanese entrepreneur Samuel Yin in 2012 to complement the Nobel Prize.

<http://www.chinapost.com.tw/taiwan/business/2015/02/17/429188/Tang-laureates.htm>

### **Acer portable projector wins 2015 iF Design Award**

(Central News Agency, 25 02 2015)

Taiwanese computer maker Acer Inc. said that its C205 LED light and portable projector has won Germany's iF Design Award 2015 in the audio and video category.

"Winning this coveted award reflects the jury's recognition of outstanding achievements in design quality, finish, choice of materials, degree of innovation, environmental impact, functionality, as well as universal design," the New Taipei-based company said in a statement.

The Acer C205 carries a small footprint of just 144 x 108 millimeters and weighs 0.3 kilograms, making it "a great companion for mobile devices," according to Acer. The projector can also work cable-free with a built-in battery design.

Since 1953, the iF award logo has become synonymous for outstanding design around the world. The winners of the 2015 iF Design Award were chosen from among 4,783 products submitted by 2,102 participants from 53 countries.

Organized by the International Forum Design of Germany, the award-winning products will be presented at the iF design exhibition that will begin Feb. 28 in Hamburg.

<http://focustaiwan.tw/news/ast/201502250021.aspx>



### **Taiwan university launches orchid wine**

(Central News Agency, 25 02 2015)

A Taiwanese university that is known for making cosmetics from orchid extracts is now working with local farmers to brew a wine from a special variety of orchids.

The Moonbeam wine is made from an orchid breed called I-Shin Venus, which is noted for its sweet aroma, said Chen Hong-hwa, head of National Cheng Kung University's Research Center of Orchid. Chen is head of the research team that developed the I-Shin Venus and the Moonbeam wine in collaboration with local farmers.

In 2013, the team created a line of facial products using embryonic stem cells extracted from orchids. Thanks to technology advancements, the center can now obtain good quality and quantity extracts and embryonic stem cells from orchids to make a variety of products, said Hsiao Yu-yun, a researcher at the center.

Taiwan, which has an ideal climate and the technology to grow orchids, has earned the nickname "Kingdom of Phalaenopsis" and has an orchid production value of over NT\$3 billion (US\$35.37 million) per year, Hsiao said. More importantly, she said, Taiwan has a rich history and culture of orchid production, something that is hard for its competitors to mimic, she said.

Hsiao said the goal of the university's orchid research center is to boost cooperation between Taiwan's universities and its industrial sector and create new businesses to retain the country's talent.

<http://focustaiwan.tw/news/ast/201502250027.aspx>

### **More foreign students comprise Taiwan workforce**

(Taiwan Today, 25 02 2015)

The number of foreign students working in Taiwan after graduation climbed 68 percent to 1,428 in 2014, up from an annual average of 850, according to the National Development Council.

Attributing the growth to an easing of regulations implemented July 1 last year, the NDC said the students are playing an integral part in strengthening Taiwan's labor pool.

"Our new points system enables more high-caliber students to remain in country," said Chang Heng-yu, director of NDC Department of Human Resources Development. "Assessment categories better match national development goals and take into account the categories of education, language, previous salaries, professional skills, and work and life experience."

According to Chang, 477 students were employed last year through the program, with over half taking professional roles in the fields of commerce, electronics, engineering, information and communications technology and machinery. "By lifting former restrictions on minimum wage and work experience, foreign students have greater leeway in finding jobs and Taiwan businesses greater hiring incentives," Chang said.

The majority of foreign students taking advantage of the program are from Southeast Asia, with Malaysia accounting for the lion's share at 15 percent followed by Hong Kong and Vietnam, both at 8 percent.

"This really is a win-win situation as Taiwan businesses can capitalize on the familiarity of the students with their home markets to create more trading opportunities," Chang said. "We will continue coordinating efforts with the ministries of education, economic affairs and foreign affairs to further the initiative."

<http://www.taiwantoday.tw/ct.asp?xItem=227737&CtNode=436>

### **College admission exam top-scorers drop by 40%**

(The China Post, 26 02 2015)

The number of students who scored straight As in the national examination for university admission dropped by around 40 percent while the number of students who received zeros in English composition jumped by around 10 percent, according to the last results released.

Out of more than 140,000 students who had taken the 2014 General Scholastic Ability Test (GSAT), 182 took the top combined score of 75 points for the five subjects in the exam, a drop from last year's 295.

The GSAT employs a complex marking system to come up with its final grades. The tests are marked initially by the hundred-mark system, with 100 marks being the top score. To avoid the hundred-mark system distorting the difference of students' ability — such as when a person scoring 84 points would end up in a less desired school than one scoring 85 — the GSAT further weights the initial results into 15 grades. The exact minimal mark need to score the full 15 grade points in a given subject is different year from year based on the results and the total number of exam-takers. Generally the top achievers would have at least scored around 88 in the hundred-mark system in order to get all 15 points.

Meanwhile, 13,493 students got the lowest zero grading point, which is also zero in the hundred-mark system, for their English composition exam, up by 1,242 compared to the previous year.

The lower results do not necessarily mean a drop in student standards, however. Some teachers had suggested that the GSAT English test in 2014 was the hardest in five years. In the composition test, students were asked to select one of two fictional books ("Everyone Is Beautiful: Respect Others & Yourself," and "Leadership Is a Choice: Conquer Your Fears & You Can Be a Leader Too") as make-believe summer reading material and explain their choices.

<http://www.chinapost.com.tw/taiwan/national/national-news/2015/02/26/429709/College-admission.htm>