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30 June 2011

Science, Technology and Education News from Taiwan Number 06 — June 2011

According to Wong Chi-huey, president of Academia Sinica (Taiwan's foremast academic research body), the establishment of *Nangang biotech research center* in five years will give a strong boost to the development of Taiwan's biotech industry, whose annual output value may top NT\$1 trillion, five times the existing level. The biotech research center will be able to break ground on its construction soon, which will entail an investment of NT\$22.5 billion and is scheduled for completion in five years, capable of accommodating 2,000 researchers. Wong noted that Taiwan's biotech industry has strong R&D capability, but lacks the mechanism for the integration and commercialization of its R&D results. In Taiwan, there are at least 50 new drugs under development now, of which 30 have obtained the approval of the U.S. Food and Drug Administration for clinical test. The biotech research center can help the 30 drugs pass the clinical test and hit the market. The research center will play a role of integration, pinpointing R&D results with market potential and passing them to enterprises via the mediation of industrial incubation centers. It will also coordinate the resources of the biotech center of the Ministry of Economic Affairs, Taiwan Food & Drug Administration, and the animal center of the National Science Council to assist the enterprises in commercializing the transferred technologies. http://www.nsc.gov.tw/int/mp.asp

The goal of the Global Partnership Programs (GPP) – National Priority S&T is to promote international collaboration related to National Science and Technology Programs as follows:

National S&T Program for Networked Communications http://www.ntpo.org.tw/

National S&T Program for Energy

http://nstpe.ntu.edu.tw/

National S&T Program for Biopharmaceuticals
National S&T Program for Intelligent Electronics http://www.twnpie.org/

Taiwan e-Learning and Digital Archives Program http://teldap.tw/

National S&T Program for Nanoscience and Nanotechnology http://nano-taiwan.sinica.edu.tw/

EU FP National Contact Point Taiwan - The National Contact Point-Taiwan Office (NCP-Taiwan) seeks to facilitate the engagement of Taiwanese industry, universities, research institutes and their researchers with the European Union's Seventh Framework Programme (FP7) and other related EU opportunities for mutual collaboration between the European Union and Taiwan. The aim of NCP-Taiwan is to increase the quality, quantity, profile and impact of Taiwan-EU research cooperation under FP7 by developing and executing a suite of activities such as info-days, seminars, exchange visits, technical assistance, workshops and other activities designed to increase the awareness of, and involvement in, new collaborative opportunities.

With the help of the NCP-Taiwan office and its website,

http://www.ncp-tw-eng.ntust.edu.tw/front/bin/ptdetail.phtml?Part=our services

research institutes and scholars can obtain the latest information about FP7 and open calls for research proposals, can access details about these calls via the NCP-Taiwan website CORDIS connection, can receive assistance in connecting with other Taiwanese specialists, scholars and entrepreneurs who share similar research interests, and can receive support in establishing academic research exchanges with the European Union.

Thematic NCPs Taiwan

http://www.ncp-tw-eng.ntust.edu.tw/front/bin/ptdetail.phtml?Part=Energy NCP

http://www.ncp-tw-eng.ntust.edu.tw/front/bin/ptdetail.phtml?Part=Environment NCP

http://www.ncp-tw-eng.ntust.edu.tw/front/bin/ptdetail.phtml?Part=Health NCP

http://www.ncp-tw-eng.ntust.edu.tw/front/bin/ptdetail.phtml?Part=ICT_NCP

http://www.ncp-tw-eng.ntust.edu.tw/front/bin/ptdetail.phtml?Part=SSH_NCP

http://www.ncp-tw-eng.ntust.edu.tw/front/bin/ptdetail.phtml?Part=Bio_NCP

http://www.ncp-tw-eng.ntust.edu.tw/front/bin/ptdetail.phtml?Part=NMP_NCP

http://www.ncp-tw-eng.ntust.edu.tw/front/bin/ptdetail.phtml?Part=Security NCP

Taiwan Tech Trek - TTT provides a unique opportunity for overseas and domestic Taiwanese youths to gain hands-on internship or research experiences. Summer internships are available all across Taiwan at top research institutes, high-tech companies, fine universities, and the world-famous science parks. https://nscnt12.nsc.gov.tw/ttt/

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1. NTU - Department of Biochemical Science and Technology Presents New Nano-Material Treatment for AMI

(MEPO Forum, 30 05 2011)

Professor J.A. Ho at the Department of Biochemical Science and Technology, National Taiwan University, combines high polymer nanomaterial technology and stem cell technology presenting a new treatment for acute myocardial infarction (AMI) which is a therapeutics based on stem cells as well as a measure to trace stem cells development. More significantly, the stem cells integrated with high polymer nanomaterials have been proved not to express their disfunction in differentiation. The therapeutics can treat and thus track the infarction together within 30 minutes, enhancing the efficiency of AMI treatment. The findings have been published in *Circulation* (2010: 122: S132-141). Since the treatment has showed that nano-materials can be applied to the treatment of cardiovascular disease, it opens a promising sci-tech as well as medical opportunity.

http://web1.nsc.gov.tw/techwp.aspx?id=1000516001&ctunit=208&ctnode=287&mp=7

2. National Taiwan University of Science and Technology Makes Breakthrough Inventing Second-Generation Solar Power Glass

(Central News Agency, 07 06 2011)

National Taiwan University of Science and Technology announced on 7 June that the team developing solar power glass had made a big breakthrough introducing the next-generation glass, integrating the previous functions, namely, clean, power generation and thermal insulation, with the new technique which doubles the effect of heat insulation, reducing 50% of the air conditioning cost. The team led by Professor Chin-Huai Young at the Department of Construction Engineering, National Taiwan University of Science and Technology, began the development of solar power glass since 2008, intending to add the functions of cleaning and heat insulation to the solar power generating plate. The team succeeded in upgrading the first-generation model in July 2010, and the results were going to be introduced in Discovery recently. Professor Young said, by using two layers of semiconducting films and insulation films on the glass, the heat insulation effect of the second-generation is two times higher than the first-generation, and at the meanwhile its generation capacity has been lifted five times. A building with full adoption of the model will save 50% of the air conditioning cost.

http://mepopedia.com/archives/14217-CreativityNationalTaiwanUniversityofScienceandTechnologyMakesBreakthroughInventingSecond-GenerationSolarPowerGlass.html

3. CEPD signs cooperation deal with world's No. 1 indoor aquarium

(Central News Agency, 09 06 2011)

The Council for Economic Planning and Development (CEPD) signed a memorandum of understanding (MOU) with the John G. Shedd Aquarium, the world's largest indoor aquarium, for exchanges in marine research and conservation of biodiversity in Taiwan. The deal will drive exchanges of research staff between the Chicago-based aquarium and two Taiwanese aquariums -- the National Museum of Marine Biology and Aquarium in Kenting and the Farglory Ocean Park in Hualien -- to allow the sharing of experience in exploring the ocean.

http://focustaiwan.tw/ShowNews/WebNews Detail.aspx?Type=aALL&ID=201106090043

4. Kaohsiung City: Taiwan launches new research vessel to improve marine surveys

(Taiwan News, 11 06 2011)

Taiwan launched a 2,700-ton marine research vessel in southern Taiwan's Kaohsiung Harbor that officials believe will improve the country's marine research and exploration ability. The Kaohsiung-based ship, the Ocean Researcher V, will be used to conduct research and surveys on the ecology, marine resources and undersea faults in the seas surrounding Taiwan. The 72.6 meter ship can carry remotely operated underwater robots that can collect data on an ocean bed as deep as 5,000-6,000 meters below sea level. In addition, its strong resistance to wave action will allow it to gather information at sea even during winter, therefore extending its operating time. The country's three existing research vessels are between 300 and 890 tons. The Ocean Researcher I, II and III, will operate in coordination with the new vessel to help launch Taiwan's marine science and technology into a new era, Lee Lou-chuang, minister of the National Science Council (NSC), said. A national oceanographic database will be established to accommodate the data gathered from the new vessel and to serve as references for Taiwan's marine policies, other officials said.

http://www.taiwannews.com.tw/etn/news content.php?id=1623549



5. Taiwan Paper Manufacturer Invents Environment Friendly Stone Paper

(The Liberty Times, 11 06 2011)

A paper manufacturer in Tainan invents an environment friendly material, stone paper, and obtains its patent in over 40 countries. The books printed with stone paper look similar to the ones with ordinary art paper. The only difference is that the touch of stone paper is slightly softer; the non-expert people cannot easily tell the difference. The company says, the main raw material of stone paper is limestone. Besides, unlike the production of concrete that needs a large amount of limestone, the production of stone paper only needs the lime scraps, which are made into stone powder, namely, calcium carbonate, and processed together with non-toxic resin. The company says, although certain manufacturer in Germany and Japan have similar technology, but their technology can use the best about 20% of calcium carbonate, whereas the company's paper uses between 55% to 85% of calcium carbonate. Now the company's market has reached Europe, America, Japan and China. Besides, the resin used for the paper is biodegradable under the solar ultraviolet rays and the production needs no water, comparing to the ordinary paper production which needs four tons of wood pulp for one ton of paper. The material is rather eco-friendly.

http://web1.nsc.gov.tw/techwp.aspx?id=1000613001&ctunit=208&ctnode=287&mp=7

6. Local scientists join cosmos research project

(Central News Agency, 16 06 2011)

Taiwanese scientists and researchers have joined their counterparts from 15 other countries in the second phase of a cosmos research project using the Alpha Magnetic Spectrometer (AMS-02), according to Ministry of National Defense spokesperson Colonel Lo Shao-ho. The AMS-02 project, launched by the US Department of Energy in 1999, is designed to detect charged particles in cosmic rays to find anti-matter, dark matter and missing matter in the hope of answering questions about the -formation of the universe.

The first AMS project (AMS-01) started in 1994 using equipment deployed on the payload of the US space shuttle Discovery, which orbited the Earth for 10 days in the initial research mission in 1998. It was followed by AMS-02 in 1999. Lo said Taiwanese scientists are responsible for designing and manufacturing the project's electronic system for transforming the data collected by the AMS detectors into electronic signals and sending them back to ground control.

http://www.taiwanheadlines.gov.tw/ct.asp?xltem=228257&CtNode=9 http://www.cna.com.tw/ShowNews/WebNews Detail.aspx?Type=FirstNews&ID=201106140040 http://www.taipeitimes.com/News/taiwan/archives/2011/06/16/2003505927

7. Academia Sinica researcher elected to American Academy of Arts & Sci.

(Central News Agency, 17 06 2011)

Academia Sinica researcher Yuk Ling Yung has been selected as a fellow of the American Academy of Arts and Sciences (AAAS), according to a news release by the top academic institute of Taiwan. Yung is one of 212 new members of the AAAS, and enters the prestigious institution as a foreign honorary member. According to Academia Sinica, Yung's research focuses on planetary atmospheres, planetary evolution, atmospheric chemistry, atmospheric radiation, astrobiology and global climate change.

http://focustaiwan.tw/ShowNews/WebNews Detail.aspx?Type=aALL&ID=201106170022

8. Taiwan biggest winner at Pittsburgh invention show

(Central News Agency, 18 06 2011)

Taiwan garnered 26 gold, 12 silver and five special awards on Friday at the 26th Invention & New Product Exposition (INPEX) in Pittsburgh, making it the show's big winner. The Taiwanese delegation showcased 54 inventions at this year's expo. Among the winning Taiwanese inventions was a highly-efficient ceramics cooling substrate for LED devices that uses far-infrared radiation instead of traditional convection to dissipate heat. The invention took three years to develop and was the result of a collaborative effort by Far East University's Environmental Materials Center, Department of Mechanical Engineering and Department of Automation and Control Engineer, said Chung Ming-chi, vice president of the university and co-chair of the invention project. The invention won the special award for Outstanding Design from Asia Pacific. Chen Chih-chen, director of the university's Environmental Materials Center, and co-designer of the product, said the new invention could double the battery lives of LED devices, which have suffered from short battery lives because of cooling problems. The new substrate could lower temperatures by 10 % and the use of nano materials reduced its weight by 60-70 %, Chen said.

website: www.swiss.org.tw

Another eye-catching invention was a wheelchair that combines the features and conveniences of manual and electric wheelchairs. It was the only Taiwanese invention to win two gold awards at the show. Kuo Tsung-yuan, a professor at Southern Taiwan University, which designed the product, said the wheelchair is designed to help increase the willingness of paralyzed patients and the elderly to go outside and exercise or engage in leisure activities. Some other Taiwanese inventions included a cart that could climb stairs, a high-efficient impact wrench, a microalgae protein feed, and a nutritious food additive.

http://www.taiwanheadlines.gov.tw/ct.asp?xItem=228652&CtNode=9

9. Researchers find multiple sclerosis and shingles link

(Taipei Times, 18 06 2011)

People who get shingles are more likely to also develop multiple sclerosis (MS), with researchers in Taiwan finding that people who developed shingles had four times the risk of being diagnosed with MS within the next year. However, the team led by Kang Jiunn-horng (康峻宏), at Taipei Medical University Hospital warned that their study did not show that shingles itself could cause MS, although there were "several potential mechanisms" that could explain why the two diseases are linked. "Our findings support the notion that occurrence of MS could be associated with herpes zoster attack," Kang and colleagues wrote in the Journal of Infectious Diseases. "We found a significantly higher risk for MS within 1 year of [a] herpes zoster attack compared with the control population," they wrote.

http://www.taipeitimes.com/News/taiwan/archives/2011/06/18/2003506083

10. Advanced Testing Benefits Diagnosis and Study of Neuropathic Pain: NTU

(MEPO Forum, 18 06 2011)

The NTU College of Medicine and NTU Hospital have established a complete assessment system to better help patients who suffer neuropathic pain. Encompassing advanced pathology, physiology and imaging testing, this system not only yields more accurate diagnoses than traditional approaches, it benefits studies into the causes of neuropathic pain and the devising of effective remedies. The most commonly observed cause of chronic neuropathic pain is the degeneration of nerve endings that reside in the most outer layer of skin. Therefore, the college and hospital have instituted small dermal biopsy testing for sensory nerve damage to obtain empirical data for diagnosing the pathological states of nerves. The first of its kind in Asia, the system is superior to traditional nerve biopsies. Like minimally invasive procedures, it causes only a light abrasion of the skin yet enables the physician to easily "observe" damage to nerve endings rather than rely solely on the patient's subjective descriptions. For this reason, the international neuroscience community has recognized this testing as a new standard diagnostic tool. As the nerves of the skin surface convey heat as well as pain, NTU neurologists have also measured heat evoked potentials to establish an atlas of heat evoked potentials for neuropathic pain, thus providing independent physiological evidence for the diagnosis of pain. Besides serving as an effective diagnostic and evaluation tool for patients, this system opens up new directions and opportunities for the neurobiological study of pain by allowing deeper explorations of the relationships between brain structure and function.

http://web1.nsc.gov.tw/techwp.aspx?id=1000614003&ctunit=208&ctnode=287&mp=7

11. Delta, NTU to build academic cloud computing environment

(Central News Agency, 20 06 2011)

Delta Electronics Inc., a major Taiwanese energy-saving solutions provider, will join with National Taiwan University (NTU) to build the country's first cloud computing environment for academic use. Delta will donate cloud infrastructure worth NT\$200 million (US\$6.9 million), including a mobile container cloud computing center equipped with 1,000 servers and large-capacity hard disks, which will be used by NTU's College of Management. The power supply unit maker will also sponsor a class at the college starting this year, open to 30 undergraduate and graduate students, to study business models and innovations in the cloud computing industry. Ben Jai, senior director of Delta's cloud technology center, said the company hopes to structure the class from the perspective of service innovation and industrial upgrading, which was why Delta chose to work with the College of Management instead of the Department of Computer Science and Information Engineering. Following similar steps from Wistron Corp., Inventec Corp. and Hon Hai Precision Industry Co., Delta launched the cloud computing container late in the past year, but it learned from other models and made more energy-efficient data centers, Jai said. "IT equipment usually accounts for 40 % of the total power consumption in traditional data centers, while things like cooling, air conditioning

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and lighting account for the balance. Our new center lowers the power consumption of the other equipment to 20 % of the power used," Jai told a press conference in Taipei. Delta does not have any commercial plans for its new cloud computing center in the near future, but the company will keep an eye on the sector as the global cloud computing ecosystem becomes more mature.

http://focustaiwan.tw/ShowNews/WebNews Detail.aspx?Type=aALL&ID=201106200036

12. Power efficiency key to Taiwanese semiconductors: researcher

(Central News Agency, 23 06 2011)

Low power consumption will become a key factor for Taiwan's semiconductor manufacturers in a rapidly growing mobile market driven by smartphones and tablet computers, a Taipei-based researcher said. The worldwide semiconductor industry grew 30 % year-on-year in 2010, a record-high over the past decade, according to the Topology Research Institute (TRI). However, the segment is expected to grow at a moderate pace of just 5 % this year due to slowing demand in the PC industry, the research firm said. Amily Chen, an associate manager at TRI, said sales of mobile communication products have become a major driver for the growth of the semiconductor industry, but integration of key components will be needed to achieve higher power efficiency in smaller-sized devices. "Taiwanese chipmakers and hardware manufacturers should use their imagination to think about how to achieve higher efficiency with lower power consumption, which is different from the traditional Windows-Intel model that pursues higher speed and higher efficiency" without regard for power, Chen said at a TRI industry forum titled "Remodeling the Semiconductor Value Chain in the Post-PC Era." Thinner and lighter smartphones will also bring challenges to memory makers, which require the most advanced manufacturing processes to achieve power efficiency and larger capacity in limited spaces, she said. Chen added that the improvement of graphic input interface will become another chance for Taiwanese manufacturers, as more users get accustomed to the touch interface on handheld devices such as Apple's iPhone and iPad.

http://focustaiwan.tw/ShowNews/WebNews Detail.aspx?Type=aECO&ID=201106230038

13. Taiwan supercomputer rated 42nd fastest worldwide

(Taiwan Today, 23 06 2011)

A new supercomputer built by Taiwan's National Applied Research Laboratories will greatly strengthen domestic research projects, the Center for High Performance Computing under the NARL said. The supercomputer, AR585 F1 Cluster, can perform 177 terafloating-point operations per second and was rated the 42nd fastest computer in the world at the 26th International Supercomputing Conference earlier this month. "For the second time in history, a supercomputer made in Taiwan has been included in the top 50 list," said Chiang Kuo-ning, director of the CHPC. Another Taiwanese supercomputer reached 35th place in 2007. "The supercomputer runs 17,000 times faster than an average personal computer," Chiang said. "Its storage volume is big enough to contain 230,000 DVDs. In addition to its high performance, the machine is power efficient and expected to enter the Green 500 list to be released in a few weeks, the center added. Chiang said AR585 F1 Cluster was designed by the CHPC and manufactured by Taipei-based Acer Inc. The supercomputer will be devoted to physical and chemical calculations such as industrial design and weather simulation, the CHPC said. The machine will stimulate cloud computing efforts, it added.

http://www.taiwantoday.tw/ct.asp?xltem=168840&CtNode=419

14. R&D 100 Awards recognize 4 Taiwan products

(Taiwan Today, 24 06 2011)

Four products developed by research institutions in Taiwan have been included in the 49th Annual R&D 100 Awards, according to a list released 23 June by U.S.-based R&D Magazine.

One of the products was In-Synergy Technology, developed by the Institute for Information Industry. Short for Internet smart energy technology, In-Synergy is a management system that monitors power consumption devices for households and offices in real time, according to the institute. "The system watches electricity use like a Chinese physician who takes a patient's pulse and gives warnings," the institute said.

Also on the R&D 100 list was the All-Foldable Fabric Ultra-Capacitor, developed by the Taiwan Textile Research Institute. The device is a new super capacitor, less than 1 millimeter thick, which can be folded and stored. In spite of its diminutive size, the capacitor stores 10 times more energy than a standard super capacitor, according to the developer. "A typical capacitor can accept one farad of charge at best," the TTRI explained. "But our ultra-capacitor can hold up to 50 farads."



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The other two products on the list, HyTAC and i2R e-Paper, were both developed by the Industrial Technology Research Institute (ITRI). The products were recognized because of their eco-friendly properties and innovative applications, according to ITRI.

HyTAC is a new type of polarizer protective film that uses nano material mixing technology to produce great transparency and stability, ITRI said. According to ITRI, traditional triacetyl cellulose film (TAC) requires a harmful dichloromethane solvent in polarizer production. HyTAC could one day replace TAC completely, the institute added. i2R e-Paper is a rewritable, and hence reusable, electronic material that can display images of 300-dpi high resolution with memory function. "In the future, the technology may be used for digital books and pictorials, electronic bulletin boards and other innovative applications," according to the institute.

http://www.taiwantoday.tw/ct.asp?xltem=169050&ctNode=445

15. Taiwanese wins red dot award with mobile digital microscope

(The Liberty Times, 24 06 2011)

Chen Zhong-sheng, director of Tainan University of Technology's Cultural Creativity Design Development Center, has developed a mobile digital microscope that combines the functions of a microscope and camera, and is able to carry out videotaping. The device marks a breakthrough as it significantly sizes down traditional microscopes and overcomes limits on moving the device around. The hand-held product, the first of its kind in the world, is called the Pro10 mobile digital microscope, and won an award at Germany's red dot design awards for the creativity exhibited in developing it. The Pro10 mobile digital microscope weighs only 200 grams, and images can be blown up by a factor of 200 times. "It also has a 2 million megapixel lens that can be used to take photographs or videos," Chen said. "The overall design is extremely user-friendly."

http://www.taiwantoday.tw/ct.asp?xltem=168963&CtNode=419 http://www.taiwanheadlines.gov.tw/ct.asp?xltem=229243&CtNode=9

16. Local geological storage of CO2 feasible: NSC

(China Post, 26 06 2011)

The National Science Council (NSC) is actively proceeding with a carbon dioxide storage (CO2) project in an effort to accomplish the government's goal of reducing annual CO2 emissions in 2025 to the same level as recorded in 2000, and cutting the emissions in 2050 to only 50 % of the 2000 level. At the moment, Taichung Thermal Power Plant, Formosa Plastic Group's naphtha cracking plant in the Mailiao Industrial Zone of Yunlin County and Hsing Ta Thermal Power Plant in Kaohsiung are the three major sources of CO2 emissions, with their annual emissions reaching 40 million metric tons (mmt), 30 mmt an 15 mmt, respectively, according to Vice Chairman Chen Cheng-hong of the NSC. Chen said that there are quite a few methods for reducing CO2 emissions, and injecting carbon dioxide, generally in supercritical form, directly into underground geological formations is regarded as the most feasible ways.

http://www.chinapost.com.tw/taiwan/national/national-news/2011/06/26/307583/Local-geological.htm

17. Universal Microelectronics Unveils Solid-state Marine Radar

(China Economic News, 27 06 2011)

Universal Microelectronics Co. (UMEC), a leading maker of ICT products in Taiwan, recently unveiled its newly developed all-solid-state marine radar, which had been developed with technical cooperation with the Chung-Shan Institute of Science and Technology, a body known for working on military ware. An industry insider said UMEC is only the second globally to have developed such a marine radar, following Navico of Norway.

http://cens.com/cens/html/en/news/news inner 36748.html

18. Taiwan, US researchers enhance 3-D visual effects

(Taiwan Today, 27 06 2011)

National Taipei University of Technology and the Pennsylvania State University have co-developed a waveplate that enhances 3D visual effects and creates higher definition in DVD players.

A waveplate, similar in structure to the eyes of a peacock mantis shrimp, can alter the polarization of light because it possesses birefringence, or double refraction, Jen Yi-jun, a professor and chair of the Department of Electro-Optical Engineering at National Taipei University of Technology said.

http://www.taiwantoday.tw/ct.asp?xltem=169136&ctNode=445

19. Taiwan inks development deals with US biotech conglomerates

(Taiwan Today, 29 06 2011)

Taiwan's Medical and Pharmaceutical Industry Technology and Development Center (PITDC) signed a memorandum on mutual cooperation with U.S.-based global clinical research company PharmaNet Development Group Inc. on 28 June. The PITDC also inked an agreement on co-development with Aihol Biomedical LLC on new drugs for inflammatory bowel diseases, and helped Pei Li Pharmaceutical Ind. Co. Ltd., a local company specializing in hormone drugs, team up with PharmaNet. "Taiwanese medical researchers are fully experienced in clinical trials, and their performance is the cornerstone of the nation's biotech industry," said Minister without Portfolio Cyrus C.Y. Chu.

http://www.taiwantoday.tw/ct.asp?xltem=169461&ctNode=445

20. Taiwanese scholar to help set up biotech incubation center: GIO

(Central News Agency, 29 06 2011)

US-based Taiwanese scholar, Su Huai-jen, Taiwan's biotechnology overseas consultant, has consented to help set up the Supra Incubation Center in Taiwan. Su will choose 3-4 potential new medicines and medical devices from the National Science and Technology Program for Biotechnology and Pharmaceuticals (NSTPBP), National Research Program for Genomic Medicine (NRPGM) and National Research Program for Biopharmaceuticals (NRPB). He will offer his assistance to help bring these products to market.

Su, 60, graduated from National Taiwan University's chemical engineering department. He also has two Ph.D. degrees from the University of California Berkeley and the University of California at San Francisco. He once worked for Biogen Idec, a biotechnology company, and Shire Pharmaceuticals. The incubation center was an idea he developed five years ago.

The incubation center is a key initiative of the "Biotechnology Takeoff Package," which was launched by the Executive Yuan in 2009. The center will provide integrated services to labs and companies that want to take their biotechnology innovations to market.

http://focustaiwan.tw/ShowNews/WebNews Detail.aspx?Type=aALL&ID=201106290028