

NATEA-Dallas Annual Conference



Saturday, January 8, 2011

1:30pm - 10:00pm

Holiday Inn Select North Dallas

2645 LBJ Freeway, Dallas TX 75234

主辦單位：北美台灣工程師協會達拉斯分會

台工會歷任會長

張謙益	2005
葉鴻振	2006
謝慶鏘	2007
陳隆豐	2008(六月)
詹文聲	2008
莊樹源	2009
趙芳珍	2010

2010年台工會理事會

會長: **Fannie Chao**

趙芳珍

副會長: **Kim Yang**

楊金文

理事 (In alphabetical order):

Sue Chang

李紫鳳

Paul Chen

陳伯勛

John Hsieh

謝慶鏘

S.Y. Chuang

莊樹源

Patrick Tsay

蔡靜煌

顧問:

C.Y. Chang

張謙益

Ming-Chi Wu

吳明基



一年會長任務即將完成,心中充滿著對演講者,會員們,理事們 同鄉廣告商們的感恩與感謝! 因為您們的熱力支持與指導使得台工會能被認同, 接受, 發展並繼續服務於達福地區! 這是身為台工會會長, 理事, 與會員們的使命! 希望您們永遠支持與奉獻! 我們感謝同鄉的廣告支持 敬請大家多多支持, 使用他們所提供的服務與產品.

在此為會員們略為介紹一下” 北美台灣工程師協會 – North America Taiwanese Engineers' Association” 簡稱台工會. 台工會總部在加州; 計有 Silicon Valley, Southern California, Seattle, Dallas, Toronto (Canada), St. Louis, Austin, Greater New York City, Ottawa (Canada), North Carolina, Upstate New York 等分會. 總會正努力支持成立更多分會. 台工會達拉斯分會網站:
<http://natea.taadfw.org>

台工會達拉斯分會2010年會將於 1月8日 (六) 下午 1:30PM至 10:00PM 在 Holiday Inn Express North (NE side of I-635 LBJ and I-35E) 舉行. 除了三位重量級的演講者外會中也將宣佈新選出的2011年理事並頒發2010獎學金! 敬請熱烈參與! 詳情請細讀我們的年刊!

以下是台工會一年來的活動.

11月8日 (六) 下午 2:00PM至 5:30PM台工會達拉斯分會在「台心的家」有兩位出色演講者:

Jay Norelius 主講 "Are You Safe and Secure In Your Center Seat---That Depends!"

Dr. Ching-Tarng Hsieh 主講 “Evolution of Information and Communications Technology!”

八月十四日(六) 參觀美航博物館American Airlines CR Smith Museum. 前來參觀美航博物館的會員/同鄉及親朋一共竟超過六十人之多。

6月19日 (六) 下午 4:00PM至 5:30PM台工會達拉斯分會在「台心的家」舉行了一場圓滿成功的初夏醫學講座會. 黃偉廉醫師, Dr. Bill Hwang, 為我們主講「老化癡呆症預防 (頭殼壞去了)」 “Dementia Prevention”.

3月27日在「台心的家」(Westgrove Plaza, 4222 Trinity Mills Road, #260, Dallas, TX 75287), 由台工會達拉斯分會主辦, 台灣同鄉會達拉斯分會協辦了今年度第一場科技座談會。

主講者蔡靜煌先生，他也是台工會的理事，講題是“Protection of Cyber Attack-網路攻擊之預防”

另一題目是“老化的記憶損失與改進”，由另一位台工會理事楊金文博士主講。

感謝詹文聲教授自2005起，年年努力為台工會達拉斯分會籌募獎學金而鄉親們的慷慨解囊更讓人窩心。凡是達福地區台美人第二代大學生及就讀於德州的大學的台灣留美學生，在工程、自然科學、醫學、生技科學、數學、電腦、以及相關科技方面攻讀深造者，都歡迎前來申請此獎學金。每年申請期限為十月一日。

借此機會也向會員們說明您們所繳會費的運用。除一般運作及seminar茶點外 依據理事們的同意今年我們各別捐了\$500協助Rosalyne Shieh (謝泊欣) 出書。

Rosalyne目前任教The University of Michigan, 建築系。今夏她帶領近20位University of Michigan的學生去台灣約一個月，從事建築、設計、環境的研究工作，完後她預計把研究所得寫成專書由密大發表。另外協助 ITASA (the Intercollegiate Taiwanese American Students Association) – Midwest Conference which will be taking place at Northwestern University from April 15th to 17th, 2011.



感謝下列四位卸任理事兩年來對台工會盡心盡力,無私的奉獻。我們衷心感謝並祝福他們平安!

John Hsieh

謝慶鏘

Paul Chen

陳伯勛

Fannie Chao

趙芳珍

S Y Chuang

莊樹源

~ On Demand Technologies ~
Annual Conference Agenda
Saturday, January 8, 2011
Holiday Inn Select North Dallas
Room Sabine

2:00PM – 2:05PM	Welcome Patrick Tsay, 蔡靜煌, NATEA-Dallas Program Chair
2:05PM– 2:15PM	NATEA -Dallas Business Updates Fannie Chao, 趙芳珍, President, NATEA – Dallas
2:15PM – 3:15PM	“Cancer Therapy Present and Future: Precise and Personal” Dr. Alan M. Miller, MD., Ph.D. Director, Baylor Cancer Center, Chief Oncologist (To be introduced by Ming-chi Wu, 吳明基)
3:15PM – 3:45PM	Open Discussion (Q and A)
3:45PM – 4:45PM	“Everything you always wanted to know about Solar Energy but were afraid to ask” Dr. Michael Chen, PE, Ph.D., MBA Founder & CEO, Austin Tx. SolarTech LLC (to be introduced by C.Y. Chang, 張謙益)
4:45PM – 5:15PM	Open Discussion (Q and A)
5:15PM – 5:20PM	Announcement of 2010 Board Election Results Kim Yang, 楊金文, Nomination Committee Chair
5:20PM – 5:45PM	NATEA-Dallas 2010 College Students Scholarship Awards Ming-Chi Wu, 吳明基, Scholarship Committee Chair
6:00PM – 7:30PM	Dinner Banquet (at Room Summit II)
7:30PM – 7:45PM	Recognitions (Retired BoDs and Life members) Fannie Chao, 趙芳珍, President, NATEA – Dallas
7:45PM – 9:00PM	Keynote Address: "The Economic Outlook for 2011” Ms. Jessica Renier Senior Economic Analyst and Coordinator of Economic and Financial Analysis – Federal Reserve Bank of Dallas (To be introduced by Sue Chang, 李紫鳳)
9:00PM – 9:15PM	Closing Remarks Fannie Chao, 趙芳珍, President, NATEA - Dallas



NATEA 的成立與目的

BYLAWS OF DALLAS CHAPTER OF NORTH AMERICA TAIWANESE ENGINEERS' ASSOCIATION

Article I NAME, LOCATION, AND STATUS

- (1) The name of the organization shall be the North America Taiwanese Engineers' Association (NATEA)-Dallas, hereinafter the 'NATEA - Dallas'.
- (2) The headquarters of the NATEA-Dallas is located in North Texas, USA.
- (3) The NATEA-Dallas is established according to The Bylaws of North America Taiwanese Engineers' Association (NATEA). The Bylaws of NATEA shall take the precedence over regional Dallas chapter bylaws.
- (4) The NATEA is a non-profit corporation.

Article II PURPOSE

- (1) The purposes of the NATEA-Dallas are as follows:
- (2) To promote scientific and engineering knowledge and its practical applications and to provide engineering management training opportunities for the members of the NATEA-Dallas
- (3) To increase technology development, entrepreneurship, and job opportunities for the members of the NATEA -Dallas;
- (4) To support research and development of technology in Taiwan and enhance Taiwan's technological global position;
- (5) To establish relationships between the NATEA-Dallas and the other scientific or engineering organizations in the region;
- (6) To facilitate and coordinate service to communities by the NATEA-Dallas membership;
- (7) To further the fellowship among its members; and
- (8) Any other purposes, which are proper.

Introduction to keynote speaker – Ms. Jessica Renier

Jessica Renier is Senior Economic Analyst and Coordinator of Economic and Financial Analysis at the Federal Reserve Bank of Dallas. As a member of the Research Department's macroeconomic group, she conducts research on financial and national economic issues, produces articles for various bank publications and the Dallas Fed website, and keeps the bank's Board of Directors up-to-date on US economic developments. Renier also coordinates the Board of Governors' *Senior Loan Officer Opinion Survey* for the Eleventh District, and covers the financial, accounting and legal sectors of the Eleventh District Beige Book – the Bank's anecdotal survey of regional economic conditions. Renier, who has been with the Dallas Fed since 2006, holds a bachelor's degree in economics, communication and Spanish from Trinity University.



Topic

The Economic Outlook for 2011

Abstract

An overview of the current state of the US economy, the policy that the Fed is currently pursuing in response to the state of the economy, and some projections for the progress will be given. The economy to make over the coming year of economic expansion may be focused.





Introduction to guest speakers

Dr. Alan M. Miller
Director of Charles A. Sammons Cancer Center/
Chief of Oncology
Baylor Health Care System



Current Responsibilities

Alan M. Miller MD, PhD currently serves as the Director of the Baylor Charles A. Sammons Cancer Center, Chief of Oncology at Baylor University Medical Center in Dallas, and Medical Director of Oncology for the Baylor Health Care System. Dr. Miller has responsibility for the oversight and growth of all aspects of cancer clinical care, research and education at Baylor. Currently the Baylor Charles A. Sammons Cancer Center is undergoing a major expansion with the development of a 450,000 sq. ft. outpatient center and a 140 bed dedicated cancer hospital. The outpatient center will open in March of 2011. The Baylor University Medical Center has close to 4000 annual cancer admissions, and nearly 80,000 outpatient cancer visits. Eight hundred patients were entered onto cancer clinical trials in 2009.

Prior Experience

Prior to coming to Baylor in November of 2008, Dr. Miller spent the previous 15 years at Tulane University in New Orleans. During that time he held multiple positions, including founding director of the Bone Marrow Transplant Program, Deputy Director of the Tulane Cancer Center, and Associate Senior Vice President for Health Sciences. Previously Dr. Miller held faculty positions at the University of Miami and the University of Florida.

Education and Awards

Dr. Miller received his PhD in Physiology from the Roswell Park Division of the State University of New York at Buffalo. He completed a post-doctoral fellowship and received his MD from the University of Miami. He completed his internal medicine residency and medical oncology fellowship at the University of Florida.

Topic

Cancer Therapy Present and Future: Precise and Personal

Abstract

The treatment of patients with cancer has changed dramatically over the past century. We have moved from an era in which a diagnosis of cancer was considered a death sentence, to a time when for most it can be cured, or considered a chronic disease. Currently there are over twelve million cancer survivors in the United States. Treatment continues to change at a rapid pace with therapy no longer determined by a tumors appearance under the microscope, but rather by its unique genetic make-up. We will review both the trends in precision medicine, tailoring the treatment to the specific target, as well as the personal touches in cancer care provided at the Baylor Charles A. Sammons Cancer Center.

Michael S. K. Chen, PE, Ph.D., MBA

Founder & CEO, Austin Tx. SolarTech LLC

<http://www.austinsolartech.com>; chenms@msn.com

As co-founder and CEO of a new start-up company, Austin Tx. SolarTech LLC, Dr. Michael S Chen holds a B.S. and Ph.D. degree and a professional license in chemical engineering, and an MBA in business. He had taught at Kansas State University, University of Pennsylvania, Penn State University, and Desales University. He also had worked at Air Products & Chemicals, Praxair Inc, San Fu Gas Chemical Co., and Shinkong Synthetic Fibers Corporation. He has accumulated over 30 years of experiences and knowledge in industrial and electronic gases and chemicals, semiconductor processes and materials, environmental and energy fields. He has published 72 papers and presentations and holds 29 patents.

He was a senior member of American Institute of Chemical Engineering and an ex-president of NATEA-Austin Chapter. He is currently a member of Texas Solar Energy Society and NATPA. Recently he was awarded by NABCEP an Entry Level Certificate of Knowledge as an energy practitioner.



Topic

Everything you always wanted to know about Solar Energy but were afraid to ask

Abstract

Humanity has for decades been facing unprecedented challenges from worsening global climate changes to escalating cyclic energy crisis. Solar energy, more precisely, converting solar light directly into electricity by using the solar photovoltaic (PV) systems, has emerged as the one of two most favored renewable technologies for meeting such challenges. The wind turbine systems to generate electricity being the other favorable technology however require a certain minimum wind speed in order to function properly.

Although the solar PV electricity currently costs more to produce than the conventional fossil fuel generated electricity its production costs are falling steadily and are expected to reach grid-parity in 5 to 10 years. Solar PV electricity offers the following distinctive benefits:

:

- Solar PV system is highly reliable and virtually maintenance free,
- It costs little to build and quiet to operate while it reduces your energy bills when the sun shines,
- It has no environmental impact, causing no global warming and keeping the mother earth happy,
- It is modular designed, flexible in size and applications on the roof or on the ground,
- It meets the demand and capacity challenges facing the energy generators (utility companies),
- It helps energy service providers manage uncertainly and mitigate risks,
- It can serve both form the function in a building both outside and inside, and
- It is increasingly being produced domestically, thus lessening foreign oil importation, reducing trade deficit, creating jobs and new businesses, and hence improving our economy.

In this presentation the author will first explain the concerned environmental and energy problems, the emerging PV technology for capturing the solar energy. He will then address the challenges and opportunities of the new paradigm shift of the PV applications that present to the users, the job seekers, the investors, and the societies. He will finally make some observations and recommendations based on his own experiences with the new company Austin Tx. SolarTech LLC.





Congratulations!

Steve Chang 張勝閔

Jiin Chen 陳錦隆

S. T. Chen 陳善同

Clement Hsu 許清曉

2011 – 2012新理事



Scholarship Recipients:

Haw-Lih Su (蘇浩立)
Danny Wang (王昱翔)
Pei-San Huang (黃珮珊)



Honorable Mentions:

Hao-Ching Hsiao (蕭豪青)
Peter Tu (杜敏誠)
How-Chiang Cheng (鄭皓江)
Allen Tsai (蔡亞倫)
Hsin Min Tsai (蔡新民)

NATEA Scholarship Recipients

(1)



Pei-San Huang (黃珮珊)
Neuroscience/Biomedical Science,
Texas A&M

Pei-San is a fifth year PhD student in Texas A&M University neuroscience program. Before that, she went to vet school in Taipei, Taiwan. During my last two years in vet school, her beloved grandmother was diagnosed with Parkinson combined with Alzheimer disease. These are two neurodegenerative diseases caused by extensive neuronal cell death in the brain and patients mainly suffer from loss of memory and cognitive function. After she got her Doctor of Veterinary Medicine degree and veterinary license in Taipei, Taiwan, she

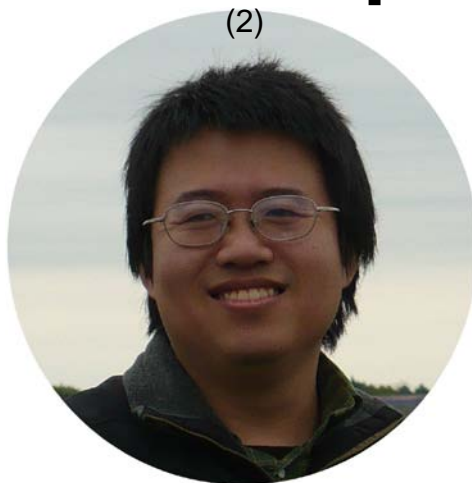
decided to contribute her clinical knowledge to

medical research, specifically neuroscience research, instead of being a clinical veterinarian, so she came to A&M and tried to extend her veterinary knowledge to the neuroscience field. Her research is to understand nicotine's neuroprotective effects against aging and the underlying mechanisms. Nicotine is the major ingredient of tobacco. For decades, people have noticed that smoking is negatively correlated with the incidence of Parkinson disease. On the other hand, there are studies showing that nicotine can protect neurons from many insults like excitotoxicity, neurotoxins, and even knife cut. Further more; one of the major histological findings in Alzheimer patients' brains is the loss of cholinergic neurons, which secret acetylcholine as their neurotransmitter that shares the same group of receptors as nicotine. All these evidence make scientists like us believe that nicotine can protect neurons against aging and potentially become a remedy for diseases that we called neurodegenerative disease with dementia, for example Alzheimer disease, Parkinson disease and mild cognitive impairment.

The society in Taiwan is currently facing the problem of serious birth rate decline and dramatic elderly population growth. In 2009, the population of people at an age of 60 years and higher is about 15% of the total population (data from Department of Statistics, Ministry of Interior, Taiwan), and this number will keep increasing. With an increasing elderly population, the population that suffers from neurodegenerative disease with dementia increases too. It costs a lot of human recourses and money to take care of patients with these diseases. In summary, her research has a long-term goal to understand the effects and mechanisms of nicotine's neuroprotection against neurodegeneration and aging, which is becoming one of the major problems in the society of Taiwan. She'd like to contribute her efforts to this big field and shall benefit many people in Taiwan and the world.

NATEA Scholarship Recipients

(2)



Haw-Lih Su (蘇浩立)
Chemical Engineering, Texas A&M

Haw-Lih Su was born in Changhua, Taiwan in 1978. He became interested in science in high school. Those interests led him to focus his talents in science generally and in chemistry in particular. He received the Bronze Medal in *28th International Chemistry Olympiad* in Moscow, Russia in 2006. He received his B.S. and M.S. from National Tsing Hua University in 2000 and 2002, respectively. In 2005, he came to Texas A&M University and joined research group of Dr. David E. Bergbreiter for his Ph.D. study.

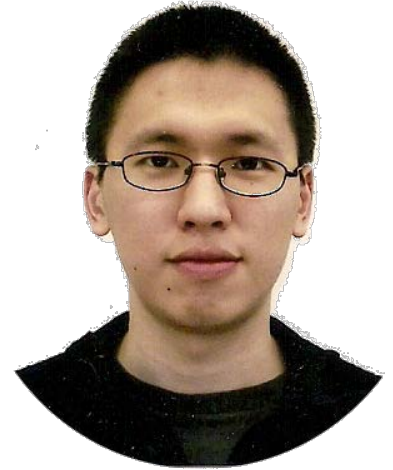
Haw-Lih's research focuses on catalyst modification and organometallic chemistry. In catalyst modification, his work involves the development of new strategies for catalytic reaction processes: strategies that can simplify the operation processes, minimize the waste generated in the process, and lead to recycling and reuse of the catalysts. He has used polyisobutylene (PIB) oligomers as a lipophilic phase anchor for catalysts and reagents to achieve these goals. The PIB-bound catalysts and reagents he has prepared are phase-selectively soluble in weakly polar or nonpolar phases of liquid/liquid biphasic mixtures – systems that can be efficiently formed after 1) a reaction in a thermomorphic system, 2) latent biphasic separation of an initially miscible solvent mixture, or 3) extraction. The use of PIB as a support and a liquid/liquid phase separation has proven to be an efficient way to separate even deeply-colored or toxic metal-containing byproducts from reaction mixtures. Such methods offer a general way for the development of *Green Chemistry* processes, broadly useful in industrial, pharmaceutical, and organic synthesis.

NATEA Scholarship Recipients

(3)

Danny enrolls in the four year Medical Doctor (MD) program at University of Texas Southwestern Medical Center at Dallas. According to the plan, he will complete the degree in the summer of 2011 and start his residency in Internal Medicine in the ensuing fall. His professional training will focus on human's health. And as the Oath of Hippocrates dictates, he will treat the sick warmth and sympathy; the poor with dignity and understanding; and see life as valuable lessons of love and humbleness. He has no doubt that this philosophy will serve as his foundation as he is able to contribute more to the society (people in Taiwan included, though not exclusively).

Practicing medicine demands heavy use of judgment and evaluation to sort through both the objective and subjective information: for patient's subjective feelings and suffering are often difficult to gauge by another, and that the objective efficacy of physicians' treatment and interventions are sometimes even harder. This conundrum stems from the complexity and beauty of biology. It is, in his mind, through physicians' continuous quest for knowledge and appreciation of humans, slowly but surely propelling our understandings as a human. As far as how he can be of the benefits of Taiwanese and the society, I hope that through his efforts in medicine he will become a conduit that raises the public health awareness in the Taiwanese American society, an orienting platform for young aspiring Taiwanese Americans who are interested in Medicine, and a warm translator that speaks Taiwanese/Mandarin to reduce unwarranted anxiety due to language barrier. He thinks that the most effective way to achieve these points is to organize community health fair through local Taiwanese American Association. Through the health fair, his future role as a physician will allow him to connect all needed resources, such as finding grants to screen common diseases, asking affiliated hospitals to assist, recruiting young volunteers for community service, and coordinating with local TAA to extend its impact. All in all, as a future physician for the community, he'd like to contribute his knowledge in not only the health care issues, but also many other important issues relating to Taiwanese American (such as politics, educations, and cultural awareness).

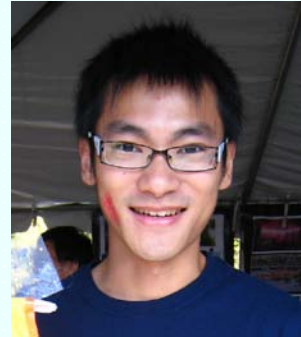


Danny Wang (王昱翔)
Medical Doctor,
Southwestern Medical
Center at Dallas

NATEA榮譽獎



How-Chiang Cheng (鄭皓江)
Aerospace and mechanical Engineering, UT-
Arlington



Hsin Min Tsai (蔡新民)
Engineering Technology & Industrial Distribution
Texas A&M



Hao-Ching Hsiao (蕭豪青)
Health Science
Texas A&M



Peter Tu (杜敏誠)
Water Management and Hydrologic Science
Texas A&M



Allen Tsai (蔡亞倫)
Biochemistry
Southwestern Medical Science Center at Dallas



林國亮

李耀亭

連銘志

劉文生

為

台工會—達拉斯分會永久會員

3月27日在「台心的家」(Westgrove Plaza, 4222 Trinity Mills Road, #260, Dallas, TX 75287)，由台工會達拉斯分會主辦，台灣同鄉會達拉斯分會協辦了今年度第一場圓滿成功的科技座談會。科技探討深入淺出，所討論的議題又都跟我們日常生活有密切的關係，使得小小的「台心的家」擠滿了近四五十位同鄉，其中還來了好幾位年輕的一代參與，非常難得。

首先台工會達拉斯分會會長趙芳珍歡迎大家前來參加2010年首次科技座談會，並介紹台工會的理事和顧問。接著台灣同鄉會達拉斯分會會長鄭忠傳致詞歡迎，並指出這個座談會將是一場科技知識的分享，還提醒即將來臨的六月五日肉粽節的活動，以及現在正在達拉斯電影院上映的「被出賣的台灣 **Formosa Betrayed**」，希望大家能夠踴躍前往觀賞捧場。據了解3月26日首日第一場就有二十幾位去觀賞，都給予不錯的評價，其中還有數位從Tulsa, Oklahoma 的同鄉也專程趕來看這部由台美人第二代刁毓能 (Will Tiao) 籌資拍攝的電影。

會長趙芳珍隨即介紹第一位主講者蔡靜煌先生，他也是台工會的理事，講題是“**Protection of Cyber Attack**網路攻擊之預防”。蔡靜煌是達拉斯一家很有名的電腦服務公司的資深系統工程師，積三十年的經驗，對網路攻擊的來龍去脈以及如何防範其威脅，有深切瞭解。

蔡靜煌首先談及電腦這幾年來一路的演變，指出電腦現在已經是日常生活不可缺少的一部份；並闡釋 **Cyber** 為一種前置詞用來表示與電腦、資訊、網路、通信技術等之間的關係。他指出隨著個人以及公司仰賴電腦和資訊使用與日俱增，在其軟體硬體科技的日新月異發展下，電腦駭客、電腦蠕蟲 (worm)、電腦病毒 (virus) 等等不速之客也接踵而至。一般來說所謂網路攻擊，指電腦駭客透過特殊軟體致使電腦失靈，網路資訊作業遭受負面影響。惡作劇的網路攻擊目的不外乎竊取財經資料，窺探國防、工業、個人秘密或破壞對方電腦。動機包括報復恐嚇、政治軍事商業間諜活動。不難想像，這網路攻擊所招致的損失必定數以萬計，後果不堪設想。根據今年三月 **FBI** 最新報告，全美國在這方面所遭受的損失，估計已超過兩千億美元以上。為了防範、偵測一般駭客和惡意程式的攻擊，除了謹慎設置登入密碼(**Dynamic Password**, 機動密碼更佳)、火牆、防病毒軟體外，其他諸如提高警覺不隨便開啟不明來源之附件或 **Hyperlink**，採用隱藏式密碼及資料檔案，儲存重要資料於外置硬碟等都能給網路作業安全提供更加一層的保障，讓我們在健全安穩的資訊環境下安心上網，盡情地享用高科技的成果。萬一電腦被侵擾遭到網路攻擊，可向 **CERT (Computer Emergency Readiness Team)** 報案：<http://www.us-cert.gov>。

接著下個題目是“老化的記憶損失與改進”，由另一位台工會理事楊金文博士主講。會長鄭忠傳做了一個生動的介紹，謂楊金文是達拉斯一家生技公司的資深科學家，平時對身心健康方面有獨到的見解。如眾所周知，人類的生理功能隨著年齡的增加而逐漸退化，腦的記憶功能當然也不例外，伴隨著年歲增長的是：學得慢、忘得快。楊金文指出本來這個主題是為台心合唱團而準備的；畢竟當公演時若能把歌詞全都背起來，必定能夠全神貫注於指揮的動作，唱時不需要看譜，歌曲的感情自然而然就可表露無遺。

腦的記憶功能有如電腦，將獲取的資料分門別類地儲存於腦中，要用時就把該記憶的檔案抽出來。記憶的形成通常包括獲取、加強、取出這三個階段。記憶功能並不是永遠完善的，尤其當年歲增加，憶及那些檔案的效率也會跟著慢下來。不過偶而忘卻一二如人名之類，甚或忘了眼鏡、鑰匙不知放在何處，這些都是極其平常的事。假使連回家的路都給忘了，可能就意味著嚴重問題的存在。

記憶的保持因在時間上的不同，可分短期記憶和長期記憶兩種。前者指人在接受外部刺激後，所引發注意過程的學習，是短暫的、容易遺忘；但如果及時不斷地反覆復習，這些記過的東西就會在腦中保持著較長的時間，形成一種長期記憶。

老化的一般現象是學起來比年輕時較吃力、記起來及也較緩慢，不過累積的經驗可以補足這些缺陷。正常的遺忘通常是屬於短暫的、健忘的，而癡呆症則是趨向嚴重、進行式的，**Hippocampus** 大腦海馬回受到損傷而言，但這並不就意味著得到老人癡呆(艾茲海默症, **Alzheimer's**)。記憶認知方面的損失不外起因於：基因、荷爾蒙、維他命**B12**欠缺、抑鬱、中風、睡眠問題、不良生活習慣等等。記憶損失的預防方法可歸納為，健身運動、持續學習、謝絕煙酒、有益於健康的飲食、服用各樣維他命、睡個好覺、朋友來往、控制壓力等。最後如何改進記憶損失，可採以下對策：專注集中、有條不紊、重複、瞭解透徹、做筆記、輪番預習、以及持之以恆等。

整個座談會下來，我們大家都聽得津津有味，受益良多，雖然時間不允許有許多的發問，不過還是深感滿載而歸。從這一個下午我們所獲得的知識，可以讓我們對電腦網路上學到事實和迷思的區別，也讓我們學到如何改進記憶的損失，這場科技座談會在與會聽眾心滿意足下圓滿結束。

科技座談會圖片 — 2010年3月27日



台工會會長趙芳珍



台灣同鄉會會長鄭忠傳



蔡靜煌主講Cyber Attach & Prevention



楊金文主講“老化的記憶損失與改進”



主講者與兩位會長合影



聆聽的台灣同鄉

6月19日 (六) 下午 4:00PM至 5:30PM台工會達拉斯分會在「台心的家」舉行了一場圓滿成功的初夏醫學講座會。

初夏艷陽天，雖然外頭熱烘烘的，但是小小的「台心的家」卻擠滿了六十多位聽眾，座無虛席。大家都熱烈的期待這次醫學講座會。台工會這一次很難得邀請到一位傑出的同鄉、也是神經科，睡眠科內科專家，黃偉廉醫師Dr. Bill Hwang來給我們主講「老化痴呆症預防 (頭殼壞去了) 」 “Dementia Prevention”，由於這一個講題跟我們每一位身心健康都有密切的關係，他這個精彩演講襯以生動的 Power Points，深深地吸引大家的注意。

首先台工會達拉斯分會會長趙芳珍歡迎大家踴躍前來參加今天的醫學講座會，並謝謝黃醫師接受邀請給我們講述健康長壽的秘訣；接著由同鄉黃泰國介紹主講者，開場幾句客家話大家一陣茫然，原來黃醫師係來自苗栗的客家人，黃醫師一家極其優秀，妹妹黃美蓮雖罹患腦性痲痺症，勤奮不懈，28歲就拿到博士學位。黃醫師曾就讀於台南一中，高中時移民美國，在 University of California, Irvine獲得了生物系學士後，進入 University of Texas Health Science Center, San Antonio 醫學院，於1990 取得M.D.。黃醫師接受過包括在 UT Southwestern Medical Center/Parkland Memorial Hospital, Dallas, TX 等處嚴謹的 Residency訓練。他擁有一系列可觀的專長: 腦神經科、睡眠科、疼痛科、以及復健科。除了在這些專長上具有豐富的臨床經驗外，黃醫師還在附屬於UT Southwestern Medical Center 的一家醫院兼任授課Neurology。

黃偉廉醫師從頭開始即以詼諧輕鬆的口吻，為我們侃侃而談，以深入淺出舉例闡釋和“老化痴呆症預防”有關醫學知識及各式各樣問題。他提起腦部功能衰退最常見的原因是老人痴呆症和中風。黃醫師治療中風和老人癡呆症有二十幾年的經驗。他首先指出醫學科技日新月異，在美國的台灣人平均壽命已延伸到 70 – 80 歲，因而中風與老化痴呆症的比例也隨著增加。

老化痴呆症、或稱失智症 (Dementia) 的定義包括多重認識力的欠缺，如記憶功能失靈、特別是新的學習能力的失調，就是一個特需注意的早期症狀。其他像失語症 (aphasia)、apraxia、agnosia、及executive dysfunction 等，還有認識力的擾亂，如思想能力之喪失，嚴重得損傷職業上或社交上的功能，也都是老化痴呆症的徵象。

關於痴呆症有差別性的診斷 “Differential Diagnosis”，其前十項結果依序為: 1. 老人痴呆症，2. 中風，3. 消沉、沮喪、神經衰弱，4. 酒精中毒，5. 新陳代謝系統不良，6. 內分泌腺(甲狀腺、糖尿病)、耳、眼、環境污染之類引起的問題，7. 起源於神經退化的，8. 腦瘤、重金屬中毒、或腦震盪創傷，9. 感染或免疫系統失調，10. 健忘症或患睡眠呼吸暫停綜合症 (Sleep Apnea)。

Alzheimer's Disease (AD) 艾爾茲海默症，或叫老人痴呆症，是痴呆症最有名的一種，佔病患比例一半左在。這是指一種記憶衰退和大腦的神經細胞死亡而造成的神經性疾病，腦前葉顯著縮小，普遍症狀會引起智能喪失、並有妄想、憂鬱、焦慮、有時還呈現攻擊性行為，鐵牛運功散喫得太多？為何**AD**需要即早診斷？理由不外乎：安全（開車、煮食等等），減輕給予家人的壓力與誤會，照顧者對處理患者的預先準備，以及趁患者神智尚清晰時事先擬妥遺囑和其他交代事宜。若即早診斷出來，某些特種醫療或許可以延緩送患者入療養院之需要。黃醫師還特地指出通常智商高也有可能掩飾老人痴呆症的症狀。他舉列來說若**IQ**無緣故突然從 **160** 降到 **120**，那就很可能意味著早期老人痴呆症被掩飾但已來臨的現象。

一般來說老人痴呆症會有下列警訊：**1.** 最近記憶力喪失而影響工作，**2.** 無法做熟悉的工作，**3.** 無法講話或講話不流利，**4.** 無法認清時間或地點，**5.** 判斷力差，**6.** 不容易抽象思考，**7.** 錯放東西，**8.** 心情或行為變化，**9.** 性格變化，**10.** 喪失主動帶頭的能力。在這種情況下，需要由專科醫師做詳細的檢查，追蹤真正的病因而做適當的治療。大部分症狀是無法痊癒，只是以藥物控制，延緩病情惡化速度。最近報導顯示 **Anti-cholinesterase agents** 有助於輕度老人痴呆症患者，改進認知力，並可延緩其惡化。老人痴呆症初期患者大多無病識感，常常會被誤診或沒有即時正確地診斷出來，患者大部份不知情，而家人也都很可能以為那些症狀是屬於其他的疾病。即早診斷出老人痴呆症的關鍵在於透過有效的檢查和先進的評估，再加上可能的遺傳因素，以做適當而正確的考量。如果您或您家人產生了某些變化，令您懷疑是痴呆症的症狀，您應該讓醫生進行評估。

黃醫師建議、老人痴呆症的預防起碼包括下列幾項：生活及飲食習慣的調整，戒除煙癮，每天至少做 **30 – 40** 分鐘的健身運動，想法減輕壓力，改善並保持良好的睡眠習慣，並需注意飲食、少吃油膩及內臟、或過鹹的食物、降低膽固醇與高血壓，每天可服用**baby**阿斯匹林片，以及多參與社交活動、以開朗的心情生活都不失為上策。另一個可能導致有像痴呆症的症狀的重要因素叫中風 (**Stroke**)，它是由腦內出血引起，會令神經功能急遽下降，數分鐘內呈現虛弱、癱瘓、喪失語言能力、噁心、神智不清、嘔吐、以及喪失視力等等症狀。高血壓、血管阻塞、腦腫瘤或腦震盪等都可能是腦內出血引發的原因，其他在急性的低血壓情況下，血液無法充分供應腦部，以致缺氧、缺血糖，也可能造成中風。此時最重要的是要即時找醫師做正確的診斷，只要能夠及早找到病因，依引起中風的原因做不同的治療方法，以將這些疾病從老年痴呆症區別出來。

痴呆症的診斷及治療，仍然有很長一段路要走。在不久的未來，很可能有更新穎可靠的設備能夠早期診斷老年痴呆症。

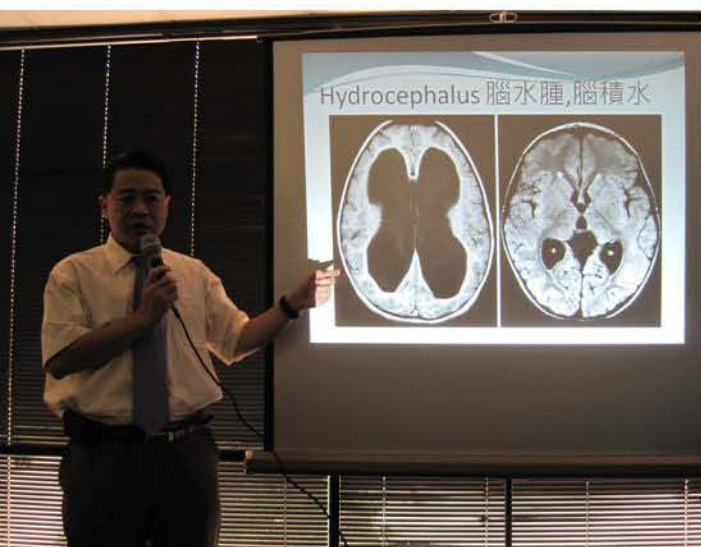
黃醫師最後還提到可能的醫學商業機會，鼓勵較年輕的聽眾不妨朝醫學科技方面嚐試新的職業生涯。所謂知己知彼，百戰百勝，據了解生化工程、腦電圖方面的**EEG Technologist** 等的商情頗有前途。

一場精彩的講座會在聽眾踴躍的發問，欲罷不能下圓滿結束。

醫學講座 — 2010年6月19日



黃偉廉醫師



老年痴呆的腦部圖解



趙方珍會長頒發感謝狀給黃偉廉



聽眾一角



黃偉廉醫師與太太、母親合影

達拉斯台工會參觀美航博物館

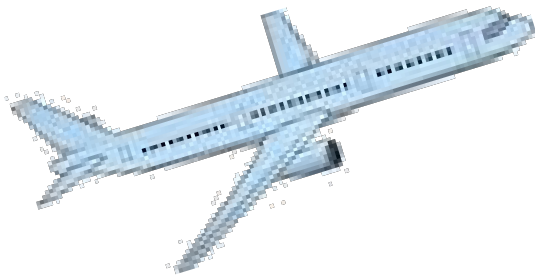
李紫鳳

八月十四日早上一起來又是個豔陽天，九點半出發時，我們就擔心達拉斯今年特別的熱，這個郊遊不曉得會有多少人來參加。不到十點半，在美航博物館American Airlines CR Smith Museum旁的停車場就碰到理事莊樹源夫婦帶了從外地回來的女兒、孫子孫女，還有本地的女婿、孫女兒浩浩蕩蕩一共九個人，同鄉陳鳳求也帶她剛從台灣來訪的姪女、姪女婿和姪孫女來，陸陸續續看到其他的同鄉也一群接著一群來到。據了解前來參觀美航博物館的會員/同鄉及親朋一共竟超過六十人之多。

我們一群首先被招呼到First Class Theater 欣賞長達 14 分鐘的電影叫 “The spirit of America”。這是一個大銀幕 high-definition 的影院，裡頭裝設著從飛機上改裝過來的第一等艙座椅，讓你在舒服的座位上一飽眼福觀賞令人驚歎的飛行經驗，以及凌空俯瞰的大自然景象，也讓我們瞭解美國航空公司在商業及民航的歷史和進展。看完後不由得令人感激能夠享受現今“司空見慣”的巨型噴射機的旅遊，那是五、六十年前只有夢寐以求而已。

影院外頭可以看到沿路展覽著許多富有教育性質的航空史－從初期發展到商用航行，噴射機引擎，wind tunnels展示致使飛機翅膀上升及拖曳之道理，還有真實的美航駕駛員坐艙Fokker 100 cockpit 等等。在駕駛員坐艙裡透過模擬，能夠讓你親身感受到一系列從起飛、上空逍遙飛行、以及“安全”降落的難得經驗。在另一邊坐落著一架完全復原的飛機，那是1940s 年代DC-3 Flagship Knoxville 型有21 座位，自由任人上去參觀。為了給老少孩童增添一層娛樂，有一角落桌上供給些材料讓你做折紙飛機模型的活動。

我們一夥兒邊看邊到處拍相留影，不覺已近中午，大家相約到附近的 China Sea 自助餐一快朵頤，並繼續天南地北互相交談後，盡興結束了一個滿有意義的郊遊。



Field Trip - 參觀美航博物館2010年8月14日



台工會十一月的講座 由自美國空軍及美國航空公司退休下來的機長 **Jay Norelius** 講述他在” **Aviation Safety & Security**”方面的努力與貢獻! Jay 的飛行經驗非常豐富! 從小就志在當飛行員. 他曾駐紮台中清泉岡因而在當時認識了他的另一半成了台灣女婿!

在 **911** 之前飛安的最大考慮在空中人質的挾持也就是hijack. **911** 事件的發生改變了美國甚至全世界對飛安的從新考量. 美國派各層次人員了解 研究以色列的飛安系統、政策 進一步發展出適合自己國情的政策、機構, **Home Land Security**, 及設施來防衛分佈全美各地**409**個大小機場。

飛航的重要性是因它提供了快速運輸系統再加上西方經濟體系的吸引也因此民機淪為恐怖份子的使用工具. 飛安的主要使命是要確保每位家庭成員的安全. **Jay** 特別指出警察與安全人員 (**Police vs. Security**)的訓練與職責是不同的最主要是因為罪犯與恐怖份子的行為模式是不一樣的。

911 之後計有**16,341**非軍事國防有關的恐怖事件。 由於恐怖份子無孔不入也因此飛行安檢也越來越嚴格。 每班次派有飛安人員。 對旅客的檢查由脫鞋到全身掃描範圍; 也由客機推廣到貨機; 由陸空延伸到海域。 **Jay** 積極參與飛安的評鑑與提升. 他所參與的組織如 **GAD, ASAC, ACWG, FAMS**. 每年都在美國各大報刊登飛安報表 點出尚需加強防備之處. **Jay** 也提到一般以色列民眾的觀察力與警覺性很強很多案件都是靠民眾的報告舉發而得以即時處理. 飛安不只是航空公司或**Home Land Security** 的事.... 它是人人有責!



Check-in Security



X-Ray Scan



Buckle Seat Belt



Flight Safety

第二場的演講由謝慶堂博士主講 “Evolution of ICT – Information, Communication, & Technology”. 謝博士目前在台灣工研院，專責資訊與通訊研究所，推廣無線通訊(WI-FI)技術以及產業發展。 Wireless Fidelity, Wi-Fi, 原是無線高傳真的縮寫，現被視為 802.11無線區域網路的代名詞。 Wi-Fi技術規格為IEEE提出，經Wi-Fi聯盟認證後，可確保不同無線產品的互通。謝博士現為此聯盟，WiMAX Forum, 駐台灣主任，致力於為台灣爭取在 WiMAX 組織中之關鍵角色。目前WI-FI在台灣也是開放免費提供大眾使用的。如同我們可以帶著手提電腦到麥當勞(McDonalds)或星巴客(Starbucks) 等等連鎖店透過WI-FI即可免費上網!

謝博士此次演講範圍廣闊包括WI-FI 第四代的發展與運用及 ICT的最新發展。在科技上主要與數字、資料的儲存、檢索、操作、傳輸或者收取有關的硬體 軟體的使用與發展都是在ICT的範疇。重要地是如何使這些不同的硬體與軟體接連互通。謝博士提到:

SMART GRID – 靠軟體來平衡電力能量的輸送、補給與儲存 以助解決極熱極寒時停電或電力不足的現象或電力過剩的情況！

M2M – 機種與機種間的接連與溝通. 如手機對電腦, 手機對手機, 相機對電腦... 目前是您擁有越多電腦產品您所碰到的軟、硬體間互通問題越多. 這塊很有改進的空間!

CLOUD COMPUTING – 雲端運算！這是商界或政府機關在軟體方面外包外的另一驅勢。公司或政府機關不用請人來書寫發展自己的應用電腦程式也不用購買硬體並請人來操作而只要將這一切交給一家軟體電腦公司操作就好了。這中間只靠電腦連線來存取資料！

T E LEMATICS – Telecom and Informatics 這是把車輛裡外電腦化的一個規劃. 給與時間，今日想像得到的科技明日接可完成！



秋季科技研討會 — 2010年11月6日



Jay Norelius講解「飛安與恐怖攻擊的預防」



謝慶堂博士談WiMax



聆聽的台灣同鄉一角



研討會後一起晚餐

北美台灣工程師協會達拉斯分會
North America Taiwanese Engineers' Association, Dallas Chapter
(NATEA-DALLAS)
Individual Membership Application Form

I wish to provide the following information for application of the NATEA Membership:

Personal Data:

Name: _____ 漢名: _____
 Last First and Middle

Address: _____
 _____ _____ _____
 City State Zip Code
 _____ _____ _____
 Home number Home fax

Career/Occupational Data:

Employer: _____

Position: _____

_____ _____
Office Phone Office Fax

E-mail Address: _____

Academic Data:

Highest Degree Received in Taiwan:

_____ in _____ from _____ in _____
Degree Major Field School year

Highest Degree Received in U.S.:

_____ in _____ from _____ in _____
Degree Major Field School year

Technical Field:

Expertise & Interest:

Applied for : ☐ Regular Member ☐ Associate Member ☐ Student Member

Signature: _____ Date: _____

Please mail the completed form with an annual fee (regular: \$20/yr, associate: \$20/yr, student: \$10/yr, couple: \$35/yr to **C/O John Hsieh**, 616 Winterberry Lane, Frisco , TX 75034