第三十八屆年會

The 38th Annual Convention Program August 25 2013

科技與教育：
改善生活品質，提升文化和經濟

Technology and Education:Enriching Lifestyle, Culture and Economy

美東華人學術聯誼會

Chinese American Academic & Professional Society (CAAPS)

美東華人學術聯誼會第三十八屆年會紀念

策勵精進

馬英九

中華民國一〇二年六月

用箋

美東華人學術聯誼會
第三十八屆年會誌慶

人才薈萃
日新月盛

江宜樺

THE CITY OF NEW YORK
OFFICE OF THE MAYOR
NEW YORK, NY 10007

August 25, 2013

Dear Friends:

It is a great pleasure to welcome everyone to the Chinese American Academic and Professional Society's 38th Annual Convention.

As technology, science, and the arts continue to play a vital role in New York's economy, we know how important it is to provide people of all backgrounds and beliefs with the education and resources they need to take advantage of opportunities in these fields. Since 1975, CAAPS has strengthened Chinese American professionals by promoting cooperation, fellowship, and mutual understanding with other groups. As CAAPS members from across the country gather for this year's convention on technology and education, we look forward to them harnessing their professional development to make vital contributions to our communities for many years to come.

On behalf of the City of New York, I offer my best wishes for an engaging convention and continued success.

Sincerely,

Michael R. Bloomberg
Mayor

美東華人學術聯誼會
第三十八屆年會誌慶

英才淵藪
扎根海外

教育部
部長 蔣偉寧 敬題

美東華人學術聯誼會第38屆年會紀念

群英匯聚 僑社之光

僑務委員會
委員長 陳士魁 敬題

陳士魁

敬 祝

美東華人學術聯誼會

第 38 屆年會暨研討會

圓滿成功

中華民國駐美國代表 金溥聰 敬賀

中華民國一〇二年八月二十五日

Chairman's Welcome Statement

On behalf of the Chinese American Academic and Professional Society (CAAPS), I would like to welcome you to our Thirty-eighth Anniversary Annual Convention. CAAPS was established in 1976 in New York City. Over the years, CAAPS became one of the largest Chinese American academic organizations in the United States. Members are academics or professionals from all walks of life. CAAPS is now a registered 501(C)(3) not-for-profit and nonpolitical organization with the purposes of:

(A) promoting fellowship and cooperation in scholarly and professional activities, as well as encouraging and supporting educational undertakings conducive to the interests, concerns and well-being of its membership;
(B) encouraging and facilitating the exchange, enhancement, and application of the skills and expertise of its membership in the interest of advancing scientific knowledge, social and human values; and
(C) encouraging and promoting cultural understanding and communications among Chinese Americans in general, and with other ethnic groups in American and Chinese Communities elsewhere.

The theme of this year's convention is *Technology and Education: Enriching Lifestyle, Culture and Economy.* The Convention has organized an enriching technical program that consists of six technical discussion sessions in scientific and technological, cultural and economic areas. We are particularly honored to have as our keynote speakers for the Opening Ceremony, Luncheon and Banquet: Prof. Shu Chien (Institute of Engineering in Medicine, University of California, San Diego), CEO William Wang (VIZIO Inc.), CEO Jen-Feng, James Yang (World Journal, North America Operations), and President Ching-Fong Chang (National Taiwan Ocean University).

I would like to take this opportunity to thank Advisors, the members of the Board of Directors, the Executive Committee and to the volunteers for their precious time and dedication. I would also like to express my gratitude for the honorable guests, session organizers, chairs, speakers and the sponsors for their participation, support and generous contributions, which made this convention successful. I wish you all the best for a wonderful and memorable event.

***Ping-Tsai Chung, Ph.D.* 鍾炳采教授**
Chairman of the Board CAAPS

President's Welcome Statement

It is a great honor and privilege to welcome you to the 38th Annual Convention of the Chinese American Academic and Professional Society (CAAPS). Your participation and support have made CAAPS become one of the most prestigious and professional Chinese American organizations.

The theme of the convention is "Technology and Education：Enriching Lifestyle, Culture, and Economy". This theme was selected to show the focus and direction of CAAPS.

The one-day convention includes six technical sessions. The sessions address the current advanced research and developments, such as Emerging Information, Biomedical technology, Protecting Environment, Higher Education, Economics and Finance, and Technology Application. Also, we have great honor to have Professor Shu Chien, University of California, San Diego, to deliver the keynote speech during the banquet.

I would like to take this opportunity to thank the members of the Board of Directors led by Chairman Ping-Tsai Chung for their guidance and support throughout the year. My special thanks go to the Advisors to President and the Executive Committee members: Professor Yue Lin, Dr. Moses Chang, Professor Leon Wang, Vice Presidents Sarah Chung, Joe Chang, Hamilton Hwang, Lida Chen, Lucy Yang, Secretary Sheena Cheng, and Treasurer Winnie Lin. They spent a lot of time and efforts to ensure the success of the convention.

The convention would not be made possible without your support and guidance. I hope you will enjoy the convention.

Johnson Tseng, Ph.D. ***曾令寧博士***
President of CAAPS 2013

CHINESE AMERICAN ACADEMIC & PROFESSIONAL SOCIETY

Proceedings of CAAPS 38th Annual Convention

Technology and Education: Enriching Lifestyle, Culture and Economy

科技與教育: 改善生活品質，提升文化和經濟

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科技與教育: 改善生活品質，提升文化和經濟

Time: August 25, 2013, Sunday, 9:00 AM ~ 11:00 PM
Place: 紐約法拉盛喜來登大飯店 Sheraton LaGuardia East Hotel
135-20 39th Avenue, Flushing, NY 11354, Tel: (718) 460-6666

Time	Session	Room
9:00AM ~ 5:00 PM	**Registration**	
10:00AM ~ 10:30 AM	**Opening Ceremony** Deputy Minister Pi-Twan Huang, Ph.D. **教育部政務次長黃碧端** Ministry of Education, Executive Yaun Representative, Overseas Compatriot Affairs Commission, Executive Yuan	Gallery, 7th Floor
10:30 AM ~ 11:20PM	***Plenary Keynote Speech:*** How I Did It: The secret of Vizio's success CEO William Wang **王蔚**, VIZIO Inc.	
11:20 AM~ 12:10PM	***Plenary Keynote Speech:*** **文化的傳承與開展- 報紙邁向數位世界** **世界日報北美總管理處總經理兼世界日報紐約社社長楊仁烽**	
12:10 ~ 1:30PM	***Plenary Keynote Speech:*** Oceans and Coral Reefs President Ching-Fong Chang **張清風校長**, National Taiwan Ocean University **Luncheon**	
2:00 ~ 3:30 PM	**1. Emerging Information and and Communications Technology Session 新興資訊與科技研討會** **Organizer:** Prof. Ping-Tsai Chung **鍾炳采** **Chair:** Dr. Jen-Yao Chung, **鍾健堯** IBM Research	Gallery, 7th Floor

	Dr. Howard Chen, **陳浩,** CIE-USA - Thermoelectric Cooling Technology and Application. Prof. Kang Xi , **席康,** NYU-Poly -Traffic Measurement and Analysis in an Organic Enterprise Data Center. Prof. D. Frank Hsu, **許德標**, Fordham University - Cognitive diversity in perceptive informatics and affective computing.	
2:00 ~ 3:30 PM	**2. Higher Education Session 高等教育研討會** **Organizer:** Prof. Hui-Yin Hsu **徐慧茵**, NYIT **Chair:** Prof. Shiang-Kwei Wang, **王向葵**, NYIT Prof. Hsu-Min (Mina) Chiang **江旭敏**, Columbia University- Providing Educational Support to Chinese-American Children with Autism Spectrum Disorders, **提供華裔美籍自閉症兒童教育服務.** Prof. Ya-Ning Hsu **許雅寧**, Columbia University - Bilingual Children' Reading at Home: Studies of Three Families, **雙語兒童家庭閱讀研究調查.** Prof. Chao-Chih Huang **黃招智**, St. John's U. **-讓字動起來--漢字教學的新思維.** Prof. Sheau-Yueh J. Chao, **賀筱岳**, Baruch College, CUNY, Resource-sharing and Genealogical Research on Islamic Chinese Names in Guilin.	Topaz, 7th Floor
2:00 ~ 3:30 PM	**3. Economics and Finance Session 財經金融研討會** **Organizer:** Prof. Steven Tung- Lung Chang **張東隆,** Long Island University **Chair: 蔡偉彥教授, 哥倫比亞大學** Prof. Mike Chen-Ho Chao, **趙貞和** -Examining Emerging Market Multinationals' Ownership Strategy in Cross-Border Mergers & Acquisitions, William Paterson University. Prof. Tung-lung Steven Chang **張東隆** - Competitive position of Taiwan's	Diamond, 7th Floor

	Technological Capability and Economic Growth.	
3:30 ~ 5:00PM	**4. Technology and Applications Session 科技運用研討會** **Organizer**, Prof. Ping-Tsai Chung **鍾炳采** and Dr. Tseng Tseng **曾令寧** **Chair:** Prof. Feng-Bao Lin, **林豐堡**, CCNY Mr. Guang-Nan Fanjiang **范姜光男**, Weidlinger Associates, Inc. - A Few Unique Features of Brooklyn Bridge. David Wei, Chairman and CEO, **魏學常**, USSolargy - Why SOLAR SYSTEM Now, **為何選擇太陽能能源系統**. Mr. Kevin Wey, Registered Architect, LEED AP. **魏國勝** - Green Architecture & Green Design, **綠能建築及綠能設計**.	Gallery, 7th Floor
3:30 ~ 5:00PM	**5. Biomedical Technology and Healthy Life Session** **生醫科技與健康人生研討會** **Organizer:** Prof. Yue J. Lin **林友直教授**, St. John's University **Chair:** Paul Wang, **王新澤** MD, PhD Richard Lee, MD, Englewood Hospital Medical Center, New Jersey - Prostate Cancer Update 2013 and Prostate Facts & Myths. John Wang **王恩洲**, Washington University in St. Louis and Paul Wang **王新澤**, - Washington University Volunteers Experience the Care of Orphans with Birth Defects in Beijing,	Topaz, 7th Floor
3:30 ~ 5:00PM	**6. Sustainability and Protecting the Environment Session** **永續性與環境保護研討會** **Organizer:** Dr. Moses Chang **張彰華** **Chair: Mr. Jerry S.Y. Cheng 鄭向元**, Retired Principal City Planner, NYC Dept. of City Planning. **Mr. Jerry S.Y. Cheng 鄭向元** - America's Experience with Transit-Oriented Development Mr. Alexandre Remnek, US EPA Region 2, NY - Climate Change Impacts and	Diamond, 7th Floor

	Adaptation for the Water Sector in the Northeast United States. Mr. Robert Nyman, Director, New York-New Jersey Harbor & Estuary Program, US EPA NY - New Jersey Harbor & Estuary Program: Restoring an Urban Harbor.	
5:30 PM	**Banquet Registration**	Phoenix Ballroom 2nd Floor
6:30 ~ 11:30 PM	***Banquet, Welcome Remarks, Keynote Speech, Awards, and Entertainment*** **晚宴** ***Honorable Guests:*** Ambassador Andrew J. C. Kao,**高振群大使** **紐約台北經濟文化辦事處** Director General of the Taipei Economic and Cultural Office in New York Member of the United States House of Representatives, Grace Meng New York City Comptroller John C. Liu ***Banquet Keynote Speech:*** Prof. Shu Chien **錢煦教授**- Interplays between Science-Medicine-Technology and Humanity-Society **生醫科技與人文社會的互動** Departments of Bioengineering and Medicine and Institute of Engineering in Medicine, University of California, San Diego ***Entertainment Program*** **弦樂四重奏， 來音合唱團，** **臺灣小調, 中國及世界名謠。**	Phoenix Ballroom 2nd Floor

美東華人學術聯誼會

Chinese American Academic & Professional Society (CAAPS)

Celebrating 38th Anniversary

2013 CAAPS Board of Directors

Chairperson: Ping-Tsai Chung 鍾炳采
Secretary General: Hui-Yin Hsu, 徐慧茵
CAAPS 2010 President: Johnson Tseng, 曾令寧

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美東華人學術聯誼會

Chinese American Academic & Professional Society (CAAPS)

Celebrating 38th Anniversary

2013 CAAPS Awards

DISTINGUISHED LIFETIME ACHIEVEMENT AWARD
卓越終身成就獎
Professor Shu Chien 錢煦教授

THE MODEL OF ENTREPRENEUR
企業楷模獎
Mr. Williams Wang 王蔚 先生

DISTINGUISED PROFESSIONAL ACHIEVEMENT AWARD 傑出專業成就獎
Mr. James Yang 楊仁烽先生

THE FRIEND OF CAAPS 美東之友獎
Mr. Thomas Chen 陳秋貴先生

CONTRIBUTION AWARD 傑出貢獻獎
Professor Spencer Kuo 郭思平教授

SERVICE AWARD 傑出服務獎
Dr. Moses Chang 張彰華博士

Session 1
Emerging Information and Communications Technology Session
新興資訊與通訊科技研討會

CAAPS 2013 Annual Convention
August 25, 2013, Sunday
2:00 ~ 3:30 PM, 7th Floor, Gallery Conference Room

Organizer 召集人: Prof. Ping-Tsai Chung 鍾炳采教授
Dept Chair, Dept. of Computer Science, Long Island University, Brooklyn, New York

Chair 主持人: Dr. Jen-Yao Chung 鍾健堯博士
Senior Manager, Industry Technology and Solutions, IBM T. J. Watson Research Center

Speakers and Topics 主講人及講題:

Dr. Howard Chen, 陳浩博士, President of Chinese Institute of Engineers¬–Greater New York Chapter, 美洲中國工程師學會大紐約區分會會長, "Thermoelectric Cooling Technology and Application" ("熱電冷卻技術與應用").

Prof. Kang Xi , 席康教授 , Department of Electrical and Computer Engineering, Polytechnic Institute of New York University (NYU-Poly), "Traffic Measurement and Analysis in an Organic Enterprise Data Center", ("企業級數據中心中的 流量測量與分析").

Prof. D. Frank Hsu, 許德標教授, Department of Computer and Information Science, Laboratory of Informatics and Data Mining, Fordham University, New York, Cognitive diversity in perceptive informatics and affective computing.

Organizer 召集人: Prof. Ping-Tsai Chung, 鍾炳采教授 is an Associate Professor of Department of Computer Science with Long Island University, Brooklyn, New York, where he has served as Dept Chair for nine years from June 2004 to August 2013. Prof. Chung received his Ph.D. degree in Computer Science from Polytechnic Institute of NYU (NYU-Poly). Earlier, he has worked with AT&T Bell Labs in U.S.A. for develop High Speed Network Management Systems. Dr. Chung is a Senior Member of IEEE Society, he is the Founding Chair of New York Chapter of IEEE Systems, Man, Cybernetics (SMC) Society. Also, he established Student Branch Chapter of IEEE Society at LIU-Brooklyn, where the student chapter of IEEE SMC Society is the first student chapter of SMC Society in North America. His research interests are Network Computing, Intelligent Systems, Web Services and Biomedical Informatics. He is an Associate Editor of Journal of Convergence Information Technology, AICIT, and is an Associate Editor of Cyber Journals: Multidisciplinary Journals in Science and Technology, The Canadian-based Cyber Journals.

Dr. Chung is an Executive Member of Phi Tau Phi Scholastic Honor Society of America, a Board of Director of Chinese Institute of Engineers-Greater New York Chapter (CIE-GNYC), a Board of Director of Chinese American Academic and Professional Society (CAAPS), and he served as the President of CAAPS in 2010. He is the Chairman of CAAPS in 2013.

Chair 主持人: Dr. Jen-Yao Chung, 鍾健堯博士 received the B.S. degree in Computer Science and Information Engineering from National Taiwan University and the M.S. and Ph.D. degrees in Computer Science from the University of Illinois at Urbana-Champaign. He is the senior manager for Industry Technology and Solutions, IBM T. J. Watson Research Center, responsible for identifying and creating emerging solutions with focus on Smart Cities, Green Computing and Business. Before that, he was Chief Technology Officer for IBM Global Electronics Industry. Dr. Chung is co-Editor in Chief of the International Journal of Service Oriented Computing and Applications (published by Springer). Dr. Chung is the co-founder and co-chair of the IEEE technical committee on Electronic Commerce. He has served as general chairs and program chairs for over 25 international conferences. He has authored or co-authored over 180 technical papers in published journals or conference. He was awarded an IEEE Outstanding Paper award in 1995, two IBM Outstanding Technical Achievement awards, in 1994 and 2000, an IBM Outstanding Contribution award in 1997, and five IBM Research Division awards, in 1990, 1996, 2001 and 2008. He is an IEEE Fellow, a Distinguished Engineer of ACM and a Member of IBM Academy of Technology. He is a member of the board of Chinese American Academic and Professional Society, USA.

Thermoelectric Cooling Technology and Application

熱電冷卻技術與應用

Howard Chen 陳浩

president@cieusa-gnyc.org

President of Chinese Institute of Engineers¬– Greater New York Chapter

美洲中國工程師學會大紐約區分會會長

With no moving parts, a thermoelectric cooler operates quietly, allows cooling below ambient temperature, and may be used for temperature control or heating if the direction of current flow is reversed. By using a monolithic process to increase the number of thermoelectric couples, this emerging solid-state cooling technology can be combined with traditional air cooling, liquid cooling, and phase-change cooling to provide an estimated cooling heat flux of over 1,000 W/cm2.

A thermoelectric module is a solid-state heat pump that consists of multiple pairs of n-type and p-type thermoelectric elements that are connected electrically in series and thermally in parallel (Fig. 1). Since the n-type thermoelectric material is doped with an excess of electrons and the p-type thermoelectric material is doped with an excess of holes, they can be used to conduct electricity and heat in a thermoelectric module. By applying a direct current (DC) through the n-type and p-type thermoelectric elements, the electric current will flow alternately through each n-type device and p-type device, and travel back and forth between the cold plate (chip side) and the hot plate (heat sink side) of a thermoelectric module. Since the electrons move in the same direction as the holes, they can carry heat from one side of the thermoelectric module to the other side of the thermoelectric module through the n-type and p-type thermoelectric material, respectively.

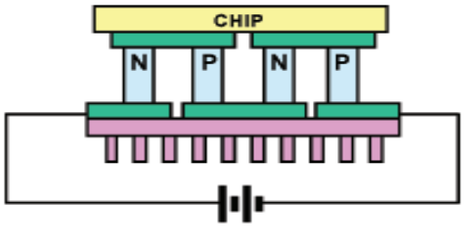

Figure 1. Thermoelectric cooling module.

The principles of heat transfer in a thermoelectric module can be explained by the Peltier effect [1]. When the electrons and holes move from one junction (cold plate) to the other junction (hot plate), the heat is absorbed at the cold plate in order to move additional electrons from the valence band to the conduction band, so that additional pairs of electrons and holes can be generated to replenish and compensate for the loss of charged carriers. The heat is released at the other junction (hot

plate) as the electrons reunite with holes. Therefore, by applying a DC voltage to a thermoelectric module, heat can be moved from one side of the module to the other side of the module. Since the direction of the heat flow depends on the polarity of the DC voltage applied to the thermoelectric module, heat can be pumped through a thermoelectric module in either direction. Consequently, a thermoelectric module may be used for both heating and cooling, which makes it suitable for applications that require precise temperature control. Furthermore, as a result of the Seebeck effect [1], the thermoelectric module can be used for power generation, where a current is generated due to the temperature differential across the thermoelectric module.

Most thermoelectric modules have an equal number of n-type and p-type elements and each pair of n-type and p-type elements forms a thermoelectric couple. The thermoelectric couple elements and their electrical interconnects are usually mounted between two thermally conductive ceramic substrates, which hold the thermoelectric module together mechanically and insulate the thermoelectric elements electrically. The cooling capacity of a thermoelectric module is proportional to the DC current applied and the thermal conditions on each side of the module. The thermoelectric cooling module is small, light-weight, maintenance-free, and environmentally friendly. With no moving parts, it is also acoustically silent and electrically quiet. A thermoelectric module can provide active heating and cooling in the same device with precise temperature control (within 0.1 °C). It can also operate in a wide range of temperatures, from sub-ambient cooling to low temperature (-80 °C) cooling.

The ideal Peltier cooling rate of a thermoelectric module is equal to , where π is the Peltier coefficient, α is the Seebeck coefficient, T is the junction temperature in degrees Kelvin, and I is the DC current. However, in reality, the heat will also be conducted from the hot plate back to the cold plate. The Fourier heat conduction rate is equal to , where $\varkappa$ is thermal conductance and ΔT is the temperature difference between the hot plate and the cold plate. In addition, there will be joule heating, which equals to ½ , due to the electrical resistance R of thermoelectric elements. As a result, the net cooling rate of a thermoelectric module can be calculated by the formula . In order to increase the Peltier cooling rate and reduce the back flow of Fourier heat conduction from hot plate to cold plate, thermoelectric material must exhibit high Seebeck coefficient, low thermal conductivity and low electrical resistance. For example, metal alloys are known to have high thermal and electrical conductivities, but since their Seebeck coefficients are inherently low, metals are not suitable for thermoelectric cooling. On the other hand, extrinsic alloy semiconductors are known to offer reasonable electric conductivity while maintaining low thermal conductivity. They also exhibit relatively large Seebeck coefficients and narrow band gap. Based on the cost and the compatibility of the deposition process with VLSI integration, SiGe is a suitable thermoelectric material for thin-film micro-fabrication.

In addition to the enhanced cooling performance, the heating capability of thermoelectric device also enables precise temperature control through an integrated power monitoring and feedback system. The high-density thermoelectric arrays can be implemented directly on the backside of a semiconductor chip, embedded near the hot spots, or fabricated separately on a module. Combined with traditional heat sinks, micro channels, and heat pipes, the implementation of thermoelectric micro-coolers could significantly increase cooling capacity [2] and provide a promising solution to the increasing power demand and thermal design challenges for the future.

References

[1] Sara Godfrey, "An introduction to thermoelectric coolers," Electronics Cooling, vol. 2, no. 3, pp. 30-33, September 1996.
[2] Clemens Lasance and Robert Simons, "Advances in high-performance cooling for electronics," Electronics Cooling, vol. 11, no. 4, November 2005.

Dr. Howard Chen, 陳浩博士 received his B.S. degree in electrical engineering from National Taiwan University in 1979, and Ph.D. degree in electrical engineering and computer science from the University of California, Berkeley, in 1987. From 1987 to 2013, he was a research staff member at the IBM Research Division, Thomas J. Watson Research Center, in Yorktown Heights, New York, where he received the IBM Invention Achievement Awards for 35 U.S. patents issued, the IBM Outstanding Contribution Award, and the IBM Outstanding Technical Achievement Award. Currently, he serves as President of Chinese Institute of Engineers¬– Greater New York Chapter, 美洲中國工程師學會大紐約區分會會長,(the Founding Chapter of CIE-USA).

Traffic Measurement and Analysis in an Organic Enterprise Data Center

企業級數據中心中的流量測量與分析

Kang Xi 席康
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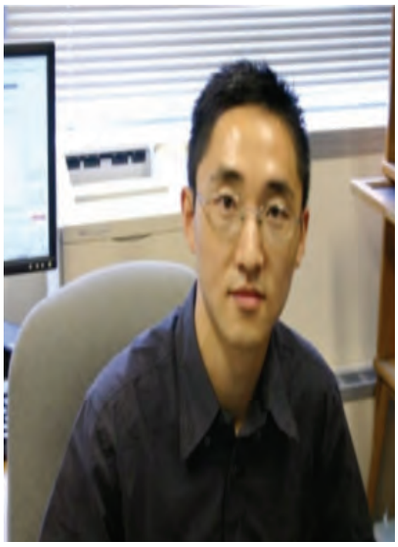
Enterprise data centers (EDCs) are critical infrastructure to large enterprises, government agencies, research institutions, etc. They are used to support a variety of off-theshelfand customized services. EDCs are different from cloud data centers (CDCs) in two major aspects. Firstly, an EDC is usually built over time and consists of old and new equipment. Secondly, the type of services and applications in EDCs are quite different from those in CDCs. Therefore, we expect that the traffic characteristics in EDCs would also be different from those in CDCs. While most existing data center measurements were from CDCs, we performed extensive traffic measurement and analysis in an EDC that provided multiple services to over a million users. We present the data center architecture, measurement methodology, measurement results, and analysis. The results include traffic matrix, traffic distribution, flow characteristics, and TCP characteristics. Our research reveals that the traffic characteristics in the EDC are indeed quite different from the reported results in CDCs. For example, the traffic matrix tends to be sparse rather than all-to-all. Based on the analysis we provide a few guidelines for EDC design, optimization, and anomaly detection. As the first most extensive study on EDC traffic, our work provides valuable information to future EDC design and implementation, and also helps researchers develop insights into the differences and similarities between EDCs and CDCs.



Prof. Kang Xi, 席康教授 is an Industry Associate Professor in the Department of Electrical and Computer Engineering at Polytechnic Institute of New York University (NYU-Poly). He received his BS, MS and Ph.D. from Tsinghua University in 1998, 2000 and 2003, respectively, all in Electrical Engineering. Before joining NYU-Poly in 2005, he spent four years in the industry working on Ethernet, IP, and SONET network designs. He also worked in Osaka University (Osaka, Japan) as a research associate from 2004-2005. His research interests include data center and cloud computing, high-speed networks, network resilience, routing, and network security. He holds seven US patents (two pending) and received the ICCCN 2010 best paper award for his work on network resilience.

Cognitive diversity in perceptive informatics and affective computing

D. Frank Hsu 許德標
Laboratory of Informatics and Data Mining
Department of Computer and Information Science
Fordham University
New York, NY 10023, USA
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The advent of sensor technologies and imaging modalities has greatly increased our ability to map the brain structure and understand its cognitive function. In order for the acquired Big Data (with large volume, wide variety, and high velocity) to be valuable, innovative data-centric algorithms and systems in machine learning, data mining and artificial intelligence have been developed, designed and implemented. Due to the complexity of the brain system and its
cognitive processes, new data-driven paradigm is needed to recognize patterns in Big Data, to
fuse information from different sources (systems and sensors), and to extract useful knowledge for actionable decisions. In this talk, I will focus on the notion of "Cognition diversity" which provides a new paradigm to measure the "dissimilarity" or "difference", between two objects or subjects at both the levels of variable (feature, cue, parameter, modality, indicator) and system (classification, regression, associate rule and clustering; decision trees, naïve Bayes, k-NN, neural nets, SVM and other kernel methods). We compare cognitive diversity to the three statistical correlations (Pearson, Kendall and Spearman). We also discuss the relation of cognitive diversity to other goodness-of-fit tests (e.g. the Kolmogorov-Smirnov test). It can be emphasized that cognitive diversity is useful in unsupervised machine learning and decision making environments where the true fact or optimal decision is not known or cannot be obtained until it happens. Among other applications, we discuss three examples: (1) combining two visual perception and cognition systems using confidence radius and cognitive diversity, (2) feature selection and combination for stress detection and affective computing using physiological sensors, and (3) combinatorial fusion of five sensor stress detection algorithms: C4.5, Naïve Bayes (NB), Linear Discriminate Function (LDF), SVM and K-nearest neighbors (k-NN) across a variety of feature sets selected by C4.5, PCA, correlation-based and diversity-based feature and selection methods.

References

[1] Y.-S. Chung, D.F. Hsu, C.-Y. Liu, and C.-Y Tang, “Performance evaluation of classifier
ensembles in terms of diversity and performance of individual systems”. International Journal of
Pervasive Computing and Communications, Vol. 6(No. 4), (2010), pp. 373-403.
[2] D.F. Hsu, Taksa, I., Comparing rank and score combination methods for data fusion in information
retrieval. Information Retrieval, 8(3), (2005). 449-480.
[3] D.F. Hsu., Kristal, B.S., Schweikert C., “Rank-Score Characteristics (RSC) function and cognitive
diversity”, Brain Informatics (2010). pp. 42-54.
[4] H.Z. Liu, Z.H. Wu, X. Zhang and D.F. Hsu, “A skeleton pruning algorithm based on information
Fusion”, Pattern Recognition Letter, 34, (2013), pp.1138-1145.
[5] C. Schweikert, S. Brown, Z. Tang, P.R. Smith, and D.F. Hsu, “ Combining multiple ChIP-Seq peak
detection systems using combinatorial fusion”. BMC Genomics, 13(8), (2012).

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Session 2

Higher Education Session 高等教育研討會

CAAPS 2013 Annual Conventio
August 25, 2013, Sunday
2:00 ~ 3:30 PM, 7th Floor, Topaz Conference Room

Organizer 召集人: Prof. Hui-Yin Hsu, 徐慧茵教授
Teacher Education Program, School of Education at New York Institute of Technology.

Chair 主持人: Prof. Shiang-Kwei Wang, 王向葵教授
Instructional Technology Program, School of Education at the New York Institute of Technology.

Speakers and Topics 主講人及講題:

Prof. Hsu-Min (Mina) Chiang 江旭敏教授, Department of Health and Behavior Studies, Teachers College, Columbia University, New York, "Providing Educational Support to Chinese-American Children with Autism Spectrum Disorders", (" 提供華裔美籍自閉症兒童教育服務").

Prof. Ya-Ning Hsu 許雅寧教授, Bilingual and Bicultural Education Program
Teachers College, Columbia University, New York, "Bilingual Children' Reading at Home: Studies of Three Families", (" 雙語兒童家庭閱讀研究調查").

Prof. Chao-Chih Huang 黃招智教授, St. John's University
("讓字動起來--漢字教學的新思維").

Prof. Sheau-Yueh J. Chao, 賀筱岳教授, William and Anita Newman Library, Baruch College, City University of New York (CUNY), Resource-sharing and Genealogical Research on Islamic Chinese Names in Guilin ("廣西桂林回族姓氏的家譜研究與家族根源").

Organizer 召集人: Prof. Hui-Yin Hsu, 徐慧茵教授received a Ph.D. degree from University of Pittsburgh and currently is associate professor of Teacher Education Program in the School of Education at New York Institute of Technology, where she coordinates the College Reading Placement Program. Dr. Hsu concentrates her research interests on using new technologies to enhance language and literacy learning. Her professional interests have been in the area of reading and diversity, teacher preparation, as well as New Literacies of Information and Communication Technologies (ICTs). Dr. Hsu is the Co-PI of a recent funded National Science Foundation grant, which supports her interest in researching new literacies and science education. Her web site address is http://iris.nyit.edu/~hhsu02.

Chair 主持人: Prof. Shiang-Kwei Wang, 王向葵教授, received a Ph.D. degree from University of Georgia and currently is associate professor of the Master of Science in Instructional Technology Program in the School of Education at the New York Institute of Technology. Her professional interests have been in the areas of technology integration in K-12 learning settings, the motivational impact of information and communication technologies (ICTs) on learning attitude and performance, mobile learning, as well as the design and development of interactive learning tools. Dr. Wang is the Principal Investigator (PI) of an on-going National Science Foundation grant that prepares science teachers to integration ICTs in the classrooms. Her web site address is http://iris.nyit.edu/~skwang.

Providing Educational Support to Chinese-American Children with Autism Spectrum Disorders
提供華裔美籍自閉症兒童教育服務

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A Saturday enrichment program containing 10-weekly 120-minutes intervention sessions was provided to Chinese-American children with autism to improve their language skills, communication skills, and social skills.

Autism spectrum disorders (ASD) prevalence rate is higher among Asian and non-Hispanic White children than among non-Hispanic Black or African-America and Hispanic children [1]. However, the majority of the participants for ASD interventions are White and Asian Americans are underrepresented in these interventions. Chinese-American community is the largest ethnic group among Asian Americans. The number of children affecting by ASD in Chinese-Americans may be the highest among various ethnic groups within the Asian American category. However, no intervention program has been specifically developed to address the needs of Chinese-American children with ASD. Thus, a Saturday enrichment program was developed for these children and this study was conducted to examine the effectiveness of this Saturday program in improving language skills, communication skills, and social skills of Chinese-American children with ASD.

The Saturday program used multiple intervention strategies. First, it had children with typical development (TD) in the program. Chiang and Lin [2] have reported that children with ASD show more social communication with peers when they have peers without ASD compared to when they do not have peers without ASD. Second, it used thematic instruction. The thematic-based teaching approach has been successfully used to teaching social communication skills to students at risk for language delays or behavior problems [3]. Third, it had play activities for children with and without ASD to interact with each other naturally. Play activities have been successfully incorporated into the intervention aiming to improve communication and social interaction skills in children at risk for language delays or behavior problems [3]. Fourth, it used incidental teaching to teach children appropriate social interaction and communication skills. Incidental teaching has shown effectiveness in improving social interaction skills [4] of children with ASD. Fifth, it had exercise and dance activities. Exercise has shown effectiveness in calming students with ADHD [5]. Sixth, it incorporated children's interests into intervention activities. Koegel and Koegel [6] suggest that incorporating children's interests into intervention activities can have positive effects on motivation, language, and social interaction development in children with ASD. The Saturday program was conducted at a nonprofit organization for Chinese-Americans in Chinatown, New York City. It consisted of 10 weekly 120-minutes intervention sessions. The activities of each session were centered on one theme developed based on children' interests. Each session had four 30-minutes sequential segments: (a) exercise/dance/music segment, (b) interactive story segment, (c) literacy/mathematics/science instruction segment, and (d) arts and crafts segment.

Children with ASD (N = 17) and children with TD (N = 9) participated in this study. A pre- and post-treatment design was used. Given the small sample size of this study, the efficacy of the program was evaluated using Wilcoxon signed ranks tests. The pre and post intervention raw scores by language (EOWPVT, ROWPVT), communication skills (VABS: communication), and social skills (VABS: socialization) for children with ASD are presented in Table 1. The results of this study showed that children with ASD demonstrated significant improvements in expressive language, receptive language, communication skills, and socialization skills.

	Pre			Post			% Change
	Mean	SD	Range	Mean	SD	Range	
EOWPVT*	48.35	36.09	0-129	59.71	43.69	0-145	+23%
ROWPVT*	59.12	39.32	0-145	63.41	38.46	0-153	+7%
VABS							
Communication*	41.82	31.33	11-133	50.41	38.64	19-128	+21%
Socialization*	31.47	20.77	9-81	36.06	24.26	7-81	+15%

*$p < .05$; EOWPVT = the Expressive One-Word Picture Vocabulary Test; ROWPVT = the Receptive One-Word Picture Vocabulary Test; VABS = the Vineland Adaptive Behavior Scales

Tab. 1: Pre and post intervention raw scores.

References

[1] Durkin, M. S., Maenner, M. J., Meaney, F. J., Levy, S. E., DiGuiseppi, C., Nicholas, J. S., Schieve, L. A. (2010). Socioeconomic inequality in the prevalence of autism spectrum disorder: Evidence from a US cross-sectional study. *Plos One, 5*(7).

[2] Chiang, H. M., & Lin, Y. H. (2008). Expressive communication of children with autism. *Journal of Autism and Developmental Disorders, 38*(3), 538-545.

[3] Stanton-Chapman, T. L., Kaiser, A. P., Vijay, P., & Chapman, C. (2008). A multicomponent intervention to increase peer-directed communication in head start children. *Journal of Early Intervention, 30*(3), 188-212.

[4] McGee, G. G., Almeida, M., Sulzer-Azaroff, B., & Feldman, R. S. (1992). Promoting reciprocal interactions via peer incidental teaching. *Journal of Applied Behavior Analysis, 25*(1), 117-126.

[5] Azrin, N. H., Ehle, C. T., & Beaumont, A. L. (2006). Physical exercise as a reinforcer to promote calmness of an AD/HD Child. *Behavior Modification, 30*(5), 564-570.

[6] Koegel, R. L., & Koegel, L. K. (2006). *Pivotal response treatment for autism: Communication, social, and academic development.* Baltimore, MD: Brookes.

Prof. Hsu-Min (Mina) Chiang, 江旭敏教授, is an Assistant Professor in Autism Spectrum Disorders in the Department of Health and Behavior Studies, Teachers College, Columbia University. Dr. Chiang's research focuses on social communication skills, academic skills (reading and math), behavior problems, and cultural differences in individuals with autism spectrum disorders as well as support services for these individuals and their families. Prior to embarking on her university career, Dr. Chiang worked as a special education teacher in Taiwan.

Dr. Chiang received her B.Ed. in Special Education from National Tainan Teachers College in Taiwan. She received her M.Ed. in Special Education from Monash University and Ph.D. in Special Education from Macquarie University in Australia.

Bilingual Children' Reading at Home: Studies of Three Families
雙語兒童家庭閱讀研究調查

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The current study explores upper-elementary school age bilingual children's co-reading practices at home in their heritage language, Mandarin Chinese. Existing research on reading time and genre choice with adults reading to children mostly focuses on monolingual children or takes place within school settings. Given the paucity of research related to at-home, out-loud reading practices with multilingual children, this study draws from other studies on reading time and genre choice in monolingual family and school settings. The current study aims to provide an overview on the reading time between children and adults in three bilingual families and their genre choice in their primary home language. Methods include observation of the reading practices in each family, interviews with the parents and children to discover their reading routines, genre choices, and book counts of each family. The study has found that read-aloud time decreases as children grow up. The participating parents believe that children are not interested in having parents read to them and do not need reading support from them. The current study's data, however, prove such assumptions false. In addition to a reduction in out-loud reading over time, nonfiction reading in terms of time and materials is neglected in all the families in this study. The findings suggest that parents keep reading to their children because children still need reading support from parents even after they can read independently, and nonfiction should be promoted in all reading practices for a balanced reading diet.

Highlights

- Bilingual children and reading
- Family reading time and children's age
- Reading genre imbalance
- Heritage language development and maintenance

Keywords
Reading, fiction, non-fiction, reading time, genre choices, family reading, co-reading, parental support, heritage language development, bilingual children.

References

[1] Bialystok, E. (1997). Effects of bilingualism and biliteracy on children's emerging concepts of print. Developmental Psychology, 33(3), 429-440.
[2] Caswell, L, & Duke, N. K. (1998). Non-narrative as a catalyst for literary development. Language Arts, 75(2), 108-117.
[3] Cummins, J. (2000). Language, power, and pedagogy: Bilingual children in the crossfire. Clevedon, England: Multilingual Matters.
[4] Duke, N. K. (2000). 3.6 minutes per day: the scarcity of informational texts in first grade. Reading Research Quarterly, 35(2), 202-224.
[5] Hayes, D. P., & Ahrens, M. G. (1988). Vocabulary simplificaiton for children: A special case of "motherese"? Journal of Child Language, 15(2), 395-410.
Holdaway, Don. (1979). The foundations of literacy. Sydney, Australia: Ashton Scholastic.
[6] Pappas, C. . (1993). Is narrative "primary"? Some insights from kindergarteners' pretend readings of stone and information books. Journal of Reading Behavior, 25(1), 97-129.
[7] Rief, L. (2000). The power of reading: Practices that work. Voices from the Middle, 8(2), 49-59.
[8] Roberts, T.A. . (2008). Home storybook reading in primary or second language with preschool children: Evidence of equal effectiveness for second-language vocabulary acquisition. Reading Research Quarterly, 43(2), 103-130.
[9] Rucker, B. . (1982). Magazines and teenage reading skills: Two controlled field experiments. Journalism Quarterly, 59(28-33).
[10] Saracho, O. N., & Spodek, B. . (2010). Parents and children engaging in storybook reading. Early Child Development and Care, 180(10), 1379-1389.
Sénéchal, M., & Young, L. . (2008). The effect of family literacy interventions on children's acquisition of reading from kindergarten to grade 3: A meta-analytic review. Review of Educational Research, 78(4), 880-907.
[11] Yopp, R. H., & Yopp, H. K. (2006). Informational texts as read-alouds at school and home. Journal of Literacy Research, 38(1), 37-51.

Dr. Ya-Ning Hsu, 許雅寧博士, received her M.A. in TESOL and Ed. D. in Bilingual and Bicultural Education from Teachers College, Columbia University. She is an adjunct assistant professor in the Bilingual/Bicultural Education Program at Teachers College, Columbia University. Her experience and research interests include literacy education, bilingualism, bi-literacy, balanced-literacy models, content area literacy, learner psychology, nonfiction literacy and methodology. She is currently on the research team of a Federal-funded research grant, the Pedagogy of Social Imagination in Language Teaching/Learning, in addition to the research collaboration with New York City's Board of Education.

讓字動起來--漢字教學的新思維

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使用Microsoft Power Point製作的動畫式漢字筆順，讓初學寫漢字的大學生，學得又好又準確。近年來學習中文的學生越來越多了，從小學生到大學生，甚至於成年人都學得很起勁，但發現以一個初學中文的學生而言，年齡越長在書寫漢字方面越感吃力。所以為了增進學生的漢字書寫能力，我在任教的聖約翰大學中文課，今年春季班我嘗試將生字製作成動畫式的筆順，一筆一劃的透過電腦螢幕將字的筆劃順序演示給學生看，並且將字的部首用紅色標註出來〔圖一〕，讓學生瞭解字的結構，同時在這個動畫字的旁邊加註拼音、英文意思及造詞〔圖二〕，讓學生對生字有全面的瞭解與深刻的印象。

借助電腦科技的幫助，學生很快就接受這種漢字的學習方式，因為若有學生沒看清楚筆順，我輕輕地在鍵盤敲一下，就可重新演示，不用費時地重寫黑板擦黑板，造詞也標註在旁，老師可專心講解字詞的涵意及用法，學生透過電腦的大螢幕，看清筆劃順序，把字寫對了，就不覺得寫漢字那麼難，幫助初次學寫漢字的大學生，克服了寫漢字的恐懼感。

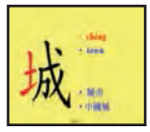
除了動畫式的筆順之外，介紹生字的相關語詞時，我觀察到學生對圖片特別感興趣，例如介紹臺這個字時，我把臺灣的地理位置、環島公路、101大樓、夜市圖片一起放入Power Point，透過電腦的大螢幕；一分鐘，學生便能抓住台灣的影像。在一張臺灣環島公路的畫面中，一位大學生騎著自行車、背著背包吉他、奔馳在沿海公路上[1]，他們對著圖片熱烈討論，似乎很嚮往，也似乎置身其中。從學生反應中，我更具信心的加入圖片，但選擇圖片必須很謹慎，不能偏離生字的主題，而且須具有實用性及中國文化的特色，例如“餃”這個字，我把水餃、鍋貼、餛飩、包子、小籠包、生煎包的圖片一起呈現出來，有些學生驚訝的表示；原來有這麼多不同的“餃子”，他們不僅認識了更多的中國美食，也可以馬上到僅十分鐘路程的法拉盛親自品嚐。我也把常見的中文招牌圖片引用到生字裏，如高速公路、廁所、歡迎等，增加字的實用性。當然，教生字的目的是教會學生書寫生字，圖片不能過多，以免配角搶走主角的戲。

“讓字動起來了”— 這個漢字動畫教學的新嘗試，帶給我個人及學生新的學習方式。對我而言，教生字時就字的結構和詞彙講解的更仔細，配合圖片更生動有趣。也藉由此新的教學方式學習更多的電腦知識，教學與學習相輔相成。對學生來說，他們透過電腦漢字筆順的學習，加強了漢字書寫的能力。尤其是沒有中文背景的學生，下了課可以透過這些動畫筆順，正確的重複學習，大大地提升寫字識字的能力。有別以往，有些學生會抱怨中國字太難寫了，家人不懂中文沒人可以幫助我，或老師寫字太快看不清楚，或因缺課沒學習到這些生字等種種因素，這個學期似乎迎刃而解。尤其是第二級中文班的學生，他們去年秋季修過我的初級中文，當時我仍使用手寫黑板的方式教寫漢字。今年春季班，他們面對這個轉變感到新鮮，漢字旁邊加註英文解釋、拼音及造詞，使他們對字意字音有了更完整的瞭解，透過電腦的大螢幕(projection)做筆順演示時，也常有學生要求再點(click)一次筆順，他們想看清楚這個字的寫法。我相信

這是一個正面的反應，以前若有學生沒看清楚老師手寫的生字，不好意思要求老師重寫，現在就沒有這個顧慮了，學生願意看、且仔細看清楚筆劃順序，有助於他們的書寫能力。我在製作每一個字的筆順時，也同時將字的部首用紅色區分，讓他們容易聯想、歸納，減少混淆，增進識字的能力，結果發現他們的生字考試分數明顯地提高，錯別字也減少了。學期結束前，學生們建議第三、第四級的中文課也能製作漢字動畫及造詞造句，對他們更深一層次的學習將會有很大的幫助。

雖然筆順的動畫製作費時費力，但一旦設計製作好了，可以在這個基礎上更新創作，並隨著學生的需要調整，幫助學生克服困難，引導他們有效正確的學習。如何讓學生學得又準確又好？這是我常思考的課題，希望藉由電腦科技的輔助，結合教學經驗不斷地更新教材，為初級班的學生奠定扎實的中文基礎，以期他們在進階的中高級中文課程繼續研習，完全掌握聽說讀寫的語文能力。

圖一：動畫字的部首以紅色標明



圖二：動畫字加註英文、拼音及造詞

References

[1] 陳懷恩， 電影：練習曲單車環島日誌 (Island Etude) (2007), http://www.books.com.tw/Activity/2007/03/etude/.

Prof. Chao-Chih Huang, 黃招智教授 is an Assistant Professor of St. John’ s University. She teaches Elementary and Intermediate Chinese. She has published AP-Oriented Chinese Reading Workbook, 2009 and three Chinese textbooks: Chinese Composition in Three Step. The book was selected as “The Best Teaching Material of 1999” by the Overseas Affairs Commission of the Republic of China. Prof. Huang has recently delivered the paper “Practical Chinese for Daily and SATII Chinese Test” at the 10th International Conference TCSL in Taipei, 2011.

Resource-sharing and Genealogical Research on Islamic Chinese Names in Guilin*

廣西桂林回族姓氏的家譜研究與家族根源

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Jiapu家譜, the Chinese Family Register, has been used for thousands of years to trace the genealogical history of a clan and lineage, including a family's origin, its collateral lines, the migration history of the clan, names and ages of the members, records of marriages, births and deaths, merits and deeds, ancestral biography and ancestral locality. This paper examines the historical evolution and value of Chinese genealogical records with the focus on researching the Islamic Chinese names found in Jiapu 家譜 and used by the people living in Guilin, Guangxi Province. It provides the historical background of genealogical records and analyzes the value of Chinese genealogical research through the study of names and genealogical resources. The paper highlights the analysis and evolution of the Islamic Chinese names commonly adopted by the local people in Guilin. It concludes with the recommendations on emphasizing and making the best use of genealogical records to enhance the research value of Chinese overseas studies through resource-sharing and collaboration with libraries, museums, and institutions, locally, regionally, and internationally.

Highlights

- History of Chinese Genealogy
- Study of Names and Genealogical Records
- Origin of Islamic Chinese Names
- Islamic Chinese Names in Guilin
- Library Collaboration, Preservation, and Research

Keywords
Chinese Genealogy; Islamic Chinese Names; Jiapu; Guilin (Guangxi Province); Resource-sharing; Overseas Chinese Studies.

Prof. Sheau-yueh (Janey) Chao, **賀筱岳教授** is a librarian and Head of Cataloging at Baruch College, City University of New York. She received MLS in Library and Information Science from the University of Wisconsin-Madison and M.S. in Computer Science from the New York Institute of Technology. She is an established Chinese genealogy researcher and has published extensively in the areas of Asian studies, Chinese family history, library services to the multicultural populations, and Overseas Chinese Studies. Professor Chao has published numerous books and articles, including a book on Chinese genealogies with the title: In Search of Your Asian Roots: Genealogical Research on Chinese Surnames. Her recent lecture, Early Life of Yuan Shikai and the Formation of the Yuan Family, co-presented with Professor Gee, was delivered at the University of British Columbia, Vancouver, Canada, in May 2012. Today's presentation is based on her article published in Collection Building (issue 32, no.3, 2013) from Emerald.

Session 3
Economics and Finance Session
財經金融研討會

CAAPS 2013 Annual Convention
August 25, 2013, Sunday
2:00 ~ 3:30 PM, 7th Floor, Diamond Conference Room

Organizer 召集人: Prof. Steven Tung- Lung Chang, 張東隆教授, Prof. Tung-lung Steven Chang, 張東隆教授 , Professor and Chair of International Business and Marketing at Long Island University, C. W. Post Campus, New York.

Chair 主持人: Prof. Wei-Yann Tsai, 蔡偉彥教授, Professor of Columbia University, 哥倫比亞大學.

Speakers and Topics 主講人及講題:

Examining Emerging Market Multinationals' Ownership Strategy in Cross-Border Mergers & Acquisitions, Prof. Mike Chen-Ho Chao, 趙貞和教授
Rushiun Liou1, Mike Chen-Ho Chao*2, and Monica Yang3
1 University of Arkansas; 3 Adelphi University, New York
2 William Paterson University, New Jersey

Competitive position of Taiwan's Technological Capability and Economic Growth, Tung-lung Steven Chang 張東隆教授
Professor and Chair of International Business and Marketing at Long Island University, C. W. Post Campus, New York.

Organizer 召集人: Prof. Tung-lung Steven Chang, 張東隆教授 is Professor and Chair of International Business and Marketing at LIU-Post. He has taught IMBA in Switzerland, EMBA in New York and MBA programs at the headquarters of Northrop Grumman, Olympus, Motorola and Verizon. He has conducted seminars at various locations, including Beijing, Chengdu, Nanjing, Shanghai, Taipei, London, Miami, New York and the Headquarters of WTO in Geneva. Dr. Chang is a board member of New Jersey City University Board of Trustees. He was the former president of the Chinese American Academic and Professional Society and a member of the New Jersey State Export Finance Company Advisory Council. He previously served as a management advisor to the Ministry of Economic Affairs of Taiwan, ROC. He is the recipient of the United Nations Development Program grant, the Elite grant and the Taiwan Fellowship, among others. Dr. Chang has centered his research on the development of global expansion strategy with managerial implications for multinational corporations. He also published papers in the areas of FDI and international technology diffusion. His research has appeared in Journal of World Business (SSCI), International Marketing Review (SSCI), Technological Forecasting and Social Change (SSCI), Journal of Global Information Management (SSCI), etc.

Chair 主持人: Prof. Wei-Yann Tsai, 蔡偉彥教授, is a professor of Columbia University. He is an American Statistical Association (ASA) Fellow for his professional contributions to the field of statistical science. His Research interests are Survival analysis, incomplete data methods, and nonparametrics. Prof. Tsai was the president of CAAPS in 2001.

Examining Emerging Market Multinationals' Ownership Strategy in Cross-Border Mergers & Acquisitions

Rushiun Liou1, Mike Chen-Ho Chao*2, and Monica Yang3
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Researchers suggest that due to the limited opportunities to acquire strategic assets in their home market, emerging market multinational corporations (EMNCs) utilize a series of cross-border mergers and acquisitions (M&As) to accelerate their internationalization process. Less is known about EMNCs' international strategy, particularly how target market economies and institutional environments influence EMNCs' ownership strategy in their cross-border M&As. The current study focuses on EMNCs originating from nine major emerging economies and examines their choices between full and partial ownership in cross-border M&As. We find that driven by their strategic asset seeking motives, EMNCs tend to take on full ownership when the target markets are developed economies. Further, formal institutional distance, indicating learning opportunities, is positively related to the likelihood of EMNCs' full ownership position, whereas informal institutional distance is not significantly related to EMNCs' ownership strategy.

On November 6th, 2012, Wall Street Journal reported that a subsidiary of Chinese appliance maker Haier Group has obtained more than 90% of the shares of Fisher & Paykel Appliances Holdings Ltd. in New Zealand. This acquisition will allow Haier to sell products in developed markets at higher margins than in China and to get access to Fisher & Paykel's marketing and research and development (Howard, 2012); On March 28th, 2012, Sharp Corp., one of Japan's biggest names in consumer electronics, said it sold a 10% stake to Taiwan's Hon Hai and its affiliate companies, collectively known as Foxconn. In turn, Hon Hai will become Sharp's largest shareholder and gain technical expertise and manufacturing technology to build LCD panels (Osawa & Wakabayashi, 2012).

Thanks to the rapid economic growth of emerging economies, foreign direct investment (FDI) from emerging markets has increased from 19% of the world FDI in 2008 to 25% in 2009 (UNCTAD, 2010). China, Hong Kong, and the Russian Federation were all ranked as three of top 20 investors in the world (UNCTAD, 2010). As a result, emerging market multinational corporations (EMNCs), such as above-mentioned Haier Group and Foxconn, have become important players (Guillen & Garcia-Canal, 2009) and assumed the role of acquirer in today's global business. While outward FDI from emerging economies continues to increase, cross-border M&As are shown to be a popular entry mode among EMNCs (Economist, 2011). Among an array of possible entry mode choices, cross-border mergers and acquisitions (M&As) are more advantageous than greenfield investments when foreign firms aim to build a local presence quicker, overcome traditional trade barriers, and encounter fewer financial risks (Datta & Puia, 1995). Pioneering research has also documented that EMNCs utilize a series of cross-border M&As to accelerate their internationalization process (Luo & Tung, 2007; Ramamurti & Singh, 2009).

There has been limited research offering a systematic examination of EMNCs' international strategy in conducting M&As (Gammeltoft, Barnard, & Madhok, 2010). To fill this research gap, we utilize a large sample of EMNCs, originating from nine major emerging economies, including Brazil, China, India, Indonesia, Mexico, Russia, South Africa, Thailand and Turkey, to investigate EMNCs ownership strategy in

their cross-border M&A endeavors. Specifically, we intend to address this research question: how target market characteristics influence EMNCs' entry mode decisions between full and partial acquisitions.

The current study provides insights into how target market economy and institutional environment differences influence EMNCs' ownership strategy in their worldwide M&A efforts. These findings are timely, relevant, and informative about the international strategies of these newly emerging but formidable global players. In addition, by examining both formal and informal institutional distance, we delineate EMNCs' differential responses to these institutional environment differences between host and home markets. The current study also contributes to the broader debate of whether we need a new internationalization theory for EMNCs (e.g., Yeoh, 2011). Informed by TCE and institutional theory, we develop our arguments on EMNCs' ownership strategy with an emphasis on EMNCs' particularly salient strategic asset seeking motives. Through the examination of a series of cross-border M&A events during the period of time between 2000 and 2012, we found support for our arguments.

References

[1] Luo, Y., & Tung, R.L. 2007. International expansion of emerging market enterprises: A springboard perspective. Journal of International Business Studies, 38(4), 481-498.

Prof. Mike Chen-Ho Chao, **趙貞和教授** received a Ph.D. in Marketing and International Business from Saint Louis University and joined the Cotsakos College of Business Baruch College in 2012. He is currently an Associate Professor with Department of Marketing and Management, William Paterson University, New Jersey. Prof. Chao's research and teaching interests center on the internationalization and regionalization of multinational enterprises (MNEs), standardization versus localization of their Web sites, and country-of-origin (COO) effects in international marketing. The results of his research provide guidance to business managers such as a recent article that argues that international marketing managers should try to find solutions to the problems caused by the complexity of product diversification and that adopting an international diversification strategy appears tobe a good option. His research has appeared in academic journals such as the Journal of International Marketing and the International Marketing Review.

Competitive position of Taiwan's Technological Capability and Economic Growth

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A country can enhance its economic growth by using knowledge spillovers accompanied by the business expansion of multinational enterprises (MNEs) to source technology creation internationally. Foreign direct investment (FDI) inflows caused by MNE activities can thus contribute to the economic progress of the host country if the host country possesses a good level of technological capability with proper absorptive capacity (Agosin and Machado, 2005; Batten and Vo, 2009; Cohen & Levinthal, 1989; Coe & Helpman, 1995; Criscuolo and Narula, 2008; Driffield and Love, 2007; Keller, 1998 & 2004). A country with high technological capability possesses a competitive edge when striving for advanced economic development (Braconier, et al., 2002). It has been noted that a better understanding of a nation's technological gap may elucidate the effect of inward FDI on knowledge accumulation that could lead to desired economic growth of the host country (Criscuolo and Narula, 2008; Hamida and Gugler, 2009). Over the years, Taiwan has been able to attract inward FDI, which in turn via technology spillovers has supported the international business expansion for Taiwanese firms. The paper focuses on the related areas during the two major financial crises in order to know the dynamics of Taiwan's competitive positions in the global economy between 1997 and 2008.

In order to sustain its competitive position to cultivate R&D outcomes, Taiwan has striven for the enhancement of its absorptive capacity. Approximately 70% of Taiwan's R&D professionals are concentrated in the high-tech industries, thus leading to its high number of registered patents. Taiwan's R&D outcomes can be attributed to the combined efforts by both industries and the government, who launched incentive programs for encouraging both domestic and foreign multinationals to establish R&D centers in Taiwan. Many foreign multinationals have established R&D centers in Taiwan, including global players such as HP, IBM, Microsoft, Dell, Intel and Motorola. Taiwan also made efforts to enhance the number of quality research talents holding college or advanced degrees to 32 persons per 10,000 in 2007. As a result, Taiwan escalated its R&D input during 1997-2007. In addition, Taiwan increased 85% of its R&D expenditures and 66% of its full-time equivalent (FTE) R&D personnel; while its labor force per 1,000 employment for science and technology research also increased 80% during the same period.

Taiwan has been in transition from the “pre-frontier” stage towards a “frontier” nation in terms of its economic development stage in the world development system. Taiwan has become a source country in the embodied international technology diffusion (ITD) network and an intermediate country for disembodied technology during 1997-99 (Shih and Chang, 2009). According to the Investment Development Path (IDP) and the knowledge accumulation stage (Criscuolo and Narula, 2008; Narula and Dunning, 2010), Taiwan is categorized as a pre-frontier country. However, Taiwan’s GDP growth has decreased relative to other newly industrial economies in the same region since the late 1990s. This paper is to address the following: What is Taiwan’s global competitive position in terms of technological capability? What impact could Taiwan’s ITD positions have on its economic progress? And, is FDI a driving factor of Taiwan’s economic growth? The author addresses the competitive position of Taiwan’s technological capability, elaborates the interdependent relationships between ITD positions, FDI, R&D input and economic progress of Taiwan, and discusses policy implications.

References

[1] Agosin, M.R. and Machado, R. 2005. Foreign Investment in Developing Countries: Does it Crowd in Domestic Investment? Oxford Development Studies, 33(2): 149-162.
[2] Batten, J.A. and Vo, X.V. 2009. An analysis of the relationship between foreign direct investment and economic growth. Applied Economics, 41(13): 1621–1641.
[3] Criscuolo, P. and Narula, R. 2008. A novel approach to national technological accumulation and absorptive capacity: aggregating Cohen and Levinthal, European Journal of Development Research, 20(1): 56–73.
[4] Narula, R. and Dunning, J. 2010. Multinational enterprises, development and globalization: Some clarifications and a research agenda. Oxford Development Studies, 38(3): 263-287.
[5] Shih, H. and Chang, T. 2009. International diffusion of embodied and disembodied technology: A network analysis. Technological forecasting and Social Change, 76(6): 821-834.

Session 4
Technology and Applications Session
科技運用研討會

CAAPS 2013 Annual Convention
August 25, 2013, Sunday
3:30 ~ 5:00 PM, 7th Floor, Gallery Conference Room

Organizer 召集人: Prof. Ping-Tsai Chung 鍾炳采教授
Dept Chair, Dept. of Computer Science, Long Island University, Brooklyn, New York.

Co-Organizer: Dr. Johnson Tseng, 曾令寧博士, President of CAAPS 2013.

Chair 主持人: Prof. Feng-Bao Lin, 林豐堡教授, City College, City University of New York.

Speakers and Topics 主講人及講題:

Mr. Guang-Nan Fanjiang 范姜光男先生, Weidlinger Associates, Inc
A Few Unique Features of Brooklyn Bridge.

David Wei, Chairman and CEO, 魏學常總裁, USSolargy.
Why SOLAR SYSTEM Now, ("為何選擇太陽能能源系統").

Kevin Wey, Registered Architect, LEED AP. 魏國勝建築師(綠建築協會)
Green Architecture & Green Design, ("綠能建築及綠能設計"), Green Architecture & Green Design"

Organizer 召集人: Prof. Ping-Tsai Chung, 鍾炳采教授 is an Associate Professor of Department of Computer Science with Long Island University, Brooklyn, New York, where he has served as Dept Chair for nine years from June 2004 to August 2013. Prof. Chung received his Ph.D. degree in Computer Science from Polytechnic Institute of NYU (NYU-Poly). Earlier, he worked with AT&T Bell Labs in U.S.A. for developing High Speed Network Management Systems. Earlier, he has worked with Telecommunications Labs (TL) in Taiwan, R.O.C for a Broadband ISDN Services Project. He is an Alumnus of Department of Electronic Engineering of National Taipei University of Technology 國立臺北科技大學, where he received Outstanding Alumni Award at NTUT 95th Anniversary Ceremony, Taipei, in 2006.

Dr. Chung is a Senior Member of IEEE Society, he is the Founding Chair of New York Chapter of IEEE Systems, Man, Cybernetics (SMC) Society. Also, he established Student Branch Chapter of IEEE Society at LIU-Brooklyn, where the student chapter of IEEE SMC Society is the first student chapter of SMC Society in North America. His research interests are Network Computing, Intelligent Systems, Web Services and Biomedical Informatics. He is an Associate Editor of Journal of Convergence Information Technology, AICIT, and is an Associate Editor of Cyber Journals: Multidisciplinary Journals in Science and Technology, The Canadian-based Cyber Journals. Dr. Chung is an Executive Member of Phi Tau Phi Scholastic Honor Society of America, a Board of Director of Chinese Institute of Engineers-Greater New York Chapter (CIE-GNYC), a Board of Director of Chinese American Academic and Professional Society (CAAPS), and he served as the President of CAAPS in 2010. He is the Chairman of CAAPS in 2013.

Co-Organizer: Dr. Johnson Tseng 曾令寧博士 is the President of CAAPS in 2013.

Chair 主持人: Prof. Feng-Bao Lin (林豐堡教授) earned his Bachelor's degree in Civil Engineering and Master's degree in Structural Engineering both from National Taiwan University in Taipei, and received his Ph.D. in Structural Mechanics from Northwestern University in Evanston, Illinois. He joined Polytechnic University in New York as a faculty member soon after he graduated from Northwestern University, and then joined The City College of New York in 2002. He teaches Reinforced Concrete Structures, Prestressed Concrete Structures, Steel Structures, Inelastic Structural Analysis, Stability of Structures, Structural Dynamics and Finite Element Methods among other subjects. Many of his Ph.D.

students after graduation either work with renowned organizations or teach at well-known universities.

Prof. Lin has conducted various research projects for National Science Foundation, Air Force, NASA, AISC, Argonne National Laboratory, etc. Currently, he is working on research topics such as Seismic Evaluation and Isolation Retrofit of Long-Span Bridges, Development of Structural Integrity Monitoring System for Buildings Damaged by Fire, Characterization of Stress Separation Relation and Boundary Element Analysis of Crack Propagation in Cementitious Materials, and Seismic Analysis of Coupled Structural Systems with Non- Proportional Damping. Prof. Lin has been active in various professional societies and has served as a committee member on a number of professional committees. He has published more than sixty journal and conference papers, and has received several Outstanding Merit, Outstanding Service, and Outstanding Science and Technology Research Paper awards for his dedication to research and active participation in professional organizations.

Prof. Lin earned a professional license in Civil Engineering in 1977 by passing the highest professional examination in Taiwan. He is also a practicing licensed engineer in the states of New York and Connecticut. He has worked as a consultant, besides his diversified research interests, on many reinforced concrete and steel building and bridge structure design projects. He was president of CAAPS 2004 and was Chairman of BOD in 2008.

A Few Unique Features of Brooklyn Bridge

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A national historic landmark, in 2013 the Brooklyn Bridge in New York City will mark the 130th anniversary of its opening in 1883. The bridge is even older if one considers the 14 years of the construction time after its ground breaking in 1869. The most difficult and controversial engineering work was the construction of two timber caissons to support its two masonry towers. The caissons were sunk deep into the East River; workers excavated the foundations by hand and labored inside the caissons under compressed air. It took almost two years to reach their final level below the water. In addition to the caissons and masonry towers, the Brooklyn Bridge was also built with many engineering features that are unique compared with other suspension bridges.

John Roebling began plans for an East River bridge as early as 1857. He had a different design for the stone towers, which would have looked like the Egyptian style landmarks (Figure 1). In April 1867, a charter authorizing a private company to build and operate an East River bridge had been voted through at Albany, and a month later, John Roebling was named engineer of the work. By that time John Roebling already had a great deal of experience in building suspension bridges, such as the Niagara Bridge in 1855 and the Cincinnati Bridge in 1866.

As he planned to sink two tremendous timber caissons deep into the riverbed to support the weight of masonry towers, his son Washington was sent to Europe to study the use of caisson for a year in 1867. It was not until June of 1869, when the proposed plan and the location of the bridge were finally approved by the Army Engineers and the Secretary of War. On June 28, 1869 while surveying for the location of the Brooklyn Tower, John Roebling's toe was accidentally crushed by a boat. He refused professional medical attention, stubbornly opting to treat the injury himself, and died on July 22, 1869 of gangrene. His son, Washington at the age of 32, was appointed the Chief Engineer soon after. The average age of his engineering staff was 31. The men were all new to the job and were about to undertake a project unlike anything ever attempted before.

The first and most difficult task facing the young engineering staff was the sinking of tower caissons, with out which the bridge could not be built. The caissons were basically constructed of wood and iron rods, and shaped like a gigantic rectangular box with heavy roof and strong V-shaped sides (Figure 2). The bottom of the box was open for men to dig out the exposed river bed as the caisson was slowly sunk deeper and deeper. To keep the water and mud from seeping into the enclosed workspace, compressed air was pumped inside with pressure gradually being increased as the work advanced. The caissons used for the Brooklyn Bridge were much bigger and would be sunk deeper than any other caissons used in Europe and the United States. The men working inside the caisson were exposed to the compressed air environment for long periods of time, especially when the caisson was in deeper water. Upon exiting the pressurized caisson, many were struck down with a debilitating illness, which would become known as "caisson disease" or "the bends".

The Brooklyn Tower caisson was launched on March 19, 1870 and reached its intended depth of 45 feet below water on March 15, 1871. No deaths directly related to the bends were recorded. The New York Tower caisson was launched on May of 1871. Between April and May of 1872, when the New York Tower caisson was sunk more than 76 feet below water, the men became more seriously ill; two deaths were directly attributed to the bends. Concerned with the prospect of more casualties, Roebling decided on May 18 that the caisson would not have to go all the way down to the bed rock and halted the excavation. The inside of the caisson was filled with

concrete on July 12, 1872. Having spent more time inside the pressurized caissons than any other man, Washington had also become afflicted by the bends, and was nearly paralyzed by the end of 1872.

The towers were built of granite masonry, one stone at a time, eventually rising to a height of 276 feet above the water, resting entirely on the timber caissons. The last stone on the New York Tower was set in place in July 1876. Each tower consists of three solid buttressed shafts. The top of tower is tied together by cross walls designed to form Gothic Arches, which becomes the bridge's most distinctive feature (Figure 3). Assisted by his able and extremely loyal staff, the remaining bridge was built without the Chief Engineer on hand to direct the work. The suspension structure was basically the same system used at both the Niagara and Cincinnati bridges, except that it was on a much bigger scale. The other unique engineering features of the Brooklyn Bridge's "suspension" span include:

(1). The weight of suspended structure is not wholly supported by the vertical hangers or suspenders. It is shared by the crisscrossing diagonal stays.
(2). The stiffening trusses run continuously through the towers and therefore are not entirely "suspended" by the main cables.
(3). Expansion (or moving) joints are provided at the mid-points of both main and side spans.
The longest suspension bridge in the world, the Brooklyn Bridge, was opened for traffic on May 24, 1883. Bridge trains or trolley cars started running in September 1883.

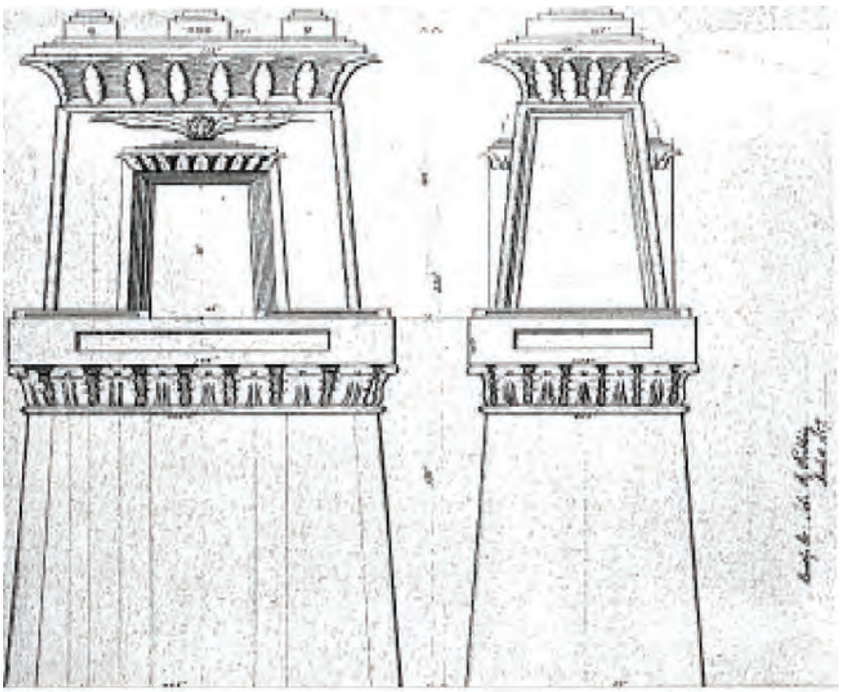

Figure 1- Roebling's Tower Design in 1857.

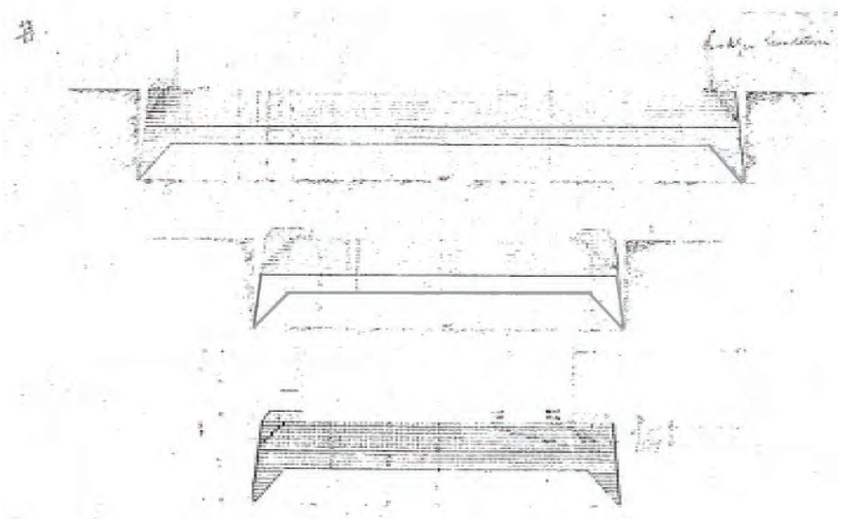

Figure 2 – Cross Section of Caisson.

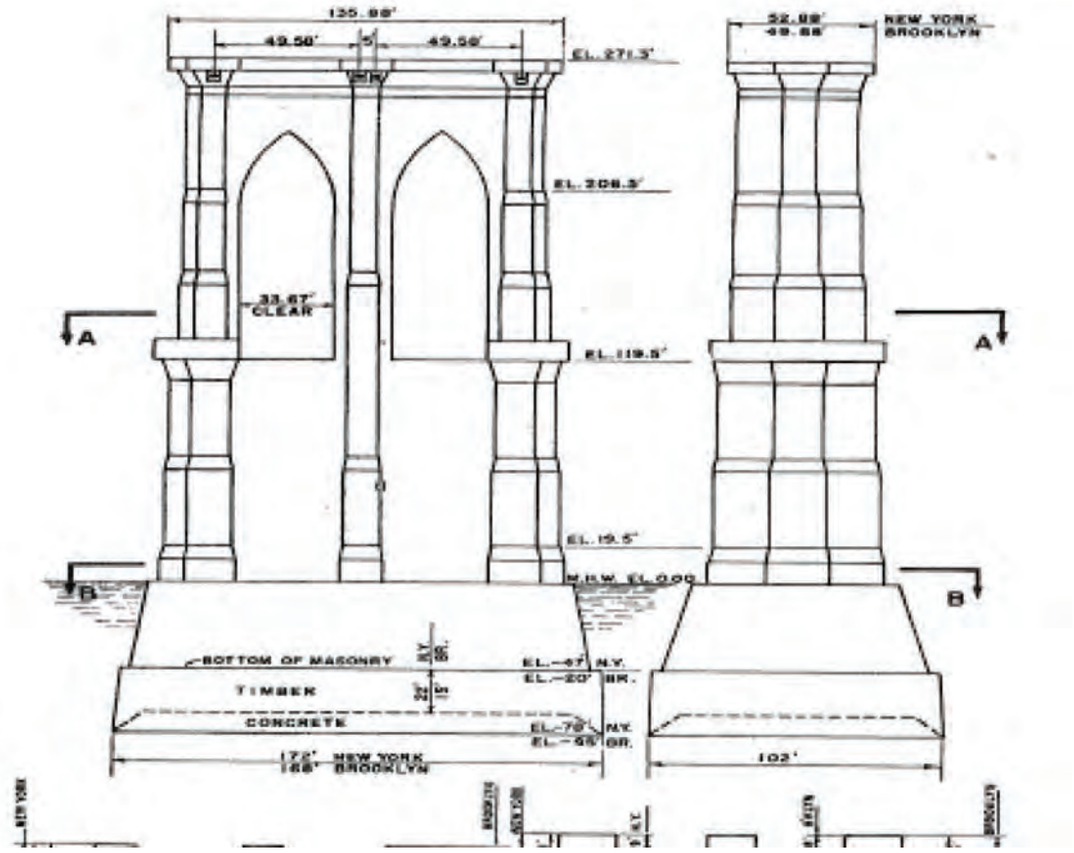

Figure 3. Tower Design in 1876

References

[1] David McCullough, The Great Bridge, Simon & Schuster Paperbacks, 1972.
[2] Department of Public Works, City of New York, Brooklyn Bridge Technical Survey, Final Report, 1945.

Mr. Guang-Nan Fanjiang **范姜光男先生** has been a Principal of Weidlinger since 1989. Mr. Fanjiang's outstanding leadership and prominence in complex bridge engineering have contributed significantly to the firm's success. Since joining Weidlinger, Mr. Fanjiang has risen to become the Managing Director of firm's prominent bridge engineering practice, as well as suspension and long-span bridges. He has had a significant influence in expanding the firm's complex bridge engineering practice. Since the mid-1990s, he has tripled the firm's business in bridge design. He currently managed a staff of 100 bridge engineering professionals, amounting to billions of dollars in construction costs. In 2002, Mr. Fanjiang received an Outstanding Achievement Award in Bridge Engineering from the International Chinese Transportation Professionals Association, and in 2008, he was selected one of the 50 Outstanding Asia American in Business Award. Mr. Fanjiang graduated from National Taipei University of Technology (NTUT) and received MS in Civil Engineering from Kansas State University in 1971. In 2009, he received an Outstanding Alumni Award at NTUT 98th Anniversary Ceremony. He is the president of NTUT Alumni Association in Greater New York.

Why SOLAR SYSTEM Now為何選擇太陽能能源系統

- What is SOLAR SYSTEM & Why get it now

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(1) Why SOLAR SYSTEM Now. (What is SOLAR SYSTEM. Why get it now.
(2) Do you know you are paying other to get SOLAR SYSTEM?-
(3) Best way to get SOLAR SYSTEM (Cash Positive way to get SOLAR SYSTEM) -
(4) SOLAR SYSTEM now and future.

David Wei, Chairman and CEO, 魏學常總裁 has a Master of Computer Science and Master of Management Science from Stevens Institute of Technology. He is Active in multiple successful national and international businesses including (1) Chairman/CEO of US Solary Inc. an innovative Solar Energy Company with "One-Stop Solar Energy Solution" that offers solar panels, solar installations and solar financing to the customers. US Solargy currently offers its innovative, top selling No Cost Solar System PPA to most east coast states (including NJ, NY, CT, RI, MA, PA, OH, MD, DC, SC, and NC) and CA customers. We are continuing to expanding to other states aggressively. US Solargy is rated Top 20 of Solar Company by NJBiz. (2) President/Founder CompuPlus International Inc. since 7/1990, a New Jersey base IT consulting firm which provides services to various major corporations for more than 21 years. CompuPlus is going to grow aggressively in consulting and staffing with its expansion on sales marketing and newly developed franchise business model. (3) President/Founder of Dreams Footwear Inc., a CA base importer and distributor of young junior fashion footwear.

Green Architecture & Green Design, 綠能建築及綠能設計
Double Skin Façade - Naturalization and Ventilation

Gwo-Shenq (Kevin)Wey
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魏國勝建築師(綠建築協會)
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According to the Source book of the Belgian Building Research Institute [BBRI], (2002), *"An active façade is a façade covering one or several stories constructed withmultiple glazed skins. The skins can be air tighten or not. In this kind of façade,the air cavity situated between the skins is naturally or mechanically ventilated. The air cavity ventilation strategy may vary with the time. Devices and systems are generally integrated in order to improve the indoor climate with active or passive techniques. Most of the time such systems are managed in semi automatic way via control systems."*

Double Skin Facade is a system of building consisting of two skins placed in such a

way that air flows in the in-between cavity. Main goals of this system may comprise of these functions below:

(1) Architecture: Architecture of the facade/ Fully glazed façades/ Floor plan layout/ Improvement of the environmental profile of the building.
(2) Indoor climate: Thermal comfort/ Visual comfort/ Acoustic comfort/ Ventilation.
(3) Energy Use: Reduction of heating demand during winter/ Reduction of cooling demand during summer/ Reduction of peak heating/cooling loads/ Use of natural daylight instead of artificial.
(4) Other: Construction costs/ Fire regulations/ Maintenance of the façade.

Case Studies:

GSW Headquarters, Berlin Germany, the use of color for double skin façade transforms a functional aspect of the facade into a universally accessible painting on an urban scale. This design gesture not only provides a thoroughly democratic unifying element for a city looking forward to its future, but also controls solar gains and thereby reduces the use of artificial heating and cooling.

Shangnai GIANT Corporation, Shanghai China, the "green" goals to design a building that exists in harmony with nature and expresses this to its occupants. In service to that goal the proposed design generates a portion of its own energy, collects for reuse the abundant run-off rainwater, capitalizes upon its site by taking advantage of its proximity to the lake, its microclimate and orientation, uses materials and technologies that have minimum impact to environment and uses an intelligent skin approach to facade design.

The House, Taichung, Taiwan, With respect to the practice of feng shui, the design is laid out to coincide with energy and air flow. After thoroughly studying the land and climate of the region, to create micro-climate in naturally air flow inside of house, as well as alleviate the hot or clod climate in macro-climate.

Bosco Verticale (Vertical Forest), Milano Italy, is a project for metropolitan reforestation that contributes to the respect of the environment and urban biodiversity without the implication of expanding the city upon the territory. Bosco Verticale is a model of vertical densification of nature within the city. It is a model that operates correlated to the policies for reforestation and naturalization of the large urban and metropolitan borders.

References

[1] GSW Headquarters, Berlin Germany.
[2] Shangnai GIANT Corporation, Shanghai China.
[3] The House, Taichung Taiwan.
[4] Bosco Verticale (Vertical Forest), Milano Italy.

Session 5
Biomedical Technology and Healthy Life Session
生醫科技與健康人生研討會

CAAPS 2013 Annual Convention
August 25, 2013, Sunday
2:00 ~ 3:30 PM, 7th Floor, Topaz Conference Room

Organizer 召集人: Dr. Paul Wang, MD Ph.D. 王新澤醫生, 醫學博士，臨床醫學博士, Private Practice in Internal Medicine,
Primary Care in Hackensack, New Jersey.

Chair 主持人: Professor Yue J. Lin, 林友直教授, St. John's University.

Speakers and Topics 主講人及講題:

Prostate Cancer Update 2013 and Prostate Facts & Myths
Richard Lee, MD, Robotic Surgery, Holy Name Medical Center,
Englewood Hospital Medical Center, New Jersey.

Washington University Volunteers Experience the Care of Orphans with Birth Defects in Beijing, John Wang 王恩洲, Washington University in St. Louis and Paul Wang 王新澤醫生, Private Practice in Internal Medicine,
Primary Care in Hackensack, New Jersey.

Organizer 召集人: **王新澤醫生** (Dr. Paul Wang, MD, Ph.D.)，醫學博士，臨床醫學博士　1984年畢業於河北醫學院，同年前往開灤煤礦工作，一線大夫。1985年進北京醫科大學臨床醫學博士班，並從事肝病研究。期間對分子生物學，基因治療，細胞及分子克隆技術產生了極大興趣。1991年來美，分別在康州大學，波士頓大學進行膠原脢的研究。並試圖發現，克隆新的膠原脢，因為這些生物蛋白脢可能參與了關節炎的關節破壞及癌細胞的轉移。 自1996年開始，又回到臨床， 從事內科醫學至今。

Chair 主持人: **Professor Yue J. Lin, 林友直教授** is a graduate of National Taiwan University and received a Ph.D. from the Ohio State University. He worked at the Taiwan Agricultural Research Institute as a crop breeder and then taught biology and genetics in the United States before assuming his current faculty position at St. John's University. His research interests are genetics and cytogenetics and he has published many full research articles in various scientific journals. He was president of CAAPS in 1988, and chairman of CAAPS in 2002, and 2003. He is a life member of CAAPS and other professional societies.

Prostate Cancer Update 2013 and Prostate Facts & Myths

Richard Lee, MD
Robotic Surgery
Holy Name Medical Center
Englewood Hospital Medical Center
350 Engle Street
Englewood, NJ 07631
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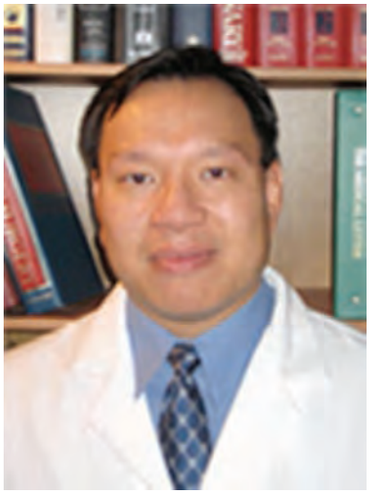
There are 200K cases of prostate cancer diagnosed yearly in the U.S. It is the most common non-cutaneous malignancy in men and is the second leading cause of death. Reports that PSA screening is unnecessary are controversial. The studies from which these recommendations were derived have been called into question.

Surgery has remained the gold standard in therapy for prostate cancer. Robotic surgery has supplanted open surgery over the last 10 years. The Intuitive Surgical's daVinci surgical system allows the surgeon to control instruments remotely. Higher definition and magnification results in better outcomes and fewer side effects.

Screening parameters will be discussed as well treatment options. Preventative and causative factors will also be discussed. Myths and facts will be presented.



Richard Lee, MD, Board Certified in Urology
Chief of Urology and Director of Robotic Surgery at Englewood Hospital and Medical Center
Dr. Richard Lee graduated with honors from Cornell University in Chemistry. He then went on to medical school at The Mount Sinai/New York University School of Medicine in 1995. He remained at the Mount Sinai Hospital in New York for his internship in surgery and completed his urologic training there as well. He has experience in both adult and pediatric urology including the most up to date oncologic care. Dr. Lee was trained in advanced laparoscopic techniques and endoscopic procedures including laparoscopic nephrectomies, percutaneous kidney surgery and ureteroscopy.
Dr. Lee is an experienced and certified da Vinci Robotic Surgeon and Proctor. He performs many robotic procedures including prostatectomy, partial nephrectomy, nephrectomy, pyeloplasty and cystectomy. He is fluent in Spanish and Chinese. Dr. Lee is a board certified urologist practices in Englewood, NJ, and has privileges at Holy Name Medical Center in Teaneck and Englewood Hospital and Medical Center. He is the Chief of Urology and the Director of Robotic Surgery at Englewood Hospital. He has a special interest in minimally invasive surgery including advanced robotic surgery and laparoscopic retroperitoneal surgery. He mentors and teaches robotic techniques to surgeons nationwide.

Washington University Volunteers Experience the Care of Orphans with Birth Defects in Beijing

John Wang 王恩洲
Washington University in St. Louis
Paul Wang 王新澤
Private Practice in Internal Medicine,
Primary Care in Hackensack, New Jersey

With so many health care issues both in the US and around the world, it is inevitable for some important problems to be lost from our minds. One of these important concerns is the prevalence of orphans with birth defects needing operations in countries such as China. Today, many orphans in China are born with cleft lip, cleft palate, hydrocephalus, heart defects, and other medical conditions that require major operations and significant treatment. As human beings, we cannot abandon these children without giving them the chance for life. This presentation will profile one such organization that reaches out to help these orphans, called Half the Sky, which operates by connecting Chinese physicians, local nurses and aides, and American volunteers. We will explore the history of this organization and how it is able to provide care to these orphans and give them a second chance at life, even as they are left behind by the rest of the world in their forgotten corner of health care.

John Wang graduated from the Bergen County Academies in 2012 and is now a sophomore at Washington University in St. Louis. He is pursuing a double major in Anthropology (with a concentration in Global Health & Environment) and Biology, and plans to study medicine. He hopes to apply medicine to address health disparities and community development in the US, which he is exploring this summer through his internship at Health Leads in Chicago. At school, John is involved with Chinese Students Association, Global Brigades medical missions to developing countries, Calculus peer mentoring, and hospice volunteering at Barnes Jewish hospital. One of John's most cherished commitments is his involvement with Uncle Joe's Peer Counseling center, where he helps peers cope with issues such as grief, eating disorders, LGBT life, and depression.

Session 6
Sustainability and Protecting the Environment Session
永續性與環境保護研討會

CAAPS 2013 Annual Convention
August 25, 2013, Sunday
3:30 ~ 5:00 PM, 7th Floor, Diamond Conference Room

Organizer 召集人: Dr. Moses Chang, 張彰華博士
United States Environmental Protection Agency, Region 2, New York.

Chair 主持人: Mr. Jerry S.Y. Cheng 鄭向元
Retired Principal City Planner, NYC Dept. of City Planning
Former Deputy Director, Transportation Division, NYCDCP.

Speakers and Topics 主講人及講題:

America's Experience with Transit-Oriented Development
Mr. Jerry S.Y. Cheng 鄭向元 , Retired Principal City Planner, NYC Dept. of City Planning, Former Deputy Director, Transportation Division, NYCDCP.

Climate Change Impacts and Adaptation for the Water Sector in the Northeast United States.
Mr. Alexandre Remnek, Clean Water Division, United States Environmental Protection Agency, Region 2, New York.

New York-New Jersey Harbor & Estuary Program:
Restoring an Urban Harbor, Mr. Robert Nyman, Director, New York-New Jersey Harbor & Estuary Program, U.S. Environmental Protection Agency.

Organizer 召集人: Dr. Moses Chang 張彰華博士 received his B.S. in Fishery Science from National Taiwan Ocean University, and M.A. and Ph.D. in Biology from the City College and the City University of New York, respectively. His initial research interests were in the area of fishery, marine science, marine ecology, and ichthyology. His career in Region 2 of the U.S. EPA began in 1987. His major responsibilities include the implementation of the Clean Water Act Sections 301(h), 403(c) and 316 Programs in Region 2. These programs are related to ocean or thermal discharge impact assessment, water quality evaluation, biological including bioaccumulation monitoring development and analysis. In addition, Moses serves as EPA Region 2's representative on the EPA's Intake Structure Workgroup and Coral Reef Biocriteria Workgroup. Furthermore, as the Region's Aquatic Biologist, he is responsible for the biological evaluation, assessment, and played a major role in the region's decision-making processes related to the biological opinion, including issues on: marine aquaculture, coral reef, biological monitoring, fish bioaccumulation, essential fish habitats, invasive, threatened and endangered species. He taught environmental science related courses as a visiting professor in the Fishery and Environmental Science Department of the National Taiwan Ocean University and the National Kaohsiung Marine University in Taiwan since 2000, and 2005, respectively. He is an adjunct associate professor in the School of Earth and Environmental Science of the Queens College of the City University of New York since 2007.

Chair 主持人: Mr. Jerry S.Y. Cheng 鄭向元,
With over 37 years of experience in city planning and urban transportation planning, Mr. Jerry Cheng was a Principal City Planner with the Transportation Division of the New York City Department of City Planning when he retired in October 2008. Since 1971, he has managed more than 30 major planning studies for New York City, such as the Midtown Circulation and Surface Transit Study, the Lower Manhattan Transportation Management Study, the Express Bus Route Policy Study, the Commuter Van Service Policy Study and the Far West Midtown Transportation Study, Chelsea Transportation Study and Jamaica Transportation Study. He was the Deputy Director of the Transportation Division of New York City Department of City Planning between 1991 and 1996. Since 1982, Mr. Cheng has frequently been invited to provide assistance for the transportation development in Taiwan and Mainland China. In 1982, at the request of Taipei Mayor Teng-Hiu Lee, Mr. Cheng was officially lent by New York City Mayor Edward Koch to assist with Taipei City's transportation problems. From 1987 to 1988, he was the Science and Technology Advisor to the Ministry of Communication and Transportation, ROC. In addition to being an invited consultant to Taipei County and Kaohsiung City between 1983 and 1984, Mr. Cheng was also the advisor to the Department of Mass Rapid Transit of Kaohsiung City (1992 to 1993), the Bureau of Taiwan High Speed Rail (2001) and the City government of Taipei (1999 to present). He has also provided assistance to Shanghai City Comprehensive Transportation Planning Institute, Kunming Urban Planning and Design Institute and Shenzhen Urban Transport Planning Center in Mainland China. Mr. Cheng earned his B.S. in Civil Engineering from Cheng Kung University (1966) and M.S. in City and Regional Planning from Culture University (1968) in Taiwan. He also earned a M.S. in Urban Planning at Columbia University (1971) and a M.S. in Transportation Planning and Engineering at Polytechnic University (1982) in New York. At Polytechnic University, he completed his Ph.D. course work requirements for Transportation Planning and Engineering and passed the qualifying exam in 1987.

America's Experience with Transit-Oriented Development

Jerry S. Y. Cheng 鄭向元
Retired Principal City Planner, NYC Dept. of City Planning
Former Deputy Director, Transportation Division, NYCDCP
jerrysycheng@yahoo.com

For over the last two decades, city and transportation planners in the United States have recognized the problems inherent in automobile-centered growth, such as traffic congestion and environmental repercussions. In an attempt to address these issues, many American cities have begun turning to Transit-Oriented Development (TOD). More than 100 TOD projects currently exist in the United States, found overwhelmingly in and around heavy rail, light rail, and commuter rail stations as well as bus transit center. TOD is an important tool for sustainable urban development. It is a mixed-use community within walking distance of a transit facility that mixes residential, retail, office, open space, and public uses in a way that makes it convenient to travel on foot or by public transportation instead of by car. This will encourage transit ridership and reduce the ownership and use of private motor vehicles. With the increasing population density around transit facilities can capitalize on transit investment. TOD can also provide an alternative suburban living and working environments (an opportunity to live in the suburbs without being entirely dependent on the automobile) and neighborhood revitalization (a means of stimulating economic growth in blighted or declining areas served by rail or other transit). One of the reasons why TOD becomes popular is contributed to American environmental awareness after 90's. The awareness came with Sustainability. After 90's, American begins to rethink their life style, they begin to regard cars and suburban life as environmental-unfriendly style. Another reason is that American is becoming an aging society, whereas suburban style is not in fashion for the old people. It is also because there has been an increasingly common theme in zoning code reform across the country; incentive zoning through the newer zoning codes, which provide for and encourage the use of TOD by allowing increased density at transit facilities reform across the country.

Besides increased transit ridership and fare revenue, as well as reduced dependence on the automobile, the benefits of TOD can also include: reduced vehicle miles traveled (VMT) and therefore lowered regional congestion, air pollution and greenhouse gas emissions; improved access to job centers and economic opportunity for low-income residents. The good TOD examples in the United States are: The Far West Midtown plan and The Jamaica Rezoning Plan in New York; Hudson-Bergen Light Rail Extension Project in New Jersey and The Atlanta Beltline in George. The good planning tools for the successful TOD in the United States are: New Jersey's Transit Village Initiative; New York City's Density Bonus Program; Tax Increment Financing (TIF); Tax Allocation District (TAD) and Overlay Zone.

This presentation will also provide as a specific example the largest TOD in America - New York City's No. 7 Subway Line Extension and the Hudson Yards Development, a very unique and unusual case. Having the project's own funding source has been immensely important to bringing the construction of the No. 7 extension along on schedule so far. The $2 billion Extension is paid for by New York City funds from municipal Tax Increment Financing (TIF) bond sales that are expected to be repaid with property tax revenues from future developments (24 million square feet of new office space, 13,500 new housing units and 1 million square feet of new retail space) in areas served by the Extension. To promote the transit-oriented redevelopment of the Hudson Yards area, the Metropolitan Transportation Authority and the City of New York Department of City Planning had to work together. Without the No. 7 Extension, the major Hudson Yards Development will not be attractive to the developers. Upon construction of the No. 7 subway extension, nearly the entire Hudson Yards area will be within a ten minute walk of a subway station. Because the No. 7 subway line is a cross-town line that connects to nearly every other subway line, the Hudson Yards will become easily accessible for residents, commuters and visitors.

Climate Change Impacts and Adaptation for the Water Sector in the Northeast United States

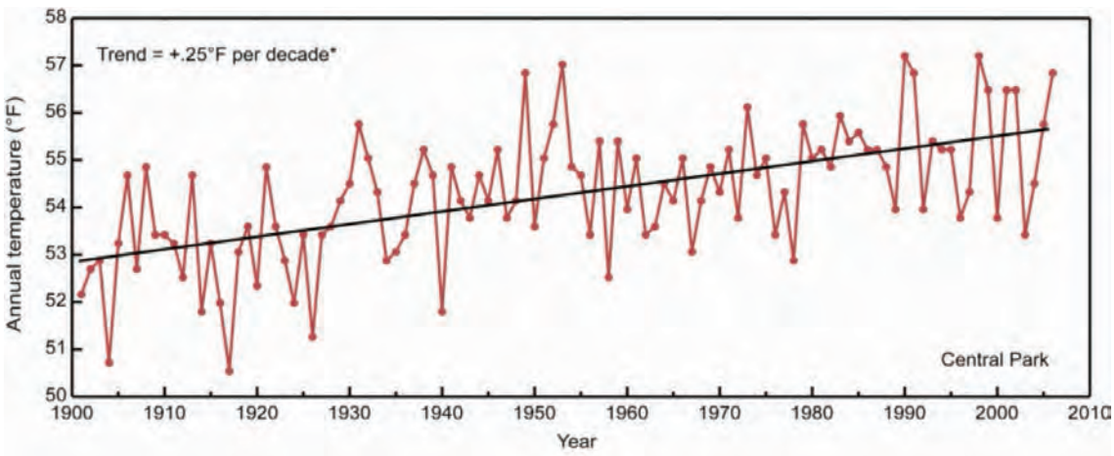
Alexandre Remnek
Clean Water Division
United States Environmental Protection Agency
Region 2, New York
Remnek.alexandre@epa.gov

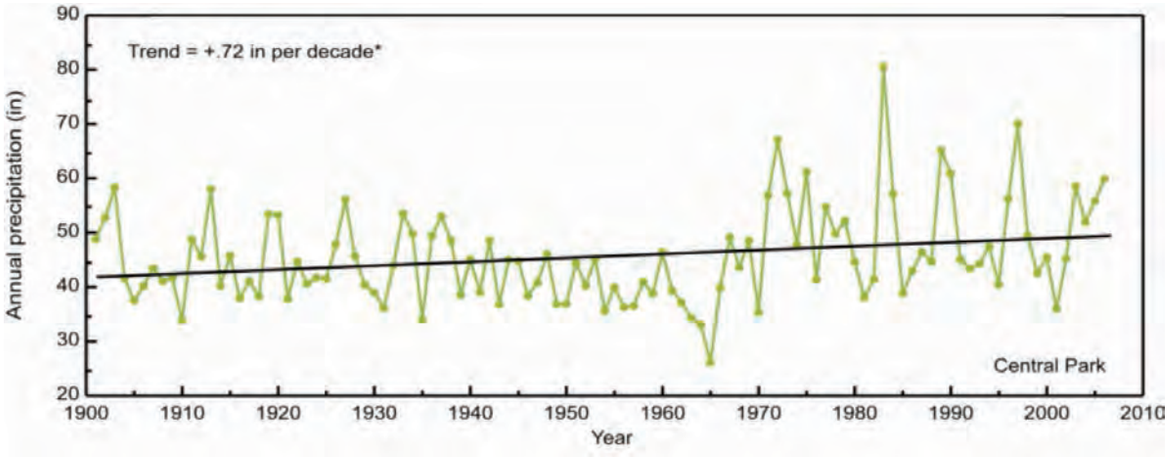
Climate change impacts and potential climate change scenarios will be introduced and planned and proposed adaptation activities to reduce impacts on watersheds, waterbodies, and water infrastructure in New York and New Jersey will be discussed.

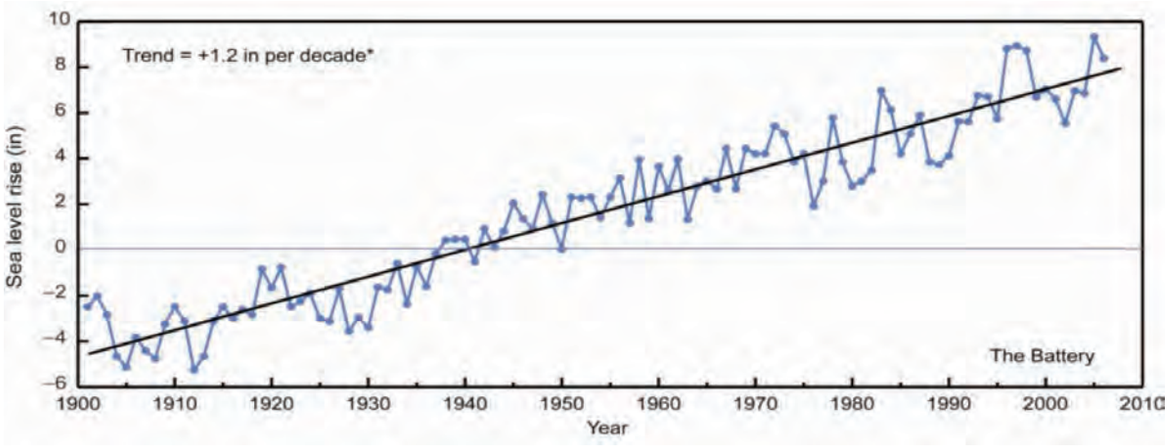
Currently CO2 concentrations in the atmosphere have increased from 280 ppm in 1800 to 400 ppm in 2013, and are projected to increase to between 550 and 900 ppm in 2100. This results in atmospheric changes and to what is commonly known as the Greenhouse Gas Effect, which have serious impacts on both the environment and infrastructure. This talk will examine current climate stresses, future climate projections, climate impacts, climate adaptation in New York City, New York State and New Jersey, and the aftermath of Hurricane Sandy. Current climate stresses

include extreme heat and heat waves, intense precipitation, mid-latitude cyclone (nor'easters), tropical cyclones and hurricanes and droughts. Temperatures in the region and globally have shown significant warming since 1970, the sea level has increased significantly during the 20th century at the Battery, and there have been historic storm events in the past few years. Currently, a 5 to 7 F increase in temperature, a 4 to 10% annual change in precipitation, and an 8 to 56 inch rise in sea level is predicted by the 2080s over current levels. This will have significant impact on ecosystems, water resources, environmental management and the design and management of our infrastructure. For example, barrier islands are being significantly altered due to erosion, overwash and new inlets created by strong coastal storms. Increased flooding from heavy rains has increased pollutants in the water supply and inundated wastewater treatment plants and other vulnerable developments in floodplains. Adaptation measures such as living shorelines, redesigning of water and wastewater treatment plants and stormwater conveyance systems, and drought management plans will be discussed.

Finally, the aftermath of Hurricane Sandy, which caused more than $50 billion dollars of damage to the Region, significant loss of life and hardships on inhabitants in the Tri-State Region will be discussed. However, Hurricane Sandy also placed a major focus on climate change adaptation as a priority for the Region, and significant progress in the public policy arena has occurred since the storm, including Mayor Bloomberg's $20 billion dollar flood prevention proposal and President Obama's climate change speech.







Observed climate in Central Park, New York City. Temperature data are not adjusted for urbanization effects. *Trend is significant at the 95% level. Source: NPCC, 2010.

References

[1] US EPA Climate Change Website. www.epa.gov/climatechange.
[2] United States Global Change Research Program. www.globalchange.gov
[3] Consortium for Climate Risk in the Urban Northeast. www.ccrun.org.
[4] NYSERDA ClimAID Report, www.nyserda.ny.gov/climaid.
[5] New York City Panel on Climate Change report. www.nyas.org.
[6] Rutgers University Climate Change Website. climatechange.rutgers.edu.

Mr. Alexandre Remnek currently is the Water and Climate Change Coordinator for the United States Environmental Protection Agency, Region 2. In this role, he works with EPA HQ and EPA Regional staff in developing climate change adaptation plans and programmatic activities. Mr. Remnek previously worked as an Environmental Engineer with the Hawaii Department of Health Environmental Planning Office on water quality and watershed studies. He has worked both as an environmental engineer on water quality with the US Environmental Protection Agency and an environmental and transportation engineering consultant in California. His international development experience includes working on community based natural resources management with the Central African Regional Project for the Environment and as a Water Resources Engineer with the Peace Corps in Thailand. He received a B.S. in Civil and Environmental Engineering from the University of California at Davis and a M.S. in Environmental Engineering and Biogeochemistry from Cornell.

New York-New Jersey Harbor & Estuary Program: Restoring an Urban Harbor

Robert Nyman, Director
New York-New Jersey Harbor & Estuary Program
U.S. Environmental Protection Agency

The New York-New Jersey Harbor Estuary is a complex ecological system with many competing demands located in the major urban center. It was designated as an Estuary of National Significance under the federal Clean Water Act in 1987. Since that time, the USEPA has lead a consortium of federal, state, and local agencies, as well as academicians, non-government organizations, and citizens in the development and implementation of a comprehensive restoration plan (www.harborestuary.org).

The program acts as a recognized forum for identifying and addressing priority issues that impact the health of the estuary. A few of the major issues that are being addressed include water quality, habitat restoration, public access, and stewardship. Evolving issues such as climate change and coastal resiliency are also becoming part of the conversation. While the program's geographic scope includes the entire Hudson River watershed below Troy, NY as well as the watersheds of the Raritan, Passaic, and Hackensack Rivers, the focus is on the urban core area.

The overall health of the estuary has improved greatly since the passage of the Clean Water Act 40 years ago. Yet there are ongoing problems with legacy pollutants in the sediments, aging wastewater and combined sewer infrastructure, habitat loss, invasive species, and limitations on public access. Much of this information is described in the 2012 State of the Estuary report (http://harborestuary.org/aboutestuary-health.htm).

Though on average pathogen levels have improved, reducing pathogen pollution further in the estuary is still a priority issue due to its potential to impact human health through recreational contact with the water and consumption of shellfish from the waters of the estuary. Mathematical modeling has shown that combined sewer overflows (CSO), and to a lesser extent storm water, are the primary sources of pathogens to the harbor.

The City of New York has undertaken numerous projects to control CSOs and to reduce the volume of water entering the system. The State of New Jersey is now addressing CSOs through revisions to their CSO permits to municipalities. Habitat restoration is being undertaken because of its ecological importance, but is now also being recognized as a potential tool in coastal resiliency. Important habitat features that are actively being addressed include wetlands, anadromous fish passage, oyster reefs, and heron breeding islands. Information on past restorations as well as potential future sites is being made available on-line. http://www.harborestuary.org/watersweshare/.

References

[1] A comprehensive restoration plan , www.harborestuary.org.
[2] The 2012 State of the Estuary report, harborestuary.org/aboutestuary-health.htm.
[3] Information on past restorations as well as potential future sites, www.harborestuary.org/watersweshare/.

Mr. Robert Nyman has been with the USEPA for over twenty years working on estuary and coastal issues. He has been the Director of the New York-New Jersey Harbor Estuary Program (HEP) since 1998 within the EPA Region 2 Clean Water Division. As Director, Mr. Nyman works with numerous government agencies, non-profit groups, academic institutions, and individual citizens to implement HEP's Management Plan. Because of this broad participation, HEP acts as a forum for technical, management and policy discussion. Mr. Nyman has a Master of Science degree in Marine Science from the State University of New York at Stony Brook.

賀錢煦錢前會長受頒 卓越 終生成就獎

CAAPS July 25, 2013

Dear Professor Chung and Dr. Tseng:

I have received the announcement of the forthcoming 38th Anniversary Convention of the Chinese American Academic and Professional Society (CAAPS). Please accept my warmest congratulations for achieving this milestone. I wish you the best in your celebrations in New York City next month.

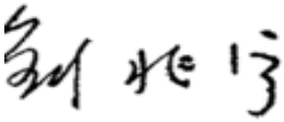
During the past 38 years, CAAPS has succeeded admirably in bringing together like-minded Chinese-Americans in the academic and professional world from a variety of disciplines and backgrounds, transcending geographical boundaries. It is particularly gratifying to see the increase in activities in the past few years. It is of much importance to the CAAPS that the society has been able to attract young academics and professionals in recent times. As an organization, CAAPS is in great shape, due to the dedicated efforts of the Board and the members over the years.

I have seen the theme of this year's Convention, "Technology and Education." I believe it should be a wonderful meeting both technically and socially.

My hearty congratulations to Dr. Shu Chien, the recipient of the Distinguished Lifetime Achievement Award. I can think of no one more deserving.

Please pass on my personal best wishes to the Board members, organizers of the 38th Annual Convention and all who have contributed so significantly to the upcoming Convention.

Sincerely,



C. N. Liu 劉兆寧

一九八七美東華人學術聯誼會會長

美東乃美國之東主.美東是美國學術的發源地,有最古老的也有最先進的學府.華人如今遍布全美,但是其精英人數仍以美東為首.中國城也是在美東最多和最老.華人移民美國人數不斷增加,東西兩岸華人最多,但是從事學術工作的和職有專業的又以美東居首.所以美東華人學術聯誼會是一個極重要的組織;它不但是一個華人學術專業人士的一個聯誼機構,它更負有重大的職業使命,從促進國際社會文化的和諧交流進步到推動政治經濟科學教育醫療生化藝術環保通訊交通金融建築等領域專業化互切互磋.這個宗旨和任務是歷屆美東華人學術聯誼會所要履行的;而其能達到的成果就在于學術聯誼會的會員和領導的努力和合作了.

歷屆美東華人學術聯誼會都有它的主題,邀請各界人士參加大會.美東曾經有遠見地請過未來的中華民國的總統來演講也曾經有見識地請了許多未來的科學家企業家來發表過專題報告.美東華人學術聯誼會已經有了三十八年的歷史了,在本屆表揚我們敬愛的錢煦錢(前)會長的時候,也讓我們來鼓勵我們的這個學會繼續遵循我們的宗旨和任務來為我們的中美會員服務,為美中兩國的學術交流搭橋,及為兩國各學術領域的和平共贏合作鋪路.

張一飛

一九九二美東華人學術聯誼會會長

寫于三十八屆美東華人學術聯誼會前

美東華人學術聯誼會是一個歷史攸久的非營利組織，源始於1974年由一群旅居美東地區，熱心社區的學者和專業人士所組成。經過多年經營，已成為在美國深具影響力的華人學術及專業社團之一，許多學術及政商名流皆曾為本會會員或座上賓。而我與美東學聯結緣是在1990年代初參加學聯年會開始，至今已有二十餘年。早在2002 年時，承蒙曾令寧會長邀請擔任學聯副會長。之後，我分別於2004 年擔任會長以及在2008 年擔任董事長。期間並擔任學聯董事多年，一直致力於社區的服務，同時也為提升學聯專業、及擴展會務而努力。為使本會能更有效率的與廣大各界資訊交流，以及擴展學聯知名度，本人於 2005 年創建美東學聯網站 (www.caaps.us)。由於對學聯稍具貢獻，並承蒙會友厚愛推舉，曾獲頒學聯服務獎及學聯楷模獎。這些獎肯定了我努力成果，也鼓勵了我繼續擁抱熱誠為學聯效力。

在多年積極參與學聯活動中，獲得許多為人處事的寶貴經驗，增廣見聞，受益匪淺。
本會的專題寬廣而深入，舉凡尖端科技到個人養生、國際局勢到地方建設、政治財經、教育文化等包羅萬象。我也因緣際會結交了很多各個領域的專業好友及社會賢達，利人利己，何樂不為。在此真誠的與各位分享，也藉此鼓勵更多有志青年朋友加入學聯行列，發揮你們的創意，實現你們的理想，讓我們一齊努力，讓學聯更加茁壯發光永續發展！

最後謹祝2013年學聯年會成功，會務蒸蒸日上！

林豐堡 2013年8月

恭祝 美東華人學術聯誼會全體董事、理事及全體會員
在學術上屢有突破，在專業上續有成就，共同為社會進步及福祉做出貢獻。

林友直
一九八八美東華人學術聯誼會會長

Source: 世界日報二〇一一年十月二十五日美東版

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美東華人學術聯誼會董事會

錢煦

美東華人學術聯誼會於十年前在紐約成立。其宗旨爲：㈠促進會員在學術及專業方面之活動，合作及聯誼。㈡鼓勵會員間交流、加強及應用其技術專長，以期增進科學知識與人生意義。㈢促進在美華人與其他種族以及他處華人社會間之了解與聯繫。

根據會章，本會組織包含董事會及理事會。董事會爲決策機構，理事會爲執行機構。本會成立之初，董事有李宗正、林國本、全泰勳、谷家泰、傅萍、童世綱、冉憲雲、熊玠、汪榮安、莊懷義、崔岦、高資敏等諸位，由李宗正任董事長，此後數年間有數位董事因返國服務或遷離美東而請辭，其缺額由董事會補選。但最初會章並未明定董事任期，故並無固定任滿退任、新選董事制度。

五年前宗正兄返國服務，承董事會推煦繼任，董事會在宗正兄領導之下，一切進入軌道，故明定董事任期之時機已成熟，由董事會推請熊玠兄主持修改會章，規定董事任期爲每任三年，此修正會章經董事會及全體會員通過後，在去年開始執行。承傅萍、熊玠、崔岦、全泰勳、會燕山五位董事自願任滿退休，以致新會章所訂選舉方法得以實施，除會燕山兄連任一期外，並選出丘宏達、呂仲濂、余英時、劉兆寧四位董事及其任期如下：

錢煦、朱榮慶、高資敏、高雙英、陳大威（以上五位任期至一九八四年底）。

何瑜笙、汪榮安、虞華年、鄭向元、嚴倚森（以上五位任期至一九八五年底）。

丘宏達、呂仲濂、余英時、曾燕山、劉兆寧（以上五位任期至一九八六年底）。

在過去五年中，承各位董事鼎力賜助，感激無比。會務在歷任會長嚴倚森、曾燕山、全泰勳、虞華年諸兄領導之下，及歷屆理事會友熱心服務合作，得以推進。本屆通訊刊物承虞會長、粟慶雄博士及陳琅予先生精心籌劃，至爲敬佩，謹此代表董事會致感謝之忱。

虞華年赴台講學

本會會長虞華年博士，於本年八月下旬左右，被邀請赴台灣工業技術研究院電子研究所講學一週，將於九月八日前返回美國。虞會長係我國留美電子學著名權威學者之一，現在美國紐約萬國電腦公司，擔任研究部主任。在其講學之餘，可能爲本會一九八四年十一月間舉行年會時，邀請主講人來美演講事，將有所接洽。

中央研究院院士會議

錢煦、鄒至莊、許倬雲、余英時、將返國參加

一九八四年，中央研究院院士會議，已預定在十二月十九日至二十二日於台北南港中研院舉行，中研院院士共有九十九人，每兩年舉行一次院士會議。據中研院預告，本年海外院士表示願意返國參加第十六次院士會議者，約有四十九人，以後可能尚有增加，其中頗多爲國際間著名學人及獲得諾貝爾獎金之教授，如丁肇中、李政道兩人，皆爲諾貝爾獎金之得主。國際著名學者如吳健雄、袁家騮夫婦，以研究生長激素著名的李卓皓，著名的生物學家錢煦，經濟學家鄒至莊，語言學家張琨等均將出席，同時國內院士有廿五人，屆時亦將參加，預料出席院士將有七十餘人。本會董事長錢煦博士及會員鄒至莊，均爲中研院院士。鄒至莊博士現任教著名普林斯頓大學，主講經濟學課程，本年十一月十七日本會舉行年會時，將演講「海峽兩岸之經濟比較」，必有精闢之見解與分析。

雷根總統電賀
熊公哲教授九十誕辰

本會理事熊玠博士之尊翁　熊公哲教授於本年八月廿九日爲其九十誕辰。美國總統雷根及第一夫人南茜曾致電函祝賀，其原文如下：「南茜和我均樂於在閣下的生日表示我們的賀忱。我們希望閣下的這個特別日子，充滿溫馨與歡樂。並希望你快樂的享受未來的歲月。洛納德．雷根。」熊公哲教授爲中華民國著名之孔學大師，自一九三九年起，即在政大前身之中央政治學校任教，去年春間，因心肌梗塞症住院，出院後便辭去政大中文研究所博士班的教職。此次熊大師生日，由其五位公子及一位女公子出面，已於八月二十二日，除老四熊璟外，均分別自美國、泰國工作地趕回台北，向其父親祝賀生日。

感謝鄭向元前董事長提供年刊編輯部美東華人學術聯誼會通訊創刊號（鄭向元 會長: 1994, 董事長: 2000, 2010, 2011)

美東華人學術聯誼會

Chinese American Academic & Professional Society (CAAPS)

Celebrating 38th Anniversary

Advisors to President

Yue J. Lin 林友直　　Moses Chang 張彰華

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Lida Chen 陳立大
Jennifer Tung 童惠珍
Shiang-K Wang 王向葵
David Kwang 鄺迺智
Mengxi Cao 曹夢晰

Entertainment Program 娛興節目

Organizer 召集人：

蕭醒華 Sarah Chung　Host:　主持人：

來音合唱團: 王惠津老師指揮，吳同良團長

原是一群愛唱卡拉OK 的朋友，跟隨王惠津老師學唱多年, 其樂融融。在許多學生的期望之下，王老師在1998年3月於紐約成立了來音合唱團。王老師有無數的教唱合唱團經驗，其中著名的有，她曾是台北市立交響樂團合唱團的指揮，華視兒童合唱團的創始人，也是中視兒童合唱團的指導老師。來音合唱團在王老師的領導下，連續多年在紐約的國慶酒會上獻唱，也應邀參加各大專院校校友會的晚會表演留下許多美好的回憶。於2004 年更代表美東回台參加 ”全球華僑合唱比賽” 榮獲全球亞軍。

表演 曲目： 合唱: 回憶、相思雨、白雲歌　女聲二重唱: 秋蟬、夢田

新亞室內樂協會

Kelly Yu-Chieh Lin is a sought-after young pianist, who began her musical studies at an early age on the piano, violin, viola, and er-hu (a traditional Chinese instrument). In 1996 she was the first-place winner at the Chinese- American Piano Competition in Los Angeles. After that, Miss Lin constantly won top prizes and awards at different Piano Competition and Music Festival. Miss Lin is pursuing her Doctorate of Music Art with Daniel Epstein at Rutgers University, where she received full scholarship with a teaching assistantship, while balancing a busy schedule as an opera coach, an instrumental accompanist, a piano teacher, and a chamber musician.

Kevin Shue, Taiwanese-American violinist, hailed by Anthony Tommassini of the New York Times as **"promising violinist with rich, full sound, true musical sensitivity and considerable techniques."** Mr. Shue has presented performed as soloist at venues such as Carnegie Hall and Lincoln Center to sold-outsuccess. In June of 2008, Mr. Shue performed for the President of Philippines under the invitation of the United Nations. His upcoming engagement will include performances in the Smithsonian Institute in Washington D.C and Millersville University in Pennsylvania.

Wei-Yang Andy Lin, recognized as one of the most promising young violists of today, is currently a Doctoral Candidate at the Stony Brook Univsity of New York and holds his Bachelor and Master's Degrees from The Juilliard School. Mr. Lin has won numerous competitions including Taiwan National Viola Competition, the Idyllwild Concerto Competition, Top Prize in the 2008 Juilliard Viola Concerto Competition and subsequently made his Avery Fisher Hall solo debut with the Juilliard Orchestra under Maestro Stefan Sanderling playing Penderecki's Viola Concerto. As the winner of the 2009 Stony Brook University Concerto Competition he performed the Walton Viola Concerto with Stony Brook Symphony Orchestra.

Nan-Cheng Chen, an international award winning cellist, is passionate-about sharing music with music lovers. Recently praised for his **"Beautiful Tone" by New York Concert Reviews.** Nan-Cheng has earned Bachelor Music and Master of Music degrees from The Juilliard School. Highlights of Nan-Cheng Chen's upcoming engagements includes a solo debut in Vienna, Austria in September, and over 60 solo and chamber concerts at other U.S. venues such as Carnegie Hall, Lincoln Center's Alice Tully Hall, Symphony Space, Juilliard School's Paul Hall, WMP Concert Hall, as well as collaborations with Peridance Company, NaiNi Dance Company, New York Composer's Circle, Ensemble 212 and Taiwanese Consulate of New York.

表演 曲目:

茉莉花	中提琴主奏／鋼琴, 小提琴, 大提琴伴奏
梁祝 鋼琴協奏曲-	鋼琴獨奏
雨夜花 -	大提琴主奏／鋼琴, 小提琴, 中提琴伴奏
二泉映月 -	二胡獨奏
望春風 -	小提琴主奏／鋼琴, 中提琴, 大提琴伴奏

女聲獨唱： 李佳玲 Christine Lee

鳳凰于飛、I could have dance all night

百老 滙 歌劇演唱

All I ask of you: 王惠津、吳同良

Good Night

Chien Family: Shu, Mother, Father, Brothers Fred and Robert at home in Taipei. 1953

K.C. & Shu, Columbia Commencement, June 1957

Met Kuang-Chung (KC) Hu (胡匡欽) at NTU College of Medicine

Most Important Event in Life!

Life and Science
科學與人生

A Case History and General Thoughts

Shu Chien, M.D., Ph.D.

Departments of Bioengineering and Medicine, and
The Institute of Engineering in Medicine
University of California San Diego, La Jolla, CA

Chinese American Academic and Professional Society (CAAPS)

Taipei Economic & Cultural Office in New York

May 17, 2012

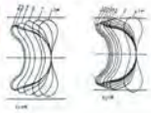
With daughters May and Ann, 1961

Columbia Physiology 1960

Brånemark, Skalak and Chien

Red Blood Cell Deformability

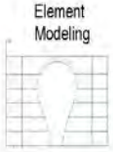
R. Skalak and P.-I. Brånemark,
Science 164:717-9, 1969.



Modeling of
RBC deformation

Red Blood Cell Aggregation

Experimental Studies

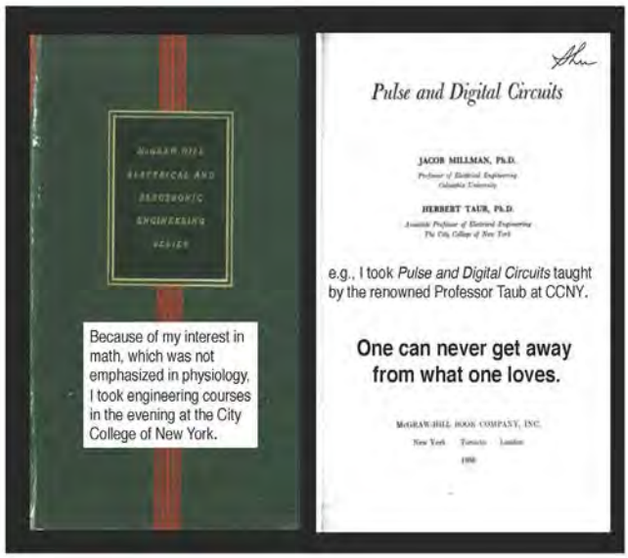


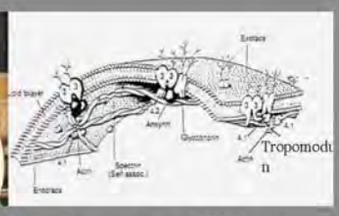
Finite
Element
Modeling

Theoretical Modeling

Division of Circulatory Physiology and Biophysics,
Columbia University College of Physicians & Surgeons, 1978

Sheldon Weinbaum and Shu Chien





Elvin Kabat, Amy Sung, & Shu Chien **Molecular organization of RBC membrane**

Biological Experimentation
and theoretical modeling

Jan. 1987-June 1988: Went to Academia Sinica in Taiwan to establish the Institute of Biomedical Sciences (IBMS), which is now a leading institution in the Far East.

Receiving Found e r s Award from National Academy of Engineering (NAE), 2006
美國工程師學院創始者獎

NAE honors one member per year who has upheld its ideals and principles through professional, educational, and personal achievement & accomplishment.

Receiving Presidential Science Prize from Pres. YingJeou Ma, December 2009.

How to Succeed in Scientific Career?

Direction	Adaptability
Learning all the time	Breadth and Depth
Pursuit of excellence	Do the best we can
Aim at success	Accept failure & learn from it
Challenges-Opportunities	Optimism
Collaboration - People	Give & take 60/40
Service	Big Self, Small Self
Time management	Optimization & Balance
Passion, Love	Dedication
Perseverance	Completion

Receiving National Medal of Science from President Obama at the White House on 10/21/11