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Address:
Department of Statistics,
The Chinese University of
Hong Kong, Shatin, N.T.,
HKSAR

Phone: (852) 3943 7931

Fax: (852) 2603 5188

Email:
statdept@cuhk.edu.hk

Website:
www.sta.cuhk.edu.hk

Message from the Chairman

Dear Alumni and Friends,

Welcome to this issue of the Newsletter. Last year was a year of changes. The University admitted its double cohort, and the Faculty of Science started a broad-based admission scheme in which the undergraduate statistics programme took part. I am pleased to report that these missions have been achieved seamlessly with the concerted effort from the faculty, staff, and alumni. I would like to thank everyone for helping during this transition.

Over the past decade, we have witnessed many changes and much growth in the University and the Department. After almost a decade, the Department has a new chairman in the person of Professor Qi-Man Shao. Professor Shao is a world-renowned probabilist and statistician who joined the Department in September 2012. He assumed the chairmanship starting January 1, 2013. More on the vision and mission of Professor Shao can be found on page 2. Do join me in welcoming him aboard. I am certain the Department will rise to a new level of excellence under his leadership.

Finally, I would like to thank everyone for their unequivocal support in the past 10 years. Without your contribution, the Department would not have been able to achieve its current status. Working with you for the last 10 years has been a privilege and honor. I sincerely hope that you will continue to render your support to Professor Shao in the next decade or so.

I wish everyone a healthy and prosperous 2013!

Ngai Hang Chan
Chairman and Professor of Statistics



邵教授於杭州大學取得統計與概率理學士及理學碩士學位，其後在中國科技大學取得統計與概率哲學博士學位。1987年，邵教授在杭州大學任教，其後到加拿大卡爾頓大學當訪問研究員，後轉到美國辛辛那提大學當博士後。1992年，邵教授到新加坡國立大學任教，四年後到美國俄勒岡大學。2005年他來到香港，在香港科技大學任教。2012年9月加入香港中文大學，2013年1月1日正式上任為香港中文大學統計學系系主任。

你為何選讀數學、統計、概率？有什麼因素影響你唸這些科目？數學和統計有什麼引人入勝之處？

我讀高中的時候，數學、物理、化學的成績是差不多的，但高考的時候數學考得特別好，而且我對數學也蠻有興趣，因此就選了數學專業了。

我覺得讀數學是挺有意思的。當年唸大學，我未有打算將科目跟職業接合，特別是因為我是從農村出來的，當時的想法是如果畢業後能夠在工廠裡找到一份工作也蠻好了。

我於1979年進杭州大學，當時學校找了最好的老師來教我們，師生關係很好，每遇到問題學生都可以找他們學習學習，學術氣氛很開放。那時候，有幾個老師組織了各個方向的興趣小組，我參加了陸傳榮老師的概率論興趣小組，從而開啟了我對概率論的研究興趣。我寫的第一篇文章就出自於這個興趣小組。一年後，我被錄取為陸老師的碩士研究生。

你的工作經歷很豐富，曾在新加坡、俄勒岡執教，之後你轉到香港科技大學任教。你為何會選擇在香港工作？

我碩士畢業後在杭州大學工作兩年，然後到中國科技大學修讀博士學位。完成博士學位之後再回到杭州大學工作，隨後到加拿大做訪問研究員，到美國辛辛那提做博士後研究。1992-96年我在新加坡國立大學任教，隨後到美國的俄勒岡大學工作大約有12年時間。

來到香港的原因，是我覺得香港跟內地比較近，是中國的一部分。也因為我比較習慣東方文化，香港本身是一個東西文化交匯的地方。至於授課方面，其實在科技大學或是在俄勒岡大學都沒有太大分別，授課語言也是英語。

作為本系的系主任，你希望本系在教學、研究和學術連繫等方面怎麼發展？

我覺得統計系的課程開辦得挺好，既有完整的本科生課程、哲學碩士及博士課程，也有兩個自負盈虧的碩士課程。在教學方面，我們會檢視怎樣把本科生和研究生課程辦得更好，有沒有空間開設新課程，開設新專業。特別在新學制下，怎樣把學生吸引到統計系，我們會加強宣傳統計的應用，讓學生知道統計是非常有發展前途的。

至於招收研究生或博士生方面，我們會加強與內地的聯繫從而把好的學生吸引過來。我們考慮在研究生和博士生裡評選 Best TA（最佳助教），這樣既可以肯定他們對教學工作的付出，也有利於他們畢業後找工作。

學術連繫方面，我希望未來能多辦一些學術活動來加強與外地大學的聯繫，提高我們系在國際上的影響力。在校內方面，我希望能與其他學系或學院加強合作，使統計廣泛被應用到其他學科上。

你對這所大學有什麼感覺？

這校園挺漂亮，有時候我需要到深圳轉機到內地各城市，從這裡到深圳挺方便的。

至於學生方面，本科生我暫時還未有機會跟他們談談。研究生我則比較熟悉一點，但將來成為系主任以後一定找更多機會聽聽他們的意見和建議。

中大和科大有什麼不同？

中大跟科大都是本地很好的學府，最大的區別是中大有統計系。擁有獨立的統計系對統計的發展肯定有很大的好處。至於其他方面我則沒感到有特別大的區別。

除了教學和研究工作，你還擔任多個委員會的委員，也是多份學術刊物的編輯委員，當了系主任以後，也有很多系務需要處理，忙碌可想而知。你如何管理時間？如何在工作與生活上取得平衡？

確實比較忙碌，有時覺得時間不夠用。一般來說，我會把工作分類，比如我一般會集中時間處理稿件，然後忙其他的事務。至於系務工作我則會邀請其他同事一同幫忙了，這個系屬於每一位同事。

90後經常被批評為自我中心與缺乏責任感。你對這群年青人有何看法？

我不太認同他們是自我中心，每個人本身生活的環境不一樣，想法一定會有所不同。我會尊重每個人的想法。但當某些做法會影響別人的時候，就當考慮別人的感受，也該尊重其他人的想法。每個人都要對自己做的事情負責任。

可否對我們的校友及學生作出一些寶貴建議？

我希望他們能夠對課程作出一些反饋，譬如在課程安排上哪些是可以改進的，也希望他們能分享畢業後的工作經歷。我會聆聽每一個人的聲音，希望大家能共同參與，把統計系辦得更好。

— 完 —

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Statistics Alumni Association

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第二屆校友會落莊了!

感謝各位校友支持，第二屆統計學系校友會已圓滿卸任。回顧過去兩年，校友會致力在以下三個範疇舉辦活動：

校友聯誼

活動包括：燒鵝遠足半日遊、校友碌LANE同樂日、情人節甜品班。畢業後仍能和同學聯繫，於假日放下工作，與舊朋友打成一片，歡聚一番，此乃人生一大樂事。校友會推動校友聯誼活動，為校友增添歡樂。



輔導學弟妹

活動包括：
Interview Workshop 2011 & 2012
學長對學弟學妹的前途非常關注。校友會舉辦了就業講座、模擬面試和撰寫履歷表工作坊。學長既能指導學弟學妹，又可促進不同年份校友的互動。

統計學系三十週年

活動包括：
統計學系三十週年校友晚會
去年適逢統計學系三十週年慶誌，校友會舉辦晚會讓歷屆校友為母系慶生，也令各屆校友聚首一堂。



本屆校友會感謝各位教授及會員校友的無私支持，也藉此寶貴機會祝願第三屆校友會會務順利，事事稱心如意。

校友會聯絡辦法： Website: alumni.sta.cuhk.edu.hk

Facebook: www.facebook.com/custaaa

Email: alumni@sta.cuhk.edu.hk

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Awards 2012

Professor Chan Ngai Hang is the recipient of the Research Excellence Award 2011/12. The objective of the Award is to provide a long-term, overall positive effect on promoting research excellence at the University. In addition, Professor Chan has been awarded the Choh-Ming Li Professorship in recognition of his distinguished scholastic performance.



Professor Wong Hoi Ying was awarded the Faculty Exemplary Teaching Award 2010-11.



Congratulations to Professor Chan and Professor Wong !

Admission Highlight for the Academic Year 2012-13

Programmes	STAT	RMSC	QFRM	MPhil in Statistics	MPhil in RMS	MSc in Data Science and Business Statistics	MSc in Risk Management Science	PhD in Statistics
No. of new Students	48	20 (3-Year curriculum) 17 (4-Year curriculum)	13 (3-Year curriculum) 13 (4-Year curriculum)	3	7	29	33	6

Scholarships

Scholarships have been given to the following students in recognition of their outstanding academic performance

ADVANTAGE TRUST STATISTICS SCHOLARSHIP

Name	Major	Year	Amount (HK\$)
Mr. Chan Kin Wai	RMSC	2nd	\$2,000
Mr. Chan Sing Yan	RMSC	1st	\$10,000
Mr. Fu Beavis	RMSC	4th	\$2,000
Mr. Ho Shing Yan William	STAT	1st	\$10,000
Mr. Hui Tsz Shing	STAT	3rd	\$2,000
Mr. Kwok Kai Yin	RMSC	1st	\$10,000
Mr. Lai Sai Yu	STAT	2nd	\$2,000
Mr. Leung Kam Tat	STAT	3rd	\$2,000
Mr. Ma Ting Fung	STAT	4th	\$2,000
Ms. Tang Tsz Ki	RMSC	3rd	\$2,000
Ms. Wong Pui Man	STAT	1st	\$10,000
Mr. Wong Wing Nung	STAT	2nd	\$2,000
Mr. Yau Yu Fung Barry	STAT	2nd	\$2,000
Mr. Yiu Chi Chiu	STAT	1st	\$10,000
Mr. Zhou Jialei	RMSC	2nd	\$2,000

TO CHO FONG STATISTICS PRIZE

Name	Major	Year	Amount (HK\$)
Ms. Lee Mei Wah	STAT	2nd	\$3,300

Personalia

- ★ Professor Shao Qiman (邵啟滿教授) has joined the department as Professor since 31st August, 2012. Professor Shao received his BS and MS in Statistics & Probability from Hangzhou University, and his PhD in Statistics and Probability from University of Science and Technology of China. He has assumed the chairmanship of the Department of Statistics with effect from 1st January 2013.
- ★ Dr. Lee Pak Kuen Philip (李伯權博士) has joined the department as Lecturer since 3rd July, 2012. Dr. Lee received his MS in Statistics and PhD in Statistics from Carnegie Mellon University. He got his BSc and MPhil in Statistics from the Hong Kong University of Science and Technology.
- ★ Dr. John Alexander Wright has joined the department as Lecturer since 1st August, 2012. Dr. Wright received his PhD in Financial Mathematics from the University of Hong Kong. Before that, he got his BA in Mathematical Sciences with First Class Honours from the University of Oxford, and MAST in Mathematics from the University of Cambridge.
- ★ Dr. Ng Chi Tim has resigned from the department as Instructor with effect from 1st July 2012.

Annual Dinners

Master of Science in Data Science and Business Statistics Programme

The Annual Dinner of the MSc in DSBS was held on 4th February 2012 at Hyatt Regency Hotel, Shatin. 92 persons attended the event including teaching staff, guest lecturers, students and alumni. Prizes and Certificate of Excellence were presented to the eight 2011 graduates with outstanding academic performance.



Master of Science in Risk Management Science Programme

The Annual Dinner of the MSc in RMSC was held on 18th May 2012 at Royal Plaza Hotel, Mong Kok. 70 persons attended the event including teaching staff, guest lecturers, students and alumni. Awards were presented to the six 2011 graduates with outstanding academic performance.



Recipients of Academic Excellence Award

- YEUNG Ming Yan
- HAU Pui Chi
- KWAN Chi On
- LAM Ching Yu
- YIP Wai Hung
- LEE Wing Yan
- LUI Ka Wai
- NG Ho Fai

Recipient of the Best Student Award: LING Ka Kin

Recipients of the Academic Excellence Award

- CHUNG Kwun Wa
- FONG Yuk
- TAM Ho Man Herman
- WONG Siu Shan
- CHAN Kam Chuen

Teaching and Learning

In 2011/12, the Department has conducted the programme light review for three undergraduate programmes and a Programme review for the MSc in Risk Management Science. The programme light review aims at following up the action plan that have been addressed in the programme review, and to enhance the programme design of 334 curriculum for each individual programme.

The results of the light reviews are very encouraging. The light review panel is impressed with the good progress on the action plans and the responsiveness to follow up the recommendations of the programme review panels on the RMSC and STAT Programmes. Regarding the programme design, the light review panel considered that all three

Programmes: RMSC, QFRM and STAT are good, with an exemplary area in the variety of learning activities offered to students.

Likewise, the review result of the MSc in RMS Programme is also very encouraging. The Programme is considered excellent and is commended as a leading Risk Management Science programme that enjoys a good reputation with practitioners in industry.

Computers Upgraded

To further enhance the teaching and learning environment for our students, the computers and server were upgraded in summer 2012.

SEMINARS

The department organized a number of regular seminars in 2012. Some of them are listed below. For seminar abstracts or past seminars, please visit our website at <http://www.sta.cuhk.edu.hk/Dept/Seminar/Seminar.htm>

DATE	Speaker	Title
January 10, 2012	Professor Keiji Nagai Yokohama National University	Sequential Unit-Root Tests
January 11, 2012	Professor T. Tony Cai University of Pennsylvania	Statistical Inference on Covariance Structure and Sparse Discriminant Analysis
January 16, 2012	Professor Ling Shiqing Hong Kong University of Science and Technology	Estimation of Change-points in ARMA-GARCH/GARCH and General Time Series Models
January 17, 2012	Professor David A. van Dyk Imperial College London	Accounting for Calibration Uncertainty in High Energy Astrophysics via the Partially Collapsed Gibbs Samplers with MH updates
January 18, 2012	Professor Junyi Guo School of Mathematical Sciences Nankai University	On the Dividend Problems of the Dual Model
January 19, 2012	Professor Zhou Wang National University of Singapore	Smoothed Empirical Spectral Distribution of Sample Covariance Matrices
January 31, 2012	Professor Peng Liang Georgia Institute of Technology	Empirical Likelihood Methods for High Dimensional Data
February 2, 2012	Professor Shao Qiman Hong Kong University of Science and Technology	Testing for Independence and m-Dependence in High and Ultra-High Dimension
February 7, 2012	Professor Zhu Lixing Hong Kong Baptist University	Could Linear Method Solve Nonlinear Problems?—A New Attempt in Regression Estimation
February 8, 2012	Professor Ye Qian, Kenny Albert Einstein College of Medicine	Genotype Copy Number Variations using Gaussian Mixture Models: Theory and Algorithms
February 14, 2012	Professor Zhao Xingqiu The Hong Kong Polytechnic University	Efficient Estimation for Semiparametric Partially Linear Varying-Coefficient Model with Panel Count Data
March 6, 2012	Professor Katsuto Tanaka Hitotsubashi University	Distributions of Quadratic Functionals of the Fractional Brownian Motion Based on a Martingale Approximation
March 19, 2012	Professor Jun Zhu New York University	A Probabilistic Framework for Integrating Multi-omics Data
April 3, 2012	Dr. So Moon Tong City University of Hong Kong & HKU SPACE Community College	Illustrations of Application of Informational Criteria for Statistical Model Selection
April 10, 2012	Dr. Lee Pak Kuen, Philip The Chinese University of Hong Kong	The Generalized Lambda Distribution Applied to Spot Exchange Rates
April 12, 2012	Dr. Leung Chi Man The Chinese University of Hong Kong	The Pricing Problem of European Option
May 2, 2012	Dr. John Alexander Wright The Chinese University of Hong Kong	Enlargement of Filtration on Poisson Space and Some Results on the Sharpe Ratio
May 8, 2012	Professor Masanobu Taniguchi Waseda University	Jackknifed Whittle Estimators
May 15, 2012	Professor Yuhong Yang University of Minnesota	Adaptive Minimax Estimation over Sparse lq-Hulls
June 5, 2012	Professor Yoshihide Kakizawa Hokkaido University	Asymptotic Expansions for Several GEL-based Test Statistics
July 12, 2012	Professor Kenneth A. Bollen University of North Carolina	A General Panel Model with Random and Fixed Effects: A Structural Equations Approach
September 25, 2012	Professor K.C. Gary Chan University of Washington	Multiple Model Assisted Estimation of Average Treatment Effect: Robustness, Best Linear Model Averaging and Oracle Semiparametric Efficiency
October 16, 2012	Dr. Chi Chung Siu Tokyo Metropolitan University & University of Technology, Sydney	First Passage Time under Regime-Switching Jump-Diffusion Process
November 27, 2012	Prof. J.K. Woo The University of Hong Kong	Discounted Compound Renewal Sums Under Dependency
December 11, 2012	Professor Takashi Shibata Tokyo Metropolitan University	Investment Timing, Debt Structure and Financing Constraints

Internship

Albert Chi

The first five months of year 2012 has certainly been a wonderful journey for me, when I completed the internship program in the Financial Services Risk Management Department (FSRM) at Ernst and Young. It was a great opportunity to grab a peek at how the financial market functions and I am glad I was able to contribute to the team's efficiency with my knowledge and vision.

In FSRM, my job mainly involved two parts. The first part was about derivatives valuation. Every year auditors in Ernst and Young will review and audit the clients' financial statements. Whenever there are derivative contracts held by the clients, our team comes into play. The valuation process covers a variety of derivatives, namely FX forwards, structured forwards, convertible bonds, interest rate swaps and so forth. During my work, I had to use Bloomberg, Reuters and other sources to obtain market factor parameters and company information. Several derivative pricing engines were provided to implement the valuation. I had to thoroughly understand the products, methodologies and assumptions of models before the valuation was conducted. Sometimes I also needed to build new models with the aid of VBA or other programming languages. However, pricing accuracy was not the only concern in this work. Since the derivatives are part of the financial statements, certain accounting and auditing knowledge was required before risk management decisions or suggestions could be made for the audit team and the clients. The integration of school knowledge and market practice was the first lesson I learned from the internship.

The other part of my job was related to risk management projects. These projects aimed to build a comprehensive system for the clients,

banks for example, to better manage their various risk exposures like market risk, credit risk or liquidity risk and to help the clients keep in compliance with the financial regulations. Projects often required more resources and I had to collaborate with more colleagues. Not to mention that the system building process was a completely different story from what I came across at school, the abilities to understand the clients' pre-existing systems, comprehend the clients' requirements, and communicate with colleagues about their specific needs are the keys to the success of the projects. This internship allowed me to have a good taste of the real, client-facing and team-working job environment.

Five months passed like a blink of an eye but the memories stayed deep in my mind. I have to say this internship instilled me with many new ideas and thoughts about a career in finance and risk management. It is fortunate that I was one of the few guys who could take internship programs as a full-time postgraduate student. I hope more and more fellow students can benefit from the internship programs and find their true passion in this industry.



Ben Yiu

Never could I have known how different it would have been if I had made a different choice, yet I will not regret not taking what might have been as my decision has led to remarkable experience that I will never ever forget. What I gained in the past few months as an Intern in the Financial Services Risk Management Team at Ernst & Young is beyond campus and is useful for a lifetime.

I was responsible for valuating different kinds of financial instruments, ranging from plain forwards to exotic derivatives that I had never encountered during my studies --- as we covered whatever clients held. Therefore, I had a great exposure to the different products available in the market, as well as the market practices of valuating them. However unfamiliar these products were to me, the training I had during my university equipped me every technical skill to understand and value them.

Understanding the product and arriving at a reasonable number was not the end of my work. I had to decide the most appreciate valuation

approach according to the engagement, and had to understand third party's approach and communicate with the auditors, especially when there were material differences between our valuation and third party's one. The opportunity to communicate and discuss with others, of which trained up my soft skills, was another thing that I treasured and enjoyed very much.

Yet the greatest enjoyment came not only from applying what I learned in university, nor only from product knowledge and soft skills I gained, but were in combine with the independence I was given to learn and try, as well as the friendliness and sincerity within the team. I really enjoyed the internship very much and will never forget the experience of working with such great colleagues.

Lastly, I would like to take this opportunity to express my sincere gratitude to everyone who has taught me and worked with me, as well as to those who were involved in organizing such a great internship. I truly wish this kind of programs could continue and more students can be benefited from them in the future.

Sardona Ho

The half-year internship in Ernst & Young is the most meaningful internship experience

I have ever had. Not only can I apply what I have learnt in university, but there are also chances for me to acquire some practical skills required at work.

Let me begin by introducing the job nature of our team. We have two types of work. The first one is to verify if values of derivatives adopted by clients in their Announcement Report are correct. The method adopted is performing valuation on that derivatives based on assumptions and parameters according to accounting standard. We then have to compare the difference between our result and client's. If it is within our tolerance level, the value is shown to be verified.

The second type of work is valuation services for clients directly. It is more challenging than the previous type of work since other accounting firms would audit what we have done. We could be questioned by them on why we adopt certain methods and assumptions. Despite of the challenge, this made me learnt a lot as I have to think very clearly before I adopted any assumptions and valuation methods.

I would say this internship provides an opportunity for me to consolidate

my knowledge acquired in university, especially valuation skills such as modeling and simulation. Besides that, I could learn some specific terms for exotic derivatives and also what kinds of parameters are adopted in real market valuation, which I could not learn in textbooks.



Apart from the job nature, I really enjoy the working environment of our team. All my colleagues are supportive and willing to teach the new members. Although sometimes the workload may be heavy in peak seasons and may need to work overtime, my colleagues would never put pressure on me but try to assist me to finish the tasks. This really made me feel I am part of the team.

If I were given a chance to choose again, I would apply for the same internship as I really have gained a lot from it. This experience is conducive to my career and personal growth.

Suey So

Working as a part-time assistant at the Hong Kong Airport Authority has been a memorable experience.

My general duties are to analyze airport operational data for performance measurements and write statistics program for airport planning purposes in 2030. Although the job nature is not closely related to the RMSC curriculum, I have to apply the knowledge I learnt in the RMSC program to the real life working environment, not only limited to the financial world. It is meaningful for me to get involved in the community through planning fundamental construction with my knowledge.

Being the only intern in the programming field, I needed to develop the algorithm and model structure independently. The workload was heavy yet challenging and I enjoyed it. My supervisors gave me much flexibility to try and learn. By consulting Dr. Philip Lee and discussing with supervisors, I learnt lots of statistical practices and aviation knowledge. Apart from the solid knowledge, I have also improved many soft skills through interacting with other colleagues, such as critical thinking and interpersonal communication skill.

Working with other colleagues from different backgrounds, I discovered my inadequacies in problem-solving skills and communication skills. Whenever I encountered difficulties at work, they were always willing to discuss and solve the problems with me. Their positive working

attitude motivated me to think from different point of views in order to enhance efficiency and performance at work. They also encouraged me to communicate with others beyond work. Following their advice, I made lots of new friends and my social network was expanded. I love working with them.

This internship serves a great opportunity for me to make transition from campus to corporate. The actual working environment is far different from studying at campus. There would be no lecturer or tutor to guide me step by step. I had to take the initiative at work, to read relevant materials and to conduct regular self-reviews. In order to complete the interim report and the project on time, I also had to set my personal working schedule. The deadline is deadline.

The practicum program equips me with the essential skills required for my future career. The hands-on experience I gained during the six months is a precious asset. I am grateful and would like to express my sincere gratitude to those who were involved in organizing this great internship program and offered me such an opportunity.



Suey So (right)