CUHK Traces Genetic Fingerprint of Coronavirus

The Chinese University's SARS research team has revealed the genetic fingerprint of the coronavirus associated with the outbreak at the Prince of Wales Hospital after studying the virus from 11 patients. Through this research, the team obtained scientific evidence showing that the virus is mutating at a rapid rate and that the genetic signature of the virus changes even between its passage from one wave of infection to the next.

The study also revealed the presence of a coronavirus that is unrelated to the various genetic variants responsible for the Prince of Wales Hospital outbreak. This indicates that more than one coronavirus type is present in Hong Kong.

Architecture Department Shows 'Wind Curtain' Effect

A detailed computational fluid dynamics study of the Amoy Garden complex found that the position of Blocks E and F, the ones hardest hit by SARS, relative to each other and relative to the prevailing wind direction, leads to a 'wind curtain' effect which seals off the reentrant area, or the 'light well'. This stagnates horizontal air-flow, which also means that virus-laden droplets released into the reentrant area will have a high possibility of remaining in that area and hence, of spreading vertically and contaminating other floors of the block.

The study also shows that the addition of a single panel or spoler at a strategic position in the reentrant area would disrupt the 'wind curtain' sufficiently so that this effect would no longer be operative. This would provide a retro-fitting solution to many buildings.

The findings of the study indicate that the high risk of SARS in Blocks E and F was due to the convergence of a number of factors - sewage problems, U-shaped tubes, and the 'wind curtain' effect. The department believes that buildings without the same topography are unlikely to be equally susceptible, so the minds of the majority of the community should be put at ease.

Anti-SARS Activities

A Quick Run-through

Community Care and Service
- Seminars to address challenges faced by homes for the elderly and their frontline workers were held on 3rd and 10th May 2003, attracting some 300 participants in all. The functions were organized by the Department of Social Work in collaboration with the Centre for Health Education and Health Promotion and the School of Chinese Medicine.
- "We Care Foundation" delivers free anti-SARS packages to frontline cleaners on four successive Saturdays from 3rd May for preventive care.
- Free Chinese medicine consultation in Tai Po on 2nd May by the School of Chinese Medicine.
- Provision of tonic soup formula for Pok Oi Hospital's Anti-SARS Campaign on 22nd April by the School of Chinese Medicine.
- Delivery of health talk on SARS prevention from a Chinese medicine perspective at Ho Shing Nursing Home for the Elderly by Mr. Chan Yun-ka, part-time lecturer at the School of Chinese Medicine.
- Provision of herbal formula to Sing Tao Daily and the Neighbourhood Advice-Action Council by the School of Chinese Medicine.
- The distribution of free booklets on menopause and the organization of free bone mass x-ray examination by the Centre for Research and Promotion of Women's Health for mothers in Hong Kong on Mother's Day 2003, as a gesture of concern during the SARS epidemic.
- Talks on SARS for the community by staff of the Centre for Research and Promotion of Women's Health.

Education
- Ten short courses, two workshops, and four seminars offered by the School of Continuing Studies on SARS. http://www.lcs.cuhk.edu.hk/sars/
- The production of teaching materials for children recovering from SARS in hospitals and students undergoing home confinement by the School and University Partnership for Educational Renewal Project of the Faculty of Education. http://www3.fed.cuhk.edu.hk/super/sars.asp
- Adoption by the Hong Kong School Net of the arithmetic teaching material (primary level) developed by teachers in the Faculty of Education and published by The Chinese University Press as an Arithmetic Package for online teaching purposes during class suspension. http://homework.school.net.hk/hommenet/maths/index.htm

Counselling
- Launch of a limited hotline service (2252 8839) by the Centre for Research and Promotion of Women's Health for its members, their families and friends on psychological counselling and community education in relation to SARS from 2.30 to 5 p.m. on Monday, Tuesday, and Friday.

Expert Opinion
- Expert advice on clinical thermometers and body temperature by Prof. Chan Kin-shing of the Department of Chemistry published in Sing Tao Daily.
- A visual database of SARS-related housing estates in Hong Kong created by Prof. Edward Ng of the Department of Architecture, version one launched on 4th May.

Publications and Research Studies
- Publication in The Lancet on 29th April of article "Clinical Presentations and Outcomes of Severe Acute Respiratory Syndrome in Children" written by Prof. T.F. Fok and other members of the Faculty of Medicine.
- Publication in The Lancet on 3rd May of commentary "SARS: Experience at Prince of Wales Hospital, Hong Kong" written by Prof. Brian Tomlinson and Prof. Clive Cockram of the Department of Medicine and Therapeutics.
- A survey conducted by the Department of Economics in April on the public's assessment of Hong Kong's economy showed that public confidence in the economy had diminished by the SARS outbreak. The consumer mood index had been dropping, the public was very pessimistic about the overall economic future of Hong Kong, and desire for consumption registered a persistent decrease.
## Engineering Paper Wins SIAM Outstanding Paper Award

A paper co-authored by three academics at the Department of Systems Engineering and Industrial Management, Prof. David Yao, Prof. Zhang Shuzhong, and Prof. Zhou Xunyu, has been selected as the winner of this year’s SIAM Outstanding Paper Prize. Entitled ‘Stochastic Linear-Quadratic Control via Semidefinite Programming’, the paper was published in the SIAM Journal on Control and Optimization, volume 40 (2001).

SIAM is an abbreviation for the Society for Industrial and Applied Mathematics. With a membership of 9,000 individual and 400 institutional members worldwide, SIAM’s policy is to advance and promote the research and application of mathematics and computational science to engineering, industry, science, and society. The SIAM Outstanding Paper Prizes were introduced in 1999 and are awarded annually. Three winners are selected each year among all the papers published in the 13 SIAM Journals in the four years prior to the year of the award.

## Biology Students Receive Croucher Scholarships to Study at Top Universities Abroad

Four final year M.Phil. students in the Department of Biology were awarded the prestigious Croucher Foundation Overseas Study Scholarships this year to pursue higher studies at top universities in the US, UK, and Germany. With full financial support from the Croucher Foundation, four final-year M.Phil. students, two of whom are from the Department of Biology, were awarded the same scholarship last year. Miss Chow Cheung-ming and Mr. Wong Piu are now Ph.D. students at Oxford University and Stanford University, respectively.

Among these six awardees, five are graduate students associated with the UGC Area of Excellence (AoE) on Plant and Fungal Biotechnology administered by the Department of Biology, CUHK. They have all received or are undergoing training in the field of plant biotechnology.

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**OBITUARY**

The Chinese University of Hong Kong records with deep sadness the passing away of Dr. Tse Yuen-man, a 1992 M.B. Ch.B. graduate (United College), on 15th May 2003. Dr. Tse was a specialist physician at Tuen Mun Hospital. His untimely death is mourned by all his friends, former teachers and other members of the University, her acts of honour and bravery and her remarkable contribution to the medical profession and the community-at-large will be long remembered on this campus. We extend our deepest sympathies.

The Chinese University of Hong Kong
13th May 2003
UHS Hepatitis Vaccination Postponed

Due to the unforeseen SARS situation, the University Health Service has decided to postpone the second and third dose of Hepatitis vaccination to 22nd and 23rd May (Thursday and Friday). Sorry for the inconvenience.

For further information, please contact the University Health Service at Ext. 7990 or 7992.
A Retrospective of the Past 40 Years

重大事件 Major Events

- 成立工程學院 (一九九一)
  Faculty of Engineering established (1991)
- 教育學院升格 (一九九一)
  School of Education upgraded to become Faculty of Education (1991)
- 設行靈活學分制 (一九九一)
  A more flexible credit unit system introduced (1991)
- 改革校政 (中央權責下放，資源與表現掛鉤) (一九九二起)
  Decentralization of authority and responsibility to faculty/department levels and the implementation of performance-based resource allocation (from 1992)
- 中大評議會正式成立 (一九九三)
  Convocation of the University established (1993)
- 成立 / 重組七個主要研究所
  Establishment/reorganization of seven major research institutes
  - 香港生物科技研究院 (一九八八)
    Hong Kong Institute of Biotechnology (1988)
  - 亞太工商研究所 (一九九零)
    Asia-Pacific Institute of Business (1990)
  - 香港亞太研究所 (一九九零)
    Hong Kong Institute of Asia-Pacific Studies (1990)
  - 藥物發展研究所 (一九九六)
    Hong Kong Cancer Institute (1996)
  - 人文科學研究所 (一九九一)
    Research Institute for the Humanities (1991)
  - 數學科學研究所 (一九九三)
    Institute of Mathematical Sciences (1993)
  - 香港教育研究所 (一九九三)
    Hong Kong Institute of Educational Research (1993)

随著政府资助及生人数的大幅增加，高錕校長於任內下放决策与管理权予以系所及行政单位，推行新的资源分配模式，并加强教学评核的机制，以改善效率，鼓励卓越表现。

With increased government funding for a much expanded student and staff population, Prof. Charles K. Kao decentralized decision-making and management authority to the departments/administrative units, adopted a new mode of resource allocation, and strengthened assessment mechanisms for teaching and research, with an aim to improve efficiency and reward excellent performance.
李國章教授—跨世紀騰飛（一九九六至二零零二）

李國章校長領導中大渡過九七，更於世紀之交全面進行資訊科技的應用，促進大學的國際化，提升教研及管理素質，使中大聲譽日隆，又為大學取得大量政府撥款和私人捐贈。

Prof. Arthur K.C. Li guided the University through the 1997 transition, and, at the turn of the century, encouraged the wide application of IT on campus, stepped up the University's internationalization efforts, and upgraded the quality of teaching, research, and administration through rigorous internal audits, thereby enhancing the University's local and international reputation, winning it substantial government funding and private sponsorship.

任內大事紀要
Major Events

• 推行全校管理效率檢討（一九九七起）
Launch of University-wide management efficiency reviews (from 1997)

• 全面推行資訊科技訓練及網上教學（一九九九起）
Adoption of a University-wide IT strategy and the promotion of web-based teaching (from 1999)

• 頒授大學榮譽院士銜（二零零二）
First conferment of University honorary fellowships (2002)

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抗炎總動員
齊關心、齊盡力

由「中大SARS資訊統籌小組」新設的「抗炎總動員：齊關心、齊盡力」網頁已
啟用，集中報導中大教職員、學生和校友在抗SARS與照顧弱勢社群的各種努力，
以及如何在戰勝疫情的知識和經驗上，繼續為社會貢獻心力。

中大人抗SARS的研究成果、社會服務和行動等，並於SARS疫情結束後，
繼續爭取更多資源與平台，積極推動社會發展。

中大人抗SARS的行動推廣，將於本刊的「人事動態」及 CUHK Newsletter
網站上定期報導，也歡迎大家直接連絡 CUHK Newsletter 檢覈、圖片或
標題國際重要報導的獨家採訪。
校友贈防炎包予街道清潔工人

中大校友成立的「齊關心基金」，自五月三日起，連四個週末，動員中大校友前在較多感染非典型肺炎案例的地區，將防炎包贈予街道清潔工人。防炎包內附《中醫學院》研究所的「抗毒補肺丸」製劑十包、外科手術口罩十個、膠手套十對及消毒紙巾十包，首次贈送地區為觀塘及牛池灣區。

是次行動獲香港電台全力支持，其中的製劑贈品由余仁生(香港)有限公司贊助。

「齊關心基金」於三月成立，支援威爾斯親王醫院前線護理人員及社區防炎工作。該基金於五月起更向保持社區環境衛生的前線人員表達敬意與支持。

校友到牛頭角下邨向清潔工人派發防炎包

卓越學科領域研究生獲獎學金赴歐美名校深造

生物系四名碩士生今年獲得裘槎基金會海外學習獎學金，將前往歐美著名大學攻讀博士學位。他們是周淑敏(美國柏克萊加州大學)、柳岸新(美國耶魯大學)、李之浩(德國海德堡大學)及吳煒欣(英國劍橋大學)。

該獎學金發放年期最長為三年，包括旅費、學費、生活費、配偶及子女生活津貼，以及其他雜費。

生物系去年亦有兩位碩士生獲此獎學金：周祥明現於英國牛津大學進修，而王標則在美國史丹福大學深造。這六名得獎人中，五人受訓於生物系教育資助委員會植物及真菌生物科技卓越學科領域，他們的碩士研究論文皆主攻植物生物科技。

去年畢業生就業率及薪酬理想

學生事務處就業策劃及發展中心上月三十日公布，去年度中大本科畢業生近九成七人已經找到工作或繼續升學，就業者平均月入一萬四千多元。在現今的經濟狀況下，本校畢業生的就業率和薪酬水平均非常理想。

該中心去年十一月至十二月底以問卷及電話訪問的方式，調查了近二千名全日制本科畢業生的就業情況，收到一千九百六十二份回覆。結果顯示，七成二人已經就業，近兩成半人深造。就業率、升學率及待業率均與前年相若。

畢業生的平均月薪為一萬四千七百三十五元。其中最高薪者任職保險公司分行經理，月入六萬元；醫科畢業生則平均月入四萬五千；任職政府或香港財政處的則月入三萬多元。

就業率、升學率及待業率均與前年相若。畢業生的平均月薪為一萬四千七百三十五元。其中最高薪者任職保險公司分行經理，月入六萬元；醫科畢業生則平均月入四萬五千；任職政府或香港財政處的則月入三萬多元。

就業率、升學率及待業率均與前年相若。
醫學院追尋冠狀病毒源頭
掌握其傳播模式及基因演變

醫學院的研究人員細胞在威爾斯親王醫院的嚴重急性呼吸道系統綜合症(SARS)的建構中，並對其與其接觸者作了深入剖析，具體掌握病毒在威爾斯親王醫院傳播的模式和病毒基因的演變過程。

該院本月二日在公共衛生學院大樓二號及三號研討室召開記者招待會，公布研究所得。講者包括醫學院院長鍾尚志教授(左二)、副院長(研究)盧煜明教授(右二)、微生物學系談兆麟教授(左一)和生物化學系徐國榮教授(右一)。

他們在十一名病者中抽取含有冠狀病毒的樣本進行基因分析，是全球在單一研究中心進行的最大規模基因研究。他們比較不同樣本的基因排序，發現病毒在人傳人的過程中，會將基因密碼傳到下一代的病毒內，而下一代病毒的基因亦會變異。

另一個重大發現是，數個基因排序組合與威爾斯親王醫院病發源頭的病毒基因排序無關，亦即SARS在威爾斯親王醫院爆發之時，香港已有多於一種冠狀病毒。研究人員亦比較了世界各地的病毒基因排序，並利用該病毒各自具有獨特基因排序的特點設計了一套模式，可逐步追尋冠狀病毒的最終源頭，對了解SARS蔓延全球和演變有重大作用。

醫學院為盡速研究SARS的病毒源頭，於三月成立了一支超過三十人的跨部門研究隊伍，包括生物化學系、化學病理學系、內科及藥物治療學系、微生物學系及外科學系的專家，日以繼夜地鑽研，其中一個主要目標是了解冠狀病毒的演變。

非典疫情下的消費意欲

根據經濟學系關焯照教授四月份的「市民對香港經濟現況評價」調查顯示，只有百分八的受訪者認為自己的財務狀況較一年前轉好，而變相轉壞則分別佔四成六和五成一。

該次調查特別詢問市民對非典型肺炎爆發的意見。結果發現，三成二受訪者認為每日的新增感染個案要降至零，疫情才可稱受到控制，而認為「每天一至五宗」及「每天六至十宗」疫情也算受控的，分別佔三成七及兩成，只有百分三的人選擇「每天十至二十宗」。

五成二人認為「政府有效地控制疫情」，才可以令市民重建對香港經濟及消費的信心。逾半受訪者表示，一旦非典型肺炎受到控制時，他們的消費會回復疫情爆發前的水平，而選擇「增加」和「減少」消費的，則分別佔三成二及一成五。其中六成七會在「飲食」方面增加消費，在「購物」、「娛樂」和「旅遊」增加消費者，依次有五成一、四成及四成三。

建築師：風閘效應加強病毒傳播

建築學系以計算流體力學原理仔細研究非典型肺炎重災區淘大花園的環境因素，發現E座與F座的地理位置和風向，導致兩座建築物之間產生快速氣流，形成一道天然「風閘」，封住了E座天井的出口，今天井內空氣的循環流動非常緩慢，排放至天井的微細水珠只能上下流動，若水珠帶有病毒，便會增加病毒傳播到其他樓層的機會。

研究人員指出，其他建築物即使有相同構造的天井，只要沒有特殊的相鄰建築物及氣流方向，天井口不會形成「風閘」，因此排污管未修或U型聚水器乾涸，仍然不會出現淘大E座同一層樓內傳播的風險。

是項研究由鄭經宇教授領導，利用該系的超級電腦進行。該系除於五月三日將此項研究成果公諸於世，更願意支援業主或管理機構，協助評估特定樓宇有否類似的狀況。

安老院舍防炎講座

本港感染及被懷疑感染非典型肺炎的長者人數與日俱增，影響已擴及安老院舍。社會工作學系分別與公共衛生學院健康教育及促進健康中心和中醫學院，於本月三及十日在李冠春堂合辦防炎講座。

第一講以「安老院舍如何作好準備及處理非典型肺炎」為主題，由健康教育及促進健康中心主任李大拔教授、社會工作學系兼主任(註冊護士)陳頌儀女士、護理安老院院長(註冊社工)宗家沛女士和社會工作學系導師曾育彪先生，分別從醫學、護理、輔導及管理四方面，向安老院舍前線工作人員講解及分享處理非典型肺炎的知識和技巧。

第二講的主題為「如何應用中醫護理長者身心則醫非典型肺炎」，由中醫學院梁頌名教授、註冊護士梁鎮泉先生、長者綜合服務中心主任(註冊社工)藍宇喬女士和社會工作學系黃洪教授，分別從中醫藥、長者身心照顧等層面介紹防炎方法。

五月三日的講座吸引逾二百名安老院舍前線員工出席，大學校董捐助抗炎醫護及研究人員

大學校董、大中華科技(集團)有限公司主席兼行政總裁鄭潔賢女士本月六日慷慨捐贈一千瓶草苓香冬蟲草予威爾斯親王醫院的前線醫護人員，對他們日以繼夜，以崇高的專業精神和無私奉獻的愛心，治療和照顧非典型肺炎病人表達衷心的謝意。