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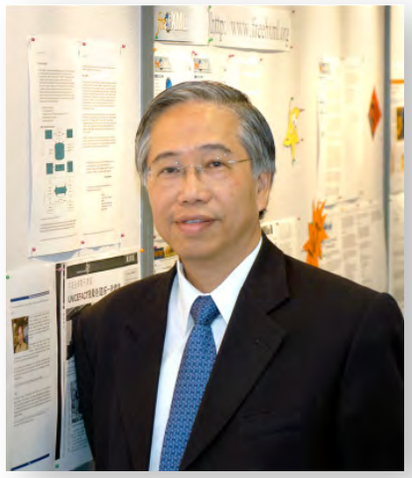
SPEAKERS



Professor David W.L. Cheung

Head and Professor
Department of Computer Science
Director
Center for E-Commerce Infrastructure Development

The University of Hong Kong

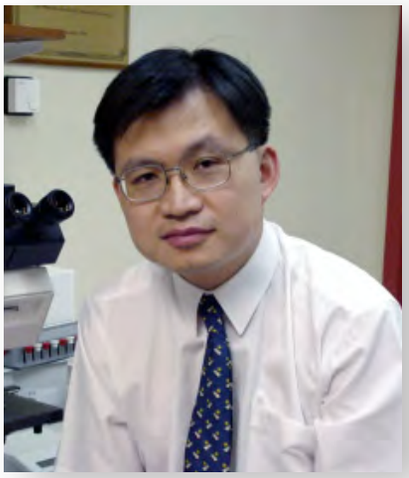
Biography

Professor David W.L. Cheung is the Head of Department of Computer Science and Director of the Center for E-commerce Infrastructure Development (CECID) in The University of Hong Kong. He conducts research in database, cloud computing and e-commerce technologies. He is a Distinguished Fellow of the Hong Kong Computer Society. He was the recipient of the HKU Outstanding Researcher Award. Most recently, he received the Distinguished Contribution Award in the 2009 Pacific-Asia Data Mining and Knowledge Discovery Conference. He was the program chairman of the 2001 and 2005 Pacific-Asia Knowledge Discovery and Data Mining Conferences, the conference chairman of the 2007 PAKDD Conference. He was also the conference co-chair of the 2009 CIKM Conference. Concerning applied research, Professor Cheung and his team have developed open-source ebXML gateway, which has received awards in various prominent competitions, including the Hong Kong 2004 IT Excellence Awards, the 2004 Asia-Pacific ICT Awards, and the 2005 Linux Business Awards. He has received more than 70M of ITF grants as PI or Coordinates.

Abstract

From ebXML Gateway to the Challenge of Applied Research in Hong Kong

In the area of electronic commerce, a family of XML based standards known as ebXML was sponsored by OASIS and UN/CEFACT in 2002. Its mission is to provide an open XML-based infrastructure to conduct electronic business by trading partners. In 2002, the Center of E-Commerce Infrastructure and Development (CECID) at HKU received an ITF grant for the implementation of the ebXML infrastructure. As a deliverable of the project, a software named Hermes was released as an open source software. It has since become the most popular ebXML messaging gateway in the world. In Hong Kong, Hermes is being used in many B2B systems including the Government Electronic Trading Services (GETS) system, the office supplies procurement system in MTRC. The GETS system processes over 20 million document exchanges annually. In this talk, we will share our success, excitement and difficulties experienced in doing applied research and technology transfer in Hong Kong.



Professor Yok Lam Kwong

Chui Fook-Chuen Professor in Molecular Medicine, Chair of Haematology and Oncology, and Chief of the Division of Haematology, Medical Oncology and Bone Marrow Transplantation
Department of Medicine

The University of Hong Kong

Biography

Professor Y.L. Kwong is chief of the Division of Haematology, Medical Oncology and Bone Marrow Transplantation at the Department of Medicine, University of Hong Kong. He is a chair professor, and holds the Chui Fook Chuen Chair in Molecular Medicine. He is specialized in haematology and haematopathology. His clinical work focuses on the management of haematological malignancies. His research centers on the molecular pathogenetic pathways and novel treatment modalities in haematological neoplasms. Together with the clinical pharmacology team in his department, Professor Kwong has pioneered the development and use of oral arsenic trioxide in the treatment of acute promyelocytic leukemia and other blood cancers. The oral arsenic trioxide formulation has successfully secured patents in the United States of America and Japan. An international oral arsenic trioxide user group has been formed to promote clinical use and research in this area. His research team is also actively involved in defining the molecular defects and optimal treatment protocols for T-cell and natural killer cell lymphomas, which are neoplasms prevalent in Asian populations. His team is widely regarded as one of the world opinion leaders in the treatment of T-cell and natural killer-cell malignancies.

Abstract

The Development of Oral Arsenic Trioxide for Cancer Treatment: Academic Success, Economic Implications and Global Perspectives

Arsenic trioxide (As_2O_3) has been used medicinally for millennia in both Chinese and Western medicine. It was first demonstrated to be effective in the treatment of chronic myelogneous leukaemia in the nineteenth century. After the Second World War, As_2O_3 continued to be used as a standard medication for leukaemia treatment until the advent of modern chemotherapy. Its therapeutic efficacy was re-discovered in the 1970s first in Harbin and then in Shanghai for the treatment of acute promyelocytic leukaemia (APL). The intravenous (i.v.) formulation was used. Despite its discovery in China, a United States (US) patent was granted to US investigators, resulting in the marketing of i.v.-As_2O_3 at prohibitive prices, making the medication unaffordable in less affluent countries.

Based on the experience of using "liquor arsenicalis" (oral arsenic) in the Department of Medicine, Queen Mary Hospital, C.R. Kumana and Y.L. Kwong researched on the preparation of oral-As_2O_3. The group succeeded in producing an oral-As_2O_3formulation, which was shown pharmacokinetically and clinically to be compared with the i.v.-As_2O_3 formulation. Furthermore, because of slow intestinal absorption, the peak blood arsenic level reached after oral-As_2O_3 was much lower than that of an equal dose of i.v.-As_2O_3. Because QTc prolongation that may lead to potentially fatal ventricular arrhythmias, a serious side effect of i.v.-As_2O_3, is directly proportional of blood arsenic level, oral-As_2O_3 results in minimal QTc prolongation, so that its cardiac safety is much superior to i.v.-As_2O_3. The administration of oral-As_2O_3 at home also makes arsenic maintenance therapy feasible. The treatment of APL has therefore been changed dramatically in Hong Kong since the development of oral-As_2O_3.

In collaboration with Versitech, the technology transfer branch of the University of Hong Kong, oral-As_2O_3 has successfully secured a US patent and a Japan patent. Oral-As_2O_3 is posed to replace i.v.-As_2O_3 globally. Oral-As_2O_3 may also be available on humanitarian grounds to less affluent countries for the treatment of APL. The development of oral-As_2O_3 has important lessons and implications. (1). It shows that academic innovation does not necessarily have to come from big investments. (2). Academic innovation can also be commercially successful. (3). Academic and industry collaborations are needed to impact on medical practice. (4) Global societal problems such as expensive medication pricing should also be tackled by academia and industry.

Professor Amanda Whitfort

Associate Professor
Department of Professional Legal Education
The University of Hong Kong

Biography

Amanda Whitfort is an Associate Professor in the Department of Legal Education, Faculty of Law, The University of Hong Kong and a member of the Hong Kong Bar. She has extensive experience in criminal prosecution work and acts on fiat for the Hong Kong Department of Justice. She holds an LLM from The University of London and trained as a lawyer in Australia where she prosecuted for the Victorian Office of Public Prosecutions. She is a member of the Society for the Prevention of Cruelty to Animals Law Reform Committee and the AFCD's Animal Welfare Advisory Group's Legal Working Party. Her research interests include criminal justice and administration and environmental law, both of which she currently teaches at the University of Hong Kong. She is the leading legal authority on animal welfare in Hong Kong.

Abstract

The Review of Hong Kong's Animal Welfare Laws

From 2007-2009, the Central Policy Unit of the Hong Kong Government and the Research Grants Council funded the authors to conduct a comprehensive review of Hong Kong's animal welfare legislation. Hong Kong's animal welfare laws were drafted in the 1930's and a review of current law was timely. Media publicity had focused on increasing public concern as to the adequacy of legislation available to address cases of cruelty to animals and the government is currently under pressure to update legislation.

In the course of the two year review, the authors identified that Hong Kong's anti cruelty legislation, as currently drafted, is unable to assist animals in danger and distress. The authors found licensing conditions for pet shops seriously out of date with modern welfare science and a lack of legislation controlling hobby breeders allowing animals of dubious origin and health to be widely sold throughout the Territory.

The authors also uncovered serious failures, at local slaughterhouses, on farms and in live food wet markets to meet animal welfare standards prescribed by the OIE Terrestrial Animal Health Code 2009 (Slaughter of Animals), to which China is a signatory.

The review has now been released and is being studied by the Hong Kong government, with the view to reform. The primary author will discuss the review findings and recommendations for extensive amendment to laws, regulations and codes of welfare affecting animals in Hong Kong.

Professor Paul S.F. Yip

Professor
Department of Social Work and Social Administration
Director
Hong Kong Jockey Club Centre for Suicide Research and Prevention
The University of Hong Kong

Biography

Professor Yip is the director of the HKJC Centre for Suicide Research and Prevention and a Professor of Social Work and Social Administration at The University of Hong Kong. He is a national representative of the Hong Kong SAR for the International Association of Suicide Prevention (IASP) and a vice-president of the International Association of Suicide Research, a consultant for Beijing Suicide Prevention Services, a board member for Suicide Prevention Service (Hong Kong). He has done innovative suicide prevention work in restricting means of charcoal in a community-based exploratory study. He is a pioneer in developing sophisticated surveillance system in monitoring and estimating suicide rate. He has received the Outstanding Researcher Award, The University of Hong Kong in 2009, a Distinguished Alumni Award, and La Trobe University in 2008 for his excellent research and service on population health. He is also a recipient of an Excellent Research Award "Charcoal Burning Suicide" by the Health and Welfare Bureau of Hong Kong SAR Government, 2007 and a Silver Asian Innovation Award, by Asian Wall Street Journal and Singapore Economic Development Board, 2005.

Abstract

A Public Health Approach for Suicide Prevention: from Research to Practice

Traditionally, suicide has been viewed as a mental health issue best addressed primarily through clinical interventions, especially through the treatment of depression. However, it has been found that the majority of people who committed suicide had not received psychiatric services prior to death. Furthermore, in view of the size of the problem and the limited resources, the medical and clinical model involving intensive professional care service might not be practical in Asia. In our daily lives, stopping people from reaching the edge of a cliff is always easier than trying to save them when they are on the edge. In the same sense, drug-clot busters might be useful in providing temporary relief for those who suffer from cardiovascular diseases, but this is not as cost-efficient or cost-effective as a healthy diet and routine exercise for the population as a whole. The public health approach to suicide prevention shares the same vision. By using information and knowledge generated from research studies, a multilayer intervention, holistic and integrated approach together with community collaboration, we can make a difference.

Professor Chi-Ming Che

Dr. Hui Wai Haan Chair of Chemistry
Department of Chemistry
The University of Hong Kong

Biography

Professor Chi-Ming Che received his B.Sc. and Ph.D. in 1978 and 1982, respectively, from The University of Hong Kong (HKU). From 1980 to 1983, he studied at the California Institute of Technology under the guidance of Professor Harry B. Gray. Thereafter, he returned to his alma mater, where he was promoted to Chair Professor of Chemistry in 1992. Since 1997 he has been the Dr. Hui Wai-Haan Chair of Chemistry in HKU. His research interests include inorganic and organic synthesis; metal-ion promoted organic transformations; reactive metal-ligand multiple bonded complexes; inorganic photochemistry; luminescent materials; bioinorganic chemistry; and inorganic medicines. Over 100 Ph.D. students have successfully completed their studies at HKU under his supervision. With more than 700 publications and an H-index of 76, Professor Che is one of the ISI Highly Cited Researchers. He is a current member of the international advisory board of *Chemistry-A European Journal, Chemistry-An Asian Journal, Chemical Science*, *ChemCatChem*, and *Journal of Inorganic Biochemistry*.

In 1995 Prof. Che was elected as a member of the Chinese Academy of Sciences and became the first CAS member from Hong Kong and the youngest CAS member at that time. He was elected as a Fellow of World Innovation Foundation (2004), a Fellow of Federation of Asian Chemical Societies (2005), a Fellow of TWAS in Chemical Sciences (2007), and a Fellow of The Royal Society of Chemistry (2009). He received the following awards or prizes: National Natural Science Prize of China (1993), Croucher Senior Fellowship (1997), Chung-Hsing S&T Lectureship (1997), Distinguished Research Achievement Award of the University of Hong Kong (2000), IUF Invited Professorship of France (2000), Federation of Asian Chemical Societies Foundation Lectureship (2003), Visiting Scientist of National Research Council of Italy (2004), Pfizer Signature Lecture (2006), TWAS Prize in Chemistry (2006), 1st Class State Natural Science Award of China (2006), Seaborg Lectureship at the University of California at Berkeley (2007), Prize of Ho Leung Ho Lee (HLHL) Foundation for Scientific and Technological Progress (2007), Edward Clark Lee Lectureship at University of Chicago (2008), the Leader of Year 2008 Hong Kong (Research), Fellow of Royal Society of Chemistry (2008) and Molecular Sciences Forum Lecture Professorship at Institute of Chemistry, CAS (2009).

Abstract

Organic Light-Emitting Diodes

Organic light-emitting diodes (OLEDs) with unique features including fast response time, ultra-thin panel structure, low-power consumption and wide viewing angle, continue to draw substantial attention in the development of next generation of new display technology. Over the decades, we have been doing fundamental research in the development of innovative highly robust phosphorescent metal emitters with practical applications in OLEDs, and improving technology in process and production of these materials. Over the past 10 years, we jointly worked with Sun Yat-Sen University, Clover & Coled Display Ltd., OLED-T Ltd., and Teijin Dupont Films Japan Ltd., to promote the research and development of new materials and printing technologies.

Through partnerships with local, international and Mainland display companies, we have been able to develop novel and patentable materials for OLEDs with practical applications. We have also produced patentable technologies for applications in electronics, displays and lighting. Our recent endeavour is to collaborate with display and materials companies in Mainland to launch the technological know-how for AMOLED panel production with high yields in Hong Kong and in Guangdong. Meanwhile, training of scientists and engineers in local companies promotes research and development in the area of OLEDs. Research findings and technological know-how are subsequently transferred to industries. We are working to promote the development of new lighting industry and innovative electronic consumer products in Hong Kong and South China in the coming decade.

Acknowledgments. We are grateful for financial support from the Innovation and Technology Fund, National Natural Science Foundation of China/Research Grants Council Joint Research Scheme (N_HKU 752/08), Research Grant Council of Hong Kong (HKU 7008/09P), and The Chinese Academy of Sciences–Croucher Foundation Funding Scheme For Joint Laboratories.

Professor Tammy Y.L. Kwan

Assistant Dean (School-University Partnerships)
and Associate Professor
Faculty of Education

The University of Hong Kong

Biography

Tammy Kwan taught social, geographical and environmental education in the Queensland University of Technology before returning to The University of Hong Kong in 1998 as Associate Professor. She has been PGDE program director (2005-2007) and was partnership director for initial teacher education from 2007-2010. She is now Assistant Dean (School-University Partnerships). She has a strong commitment to encouraging teachers to become critically reflective professionals through better personal understanding and to achieve professional development and personal growth. She is responsible for setting up the community of Professional Partnership Schools which encourages the adoption of a 'whole school mentoring support' approach to actualize School-University Partnerships.

Abstract

Extending the Boundary of School-University Partnerships

The major aim of School-University Partnerships (SUP) is to achieve and consolidate in-depth collaboration between schools and the Faculty of Education, HKU, in order to enhance the continuous professional development of schools and teachers, and further the success of initial teacher education.

To achieve this aim, a "whole school mentoring support" has been promoted to involve teachers and principals who share a similar vision. Schools that are committed to this approach are eventually invited to become part of our group of "Professional Partnership Schools (PPS)". This group represents an enlarged collaborative community of 19 PPS, all of which have signed a 3-year memorandum with the Faculty. This has allowed partnership schools to benefit from a mutual exchange of professional experiences, bringing about meaningful school improvements and better student learning.

Since 2007, we have witnessed the extension of the boundary of SUP in the following aspects to strengthen our collaboration:

- Through Initial Teacher Education Practicum Placement within each school, there has been a huge increase in the number of mentor-teachers in each school.
- We have extended the initiative so that it includes primary schools as well as secondary schools.
- As well as knowledge exchange with student-teachers, mentor-teachers and principals, we have also included parents so that they might understand better the collaboration between schools and our faculty.
- We have extended partnership from individual schools to cluster schools as a way of multiplying the positive effects of SUP.
- We have extended our focus from practicum placemen to the encouragement of professional teacher development which has led to school improvement by infusing research opportunities into schools.
- We have extended our communication to include major School Sponsoring Bodies as well as individual schools.
- We have extended our geographical locus from the local Hong Kong context to the pioneering of overseas international practicum exchange.

We strongly believe that by extending the boundary of the various forms of KE activities, we have generated a profound impact on the local school community as well as the broader educational community. This has further actualised the spirit of "School-University Partnerships" so that it lives up to the Faculty's mission of nurturing our graduates and transforming them into passionately committed teaching professionals.

Professor Agnes F.Y. Tiwari

Head and Professor
School of Nursing
Assistant Dean (Education)
Li Ka Shing Faculty of Medicine

The University of Hong Kong

Biography

Professor Agnes Tiwari is Head of School of Nursing and Assistant Dean (Education) of Li Ka Shing Faculty of Medicine, The University of Hong Kong. Professor Tiwari received her Diploma of Nursing from the University of London, Master of Science in Social Research from the University of Surrey, United Kingdom and Doctor of Philosophy from the University of Wollongong, Australia. Also, she was awarded the Fellow of the American Academy of Nursing (FAAN) in recognition of her contribution to the nursing profession.

She is committed to research-based teaching and her educational research interests include the development and evaluation of nursing students' critical thinking, outcome-based education, problem-based learning, portfolio assessment, and constructive alignment. Recent awards for her scholarly work include Best of Journal of Nursing Scholarship from the Sigma Theta Tau International, the Teaching Medal from the Li Ka Shing Faculty of Medicine, the Outstanding Teaching Award from the University of Hong Kong.

She has published extensively including the much cited paper "From process to outcome: The effect of portfolio assessment on student learning", and "A comparison of the effects of problem-based learning and lecturing on the development of students' critical thinking" which was The Journal of Medical Education's second most cited paper in 2006.

Abstract

Preparing Academic Supervisors and Clinical Mentors for Work-integrated Learning in Nursing Education

It has long been recognized that the workplace is a unique and valuable learning environment for nursing students. However, it is also known that knowledge learned at the university is not transferred readily into practice in the reality of the workplace. Similarly, the transfer of the practical skills learned at university into workplace practice is often limited to an imitation of the context in which it was originally learned. Thus, questions have been raised about the capability of nursing graduates to move seamlessly into the reality of clinical work after their university education. Indeed, the term 'reality shock' has often been used to describe the difficulties experienced by new graduates during the transition from student to professionally practising nurse. Central to the problem is the long-standing, unresolved gap between the actualities of practice in the workplace and the culture of academic nursing in the university. This presentation will describe the planning and implementation of a clinical mentoring scheme that has been designed to prepare final-year nursing students better for their entry into the nursing workforce.

The medical and surgical units of a large, university affiliated, teaching hospital provide the context within which the clinical mentoring scheme takes place. Institutional support was secured through a series of meetings between senior administrators of the hospital and senior academic staff of the university to negotiate the staff development plans, organizational changes and costs associated with the proposed scheme. A model of clinical mentoring was worked out and agreed whereby a designated clinical nurse is appointed as the named tutor for each nursing student undergoing his/her final clinical practicum in a surgical or medical ward over a 4-month period immediately before completion of the baccalaureate programme in nursing. The students work closely with their mentors, even following the same shift patterns, in order to promote their socialization into new professional roles and reduce their sense of isolation and vulnerability. As a part of the capacity-building strategies, a structured mentoring programme, with planned follow-ups, is provided to the clinical mentors prior to their taking up the mentoring assignment. The roles and responsibilities of the academic supervisors and clinical mentors are delineated clearly and agreed. Specifically, models of teaching, facilitation and supervision necessary for the mutual integration of workplace and academic learning have been developed, implemented and refined as needed. Formative and summative evaluations provide feedback for the scheme's continuous quality improvement. The scheme is now in its 5th year of implementation, with positive outcomes in terms of student learning and professional socialization.

Professor Terry Y.S. Lum

Associate Professor
Department of Social Work and Social Administration
Director
Sau Po Center on Ageing
The University of Hong Kong

Biography

Dr. Terry Lum (林一星) is an Associate Professor at the Department of Social Work and Social Administration and the Director of the Sau Po Center on Aging at the University of Hong Kong. Before joining the University of Hong Kong, he was an Associate Professor at the School of Social Work at the University of Minnesota. Dr. Lum earned his Bachelor's degree in Economics and his Master's degree in Social Work from the University of Hong Kong. He earned his Ph.D. degree in social work from the Washington University in St. Louis, with special focus on gerontological social work and policy research. Dr. Lum is also an elected Fellow of the Gerontological Society of America.

Abstract

Evidence Based Elder Care - How Research Contributes to Improve the Quality of Care and Quality of Life of Older People in Long Term Care System

The number of institutionalized elderly persons has been rapidly increasing in Hong Kong. In 2009, 58,300 elderly persons, or 5.2% of all elderly in Hong Kong, were institutionalized. Residential care for frail elderly people has grown rapidly since the 1980s, and concerns over the living conditions of residents and quality-of-care in these homes emerged at much the same time. Although the Hong Kong Government has tried to improve the quality of nursing home care through a licensing process, with the expectation that doing so will eventually improve residents' quality-of-life (QOL), very little has been done to systematically monitor and improve the QOL of older nursing home residents. Using the Green House Nursing Home Project in the US as an example, I will present how a small but well-designed research project that focused on QOL of older people, has revolutionized the nursing home care in the United States.

Professor Peter K. K. Lee

Associate Dean (Special & Mainland Affairs)
Faculty of Engineering
Honorary Professor
Department of Civil Engineering

The University of Hong Kong

Biography

Professor Peter K K Lee is currently the Associate Dean in the Faculty of Engineering and an Honorary Professor in the Department of Civil Engineering at The University of Hong Kong. After a few years working in the industry in the United Kingdom, he returned to join the University in 1970 and has been involved with teaching and research activities ever since. Before appointment of the Faculty position, he had been the Head of the Department of Civil Engineering for over 7 years and implemented project-based-learning design courses hand in hand with traditional courses on fundamental engineering principles.

Outside the campus, Professor Lee has been an active member of the engineering community and has established a strong connection with the profession. During his tenure at the university, he emphasized the importance of communication in engineering. With the support from senior practicing engineers as joint-supervisors, he has introduced successfully credit-bearing practical design courses with small groups of students. Summer intern in the industry is also a core component in the curriculum. Through these arrangements, students are able to experience for themselves the application of knowledge taught in the classroom in the real life scenario and hence enhancing their interests in studying engineering.

Abstract

An Experiential Learning Experience in Engineering – the Mingde Projects

By combining learning and practice, the Mingde Projects gives Civil Engineering students the opportunity to volunteer on community-based projects and contribute their skills to society. Mingde, in Chinese, appears in the motto of The University of Hong Kong carrying the meaning of "understanding the human virtue". Since it began in 2004, the Mingde Projects has united nearly 350 students and teachers, together with some 70 alumni, in a common cause. In the end, the project is not only about volunteering, it is about training a new generation who takes up the duties of society.

The first project began in 2004 when students in Civil Engineering were invited by a donor to design and supervise the construction of Mingde Building, a primary school in the mountainous area in Dalang Village, Rongshui Country in Guangxi Province, China. On completion of the Building, students working on this project learned an unexpected lesson - walls alone do not make a school. To fully realize the dream of a new school for the children, students raised funds among themselves for new furniture, books and equipment to make it complete.

This was followed in 2006 by the Gewu Building, a dormitory for 600 vocational training students also in the Rongshui County. After primary education, most boys and girls in their early teens undertake vocational training before embarking on a career in the society. A dormitory at the training school can help to save everyday long travelling hours of these teenagers coming from scattering villages far away.

The most recent project, the Zhengdong Jie Kindergarten in Chongzhou, is near completion. The original building collapsed during a severe earthquake in May, 2008. Due to site constraints and stringent earthquake resistant requirements, this is a much more complicated project. We were fortunate to have unfailing supports from many professional alumni contributing their valuable time and effort, voluntarily, to guide and supervise the work of students. Over 200 students have been involved in this project. During the monthly supervision visits to the construction site, opportunities have been arranged for students to witness the ruins caused by earthquake as well as various earthquake resistant systems proposed for different new structures.

Through Mingde Projects, the Department of Civil Engineering has been successful in providing students a platform to experience the practical application of knowledge taught in the classroom. Also through participation in real projects, students understand the need of the society; learn how to communicate with the society and to contribute to the society with their own effort and expertise. This experience will fortify their confidence and interests in the programme they have chosen to study at the university as well as to give them a sense of satisfaction when caring the need of the society around them.

Professor John C. H. Lin

Assistant Professor
Department of Architecture
The University of Hong Kong

Biography

John Lin is an architect based in Hong Kong and currently an Assistant Professor at The University of Hong Kong. He was born in Taiwan and immigrated to the US. After studying in both the Art and Engineering programs at The Cooper Union in New York City, he received a professional degree in Architecture in 2002. His current research concerns the process of urbanization in rural China with a focus on the sustainable development of Chinese villages. His current projects include the design of several school buildings, a village community center, a hospital and a sustainable house prototype in China. Located in rural areas of Shaanxi, Jiangxi, Guizhou, Hainan, Hunan and Guangdong provinces they integrate local and traditional construction practices with contemporary sustainable technologies. The projects coordinate between Chinese and Hong Kong universities, education bureaus, ministries of construction, and local governments along with NGO's and charity organizations. His research and work has been published widely and exhibited in various places including the Architecture Park (*Kolonihaven*) at the Louisiana Museum of Modern Art in Copenhagen 2004, the Hong Kong & Shenzhen Bi-City Biennale of Architecture and Urbanism 2007 and 2009, the Beijing Architecture Biennale 2008 and at the Venice Biennale of Architecture 2008 and 2010. He has received two AR Awards for Emerging Architecture in 2009 and 2010 for his *Qinmo Village School* and *Taiping Bridge Renovation* projects. He has taught previously at the Royal Danish Academy of Fine Arts, School of Architecture and The Chinese University of Hong Kong. He is the 2010 recipient of the Outstanding Teaching Award at The University of Hong Kong.

Abstract

A Different Role: Teaching in the Real World

In reflecting on my role as a teacher over the past 9 years, I began to compare myself to the teachers which had the biggest impact upon my own education. The most memorable are those which did not necessarily hold all the right answers. These teachers formulated curriculum around real-life problems and put us into situations where there were no existing answers. I remember distinctly the excitement in discovering unexplored frontiers. In that moment, I acquired the desire for further knowledge, and the desire to become an architect.

As teachers we cover only a fraction of a person's entire professional career, it is far more important to offer the tools and instill the desire for pursuing a lifetime of learning. Engagement in the world at large is such a bridge. Though the classroom is essential as a place to generate ideas, ultimately ideas must be tested in the complexity of the real world. The ability to engage in unprecedented and complex problems is the difference between simply possessing knowledge and lifelong learning. This fundamentally changes the student-teacher relationship, which may be hierarchical in the classroom, but contemporaneous in the real world; the teacher is an instigator, a critic, a leader, a fellow collaborator and him/herself equally a student. This is why I believe that the most important quality for being a good teacher is the ability to learn from, and in partnership with students.

Professor Ron S.Y. Hui

Chair Professor
Department of Electrical and Electronic Engineering
The University of Hong Kong

Biography

Ron Hui received his Ph.D at Imperial College London in 1987. He has previously held academic positions at the University of Nottingham, the University of Sydney and City University of Hong Kong. Presently, he is a Chair Professor at the Departments of Electrical & Electronic Engineering at the University of Hong Kong and Imperial College London. He has published over 140 refereed journal papers in Power Electronics and Industrial Electronics. Over 50 of his patents have been adopted by industry worldwide. His inventions underpin key dimensions of the world's first international Wireless Power Standard "Qi", which was launched in 2010 by the Wireless Power Consortium, now comprising over 80 international companies. He is a Fellow of the IEEE (USA) and IET (UK). He received the Earth Champion Award in 2008. In 2010, he received the IET Crompton Medal, the IEEE Rudolf Chope R&D Award and was elected to the Fellowship of the Australian Academy of Technological Sciences & Engineering.

Abstract

Drastic Reduction of Electronic Waste through Novel Sustainable Technologies

Modern portable electronic products such as mobile phones and iPods have transformed human society in communication and entertainment. However, these products and their chargers also give rise to increasing electronic waste problems. Similarly, electronic ballasts and compact fluorescent lamps have been promoted by many governments which emphasize only energy saving without realizing the serious consequences of the associated electronic waste and highly toxic chemicals. In this talk, the author will address the needs for new international criteria for "Sustainable Technologies" and explain how new technologies in wireless charging and sustainable lighting areas can play significant roles in drastically reducing electronic waste and preserving the environment. Novel wireless charging pad systems for portable consumer electronics and recyclable ultra-low-loss ballasts will be introduced as examples that meet the criteria for sustainability, including not only energy saving but also long product lifetime and recyclability.

Professor Yuen Ying Chan

Professor of Journalism
Director
Journalism and Media Studies Centre
The University of Hong Kong

Biography

Ying Chan is a writer, educator, China media expert, and the founding director of the Journalism and Media Studies Centre at The University of Hong Kong. As an academic unit of HKU, the JMSC offers professional graduate and undergraduate degrees in journalism, and MPhil and PhD degrees. Prior to joining HKU in 1998, Chan spent 23 years working as a journalist in New York City, where she reported for the New York Daily News, NBC News, and Chinese language dailies. Chan's honours include a Nieman Fellowship at Harvard University, a George Polk Award for journalistic excellence and an International Press Freedom Award by the Committee to Protect Journalists. She is the co-Public Lead of Creative Commons Hong Kong; a board member of the Media Development Loan Fund, an investment fund for independent media worldwide; and the chair of the World Economic Forum Council on Informed Societies. She writes regularly on China's media and media development issues and has co-edited two books on China's media.

Abstract

Creative Commons: An Innovative Copyright Model to Promote Creativity and Knowledge Sharing

Creative Commons (CC) is an international system of intellectual property rights management through which creators can choose to distribute their works with "some rights reserved". An innovative copy-right protocol for the digital age, CC promotes the values of sharing, openness and collaboration. In 2008, the Journalism and Media Studies Centre of HKU, worked with professors Alice Lee and Li Yahong of the HKU Faculty of Law and community volunteers to bring CC to Hong Kong. Since then, more than 400,000 pieces of creative work have been licensed under CC in HK.

Professor Ying Chan, co-community lead of CCHK, will discuss how CC has helped to promote creativity and knowledge exchange, and the significance of the growing international CC movement. She will also discuss Hong Kong's experience in the implementation of CC licenses, and how the licenses could be used to promote the creative work of both faculty and students. CCHK works with Creative Commons International (http://creativecommons.org/international/) to localize and promote the use of CC licenses in Hong Kong.

Mr. David T. Palmer

Scholarly Communications Team Leader
University Libraries

The University of Hong Kong

Biography

David Palmer is the Scholarly Communications Team Leader in the University Libraries, developing and managing the institutional repository, "The HKU Scholars Hub", and the many issues of access, repository population, and bibliometrics that surround The Hub. He has worked at The University of Hong Kong Libraries (HKUL) since 1990, as Systems Librarian, Technical Services Support Team Leader, and now as Scholarly Communications Head. He is a founding member of the Hong Kong Open Access Committee, and was instrumental in having HKU become signatory to the Berlin Declaration on Open Access in November 2009. He has lead in many path-breaking projects, such as the first university in Asia to have all of its thesis collection (19,000+) online in fulltext, the first institution worldwide to do an institutional upload of publication data for each researcher into Thomson Reuters' ResearcherID, and the creation of ResearcherPages in The Hub for each of HKU's authors.

Abstract

Making HKU Research Discoverable & Findable: The HKU Scholars Hub

Developed and maintained by the University Libraries, the Hub is the institutional repository of The University of Hong Kong (HKU). On top of its regular work to place HKU publications in open access, it has received funding from the HKU Knowledge Exchange Office (KEO) to make HKU research and researchers highly visible on the web, with the aim of increasing all forms of collaboration, internally and externally. The Libraries extracted data from several internal HKU silos and external databases to create author profiles, or "HKU ResearcherPages" for each of the professoriate staff.

These pages bring together in a public mashup, interlinking publication details, patent records, and grant applications, as well as details of community service, postgraduate student supervision, research interests, etc. Bibliometrics provided by Scopus and ResearcherID, as well as Hub generated view counts and download counts, cumulated to the article level, and to the author level, show that this work and these pages have increased visibility, and thus impact. Serendipitously this work has also received the attention and efforts of many HKU researchers, who now interact with Library staff and their ResearcherPages to ensure that their details are complete and shown in the best light. The Hub is therefore one tool by which a new culture and community of Knowledge Exchange is being forged at HKU.

Professor Yanfeng Zheng

Assistant Professor
School of Business
The University of Hong Kong

Biography

Yanfeng Zheng is an assistant professor of entrepreneurship at Hong Kong University. He earned his Ph.D. in management at University of Wisconsin Madison in 2006. His research interests revolve around the nexus of strategy and entrepreneurship. Specifically, he studies how high-tech startups develop capabilities through organizational learning. His current research deals with how cognitive structures of founding teams affect their behaviors, especially when surprise events occur. He was the recipient of the Irene M. McCarthy Award for the best paper on the topic of High Technology and Innovation in 2006 at the Babson International Entrepreneurship Conference. His work has been published at leading management and entrepreneurship journals such as Strategic Management Journal, Journal of Business Venturing, Journal of Management Studies, and Journal of Small Business Management. Dr. Zheng has extensive teaching experience in organizational behavior, strategic management and entrepreneurship.

Abstract

Turning New Business Ideas into Reality, Cases and Lessons from Hong Kong

New venture creation has been proved to be a crucial driver of job creation and regional economy development worldwide. Hong Kong is no exception. Yet, few new ventures in Hong Kong were able to grow sufficiently to make meaningful contributions to employment and economy. According to the 2009 Global Entrepreneurship Monitor (GEM) survey, the majority of new firms in Hong Kong still hired fewer than 10 employees and concentrated in industries with small growth potential. The average annual sales of those new firms in Hong Kong were meager compared to financial or real estate groups in the same region. Companioned with low level of high-impact entrepreneurial activities in Hong Kong, most Hong Kong students and novice entrepreneurs have only meager understanding on how to start and grow new ventures even with brilliant ideas. Existing entrepreneurship education in Hong Kong is lack of a practical component. These facts are in stark contrast to the image of Hong Kong as a region friendly to new ventures because of its entrepreneurial tradition, mature legal system, professional workers, and support from Hong Kong S.A.R. government. In this session, I will explain these paradoxical observations. Specifically, I will discuss a few local business ideas and how their founders nurture their businesses. The purpose is to illustrate the challenges and opportunities facing entrepreneurs in the current and local environment. In the end, I will offer suggestions for students and novice entrepreneurs on what exactly they can do to turn their business ideas into reality.

Professor Mirana May Szeto

Assistant Professor
Department of Comparative Literature
School of Humanities
The University of Hong Kong

Biography

Mirana May Szeto did her Ph.D. in Comparative Literature, UCLA and is Assistant Professor in Comparative Literature at the University of Hong Kong. She has published in postcolonial and critical theory journals like *Interventions* and *Concentric*, writes on China and Hong Kong cinema and literature, urban cultural and spatial politics, as well as cultural policy and coloniality in volumes like *Neoliberalism and Global Cinema: Capital, Culture, and Marxist Critique, Hong Kong Screenscapes: From the New Wave to the Digital Frontiers, Sinophone Studies*: *A Critical Reader*, and has completed a book manuscript on *Radical Itch: Critical Theory and Its Discontents in Colonial Cultural Politics.* Her current book project is entitled "Decolonizing Neoliberalism: Learning from Hong Kong Cultural Movements." She is also the Arts Education Advisor of the Arts Development Council, Member of the Wan Chai District Council Cultural and Leisure Services Committee (2006-08), Member of the Viva Blue House Board of Directors, Advisor of the Saint James' Settlement Advisory Committee for Community Development Services, Core Member of the People's Panel for West Kowloon, Founding Member of Community Cultural Concern, Member of the Choi Yuen Eco-Community Building Studio, Member of Heritage Watch, Advisor and Co-Founder of Students and Scholars Against Corporate Misbehavior, and an active member of movements in preservation of living heritage and communities.

Abstract

Working with Community, Government, Professional and Business Stake-holders: Knowledge Exchange in the Living Preservation of the Blue House Heritage Cluster

Recently in Hong Kong, persistent preservation movements (e.g. Wedding Card Street, Star Ferry and Queen's Pier) pushed the government to reconfigure its urban development policies to include heritage preservation. How can inter-disciplinary academic research, inter-cultural knowledge and professional know-how assist the affected community, non-government organizations and the government to generate together better policy development and execution and do something Hong Kong people actually like?

The Blue House Cluster Heritage Revitalization Partnership Scheme is the first public-private partnership project of its kind in Hong Kong in which the original grassroots inhabitants are not evicted to give way to heritage preservation and development, but can continue to stay as active participants in the revitalization of their community. Our participatory research, policy making, planning and design have helped in creating a new alternative: a bottom-up, community-led and sustainable "living preservation" model which integrates culture and heritage into development. It can become a beacon for sustainable communities to come and a demonstrative research and educational tool. It preserves not only the architecture and cultural landscape, but also the Hong Kong Tonglau habitual way of life. Its innovative social enterprises and creative financial model are self sustainable while offering at the same time affordable rental homes and services as well as relevant job opportunities for the community. It promotes community participation and generates local knowledge transfer and cultural production. How is this possible?

POSTER PRESENTERS

Professor Weijen Wang

Associate Professor
Department of Architecture

The University of Hong Kong

Biography

Wang Weijen, associate professor at department of architecture of The University of Hong Kong, graduated from UC Berkeley and Taiwan University. His design projects won several AIA Design Awards and Far Eastern Architectural Award, as well as Green Building Award and HKIA Award, and were exhibited at venues including Taipei Museum of Modern Art, Beijing Architecture Biennale, Shenzhen Biennale of Architecture and Urbanism, and Venice Architecture Biennale of 2008. He was also the curator of 2007/08 Hong Kong–Shenzhen Biennale of Architecture and Urbanism. His research mainly focuses on Chinese architecture and cities. He was a visiting associate professor at department of architecture of MIT in 2008-2009.

Poster - HKU-1

Ms. Tris Kee

Director of Community Project Workshop
Faculty of Architecture

The University of Hong Kong

Biography

Ms. Kee is a graduate of Master of Architecture, University of Waterloo, Canada.

As the recipient of the Royal Architectural Institute of Canada Roll of Honor 2002, Tris has worked in Rome, London, Amsterdam and Canada before returning to Hong Kong. She is a Registered Architect in Hong Kong, a professional member of the Hong Kong Institute of Architect (HKIA), Royal Architectural Institute of Canada (RAIC), The Hong Kong Interior Design Association (HKIDA) and the Hong Kong Institute of Architectural Conservation (HKICON). As an architect, Ms. Kee has participated in the design and completion of Phase 2 Science and Technology Park of Hong Kong, a number of MTRC stations and residential developments at the Peak.

As the Director of Community Project Workshop at HKU since 2009, Ms. Kee has been involved in a number of projects aimed for promoting knowledge exchange (KE) with the community; namely, The District Aspiration Study for Tsuen Wan and Kwun Tong; The Conservation Management Plan for the Hong Kong Sheng Kung Hui, The Revitalization Scheme for Wong Uk, Sha Tin, Art Alive @ Park 2010, the Tsuen Wan short course on urban planning and architecture, the Public Engagement Meeting for Pok Fu Lam Harbourfront, as well as the Study of the Kwun Tong Waterfront Promenade.

Poster - HKU-2

Background

Our CPW provides design and consultancy services to government and non-governmental organizations, and undertakes other non-commercial projects which require interdisciplinary expertise drawn from all disciplines of the Faculty: Architecture, Landscape Architecture, Architectural Conservation, Real Estate and Construction, and Urban Planning and Design. Today, CPW utilizes faculty-wide skills, knowledge and professional experience, to provide invaluable services to the community.

CPW has developed teams of consultants who critically evaluate, analyze, and synthesize problems in a 'real-life' project context. These teams are comprised of academic staff members from the faculty, outside professionals, university students and community representatives. The community projects undertaken by CPW aim to address the pressing and changing community needs of our society.

Fig 1&2: CPW engages in site study and public consultation sessions

Fig 3: Students' model for CPW project

The Objectives of CPW

The mission and objectives of CPW are threefold:

Knowledge Exchange (KE)
- To promote KE matters related to the Faculty of Architecture;
- To be responsible for all KE activities related to the Faculty, such as overseeing KE awards, KE data collection, KE reports and KE funding applications.

Community Participation
- To provide design and consultancy services to government and non-governmental organizations that require the expertise of the Faculty of Architecture;
- To foster the development of core competencies in applied research and development, in the Faculty of Architecture;
- To engage in projects targeted at serving community needs;
- To carry out research and design in planning, conservation and built design projects;
- To organize and conduct conferences, seminars, exhibitions, training courses and overseas missions relating to the Faculty.

Experiential Learning
- To provide experiential learning opportunities to students;
- To provide internship positions to students;
- To facilitate out-of-classroom learning opportunities for students in return for academic credit.

Fig 4&5: Students' design proposals

Services Offered

- Vision Plan
- Master Plan
- Design Inception Plan
- Outline Schematic Proposal
- Architectural Schematic Design
- Landscape Schematic Design
- Feasibility Study
- Geological Study
- Environmental Study
- District Aspiration Study
- Historical / Conservation Study
- Government / Public Consultation
- Government / Public Presentation
- Exhibition
- Analytical Report
- Environmental Engineering Review
- Coordination with local Design Institutes

CPW Advisory Board (2011-2013)

Dr. Roger C. K. Chan, Associate Dean (Research)
Dr. Frederik Pretorius, Associate Professor
Mr. Jonathan D. Solomon, Assistant Professor
Dr. Hoyin Lee, Assistant Professor
Mr. Matthew R. Pryor, Assistant Professor

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THE UNIVERSITY OF HONG KONG 香港大學
faculty of architecture 建築學院
Community Project Workshop 社區項目工作坊

CENTENARY 香港大學百周年

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Professor Joe Y.F. Lau

Associate Professor
Department of Philosophy

The University of Hong Kong

Biography

Dr Joe Lau is an Associate Professor in the Philosophy Department at HKU and the current Department Chairperson. His research area is the philosophy of mind and cognitive science. He is also interested in the teaching and promotion of critical thinking, and the use of IT in education and knowledge exchange. He was a University Teaching Fellow in 2006. A textbook on critical thinking and creativity has just been published by Wiley in 2011.

Poster - HKU-3

Project Objectives

1. To develop and maintain a website that disseminates free learning resources about critical thinking and related thinking skills, in order to enhance the teaching and learning of thinking skills in both the local and global community.
2. To promote awareness of the importance of critical thinking through related activities, including publications, public talks, special courses, etc.

Brief Description

The primary product of the project is **Critical Thinking Web (http://philosophy.hku.hk/think)**, a website with over 100 online tutorials on critical thinking, logic and related topics, in both Chinese and English.

The website was launched around 2004. It is a major portal for online self-learning about critical thinking and is regularly updated. It receives about 30,000 visitors on average each month, and appears on the first page of Google's search results on "critical thinking" (out of 14 million web pages).

The website pioneered the use of a creative commons license to place learning material in the public domain to maximize the free dissemination of knowledge. The project was invited to join the MIT Opencourseware Consortium.

The project investigator has also offered seminars on critical thinking to HKSAR government departments and published books and miniguides to promote critical thinking

Impact and Contributions

The project has helped people around the world to improve their critical thinking. Users of the website come from all over the world, e.g. China, US, UK, Brazil, Iran and South Africa. Apart from universities, many teachers from local and overseas secondary schools have used the website in their teaching.

The project content has been used by many diverse educational companies, e.g. Pui Ching Education Center, a Hong Kong non-profit organization, uses the website content in a thinking skills workshop. A US Navy intelligence officer has also used the website content to design a Critical Thinking and Structured Analysis (CTSA) workshop for CSC, a $16-billion global IT services company.

The creative license used for the website content ensures that disadvantaged minorities and developing countries can have access to free and high-quality learning material. Saylor.org, a free education initiative that aspires to become a free online university, has designed a complete online course on logic and critical thinking based on the project website **(http://www.saylor.org/courses/phil102)**.

Project investigator:

Dr Joe Y F Lau
Associate Professor, Department of Philosophy
School of Humanities, Faculty of Arts, The University of Hong Kong

Project Sponsors:

- Initial setup funded by a UGC Teaching Development Grant.
- Further development of the website supported by various HKU Teaching Development Grants.

Professor Ali Farhoomand

Professor of Innovation & Information Management
School of Business
Director
Asia Case Research Centre
Faculty of Business and Economics

The University of Hong Kong

Biography

Ali Farhoomand is Professor of Innovation and Information Management and the founding Director of Asia Case Research Centre at The University of Hong Kong School of Business. He has taught and conducted research in universities across the globe, including executive development programs at Oxford and INSEAD and as a Visiting Scholar at MIT Sloan School of Management. He has been a consultant for the government as well as large companies. A three-time winner of the Society for Information Management Paper Award, Professor Farhoomand has written several books, published numerous academic articles and developed 140 business case studies, over half a million copies of which were distributed worldwide through Harvard Business Publishing and other outlets. He is the creator and executive producer of the popular FocusAsia Business Leaders series, which was aired by BBC World, PBS and Asia News Network. He is recipient of several teaching awards including The University of Hong Kong Outstanding Teaching Award.

Poster - HKU-4

Professor Chun-Hung Chu

Clinical Associate Professor and
Assistant Dean (Research and Innovation)
Faculty of Dentistry

The University of Hong Kong

Biography

Dr Chun-Hung Chu is a Clinical Associate Professor and Assistant Dean (Research & Innovation) of the Faculty of Dentistry, The University of Hong Kong. He is a registered specialist in Family Dentistry in Hong Kong. He teaches clinical dentistry and supervises research post-graduate students. He is the Honorary Secretary of South East Asian Association of Dental Education. His research interests include caries prevention and management and community dental care.

Dr Chu was conferred Bachelor of Dental Surgery, Master of Dental Surgery in Pediatric Dentistry and Doctor of Philosophy by The University of Hong Kong. He also obtained a Postgraduate Diploma in Dental Public Health. Dr Chu is a Fellow of the Royal Australasian College of Dental Surgeons, Fellow in Dental Surgery of the Royal College of Surgeons of Edinburgh, Master of the Academy of General Dentistry and Diplomate of the American Board of General Dentistry.

Dr Chu married Shela and has two daughters, Samantha and Stephanie. They are Evangelical Christians attending Alliance International Church. They serve in Christian small group fellowship, and have joined missionary visits to Mainland China, Myanmar, Cambodia and the Philippines.

Poster - HKU-5

Promoting oral health of Hong Kong preschool children through educating their parents and kindergarten teachers

Project objectives

To promote the oral health of preschool children in Hong Kong through provision of oral health education (OHE) to their parents and kindergarten teachers.

Brief description

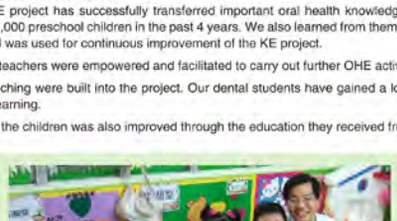
In this project, kindergarten teachers were trained to become oral health educators. Oral health education aids such as toothbrushing demonstration models and teacher's manual have been developed and provided to the kindergartens to enable and facilitate the teachers to carry out OHE for preschool children.
To better understand the oral health related behaviours of the preschool children and their parents, individualized dental caries (tooth decay) risk assessment of the children including parental questionnaire was conducted. The information obtained was used to improve the OHE.

This project started in 2008 to provide outreach dental service to 14 kindergartens with support from the government Health Care and Promotion Fund. In 2010, further support have been sought from the S.K. Yee Medical Foundation and the Colgate-Palmolive Co. Ltd to expand this knowledge exchange (KE) project to cover 100 kindergartens, involving over 10,000 preschool children. OHE sessions were arranged in the kindergartens for all teachers (about 2,000 in total) and also for parents of the children. Undergraduate and postgraduate dental students participated in delivering the OHE. In addition to the educational activities, prevention (topical fluoride application) was provided to the high risk children according to protocols developed from our previous research.

An interim evaluation was conducted this year on 83 participant kindergartens through interviewing the principal or head teacher. Nearly all (96%) of the respondents were very satisfied or satisfied with our project and all found their oral health knowledge had improved. The trained teachers also carried out OHE in their various teaching activities.

Impact and Contribution

1) Our continuing KE project has successfully transferred important oral health knowledge to the teachers and parents of over 10,000 preschool children in the past 4 years. We also learned from them in the process and the knowledge gained was used for continuous improvement of the KE project.
2) The kindergarten teachers were empowered and facilitated to carry out further OHE activities.
3) Research and teaching were built into the project. Our dental students have gained a lot through participation and experiential learning.
4) The oral health of the children was also improved through the education they received from the teachers.



Project Team:

Faculty of Dentistry, The University of Hong Kong,
Dr. Chun Hung CHU, Associate Professor,
Prof. Edward Chin Man LO, Professor in Dental Public Health,
Dr. Xiaoli GAO, Research Assistant Professor in Dental Public Health,
Dr. Alex Man Him CHAU, Dentist,
Dr. Ivy Di WU, PhD graduate,
Dr. Emily Ming JIANG, PhD Candidate,
Dr. Marcus Ho Tak FUNG, PhD Candidate

Acknowledgement

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1) Health Care and Promotion Fund (01080405)
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3) S.K. Yee Medical Foundation Fund (210205)
4) Bright Smiles Bright Future Dental Health Education Grant (2010001)

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Professor Dorothy F.P. Ng

Assistant Professor
Faculty of Education

The University of Hong Kong

Biography

Dr Ng is a senior language education researcher, also has over 20 years experience of teacher training. She was graduated from the Department of Chinese Language and Literature, the Chinese University of Hong Kong, and was awarded Post-graduate Diploma of Education (Distinction) and Master of Arts (Language Education). Later Dr Ng was awarded Common Wealth Scholarship to study Diploma of Applied Linguistics in Regional Language Centre in Singapore. She has been lecturer of Chinese University of Hong Kong and Hong Kong Institution of Education, and now is an Assistant Professor within the Language and Literature division, Faculty of Education and was previously an Assistant Professor within the Department of Curriculum Studies, in the Faculty of Education of University of Hong Kong. Her research interest includes linguistics, medium of instruction, classroom discourse analysis, teaching of reading and reading and learning etc. Dr Ng's current focus has been on the integration of Chinese opera into the curriculum. Her research aims to enhance and enrich students' understanding of culture, art performance, literature and music and it is anticipated that this will be fully integrated into the secondary curriculum.

Poster - HKU-6

Professor Kam Pui Chow

Associate Professor
Department of Computer Science
Associate Director
Center for Information Security and Cryptography

The University of Hong Kong

Biography

Dr K. P. Chow is the Associate Professor of Department of Computer Science and the Associate Director of the Center for Information Security and Cryptography at The University of Hong Kong. Dr. Chow's areas of research interest are computer forensics, cryptography, computer security, Internet surveillance and privacy. He was the chief designer of the computer forensic tool Digital Evidence Search Kit (DESK). Dr. Chow has been working on the Internet piracy monitoring system Lineament I, and Internet auction site monitoring system Lineament II. Both Lineament I and Lineament II were adopted by HKSAR Customs and Excise Department in 2007 and 2011 respectively. He has also published research papers on computer forensics, data security and cryptography in local and international conferences and journals. Dr. Chow has analyzed various data leakage cases in Hong Kong, which includes the IPCC case in 2006, the Foxy/Edison cases and the Yahoo case in 2008. Findings and results were presented in local seminars and international conferences with participants from legal and IT professions. In 2009, Dr. Chow was the honoree in the category of Senior IT Security Professional of the 3rd Annual Asia-Pacific Information Security Leadership Achievements Program. Dr. Chow has served as a member of the Program Committee of the international computer forensic workshop SADFE (Systematic Approaches to Digital Forensic Engineering) in 2005, 2007 and 2011. He was the conference chairman of the Sixth IFIP WG 11.9 International Conference on Digital Forensics held in 2010 in Hong Kong. From 2010, Dr. Chow is the Chairman of the Information Security and Forensics Society (ISFS), a professional body for digital forensics experts in Hong Kong. Dr. Chow is also a committee member of the IT Division, Hong Kong Institution of Engineers, and a council member of the Hong Kong Forensics Science Society. In the past few years, Dr. Chow has been invited to be a computer forensic expert to assist the Court in Hong Kong.

Poster - HKU-7

Project Objectives

The heated trend of online shopping nowadays is followed by a series of intellectual property infringement and the auction of fake goods. In order to prevent this, a new system called Lineament Monitoring System II (Lineament II) was jointly developed by the Center for Information Security and Cryptography at the University of Hong Kong and the Customs and Excise Department (C&ED), HKSAR, making 24-hour monitoring possible.

Graphical Overview of Lineament II system architecture

Brief Description of Project

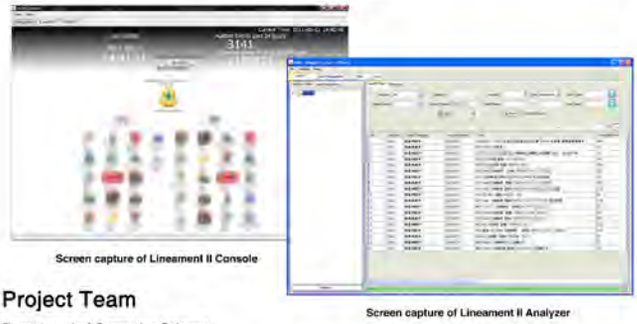
Lineament II targets the activities of Internet auction sites selling intellectual property infringement articles. By entering some relevant information into the system, C&ED can impose a 24-hour monitoring of the local Internet auction sites and suspected infringing activities are recorded to facilitate follow-up action and investigation by Customs officers. As Lineament II can be operated automatically, not only can it enhance the efficiency in monitoring Internet auction sites, it can also enhance the enforcement effectiveness of combating the sale of infringing articles through Internet auction sites as it can operate round the clock.

Lineament II uses the latest technologies in cybercriminal profiling, artificial intelligence (AI) and web crawling. The crawler of the system not only collects data from the target auction sites, but also performs a semantic analysis on the crawled data so that they can further be analyzed by the profiling engine and the AI engine. The profiling engine analyses the behavior of individual user account and then trigger rules of the AI engine to alert the law enforcement officers for follow up actions.

Impact and Contributions

In the past, C&ED counted on the manual patrolling to surf for suspected cases, which was tedious and inefficient. Some of the suspicious cases could even be missed due to the unavoidable carelessness. Moreover, the illegal sellers would sometimes keep the bidding open briefly and erased all the information after the deal within an hour, making it more difficult to track. However, the new system does a search of key words such as sellers, brands and price range. After entering the relevant information into the Lineament II, round-the-clock monitoring of the designated internet auction sites gets stared. Any suspected infringements will be recorded to facilitate follow-up investigations by officers.

Last year, 45 cases of selling counterfeit goods online were detected, mainly involving with auction websites, which is up 15 percent from 2009. The goods involved accessories, watches, clothes, toys and sunglasses, etc. The Lineament II, which costs about HK$300,000, has so far investigated 120 cases of which 70 have been solved since launched in January.



Screen capture of Lineament II Console

Screen capture of Lineament II Analyzer

Project Team

Department of Computer Science

Dr CHOW Kam Pui; and

Members from Center for Information Security and Cryptography

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Project Sponsor

Customs & Excise Department, HKSAR

Professor Victor O.K. Li

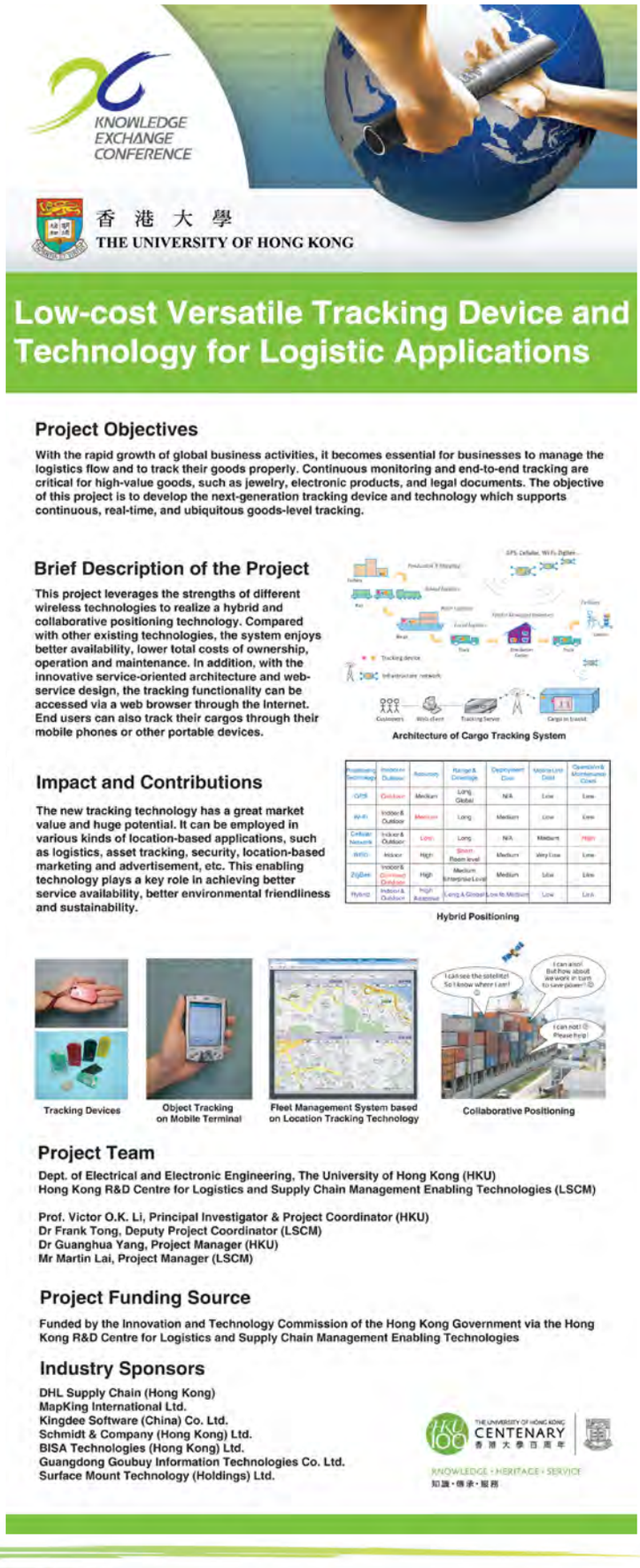
Associate Dean (Research)
Faculty of Engineering
Chair Professor of Information Engineering
Department of Electrical and Electronic Engineering

The University of Hong Kong

Biography

Victor O.K. Li received SB, SM, EE and ScD degrees in Electrical Engineering and Computer Science from MIT in 1977, 1979, 1980, and 1981, respectively. He is Associate Dean of Engineering and Chair Professor of Information Engineering at the University of Hong Kong (HKU), and Guest Chair Professor of Wireless Communication and Networking at Tsinghua University, Beijing, China. He served as Managing Director of Versitech Ltd., the technology transfer and commercial arm of HKU, and is now on the boards of Sunevision Holdings Ltd. and China.com Ltd. Previously, he was Professor of Electrical Engineering at the University of Southern California (USC), Los Angeles, California, USA, and Director of the USC Communication Sciences Institute. Sought by government, industry, and academic organizations, he has lectured and consulted extensively around the world. He has received numerous awards, including the PRC Ministry of Education Changjiang Chair Professorship at Tsinghua University, the UK Royal Academy of Engineering Senior Visiting Fellowship in Communications, the Croucher Foundation Senior Research Fellowship, and the Order of the Bronze Bauhinia Star, Government of the Hong Kong Special Administrative Region, China. He is a Registered Professional Engineer and a Fellow of the IEEE, the IAE, and the HKIE.

Poster - HKU-8



Professor Henry Y.K. Lau

Head and Associate Professor
Department of Industrial and Manufacturing Systems Engineering

The University of Hong Kong

Biography

Henry Lau is the Head of Department of Industrial and Manufacturing Systems Engineering. Henry graduated from the University of Oxford with a First Class Honor BA Degrees in Engineering Science and a DPhil in Robotics. Prior to joining HKU, he has been working in industry for many years as a system engineer and section manager at the UK Atomic Energy Authority (UKAEA) and AEA Technology plc., working on projects involving bespoke tele-robotics systems and advanced automation systems for the nuclear industry in decommissioning and waste management. While working in England, Henry was a Croucher Foundation Research Fellow at the University of Oxford Robotics Research Group, and a visiting lecturer at Brasenose College teaching Engineering Science.

Henry joined the University of Hong Kong in 1997 and his research interest includes artificial intelligence, in particular in artificial immune systems (AIS), intelligent automation for material handling, virtual and augmented reality systems, system analysis and design. In addition, Henry works closely with industry to conduct research and development projects on the design, evaluation and deployment of automated material handling systems, process simulation and improvement, and the deployment of virtual reality technology for system visualization.

Poster - HKU-9

Professor Yuguo Li

Head and Professor
Department of Mechanical Engineering

The University of Hong Kong

Biography

Yuguo Li is a Professor and Head of HKU Mechanical Engineering, and was a Principal Research Scientist and the team leader of indoor environments at CSIRO Australia prior to 2000. He studied at Shanghai Jiaotong University, Tsinghua University and Royal Institute of Technology in Sweden with PhD in Fluid Mechanics.

His research interests are at the interface of atmospheric environment and energy efficiency with a focus on ventilation (environment aerodynamics). His current research topics include city ventilation, urban heat island, and ventilation control of infection. He contributed to new theory and technologies of natural ventilation and hospital ventilation. His work led to the findings of the roles played by airflow and ventilation in the 2003 Amoy Gardens SARS outbreak. He carried out research on hospital ventilation in preparation for the influenza pandemic for Hospital Authority and WHO. He led and drafted the 2009 WHO guidelines on natural ventilation and co-drafted the 2007 WHO interim infection control guidelines.

He serves as Associate Editor of Indoor Air, Energy and Buildings. He received the State Scientific and Technological Progress Award (Second Prize) in 2010 and HKU Outstanding Young Researcher Award in 2003. He was elected an ASHRAE Fellow in 2007, ISIAQ Fellow in 2008 and HKIE Fellow in 2011.

Poster - HKU-10

Effective Ventilation for Minimizing Expiratory Droplet Exposure

Project Objectives

To understand the behavior and transmission of the expiratory droplets from a respiratory patient infected with diseases such as SARS and influenza in indoor environment.
To develop effective ventilation methods in hospitals and crowded indoor environments such as high-speed trains and classrooms.

Brief Description

Respiratory diseases such as influenza still kill. "Our understanding of the transmission of influenza is woefully inadequate". Expiratory droplets are the vectors of the disease transmission. Breathing, coughing and sneezing etc of an infected person can generate pathogen-containing particles of saliva and mucus.

In 2003, we studied the roles of airflows and ventilation in the spread of SARS in the Amoy Gardens outbreak. Since then, we have used the SARS research findings and thermal fluid engineering principle to develop new and effective ventilation methods for isolation rooms, understanding the roles of ventilation in influenza transmission, and developing feasible ventilation methods for hospitals in resources-limited countries.

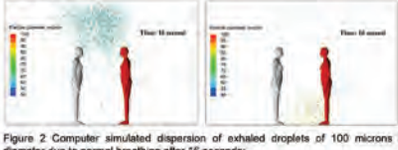


Figure 2 Computer simulated dispersion of exhaled droplets of 100 microns in diameter due to normal breathing after 16 seconds:
Left: With **35%** relative humidity (drier air);
Right: With **95%** relative humidity (wetter air)

Figure 3 Penetration of exhaled air in a mock-up full-scale hospital ward.

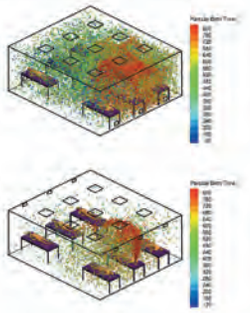


Figure 1 Top: The remaining number of particles of 10 μm in diameter by a patient in a room with **lower** level exhaust after 800 seconds; Bottom: The remaining number of particles of 10 μm in diameter by a patient in a room with **upper** level exhaust after 800 seconds, and much less particles are remained in air.

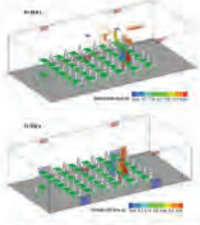


Figure 4 Dispersion of exhaled droplets due to coughing in a classroom
Top: In a room ventilated by **mixing** system;
Bottom: In a room ventilated by **displacement** system.

Impact and Contributions

We drafted as the lead author the 2009 WHO guidelines - Natural Ventilation for Infection Control in Health-Care Settings.

We drafted the Ventilation Chapter in the 2007 WHO Guidelines on Infection prevention and control of epidemic- and pandemic-prone acute respiratory diseases in health care.

The isolation ventilation design principles developed by the SARS busters were used in constructing the new SARS wards.

Invited by Ministry of Health, Indonesia, we provided evaluation to design of isolation rooms in 15 avian influenza referral hospitals.

We have given 1-2 lectures per annum on ventilation in health care settings for the Hong Kong Infection Control Nurses Association, Asia-Pacific Society of Infection Control and Centre for Health protection.

Figure 5 Left: Coverpage of WHO Guideline developed by Prof. Yuguo Li and his collaborators; Right: Professor Yuguo Li, in Indonesia in February 2009 as a WHO Temporary Advisor for the Indonesia Ministry of Health on ventilation design in their hospitals for control of avian flu.

Project team/Collaborators

Dr. Wing Hong Seto and Ms. Patricia Ching, Queen Mary Hospital
Dr. Benjamin Cowling, Department of Community Medicine, HKU
Prof. Ignatious Yu and Prof. TW Wong, Department of Community Medicine, CUHK
Mr. PL Yuen, Hospital Authority
Dr. Carmem LÚCIA Pessoa-Silva and Yves CHARTIER, WHO, Geneva
Prof. Yuguo Li, Dr. Qian Hua, Dr. Xie Xiaojian, Mr. Liu Li, Mr. Zhang Lei, Ms. Caroline Gao, Department of Mechanical Engineering, HKU

Project Sponsors

Research Grants Committee: 3 projects (HKU 7115/04E, 7150/06E, 7146/08E)
RFCID/Hospital Authority: 4 projects (HA-NS-002, 003, 006, 007)
WHO: 2 projects HKIE SARS Fund: 1 project

Professor Yu-Lung Lau

Associate Dean (Research)
Li Ka Shing Faculty of Medicine
Head and
Doris Zimmern Professor in Community Child Health
Department of Paediatrics and Adolescent Medicine

The University of Hong Kong

Biography

Professor Lau Yu Lung who graduated from the University of Glasgow in 1980, joined the Department of Paediatrics in 1988 as a lecturer. He is currently the Chair Professor in Paediatrics and Head of the Department, as well as the Associate Dean for Research in the LKS Faculty of Medicine.

Professor Lau's main research interests include primary immunodeficiencies, genetics in childhood and immunological diseases, developmental and viral immunology and control of childhood infectious diseases. He established an Asian Primary Immunodeficiencies Referral Network offering e-consultation and free genetic tests for such patients in China and Asia, supported by the Society for the Relief of Disabled Children. For studying the genetics of systemic lupus erythematosus, he has set up the Asian Lupus Genetics Consortium with collaborators from centres in China and Thailand. His research team has also contributed significantly to the understanding of how pathogens, such as SARS-coronavirus and influenza virus cause disease, and the possible strategy in controlling them.

As a child health researcher and advocate, especially in the area of control of infectious diseases, he has worked towards the implementation of universal pneumococcal vaccination in 2009 for Hong Kong children in his capacity as the Chairman of the Working Group on Pneumococcal Vaccination, Department of Health. He steered the process of introducing the universal screening for HIV infection in pregnant mothers back in 2001, when he was the Chairman of the Scientific Committee on AIDS, Advisory Council on AIDS.

As a public educator, Professor Lau initiated a book series for educating the Hong Kong public on childhood diseases, including eczema, food allergy, rheumatic diseases and allergic rhinitis.

Poster - HKU-11

A series of books on important paediatric diseases for the public

Project Objective

To ensure our children and families are able to understand and make shared decisions on the management of their illnesses with health care professionals, we started to publish a series of easy-to-read cartoon books with DVD on important paediatric diseases for the public since 2009. The theme of book series is "The Paediatric Disease You MUST Learn" (不能不認識的兒童病系列).

Brief Description of the Project

The preparation of the project started in 2008 and has now become a continuing enterprise with structured pathway for the production. The governance of this enterprise rests with The University of Hong Kong and the revenues generated will be returned to a fund for future production. The initial funding has been solicited from charities with missions in helping children; these include Children's Catastrophic Disease Foundation, Providence Foundation and SCMP Operation Santa Claus. Once funding is secured, cross-sectorial collaboration from volunteers including paediatricians, nurses, therapists, school teachers, patients and families, as well as their support groups is most important to plan the content of these books and the DVD. The patients' organizations that have involved include Hong Kong Allergy Association and Hong Kong Paediatric Rheumatism Association. A production team from Action Communication helps produce the DVD which documents the patients' stories reflecting their personal experience, with doctors and allied health workers narrating the basics of these paediatric diseases. Cartoonists help with the illustrations accompanying the text. Even the phraseology of the text has been meticulously edited to ensure lay public can easily understand. All these professionals only charge at the most basic cost.

Forms Publications (HK) Co. Ltd., a subsidiary of Sino United Publishing (Holdings) Limited (聯合出版集團), is our publisher who has signed a contract with The University of Hong Kong, also share our vision and has promoted our series of 4 books on Eczema, Food Allergy ,Childhood Rheumatic Diseases and Allergic Rhinitis including a talk on "從免疫看人生" in the 2010 Hong Kong Book Fair and "鼻敏感知多一點點" in the 2011 Hong Kong Book Fair. The first book on Eczema is now in second edition as the first edition published in 2009 has been sold out.

Impact

Through this project, we have transferred our excellence in teaching and learning on paediatric diseases effectively and continuously to the public via multi-channels, including book, DVD, public talk and press conference (see accompanying photos). More importantly through engaging the various partners of over hundreds of individuals and many organisations, we have formed a very robust alliance which will continue for years to produce more books and DVD. The 5th book on Newborn Diseases and Infant Nutrition and the 6th book on Asthma are now underway. We are confident this project will grow and develop, with impact radiating to both Taiwan and mainland China, as well as other overseas Chinese community.

Contributors

Lau YL, TL Lee, Marco Ho, SL Lee with

- Medical, Nursing and Allied Health Staff of Department of Paediatrics and Adolescent Medicine and other departments, The University of Hong Kong and Queen Mary Hospital
- Action Communication
- Children's Catastrophic Disease Foundation
- Forms Publications (HK) Co.
- Hong Kong Allergy Association Ltd
- Hong Kong Paediatric Rheumatism Association
- Providence Foundation
- SCMP Operation Santa Claus

Press conference about "Childhood Rheumatic Diseases 3 - The Paediatric Diseases You Must Learn" on 15 July 2010

Press conference about "Allergic Rhinitis 4 - The Paediatric Diseases You Must Learn" on 5 July 2011

Book fair talk by Prof YL Lau on 25 July 2010

Book fair talk by Prof YL Lau on 27 July 2011

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Professor Connie S.H. Ho

Professor
Department of Psychology

The University of Hong Kong

Biography

Connie Ho is a full Professor and Director of two Doctoral Educational Psychology programmes at thev the University of Hong Kong. She is an editorial board member of two international academic journals and has been providing consultative services to some NGOs and government departments on education-related issues.

Prof. Ho's research focuses mainly on reading acquisition and reading disability in Chinese. She has documented that the rate of dyslexia among Hong Kong Chinese children is around 10%, comparable to the rate found for alphabetical languages. Her research has focused on the underlying mechanisms of reading acquisition and the cognitive profile of reading disability. Her research findings have given us insights about the language-universal and language-specific aspects of learning to read different languages. In recent years, she has also investigated the genetic and environmental contributions of language and reading development, and the connection between language impairments and reading disability in Chinese.

With regard to research grants, she has been awarded 14 external competitive grants amounted to over HK$60M in the past 10 years. She has been the principal investigator of 9 of these research projects, and has produced over 80 academic publications on these topics.

Since 2006, Prof. Ho has served as the principal investigator of the READ & WRITE project, which is a 5-year project funded by the Hong Kong Jockey Club aiming at developing evidence-based support to children with specific learning difficulties. There are several sub-projects including basic research as well as development of assessment tools, learning packages, and school-based support models to help needy children from preschool to adolescent period. In addition, the project also develops programmes for teacher training and parent support.

This project has generated some important academic and educational publications, including journal papers, standardized screening and assessment tools, and training-related curricula and packages for Chinese language learning that support children with specific learning difficulties. The assessment instruments are the first standardized Chinese screening and assessment instruments for learning difficulties world-wide. They have become the practical standard used by all schools and professional psychologists in Hong Kong. These evidence-based practices in the identification of and the intervention to learning difficulties have exemplified how good science can be applied to meet real-world challenges.

Poster - HKU-12