

*Knowledge exchange and networking*



**5<sup>th</sup> Undergraduate Summer Program  
National University of Singapore**



**11<sup>th</sup> Doctoral Students Conference  
University of Indonesia**



**14<sup>th</sup> Annual Presidents Meeting  
University of Auckland**



**3<sup>rd</sup> Symposium on Brain and Mind Research in the Asia Pacific  
Seoul National University**



**6<sup>th</sup> Research Symposium on  
Multi-hazards around the Pacific Rim  
Peking University**

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*Cover page: Snapshots from various APRU activities.*

*The views and opinions expressed in the articles are those of the authors and contributors and do not necessarily represent the views of APRU.*



## From the Treasurer's Desk

Dear APRU Colleagues,

Warm greetings from the Association of Pacific Rim Universities!

Knowledge exchange, a chance to network and a sense of camaraderie are some of the benefits available to fellow APRU colleagues through our consortium's broad range of activities. The personal interactions that take place and the relationships that form as a result of these activities have proved to be invaluable in the strengthening of ties between members of the APRU family. The diversity of participation and engagement of external speakers at our meetings, conferences and symposiums also encourage new perspectives and fresh ideas. Many thanks to each of our host universities which have worked tirelessly to make every APRU program a success!

In addition to the success of our initiatives over these past months, we have seen several changes in APRU's leadership, including the election of APRU's 6<sup>th</sup> Chair Chancellor Henry T. Yang of the University of California, Santa Barbara and other new members of the Steering Committee; the retirement of APRU's founding President, Steven B. Sample; and the stepping down of Secretary General Kenneth McGillivray.

As the new Chair and Steering Committee lead the search for a new Secretary General, let us take this opportunity to recognize APRU's founding chair, former University of Southern California (USC) President Steven B. Sample for his vision and commitment to APRU; APRU Interim Chair (2009-2010) and Zhejiang University President Wei Yang for his leadership and service to the consortium; Far Eastern National University President Vladimir Kurilov and University of Melbourne Vice-Chancellor Glyn Davis for their excellent service on the APRU Steering Committee. The Secretariat also wishes to thank Dr McGillivray for continuing on as Secretary General in an acting capacity until the end of December 2010. We wish him well in his new role at USC.

This issue of APRU:News features APRU's student network with reports on the Undergraduate Summer Program (USP) and Doctoral Students Conference (DSC). These annual student activities nurture young talents who have the potential and drive to become future leaders in academia and beyond. We are pleased to highlight several student experiences at the recent USP hosted by National University of Singapore, and research interests presented at the DSC hosted by University of Indonesia.

I am delighted to share this issue with you and your colleagues.

Sincerely,

*Margaret Leong*

*Treasurer and Director (Secretariat)*

## APRU elects new Chair and Steering Committee members

At the APRU Business Meeting of the 14<sup>th</sup> Annual Presidents Meeting (APM) held on July 2, 2010 at University of Auckland, [Chancellor Henry T. Yang](#) of the University of California, Santa Barbara (UCSB) was elected Chair of APRU's Steering Committee. Chancellor Yang joined UCSB as chancellor and professor of mechanical engineering in 1994 and has been an active member of the [APRU Steering Committee](#) since the consortium was established in 1997. He also served as APRU's Vice Chair from 2009.



*Symbol of Leadership: Interim Chair, President Wei Yang of Zhejiang University (right) handing the APRU gavel to new APRU Chair Chancellor Henry T. Yang of the University of California, Santa Barbara (left).*



Joining Chancellor Yang as newly elected members of the Steering Committee are: Vice-Chancellor Stuart McCutcheon of University of Auckland, President Jean-Lou Chameau of California Institute of Technology, and President Jianguo Hou of University of Science and Technology of China.

Kyoto University President Hiroshi Matsumoto, National University of Singapore President Tan Chorh Chuan and University of Indonesia Rector Gumilar Rusliwa Somantri will continue in their terms as Steering Committee members.

*APRU's new Chair: UCSB Chancellor Henry T. Yang*

## Knowledge exchange and networking opportunities through APRU activities

*The last few months have seen the meeting of APRU presidents, senior staff, faculty, researchers, doctoral and undergraduate students at a number of APRU programs. Through the consortium's diverse initiatives, APRU colleagues have had the opportunity to engage in thought-provoking dialogues, exchange and gain new perspectives on relevant issues from fellow participants, and meet with and learn from distinguished speakers and guests.*

### Annual Meeting

#### 14<sup>th</sup> Annual Presidents Meeting

Attended by 18 APRU presidents and 57 senior staff and delegates from 32 member institutions, the [14<sup>th</sup> Annual Presidents Meeting](#) (APM) was hosted by University of Auckland from June 30 to July 2, 2010.

A flagship APRU event, the APM provides an opportunity for university leaders from member institutions to meet in person and engage in key global and regional issues relating to higher education. This year's three-day meeting featured panel sessions centered on the theme "Global Challenges – Pacific Perspectives". Forum and discussion topics at the APM included key challenges facing the Pacific Rim in global warming and ocean management, trade and migration, security and diplomatic relations, and APRU's role in global change and knowledge transfer.

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## Knowledge exchange and networking opportunities through APRU activities

*continued...*

Eminent speakers at the 14<sup>th</sup> APM included New Zealand (NZ) Ambassador to the United States, Rt. Hon. Mike Moore; Chief Science Advisor to the NZ Prime Minister, Distinguished Professor Sir Peter Gluckman; Chief Executive Secretary of NZ Ministry of Foreign Affairs and Trade, Mr John Allen; notable political journalist, Mr Colin James; Auckland's City Mayor, Hon. John Banks QSO; and University of Auckland's Chancellor, Mr Roger France.



*Valuable opportunities: Stimulating discussions and networking among colleagues. (1) University of British Columbia (UBC) President Stephen J. Toope (middle) posing a question at the session on "Regional Challenges, New Zealand Perspectives".*

*(2) L-R: APRU Chair and UCSB Chancellor Henry T. Yang talking to APRU Founding Chair and former USC President Steven B. Sample, and APRU Interim Chair (2009- 2010) and Zhejiang University President Wei Yang at the APM Presidents' Dinner.*

### Student-centric activities

#### **5<sup>th</sup> Undergraduate Summer Program**

Forty-nine student leaders from 25 member universities representing all 16 economies of APRU's membership participated in the [5<sup>th</sup> Undergraduate Summer Program](#) (USP) hosted by National University of Singapore (NUS) from July 5 to 16, 2010. APRU Secretary General Kenneth McGillivray and Associate Professor Anne Pakir, Director of International Relations Office (IRO) at NUS, welcomed the students at the opening ceremony on July 5 while NUS Deputy President (Academic Affairs) and Provost, Professor Tan Eng Chye hosted a welcome dinner for the participants that evening.

With its theme, "Rising to New Challenges - Impactful Leadership in the 21<sup>st</sup> Century", students interacted with leaders representing a broad mix of business, government, various religions and the arts throughout the course of the two-week program. The USP successfully facilitated interaction among students and motivated them with various insights, perspectives and learning points on effecting global change from leaders and domain experts of a variety of disciplines. Participants also visited famous local landmarks and places of interest, and enjoyed many examples of local cuisine, all of which were organized by NUS.

In addition to the dialogue sessions, site visits and meetings with prominent personalities, participants had the opportunity to share their own leadership initiatives and contributions at their home university or communities during the ALOUD Forum – a sharing platform modeled after those conducted at APRU's Senior Staff Meetings.

Putting opinions and new concepts learned at the USP into active leadership actions were also encouraged through a proposal competition focusing on innovative ideas or approaches relating to the program theme. Designed to provide students with the freedom to conceptualize proposals related to impactful leadership, the competition drew numerous interesting and well thought-out proposals from the young participants. These included the organization of online interactive forums and international seminars on sustainability projects such as recycling, water and environmental sustainability, and a variety of community outreach projects. The top three teams walked away with monetary awards which they could put towards the implementation of their projects. These projects were: Drink Responsibly - promoting the usage reduction of water bottles through the free distribution and usage of reusable, recyclable, sustainable drink bottles as an alternative to disposable bottles; Agora @ APRU - creating an online collaborative space that is designed to engage and connect students and academics from across the Pacific Rim; and

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## Knowledge exchange and networking opportunities through APRU activities

*continued...*



*Students gain insights on harnessing their leadership potential during a four-part workshop on "Facilitation Skills for Leadership".*

Entrepreneurial Leadership through Sustainable Clothing Practices - establishing an online shop to provide eco-friendly and uniquely tailored recycled clothing. All three winning teams are to report on the progress of their proposed projects or initiatives six months after the conclusion of the summer program.

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### 11<sup>th</sup> Doctoral Students Conference

The 11<sup>th</sup> annual [Doctoral Students Conference](#) (DSC) brought together 83 participants from 23 APRU universities and 4 non-APRU institutions. Hosted by University of Indonesia (UI) from July 12 to 16, 2010, this year's conference featured a series of stimulating lectures, paper presentations and discussions based on the theme, "Research for the Sustainability of Civilizations: Past, Present and Future".

PhD students had the chance to hear UI's Rector Gumilar Rusliwa Somantri and APRU Secretary General Kenneth McGillivray who addressed the participants at the opening ceremony. Rector Somantri provided insights on plans to increase the university's research capacity through the building of state of the art learning and research facilities.

Doctoral students got a glimpse of Indonesia's economy, scientific and research undertakings, culture and history through site visits to various landmarks and research institutes in Jakarta including the Bank of Indonesia,

Salihara Art and Community, Eijkman Institute for medical molecular biology and biotechnology, and UI's Institute of Human Virology and Cancer Biology. Aside from the enriching experience gained from visiting these venues, the visits also encouraged camaraderie among the participants who could, in future, become research collaborators.



*A group of PhD students are all smiles after concluding their paper presentations and review session.*

Another highlight of the five-day conference was the Doctoral Students Network (DSN) elections. Nine student leaders, each representing a different institution and economy, were elected to the [DSN Executive Committee](#) for a two-year term. Through the DSN and its Executive Committee, DSC participants can continue their professional relationships and interact by participating in a variety of DSN initiatives.

### Research-centric activities

#### 3<sup>rd</sup> Symposium on Brain and Mind Research in the Asia Pacific

The [3<sup>rd</sup> Symposium on Brain and Mind Research in the Asia Pacific](#) (BMAP) attracted more than 120 neurobiologists, cognitive neuroscientists, researchers and graduate students from Korea and across the Asia Pacific. Hosted by Seoul National University (SNU), the

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## Knowledge exchange and networking opportunities through APRU activities

*continued...*

symposium was held from August 23 to 25, 2010 at SNU's College of Natural Sciences.

The 3<sup>rd</sup> BMAP Organizing Committee Chair and SNU Professor, Kyungjin Kim, formally opened the symposium while congratulatory remarks were given by invited guests including Professor Seung Jong Lee, Vice President and Dean of Graduate School at SNU and APRU's Treasurer and Director (Secretariat), Ms Margaret Leong.

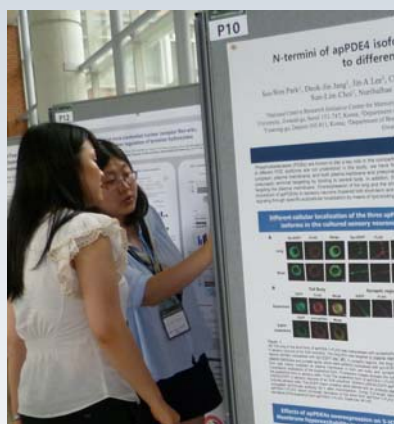
BMAP participants delivered interesting and substantive oral and poster presentations on interdisciplinary aspects of neuroscience including the latest research findings on brain function and various cognitive impairments. Through these presentations, participants had the chance to share valuable information and compare research data that were relevant to their respective fields of study. The cross-disciplinary nature of the proceedings allowed participants to consider new approaches and inputs into their areas of research.

The next BMAP symposium will be hosted by Keio University in 2012.

"Multi-disciplinary Approaches for Hazard Mitigation". Forty earth- and applied-science experts as well as civil and environmental engineers participated in the three-day event hosted by Peking University (PKU) from August 27 to 29, 2010.

Professor Yun-tai Chen, Honorary Dean of the School of Earth and Space Sciences at Peking University and APRU's Treasurer and Director (Secretariat), Ms Margaret Leong welcomed the symposium participants at the opening ceremony while Dr Shu Tao of PKU's College of Environmental Science gave a keynote lecture on the environmental impact of polycyclic aromatic hydrocarbons in China.

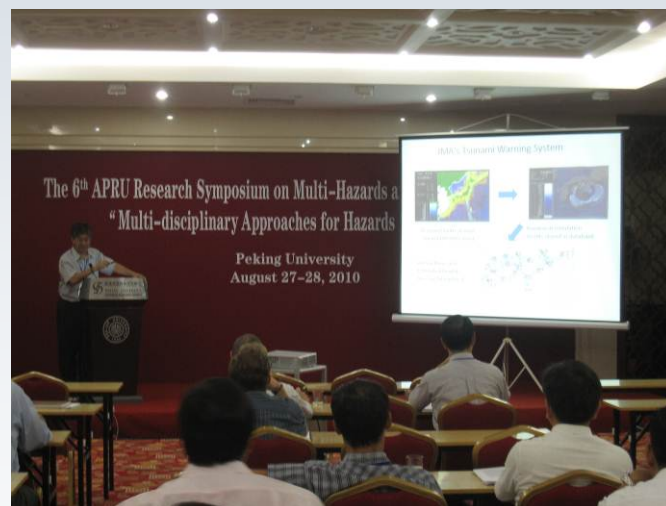
On-going research studies on geoscience and related technologies, and retrospective research investigations on recent natural calamities including Indian Ocean tsunami (2004); Sichuan and Wenchuan earthquakes in China (2008); Izu earthquake in Japan (2009); typhoon Morakot in Taiwan (2009); the Chilean earthquake (2010), Yushu earthquake in China (2010) and tropical storm Ondoy in the Philippines (2010) gave participants interdisciplinary perspectives and approaches to hazard monitoring and disaster management.



*Graduate students exchange research findings during the poster session.*

### 6<sup>th</sup> Research Symposium on Multi-hazards around the Pacific Rim - Multi-disciplinary Approaches for Hazard Mitigation

Discussions at the [6<sup>th</sup> Research Symposium on Multi-hazards around the Pacific Rim](#) focused on various case-specific methodologies in disaster monitoring, mitigation and recovery under this year's theme



*Participants listen to Professor Kenji Satake from the Earthquake Research Institute at University of Tokyo as he explains the different tsunami warning systems used to monitor Japan's coastlines.*

## Gerontology series to run its third symposium

National University of Singapore (NUS) will host the [3<sup>rd</sup> Research Symposium on Gerontology](#) from October 11 to 15, 2010. This symposium follows the two successful runs of APRU's gerontology series by University of Tokyo and Seoul National University in 2008 and 2009, respectively.

Three distinguished NUS institutions - Virtual Institute for the Studying of Ageing (VISA), Tsao Foundation Aging Research Initiative, and Duke-NUS Health Services and System Research (HSSR) will co-organize this year's symposium under the auspices of APRU.

The five-day symposium with the theme of "Healthy Aging" will engage junior researchers and professionals from across the Pacific Rim through various keynote lectures, poster and paper presentations, and site visits. A key highlight of the symposium is a research grant competition which aims to encourage new research projects focusing on healthy aging. Participants will be divided into teams based on similar research interests and each team will submit a proposal based on multi-disciplinary aspects of healthy aging and vie for a research grant worth S\$5,000.

## APRU launches new initiatives

*Adding to APRU's stable of programs, the inaugural Law Deans Meeting and the Research Symposium on the Interface between Molecular Biology and Nano-biology are two new initiatives which will take place later this year.*

### Law Deans Meeting

Chulalongkorn University will host the first [Law Deans Meeting](#) from October 14 to 16, 2010. Deans and associate deans from APRU member universities have been invited to discuss future cooperative endeavors and activities. The theme of this inaugural meeting, "The Teaching of Law in the Time of Global Crisis", hopes to enable participants to explore theoretical perspectives and practical realities in legal education amidst global crisis. The meeting agenda will include an examination of sub-themes in the context of global legal education, namely, historical and comparative approaches to law school management, analyzing the effectiveness of legal curricula for preventing and solving global crises, and constructing models of law school curricula and teaching.

The meeting's objective is to provide opportunities for deans of law schools in the Pacific Rim to share their academic and administrative vision on an international platform that will lead to the promotion and development of high quality legal education in APRU member economies.

### Research Symposium on the Interface between Molecular Biology and Nano-biology

With the emergence of interrelated scientific discoveries in various fields of biology at the macromolecular and nano-molecular levels, collaborative research on the interdisciplinary linkage between molecular biology and nano-biology has become increasingly important, particularly in the field of regenerative medicine and engineering. The [Research Symposium on the Interface between Molecular Biology and Nano-Biology](#), one of APRU's most recent initiatives under its umbrella, is a timely approach to keep up with the expanding studies and research on both biological disciplines.

Jointly organized by Kyoto University's Graduate School of Biostudies and the Institute for Integrated Cell-Material Sciences (iCeMS), the symposium will take place at Shiran Kaikan of Kyoto University's Faculty of Medicine from November 24 to 26, 2010.

The symposium will comprise six scientific sessions which cover various aspects of molecular biology and nano-biology including the frontier of signal transduction,

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mechanisms of adaptive responses to environment in photosynthetic organisms, nano-imaging and measurement, meso-space control of cellular dynamics, meso-scale membrane domains and single-molecule studies, and cell senescence. These scientific sessions aim to stimulate discussions and spark collaboration in molecular- and nano-biology research.

A plenary lecture will be given by Professor Masahiro Shirakawa, a leading researcher in biomolecular function chemistry from Kyoto University's Graduate School of Engineering, Department of Molecular Engineering. Session speakers to-date include faculty and researchers from nine APRU member institutions including Osaka University, Stanford University, University of Auckland, University of British Columbia and University of Tokyo.

Deadlines for the [submission of abstracts](#) and [registration](#) are October 15 and October 31, 2010 respectively.

## APRU Education Deans to focus on global learners and educators

University of Hong Kong (HKU) will be hosting the 3<sup>rd</sup> APRU Education Deans Meeting from December 1 to 2, 2010. With a focus on "Global Learners and Global Educators", the meeting will provide a platform for the sharing of best practices and to identify research gaps and barriers faced by schools of education. The meeting will also explore the possibility of collaboration on a research project within the field of higher education. Hence, deans are invited to bring along 1-2 members of their faculty who can drive or contribute to the research project after the meeting. As an added benefit, all participants will be invited to attend the International Conference on Enhancing Learning Experiences in Higher Education (ELEHE) organized by HKU from December 2 to 3, 2010. More information will be released shortly.

Please visit our website at <http://www.apru.org/activities/edudeansmeeting.htm> or contact the APRU Secretariat at [apru@apru.org](mailto:apru@apru.org) if you have queries.

### Snapshots



*Meeting with APRU Secretariat: (L-R) APRU Treasurer and Director (Secretariat) Margaret Leong, University of Oregon (UO) President Richard Lariviere, APRU Secretary General Kenneth McGillivray, UO Vice-President for University Advancement Michael Redding and Ms Cynthia Stenger Riplinger from UO's International Advancement and Alumni Relations. During their visit to NUS in July, President Lariviere met the Secretariat to discuss initial plans for the 16<sup>th</sup> Annual Presidents Meeting (APM) which will be hosted by University of Oregon in 2012.*



*APRU Treasurer and Director (Secretariat), Margaret Leong presents a plaque of appreciation to APRU Secretary General Kenneth McGillivray for his contributions to the APRU Secretariat. Professor McGillivray has been appointed as University of Southern California's (USC) Vice Provost for Global Initiatives in September and will serve as APRU's Secretary General in an acting capacity till end-December 2010.*

# Leadership and Life Lessons from across the Pacific Rim

*Three members of the winning team from this year's Undergraduate Summer Program proposal competition reflect on their two-week experience in Singapore.*

*Ellen Macomson*

*International Studies and Political Science  
University of Oregon*

"This 4th of July, instead of watching celebratory fireworks, I boarded a 747 bound for Singapore, where I was to meet other university students chosen to participate in the APRU Summer Undergraduate Program at the National University of Singapore. I was fortunate enough to spend two weeks meeting some bright minds of my generation as well as fascinating speakers from Singapore.

Two of my favorite presenters were Mr Aaron Maniam and Mrs Ivy Singh-Lim. Aaron is a Singaporean who encapsulates everything one should want to accomplish by the time they are thirty. He organized a thought-provoking mini-program that used short stories and case studies to stimulate group dialogue about ethical leadership. The moral dilemmas we mulled over seemed plausible (and very difficult). Aaron was able to rouse emotional responses to leadership from almost everyone. Most importantly, this allowed me to objectively view emotion and leadership together. Ivy Singh-Lim, or the Gentle-warrior Farmer, is the owner of Bollywood Veggies, an organic farm in Singapore. The woman was a character, purposely going against every social and legal convention set before her. I was moved by her carefree yet forceful manner that appreciates life and living it to the best of her ability. More leaders should truly do the same. As individuals, Aaron and Ivy are easily some of the most inspiring I've ever encountered. Furthermore, they both provoked lively discussion among our diverse group, which I found entertaining and enlightening.

I derived first-hand from Singaporeans the differences

between our two governments' priorities and functions. The environmental movement in Singapore particularly intrigued me because of the close relationship between government and environmental activism. In the States, the two are rarely known to work together, for better or worse. I'm interested in the politics of the environment so the juxtaposition of the two methods for responding to climate change gave me a unique perspective on the issues. Rarely can a political science student actually discuss policy-making with someone outside of his or her local sphere, so the opportunity to do so was fantastic.

The environmental talks also spurred me to participate in the APRU Proposal Competition, which invited us to engage in some healthy competition and present an idea showcasing our leadership. I teamed up with an American, a Kiwi, and a Japanese student. The instructions were open-ended, so coming up with an idea took forever. We wanted something tangible but fun and different. Our team's "Drink Responsibly" campaign was simple, effective plan that resonated with everyone, as did our interactive presentation. It was incredible to be awarded first prize in the proposal competition, especially since other groups had unique, well-planned ideas. I am honored and pleased that an international group could come together so well and win.

I am grateful for the opportunity to have visited Singapore and participated in the APRU program. I am currently planning on becoming more active in the organization because cross-cultural and international connections are an important part of university life at all levels, something that APRU recognizes. Its growth as an association can only improve life at the universities of which it is comprised."

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*Arnold Philip James Le-Neve*

*BA History and Bachelor of Laws*

*University of Auckland*

"This winter, I was very fortunate to gain a place at the APRU summer school, hosted by the National University of Singapore (NUS). The opportunity was exciting, fruitful and deeply rewarding. Perhaps the most obvious benefit was the solid personal friendships I was able to form through the intensive program, which allowed ample time for networking and ultimately led to the formation of new perspectives and cross-cultural partners. The rewards in this respect have been immediate, especially because of my involvement in the Proposal Competition which my team was honoured to have won. Working with individuals from Japan and the United States, we have begun to formulate a tangible plan for a social enterprise, and along the way we have exchanged leadership ideas and added to the skills the summer school equipped us with. I believe I can speak for the group when I say that as individuals our outlook on leadership and our personal ability to lead a team, think strategically, and consider the ways in which we can benefit the broader community, have been vastly improved.

There can thus be little doubt that my personal leadership and group leadership has been strengthened. But what about my ability to act as an impactful leader? By exploring novel approaches to leadership and focusing on key challenges in today's society, I was empowered to look beyond myself and my organizations. The global nature of the program itself compelled the participants to engage with issues in other cultures, and this was added to by seminars such as that on the arts – teaching us the value of the arts in stimulating cultural awareness and solving societal issues – and that on social entrepreneurship, which undoubtedly catalyzed an examination of my role in bringing about positive change. Through the Student ALOUD session also, it was heart-warming to note the initiative and capability with

which other youth are leading across the globe, and by the end of the program it was clear we all had fresh ideas, solutions, impetus, vision, and networks to support us in these. With the new notions of impactful leadership and cultural perspectives I now have, I am exceedingly better equipped to deal with 21<sup>st</sup> century leadership challenges on both a global and national level."



*Winning team: (left to right) Fumiko Kuribayashi, Kyoto University; Arnold Philip James Le-Neve, University of Auckland; Ellen Macomson, University of Oregon; and Cory Elizabeth Welsh, University of Southern California receive the top prize from APRU Secretary General McGillivray.*

*Cory Elizabeth Welsh*

*BA Communication*

*Masters of Communication Management*

*University of Southern California*

"Approximately two months ago but what feels like yesterday, 49 college students met at the National University of Singapore to explore not only what set them apart, but also what they had in common: a passion for leadership. A congregation of countless cultures, values, leadership perspectives and student experiences is the only way to summarize the APRU Undergraduate Summer Program. The diverse people whom I was able to spend

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## Leadership and Life Lessons from across the Pacific Rim *continued...*

time with over the course of our two weeks together taught me invaluable lessons about cultural sensitivity, collaboration, entrepreneurship, ethics, giving, and impactful leadership.

The plethora of opportunities I was granted through the APRU Summer program permitted these eye-opening experiences in a variety of contexts. By visiting leading organizations and hearing from influential Singaporeans in politics, commerce and their sustainable society, I was able to hear leadership philosophies that have endured real and globally-relevant leadership challenges. Ivy (Singh-Lim), for instance, the founder of uniquely sustainable Singapore organic farm Bollywood Veggies, was a somewhat atypical yet undeniably exemplary leader who shared her experiences. Ivy indicated the importance of loving yourself upon waking in the morning, spreading the wealth acquired during an enriched and successful life through service and infectious positivity, and considering every possible self-sustaining course of action in response to the struggles one meets in leadership and life.

In another light, deep and genuine connections with my colleagues from across the globe were the primary sources of inspiration and enlightenment over the course of this leadership experience. Several moments which stand out from our time together include learning tonal differences and new vocabulary while casually conducting language lessons at a local hawker center (over novel local cuisine, making it an even furthermore educational experience). We collaborated with students of unspeakably different personalities, backgrounds and moral foundations to consider the qualities of a "good" or "perfect" society; this led us to explore leadership as a responsibility of sorts, to consider these universal dilemmas and take initiative enough to found societies just as our global forefathers did. Finally, I was fortunate enough to participate in a successful leadership proposal team, comprising students from the four corners of the Pacific Rim. Working together to address a globally-relevant environmental issue, create a universally-recognizable yet original brand and establish

an action plan taught me incredible lessons about appreciating diverse perspectives, cultural frameworks and leadership styles. Our campaign for the use of reusable, environmentally-friendly water bottles encouraged our peers from across the Rim to be able to claim: "I Drink Responsibly."

Whether referring to brainstorming leadership solutions to moral crises, visiting social enterprises which work to revive the Singaporean workforce or cruising across the rich and rural island of Pulau Ubin on rented bicycles, I cannot speak highly enough of the broadening experiences, amazing insights and life-changing people I was met by in Singapore this summer at the APRU Undergraduate Program 2010."



*Participants pose for a group photo while visiting Bollywood Veggies.*

### Share it with us!

We welcome comments, suggestions and contributions you might have for our e-newsletter. If you wish to use any part of this e-newsletter, please email us at [apru@apru.org](mailto:apru@apru.org) with "APRU E-newsletter" in the subject heading.

*Research Features highlight various research interests, programs, interdisciplinary activities and collaborative initiatives across APRU member universities. This month's issue features research articles contributed by two Doctoral Students Conference 2010 participants.*

## Behind the 'City in a Garden': The development of the 'Clean and Green' movement in Singapore

*Jun Yi Ong, [jong2680@uni.sydney.edu.au](mailto:jong2680@uni.sydney.edu.au)*

*Faculty of Architecture, Design and Planning*

*University of Sydney*

The 'Clean and Green' movement has transformed the urban landscape of Singapore. The process of modernization with an emphasis on green urban development can be used to explain the notion of a Garden City in Singapore's high-density urban context. Singapore's Garden City concept has its beginnings since Singapore's independence in 1965, under the direct supervision of its first Prime Minister, Lee Kuan Yew. Today, close to half of Singapore is covered by greenery, and there are thousands of species of flora and fauna within the city itself (The Inter-Ministerial Committee on Sustainable Development 2009: p. 66). Singapore distinguishes itself, especially from other Southeast Asian cities, with its extensive roadside greenery, parks and nature amidst a high-rise built-up environment.

Connections can be drawn between the 'Clean and Green' movement and the current discourse on Green Urbanism, which emphasizes the role of cities and positive urbanism in shaping more sustainable places, communities and lifestyles (Beatley 2000: p. 5). The development of the 'Clean and Green' movement towards building the 'City in a Garden' has varying focuses over time since the nation's independence in 1965. It began as a means to solve hygienic issues, to the formation of a Garden City green image for tourism and investments that improves the experience economy (Pine II & Gilmore 1998, p. 97), towards an effort to help resolve climate change and provide a better lifestyle and environment for its people. Despite some criticisms towards its greenery being artificial, the 'Clean and Green' movement has resulted in

a vibrant, attractive, safe and liveable environment that is gaining international recognition. Mercer Human Resource Consulting ranked Singapore 1<sup>st</sup> in Asia and 8<sup>th</sup> in the Asia Pacific region in terms of quality of life, in their 2007/2008 Quality of Living Survey. Singapore also gained positive exposure in international magazine rankings of liveable cities, like Monocle Magazine's yearly ranking of liveable cities, and Ethisphere's 2020 Global Sustainability Centres (The Inter-Ministerial Committee on Sustainable Development 2009: p. 28).



*Typical 'clean and green' urban landscape of Singapore – a modern concept of utopia*

From the early days of nation building, the government set out to build Singapore into a Garden City. Ten percent of Singapore's land is committed as green space, of which about half are gazetted nature reserves. These together with the roadside greenery and an island-wide Park Connector network result in close to half of Singapore being covered by greenery (The Inter-Ministerial Committee on Sustainable Development 2009: p. 28). This is a physical demonstration of the political efforts of the 'Clean and Green' movement that formed the Garden City image, leading to the creation of a 'City in a Garden'. 'The first utopia was the city itself' (Lu 2006: p. 110). However, in the built-up urban environment of the city

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## Behind the 'City in a Garden': The development of the 'Clean and Green' movement in Singapore *continued...*

today, the idea of utopia seems to be otherwise. Rural utopian dreamers aspired to possess electricity, machinery and modern architecture, things that were available in the city but had yet to be developed in the countryside (Lu 2006: p. 109). In contrast, urban utopian dreamers aspire towards a natural environment within the urban environment. The 'City in a Garden' concept satisfies this utopian desire for artificial or natural greenery within a modernized built-up environment.

The Singapore's experience of the 'Clean and Green' movement that stretched over thirty years is a vast and extensive political experiment that impacted the urban transformation of the city. The movement can be used to rethink the relationship between modernity and nation building. The journey of the 'Clean and Green' movement, together with the contradictions that occurred along the way, which were identified and raised by NGOs such as the Nature Society (Singapore), can serve as an important reference for other cities with green visions. The strong political will of the government ensures that the 'Clean and Green' intentions are carried out and properly maintained across the city. The unique formation of the 'City in a Garden' by the 'Clean and Green' movement serves as an important reference for other urbanized cities with green visions, especially in current times where climate change is a pressing global issue - a valuable experience to be shared.

### Author's note

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- ◆ Photo: <http://en.wikipedia.org/wiki/>  
Image: [BishanParkPano, Singapore.jpg](#)

### About the author

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## A Novel Framework for Digital Video Processing and Retrieval

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Digital video data contains useful information and requires reliable information retrieval techniques for effective use. Studies on video visual content analysis have shown ways for methodological approaches to further develop practicable methods. The semantic video

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visual search, extraction and interpretation are gaining higher importance due to lapses in current approaches (A. Hoogs et al., IEEE Conference on Computer Vision and Pattern Recognition (CVPR'03), 2003, 2:327). There are many studies that have been conducted on multimedia information retrieval but only a minor commercial impact done on the industrial applications (N. Sebe, 5<sup>th</sup> ACM SIGMM International Workshop on Multimedia Information Retrieval, ACM, 2003). Incorporation of visual information to enrich video description is a challenge focused by the research community through various approaches. On the other hand the visual signal interpretation done in human brain is a complex and unclear task (Cees G.M. Snoek and Arnold W.M. Smeulders, Computer, IEEE, 2010, 43 (6):76). The task of automating the video visual content description is a three-stage process, namely visual feature extraction, feature classification, and visual concept depiction.

The description of visual concepts with irregular shapes is harder due to colour variance and lack of proper geometrical shape for those concepts. The computational complexity and 'curse of dimensionality' accompanied with most current colour features and feature combinations have shown their negative effects in visual description. The Compacted Dither Pattern Code (CDPC) has been designed to reduce the visual feature space by maintaining high visual description effectiveness for irregular shapes based visual concepts in videos (L. Ranathunga et al., Multimedia Tools and Applications, Springer, 2010, DOI:10.1007/s11042-010-0522-2). The CDPC feature extraction and the Bhattacharyya classification integrated process are maintained at very low computational cost. Furthermore, the CDPC feature can work under low number of training samples. Figure 1 illustrates the experimental framework used in the CDPC approach.

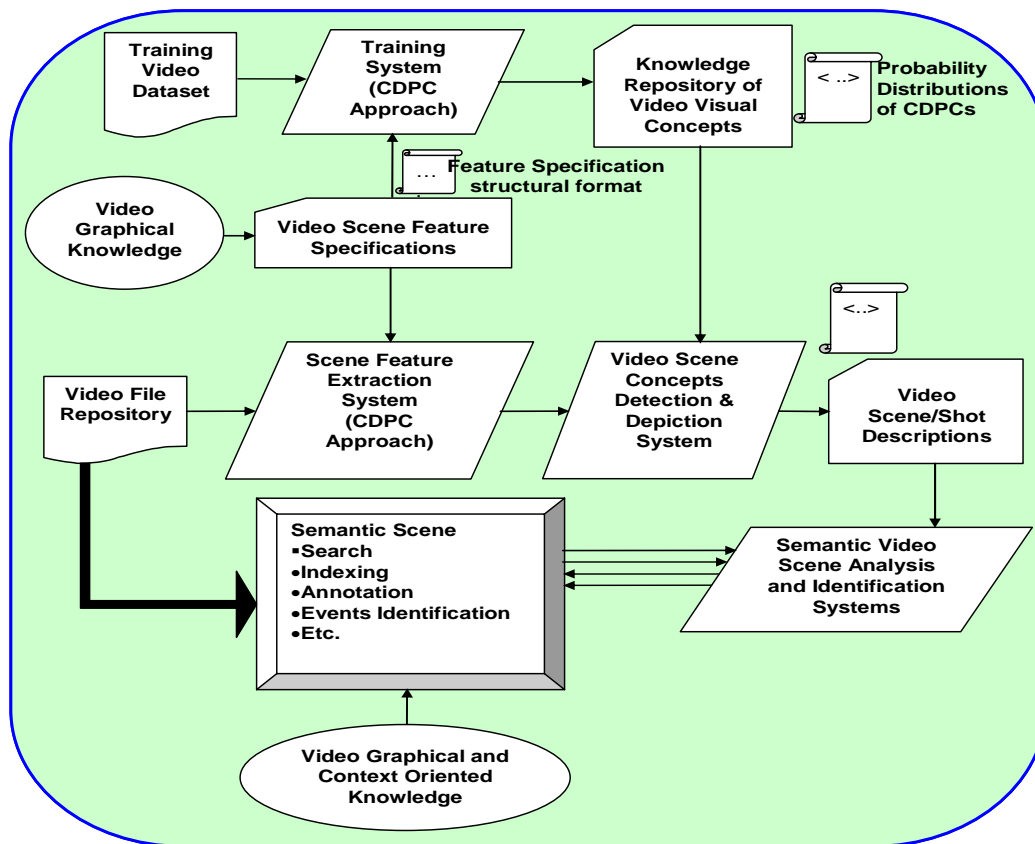


Figure 1: Experimental Framework

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The experimental framework consists of three main parts - system training, generation of automated video visual descriptions and users' context-oriented knowledge driven by a video retrieval system. Currently this framework has been implemented with four colour feature extractors including CDPC and four popular classifiers.

In realization of this framework, the technical framework outlined in Figure 2 has been used. This particular framework supports processing of video files in wide variety of formats. As video content descriptions are generated according to a well-defined semantic XML Schema structure, the semantic retrieval and search are possible.

The retrieval mechanism in this framework has been designed to realise users' expectations as much as possible by using users' visual knowledge driven by query interfaces. The schema used in this framework supports spatial and visual concept-organization. Therefore, the association, organization and transition-based search and retrieval of spatial and temporal visual concepts are made

possible by this descriptive schema. This retrieval approach is a novel approach, rather than hard logic coding of humans' visual reasoning in the visual depiction stage which is more complex and expensive.

The experimental framework is to be made available for further research and development as an open source distribution by mid of next year. Its availability provides a possibility for a greater expansion of detectors, trained-knowledge and semantic retrieval mechanisms in future research studies on digital video processing and retrieval.

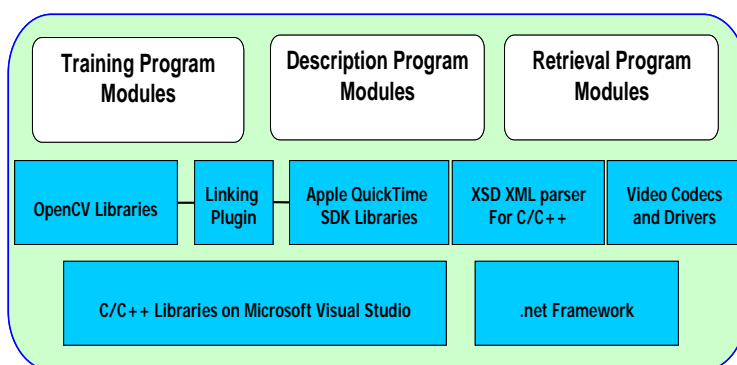


Figure 2: Technological Framework

## **About the author**

Leading author Lochandaka Ranathunga received a B.Sc (Special Hon) degree from the University of Peradeniya, Sri Lanka in 1999 and a M.Sc in Computer Science degree from University of Colombo, Sri Lanka in 2005. He received a Postgraduate Diploma in Distance Education Degree from the Indira Gandhi Open University, India, in 2007. He is currently a PhD candidate in the Faculty of Computer Science and Information Technology, University of Malaya, Malaysia. He has been working as a Lecturer in Computer Science at Faculty of Information Technology, University of Moratuwa, Sri Lanka since 2004. His potential PhD thesis title is "Video Visual Feature Space Reduction and Semantic Search Mechanism for Visual Content Retrieval". He was a member of research group of MediaMe, Media Mirror & Intelligent Video Wall projects, jointly conducted by Faculty of Information Technology, University of Moratuwa and Mixed Reality Lab, National University of Singapore. Currently, his research interests are focused on video processing, video scene description, video object tracking, reduction of visual feature space and semantic video scene indexing. He has published papers in various journals and conference proceedings on visual feature space reduction, video content analysis and visual concept depiction, telepathy computing, 3D virtual environments in e-learning, mobile based intelligent route tracer and e-document management. Lochandaka also presented a paper at the 11<sup>th</sup> APRU Doctoral Students Conference hosted by the University of Indonesia.