To mark the University of Sydney’s participation in the Shanghai World Expo we highlight here some of our growing collaborations across China in the field of health. From Xi’an to Shanghai, Changchun to Wuhan, our China partnerships span the country and the territories of research, teaching and learning and student exchange.
CLEARING THE AIR IN CHINA

BY KRISTI MAROC

Plans to introduce plain packaging on cigarette packs in Australia, announced recently by the Federal government, are another decisive step in a long campaign to cut the number of Aussie smokers. The strategy has been tough, and it has been successful.

In Australia smoking is now commonly looked upon as a social indignity. No longer does it carry the glamour and charm associated with smoking by previous generations. But the present social stigma is the result of decades of research and campaigning to ‘denormalise’ smoking. From no-smoking areas, price increases and cigarette advertising bans, to disturbing advertisements graphically demonstrating the physical results of smoking, Australia has demonstrated a no-nonsense approach to encouraging people to avoid smoking.

One man who has had played a pivotal role in the evolution of this strategy is Simon Chapman of the University of Sydney’s School of Public Health. A devoted anti-smoking advocate for more than 30 years, Professor Chapman has long campaigned for an end to tobacco advertising, and he has sifted through millions of cigarette company documents for evidence that the companies knew about the health risks but covered them up. His main research interests now are in tobacco control, studying media discourses on health and illness, and risk communication. He has become a high-profile spokesman for tobacco control policies around the world.

Professor Chapman’s successes include awards from the World Health Organisation, the American Cancer Society, the British Medical Association and the Public Health Association of Australia and New Zealand, as well as the NSW Premier’s Award for Outstanding Cancer Research. He was also a finalist in the 2009 Australian of the Year award. But most importantly, his biggest success is the role he has played in contributing to the fall in the number of Australian smokers.
“China is without a doubt the biggest challenge of any country in the world. It’s got more smokers than any other country easily, more smoking deaths, and it will just have stratospheric numbers of people dying from smoking-caused diseases unless they arrest the growth.”

“Smoking rates in Australia have never been lower in both adults and in youth. Around 17 per cent of adults – both male and female – now smoke, compared to just under 60 per cent of men and about 30 per cent of women in the early 1960s. To find the rate of male lung cancer per 100,000 population that we have today, you have to go back to 1962. Female rates are much lower and will never reach the heights seen in men. Diseases caused by smoking may well become uncommon again by the next generation,” says Professor Chapman.

“Fortunately we’ve been very successful in Australia in using research to motivate the government to take action against tobacco. Tobacco control in Australia has been a template for countries all around the world”.

Using Australia’s success in tobacco control policy to inspire other countries around the world is Professor Chapman’s next challenge. In 2009 he received a grant from the Bloomberg Foundation to foster the publication of research in the journal Tobacco Control. As commissioning editor for low- and middle-income countries he has spent time in China conducting workshops for people wanting to publish in Tobacco Control in Beijing, Shanghai and Hangzhou.

“China is without a doubt the biggest challenge of any country in the world. It’s got more smokers than any other country easily, more smoking deaths, and it will just have stratospheric numbers of people dying from smoking-caused diseases unless they arrest the growth,” says Professor Chapman.

But he says an interest to take on the challenge is certainly evident within China.

“Of all the countries we’ve been trying to encourage to submit research, China has been the most successful. We have received quite a lot of submissions from China and have been able to publish several of those already.”

Smoking is entrenched in Chinese culture. The People’s Republic is the world’s largest consumer of tobacco and almost a million Chinese die from tobacco-related illnesses every year. The impact on health is still generally not recognised, so much so that more than half of all male doctors smoke. In mid 2009, authorities in Gong’an county in Hubei province ordered government workers to smoke more, setting a target for the amount of cigarettes to be smoked each year in order to boost tax income. They imposed fines and the threat of being fired for those that did not comply. The policy was eventually revoked following criticism.

However, the Chinese government has taken some steps towards the challenge, creating smoke-free environments and anti-smoking mass media messages during the Beijing Olympics in 2008. Until then, China’s 350 million smokers were able to smoke anywhere, anytime.

Professor Chapman’s career has been committed to providing research to the Australian government to encourage action in tobacco control policy. His specific goal now for China is to encourage submissions, mentor researchers, and communicate developments in tobacco research that have been happening globally. He has worked with Chinese authors to get their papers up to submission status, and recently supported two papers from researchers at Fudan University which are currently under review and which he hopes will be successful. He is also working with researchers from Hangzhou University.

Professor Chapman hopes that highlighting the challenges that Australia has faced, and the successes in tobacco control policy that have been achieved, will help China face up to the challenge of driving down smoking.

“The profile of China is very different to Australia. We need to understand first of all the cultural differences, and then think about the implications for tobacco control. We don’t really know much about whether the sorts of messages given out to smokers in Australia – like the ‘every cigarette is doing you damage’ ads – would work in the same way in China, or whether there needs to be interim steps before getting to that point,” says Professor Chapman.

“It is like an absolute goldmine of research questions, and it is very exciting”.

This article first appeared in The University of Sydney World Magazine: 2010 Shanghai Expo Edition.
FROM SYDNEY TO SHAANXI: NEW SURVEY METHOD TO HELP PREGNANT WOMEN IN CHINA

BY PHILIP CHAN

An innovative survey method is part of a study that will help save the lives of pregnant women and their newborn babies in western China.

Neatled in the frontier of northwestern China, the province of Shaanxi is at a turning point. It is at the beginning of expanding economic development and for Associate Professor Michael Dibley and his collaborators, they hope their research will end the deaths of newborn babies caused by iron deficiency.

Associate Professor Dibley, a nutritional epidemiologist at the University of Sydney, Professor Yan Hong, Dean of Xi’an Jiaotong School of Medicine and Dr Zeng Lingxia, a lecturer in health statistics at Xi’an Jiaotong University, devised a new screening method to identify whether an elevated neonatal mortality rate existed in the counties of Shaanxi. The University of Sydney’s Dr Mu Li also contributed to the design of the study.

While such a survey usually requires a very large sample size, they used a method that only required a smaller sample size of 1000 women who had a baby in the past three years. “This sample size allowed us to reach a decision on whether or not there was a high rate of neonatal mortality, as well as identifying counties with the poorest perinatal health care services,” Associate Professor Dibley said. The findings of the survey will ascertain suitable counties to undertake a large scale community trial of iron supplements, with the aim of reducing the deaths of newborn babies during pregnancy.
Iron deficiency is a common occurrence in western China. Without iron supplementation, about 65% of women become anaemic in the final stages of pregnancy. Severe anaemia increases the risk of death to the mother during delivery. The risk of premature rupture of membrane and babies that are born prematurely also increases. Associate Professor Dibley said that the province of Shaanxi is an area that is likely to have nutritional deficiencies because of the large number of poor, rural counties. “Even though there are adequate amounts of staple food like wheat, there is less dietary diversity and they can’t afford to buy much meat and vegetables. That’s what fuels this deficiency in micronutrients in these populations.”

**UNIQUE STUDY IN WESTERN CHINA**

The survey is part of an ongoing study on the effects of iron supplements in pregnancy. The study is unique because while many countries have existing programs to distribute micro-nutrient supplements, there was no program in western China. The survey will build on the findings from the first study in Shaanxi between 2000 and 2006. “We were able to show that there was a significant reduction on rates of neonatal deaths for women who had an adequate dose of iron,” Associate Professor Dibley said. Following the survey’s analysis, a new and larger study will identify whether the early application of the iron supplements or the total amount of iron is the critical factor.

Another use of the survey’s finding will be to describe the change in health services in Shaanxi. During the past two years, the government has implemented a form of health insurance, resulting in 80% of women delivering their newborn in the county hospitals. This is in marked contrast to the time of the first study, where 40% of women delivered their child at home because they could not afford going to a health facility.

**GROWING PARTNERSHIP**

The ongoing collaboration between Sydney University and Xi’an Jiaotong University has enabled a unique research partnership. As well as being one of the leading medical schools in the country, Xi’an Jiaotong University is also “a gateway to western China”. It is situated in an area of China that is undergoing rapid economic development but the counties beyond the city are still relatively poor. “It’s an interesting place where you’re at the interface between all of this transition and where new problems are emerging but old problems still exist,” Associate Professor Dibley said.

The relationship has enabled an opportunity to exchange skills and further Australia’s engagement with the growing science hub in Asia. “The amount of scientific output coming out of China is increasing rapidly. So I guess if you look in the next 10 to 15 years, you’ll begin to see a lot more science having its origins in China.”
CHINA-AUSTRALIA CARDIOVASCULAR DISEASE (CVD) PREVENTION

BY HAMISH BOLAND-RUDDER

Professor Stephen Leeder, Director of the Menzies Centre for Health Policy at the University of Sydney, is leading an important new China-Australia CVD prevention collaborative designed to offer optimal care to patients leaving hospital after a heart attack or stroke. Heart attack and stroke are now highly prevalent in China; however, we know that simple drug treatment following such events can lead to much reduced death rates in the following year.

Professor Stephen Leeder and Harry Wang (PhD student, environmental health), Chinese University of Hong Kong
The aim of our study is to find ways to offer optimal care to patients leaving hospital after a heart attack or stroke. Heart attack and stroke are now highly prevalent in China; however, we know that simple drug treatment following such events can lead to much reduced death rates in the following year.

The collaboration is focused on providing measurable health improvements for Chinese populations by drawing on focused expertise and experience from across the Asia-Pacific region. Together with his colleagues at the Chinese University of Hong Kong, Nanjing University and Beijing University, Professor Leeder aims to launch the collaborative over the coming months.

“When patients leave hospital after a coronary episode, we know that they do much better if they receive several medications that prevent disruptions to heart rhythm and reduce the likelihood of clots,” said Professor Leeder.

“The aim of our study is to find ways in which these medications can be prescribed easily and efficiently and the patients monitored so that they continue to take the prescribed medication. We hope to see fewer people dying unnecessarily during the high-risk first couple of years following a coronary episode.”

The project arose out of an Association of Pacific Rim Universities (APRU) initiative which seeks to stabilise the mortality and morbidity from CVD among Pacific Rim nations within ten years. Collaborations are encouraged under this initiative as powerful learning organisations which can both motivate members and which provide knowledge, skills and support.

“The rising toll of heart disease worldwide is a massive concern and requires all hands on deck to prevent where possible, and treat where people already suffer from the established disease,” said Professor Leeder.

The advantage of taking a collaborative approach with this project means that information and findings can be shared between the participating institutions, rather than having to wait for the full publication of results.

Professor Leeder met recently with representatives from the collaborating sites in China at meetings auspiced by the APRU and the World Universities Network. He sees the involvement of Chinese University of Hong Kong, Nanjing University and Beijing University as essential to the success of the study, allowing for a faster response to a growing problem.

“The Chinese centres will implement the study and then share their insights with other participants,” said Professor Leeder. “Our hope is that insights gained in one collaborating centre, say Hong Kong, could be rapidly applied in, say, Nanjing, or vice versa. Sydney will also be a collaborating centre.”

Over the past fifty years China has experienced a rapid epidemiological transition from infectious to chronic diseases, due largely in part to significant changes in diet, exercise patterns, an aging population and the entrenchment of cigarette smoking.

“All these factors add up to the creation of a society that is primed for the development of cardiovascular disease,” said Professor Leeder. “The test of the project is whether good follow-up can be put in place in China and elsewhere for people following a heart attack. That may sound easy, but it is not – resources to pay for the medications have to be found, physicians need to be enthused to do it, patients need to be educated and supported and data collected to ensure that we are monitoring its success and problems.”

The ultimate aim is to identify best practice in reducing CVD mortality rates, and lead the translation of research knowledge into policy and practice. Whilst the current project focuses on CVD and stroke in China, there is potential for a wider rollout across the Asia Pacific region in the future.

NEWS BITES

THE UNIVERSITY OF SYDNEY – LEADING THE WORLD IN CHINA COLLABORATIONS

The University of Sydney participates in more international research partnerships than any other Australian university, and is the world’s fifth most frequent collaborator with Chinese universities, according to new research. The 2009 Thomson Reuters Global Research Report listed the University of Sydney as a world leader in its collaborations with China as measured by the number of joint papers published. The University of Sydney was in the top 5 with institutions such as Harvard and Imperial College.

CHINA STUDIES CENTRE AND HEALTH RESEARCH CLUSTERS

The University of Sydney will establish a China Studies Centre in January 2011. This centre will strengthen understanding between Australia and China and build on the existing academic and research partnerships with China. Two research groups under the China Studies centre will be health focussed, ‘Traditional Chinese Medicine’ and ‘Health’.

INTERNATIONAL PROJECT GRANT APPLICATIONS

Each year the University of Sydney’s Office of the Deputy Vice-Chancellor (International) provides funds to develop international projects with key partners across the globe. Applications for funding were made in August 2010 for projects with the following partners in China: Fudan University, Hong Kong University, Lanzhou University, the National Centre for Nanoscience and Technology, Peking University and Shanghai Jiao Tong University. Successful grants will be announced in September 2010.
The Schools of Public Health at Fudan University and the University of Sydney will further strengthen their research partnership with several new projects.

The research collaboration between the two universities began last year with the 2009 International Project Development Grant, funded by the University of Sydney’s International Project Development Fund.

Over the past year, the research teams have shared capabilities and expertise to shed light on the relatively unexplored area of maternal physical activity and its links to child birth weight.

Maternal and child health was one of the themes for collaboration agreed upon between the Universities in 2008. The project supported by the 2009 International Project Development Grant was instigated under this general theme.

Associate Professor in International Public Health and Sydney Medical School, Dr Mu Li, worked closely with Fudan University’s Director of the Department of Child and Maternal Health, Professor Xu Qian, during the initial collaboration.

Fudan University School of Public Health established a cohort of around one thousand mothers and babies to study the impact of physical activity and food energy intake during pregnancy on the birth weight of the child and other outcomes.

Dr Li and the University of Sydney’s School of Public Health assisted in the study with the planning and implementation of the project, analysis of the data and in developing protocols for the research.

Among the project’s important findings was the “good correlation” between the amount of physical activity undertaken during pregnancy and the size of the baby, said Dr Li. “The mothers engaged in fairly sedentary type lifestyles during pregnancy tended to have larger babies,” she said. “From that we identified of course that physical activity during pregnancy is important, but we also identified that the early onset of childhood overweight and then obesity has been an emerging issue in China.”

Further research activities are already set to continue into the near future as a result of this successful first collaboration.

The project results have been published in Chinese literature, with a recent submission also made to an international journal. “The paper that we’ve just submitted is about developing a scale to measure physical activity during pregnancy for Chinese women. This hasn’t been done in the past,” said Dr Li.

The collaboration’s findings have the potential to influence the development of guidelines for the amount of recommended physical activity during pregnancy for women in China, Dr Li said.

Fudan University and the University of Sydney are currently submitting an International Development Advanced Grant for future collaboration on the related issue of childhood obesity in China.

Dr Li said the upcoming project will aim to demystify the inappropriate infant
feeding practices which may contribute to the early onset of childhood obesity. The research teams recently secured US$50,000 in funding from the Nestle Foundation to further develop a culturally acceptable intervention for preventing early childhood obesity through improved breastfeeding and infant feeding in urban China.

Ethics approval has been obtained from both Universities for the project, which is set to commence as early as August 2010.

The 2009 International Project Development Grant has helped foster academic connections between the Universities by engaging young researchers in the relationship. The placement of the then PhD candidate, Dr Jiang Hong, at the University of Sydney in February last year led to an expected academic liaison for future collaboration, with Dr Hong now a member of the academic staff at Fudan University.

“Ethics approval has been obtained from both Universities for the project, which is set to commence as early as August 2010.”

**COLLABORATING ON SPORTS AND REHABILITATION SCIENCE**

**BY LOUISE FRECKELTON**

The Faculty of Health Science, in collaboration with the Sydney Medical School has been awarded a prestigious Australian-China Council Grant to collaborate with Peking University in the fields of sports and rehabilitation science.

The grant awarded will assist with the development and delivery of a joint research symposium and collaboration discussion focussed on the field of sports medicine between the University of Sydney, Peking University, Peking University Sports Medicine Institute and their affiliated hospitals to be held in Beijing in December 2010.

“The idea for the project was discussed when a high-level delegation from Peking University Sports Medicine Institute visited the Faculty of Health Science and the orthopaedic services at the Northern Clinical School - Royal North Shore Hospital in February 2010, lead by Professor Ao Yingfang, Director of the Institute”, says Ms Louise Freckelton, Manager International Relations for the Office for Global Health, part of Sydney Medical School and leader of the application from Sydney Medical School.

“During the visit from PUSMI, we quickly realized that we had much in common and also much to learn from each other in the field. A joint symposium seemed an excellent way to spend time getting to know each other both as institutions and as individuals. We are very much hoping that the symposium will lead to closer research and teaching and learning relations with this prestigious institution”, says Professor Patrick Brennan, Associate Dean International, Faculty of Health Science and who lead the application from the Faculty of Health Sciences.

The completed research enabled under the 2009 International Project Development Grant is just the first step in an enduring working partnership between Fudan University and the University of Sydney, according to Dr Li.

“We are very keen to work together with our colleagues in China and hopefully we can develop research applications together,” she said.

The Australia-China Council is part of the Australian Government’s Department of Foreign Affairs and Trade and thus projects funded by it are considered part of Australia’s international relations endeavour. Competition for the grant is tough with this project being the only successful application from the University of Sydney and one of only 24 successful applications from a pool of 300.

This joint research symposium will work towards the mission, goals and objectives of the Australia-China Council. Specifically, the research symposium aims to:

- develop and strengthen mutual research interests and expertise in the field of ‘education and science’ particularly in aspects of sports medicine;
- foster perceptions in China of the Faculty of Health Science and Sydney Medical School, University of Sydney as a prime site for scientifically and educationally advanced knowledge and research;
- foster linkages between the University of Sydney and Peking University Sports Medicine Institute (PUSMI) with a view to developing long-term and sustainable education and research linkages and activities; and,
- foster people-to-person relationships resulting in fruitful research and educational relationships.

A productive relationship with Peking University in the fields of sports and rehabilitation science will add to the existing collaborations with Peking in the fields of public health, cardiology and ophthalmology and our collaboration with the George Institute and Peking University in the Beijing Health Research Lecture Series.
AUSTRALIA AND CHINA
SHARING THE BURDEN OF DIABETES

BY MARGARET MCGILL

A recent publication in the New England Journal of Medicine reported that more than 92 million adults in China have diabetes and nearly 150 million more have pre-diabetes. Worse still, most of these individuals are not aware that they have the condition. Like in the West, diabetes is more common in people with large waistlines and in those who live in cities.

This prevalence data is frightening and is of great concern to the Chinese government. To cope with this increasing burden, large scale health system reform that ensures people with diabetes living in urban and rural China have access to high quality diabetes care is inevitable.

For nearly 20 years the Royal Prince Alfred Hospital (RPAH) Diabetes Centre and the Endocrinology Research Laboratory, University of Sydney have been working with doctors and nurses working in diabetes clinical practice and research in China and Hong Kong SAR.

This long lasting partnership began as it often does with a meeting of minds, when Professor Xu Zhangrong from the 306 Hospital was awarded a 12 month fellowship to study diabetes management at Lidcombe Hospital and RPAH in Australia in 1990.

Prof Xu Zhangrong, Prof Dennis Yue and Assoc Prof Marg McGill meet with officials from Wuhan
On his return to Beijing, Professor Xu, in collaboration with Professor Dennis Yue and his team from the RPAH Diabetes Centre, established the first Diabetes Centre in China. “Professor Xu modeled his centre on the RPAH Centre and focused on clinical care and patient self-management education. He established a single visit complication assessment service, the first of its kind in China and promoted the concept of the multidisciplinary team. One of his most important achievements was to implement a computerized database using the RPAH system so that for the first time he could capture and analyze process and clinical outcome data,” says Professor Yue. “As well as Professor Xu’s personality and drive, it has been the development of a standardized method of data collection has underpinned and facilitated the exchange of research ideas and collaboration on publications between the 306 Hospital and RPAH Diabetes Centre.”

Over the years this relationship between Sydney and Beijing, between 306 and RPA Hospitals have enabled the publication of ethnic-specific comparator studies in peer reviewed journals. For example, Dr Jencia Wong’s work on the determinants of early onset diabetes in Chinese in comparison to Europeans highlighted the differences in pathophysiology of diabetes in these populations. Other papers have included research into the factors that affect the clustering of cardiovascular risk factors in Chinese individuals living in Beijing and a study demonstrating the impact of late diagnosis of diabetes on the prevalence of retinopathy.

An important feature of the relationship has been the exchange of health professionals between the centres. More than a dozen of Professor Xu’s endocrinologists and nurses have spent up to 12 months training at RPAH and the Endocrinology Research Laboratory. And in return, each year a small team led by Professor Yue visits 306 for academic exchange and to discuss implementation of best clinical practice. “This has proven to be a wonderful learning experience for both groups,” says Professor Yue, and each time we meet the relationship is deeper,” Associate Professor Marg McGill has also been involved in medical and nursing education and led a number of train the trainer workshops across China as well as being invited to speak at national diabetes scientific congresses. In addition, staff of the RPAH Diabetes Centre have been invited speakers on a wide range of clinical and research topics at Medical and scientific conferences in China. As a result of these interactions there is a constant flow of doctors from around China wanting to train at the RPAH Diabetes Centre.

Like Professor Yue, Professor Xu’s developed a special interest in diabetic foot disease. As China did not have any podiatrists, Professor Xu sent three of his nurses to RPAH to learn foot care practices. “Professor Xu now has a very well established high risk foot clinic and is recognized as the foremost expert in diabetic foot disease in China. He is Chair of the Chinese Diabetic Foot Working Party of the Chinese Diabetes Society and has been instrumental in raising awareness of diabetes-related amputation prevention strategies in China”, says Professor Yue.

Through frequent visits to China, additional relationships have developed with our Chinese colleagues. In 2009, Professor Dennis Yue and Associate Professor Marg McGill were invited by the Wuhan Municipal Government of the People Republic of China to visit Wuhan to promote academic exchange and cooperation in research, clinical practice and health professional and medical education in diabetes and its complications. Capital city of the Hubei Province, Wuhan has a population of 8 million.

“The Wuhan Municipality has designated the Central Hospital of Wuhan to be the hospital for further development of its diabetes program,” says Professor Yue. “We were very impressed by the Central Hospital, its size, equipment and the general standard and enthusiasm of the staff. Both sides look forward to our ongoing collaboration.”

“Our collaboration with China on diabetes is a small step in sharing the burden of diabetes”, says Professor Yue, “and our department at the Hospital and the University has been enriched by this cultural, scientific and education exchange with our Chinese colleagues.”

“An important feature of the relationship has been the exchange of health professionals between the centres.”
Chronic lung diseases such as COPD and asthma are a focus of research conducted at the Woolcock and we have been forging partnerships with developing centres of excellence in China” said Professor Norbert Berend, Research Director of the Woolcock Institute.

Professor Wen Fuqiang, Chairman of the Department of Respiratory Medicine at the West China Hospital in Chengdu is representing the Woolcock in China. Professor Wen Fuqiang has recently overseen the first collaborative study with the West China Hospital, with the help of Woolcock engineers who have installed sophisticated lung function equipment.

In March 2010 the First Hospital in Changchun, a teaching Hospital of Jilin University and the Woolcock Institute jointly declared open the China-Australia Imaging Research Centre of Respiratory Disease.
Studies involving imaging the small airways in asthma have commenced at the First Hospital of Jilin University following the opening of the China-Australia Imaging Research Centre of Respiratory Diseases in Changchun.

There is a huge burden of chronic respiratory disease in China. The rapid economic development of China has enabled the Chinese government to invest heavily in improving clinical services and fostering excellence in medical research but has also brought its own problems in terms of poor air quality related to heavy industry, power generation and increased numbers of road vehicles.

Eight percent (8%) of the male population suffers from chronic obstructive pulmonary disease (COPD) related to the high prevalence of smoking while five percent (5%) of the female population suffers from this condition caused by indoor exposure to smoke.

The Woolcock through Professor Peter Gibson has been negotiating the development of a severe asthma network with Jilin University in Changchun and Sichuan University in Chengdu.

“The partnership with China will allow the Woolcock Institute to continue in its growth phase with the ability to participate in studies on a world scale, both centres have excellent clinical and research facilities and we look forward to tackling some of these major chronic diseases with our Chinese partners” said Professor Berend.

8% of the male population suffers from chronic obstructive pulmonary disease related to the high prevalence of smoking while 5% of the female population suffers from this condition caused by indoor exposure to smoke.

NEWS BITES

COLLABORATING ON CANCER NURSING
Sydney Nursing School has established new links for cancer nurse academics and researchers between Australia and China. Sydney Nursing School and the School of Nursing at Shanghai Jiao Tong University have recently commenced an exchange program to support the development of cancer curriculum for Shanghai Jiao Tong University. The collaboration involves academic exchange, partnership to develop and deliver the cancer curriculum at Shanghai Jiao Tong University, and fora to establish links for higher degree cancer research students.

In May 2010, Professor Kate White, Chair in Cancer Nursing at the Cancer Nursing Research Unit, and Moira Stephens, Lecturer in Cancer and Haematology, visited Shanghai Jiao Tong University to begin work on developing the cancer curriculum.

Kate and Moira will return to deliver the initial program in September 2010. They will meet with clinical nurses and also host workshops with research students. Dr Zhang Ying, senior academic from Shanghai Jiao Tong University, who will be leading the implementation of the cancer curriculum, visited Sydney Nursing School in June 2010.

NEW MEDICAL STUDENT EXCHANGE WITH FUDAN UNIVERSITY
A new medical student exchange program with Fudan University will see the exchange of 2 medical students from each university each year. The program commenced in 2010.
GPS WORK TOGETHER TO BUILD HEALTHIER COMMUNITIES

BY LOUISE FRECKELTON

The two biggest risk factors contributing to mortality in China – high blood pressure and smoking – could be radically reduced by the efforts China is taking to build a culture of general practice medicine, potentially avoiding one in five deaths.

That’s the view of Associate Professor Lyndal Trevena, Head of Sydney Medical School’s Office for Global Health and GP who, together with Ms Louise Freckelton, Manager of International Relations with China for the Office of Global Health, successfully applied for an International Project Development Fund (IPDF) grant to assist China and Australia learning from each other in terms of primary health care.

"In China, general practice is a relatively new concept", says Louise, co-author of the project. "Despite its massive population, most health care in China until recently was delivered through the hospital system. In Australia, most care is delivered, in the community setting via the GP. It seemed like such a simple and yet profound idea for an international project – to get Australian GPs and Chinese GPs together. That is what the project aims to do."

While the Chinese Government has embraced the idea of a shift to general practice-based health care, there are still only a small number of GPs in China. The funds have facilitated the development of relationships with Fudan University and Zhongshan Hospital GPs and a presentation by Associate Professor Trevena at the Shanghai Medical Associations GP Annual Conference in 2009. Activity continues in 2010 with the Head of the Discipline of General Practice, Professor Simon Willcock presenting at China’s Society of General Practice conference and Train-the-trainer session at Zhongshan Hospital in Shanghai.

And the connections go both ways. "In September 2010 we will be welcoming Dr Liu Yao from Fudan University and Zhongshan Hospital to the University of Sydney for 3 months. Dr Liu will be taking part in a number of meetings and visits that will assist in learning how Australian GPs are trained. Dr Liu will then see what can be successfully adapted or adopted for the Chinese situation. We hope that Dr Liu will be able to present on the rapidly changing health care reforms as they relate to general practice while she is here", says Louise Freckelton.

"It will be fascinating to see how China develops a system of primary care suited to the Chinese situation and it will be important for us to continue to work together to learn from each other", says Associate Professor Trevena. "I expect that in developing a whole new system of primary care, China will have much to teach Australia."

Considering China’s population, the revolution in primary care and the continuity of care it promises could be one of the most profound health care reforms the world has seen.
VISITS & LECTURES

13TH SEPTEMBER 2010
Shanghai EXPO EVENT – Academic program
‘Translational health research’
Researchers from the University of Sydney, Peking University, Shanghai Jiao Tong University and Fudan University discuss collaborations in infectious diseases, metabolic diseases, cancer research and preventative medicine.

10TH–11TH SEPTEMBER 2010
The 3rd Sino-Australian Symposium: Translational Medicine
Shanghai Jiao Tong University, School of Medicine, Shanghai.

9TH SEPTEMBER 2010
Shanghai EXPO EVENT – Government Roundtable
‘Translating Health Research into Health Outcomes’
Australian Pavilion, Shanghai Expo
Researchers from Australia’s and China’s best universities discuss childhood obesity and diabetes with Government representatives.

8TH SEPTEMBER 2010
Professor Louise Baur
‘Childhood obesity research: the Australian experience’
Fudan University, School of Public Health, Shanghai.

7TH SEPTEMBER 2010
Associate Professor Lyndal Trevena and Ms Louise Freckelton
Visit to Xi’an Jiao Tong University, School of Medicine, Xi’an.

23RD AUGUST 2010
Professor Simon Willcock
‘Clinical training for GP residents’ and ‘Clinical thinking skills for GPs’
Train the Trainer Workshop for General Practitioners, Zhongshan Hospital, Shanghai.

19TH–26TH FEBRUARY 2010
Professor He Gengsheng
Visit to the University of Sydney to meet the University of Sydney researchers working in nutrition.

4TH–5TH FEBRUARY 2010
Professor Ao Yingfang and a delegation from Peking University Sports Medicine Institute
Visit to the Faculty of Health Sciences and the Department of Orthopedics at Royal North Shore Hospital.

15 NOVEMBER 2009
Associate Professor Lyndal Trevena
‘GP Training in Australia’ and ‘Evidence-based decision-making’
Train the Trainer Workshop for General Practitioners, Zhongshan Hospital, Shanghai.

14 NOVEMBER 2009
Associate Professor Lyndal Trevena
‘The maintenance of chronic disease in the community’
Shanghai Medical Association Annual Conference for General Practitioners, Shanghai.

13 NOVEMBER 2009
Frontiers of Knowledge Symposium - Australia-China Partnerships in Health Symposium
The University of Sydney, Peking University and the Chinese Ministry of Health collaborate on this research symposium. Beijing Hotel, China.

12 NOVEMBER 2009
Professor Des Richardson
‘The mitochondrion and its role in iron processing and disease’
National Center for Nanoscience and Technology of China (NCNST), Chinese Academy of Science, Beijing.
SHARING THE TRAINING OF CHINA’S FUTURE RESEARCH LEADERS

BY LOUISE FRECKELTON

Sydney Medical School and Shanghai’s Jiao Tong School of Medicine are jointly training some of China’s future research scientists.

Funded by the Chinese Scholarship Council and a special Shanghai Jiao Tong University fund, PhD candidates from Shanghai Jiao Tong University undertake up to one year of their PhD studies based in Sydney with a Sydney supervisor.

“This scheme provides an excellent opportunity for research students to have an international experience as part of their PhD and to further develop their English language skills as well as their lab techniques. This experience also undoubtedly builds stronger research relationships between our two universities, our research scientists and our postgraduate students”, says Louise Freckelton, Manager of International Relations with China for the Office for Global Health.

When asked about her experience, Zhang Ning who undertook her placement at the Centenary Institute was fulsome in her praise for the opportunities the CSC scheme provided her with.

“It is a great privilege to host such bright young minds here for one year”.

Zhang Ning, CSC scholar
"Without doubt the one-year exchange has benefited me in a comprehensive way including the development of scientific ideas, learning new experimental techniques, English language improvement as well as the colorful taste of international life. The sophisticated equipment, well-regulated management, the efficient resource-sharing between various labs and the regular seminars hosted by distinguished experts definitely created a fantastic scientific atmosphere and has provided me with an enjoyable opportunity to immerse myself in the journey of scientific pursuit. This will also contribute the productive and continuous collaboration between the two institutes as well as two Universities."

September is change-over time for our shared PhD candidates. Sydney Medical School will soon be welcoming its third cohort of joint PhD scholars.

“It is a great privilege to host such bright young minds here for one year”, said Associate Professor Lyndal Trevena, Associate Dean (International) and Director of the Office for Global Health. “Their Sydney supervisors have all reported on the quality of the student’s endeavour and their dedication to the task. We wish the returning PhD candidates and those who have only recently arrived all the best in both their current research project and their further studies in Shanghai, we hope that they take a fond affection for Australia and a familiarity for working in partnership with Australians in the development of knowledge back home with them.”

### OUR SHARED PHD CANDIDATES

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NAME</th>
<th>SUPERVISOR</th>
<th>RESEARCH PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010–11</td>
<td>Mr Chen Zhiqiang</td>
<td>Professor Des Richardson, Bosch Institute, Sydney Medical School</td>
<td>The anti-tumor activity and molecular mechanisms of iron chelators against colon cancer</td>
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<tr>
<td></td>
<td>Mr Liang Zhou</td>
<td>Professor Jonathan Morris, Kolling Institute for Medical Research, Sydney Medical School</td>
<td>Understanding innate immunology pregnancy – its significance for pre-eclampsia</td>
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<td></td>
<td>Ms Guo Qinhua</td>
<td>Professor Nicholas King, Bosch Institute, Sydney Medical School</td>
<td>Cellular central nervous system responses to flavivirus encephalitis</td>
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<td></td>
<td>Ms Dong Zhixia</td>
<td>Professor Jacob George &amp; Professor Wang Jianhua, Storr Liver Unit, Sydney Medical School</td>
<td>The role of adiponectin in the pathogenesis of liver fibrosis</td>
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<td></td>
<td>Mr Xiang Xiaogang</td>
<td>Associate Professor Bob Bao, Bosch Institute, Sydney Medical School</td>
<td>The role of Treg and its relation to chemokine in chronic hepatitis B patients</td>
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<tr>
<td>2009–10</td>
<td>Ms Gu Liying</td>
<td>Dr Anna De Fazio &amp; Associate Professor Paul Harnett, Westmead Millennium Institute</td>
<td>The role of ANKRD1 in cellular response to platins</td>
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<td></td>
<td>Ms Zhang Hanwen</td>
<td>Professor Robert Baxter &amp; Dr Debbie Marsh, Kolling Institute for Medical Research, Sydney Medical School</td>
<td>The regulation of ovarian cancer cell function by GPCR-mediated transactivation of the EGF receptor</td>
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<td></td>
<td>Ms Cheng Xiaobing</td>
<td>Professor David Handelsman &amp; Dr Kirsty Walters, ANZAC Research Institute, Sydney Medical School</td>
<td>The role of androgen action in neuroendocrine regulation of ovulation</td>
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<tr>
<td>2008–9</td>
<td>Ms Li Na</td>
<td>Professor Bruce Robinson &amp; Dr Dindy Benn, Kolling Institute for Medical Research, Sydney Medical School</td>
<td>The genetics of phaeochromocytoma</td>
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<tr>
<td></td>
<td>Ms Zhang Ning</td>
<td>Professor Pu Xia, Centenary Institute, Sydney Medical School</td>
<td>The identification of a new therapeutic target for ovarian cancer</td>
</tr>
<tr>
<td></td>
<td>Mr Zheng Zhong</td>
<td>Professor Dong Qihan, Bosch Institute, Sydney Medical School</td>
<td>The interaction of insulin, cPLA2 and PI3K/Akt pathways - a mechanism for colon cancer formation</td>
</tr>
<tr>
<td></td>
<td>Mr Shao Xinyu</td>
<td>Dr Zhou Hong, ANZAC Research Institute, Sydney Medical School</td>
<td>The role of glucocorticoids on the Wnt/β-catenin signaling in mesenchymal progenitor Cell lineage commitment</td>
</tr>
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THROUGH THE EYES OF OUR STUDENTS

Each year we exchange medical students with Shanghai Jiao Tong University, each year their insights into medicine in China and Australia surprise and delight us. Here are a few of their impressions of their time in China and Australia.

IMPRESSIONS OF MEDICINE AND LIFE IN CHINA

Derrick, Owen, Nathan, Kevin all Sydney Medical School students undertook placements at Renji Hospital, Shanghai.

“One of the most interesting concepts I took out of my placement at Renji Hospital is the complementary role that TCM can play alongside Western Medicine. Both in outpatient clinics and in surgical theatres, I witnessed the benefits of acupuncture as a therapeutic tool and a means for anaesthesia. Because the concepts behind TCM are so different from what I’ve learned in Western Medicine, I was very impressed with the results that can be achieved from techniques for which I have so little understanding.”

Derrick Wong

I was lucky enough to be a medical student in the General Surgery, Orthopaedic Surgery, and Gastroenterology departments for a total of 4 weeks. The professors I was assigned with gave me a lot of freedom. The surgeons provided me with opportunities to scrub in to surgery with them. This way I could observe the operations closely. This was the first time I really had a chance to do this and I gained a lot from it. In addition I also had the opportunity to be a part of the orthopaedics team on call in the emergency department.

Owen Lee
“The placement in China opened my mind and eyes to its people, medicine and developing healthcare systems. I learnt from inspiring and committed doctors who work tirelessly to provide their patients with the best possible care (despite limited resources) and who nevertheless endure low social status and financial reward. I could easily observe the fulfillment derived from and contributing to rapid economic development. These major issues play an important role in a competitive society with strong desires for recognition and financial success and can make life for doctors in China difficult.”

Nathan Lum

“On my recent placement to China, I experienced an epiphany while looking down at the Renji Hospital outpatients lounge. Seeing the multitude of people who have lined up since the wee hours of the morning, I realized that patients everywhere are seeking something in common. That is, regardless of where people have come from, when they come to see a doctor, they have come to seek that one thing, comfort. Comfort in knowing that there is someone who cares for them, someone who will not forsake them.”

Kevin Wang

IMPRESSIONS OF MEDICINE AND LIFE IN AUSTRALIA

Yang Xiaobo, Wang Haolu, Tang Shuang and Ting Zhang, students from Shanghai Jiao Tong University School of Medicine undertook their placements at Royal Prince Alfred Hospital.

“This placement in my final year really helped me a lot. The most important, it offered me a very good lesson about how to communicate with patients well. Doctors at Royal Prince Alfred Hospital treated their patients very patiently and gently. Moreover, they would do every diagnosis and therapy procedure after detailed explanation and the agreement from patients which kept good understanding and relationship between doctors and their patients.”

Tang Shuang

“During my stay in Sydney I found the doctors pay attention to patients’ privacy very much. In China we also put the curtain down when we do physical examinations for patients. But in Sydney sometimes I found that even when just listening to the heart or the lung they also put the curtain down. And, when the registrar is doing the physical examination with the curtain down, if another doctor wants to come in he will say ‘knock, knock’ first and then come in. I think it’s very interesting at the same time it’s very useful and important for me to become a better doctor. I understand that you do respect patient’s privacy.”

Ting Zhang

“I was so fortunately placed in gastro for 8 weeks - such a wonderful team. During those days I got a lot of experience of dealing with diseases, going with doctors to the clinic, attending several meetings and watching all kinds of procedures especially EUS and double ballon endoscopy. All of the staff in gastro gave me warm help and suggestions and absolutely I have made great progress with my oral expression now.”

Yang Xiaobo

“I undertook my clinical elective in the anaesthetics department at Royal Prince Alfred Hospital from September to November. Every weekday I was assigned to one anesthetist to learn clinical anaesthetics and do some work in the operation theatre. All the anaesthetists are very good teachers. They explained fundamental principles to me, taught me how to put a cannula into peripheral vein and even how to do tracheal intubation. My everyday work included translating for patients who only spoke Chinese, peripheral cannulating, managing the patients’ airway, tracheal intubating and other skills.”

Wang Haolu
STUDYING AT SYDNEY MEDICAL SCHOOL

Sydney Medical School is Australia's largest and oldest. At Sydney Medical School our aim is to develop caring, clear-thinking, clinically outstanding, research capable and globally engaged graduates who have the capabilities to become leaders in medicine, public health and research. Ranked by the Times Higher Education Supplement as 15th in the world for Life and Biosciences, you can be sure that our programs are world-class.

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- Brain and Mind Sciences
- Clinical Epidemiology
- Health Policy
- Indigenous Health Promotion
- Indigenous Health (Substance Use)
- Infection and Immunity
- International Ophthalmology
- International Public Health
- Medical Education
- Medical Humanities
- Ophthalmic Science
- Paediatric Medicine
- Pain Management
- Psychotherapy
- Public Health
- Qualitative Health Research
- Refractive Surgery
- Reproductive Health Sciences and Human Genetics
- Sexually Transmitted Diseases/HIV
- Sleep Medicine
- Surgery

And research programs in any medical field.

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OFFICE FOR GLOBAL HEALTH

The Office for Global Health works closely with the University’s Office of the Deputy Vice-Chancellor (International).

The Office for Global Health is part of Sydney Medical School and aims to internationalise the research we undertake, the experience of our students and staff, and our approaches to learning and teaching. We also aim to contribute to the health and wellbeing of our region by engaging in health projects with some of our nearest neighbours.

Find out more about the activities of our office by visiting:

www.sydney.edu.au/global-health


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LOUISE FRECKELTON
Louise Freckelton is the Manager—International Relations with responsibility for China. Louise has had a long association with China, her first visit being in 1987. After falling in love with the country she returned as an international student in Beijing in the early 1990s and has also had two short stints working in Wuhan in 1994 and in Beijing in 2008. Louise (whose Chinese name is Lu Yingzi 陆盈紫) continues to develop her Mandarin skills. Louise provides advice to the Sydney Medical School in relations with China including information on our current partners and potential ones, funding and research opportunities.