



四川大学  
SICHUAN UNIVERSITY

SICHUAN UNIVERSITY

# NEWSLETTER

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Sichuan University

# NEWSLETTER

WINTER 2014 ISSUE 9

The Sichuan University Newsletter is provided by the International Office of Sichuan University. We aim to share the latest news and events happening on our campus with faculty members, students, and alumni of the University, as well as friends around the world. Any suggestions and questions are welcomed from our readers.

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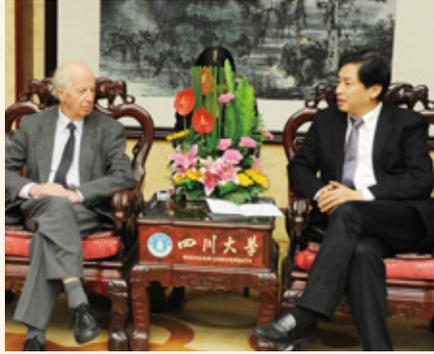
# Cambridge University King's College & SCU Co-Found Multimedia Database

From October 27<sup>th</sup> to 28<sup>th</sup>, a delegation led by Professor Alan Macfarlane from the University of Cambridge paid a visit to SCU. Dr. Xie Heping, President of Sichuan University (SCU) and Fellow of the Chinese Academy of Engineering, Dr. Luo Zhongshu, Executive Vice-President of SCU, Dr. Yan Shijing, Vice-President of SCU and officials from the departments concerned met with the distinguished guests.

The two sides had a wide-ranging discussion concerning the long-term significance of the Cambridge Rivers Project. Representatives from both sides showed great enthusiasm for prospective cooperation in building the Database of Intangible Cultural Heritage in Himalaya Region.

The opening ceremony of the construction project of SCU Workshop of Cambridge Rivers Project & Himalaya Region Multimedia Database of Sichuan University was held in the Humanities Building of SCU on October 10, 2014. Dr. Luo Zhongshu, Executive Vice-President of SCU, Dr. Yan Shijing, Vice-President of SCU, Dr. Li Xufeng, Vice-President of SCU, Professor Alan Macfarlane, a Fellow of the British Academy and the Academia Europea, Lifetime Fellow of King's College, Cambridge, Director of the Cambridge Rivers Project and Mrs. Macfarlane attended the opening ceremony. Professor Alan Macfarlane accepted an honorary professorship of SCU.

Cambridge Rivers Project—Preserving the Disappearing World,



a multimedia database established by Professor Alan Macfarlane, a renowned socioanthropologist, on the basis of state-of-the-art multimedia database of the "Unlimited Digital Space" and "Streaming Media Project", which were jointly developed by the University of Cambridge, MIT and Cornell University.

SCU boasts a strong foundation in the study of southwestern regions of China, especially the Himalayan region. SCU will cooperate with the University of Cambridge to uncover, organize and input image files and

historical records like documentaries, pictures, and manuscripts about the Himalayan region that were scattered in different countries. The establishment of the Himalaya Region Database will promote academic cooperation across different disciplines. Teacher and student exchange programs are going to be organized accordingly to promote bilateral academic exchange.

Himalayan region has abundant cultural diversity. The developers of "Cambridge Rivers Project" database and SCU scholars have studied the

Himalayan region for a long time. Hence, they have rich experience in the study of cultural diversity preservation and development. By collecting and organizing the intangible cultural heritage resources of the re-

gion and constructing the multimedia database, the intangible cultural heritages in Himalayan region will certainly be preserved more efficiently, helping promote the cultural heritage of the Himalayan region.

The Culture, Science and Technology Promotion Project of the Chinese Ministry of Culture intends to give full support to the construction of the database. 🏛️

## SCU Delegation Visits Russian Partners

In December, 2014, Professor Yang Quanming, Chairman of the Sichuan University Council, led a delegation on a tour of St. Petersburg State University and the Institute of Far Eastern Studies of the Russian Academy of Sciences.

On December 11<sup>th</sup>, the delegation led by Professor Yang Quanming received a warm welcome in St. Petersburg State University, and a cordial and friendly conversation was held by both parties. Igor A. GORLINSKY, executive vice president of St. Petersburg State University, briefed the long history of St. Petersburg State University and its development priorities at present and in the future. He emphasized the prospects and importance of conducting in-depth and broad cooperation with SCU in many fields. Professor Yang Quanming introduced the history of SCU, achievements of teaching and scientific research as well as international exchange and cooperation, etc. of SCU in recent years. This visit is expected to further broaden new cooperation fields on the basis of existing cooperation and enhance exchange of students and teachers between two universities, he added. Both sides agreed to conduct further cooperation in Sinology Study, Russian Language Teaching, Russian Studies, Biomedicine, Law and Talent Cultivation,

etc.

Established in 1724, St. Petersburg State University is one of two most famous universities in Russia in a pair with Lomonosov Moscow State University, both of which are under the direct jurisdiction of the president. It has cultivated 7 Nobel Prize winners and notable schoolfellow including: Putin, Medvedev and Pavlov, etc.

On December 12<sup>th</sup>, the delegation led by Professor Yang Quanming arrived at Institute of Far Eastern Studies of Russian Academy of Sciences, a key base of Sinology Study in Russia, and received a warm welcome from Professor Lu Jianing, the executive director of this Institute and world famous Russian sinologists like Professor Lukyanov.

A friendly conversation was held between the two parties in the conference room of the academic board of this Institute. Professor Yang Quanming firstly expressed his gratitude for the cooperation and support of Institute of Far Eastern

Studies of Russian Academy of Sciences to Contemporary Russian Studies Center of SCU, and acknowledged research achievements during cooperation of both sides. And they exchanged opinions about further cooperation.

At 3 p.m. of December 12<sup>th</sup>, Professor Yang Quanming and executive director Lu Jianing hosted the inauguration of "Sino-Russia Cultural Research Center" in China Hall jointly founded by Institute of Far Eastern Studies of Russian Academy of Sciences and Russia - China Friendship Association. More than 30 sinologists and Russian experts attended the inauguration. In the inauguration, Professor Yang Quanming delivered a keynote speech titled Making Friends



through Literary Works and Cultivating Humanity with Friends, in which he reviewed the cooperation history and achievements realized in mutual cooperation, and also looked into the future. Both sides will continue to expand cooperation in research and inheritance of Chinese and Russian Culture to forge ahead and achieve greater prosperity, he believed.

Professor Lu Jianing, executive director of Institute of Far Eastern Studies of Russian Academy of Sciences made a passionate speech in the inauguration. He highly praised the great contribution made by SCU in promoting Russian Research and Chinese Cultures. The visit of Professor Yang Quanming would certainly impel further exchange and cooperation in translation of Russian and

Chinese cultural classics, cultivation of young academic talents and academic researches, etc, between both parties, he said.

During the visit, Professor Yang Quanming met with more than 20 schoolfellow and overseas students of SCU in St. Petersburg and Moscow, respectively. He encouraged them to study and work hard to enhance international reputation of SCU and make contribution to drive the cooperation and exchange between SCU and universities and scientific research institutions

in Russia. The preparatory work of Russia alumni association of SCU was discussed in the conversation, and the schoolfellow were spurred to make more efforts in this regard. 🏠



## Nobel Laureate Professor Negishi Ei-ichi Visited SCU

On the morning of October, 28<sup>th</sup>, the winner of the Nobel Prize for Chemistry in 2010, Professor Negishi Ei-ichi visited SCU and met with Dr. Xie Heping, the President of SCU and Professor Yan Shijing, vice president of SCU along with other personnel concerned.

Professor Negishi Ei-ichi, a Japanese chemist and professor of the Purdue University, enjoys great reputation in chemistry, especially in organic chemistry. With the great contribution made in Palladium-catalyzed Cross Couplings in Organic Synthesis, Professor Ei-ichi Negishi was awarded the Nobel Prize in Chemistry in 2010 together with Richard F. Heck and Akira Suzuki.

In the meeting, president Xie Heping said SCU is endowed with satisfactory research conditions of chemistry, bioscience,

geosciences, meteorology and medicine thanks to its favorable location in resource-rich southwest China. SCU always attaches great importance in cooperation and has established long term partnership with many international famous universities. And he hoped Professor Ei-ichi Negishi could conduct further exchange and cooperation with SCU.

Professor Ei-ichi Negishi expressed his gratitude for the warm welcome of SCU and introduced basic information of the Purdue University and Herbert C. Brown Laboratory of Chemistry.

After the meeting,

Professor Ei-ichi Negishi gave a lecture named Magic of D Zone Transition Metal Catalyzed Cross Couplings with the Example of Palladium-catalyzed Cross Couplings and Zirconium-Catalyzed Oefin Asymmetric Carbon Aluminum Reaction to the students and teachers in SCU. 🏠



## President Xie Heping Welcomes Delegation of University of Prince Edward Island

In the morning of October 27<sup>th</sup>, 2014, a delegation led by Dr. Alaa Abdel Aziz, the President of the University of Prince Edward Island, visited SCU. Academician Xie Heping, president of SCU, and Professor Yan Shijing, vice-president of SCU received the delegation.

President Xie Heping told Professor Alaa Abdel Aziz that, as a world famous university, the University of Prince Edward Island had laid a solid cooperation basis with SCU in projects like student and teacher exchange and mutual recognition of credit, etc. He hoped both parties could further exploit the advantages of their disciplines and strengthen the cooperation to promote their development.

Professor Alaa Abdel Aziz said there is a decade of cooperation between the University of Prince Edward and SCU, and nearly 100 students of SCU went to the University of Prince Edward for study and exchange.



Just like SCU, the University of Prince Edward underlines international exchange to help students acquire overseas experience and gain access to multiple cultures. And

the University of Prince Edward also looks forward to strengthening the cooperation with SCU and expanding the range of cooperation. 🇨🇳

## Education Director of Yamanashi, Japan Visits SCU

On October 23, Education Director of Japan Yamanashi-ken, Mr. Kunihiko visited SCU. Executive vice president Professor Li Guangxian received the guests. And officers of relevant departments and colleges attended the meeting.

At the meeting, vice president Li Guangxian, on behalf of SCU, expressed his welcome to the delegation led by Mr. Kunihiko. SCU is one of China's first-

class universities and has cooperative relationship with Waseda University and other 20 famous Japanese universities, said Mr. Li; he hoped that the visit of the delegation is expected to deepen the cooperation of universities and the friendship



between China and Japan.

Mr. Kunihiko expressed his appreciation to SCU for the warm reception; he said SCU is a well-known, large-scale Chinese university, and multiform ex-

changes are expected between Chinese and Japanese first-class universities to contribute to the friendly exchange between both countries.

Before the meeting, the delegation

had a discussion with students from Japanese department of College of Foreign Languages. 🏯

## University of Notre Dame Delegation Visits SCU

On October 20, a delegation headed by Thomas G. Burish, executive president, and Jonathan Noble, vice president of the University of Notre Dame visited SCU. Academician Xie Heping, president of SCU, and Professor Yan Shijing, vice-president of SCU met with the delegation.

SCU puts focus on improving students' international exchange experience and broadening their international view; at present, SCU has established cooperative relationship with many internationally known universities; and with the visit of the delegation, the future cooperation between University of Notre Dame and SCU can be expected, said president Xie Heping at the meeting.

President Thomas G. Burish said University of Notre Dame had cultivated many high-calibre students, many of whom can successfully apply for post-graduate in other universities; and the



College of Business ranked top first for five successive years amongst colleges of business in US from 2010 to 2014. And University of Notre Dame has its advantages in Environmental Protection, Energy, Architecture and other disciplines. The University underscores the cultivation of international quality and value theory of students; and now it has had

cooperation and exchange with Peking University, Tsinghua University, Zhejiang University and Fudan University in China. And cooperation on student and teachers exchange between University of Notre Dame and SCU is expected by the visit. He also welcomed more Chinese students and teachers to University of Notre Dame for study and exchange. 🏯

## Dr. Michael Crow, President of Arizona State University, Visits SCU

On October 29<sup>th</sup>, a delegation led by Dr. Michael Crow, president of Arizona State University, visited SCU. Academician Xie Heping, president of SCU, and Professor Yan

Shijing, vice-president of SCU, met with the delegation.

Arizona State University is a key sister university of SCU in the U.S.; both parties have, based on the plat-

form of Sino-U.S. Public University Presidents Forum and Sino-U.S. Institute for University Design, made a series of multi-field and multi-layered cooperation, which lays a solid and

good cooperation foundation, said president Xie. And the proposed global issues research center jointly established by SCU and ASU shall focus on fostering strategic talents and researching and solving hot issues. The visit of president Michael Crow will greatly facilitate the cooperation between two institutes.

President Michael Crow said SCU is a partner ASU values very much. He spoke highly of the construction and training concept of Institute for Disaster Management and Reconstruction (IDMR) of SCU; ASU has owned mature research unit on emergency

management and homeland security, so he expressed his hope to cooperate with SCU to contribute to disaster reduction and issue research with their discipline advantages.

And the two parties also had a lively discussion on the construction of post-disaster reconstruction research center, global issues

research center, etc, and officially inked SCU-ASU Interuniversity Cooperation Statement. 🇺🇸



## Dr. Hani K. Findakly, American Investment Banker, Visits SCU

On November 3<sup>rd</sup>, Dr. Hani•K•Findakly, an American Investment Banker, visited SCU. Academician Xie Heping, president of SCU, and Professor Li Xufeng, vice-president of SCU, held a discussion with the guest.

President Xie expressed his appreciation to Dr. Hani•K•Findakly for his theme speech: "The Challenges of The Higher Education in U.S. and Its Influence on China" to the SCU students. China is in the stage of comprehensively

deepening reform, all colleges and universities in China are actively exploring a reform roadmap; SCU is trying to improve its social influence by multiple reform measures; president Xie expressed his welcome to Dr. Findakly to provide guidance and assistance for future development of SCU with his rich experience on investment and financing.

As one of the leading countries with developed education, the US has encountered various issues in its higher education that will also be faced by China, so economists and educators should pay high attention to them, Dr. Findakly said. He gave a brief description and analysis of fund sources and social financing issues American colleges and universities are facing; the colleges should follow the enterprises' opera-

tion mode to make positive effects for future development by flexible financing channels, he added.

Dr. Findakly is a member of Council on Foreign Relations (CFR), senior investment banker, senior consultant of Peking University, vice-chairman of New York Clinton Group. He once worked as a senior consultant of multiple international financial institutions, including chief investment director of World Bank Group. He has written a large number of articles on global capital market, risk management and business administration, and offered correlated curriculum. As a life member of Council on Foreign Relations, Dr. Findakly has been listed in Who's Who in America, and honored Goulbenkian Fund Award, Sigma Xi Award (scientific research excellence award), Chi Epsilon Award (outstanding industrial achievement award) and 2009 Ellis Island Medal of Honor. 🇺🇸

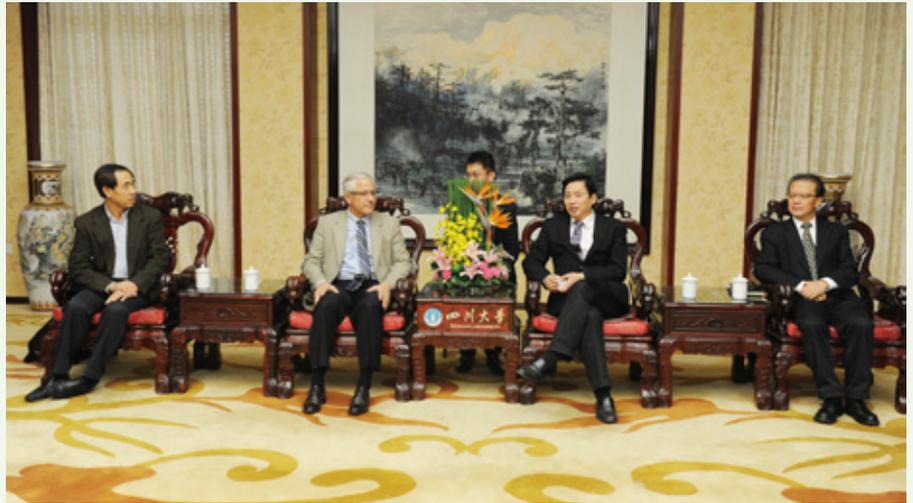


## Michigan State University Delegation Visits SCU

In the morning of November 10<sup>th</sup>, a delegation from the Michigan State University visited SCU. Academician Xie Heping, president of SCU and Professor Yan Shijing, vice-president of SCU, and officials from the SCU departments concerned met with the members of the delegation.

Michigan State University and SCU had laid a satisfactory basis of cooperation on joint student cultivation, personnel exchange and communications, as well as in the humanities and social science fields, President Xie Heping said. He expressed his hope in expanding cooperation fields between two parties and also deepening cooperation on hot issues of global concern like climate change and environmental protection, etc. Efforts will also be made to effectively facilitate exchange and interaction of the two parties to enhance service concept promotion of SCU and strengthen the sophisticated process management in logistics management services of SCU.

Mr. Guy Dominic Procopio, general manager of the Logistics, Food and



Beverage Department of Michigan State University, briefed some of their concrete measures on food and beverage operation and management. He expressed his hope to further deepen the cooperation in logistics management services between the two universities in an effort to improve the experience of the students, and boost cooperation on exchange of cooks in the future.

Mr. Steven James Kautz, assistant dean of College of Humanities & Social

Sciences, Michigan State University, said they have world-class scholars in Economics, Sociology and Judicial field, while SCU also has strong strength in humanities and social science fields. He hoped the two universities could further tap their cooperation potential in humanities and social science fields to facilitate mutual development of both parties on the basis of joint student cultivation, teachers' exchange and study in earlier stage. 📍

## Delegation from Far-East Research Institute, Russian Academy of Sciences Visits SCU

On November 11<sup>th</sup>, 2014, a delegation from the Far-East Research Institute, Russian Academy of Sciences visited SCU. Professor Yan Shijing, vice-president of SCU and officials from the SCU departments concerned met

with the visitors.

In the meeting, vice-president Yan Shijing briefed achievements of SCU in Russian language teaching and contemporary Russian studies. And he expressed his gratitude to the guests for their support

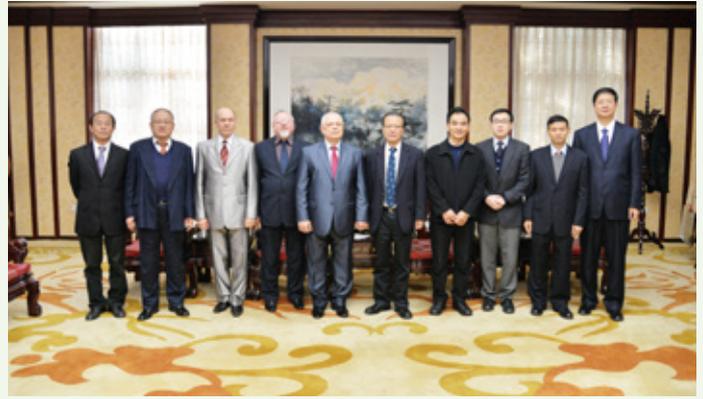
in helping the Contemporary Russian Studies Center of SCU win the major tendering project of National Social Science Fund -- "Chinese translation work of The Russian Encyclopedia of Chinese Spiritual Culture". SCU lays great emphasis on

the cooperation with Far Eastern Branch of the Russian Academy of Sciences, and hopes to strengthen the cooperation between the two parties to inject new vitality into the cultural and educational exchanges between China and Russia, he added. He also stressed that, the translation and publishing of The Russian Encyclopedia of Chinese Spiritual Culture would bring about a profound influence on the friendship and exchanges between China and Russia.

Professor Lukyanov, director of Study Center for East Asian Cultures of the Far Eastern Branch of the Russian Academy of Sciences, vice chairman of Russia China Friendship Association and vice-president of International Confucian Association, firstly read the impassioned congratulatory letter from Academician Mikhail Titarenko, director of Far Eastern

Branch of the Russian Academy of Sciences, chairman of Russia China Friendship Association and president of International Confucian Association. Professor Lukyanov expressed thanks

to the scholars of SCU who committed to translate The Russian Encyclopedia of Chinese Spiritual Culture. Far Eastern Branch of the Russian Academy of Sciences highly values the cooperation with SCU and several cooperation plans have been prepared by the scholars from the delegation and the Contemporary Russian Studies Center of SCU. A Cultural



School for sinology study would take shape with the concerted efforts of the parties, said Professor Lukyanov. He presented to SCU the newly published Russian versions of some books like The Book of History on behalf of Far Eastern Branch of the Russian Academy of Sciences. 🏠

## Dr. Guo Zhengxiao, University College London Pro-Provost, Visits SCU

In the morning of November 18, a delegation led by Professor Guo Zhengxiao, Pro-Provost of University College

London visited SCU. Academician Xie Heping, President of SCU, welcomed the guests along with other personnel concerned.

During the meeting, President Xie expressed his hope that University College London, a time-honored elite institution of England, could join hands with SCU to further strengthen international cooperation, and explore

cooperation fields unremittingly, so as to achieve mutual benefit and reciprocity as well as common development by making the most of advantageous disciplines of both parties.

Vice-president Guo Zhengxiao said that they paid the visit out of admiration for SCU, in an effort to seek scientific research cooperation opportunities whilst further expanding the exchange and cooperation between both universities. He introduced the teaching features and talent cultivation ideas of University College London, and commented that both universities share common ideas with



respect to education thoughts, scientific research and many other areas. With the belief that no culture and distance will constrain social development and scientific progress, he expressed his expecta-

tion that the two parties could further push forward international cooperation to unceasingly improve education quality and stimulate talents' potentials as much as possible.

After the meeting, President Xie Heping, on behalf of SCU, awarded Guest Professor Appointment Letter to vice president Guo Zhengxiao. 🏠

## Dr. Meng Liqiu, Executive Vice-President of Technical University of Munich and Fellow of Academy of Sciences Leopoldina, Visits SCU

In the morning of November 28, 2014, Executive Vice-President of the Technical University of Munich and a Fellow of the German Academy of Sciences Leopoldina paid a visit to SCU. Dr. Xie Heping, President of SCU, along with personnel concerned met with the guests.

During the meeting, President Xie praised that the rigorous and refined style in German education and industry sets an essential example for the whole world. Technical University of Munich was a top-notch university of German which enjoys international reputation and SCU is willing to conduct comprehensive and in-depth cooperation with Technical University of Munich, said President Xie. He also expressed his expectation that Executive Vice-president Meng Liqiu could offer more advice and suggestions on internationalization of SCU.

Academician Meng Liqiu expressed her wishes to further expand exchanges and cooperation between Technical University of Munich and SCU while seeking joint scientific research. Then she made concrete suggestions on methods and channels of talent introduction and exchange.

Soon afterwards, both parties had a heated discussion on specific issues related

to cooperation.

On the afternoon of the same day, Executive Vice-president Meng Liqiu delivered an excellent speech under the title of University Mission and Vision to faculties and students of SCU on invitation.

Centered on mission and vision, her speech consisted of three parts, namely, high education system of German, internal management of universities and personnel experience. Higher education in Germany is popularized, she said, and the rigorous style propels the elitism of higher education there; the schooling principle of "unifying research and education" was highly praised up to now, and the idea of "Combining research with application" runs through the whole process of enrolling students, teaching and obtaining employment (for students). In universities of Germany, teachers, students and administrative staff make concerted effort in internal management, and excellent retired professors and senior executives are also fully mobilized to



help in management, through which management efficiency is evidently improved, she said. In terms of talent introduction, she remarked, efforts of both talent scouts and talents are required, and international vision, unique insight and persistent strategy are necessary for universities to successfully attract elite talents. Executive Vice-President Meng Liqiu shared outstanding systems in universities of Germany and the world as a whole with the audience, from various aspects of universities to every step of management.

The teachers and students present were active in asking questions and participating in interactions during the lecture. 🏠

## SCU Delegation Strengthen Ties with Universities in Taiwan

In early November, 2014, Yan Shijing, vice president of SCU, visited Taiwan “Central University” and “Tsinghua University”, then attended “Sichuan University – Taipei University Cooperative Research Seminar” held in Taipei University.

On November 3, Prof. Li Guanghua, vice president of Taiwan Central University met with the delegation headed by vice president Yan Shijing. Both sides discussed the proposed cooperation agreement and decided to conduct comprehensive cooperation in terms of humanities & social sciences, organizational culture of campus communities, liberal education, teacher and student exchange, student collaborative education and other fields.

On November 4, during the visit to Taiwan “Tsinghua University”, vice president Yan Shijing held a conversation with vice president, Dr. William Stanton, head of Global Affair Department, Prof. Zhao Qichao and director of international cooperation, Dr. Jiang Xiaowei, with an effort to implement the agreement and cooperation between the two universities. Both parties will conduct fruitful cooperation and exchange in multiple domains including aerospace technology, nuclear physics, computer software design, postgraduate collaborative education and cooperative research. At the end of the conversation, vice president Yan Shijing invited leadership and professors of Taiwan “Tsinghua University” to visit SCU at their convenience next year.

Sichuan University - Taipei University



Cooperative Research Seminar was held in the library of Taipei University on November 4. Prof. Xue Fujing, president of Taipei University and Prof. Yan Shijing, vice president of SCU, attended the seminar, together with specialists and scholars from College of Disaster Management and Reconstruction, College of School, School of Public Administration and College of Economics of SCU as well as related scholars and professors from Taipei University.

Prof. Xue Fujing, president of Taipei University extended a warm welcome to specialists and scholars from SCU. After that, he reviewed the progress and preliminary achievements made by both parties in related cooperation areas since last visit paid by the delegation led by him in April this year for Sichuan University - Taipei University Cross-Strait Seminar on Development Research and Cooperation. He also expressed his desire that both universities can gear up their exchange and cooperation in

research fields of humanities & social sciences with continuous passion. Prof. Yan Shijing, vice president of SCU, expressed gratitude to Taipei University for their warm reception on behalf of SCU. He pointed out: with the support and attention paid by both universities and the great effort exerted by their specialists and scholars, an effective cooperation mechanism between Sichuan University and Taipei University has been basically established to facilitate scientific research and teaching exchange in the field of humanities & social sciences; as for the next step, the cooperation space should be further explored and the cooperation should be consolidated and deepened with concrete research achievements.

Subsequently, specialists gave brief introduction about their latest research progress on regional development and hazard control, cross-strait corporate governance and finance research, as well as cross-strait public governance and comparative study respectively. Besides

in-depth exploration and extensive exchange of cooperative research subjects and methods in these fields, specific research contents and schedule were also formulated in the seminar. Both sides also negotiated the plan to implement

cooperation in teacher and student exchange, multi-cooperation, establishing database and case library, undertaking international academic conference, and jointly running academic journals, etc.

Chen Mingxun, vice president of Taipei

University, Zhang Siming, chief of research and development department, and the persons in charge of the Office for Hong Kong, Macao and Taiwan Affairs as well as the Office for Social Sciences of SCU also attended the seminar. 

## Vice-President Yan Shijing Attended International Conference on University Social Responsibility at PolyU, Hong Kong

On November 17<sup>th</sup>, at the invitation of the Chinese University of Hong Kong, Dr. Yan Shijing, vice-president of SCU, went to Hong Kong to attend the exchange meeting of the Talent Recruitment Branch, Chinese Association of Higher Education. The theme of the meeting is the development prospects of talent exchange in higher education between the mainland and Hong Kong. As vice chairman of the Talent Recruitment Branch, Yan Shijing introduced SCU's talent recruitment programs, and stressed that, being on the frontline of recruitment of the best foreign intellectual resources in the world, Hong Kong universities possess unique advantages. Therefore, mainland colleges and universities should reinforce cooperation with Hong Kong counterparts so as to jointly build international top universities.

Over 30 representatives from 23 colleges and universities and institutions in mainland and Hong Kong attended the meeting. The participants



exchanged their opinions about higher education talent exchange between mainland and Hong Kong and multi-dimensional development of internationalization policies, so as to deepen mutual understanding and establish closer cooperation.

During his visit to Hong Kong, Yan Shijing paid a special visit to

Hong Kong Jockey Club and attended the Second Session of University Social Responsibility Summit Forum & International Academic Conference on Global Service Teaching held in Hong Kong Polytechnic University. Entrusted by president Xie Heping, Yan Shijing made a featured speech on the conference, introduced the

effort paid by our university to cultivate social responsibility and service awareness of teachers and students by means of disaster relief and reduction education, post-disaster reconstruction community service and other activities, based on the social service platform established by 'College of Disaster Management and Research'.

On November 18, 2014, vice-president Yan Shijing paid a visit to Hong Kong Jockey Club, during which he had an in-depth discussion with chief inspector Mai and director Wang Hong (executives of Hong Kong Jockey Club), with its purpose for joint planning on the cooperation field and objectives between "College of Disaster Management and Research" of SCU and the Club in the future. On the afternoon of the same day, vice-president Yan visited Hong Kong Disaster Preparedness Center, accompanied by director Wang Hong. He shared experience and discussed cooperation with Hong Kong peers, and then they put forward a plan to jointly build an intelligence platform for disaster management & research in China, based on the Hong Kong Jockey Club-funded disaster management and research platform, seeking the support from Yunnan University, Hong Kong Polytechnic University (HKPU) and high-end disaster prevention and reduction resources at home and abroad.

After the 5.12 Earthquake in 2008, Hong Kong Jockey Club funded SCU to establish a "College of Disaster Management and Research" with HKPU. By now, the college has cultivated more than 40 doctors and 200 masters on disaster management & research, and established professional disciplines and teams to respond

to disasters. It has conducted training on approximately ten thousand persons in the front line of disaster emergency campaign. Meanwhile, the college has also played a positive role in disaster relief missions after Yushu Earthquake, Lushan Earthquake and Ludian Earthquake.

On November 19, 2014, the "Second Summit on University's Social Responsibility cum Inaugural International Conference on Service-Learning" was held in Hong Kong Polytechnic University, Mr. Eddie NG Hak-kim, Secretary for Education of Hong Kong Special Administrative Region Government, Prof. Roy Chi-ping CHUNG, Court Chairman of HKPU, and Prof. Timothy W. TONG, president of HKPU, attended the opening ceremony.

The lecturers in the summit forum ranged from famous leaders committed to propelling universities' social responsibility to leadership of colleges and universities worldwide, such as Prof. Ye Jingyi, deputy director of Peking University School Board, Prof. James Thomson, associate vice president for Social Responsibility, University of Manchester, Prof. Yan Shijing, vice president of Sichuan University, Prof. Hau LEE, professor of operations, information and technology, faculty co-director of SEED (Stanford Institute for Innovation in Developing Economies) and faculty co-director of Value

Chain Innovation Initiative, Stanford Graduate School of Business, Stanford University. They shared their innovative and inspiring ideas on the direction and tactics of universities' social responsibility development.

Entrusted by president Xie Heping, vice-president Yan Shijing delivered a featured speech on the conference, mainly introducing the effort paid by our university to cultivate social responsibility and service awareness of teachers and students by means of disaster relief and reduction education, post-disaster reconstruction community service and other activities, based on the social service platform established by "College of Disaster Management and Research". 24 colleges and universities from 12 countries and regions as well as around one thousand representatives attended the conference. During the summit forum, university leaders had a positive discussion on specific topics like "Cultivating Students to Be Citizens with Social Responsibility", "Tactics & Modes to Promote University's Social Responsibility" and "University Should Serve as a Pioneer to Promote Social Development". 🏠



## SCU and Université de Toulouse Sign Cooperation Agreement

In the morning of October 23, SCU President Xie Heping and Vice-President Bu Hong received a delegation headed by Bertrand Monthubert, the President of Université de Toulouse, and signed a cooperation agreement. Officials from the SCU departments concerned also attended the meeting.

President Xie said, in the eve of 50<sup>th</sup> Anniversary of the Establishment of Sino-France Diplomatic Relations and under the background of “Western Development” policy, the cooperation and exchange between both parties has a profound and significant importance.

President Bertrand Monthubert said: “like Sichuan University, Université de Toulouse is a university of long history; we take international exchange and cooperation very seriously and also have a good cooperative relationship with SCU.” And he also expected to drive joint development and progress of both sides on medical science, environment and other disciplines and colleges via cooperation and exchange with SCU.

At last, both sides signed an interuniversity cooperation agreement, and also exchanged

gifts and took a group photo.

Université de Toulouse, founded in 1229, is a famous French comprehensive public university, and one of the most historic universities in the world; it is also a top institute of European economics and French engineering, since 16% of the engineers in France are graduated from Université de Toulouse each year. It is renamed as Université Fédérale Toulouse Midi-Pyrénées recently.

SCU has already conducted exchange and cooperation with Université de Toulouse. On April 25, 2012, the environmentology professor and director of international office from Paul Sabatier University (Toulouse 3) visited College of Architecture and Environment and Institute of Atomic and Molecular Physics of SCU; a preliminary cooperation intention was reached, and an interuniversity cooperation agreement was then signed by and between both parties on November 27, 2012. At present, SCU and Université de Toulouse have launched further cooperation on China Scholarship Council CSC project, EU Erasmus Lotus project, etc. 📄



Recently, Prof. Alan Macfarlane, a famous historian from England, professor of Social Anthropology of the University of Cambridge and TV Program Producer, visited SCU in the hope of establishing official cooperation with SCU to cultivate talents together. During his visit, he delivered a series of wonderful lectures to students of SCU.

On 28<sup>th</sup>, a journalist of the campus newspaper interviewed Prof. Alan Macfarlane at Wangjiang campus. After the conversation with him, the journalist got to know Prof. Alan Macfarlane not only in academic study, but also in his life. He is really an anthropologist, accompanied by tea, books and field, who gains a deep insight into the history and the present, and enjoys the process of thinking.

### A Visit with the Expectation of Cooperation

Prof. Alan Macfarlane paid this visit to SCU aiming at cooperation with the School of History & Culture in SCU. “I have visited SCU for four or five times since my first visit here in 2004. I think I will come here in the future as well. As for this visit, it is mainly about the launching of ‘Cambridge Rivers Project’ in SCU and establishment of a workstation concerned, in an effort to build the Himalaya Multimedia Database and cultivate young scholars and students proficient in digitalized technology of multimedia resource library and technology needed in intangible cultural heritage collection.” It is reported that Prof. Alan Macfarlane opened a workshop involving latest research methods and subject discussion of Anthropology in SCU for 6 days. These works will definitely serve as an important



## Tea, Books and Field Perfect Life of a Cambridge Professor

impetus for SCU to push forward the exchange of Anthropology.

### Life with Tea

Prof. Alan Macfarlane chooses a photo of himself working at home, of which the background is a corner of his studio, as the cover of his lecture notes. In the photo, his books fill the shelves up to the ceiling, which is really amazing. However, these books account for less than one-tenth of books collected in Prof. Alan Mac-

farlane's home, "His home is a big library", noted by another scholar accompanying Prof. Alan Macfarlane.

Besides the books, tea is another indispensable part of his life. "Tea in Japan is more connected with religion, which gives people a strong sense of ritual. They often spend 4 or 5 hours in drinking Japanese tea. Chinese tea is more casual, but tea is originated from China. I like Dragon Well tea. Certainly, I also like English tea with milk and sugar in it". When talking about the tea, Prof.

Alan Macfarlane can speak with great familiarity. With his childhood spent in a tea garden of Himalaya, he wrote *Green Gold* with his mother who is proficient in tea culture. *Green Gold* describes the history of tea, including the origin and development of Chinese tea and its influence to the world. He often enjoys the fun of drinking tea with his wife. They built a Japanese style tea house in the backyard of their house in England to drink tea there.

As a matter of fact, romances between Prof. Alan Macfarlane and his wife, daughter of a tea plantation owner, started in a tea garden. "She is so beautiful and I fell in love with her at first sight when I encountered her in a supermarket." And they find so many similarities and common

pursuits between them after understanding each other. For years they live together, they are not only lovers, but also colleagues, friends and soul mates. Prof. Alan Macfarlane had conducted field investigation in the Himalayan Mountains for 30 years, during which his wife always accompanied him. As he wrote: "I understand the tea is one of the great contingencies in history, it's even more important than Penicillin, Quinine or potato or rice; it lights our life..... this is the biggest kingdom in the world, even if it is almost invisible".

### Interdisciplinary Anthropologist

As for the selection of anthropology, Prof. Macfarland said, "everything is disappearing rapidly", he wants to record these quickly disappearing traditional cultures and check their significance to anthropology.

Prof. Macfarland studied history in early years and then turned to anthropology. But why? He explained that he was very interested in history, but along with the deepening of his study, he discovered that he failed to get what he wanted by reading document literatures only, so he turned to anthropology and paid more attention to field investigation. Prof. Macfarland applied comprehensively the methods in historiography, science of law, demography, anthropology, sociology and other disciplines to his study, which covers several cultural regions, including Western Europe, Himalaya region (mainly Nepal and Assam of India) and Japan, and has harvested works in diverse forms—monograph, article, database, video, etc.

"However, interdisciplinary research is not easy", Prof. Macfarland

said, "As a newcomer to a new research area, putting forward a new viewpoint, you will be rejected and sharply criticized by the scholars in this area, but you can't step back, you must be brave and confident to show your inner power."

Ruminating the behavior and history of human beings, and immersed in the fragrance of tea and books as well as the pleasure of lecturing, Prof. Macfarland presents the perfect life of a scholar.

### Background:

*"Cambridge River Project" was established by Prof. Alan Macfarland, Academician of King's College, Cambridge, after winning the Rivers award of Royal Anthropological Institute, in memory of W·H·River, the important founder of social anthropology. Since its establishment in 1983, Prof. Alan Macfarland and his team has collected plenty of videos, photographs, records, and other data with research and historical value, and made these data accessible to the internet users in the world at the end of last century. By 2013, Cambridge River Project has obtained supports from ten plus world top academic research foundations, and published several academic monographs and a quantity of papers.*

*At the beginning of 2014, a cooperation relation was established between Sichuan University and "Cambridge Rivers Project", 16 experts of the Project were introduced into SCU to set up a workstation to co-build Himalayan Multimedia Database, so as to form a construction specification and classification standard for Chinese intangible cultural heritage multimedia resources, and the biggest multilingual Himalayan region multimedia database in the world as well.* 🏠

Is appropriate tree planting may cause landslide? Does it break your common sense? A few days ago, SCU Mountain Resources Engineering and Eco-safety Talent Recruitment Center (or the Center) published its research achievements, many of which are novel. According to the introduction by staff members, the Center explores the mountain ecology in Southwest China with the assistance of foreign experts, and has achieved research results extremely valuable to resources development and ecological reconstruction in this region. The work of the Center will help promote research in relevant disciplines at SCU.

Taking the rational exploitation of tourism resources, forest resources and water resources in western Sichuan and its influence to regional ecological security as the main scientific research direction, this project establishes cooperation with a number of foreign high-end talents.

### Research Reveals the more understanding of the Mountain Ecology of Southwest China

The ecological and environment problems caused by unreasonable exploitation of natural resources and ecological environment reconstruction has become a key topic for scientific research. As early in 2008, we have thought about searching a representative region to study the impact on local, regional and national ecology and environment by mountain resources exploitation. In view of the diversified and unique physical geographic environment in Sichuan, the Center chooses Jiuzhaigou Valley, downstream of Jinsha River and

# Recruiting Talent to Boost Innovation and Exploration of Southwest China Mountain Ecology

## —Mountain Resources Engineering and Ecosafety Talent Recruitment Center Spurs Development through Research

By Cao Dan

Chishui River valley as well as mountains around Sichuan Basin. Till now, it has achieved quite a few scientific research results, among which "Inappropriate Trees Planting May Cause Landslide" is one typical scientific discovery.

The discovery is contrary to our common sense related to ecological restoration, why? According to the researchers, *cryptomeria fortunei* and other species are the troublemakers.

"Due to shallow root system and other features, *cryptomeria fortunei* can't retain the soil, and it may even have a contrary effect." Thus it can be seen that the *cryptomeria fortunei* planted in steep hill can neither "preserve water and soil" nor "consolidate slope", on the contrary, it increases the risk of landslide. The Center proposes from the point of practical application: firstly, to plant mixed forest instead of pure *cryptomeria fortunei* in mountains and similar terrains around Sichuan; secondly, try not to plant *cryptomeria fortunei* on slopes over 40-50°. Moreover, the Center has also had remarkable progress in the Jiuzhaigou Valley ecological environment research. As one of the most unique scenery zones with international significance in China, Jiuzhaigou Valley's ecological and environmental protection is of

“ Through such cooperative researches, our young teachers and postgraduates have grown up, our own team has been established and relevant disciplines have been developed. ”

exceptional importance. The cooperative research by the Center team and foreign experts reveals the fact and reason of ecological and environmental degeneration in Jiuzhaigou Valley. "We have figured out the three major factors influencing Jiuzhaigou Valley water environment: land, atmosphere and human activities. Acid rain was considered no influence to Jiuzhaigou Valley, because people believe that Jiuzhaigou Valley belongs to limestone area, where the acid rain can be neutralized. But the neutralization process is actually a degeneration process." And among the three factors, regional atmospheric pollution and local human activities are the main factors, including atmospheric pollution coming from foreign countries, especially South Asia region.

With the deepening of research,

the forest, soil and water resources as well as atmospheric activity in Jiuzhaigou Valley have become the research subjects of the Center. Other research subjects of the Center include "Ecosystem Service Function Recovery in Downstream of Jinsha River", "Relation between PM2.5 and Environment & Health", "Heavy Metal's Harm to Human Body", etc. "The ecological environment research requires systematicness and continuity, a sequence of specific research achievements will ultimately help us realize the ecological secret."

### Recruiting Foreign Experts Promotes Disciplinary Development

As a project of national "111 Plan", Mountain Resources Engineering and Ecological Security Talents Introduc-



University of Michigan professors went on a field trip with staffs of the Center.

tion Center will conduct cooperative research with 40-50 foreign scientists every year. "We hold a simple idea: try to solve domestic issues exploiting foreign wisdom." Almost all scientific research projects of the Center are participated by foreign scientists; while helping the Center to achieve research results, foreign scientists play a more important role—participating in the disciplinary construction and development, such ecological engineering, environmental atmospheric dynamics, restoration ecology, etc.

While driving talent cultivation with scientific research and accelerating disciplinary development with talent cultivation, our project has more important target, and distinguishes itself from other scientific research projects.

Up to now, the Center has established long-term cooperative relation with University of California, Davis, University of Washington, University of Michigan in USA; National University of Ireland in Europe; Monash University of Australia and University

of Modena in Italy, etc. Academic masters in these universities will come to this Center and participate in its relevant scientific research based on project requirement of SCU and their own interest.

All the projects in the Center are conducted by SCU team and foreign experts, by participating in the entire process of scientific research, our teachers and students continuously learn advanced foreign technologies and ideas, and some new disciplines were established as a result. " 'Relation between PM2.5 and Environment & Health', 'Ecological Restoration', and some other disciplines were established during the cooperation with foreign professors." An on-going research on atmospheric sedimentation is conducted with the help of the equipments and calculation models brought by foreign scientists, "None of us know much about the model before, but now we use it to conduct research that may influence the entire West China." 🏠

Dr. Kevin Hannam, a professor of Leeds Beckett University, visited Sichuan University from October 25 to 28 to attend the International Forum on Interdisciplinary Tourism & Heritage Research. During his stay at SCU, he had in-depth interaction with Professor Cheng Li and his research team from the School of History & Culture (Tourism), SCU and had extensive discussions on scientific research cooperation in the future. He expressed desire to strengthen interaction with the International Laboratory for Interdisciplinary Tourism & Heritage Research of SCU so as to jointly promote scientific research cooperation. He was very pleased to accept the position of editorial board member of the International Journal of Tourism Anthropology, and would work closely with SCU to promote the development of the International Journal of Tourism Anthropology.

On the morning of October 27, Professor Kevin Hannam delivered a lecture titled Recent Developments in Theorising Tourism Mobilities to students and teachers from School of History & Culture (Tourism) and College of Architecture & Environment.

Professor Kevin Hannam introduced the concept of mobility by citing of the geopolitic issue caused by infant milk powder incidents in China in recent years. This unique phenomenon of "infant milk powder tourism" for purchase of foreign milk powder highlights the issue of tourism mobility.

Professor Hannam pointed out, by combining tourism with mobility, the tourism research will occupy a more important position in social science. As a broad concept, mobility refers to not only movement of human, but also movement of animals, capital, gifts, thoughts, knowledge,

# Professor Kevin Hannam Attends SCU Interdisciplinary Tourism & Heritage Research Forum Series

By Ju Yingying, Xie Qi, Tong Jiejie



etc., and covers all aspects of social life indeed. After being incorporated into tourism, the tourism research possesses its own unique disciplinary characteristics. He believes that the process to theorize tourism mobility is to associate tourism with various forms of movements, to study human communication in large-scale mobile practice with post humanism philosophy thought, and it is the process to theorize movement progress.

During the lecture, Professor Hannam explained the tourism mobility vividly by taking the example of India Darjeeling Himalaya Railway, a mobile world cultural heritage. Darjeeling Himalaya Railway enjoys its most important feature

for its route and relatively low speed. Thanks to the low speed, passengers can get on and off the moving train, which makes the Darjeeling Himalaya Railway a performance stage and a tourism heritage attraction. Its mobility also makes it one of the numerous performers and helps it take the initiative in the process.

Professor Hannam further explained the great changes brought by new high technologies to human life and tourists' travel in particular, and indicated the important academic value to theorize tourism and mobility as a complicated combination. He regarded tourism mobility as "the correlation among human, objects, objects and thoughts in motion, under the overlap of various benchmarks

such as local, body, national and global scope, as an integration of multiple substances and technologies", and he further indicated the study direction and composition of tourism mobility theorization.

After the lecture, Professor Kevin Hannam had heated interaction with the students and teachers present.

Professor Kevin Hannam brought the latest and forefront international research concept in tourism research to the audients. His tourism mobility theory will push tourism discipline and tourism research to a broader research field and will definitely hold a central part of tourism research field in the future.

The visit of Professor Kevin Hannam actively accelerated the international communication process of SCU tourism discipline. Professor Kevin Hannam was deeply impressed by our students' good spirituality, professional dedication and focus in learning.

## Profile:

*Professor Kevin Hannam is a leading scholar in mobility research with great international influence, and at present he is the Co-Editor in SSCI journal Mobility, resource editor in SSCI journal Annals of Tourism Research, editorial board member of international journal Tourism Studies and Journal of Heritage Tourism, director of Association of Tourism and Leisure Education and Research(ATLAS)(a famous international tourism research academic organization) and Fellow of Royal Geographical Society. He has published 35 academic papers and 10 monographs on Annals of Tourism Research, Journal of Tourism and Cultural Change or other journals listed in SSCI.* 📖

# Scientists Achieve Breakthrough in CO<sub>2</sub> Mineralized Power Generation Technology (China Science Daily)

On December 11, an article entitled **Scientists Has Developed CO<sub>2</sub>-Mineralized Power Generation Technology** was published on the front page of China Science Daily, introducing the “new CMFC methods and technology of CO<sub>2</sub>-mineralized power generation” developed by a research group led by Dr. Xie Heping, President of Sichuan University:

“Mineralizing 1t CO<sub>2</sub> may generate 140 KWH of electric energy and 1.91t sodium bicarbonate valued at RMB 200 to 3000.” On December 10, Xie Heping, CAE academician and president of SCU, said in a press interview of China Science Daily that his research group has proposed a new mineralization reaction and chemical principle for directly generating electricity with CO<sub>2</sub>.

It's the first time to internationally develop new CMFC methods and technology of CO<sub>2</sub>-mineralized power generation, overcoming the world's problem of directly generating electricity with CO<sub>2</sub> as a potential low-phase energy.

At present, the contradiction between human being's energy demand and CO<sub>2</sub> emission reduction is a worldwide bottleneck. At the recently closed APEC conference, China and the US signed a climate change joint declaration, definitely stating the China's carbon emission will reach peak in 2030.

“Mineralizing CO<sub>2</sub> as an industrial raw material to manufacture various chemical products is a new strategy of CO<sub>2</sub> emission reduction.” said Xie Heping. Although the geological storage is one of the strategies to dispose CO<sub>2</sub> in large scale, and demonstration researches have been conducted in vari-

ous regions worldwide, people should pay more attention to the research and exploration on CO<sub>2</sub> development and utilization.

The “CO<sub>2</sub>-mineralized power generation” is reportedly to directly convert chemical energy generated during CO<sub>2</sub> mineralization into electric energy.

In the trial test by academician Xie Heping's research group, the new CMFC methods of CO<sub>2</sub>-mineralized power generation can discharge electric energy steadily with max. output power of 5.5 w/m<sup>2</sup>, 0.01~0.530 w/m<sup>2</sup> higher than some biological fuel cells, and max. output voltage of 0.452V; meanwhile, CO<sub>2</sub> of different concentrations can be directly used for mineralized power generation without CO<sub>2</sub> capture process.

According to Xie Heping, the research group also used factory discharged wasted carbide slag and kiln dust as raw materials to test the applicability of CMFC of CO<sub>2</sub>-mineralized power generation in industrial solid wastes containing calcium hydroxide. And the result indicate that both kinds of waste residues can be directly applied into CO<sub>2</sub>-mineralized power generation, showing the carbide slag reactivity is very close to analytically pure calcium hydroxide.

Mr. Xie noted, the research group has successfully realized stable electric energy output by using carbide slag, organic alkali waste, cement dust, steel slag and other industrial alkaline wastes as raw materials of CO<sub>2</sub>-mineralized power generation, meanwhile the chemical product--sodium bicarbonate of high added value can be co-produced, and the environmentally hazardous industrial wastes can also be disposed, thus opening



a new path to CO<sub>2</sub> emission reduction for environmental friendly and sustainable economic development.

“However, we just verify the feasibility of CO<sub>2</sub>-mineralized power generation in trial test scale, and more fundamental researches and technology breakthrough studies are required to realize its industrial application.” said Mr. Xie Heping.

Next, the research group shall improve the power density and electric energy output efficiency of CO<sub>2</sub>-mineralized power generation; explore and utilize the catalytic mechanism and excitation methods of CO<sub>2</sub>-mineralized power generation based on chemical properties of various minerals; and reveal various complex chemical reaction principles and mechanisms involved in CO<sub>2</sub>-mineralized power generation.

Moreover, for the purpose of technological breakthrough, the research group shall optimize the parameters and manufacturing process & precision of CMFC technology and devices for CO<sub>2</sub>-mineralized power generation; and implement pilot-scale study of CO<sub>2</sub>-mineralized power generation as soon as possible. 卍

## English Academic Periodical Bone Research Sponsored by SCU is Included in SCI Database

Recently, the English academic periodical Bone Research (BR) sponsored by State Key Laboratory of Oral Diseases (Sichuan University) was included Web of Science. All articles published in Bone Research will be included in SCI Database. This is the second English magazine sponsored by State Key Laboratory of Oral Diseases (Sichuan University) included by SCI. BR will thus

become an important bridge linking the world and China as well as stomatology and medical science, providing a high-level academic exchange platform to the researchers.

Bone Research (BR) was officially published and distributed worldwide in



February, 2013. And it was accepted as a cooperation periodical of Nature in May, this year. 🏠

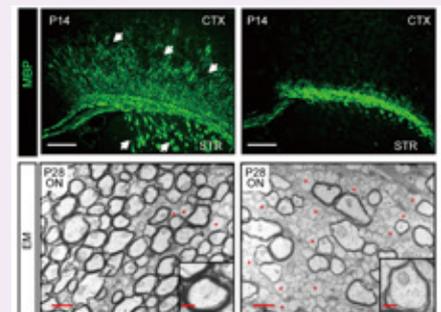
## Scientists at West China Hospital Clarifies the Role of mTORC1 Kinase in the Control of Myelin production in the Brain and Spinal Cord

By Cui Yiyuan West China Hospital, Sichuan University

The formation of the brain structure in mammals is not completed at birth. During the postnatal stage, structural maturation of individual brain regions and their connecting pathways, e.g. corpus callosum, is required for the successful development of cognitive, motor, and sensory functions. This maturation includes the formation of synapses that connect individual neurons and multiple layers of insulating material around axons called myelin. The myelination of axons provides for a smooth flow of neural impulses throughout the brain, so that humans can perform higher cognitive function. In the brain and spinal cord, myelin is produced by a type of neural cell known as oligodendrocyte. Oligodendrocytes not only produce myelin, but also provide meta-

bolic support to neurons. Malfunction of oligodendrocytes causes neuronal degeneration and is implicated in the development of neurodegenerative disease such as amyotrophic lateral sclerosis (ALS). How oligodendrocytes and myelin are formed normally in the brain and spinal cord and why the repairment of myelin is impaired in neurological disorder—multiple sclerosis (MS) have been an hot area of investigation.

A research team led by Bo Xiao, Ph.D./Professor at West China Hospital, Sichuan University, recently discovered that Rheb1 protein inside the precursor cells of oli-



Genetic deletion of *Rheb1* in OL-lineage cells by *Olig1-Cre* causes hypomyelination in CNS.



Bo Xiao and his research team

godendrocytes plays a critical role in the control of the formation of oligodendrocytes in both brain and spinal cord. Using genetically modified mice, they found that inactivating Rheb1 reduces mTORC1 kinase activity and impairs the differentiation of oligodendrocytes. As a result,

myelin production is severely affected in the brain and spinal cord. Previous work by other groups shows that mTORC1 affects only spinal cord myelination. The work done by Dr. Xiao's group convincingly demonstrates that mTORC1 affects both brain and spinal cord myelination,

as noted by reviewers of the manuscript describing this work. These discoveries are reported in the November 19<sup>th</sup>, 2014 issue of *Journal of Neuroscience*. This is a follow-up study of the work described by Xiao's group in a publication in *Developmental Cell* (2011). 📖

## Small 3D printed cutting templates help to solve big problem in cervical laminoplasty

By Liu Hao

On October 24<sup>th</sup>, 2014, Professor Liu successfully performed a unilateral open-door cervical expansive laminoplasty on a 40 year-old male patient with cervical stenosis, using 3D printed cutting templates. This is the first laminoplasty aided by 3D printing technique both domestically and internationally.

The unilateral open-door cervical expansive laminoplasty is safe and effective for patients with cervical stenosis of varied etiology. The purpose of such procedure is to decompress the spinal cord by enlarging the spinal canal so as to relieve the symptoms. In order to open the lamina, two troughs must be prepared. The open side trough is prepared with the lamina thoroughly cut, whereas the hinge side trough is prepared with the lamina partially cut. Then the lamina can be lifted like an open door. Careful choosing of the position of the troughs is crucial. Fully decompression could not be achieved if the troughs located too medially. On the contrary, if the troughs located too laterally, it is difficult for the surgeon to elevate the lamina. However, due to the small operative field and varied anatomical structure, how to find the most



appropriate trough location has always been challenging.

The research team led by Professor Liu has developed the 3D printed cutting template to help solve the problem of determination of the trough location. Patients with cervical stenosis received CT scan before surgery. The CT data were then reconstructed to a 3D model, based on what the cutting templates were designed. In this process, the most appropriate trough location was speci-



cally determined for each patient. Then the design documents were transferred to a 3D printer and the templates were fabricated. During the surgery, the 3D printed cutting templates were attached to the lamina of the cervical vertebrae. The designed cutting path would then guide the surgeon prepare the troughs. After months of collaboration, together with experts from the School of Manufacturing Science and Engineering, the 3D printed cutting templates were developed. Professor Liu performed the first 3D printing aided unilateral open-door laminoplasty on October 24<sup>th</sup>, which solved the problem of finding the appropriate trough location. With the application of the 3D printing technique, the surgical tools would become individualized and the surgical process would be more accurate. 📖

# Joint International Research Center for Polymer Science and Engineering is Upgraded as National Center for International Joint Research

A few days ago, with the approval of the Ministry of Science and Technology of the People's Republic of China, Joint International Research Center for Polymer Science and Engineering of SCU was upgraded as National Center for International Joint Research. At present, there are 4 National International Science and Technology Cooperation Bases in SCU, 2 of which are covered by National Center for International Joint Research.

Supported by State Key Laboratory of Polymer Materials Engineering (Sichuan University), Joint International Research Center for Polymer Science and Engineering is mainly devoted to the research of high-performance polymer materials, new technologies and new theories of polymer processing to develop high-performance and multifunctional polymer materials. It has reaped remarkable fruits by partnering with universities, scientific research institutions and enterprises from many countries, like Canada, the US, the UK, Germany, the Netherlands, Russia and Japan, etc. With the establishment of 4 international cooperation platforms, namely UK-China International Polymer Micro-processing Center, UK-China Advanced Materials Research Institute, Italy-China Multifunction Polymer and Biomaterial Research Institute and Canada-China International



Polymer Foaming Research Center, it has achieved fruitful results and made great contribution to the improvement of new preparation and processing technologies of new polymer materials and leap-forward development of polymer materials science and industry in China.

With recognition of National Center for International Joint Research, it aims to utilize global sci-tech innovation resources to improve the quality and level of international technology cooperation in China, strengthen capability of independent innovation to realize the strategic shift from personnel exchange and project cooperation to the combination of "project - base - talents" for international science and technology cooperation, thus making it an inter-



national platform with best-in-class technologies, talents and strong demonstration effect. 

## “3X-Factor”: Distinguished Professors, Jiuping Xu, Yinfeng Xu, and Zeshui Xu from Business School of Sichuan University

In 1905, the establishment of half-day school marked the beginning of business education in Sichuan University which is also the earliest form of its Business School. Through long-term teaching research and social service activities, the Business School identified its school motto as from Responsibility to Virtue, from Insights to Tao and this education philosophy has been guiding their students and staff to reach the spiritual enlightenment. Over the century, there are many well-known scholars and politicians from the Business School of Sichuan University, but today let's have a glance on the “3X-Factor” of Business School: Jiuping Xu, Yinfeng Xu, and Zeshui Xu. They are the Distinguished Professors of Business School, who have been recognized by a number of distinctions including the Distinguished Professor of “Cheung Kong Scholars Program” by the MOE of China, the winner of National Natural Science Foundation for Outstanding Young Scholars of China, the State Class Persons of National New Century Excellent Talents Program of China, China Youth Prize of Science and Technology.



**Prof. Dr. Dr. Jiuping Xu**  
Dean of Business School  
Assistant Vice-President



The academic career of Prof. Jiuping Xu started with his Ph.D. in

applied mathematics at Tsinghua University, directed by the foremost applied mathematician Prof. Shutie Xiao who was the founder of China Society for Industrial and Applied Mathematics and also had great practical research experiences in petroleum exploration. Prof. Jiuping Xu then obtained his second Ph.D. degree in physical chemistry at Sichuan University, directed by the worldwide renowned physical chemist in the field of nonequilibrium chemical physics Prof. Jiuli Luo whose Ph.D. supervisor is the 1977 Nobel Prize

winner I. Prigogine.

Learning under the direction of these two great academic scientists, Prof. Xu was able to attack problems at the leading edge in applied mathematics and has developed a keen insight into the physical chemistry engineering. He has devoted his long term research at the forefront of engineering practice to establish decision-making and technology innovation paradigms for the large scale of complex systems. His research has brought both theoretical and practical implications into the fields of energy

development, circular economy, water resources management, low-carbon and environmental issues, and civil engineering and management.

Prof. Jiuping Xu's pioneering contribution includes the establishment of multivariant and multilevel global organization technology for circular economy. The research on the complex problems of circular economic construction has generated more than ten billion RMB in profits to the related industries, such as agriculture. He also constructed the principle of multilevel dynamic water resources allocation optimization in order to solve the new emerging problems of water allocation modelling under climate change. The application of leading edge concept of dynamic equilibrium and the Stackelberg-Nash-Cournot equilibrium for multilevel water resources allocation has enhanced the sustainable utilization of water resources, and this has brought a great amount of social and economic benefits to the society.

In the area of autopoietic low-carbon restoration pattern of post-earthquake ecosystem, Prof. Jiuping Xu analyzed the reconstruction essence of the carbon balance, explained the carbon ecological cycle, and revealed the interaction and evolution process in the dimensionality of time-space structure and layer-level framework. His suggestions towards the policy reforms have been highly appreciated by the central leaders of the Chinese government and adapted by the Chinese National Development and Reform Commission, Chinese Ministry of Housing and Urban-Rural Construction, Chinese National

Seismological Bureau, and Sichuan Provincial Government. Furthermore, he also established the theory and methodology system for integrated management of large scale water conservancy and hydropower engineering construction project, including investment management, project organization, construction planning, construction control, benefit evaluation, and information integration. His work has made a significant contribution to help accelerate the development of project management and water conservancy and hydropower project construction.

Most recently, his research on key parameter prediction of oil and gas well tubing string has been recognized by the scientist and engineers across the world, especially for the tubular string characterization analysis, as well as perforation optimization for the High-Temperature-High-Pressure deep deviated oil and the gas wells with depths of more than 8 kilometers. This newly developed approach has been successfully adapted to optimize tubular string structure and selection of parameters, and it has also reduced the accident rate significantly, and saved more than one hundred million RMB of expenditures for the industry of petroleum and natural gas.

During his scientific career, Prof. Jiuping Xu has received more than 50 research grants from various funding bodies including National Key Technology R&D Program of China, Key Program of National Natural Science Foundation of China, Major Program of National Philosophy Social Science Planning Foundation of China, Ma-

ajor Program of Research Foundation from Ministry of Education of China. He has published more than 600 academic papers in peer-reviewed journals and more than 40 books in well recognized presses such as Springer, Taylor & Francis.

In addition, his outstanding career has been highlighted by numerous awards. The International Federation of Operational Research Societies awarded him the IFORS Prize for OR in recognition of his work in 1996 and 2014, respectively. Prof. Jiuping Xu has been the first awardee in 9 ministry and provincial first-class prizes including the Chinese Ministry of Education Prize for Progress in Science and Technology, Chinese Ministry of Education Prize for Natural Science, Chinese Sichuan Provincial Prize for Progress in Science and Technology, Chinese Sichuan Provincial Prize for Philosophy Social Science, and Chinese Sichuan Provincial Teaching Achievement Prize. As an outstanding educator Prof. Jiuping Xu has supervised more than 50 doctoral students and 250 master students, he was awarded for the title of Outstanding Young Teachers in 2002 by the MOE of China, and the "Confucius Education Lifetime Achievement Award" in 2013.

Prof. Xu has been appointed as Academician of International Academy for Systems and Cybernetic Sciences and appointed as the Academician of Lotfi Zadeh International Academy of Sciences in recognition of his contribution to the development of science and organization of scientific forums. He is currently the Editor-in-Chief of International Journal of Management

Science and Engineering Management and World Journal of Modelling and Simulation since 2006. Prof. Xu is also the president of International Society for Management Science and Engineering Management since 2007, the vice-president of the Systems Engineering Society of China between 2006 and 2014, the vice-president of the Chinese Society of Optimization & Overall Planning and Economical Mathematics since 2009, and the vice-president of the Management Science and Engineering of China since 2013. He also serves as general chair, organizing committee chair, and general secretary for a series of international conferences for 23 times, such as International Conference on Management Science and Engineering Management.

Apart from his remarkable contribution towards the scientific research, Prof. Jiuping Xu has devoted a substantial amount of the time to be involved in social services and responsibilities. He was elected as the member of the 12<sup>th</sup> National Committee of the Chinese People's Political Consultative Conference in 2013. He was also appointed as the deputy and the member of the Financial and Economic Affairs Committee of the 11<sup>th</sup> Local People's Congress in Sichuan Province of China between 2008 and 2013. He is currently the special education supervisor for Sichuan Province and consultant for Science and Technology Advisory Group of Chengdu Municipal Government.

**Prof. Dr. Yinfeng Xu**

Prof. Yinfeng Xu obtained his



Ph.D. degree from Institute of Applied Mathematics, Chinese Academy of Sciences, supervised by the world-famous mathematician Prof. Dingzhu Du who has made outstanding contributions to the Steiner ratio conjecture of Gilbert Pollack. After graduation from Chinese Academy of Sciences, Prof. Xu has maintained close exchange and collaboration with many experts and scholars all around the world. Up to now, Prof. Xu has visited a number of famous schools in the world as researcher and visiting professor.

The research areas of Prof. Yinfeng Xu include scheduling optimization and combinatory decision-making, emergency management and emergency strategies designing. He has authored or co-authored over 150 peer-reviewed journal and conference proceeding articles, and these papers were published in journals such as *INFORMS Journal on computing*, *Discrete Applied Mathematics*, *Theoretical Computer Science*, *Discrete & Computational Geometry*, *European Journal of Operational Research*, *Journal of Combinatorial Optimization*. He was also the winner of Hao Wang Award for the best paper (Approximating Uniform Triangular Meshes in

Polygons, with F. Aurenhammer, N. Katoh, H. Kojima, M. Ohsaki) in the Sixth Annual International Computing and Combinatorics Conference. Over the years, he has been invited as a keynote speaker to numerous international and national conferences, such as The China-Japan Joint Conference on Computational Geometry, Graphs and Applications.

During the scientific career, Prof. Yinfeng Xu has received more than 10 research grants for his work such as the Key Program of National Natural Science Foundation of China, the General Program of National Natural Science Foundation of China, the National Key Technology R&D Program of China, the Program for Changjiang Scholars and Innovative Research Team in University of China. He received the first-class award from the MOE of China for Progress in Science and Technology (The 4<sup>th</sup> awardee) in 2004, and the second prize of Chinese National Natural Science Award in 2005 for his research on Optimal Method of Discrete and Mixed Production.

Prof. Yinfeng Xu has been the president of the Operations Research Society of Shanxi and the vice president of the Enterprises Operations Research Society (a branch of the Operations Research Society of China) since 2006. He has also been the director of the Operations Research Society of China since 2004. Prof. Xu is currently the editor of *International Journal of Applied Evolutionary Computation*, the editor of "Information" (International Series), the guest editor of *Journal of Combinatorial Optimization and Theoretical Computer Sci-*

ence. As the general chair of a series of international conferences, Prof. Xu has successfully organized and hosted the First International Conference on Algorithmic Aspects of Information and Management (AAIM 2005) and the First International Conference on Combinatorial Optimization and Applications (COCOA 2007). As of today, the AAIM and COCOA have been successfully held 10 times and 8 times respectively across the world, and the proceedings of these conferences have all been published by Springer.

Prof. Yinfeng Xu is not only a good researcher, but also an excellent teacher. In 2006, he received the Award of Wang Kuancheng in recognition of his remarkable contribution towards teaching. As a Ph.D. supervisor, he received the title of National Outstanding Doctoral Thesis Advisor, and one of his students was awarded the prize of National Excellent Doctoral Dissertation.

#### Prof. Dr. Zeshui Xu



On October 27, 2014, at the first award ceremony of Thomson Reuters China Citation Laureates, Professor Zeshui Xu from Business School of Sichuan University has been selected as The World's Most Influential Scien-

tific Minds (2014) and Thomson Reuters Highly Cited Researcher (2014) in the fields of Computer Science and Engineering, respectively. Thomson Reuters is the only information service institution which predicts the Nobel Laureates through data analysis. The global president of Intellectual Property and Technology Division in Thomson Reuters Basil Moftah said, 'just as the rest of the world highly cited researchers, these researchers in China are making difference in their own research areas, even in the future of the world.'

Prof. Zeshui Xu received his Ph.D. degree in management science and engineering from Southeast University, Nanjing, China, in 2003. He then continued his research as a Postdoctoral Researcher at Southeast University and Tsinghua University during the time period of 2003 and 2007. Since 2006, he was appointed as the Chair Professor and the doctoral supervisor of People's Liberation Army University of Science and Technology, and also the doctoral supervisor of Southeast University, Shanghai Jiaotong University, Sichuan University. He is currently a senior member of Institute of Electrical and Electronics Engineers. He has also won the title of Distinguished Young Scholar by the National Natural Science Foundation of China and the title of Chang Jiang Scholars by the Ministry of Education of China.

In the past fifteen years, Prof. Zeshui Xu has made a great contribution to promoting the decision making theory, information fusion theory, fuzzy systems, clustering algorithms, and optimization techniques. He

has also established the theories and methods of decision making under a systematic manner with various types of uncertain or fuzzy information (such as interval numbers, linguistic labels, uncertain linguistic variables, triangular fuzzy numbers, intuitionistic fuzzy numbers, hesitant fuzzy elements, fuzzy preference relations, multiplicative preference relations, interval-valued intuitionistic fuzzy numbers, interval-valued hesitant fuzzy elements, intuitionistic preference relations, linguistic preference relations, complex judgment matrices, etc.). In 2004, he published a book titled *Methods and Applications of Uncertain Multi-attribute Decision-making*, which was extremely popular and famous in the field of decision science. He has also published a number of English monographs including *Intuitionistic Fuzzy Information Aggregation: Theory and Applications*, *Linguistic Decision Making: Theory and Methods*, *Intuitionistic Preference Modeling and Interactive Decision Making*, *Hesitant Fuzzy Sets Theory*, *Intuitionistic Fuzzy Aggregation and Clustering*. In addition, he authored or co-authored more than 400 papers in highly recognized international journals, such as *IEEE Transactions on Fuzzy Systems*, *IEEE Transactions on Cybernetics*, *Omega*, *Information Sciences*, *Decision Support Systems*, and his work has been cited more than 23,000 times by 2014. His current h-index is 80, and ranked No. 54 and No. 509 among 1% of the world's top scientists who entered the ESI (Essential Science Indicators) in the fields of computer science and Engineering in November, 2014, respectively. 📖

## Prof. Zhou Zongguang Won “Lorenzo-Capussotti” Outstanding Contribution Award

---West China Hospital Team Won Great Honor in 24<sup>th</sup> World Congress of IASGO, Vienna

By Wu Jingping

The 24<sup>th</sup> World Congress of IASGO (International Association of Surgeons, Gastroenterologists and Oncologists) was held in Vienna, Austria from December 5 to 7, 2014. As the Chairman of Chinese Society of Minimally Invasive Surgery and the team lead, Prof. Zhou Zongguang, Director of Department of Gastrointestinal Surgery, West China Hospital, Sichuan University, attended the congress along with over 30 general surgery specialists from Peking University People's Hospital, Beijing Friendship Hospital, Shanghai Ruijin Hospital, Shanghai Zhongshan Hospital, the Second Military Medical University Changzheng Hospital, the First Affiliated Hospital, Sun Yat-sen University, the Third Affiliated Hospital Sun Yat-sen University, Nan Fang Hospital, Guangdong Tumor Hospital, Guangdong People's Hospital, Tongji Hospital, Huazhong University of Science and Technology, Peking Union Medical College Hospital, Qilu Hospital of Shandong University, the First Affiliated Hospital of Haerbin Medical University, the First Affiliated Hospital of Xinjiang Medical University, Fujian Medical University Union Hospital, the First Affiliated Hospital of Anhui Medical University and other well-known Chinese medical centers. They delivered 23 lectures, which extensively showcased the exquisite skill and high level of Chinese general

surgeons, and received high attention from the participants. Prof. Zhou Zongguang offered a keynote lecture titled “Lateral pelvic Lymph Node dissection for lower rectal cancer with study of pelvic metastases and micro-metastases” on December 5, putting forward a clinical trial approach to individualized lateral dissection based on transferred evidence over the controversial issues between NCCN guidelines and JSCCR guidelines on lateral lymph node dissection for rectal cancer treatment. In subsequent professional sessions, Prof. Hu Jiankun and associate professor Yang Lie from SCU gave academic reports on December 6 and December 7 successively, titled “Correlation between CD44 and Gastric Cancer Clinical Pathology & Prognostic Analysis” and “Evaluation of Elderly Colorectal Cancer Surgery and Adjuvant Therapy Effect”, respectively.

A grand award ceremony was held on the evening of December 6, 2014 by IASGO in Vienna, wherein Prof. Zhou Zongguang was granted the “Lorenzo-Capussotti” Outstanding Contribution Award, the highest award for international gastroenterologists, oncologists and surgeons. The Award was established in memory of the deceased Italian master surgeon “Lorenzo-Capussotti”, aiming at honoring the excellent specialists who have made outstanding contributions to the development of international diges-



tive surgery. Among the Gastroenterologists, Oncologists & Surgeons teams from more than 70 member countries of IASGO, over 30 specialists won Excellence Award; and 8 specialists from USA, Japan, France, Italy, Germany, Australia and China won Outstanding Contribution Award. 🏆

## SCU Delegation Wins Third Prize in 2014 iGEM Global Final

The 2014 International Genetically Engineered Machine Competition was held at Hynes Convention Center in Boston, the U.S. from October 30 to November 3, 2014. Academic exchange and project show attracted 245 delegations from more than 40 countries and regions. The 5-day event attracted participants from the top colleges and universities, including MIT, Harvard, Cambridge, UC Berkeley and Stanford. The SCU delegation, composed mainly of students from College of Life Sciences, won the third prize after the fierce competition.

Under the guidance of Dr. Zhang Nianhui, Professor Zeng Fanya, Dr. Wu Chuanfang, Dr. Zhu Xiaofeng, Dr. Li Shuo and teacher Fan Jia, the iGEM delegation from our university consisted of 16 students from College of Life Sciences and 7 students from West China College of Stomatology, West China College of Medicine, College of Mathematics and College of Chemistry. The topic of SCU delegation for

iGEM competition was "Imperial Edict – Simulation of Simple Signals Analysis and Transmission inside Microorganism with Escherichia Colis". Through transforming the three fundamental processes of signal reception, transmission and effect within bacteria into three independent escherichia colis, the design aims to solve the plasmid DNA overload problem and establish a modular system to initiate different gene circuits and realize different physiological effects by changing its modules. In relevant experiments, it is also tried to adopt the latest pyrone quorum sensing system to modify the traditional inducible promoter and form dual-factor promoter complex. With the experiments conducted in the whole summer vocation, our delegation accomplished gene circuits under the project, verified and finished modeling of promotion efficiency of Rhl inducible promoter. Moreover, the delegation completed other work, including website design, event marketing and poster presentation, etc.

As the tenth year of iGEM, delegations from all over the world converged in Boston. During the competition, SCU delegation communicated with counterparts vigorously and established contact and cooperation with some delegations from other universities. It is not only a good chance for other colleges and universities in the world to know SCU, but also a hard-won opportunity for our delegation to learn from other top universities.

As per the requirements for iGEM competition, the participants mainly composed of students shall select the topic on their own and accomplish corresponding experiments in after-school time. Besides buildup of independent work capacity and teamwork ability of the students, the competition also cultivates their enthusiasm in science and broadens their international vision. As a pilot college in the national education system reform, College of Life Sciences of SCU stresses the principal status of students for undergraduate cultivation, and makes great efforts to create environment for the students to give full play of their independence and foster their abilities in actively exploring problems and independently solving problems. It is a concrete measure taken by the College of Life Sciences to organize students to participate in iGEM Competition whose form of competition is novel, unique and beneficial to train participants' capabilities of independent innovation and broaden their international vision. ♣



## Some Foreign Master and Doctoral Students from SCU Went to Liangshan for a Yi Culture Tour

From November 12<sup>th</sup> to 14<sup>th</sup>, 30 foreign winners of Confucius Institute Scholarship and high-calibre international students of “985 Project” went to the capital city of Liangshan Yi Autonomous Prefecture-Xichang for a culture tour. These students are from 11 countries and regions including USA, UK, Germany and Poland.

On November 12, these students personally experienced from their long-distance bus journey the convenience and visual shock brought by the expressway above the clouds—Ya’an-Xichang Expressway, which is recognized by specialist and scholars at home and abroad as one of the expressways in mountain areas with the worst natural environment, the biggest engineering difficulty and the richest technological contents in China or even in the world. The expressway passes through continuous mountains and precipitous terrain with beautiful natural scenery. Along the journey, the students enjoyed the landscape of lakes and hills, experienced the visual stimulus and shock brought by the expressway crossing lofty and steep mountains, and got surprised at the wisdom and hard work of the Chinese people for construction of the expressway.

On the second day, they had a tour to Lushan Mountain, one of the wonderful sceneries in south Sichuan, walking along the tourism line to view aged-pines, ancient temples and towers, enjoy the beauty of Qionghai Lake, and appreciate the wonderland featuring “dustless and spring-like verdant forest around green hills and limpid lakes”. And then, they visited the Liangshan Yi Slave Society Museum located



in the midst of Lushan, which is the first museum of ethnography in China, and the only topic museum reflecting slave society in the world. In the pristine and elegant Yi style museum, they witnessed the rich Yi folk custom and culture, while listening to the Yi tour guide’s detailed interpretation, and took photos from time to time of the beautiful objects and interesting presentations. All students were amazed at the detailed and rich contents in the museum. Saifei, a French student, said: “the handicrafts in the museum are really beautiful with delicacy pattern and good text introduction, I like the museum very much.” Zhang Taifan, a South Korean student, said: “To me, a student majoring in science of religion, this visit to the museum is of

great help, and it is worth of it.”

On the afternoon, they visited Guanniaodao (Bird-watching Island) Wetland Park in the north end of Qionghai Lake west bank, watching the flying birds, enjoying the natural beauty and appreciating the boundless charm of harmonious ecology; they sensed the environmental awareness of Xichang people.

After three days’ visit, the students are still longing for more. As a German student Wen Tingting said, such activity helps them know more about China, about Chinese ethnics and cultures inaccessible in class; she further expressed their hopes that the university could launch more such activities in the future. 📍

# The Exchange of Thoughts Facilitates Research

*Wang Qiong, who in 2011 became a doctoral candidate of Department of Epidemiology and Biostatistics in West China School of Public Health (No. 4 West China Teaching Hospital), Sichuan University, majored in breast cancer etiology. She studied in National Health Development Research Center under MOH and participated in several health policies research from July 2012 to September 2013, and attended the 64<sup>th</sup> Nobel Laureate Meeting dedicated to Physiology or Medicine from June 29 to July 4, 2014. At present she is teaching in the Health Management Department of School of Public Health, Sun Yat-sen University.*

A fledgling doctor of medicine sat face to face and exchanged views with the topnotch masters in physiology and medicine. Sounding unrealistic? But it's true! It happened to Wang Qiong, a doctoral student of Sichuan University, when she attended the "Nobel Laureate Meeting" in Lindau, Germany.

## Grasping the Opportunity and Facing the Challenge

Wang Qiong encountered the "Nobel Laureate Meeting" by accident.

The best of best selection procedures implemented on 60 interviewees screened among 190 candidates from various scientific research institutions to determine the final 30 qualified person sharpened every participant. Communication in English and academic knowledge became relatively less important in the face of amiable interviewers. "One of the purposes of Nobel Laureate Meeting is to encourage our mutual communication, so it pays less emphasis on the conventional rigid standards." The interviewers wished to discover during com-

munication more young scientists with thoughts and potential."

Finally she won the qualification to attend the Meeting. And this opportunity awakes her passion, breaks her calmness and indifference, and leads to eruption of her irresistible energy.

## 6 Days, Leap of "Heart"

On the Lake Constance at the junction of Germany, Austria and Switzerland, lo-

cates the famous German town-Lindau. In 1950, two doctors in Lindau, for the purpose of revitalizing Germany from the "World War II", persuaded a Sweden Hentig living near to Lindau in contributing to invite Nobel Prize winner to have communication with German young scientists in Lindau, so as to improve German scientific research strength. At present, the activity has become a name card of Germany, and the participants are converged from around the world. This year witnessed the 64<sup>th</sup> "Nobel Laureate Meeting". More than 600 young scientists from 80 countries were invited to attend this meeting, and Wang Qiong was one of them.

When talking about the specific situation of this Nobel Laureate Meeting, Wang Qiong became conversable. She said the participation in the Meeting is not only a vision expansion opportunity for her, but also a process to deepen the understanding of scientific innovation. Wang Qiong said frankly: "In Lindau, there are forums as well as chances to raise questions to Nobel Prize winner. You can ask any question. It is a very good chance to get aware of





Nobel Prize winner's life and their attitude toward science and life. And this touches me the most." Wang Qiong was shocked and inspired by Nobel Prize winner Barry Marshall's story of finding the main course of gastric ulcer by conducting experiments on his own body. Through several personal interactions, Wang Qiong discovered that all excellent scientists have a preeminent attitude toward scientific research; there are many scientific research personnel, only a few of them obtain Nobel Prize, but the prize winning or not will not influence their attitude to scientific research; it can be said that such persons have a common character, that is passion for scientific research and indifference to fame and wealth. Wang Qiong's tutor Li Jiayuan mentioned in an interview, "Indifference is an advantage of Wang Qiong". It is just the character of indifference to gains and losses that makes her deeply involved in scientific research to find the key factor therein, and finally helps her stand out from numerous applicants and win the final qualification to attend the Meeting. And such spirit is showcased not only on a doctoral student, but also on Nobel Prize winners, the scientific researchers participating in the Nobel Laureate Meeting and numerous persons fighting on

the first line of scientific research. Most Nobel Prize winners do not do scientific research with fund related for self-interest, or for publishing articles to increase their popularity, they just do it for the love for their research areas and the love for scientific researches. In their words, that is the enjoyment to the scientific research process. In Wang Qiong's opinion, they never care about short-term gains and losses, thus they can concentrate on the research to explore new field. Wang Qiong said in the interview: "My biggest gain from this communication is that interest and strong sense of responsibility are very important to the perseverance of scientific research."

Wang Qiong paid academic visits to several famous German universities. During visits, she realized at the national scientific research level: though the Chinese scientists have never won any Nobel Prize in natural sciences, our research contents and ideas are internationalized, we have a common research foundation with other countries, and many of our scientific research equipments are even better than those in foreign countries, as it were, our hardware for scientific research are not inferior to those of other countries, including those with developed S & T level. But Chinese scientists are used to study

"hotspot", they just focus on the "most practicable" contents and sometimes many of us congest in a same research direction, lacking of multi-angle review. There are also many study hotspots in foreign countries, but they will consider a same problem from different perspectives and carry out in-depth, detailed and comprehensive research on it. Thus we can conclude that we still fall behind the foreign countries with respect to thinking mode and research ability.

Wang Qiong also finds that the life ideas of German science researchers are different from Chinese counterparts, they prefer relaxation after work, so they seldom stay in laboratory to work overtime till midnight; they seldom publish articles either under outside pressure. Neither do their students, who work in working hours, leave at closing time and play in relaxing time, that is the so called "work hard, play hard". Their lives will not be influenced by scientific research. Wang Qiong said frankly: "I think they will abandon neither life nor scientific research. Their research perspectives and life ideas are different from ours."

### Solid Involvement in Research

It was in her sophomore year that Wang Qiong wanted to do some scientific research programs for the first time. She read plenty of relative articles and wrote down her thoughts. However after reading it, the teacher responsible for scientific research in her college commented that her paper was just a popular science reading instead of a research result. This comment imposed great influence on her. And maybe it is this incident that led her onto the scientific research journey. Wang Qiong shared her research experience with the author: "In my undergraduate years, I participated in some relevant

researches conducted by teachers of our college. But I paid more attention to observation and study at that time, during which I learned more about the research and grasped the methods needed. At the undergraduate stage, an attitude of passive acceptance is necessary. While in the phase of postgraduate and doctoral student, you need to be more active in scientific research. You tutor will only give you some hints or thoughts in most cases. So you need to think, plan and implement many things to detect problems and learn to solve some of them actively in the process. In respect of personal academic quality, you need to conduct more academic exchanges with people in the same industry to broaden your academic vision and acquaint yourself with frontier tendency of your research field. You need to observe, and to study the knowledge contained in certain documents, so as to improve your academic quality." In the process of scientific research, Wang Qiong is always initiative, which enables her think in a deeper way. She often discussed her research subject with her tutor actively and kept on digging deeper. In the eyes of her tutor, it is such initiative that makes Wang Qiong a capable assistant. And she regarded Wang Qiong as

a reliable partner rather than a student. Professor Li Jiayuan said, initiative is the tie connecting Wang Qiong and herself which forms a virtuous circle and help Wang Qiong move forward deeper and better along her research path. There is no doubt that scientific research can be anything but a level road. But "interest" is the biggest impetus for Wang Qiong. She once came across a thought to give up when countless effort exerted on a project didn't have any return, but she managed to stick it out thanks to her love for scientific research. In this process, Wang Qiong finds a way of her own to solve problems: "You just need to leave it alone for some time, after which you can gradually sort out your thoughts and relive your tension. Then when you are back to reexamine it, you will see it in another way and come up with different views. Thus, you can move on with your research." In face of vast scientific research subjects, Wang Qiong is always active in raising questions and discussing with her tutor to improve the research ideas with the help of exchange and collision of thoughts. As the tutor of Wang Qiong in her doctoral candidate years said, the scientific researches conducted by Wang Qiong have gradually "transformed her

to an assistant or a partner from a student".

SCU Alumna forever, Wherever She Is  
Wang Qiong spent nearly ten years in SCU from undergraduate to doctoral student phase, which leads to her deep affection to SCU. And this experience makes her proud of being the only student from SCU who has ever attended the Nobel Laureate Meeting. In conversation with the author, Wang Qiong affectionately expressed that SCU was her "Home" forever. The "Home" not only taught her the way to study, but also cultivated her strong interest in scientific research, which laid a good foundation for her attendance of the Nobel Laureate Meeting, and injected her with the courage and strength to carry on scientific exploration. When participating in relative researches conducted in National Health Development Research Center as a student of SCU, the strong sense of belonging to mother school propelled Wang Qiong to showcase the spirit of "SCU People" with her actions; besides, Wang Qiong took an active part in various volunteer activities to play a good role of "SCU People". Those happiness and sadness experienced by her in SCU have faded with time, but she will never forget the interest in scientific research and the impetus for life-long struggle cultivated by SCU. Today, Wang Qiong is no longer an ignorant student but an excellent SCU alumna in possession of both professional quality and research spirit. Now, Wang Qiong has become a lecturer of the School of Public Health in Sun Yat-sen University, but the "SCU people" label will be always buried inside her heart. With a strong passion for scientific research, she will keep moving forward in this area, and endeavor to be a "New SCU People" the mother school will be proud of. 🏠



# A Glimpse into the World's Largest Stomatology Lab Teaching Center, Boasting 8,000 m<sup>2</sup> Floorage and Capacity of Accommodating 800 Students for Lab Class or Training Sessions

When you step into the state-level Experimental Teaching Demonstration Center in the Teaching Building of Stomatology, you will find students practicing cavity preparation with 3D glasses with operation handles in their hands. In fact, they are conducting cavity preparation with virtual models that are non-existent in reality. This is one of the largest laboratories of its kind, where students practice dental procedures on virtual head models. The lab has an impressive capability of accommodating more than 200 students for practice with virtual human heads.

## Inheriting the Tradition of Integrating Experiment with Teaching--Establishing the First State-Level Teaching Center of Stomatology

Experimental teaching of West China School of Stomatology came into being simultaneously with the earliest stomatology education in China.

In 1917, Advanced Stomatology was established by Dr. Ashley Woodward Lindesay, the founder of modern stomatology in China and first dean of West China School of Stomatology, who attached great importance to experimental teaching since its beginning, and proposed the opinion of "Stomatology education without experimental teaching doesn't make sense". He brought basic experimental teaching equipments from Canada, like microscope,



and organized teachers and hired artisans to make models of oral diseases via clay sculpture and wax sculptures with teaching value even today, ushering in the tradition of highlighted experimental teaching in West China School of Stomatology.

In 1984, in an effort to plan and push forward experimental teaching as a relatively independent teaching system, a building for experimental teaching was constructed in West China School as the teaching laboratory of stomatology, covering approx. 1,000 m<sup>2</sup> and accumulating experimental facilities scattered in teaching& research of offices and laboratories.

Nowadays, as the first state-level

Stomatology Experimental Teaching Demonstration Center, it occupies 1-5F of Teaching Building of Stomatology with a coverage of about 8,000 m<sup>2</sup>. Being equipped with the state-of-the-art dental teaching equipments and models, like virtual simulative dental training machines, dental robot simulation training machines, artificial head models, endodontic microscopes, digital image systems and digital virtual microsection systems, etc., it becomes an integrated stomatology skills training center including: Morphological Experiment Platform, Basic Hand Skills Platform, Basic Clinical Skills Platform of Stomatology and

Virtual Simulation Training Platform, allowing 800 students for experimental teaching and innovative training.

### **Initiation of Virtual and Simulative Teaching--Leading the Trend of Domestic Stomatology Education**

With the development of the science and technology, virtual& simulative experimental teaching draws nationwide attention as it becomes the development trend of stomatology education. In the background of the trend, the Center took the lead in establishing a virtual& simulative experimental teaching center, in which most typical slices can be electronically scanned with virtual imaging digital slice technology to transform into super high-definition electronic tissue pathology pictures and form a tissue pathology images library. Students can choose and watch the images in the library freely, and examine the microstructure of the slices through computers. This has removed the restrictions of the limited number of microscopes, decrease of teaching pathology slices due to vulnerability and shortage of typical pathology slices.

Innovative research and development are also conducted in the virtual& simulative experimental teaching center as well. Virtually built application softwares for dental anatomy teaching or relevant teaching are developed with 3D visual human engineering techniques according to dental morphology structure and characteristics of Chinese people, which are helpful in virtual training of students in oral anatomy. Since 2013, 12 virtual simulation Simodont stomatology skills training machines have been introduced successively. With 3D videos, virtual reality, mechanical induction and engineering machinery technologies, 3D images of most common diseases can be simulated, and different

virtual tools can be selected depending on different therapies.

While holding the handles of a virtue simulation stomatology skills training machine, the students could acquire the same mechanical feelings of rigidity, resistance, vibration and falling as the cases in reality. With 3D glasses, damage of affected teeth and real-time effects of treatment could be visualized and sound of grinding teeth by a dental drill could be heard to realize simulation practice for clinical operation. Meanwhile, the training machine permits to send progress of students' experimental operation, damage of surrounding tissue and other relevant information to the computers of teachers via LAN to conduct systematical analysis and performance evaluation. This could visually display experimental achievements of students and provides objective data for teachers to evaluate operation effects of the students.

Early this year, dental robot simulation training machines were introduced into the virtual& simulative experimental teaching center so as to simulate real clinical diagnosis scenes. It is learnt that the robots enable voice recognition and response, thus, they are able to talk with students according to preset medical records to finish the first but crucial step – inquiry in clinical work; the heads of the robots can turn left or right with mouth opening and closing movements of different sizes according to commands of students, making convenient for the diagnosis and treatment of doctors; available with sensors in teeth, mouth mucosa and chest, the robots will give a warning or put up hands when an operation causes discomfort to the patient.

### **Building up the International Stature of West China School of Stomatology--Cultivating Talents of Stomatology**

World-class experimental equipments

lay the foundation of cultivating well-qualified stomatology students.

In Experimental Teaching Demonstration Center of West China School of Stomatology, 15 basic experiment courses encompassing 155 experimental projects, as well as several virtual& simulative experimental characteristic courses are provided to students.

In 2012, with the opportunity of holding "Practice and International Courses Week" in SCU, the Center opened the teaching platform to students. So, they can retrain themselves with priorities according to learning conditions in each year. Besides, during Practice and International Courses Week, a nationwide stomatology skills competition will be held by West China School of Stomatology. With participation of more students from abroad, it becomes an international event, in which students from West China School of Stomatology always rank top of the list.

As a high-level teaching demonstration center, the Center is equipped with advanced instruments and equipments and also staffed with high-calibre teachers, like national-level teaching team, international famous teachers, distinguished professor of Chang Jiang Scholars Program and provincial famous teachers, etc. In the aspect of teaching, rich fruits have been reaped, including: 6 national-level awards, without mentioning 6 national-level excellent courses and 6 excellent shared courses ...

The graduates of West China School of Stomatology realize 100 % employment rate, and also many of them continue to pursue a master's degree, doctor's degree or go abroad for further study. Students from West China School of Stomatology win appreciation in the stomatology field at home and abroad with their solid specialized knowledge, excellent operation skills and strong capacity for scientific research. 🏆

# Sichuan University Culture & Art Festival







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