



**NEW Editorial**

**The International Cooperation of Traditional Chinese Medicine:  
Towards Mutual and Complementary Benefit of Modern Medicine  
and Traditional Medicine**

Dr Xiaopin Wang, Director General, Department of International Cooperation, SATCM



“Traditional medicine is a precious resource, for primary health care, but also for innovation and discovery.” stated by Dr. Margaret Chan, Director General of the World Health Organization (WHO), in the Inaugural address at the WHO high-level meeting on the implementation of the *WHO Traditional Medicine Strategy 2014-2023*. “In some systems of traditional medicine, such as traditional Chinese medicine, traditional practices are supported by wisdom and experience acquired over centuries.”

With the paradigm shift in health and medical model, the advantages of Traditional Chinese Medicine (TCM) have been highlighted in the prevention and management of chronic diseases, major diseases and emerging infectious disease, and attracted more and more attention from the international community. At present, TCM has spread to 183 countries and regions in the world, and there are more than 80,000 TCM (acupuncture) organizations, 200,000 acupuncturists and 100,000 registered TCM practitioners outside China.

According to estimates, annual market share of TCM services has reached to about \$50 billion.

The Chinese government attaches great importance to the international cooperation of TCM, and is committed to promoting mutual and complementary benefits of Traditional Medicine and Modern Medicine, for the sake of the health and well-being of all mankind. By the end of 2014, the Chinese government has signed MoU on TCM with 83 countries and regions, with a full coverage of five continents. The cooperation with WHO is also one of the top priorities. Ever since 2009, together with Korea, Japan, the United States, Australia and other countries, China has been striving for the integration of Traditional Medicine Section into World Health Organization International Classification of Diseases (ICD-11), which will lay a solid foundation for academic exchanges, scientific research, industry development and legislation with estimated implementation in 2017. In addition, International Organization for Standardization (ISO) established TCM Technical Committee (ISO/TC 249) following China's motion in 2009. To date, ISO/TC 249 has published *ISO 17218:2014 Sterile acupuncture needles for single use* and *ISO 17217-1:2014 Traditional Chinese medicine -- Ginseng seeds and seedlings -- Part 1: Panax ginseng C.A. Meyer*, together with 3 other standards published by ISO/TC 215. In addition, TCM has been incorporated into *Vision and Proposed Actions Outlined on Jointly Building Silk Road Economic Belt and 21<sup>st</sup> Century Maritime Silk Road*. In 2015, special funds have been allocated to support the construction of TCM centers along “One-Belt-One-Road” countries, providing a new model of TCM cooperation in healthcare.

Looking forward to the future, the road towards mutual benefit of Modern Medicine and Traditional Medicine is long but bright. May all the Traditional Medicine practitioners and researchers in the whole world join hands in hands, continue to explore this excellent culture and knowledge, and serve for the global healthcare and well-being, for a better future of the human society.

## The June/July 2015 Newsletter of The GP-TCM Research Association



### 中医药国际合作：东西方医学共融互补之路

中医药管理局国际合作司王笑频司长

正如总干事陈冯富珍在世界卫生组织关于实施全球传统医药战略（2014-2023）高层会议上致辞指出的，“中医药等传统医学凝聚了几千年来的智慧和经验，无论对于初级保健或是医学创新与探索都是一份宝贵的资源。”近年来，随着健康观念与医疗模式的转变，中医药在慢性病、重大疾病和新发传染病防治领域，为国际社会提供了可资借鉴的经验，越来越受到国际社会的关注与认同。目前，中医药已经传播到世界上 183 个国家和地区，除中国外，世界上的中医医疗（针灸）机构已达 8 万多家，针灸师超过 20 万人，注册中医师超过 10 万名，这些机构和人员已成为在国外提供中医医疗服务的主体，据估算，中医药服务的年市场份额大约为 500 亿美元。

中国政府高度重视中医药国际合作，致力于推动东西方医学共融互补，造福世界民众健康福祉。截止 2014 年底，中国政府已与 83 个国家和地区签订了中医药合作协议，实现了中医药国际合作对五大洲的全覆盖，对周边国家、欧美国家、新兴市场国家、发展中大国的全覆盖，为中医药走向世界提供了稳定的沟通机制和合作渠道。同时，注重加强与世界卫生组织合作，于 2009 年联合韩国、日本、美国、澳大利亚等国，积极争取世界卫生组织在新版疾病分类代码（ICD-11）中增设“传统医学”章节，建立了以中医药为基础，兼顾其他来源于中医药的传统医学病证结合的分类体系框架，2017 年正式实施后将改变传统医学被排除在国际医学信息体系之外的历史，为学术交流、科研、产业以及立法等打下坚实基础。2009 年，中国动议并促成国际标准化组织成立中医药技术委员会（ISO/TC249），由中国专家主持制定的《一次性使用无菌针灸针》和《人参种子种苗——第一部分：亚洲人参》国际标准于 2014 年正式出版。此外，中医药国际合作已经被纳入国家“一带一路”战略发展规划，于 2015 年专门拨付资金，支持在一带一路沿线国家建设中医药中心，在中医药医疗保健、教育培训、文化传播等领域开展合作，为中医药服务沿线国家民众健康开辟新的途径。

展望未来，东西方医学共融互补之路漫长，但前途光明。愿全世界传统医药同道携起手来，共同努力，不断发掘和利用人类创造的一切优秀思想文化和丰富知识，服务于世界人民健康福祉，开创人类社会更美好的未来。

### Special report from the United Nations

#### President-Elect Tai-Ping Fan gave a speech at the United Nations HQ on 8<sup>th</sup> July 2014

On behalf of the GP-TCM RA, President-Elect Tai-Ping Fan made a presentation “Health and Healing Through Evidence-based Applications of Traditional Medicine” at a United Nations Academic Impact (UNAI) conference entitled START, Skills and Technology Accelerating Rapid Transformation. This international conference on technology for sustainable development was co-sponsored by UNAI and UNAI member institution Amrita University, and attended by more than 700 delegates. In total, 93 universities were represented, including University of Cambridge, Ecole Polytechnique Fédérale de Lausanne, Monash University, National University of Singapore, University of Oxford, Stanford University, Johns Hopkins University and University of Twente.

The complete version of the two parts of the conference can be found on the following video links

#### Part 1 (2h 56min 43sec)

<http://webtv.un.org/meetings-events/watch/part-1-amrita-university-event-an-international-conference-on-technology-for-sustainable-development/4346066038001>

#### Part 2 (2h 20min 38sec)

<http://webtv.un.org/meetings-events/watch/part-2-amrita-university-event-an-international-conference-on-technology-for-sustainable-development/4346071033001> where Tai-Ping's presentation can be found at 40-71 min.

For your convenience, it can also be found in the following shorter video-link (30min 45sec) on YouTube: <https://www.youtube.com/watch?v=wplXt9iNixo>

## The June/July 2015 Newsletter of The GP-TCM Research Association



United Nations Headquarters, New York City, USA

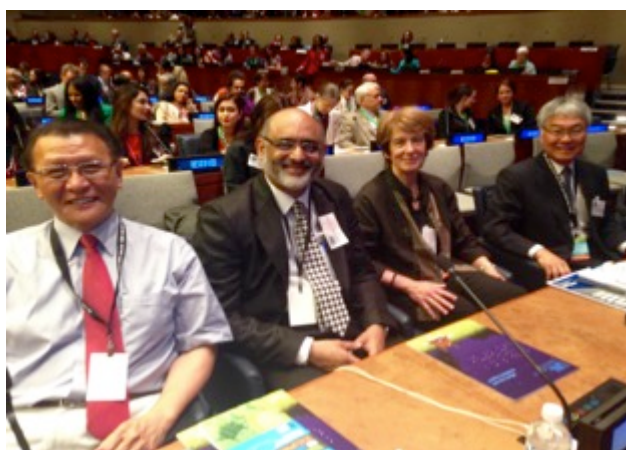


### UNAI-START Conference Harnessing Natural Resources for a Better Tomorrow

*Health and Healing Through  
Evidence-based Applications of Traditional Medicine*

Tai-Ping Fan  
E-mail: [tpf1000@cam.ac.uk](mailto:tpf1000@cam.ac.uk)

Angiogenesis & Chinese Medicine Laboratory  
Department of Pharmacology, University of Cambridge  
President-Elect, GP-TCM Research Association



With Prof. Bipin Nair (Amrita University), Prof. Gillian Murphy (University of Cambridge) and Prof. Hideaki Nagase (University of Oxford)



GP-TCM is the EU's first coordination action dedicated to traditional Chinese medicine (TCM) research.... leading to state-of-the-art reports and guidelines ...The good practices we have established are also applicable to other traditional medicines .....



Audience with Spiritual Leader and Humanitarian "Amma" Sri Mata Amritanandamayi, Chancellor of Amrita University, India



Taking questions with Prof. Bipin Nair

In the Q&A Session, he also made some contributions:

- Synthetic vs Natural Compounds - <https://www.youtube.com/watch?v=cmkPe5ViG0o>
- Patients waiting patiently and Funds for Research - [https://www.youtube.com/watch?v=kM\\_yIDNzpS4](https://www.youtube.com/watch?v=kM_yIDNzpS4)
- Prevention better than Cure for Diabetes - <https://www.youtube.com/watch?v=tNE6GgUuYmQ>

## The June/July 2015 Newsletter of The GP-TCM Research Association



### **Meeting reports**

**1. A very successful and enjoyable 4<sup>th</sup> GP-TCM RA Annual Meeting in Mons, Belgium (12<sup>th</sup> -15<sup>th</sup> July 2015):** The Joint Meeting of the GP-TCM Research Association, the TCM Chemistry Specialty Committee and the TCM Pharmaceutical Analysis Specialty Committee of the World Federation of Chinese Medicine Societies (13<sup>th</sup> - 15<sup>th</sup> July 2015, Mons, Belgium) started with a pre-meeting debate on regulatory challenges and a get-together party on the 12<sup>th</sup>. This conference was attended by 160+ people. It focused on relevant and contemporary issues of research progress in traditional Chinese medicine and natural medicines, especially on the topics of Chinese medical theory natural product chemistry, herbal analysis, pharmacology and toxicology, quality control and standardization, clinical studies, regulatory affairs as well as acupuncture and moxibustion. The meeting provided an excellent platform for regulatory-industrial-academic exchanges, with representatives from the European regulatory agencies, and potential innovative research collaborations on various challenges of traditional Chinese medicine.

### **Chairmen's speeches at the Opening and Closing Ceremonies**



Professor Pierre Duez, Chairman of Organizing Committee



Professor De-an Guo, President of the GP-TCM RA



GP-TCM RA Travel Award winners



The home-team receiving applause for their excellent work

## The June/July 2015 Newsletter of The GP-TCM Research Association



### Reception at the Mons City Hall



### Entertainments

**Pre-dinner visit to Pairi Daiza** (a privately owned 140-acre zoo and botanical garden located in Brugelette in the province of Hainaut in Belgium).

**“Panda Diplomacy” And Trade Deals As Chinese President Visits Europe** by *Magda Fahsi* | April 9, 2014 BRUSSELS — Some political leaders know exactly how to attract the media’s attention. Chinese President Xi Jinping is no exception: for his first visit to Belgium last week, he asked Belgian authorities to see the pandas — Hao-Hao, a female, and Xing Hui, a male — in Belgium on a 15-year loan from China. When the pandas arrived in early April, they were welcomed as heads of state. Prime Minister Elio Di Rupo and about a hundred foreign journalists met them at the airport. The two pandas were then given a police escort to Pairi Daiza, a zoo in Brugelette, a town about 60 kilometers south of Brussels, and close to Di Rupo’s home.

<http://www.mintpressnews.com/panda-diplomacy-trade-deals-chinese-president-visits-europe/188487/>  
<https://www.youtube.com/watch?v=dGec2-Q0Gqo>

**Thanks to Dr Qihe Xu, Co-editor of GP-TCM RA Newsletter, a good collection of photos have been put together in a Dropbox open to the public.**

<https://www.dropbox.com/sh/btytahsyp9us11p/AACmwlqzHmUGf9qGoFytxym1a?dl=0>



The June/July 2015 Newsletter of  
The GP-TCM Research Association



A fascinating Chinese gala dinner to remember .....



The June/July 2015 Newsletter of  
The GP-TCM Research Association



## The June/July 2015 Newsletter of The GP-TCM Research Association



### **< NOW > XIX<sup>th</sup> International Congress PHYTOPHARM 2015 (21-24 July 2015. Bonn Germany)**

We are pleased to inform you that all lectures of PHYTOPHARM 2015 are available on web-site:

<http://www.ipharm.sp.ru/Phyto15/Lect.html>

and remarkable pictures at this link: <http://www.ipharm.sp.ru/Phyto15/social.html>

### **News of GP-TCM RA Corporate Members**

#### **< NOW > 1. PuraPharm has been listed on the Main Board of The Stock Exchange of Hong Kong Limited (stock code 1498) on 8 July 2015. Many congratulations! Past President Rudi Bauer attended the celebration in Hong Kong.**

Past President Rudi Bauer attended the celebration in Hong Kong. [http://www.enmholdings.com/eng/investment\\_2.htm](http://www.enmholdings.com/eng/investment_2.htm)

#### **< NOW > 2. Tasly at Milano EXPO 2015 [http://www.tasly.com/milano/index\\_en.asp](http://www.tasly.com/milano/index_en.asp)**



Past President Prof. Bauer visited the Tasly pavilion at EXPO in Milan and attended the 2015 International Forum on Great-Health Industry Development & The Press Conference of Deepure Product Release on 7<sup>th</sup> June in Milan. He gave a lecture on “Chinese medicine research needs a holistic approach – How to achieve it?” and brought the following the following news from Tasly to share with members:

<https://www.facebook.com/taslyint>

[http://news.xinhuanet.com/english/2015-06/09/c\\_134311974.htm](http://news.xinhuanet.com/english/2015-06/09/c_134311974.htm)

[http://news.xinhuanet.com/english/2015-06/08/c\\_134306863.htm](http://news.xinhuanet.com/english/2015-06/08/c_134306863.htm)

[http://news.xinhuanet.com/english/2015-06/08/c\\_134305146.htm](http://news.xinhuanet.com/english/2015-06/08/c_134305146.htm)



## The June/July 2015 Newsletter of The GP-TCM Research Association



**NEW** **IMPORTANT NOTICE – *World Journal of Traditional Chinese Medicine (WJTCM)* is now an official journal of the GP-TCM RA**

[http://www.wjtcn.org:8080/ch/reader/view\\_news.aspx?id=20140421052359001](http://www.wjtcn.org:8080/ch/reader/view_news.aspx?id=20140421052359001)

At the GP-TCM RA BoD Meeting in Mons, it was decided unanimously that the Association will work more closely with the World Federation of Chinese Medicine Societies (WFCMS), and make *WJTCM* its official journal. To help increase the impact of this new journal, each of the BoD members agreed to contribute reviews and original papers to *WJTCM* within the next 12 months.

***World Journal of Traditional Chinese Medicine (WJTCM)*** is a quarterly, peer-reviewed open access journal (ISSN 2311-8571) and sponsored by the World Federation of Chinese Medicine Societies (WFCMS).

**Aims & Scope:** *WJTCM* will be dedicated to report the research progress in clinical efficacy and action mechanism of Traditional Chinese Medicine, Chinese materia medica, acupuncture and moxibustion to doctors and biomedical researchers around the world, so as to provide new thoughts and methods for solving complex diseases and knotty diseases.

**The journal columns are arranged as follows:**

- 1) Modern research on Chinese materia medica:** including theories of processing Chinese materia medica, theories of medicine property and compatibility, the safety of Chinese materia medica, TCM and compound pharmacology, material basis and mechanism of medicine effects;
- 2) Research on TCM theory:** including scientific connotation and biological foundation of TCM basic theory;
- 3) TCM clinical Research:** including disease and syndrome, the safety of TCM, curative effect evaluation, evidence-based and system evaluation;
- 4) Acupuncture & Moxibustion:** including effect mechanism of acupuncture and moxibustion, specificity of acupoint effect, acupoints compatibility, efficacy evaluation of acupuncture and moxibustion

**Sounding Board:** This section is reserved for GP-TCM RA members to express their opinions, share their views and comment on publications in previous issues of the GP-TCM RA Newsletters. All members are sincerely invited to contribute proactively. Please e-mail your Co-Editors Dr Tai-Ping Fan ([tpf1000@cam.ac.uk](mailto:tpf1000@cam.ac.uk)) and Dr Qihe Xu ([qihe.xu@kcl.ac.uk](mailto:qihe.xu@kcl.ac.uk)).

**Please contribute to this section!**

### European observations

**NEW** **1. E.U. commission promises to listen to scientists.** Surrounded by six Nobel laureates, European Commission President Jean-Claude Juncker announced his long-awaited plan to restructure the commission's scientific advice process on 13 May. In the commission's new Science Advice Mechanism, a high-level group of seven scientists will channel the input of national academies and learned societies to give the commission the best scientific advice. When Juncker took office last November, he didn't renew the position of chief scientific adviser, which some scientists took as a sign of disregard for science. Last week's announcement provided critics with some reassurance, but many details remain to be worked out, including how the high-level group will operate effectively. <http://www.sciencemag.org/content/348/6237/848.summary>

**NEW** **2. Watchdogs of the European system**  
<http://www.sciencemag.org/content/348/6238/947.full>

## The June/July 2015 Newsletter of The GP-TCM Research Association



### China observations

**1. Time for a data revolution in China**

<http://www.sciencemag.org/content/348/6238/981.1.full>

**2. *The Lancet*. Will China make the great leap in tobacco control in 2015?**

<http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736%2815%2961007-8.pdf>

**3. Tobacco in China: taming the smoking dragon** (Commentary by WHO Officers Bernhard Schwartländer and Angela Pratt). The authors said, “Beijing's air pollution makes news headlines around the world: hazy images of people's faces shrouded in masks and iconic monuments obscured by smog are now as synonymous with the city as the monuments themselves. As expatriate residents of Beijing, our friends and family from home often ask us: ‘But living in Beijing, how do you breathe?’ We hope the answer is more easily after June 1, 2015, when Beijing's new smoke-free law will take effect. Although Beijing's outdoor ambient air pollution routinely makes the news, indoor air pollution in the city—and across China—is often worse than outdoor air pollution...”

<http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736%2815%2960996-5.pdf>

**4. China to enhance growth of traditional medicine, releases five-year development plan:**

<http://en.yibada.com/articles/31790/20150509/china-enhance-growth-traditional-medicine-releases-five-year-development-plan.htm>

**5. Shanghai University of Traditional Chinese Medicine to teach traditional Chinese medicine in the University of Malta:** <http://www.timesofmalta.com/articles/view/20150524/education/University-to-teach-traditional-Chinese-medicine.569547>

**6. China's new legislation on international NGO – will this become an undue burden to international scientific collaboration, *Nature* reports:** [http://www.nature.com/news/undue-burdens-1.17716?WT.ec\\_id=NATURE-20150611](http://www.nature.com/news/undue-burdens-1.17716?WT.ec_id=NATURE-20150611)

### Future meetings

**1. International Conference & Exhibition of the Modernization of Chinese Medicine & Health Products (ICMCM), 13-15 August 2015, in Hong Kong, China:**

HKTDC  
International Conference & Exhibition of  
the Modernization of Chinese Medicine  
& Health Products  
國際現代化中醫藥及健康產品展覽會暨會議

13-15 August 2015  
Hong Kong Convention  
and Exhibition Centre

Organised by the HKTDC and the Modernized Chinese Medicine International Association Ltd (MCMIA), the ICMCM takes place at the HKCEC, providing a leading global platform for the latest traditional Chinese medicine, health-care products and services. - See more at:

<http://www.hktdc.com/fair/icmcm-en/International-Conference-and-Exhibition-of-the-Modernization-of-Chinese-Medicine-and-Health-Products.html>

**2. The 14<sup>th</sup> Meeting of Consortium for Globalization of Chinese Medicine (CGCM) will be held in London ON, Canada on August 18 - 20, 2015.** Pre-meeting Workshops will also be held on **August 17, 2015**. The Meeting is organized by University of Western Ontario (Western University). It provides a platform for regulatory-industrial-academic exchanges and potential research collaborations on various frontiers of TCM.

For more details, please refer to the meeting website: <http://conference.uwo.ca/cgcm>.

- **Abstract submission deadline:** May 31, 2015.
- **Early registration deadline:** May 29, 2015 (EST 4pm).  
[https://www.conference.uwo.ca/cgcm\\_reg/index.cfm](https://www.conference.uwo.ca/cgcm_reg/index.cfm)
- **Accommodation reservation:** <http://conference.uwo.ca/cgcm/accommodation.cfm>
- **Travel grant:** To support postgraduates to attend the 14th CGCM Meeting, up to 50 Travel Grants are now open for application. Awardees will receive travel grant, free accommodation (shared

## The June/July 2015 Newsletter of The GP-TCM Research Association

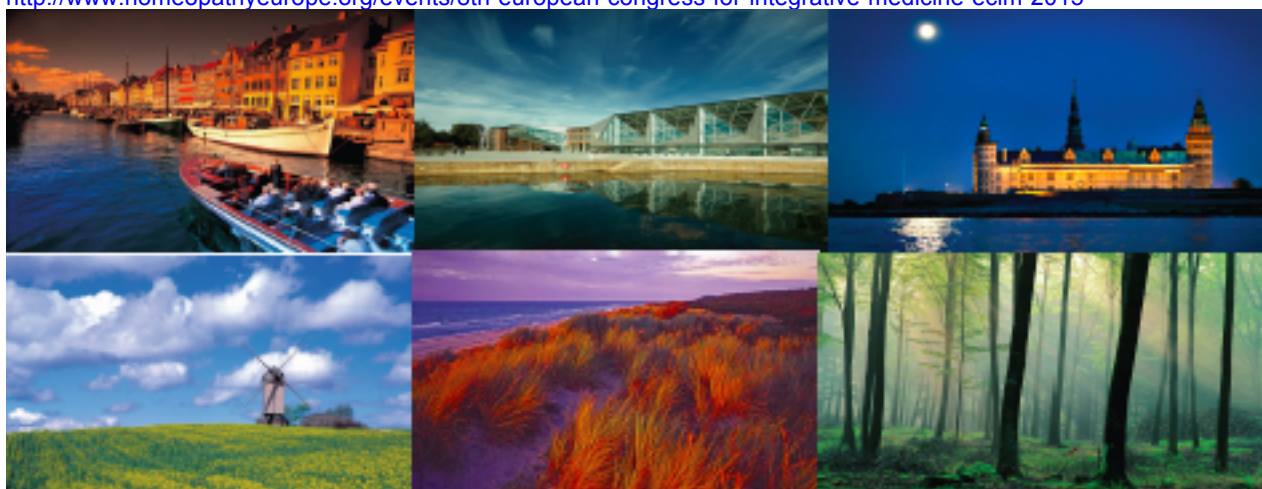


room) and waiver of registration fee. You may wish to encourage your postgraduates to submit abstracts and apply for the Travel Grant.

**3. The 63<sup>rd</sup> International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA), Budapest, Hungary, August 23-27, 2015.** <http://ga2015.hu/>

**4. ECIM 2015 Global Summit on Integrative Medicine and Healthcare, 8th European Congress for Integrative Medicine, will be held in Greater Copenhagen, Denmark, September 25-27th, 2015.** Theme: Exploring the Evidence Base for Integrated and Sustainable Research, Healthcare and Workforce for Patients.

<http://www.homeopathyeurope.org/events/8th-european-congress-for-integrative-medicine-ecim-2015>



**Now 4. ICTCMH 2015: The 2<sup>nd</sup> International Conference of Traditional and Complementary Medicine on Health will be held in Taipei, Taiwan, October 24-27, 2015.**

The Journal of Traditional and Complementary Medicine (JTCM) is pleased to be hosting the 2nd International Conference of Traditional and Complementary Medicine on Health, ICTCMH 2015. JTCM is a global platform for communication and research about Eastern and Western traditional and complementary medical science. On behalf of the organizing committee, I am pleased to invite you to participate in ICTCMH 2015, which began in 2013 with ICTCMH 2013. ICTCMH 2015 will accelerate the globalization of traditional and complementary medicine through academic convergence, communication, exchange, and collaboration. The conference will convene international experts in traditional medicine, preventive herbal medicine, and dietary therapy to share recent findings and enhance international collaboration in the increasingly globalizing field of traditional and complementary medicine. We are pleased to invite individuals from a wide range of professional backgrounds to participate in this unique conference, including healthcare professionals, policy makers, researchers, advocates, and anyone interested in health promotion and prevention medicine.

**Excellent scientific programmes:** <http://www.ictcmh2015.org.tw/program.php>

**Panels of distinguished speakers:** <http://www.ictcmh2015.org.tw/Speakers.php>

**5. The China Academy of Medical Sciences (CAMS) and *The Lancet* family of journals invite abstract submissions from China for *The Lancet-CAMS Health Summit*, which will be held in Beijing, China on Oct 30–31, 2015.**

<http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2814%2961406-9/fulltext>

**6. The 16<sup>th</sup> Congress of the International Society of Ethnopharmacology (ISE) will held in Yulin, Guangxi, China, on May 16-18, 2016.** The ISE is an international society of researchers dedicated to the interdisciplinary study of the pharmacological activities of traditional medicines. ISE is also committed to preservation and conservation of such practices for future generations.

<http://www.ethnopharmacology.org>



## Omics in progress

**1. Precision Medicine — Personalized, Problematic, and Promising**

<http://www.nejm.org/doi/full/10.1056/NEJMSb1503104?query=TOC>

**2. The FDA and Genomic Tests — Getting Regulation Right:**

<http://www.nejm.org/doi/full/10.1056/NEJMSr1501194>

**3. The FDA and Genetic Testing:**

<http://www.nejm.org/doi/full/10.1056/NEJMc1504604?query=TOC>

On autopsy, a patient is found to have hypertrophic cardiomyopathy. The patient's family pursues genetic testing that shows a "likely pathogenic" variant for the condition on the basis of a study in an original research publication. Given the dominant inheritance of the condition and the risk of sudden cardiac death, other family members are tested for the genetic variant to determine their risk. Several family members test negative and are told that they are not at risk for hypertrophic cardiomyopathy and sudden cardiac death, and those who test positive are told that they need to be regularly monitored for cardiomyopathy on echocardiography. Five years later, during a routine clinic visit of one of the genotype-positive family members, the cardiologist queries a database for current knowledge on the genetic variant and discovers that the variant is now interpreted as "likely benign" by another laboratory that uses more recently derived population-frequency data. A newly available testing panel for additional genes that are implicated in hypertrophic cardiomyopathy is initiated on an affected family member, and a different variant is found that is determined to be pathogenic. Family members are retested, and one member who previously tested negative is now found to be positive for this new variant. An immediate clinical workup detects evidence of cardiomyopathy, and an intracardiac defibrillator is implanted to reduce the risk of sudden cardiac death.

<http://www.nejm.org/doi/full/10.1056/NEJMSr1406261?query=TOC>

**5. Reproducibility crisis: Blame it on the antibodies.** Antibodies are the workhorses of biological experiments, but they are littering the field with false findings. A few evangelists are pushing for change.

[http://www.nature.com/news/reproducibility-crisis-blame-it-on-the-antibodies-1.17586?WT.ec\\_id=NATURE-20150521](http://www.nature.com/news/reproducibility-crisis-blame-it-on-the-antibodies-1.17586?WT.ec_id=NATURE-20150521)

**6. Potential flaws in genomics paper scrutinized on Twitter:** Reanalysis of a study that compared gene expression in mice and humans tests social media as a forum for discussing research results.

[http://www.nature.com/news/potential-flaws-in-genomics-paper-scrutinized-on-twitter-1.17591?WT.ec\\_id=NATURE-20150528](http://www.nature.com/news/potential-flaws-in-genomics-paper-scrutinized-on-twitter-1.17591?WT.ec_id=NATURE-20150528)

**7. Whole-genome characterization of chemo-resistant ovarian cancer**

Whole-genome sequencing of tumour and germline DNA samples from 92 patients with high-grade serous ovarian cancer identifies frequent gene breakages that inactivate the tumour suppressors *RB1*, *NF1*, *RAD51B* and *PTEN*, and contribute to chemotherapy resistance; acquired resistance was associated with diverse mechanisms such as reversions of germline *BRCA1/2* mutations and overexpression of the drug efflux pump MDR1.

[http://www.nature.com/nature/journal/v521/n7553/full/nature14410.html?WT.ec\\_id=NATURE-20150528](http://www.nature.com/nature/journal/v521/n7553/full/nature14410.html?WT.ec_id=NATURE-20150528)

**8. Off-target mutations are rare in Cas9-modified mice:** Two independent founder animals would be sufficient to establish causality. Alternatively, mutant founder animals generated with two unrelated guide RNAs would rigorously control for any confounding alleles.

[http://www.nature.com/nmeth/journal/v12/n6/full/nmeth.3408.html?WT.ec\\_id=NMETH-201506](http://www.nature.com/nmeth/journal/v12/n6/full/nmeth.3408.html?WT.ec_id=NMETH-201506)

**9. Epigenome editing:**

[http://www.nature.com/nmeth/journal/v12/n6/full/nmeth.3416.html?WT.ec\\_id=NMETH-201506](http://www.nature.com/nmeth/journal/v12/n6/full/nmeth.3416.html?WT.ec_id=NMETH-201506)

<http://www.nature.com/nbt/journal/v33/n5/full/nbt.3199.html>

<http://www.nature.com/nmeth/journal/v12/n5/full/nmeth.3325.html>

**10. Human body epigenome maps reveal noncanonical DNA methylation variation:** As part of the Epigenome Roadmap Project, genome-wide maps of DNA methylation and transcriptomes together with genomic DNA sequencing of 18 different primary human tissue types from 4 individuals

## The June/July 2015 Newsletter of The GP-TCM Research Association



are presented; analysis reveals widespread differential methylation of CG sites between tissues, and the presence of non-CG methylation in adult tissues.

<http://www.nature.com/nature/journal/vaop/ncurrent/full/nature14465.html>

**11. CRISPR, the disruptor:** A powerful gene-editing technology is the biggest game changer to hit biology since PCR. But with its huge potential come pressing concerns.

[http://www.nature.com/news/crispr-the-disruptor-1.17673?WT.ec\\_id=NATURE-20150604](http://www.nature.com/news/crispr-the-disruptor-1.17673?WT.ec_id=NATURE-20150604)

**12. Global implementation of genomic medicine: We are not alone.** Human-genomics programs work together worldwide to speed the translation of genomic medicine to the clinic.

<http://stm.sciencemag.org/content/7/290/290ps13.abstract>

### Other recommended readings

**1. Cell reports a huge weight loss effect of Celastrol, an extract from Thunder god vine (*Tripterygium wilfordii*),** a plant commonly used in TCM. The effect has been found to be due to its ability to enhance the action of leptin, an appetite-suppressing hormone.

[http://www.cell.com/cell/abstract/S0092-8674\(15\)00559-0](http://www.cell.com/cell/abstract/S0092-8674(15)00559-0)

<http://www.ibtimes.co.uk/traditional-chinese-medicine-thunder-god-vine-causes-massive-weight-loss-obese-mice-1502392>

**2. Reproducibility: changing the policies and culture of cell line authentication** - Quality control of cell lines used in biomedical research is essential to ensure reproducibility. Although cell line authentication has been widely recommended for many years, misidentification, including cross-contamination, remains a serious problem. We outline a multi-stakeholder, incremental approach and policy-related recommendations to facilitate change in the culture of cell line authentication.

[http://www.nature.com/nmeth/journal/v12/n6/full/nmeth.3403.html?WT.ec\\_id=NMETH-201506](http://www.nature.com/nmeth/journal/v12/n6/full/nmeth.3403.html?WT.ec_id=NMETH-201506)

**3. Reduction in Ephedra poisonings after FDA ban:**

<http://www.nejm.org/doi/full/10.1056/NEJMc1502505?query=TOC>

**4. Not all positive news after all – DR Congo bans TCM:**

<http://wildlifeneews.co.uk/2015/05/d-r-congo-bans-traditional-chinese-medicine/>

### Invitation from a journal special issue:

**New Exploration of Chinese Herbal Medicines in Hepatology:** This *Evidence-Based Complementary and Alternative Medicine* special issue aims to provide a platform for researchers to present recent findings and developments on herbal medicine in basic and clinical research of hepatology. As complementary and alternative treatment of liver diseases (acute and chronic hepatitis, alcoholic steatosis, fibrosis, cirrhosis and hepatocellular carcinoma, etc.), Chinese herbal medicines have been extensively studied worldwide. You are cordially invited to submit your original research or review articles for possible inclusion in this journal's special issue. Manuscript submission deadline: Friday, 23 October 2015.

Lead Guest Editor: Dr Yibin Feng, University of Hong Kong, Hong Kong.

Guest Editors: Dr Man-Fung Yuen, University of Hong Kong, Hong Kong; Dr Qihe Xu, King's College London (KCL), London; Dr Xiao-Yan Wen, University of Toronto, Toronto; Dr David Q. H. Wang, Saint Louis University, St. Louis. <http://www.hindawi.com/journals/ecam/si/502402/cfp/>

### Acknowledgements

Contributions from Prof. **Rudolf Bauer** (Graz), Prof. **Pierre Duez** (Mons), Dr. **Tai-Ping Fan** (Cambridge), Dr **Yibin Feng** (Hong Kong), Ms. **Xiaopin Wang** (Beijing), and Dr. **Qihe Xu** (London) are gratefully acknowledged.