



After the Nobel Prize – What Next?



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The Nobel Prize for Physiology or Medicine 2015 was not only a pleasing honour to Youyou Tu herself for her life-time achievements on artemisinin and malaria therapy, but also to the entire scientific community working on traditional Chinese medicine (TCM) and

phytotherapy. Therefore, it did not come as a surprise that the Nobel Prize to Youyou Tu was anticipated with much enthusiasm.

Now, when the celebrations are over and the grey everyday work reality is returning back, it is the right time to address the question what is coming next and how to continue from here. In other words, which sustainable actions are needed to come to long-lasting and significant improvements in TCM and phytotherapy in general for the sake of patients?

It has to be frankly confessed that research and development on artemisinin as malaria medication followed more the rules and strategies of classical pharmacological drug development than the development of a typical phytotherapeutic drug. The process ended with a chemical substance rather than with a standardized herbal product.

The same is true for many other drugs which became established parts of modern pharmacopeias. We all know and like to frequently cited papers of Newman and Cragg [1] stating that a majority of modern drugs are derived in one or the other way from natural sources. Again, these drug developments were inspired by nature, but not phytotherapies in the strictest sense.

At this point, it should be mentioned that detractors emphasize that the Nobel Award Committee in Stockholm did not honour TCM, but the fight against parasitic diseases in tropical countries. We in the field of TCM and phytotherapy should, hence, ask ourselves "quo vadis, phytotherapy?"

As a matter of fact, traditional medicine is being applied million times on this globe, and therefore the general conditions are basically different from those of synthetic chemical drugs. This may be an advantage, but represents a disadvantage at the same time, because there is less burning economic pressure to fulfill the strict regulations of the drug-approval authorities. If an herbal preparation is not marketed as drug by a pharmaceutical company, it can be either sold over the counter as dietary supplement without fulfilling any quality control measures or it can be used as therapeutic drug for individual compassionate uses. These practices demonstrate that herbal medicines are popular among patients, but they frequently do not provide sufficient evidence that they are safe and efficacious.

As popular TCM and herbal medicines are among physicians, practitioners and patients all over Asia, as critical they are considered among the medical community in the West. Several reasons can be discussed to explain this contradiction. One problem is certainly that herbal medicine does not belong to the standard repertoire of knowledge that is taught in our medical schools to the students. This is a fatal situation to my point of view. Another critical issue is, however, that the safety and quality of herbal products has still not been proven to the same extent, as it is routinely done for synthetic drugs.



The medical use of plants by traditional healers is frequently accompanied by spiritual and magical rituals. While these practices are doubtless of interest to cultural anthropology, rational phytotherapy should focus solely on seeking scientific evidence for the pharmacological activity of medicinal plants. On the other hand the demystification and "secularization" of medicinal plants also applies to industrialized countries, where "green medicine" is sometimes associated with esotheric elements.

If we consider phytotherapy as a regular discipline of life science, which rules and methods should be applied to do so? Crucial elements include

- · ethnobotany: documentation of traditional knowledge
- botanical verification of medicinal herbs (modern taxonomy, HPLC fingerprinting, DNA sequencing)
- · standardization of herbal products and mixtures
- avoidance of contaminations and adulterations
- elucidation of molecular and cellular modes of action
- placebo-controlled, double-blind and randomized clinical trials

To guarantee the marketing of safe and efficacious herbal products, national and international authorities regulate the approval of these medicines e.g. the Food and Drug Administration (FDA) in the United States and the EMA in Europe, both of which enforce regulatory sets of specifications including the quality, purity standards, dosage, production, precautions, storage, and labeling of these medicines [2]. Monographs provide the specifications of each plant. These monographs are usually compiled in pharmacopoeias which are considered as official documents specifying the quality, purity standards, dosage, production, precautions, storage, and labeling of medicines.

A main goal of the utilization of these diverse genetic resources is to market herbal products (*i.e.* bio-prospecting). Since the use of medicinal plants is mainly based on the traditional knowledge of indigenous communities, commercialization of herbal products by pharmaceutical industries should, follow fair rules of benefit-sharing with those, where the knowledge comes from. Bio-piracy practices by multinational companies in the past should be banned [3]. The World Health Organization (WHO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) draw the international attention on the protection of indigenous knowledge. The Nagoya Protocol contains rules on how to protect traditional medical knowledge and to compensate indigenous people for knowledge that is already being patented or being used in an inappropriate manner in the past. The European Parliament accepted the protocol (EU, No. 511/2014) on 16 April 2014. It entered into force on 12 October2014. Main principles are (1) informed consent of the country of origin of the resource and (2) mutually agreed terms between indigenous peoples and collaborative commercial partners.

Summing up, the future of phytotherapy lies without doubt in the production of high-quality products, which are able to compete with synthetic drugs regarding safety and efficacy. TCM and phytotherapy must not be mixed up with quackery practices in alternative medicine. Rational phytotherapy should fight for its image as effective medicine with good tolerability. This is the challenge in front of us!

References:

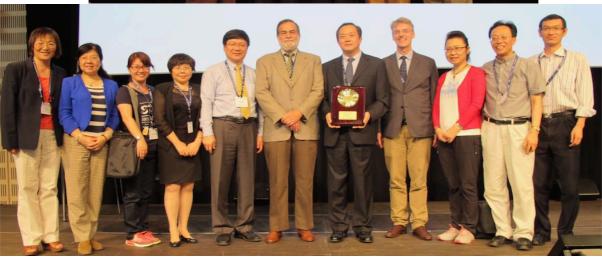
- [1] Newman DJ, Cragg GM. Natural Products as Sources of New Drugs from 1981 to 2014. *J Nat Prod.* 2016;**79**(3):629-61.
- [2] Efferth T, Greten HJ. The European directive on traditional herbal medicinal products: friend or foe for plant-based therapies? *Journal of Chinese Integrative Medicine* 2012;**10**:357-361.
- [3] Efferth T. et al. Biopiracy of natural products and good bioprospecting practice. *Phytomedicine* 2016;**23**:166-73.



News on GP-TCM BoD Members

1. Our warmest congratulations to President De-an Guo for receiving the prestigious Varro E. Tyler Prize from the American Society of Pharmacognosy, 25 July 2016. De-an, we are so proud to have you as our President! http://www.pharmacognosy.us/grants-and-awards/grants-and-awards-archive/tyler-prize/





The Varro E. Tyler Prize is to recognize an individual who has made outstanding scientific contributions to the broad field of dietary supplements, with special emphasis on botanicals. The contributions should be in an area of phytochemistry, pharmacognosy, or pharmacology. Notable contributions to botanical studies outside these primary areas of emphasis, including, for example, clinical investigations, may also be eligible for consideration.

The Varro E. Tyler Prize will consist of a suitably inscribed plaque, a monetary prize of \$5000, and travel expenses to the meeting where the award will be made. Selection: To be made by a committee appointed by the President of the American Society of Pharmacognosy (ASP), consisting of a chair and at least two other members. Eligibility and Mechanism: The Varro E. Tyler Prize will be awarded either at the annual or an interim meeting of the ASP. Recipients must be present in person to receive it. Applications/nominations (one electronic copy) for the Varro E. Tyler Prize must be received by the chairman of the Prize Committee at least two months prior to the meeting at which the award is scheduled. No special form is required, but the application should include a letter outlining the candidate's significant contributions to the field and a detailed curriculum vitae of the nominee, including a complete listing of publications. Reprints of 2-3 significant papers may be included. Other types of supporting documents that may be listed are books, unpublished speeches, patents, and the like. Up to two supporting letters may also be submitted on behalf of a candidate/nominee. Membership in the ASP is not a requirement for consideration, nor is eligibility restricted on the basis of nationality.



2. President-Elect Tai-Ping Fan signed two MoUs at the 2nd Health Ministers Meeting between China and Central & Eastern European Countries in Suzhou, China (19-20 June 2016).





In the presence of Vice Premier of the P.R.C. Madam LIU Yandong 刘延东 (L10 back row, top photo), Prime Minister Bohuslav Sobotka of the Czech Republic (L9 back row, top photo), Chair of the National Health and Family Planning Commission Madam LI Bin 李斌 (L8 back row, top photo; L2, right bottom photo) and CEEC Health Ministers, Tai-Ping Fan signed on behalf of the University of Cambridge two MoUs of international collaboration on TCM with Charles University Faculty of Medicine in Hradec Králové and Motol University Hospital, the Czech Republic (捷克查理大学 Hradec Králové 及 Motol 附属医院), Shanghai University of TCM Shuguang Hospital (上海中医药大学曙光医院), Nanjing University Drum Tower Hospital (南京大学鼓楼医院) and the scientific platform of Aequa Sciences.

- The 2nd Ministers Meeting between China and CEEC opens in Suzhou http://en.nhfpc.gov.cn/2016-06/20/c 70007.htm
- Suzhou Joint Communique on The Second Health Ministers Meeting between China and CEEC http://en.nhfpc.gov.cn/2016-06/21/c_70019.htm



Brexit and Other European Reports

Brexit or not, the root of the GP-TCM RA in EU-China collaboration remains; GP-TCM RA and our Newsletters will continue to devote ourselves to European-Chinese cooperation and strive to promote good practices in TCM research.

1. **UK's EU Referendum Result.** The UK has voted to leave the EU. The process for withdrawing from the EU is explained in more detail on the Government's referendum website. https://www.gov.uk/government/publications/the-process-for-withdrawing-from-the-european-union

2. Universities UK statement on the outcome of the EU referendum:

http://www.universitiesuk.ac.uk/news/Pages/statement-on-eu-referendum-outcome.aspx

3. Statement by Vice-Chancellor, Cambridge University:

 $\underline{\text{https://www.cam.ac.uk/notices/news/statement-from-the-vice-chancellor-of-the-university-of-cambridge-on-the-result-of-the-eu-referendum}$

4. King's experts react to the EU Referendum:

http://www.kcl.ac.uk/newsevents/news/newsrecords/2016/06%20June/Kings-experts-on-the-EU-Referendum.aspx

5. Brexit vote highlights lack of leaving plan: http://www.nature.com/news/brexit-vote-highlights-lack-of-leaving-plan-1.20184?WT.ec id

6. Royal Society of Biology news in the wake of EU Referendum.

- The Science and Technology Committee of the House of Commons has launched an inquiry into the implications and opportunities for science and research related to leaving the EU: http://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/news-parliament-2015/leaving-the-eu-inquiry-launch-16-17/
- Science and universities minister Jo Johnson has addressed the science community: 'minimise damage', 'maximise opportunities' from Brexit; 'Business as usual for Horizon 2020': https://www.rsb.org.uk/news/14-news/1530-jo-johnson-science-and-innovation-will-endure-in-uk
 <a href="https://www.timeshighereducation.com/news/jo-johnson-minimise-damage-maximise-opportunities-brexithtps://www.gov.uk/government/speeches/leading-the-world-in-the-new-age-of-global-science
- British Science "Still Open For Business":
 https://www.buzzfeed.com/tomchivers/british-science-still-open-for-business-despite-brexit-vote?utm_term=.emwY8G5nJ#.kpD2RVnLp
- World class science 'will endure' in UK after Brexit: http://www.bbc.co.uk/news/science-environment-36642961
- UK science must be protected in wake of EU Referendum: https://www.rsb.org.uk/news/14-news/1528-royal-society-of-biology-comments-on-eu-referendum
- Official seeks to reassure scientists on Brexit crisis: http://www.researchresearch.com/news/article/?articleId=1361206
- UK scientists in limbo after Brexit shock:
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http://www.nature.com/news/uk-scientists-in-limbo-after-brexit-shock-1.20178

Researchers reeling as UK votes to leave EU:

http://www.nature.com/news/researchers-reeling-as-uk-votes-to-leave-eu-1.20153?WT.mc_id=TWT_NatureNews

- How scientists reacted to the Brexit: http://www.nature.com/news/how-scientists-reacted-to-the-brexit-1.20158
- Brexit big blow to UK science: https://www.theguardian.com/science/2016/jun/24/brexit-big-blow-to-uk-science-say-top-british-scientists?CMP=fb_gu
- EU referendum: UK science wakes up to new future: http://www.bbc.co.uk/news/science-environment-36622842
- Time to speak up:

http://www.researchresearch.com/news/article/?articleId=1361155

- Life after Brexit: what next for British universities? https://www.timeshighereducation.com/blog/life-after-brexit-what-next-british-universities
- Brexit, science and public involvement: http://www.involve.org.uk/blog/2016/06/28/brexit-science-and-public-involvement/



7. Science's status shifts in new Brexit government: Reshuffled UK administration signals change for research and science policy.

http://www.nature.com/news/science-s-status-shifts-in-new-brexit-government-1.20264?WT.ec id

8. <u>First Greek science agency is rare source of joy for beleaguered researchers:</u> European Investment Bank provides surprise loan to halt startling brain drain.

 $\underline{\text{http://www.nature.com/news/first-greek-science-agency-is-rare-source-of-joy-for-beleaguered-researchers-1.20271?WT.ec_id}$



9 The European Medicines Agency has recently published for public consultation calls for scientific data for the systematic review of the monograph on:

- Tanacetum parthenium (L.) Schulz Bip., herba:
 http://www.ema.europa.eu/ema/doc_index.jsp?curl=pages/includes/document/document_detail.jsp?webContentId=WC500208685&murl=menus/document_library/document_library.jsp&mid=0b01ac058009a3dc
- Verbascum thapsus L., V. densiflorum Bertol., V. phlomoides L., flos: <a href="http://www.ema.europa.eu/ema/doc_index.jsp?curl=pages/includes/document/document_detail.jsp?webContentId=wc500208673&murl=menus/document_library/document_library.jsp&mid=0b01ac058009a3dc
- Calendula officinalis L., flos:
 http://www.ema.europa.eu/ema/doc_index.jsp?curl=pages/includes/document_detail.jsp?webContentId=wc500208684&murl=menus/document_library/document_library.jsp&mid=0b01ac058009a3dc

Please, send your comments by **15 September 2016** to http://www.ema.europa.eu/ema/index.jsp?curl=search.jsp&q=WC500017099.doc&btnG=Search&mid

- Draft European Union herbal monograph on Allium sativum L., bulbus
- <u>Draft European Union herbal monograph on Glycine max (L.) Merr., oleum</u>

Please, send your comments by **31 October 2016** to hmpc.secretariat@ema.europa.eu by using the standard template.

10 Reflection paper on polycyclic aromatic hydrocarbons in herbal medicinal products/traditional herbal medicinal products

The purpose of this reflection paper is to promote discussion about the presence of polycyclic aromatic hydrocarbons in herbal substances, herbal preparations and herbal medicines and to invite all interested parties including suppliers and manufacturers of herbal substances/herbal preparations, manufacturers of herbal medicinal products (HMPs)/traditional herbal medicinal products (THMPs), pharmaceutical industry associations, healthcare professional groups, learned societies, consumers and patients' associations, governmental institutions as well as EU and EEA-EFTA Member States to submit any scientific data or documented information (new, published or unpublished) and comments relevant to the evaluation of this problem.

Comments should be provided by **15 December 2016** using this <u>template</u>. The completed form should be sent to <u>hmpc.secretariat@ema.europa.eu</u>.

- Call for scientific data for the systematic review of the monograph on Commiphora molmol Engler, gummi-resina
- Call for scientific data for the systematic review of the monograph on Trigonella foenum-graecum L., semen
- Call for scientific data for the systematic review of the monograph on Polypodium vulgare L., rhizoma



• Call for scientific data for the systematic review of the monograph on Oenothera biennis L.; Oenothera lamarckiana L., oleum

Comments should be sent by 15 October 2016 by email to hmpc.secretariat@ema.europa.eu.

We would be grateful if you could disseminate this email to anyone else who might be interested in these documents.

With kind regards,
Nathalie Macle
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China and EU-China Cooperation Reports

1. President Xi's speech on science, technology (Xinhua; Updated: 2016-06-02 16:42) BEIJING - The text of President Xi Jinping's speech at a science and technology (S&T) conference on Monday has been published by the People's Publishing House.

Setting a national target for S&T development, Xi said China should establish itself as one of the most innovative countries by 2020 and as a leading innovator by 2030, finally becoming a world S&T power by the 100th anniversary of the founding of the People's Republic of China in 2049.

The president stressed the role of S&T as a bedrock upon which "the country relies for its power, enterprises rely for success, and people rely for a better life."

"Great scientific and technological capacity is a must for China to be strong and for people's lives to improve," he said, calling for new ideas, designs, and strategies in science and technology.

Xi also warned that the country faces a major S&T bottleneck and a big gap in innovation capacity.

"The situation, in which our country is under the control of others in core technologies in key fields, has not fundamentally changed, and the country's S&T foundation remains weak," Xi said at the conference.

"Currently, the state needs the strategic support of science and technology more urgently than any other time in the past," said Xi. http://www.chinadaily.com.cn/china/2016-06/02/content_25595626.htm

2. Nature Editorial. Way of the Dragon. Nature 2016; 534:435. To boost its research quality and innovation, China must strengthen its scientific foundations and let researchers — not policymakers — set the agenda for innovation and discovery. There is increasing excitement over China's scientific rise. The nation has more researchers than any other country and it is rapidly catching up with the United States in the number of scientific papers published. But there are lingering questions — both within China and outside — about the quality and inventiveness of science coming out of the country...

Xi faces some of the greatest battles of China's recent past: military tussles in the South China Sea have raised the political stakes abroad, economists talk of a dangerous slowdown, and environmental problems are frustrating citizens at home and threatening the country's international stature. Xi vows to raise spending on science, but it would be a mistake to think that increasing spending on research and development will solve all the issues of the homeland, make food and drugs safe, resolve the problem of an ageing population and get rid of the disparities between urban and rural China. http://www.nature.com/news/the-future-of-chinese-research-1.20123?WT.ec_id

3. In a special issue this week, *Nature* looks at China's potential and the obstacles it faces: www.nature.com/chinafocus

- Science in China: http://www.nature.com/news/science-in-china-1.20120?WT.ec id
- China by the numbers: http://www.nature.com/news/china-by-the-numbers-1.20122?WT.ec_id
- Science stars of China: http://www.nature.com/news/science-stars-of-china-1.20113?WT.ec id



- China's bid to be a DNA superpower: http://www.nature.com/news/china-s-bid-to-be-a-dna-superpower- 1.20121?WT.ec id
- Bioethics in China: No wild east: http://www.nature.com/news/bioethics-in-china-nowild-east-1.20116?WT.ec_id
- Boost basic research in China: http://www.nature.com/news/policy-boost-basicresearch-in-china-1.20117?WT.ec id

4. Joint Communication on Elements for a New EU Strategy on China. In June 2016, the High Representative of the Union for Foreign Affairs and Security Policy adopted a new strategy mapping out the EU's relationship with China for the next 5 years, also covering research & innovation. http://eeas.europa.eu/china/docs/ioint communication to the european parliament and the council elements for a new eu strategy on china.pdf

The paper identifies major opportunities for the EU's relationship with China, in particular with the aim of creating jobs and growth in Europe, as well as promoting a greater opening up of the Chinese market to European business. Such opportunities include concluding a comprehensive agreement on investment, a Chinese contribution to the Investment Plan for Europe and joint research and innovation activities, especially in the areas of 5G mobile communications and the Internet of Things. Other relevant areas of future co-operation include protection and enforcement of IPR, which are crucial for the promotion of innovation, and strengthening reciprocal access to research and innovation programmes, such as Horizon 2020. The following specific recommendations are included in the Joint Communication under the 'Research, innovation and the digital economy' chapter:

- Mutually beneficial co-operation on research and innovation should be strengthened, while ensuring a level playing field;
- · Co-operation on the digital economy can bring benefits to both the EU and China. It should harness growth through common standards and joint research on the basis of reciprocity:
- The EU should intensify co-operation with China on the protection and enforcement of IPRs and should reinforce measures to counter cyber-enabled theft of intellectual property and trade secrets.

5. Treatment false advertisement in China: a tragedy. Zhang L, et al. Lancet 2016;387:2505 On April 12, 2016, a 21-year-old man died in China, generating many reactions and questions. He had been diagnosed in 2014 with synovial sarcoma, a malignant tumour with no effective therapies. He searched for a treatment strategy on Baidu—the largest Chinese language search engine. An attractive therapeutic method based on bioimmunotherapy was displayed as the first search result, and brought hope for the patient and his family. After four treatment sessions, the family had spent most of their money, but the patient died. Some media companies reported that the advertisement for this treatment was false advertisement, because the alleged technical collaboration with a US university did not exist. Probably, similar tragedies occur every day... http://dx.doi.org/10.1016/S0140-6736(16)30797-8

6. Pfizer Invests \$350M in Biotech Facility Based in China:

http://www.dddmag.com/news/2016/06/pfizer-invests-350m-biotech-facility-based-china?et_cid

Recommended Readings

1. Dieleman JL, et al. National spending on health by source for 184 countries between 2013 and 2040. Lancet 2016;387:2521-2535.

Background: A general consensus exists that as a country develops economically, health spending per capita rises and the share of that spending that is prepaid through government or private mechanisms also rises. However, the speed and magnitude of these changes vary substantially across countries, even at similar levels of development. In this study, we use past trends and relationships to estimate future health spending, disaggregated by the source of those funds, to identify the financing trajectories that are likely to occur if current policies and trajectories evolve as expected.

Methods: We extracted data from WHO's Health Spending Observatory and the Institute for Health Metrics and Evaluation's *Financing Global Health 2015* report. We converted these data to a common purchasing power-adjusted and inflation-adjusted currency. We used a series of ensemble models



and observed empirical norms to estimate future government out-of-pocket private prepaid health spending and development assistance for health. We aggregated each country's estimates to generate total health spending from 2013 to 2040 for 184 countries. We compared these estimates with each other and internationally recognised benchmarks.

Findings: Global spending on health is expected to increase from US\$7.83 trillion in 2013 to \$18.28 (uncertainty interval 14.42–22.24) trillion in 2040 (in 2010 purchasing power parity-adjusted dollars). We expect per-capita health spending to increase annually by 2.7% (1.9–3.4) in high-income countries, 3.4% (2.4–4.2) in upper-middle-income countries, 3.0% (2.3–3.6) in lower-middle-income countries, and 2.4% (1.6–3.1) in low-income countries. Given the gaps in current health spending, these rates provide no evidence of increasing parity in health spending. In 1995 and 2015, low-income countries spent \$0.03 for every dollar spent in high-income countries, even after adjusting for purchasing power, and the same is projected for 2040. Most importantly, health spending in many low-income countries is expected to remain low. Estimates suggest that, by 2040, only one (3%) of 34 low-income countries and 36 (37%) of 98 middle-income countries will reach the Chatham House goal of 5% of gross domestic product consisting of government health spending.

Interpretation: Despite remarkable health gains, past health financing trends and relationships suggest that many low-income and lower-middle-income countries will not meet internationally set health spending targets and that spending gaps between low-income and high-income countries are unlikely to narrow unless substantive policy interventions occur. Although gains in health system efficiency can be used to make progress, current trends suggest that meaningful increases in health system resources will require concerted action. http://dx.doi.org/10.1016/S0140-6736(16)30167-2

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) and Dr Qihe Xu (gihe.xu@kcl.ac.uk).

Future Meetings

1. The 5th Annual Meeting of GP-TCM Research Association-cum-Summit on Compendium of Materia Medica and Innovative Drug Discovery in Chinese Medicine" will be held in Hong Kong, on 9–10 August 2016. http://scm.hkbu.edu.hk/gptcm-summit

Should you need further information about the Meeting-cum-Summit, please email: scm@hkbu.edu.hk or phone +852-34112064. The meeting to be held in Hong Kong will be another occasion for us to gather to exchange the findings and results of our latest work. This significant event is jointly organised by GP-TCM Research Association, School of Chinese Medicine of Hong Kong Baptist University (HKBU), and TCM Chemistry Specialty Committee and TCM Pharmaceutical Analysis Specialty Committee of WFCMS. The School of Chinese Medicine will host the event as a part of the celebrations of the 60th anniversary of HKBU. Prof. Aiping Lu, Dean of the School of Chinese Medicine and a member of the Board of Directors of GP-TCM RA, cordially invite all members and friends of the GP-TCM RA from all around the world to come to the HKBU campus to attend the event.

In particular, the Meeting-cum-Summit aims to achieve the following objectives:

- Promote discussion and implementation of good practice in TCM research and development, high-quality evidence-based research on TCM as well as the integration of Chinese medicine and conventional medicine;
- Revisit the significant contributions made by Li Shizhen, the author of the *Compendium of Materia Medica*, to the development of Chinese medicine and discuss new insights into his work;
- Explore new strategies for and approaches to new drug discovery and the standardization of Chinese materia medica with a view to contributing to the advancement, modernization and internationalization of Chinese medicine as well as health and well-being.

The Meeting-cum-Summit will be devoted to exploring the latest developments in a number of areas



of Chinese medicine, including quality control, pharmacology and toxicology, regulatory matters and standardization, clinical studies, acupuncture, *Compendium of Materia Medica*, new drug discovery strategies and approaches. Please visit http://scm.hkbu.edu.hk/gptcm-summit for more information, and check updates from time to time. Please disseminate this message to your colleagues and research students who may be interested. You can find the first announcement here:

http://scm.hkbu.edu.hk/en/onlineforms/201608 gptcm/poster 1st announcement.pd

2. HKTDC International Conference of the Modernization of Chinese Medicine & Health Products. 11-13 August 2016, Hong Kong. 国际现代化中医药及健康产品会议http://www.hktdc.com/fair/icmcm-sc/s/9563-General_Information/International-Conference-of-the-Modernization-of-Chinese-Medicine-and-Health-Products/ConferenceDetails.html

3. The 15th Meeting of Consortium for Globalization of Chinese Medicine (CGCM) will be held in Taipei on August 23 - 25, 2016 (Tuesday - Thursday), while Pre-meeting Workshop will also be held on August 22, 2016 (Monday). The Meeting is organized by Academia Sinica. It provides a platform for regulatory-industrial-academic exchanges and potential research collaborations on various frontiers of Traditional Chinese Medicine among our worldwide CGCM members and guests.

The following themes will be addressed at the meeting:

- Acupuncture
- · Bioinformatics: "Omics" Approach and Data Analysis
- · Clinical Investigation
 - Cancer, Liver Disease and Inflammation
 - Other Diseases and Safety
- Education
- Herbal Resources
 - Authentication
 - Cultivation and Herbal Quality
 - Identification, Formulation and Manufacturing
- Regulation and Interregional Collaborations in Academia and Industry
- Natural Products
 - Biological Activity
 - Cancer, Virus and Inflammation
 - Identification, Bio-transformation and Metabolism
- Polychemical Activities and Mechanism Study
 - Cancer, Immunomodulation and Inflammation
 - Metabolic, Neural Diseases, Aging Process and Others
 - Metabolism, Drug Interaction and Toxicity

You are cordially invited to join the meeting and encouraged to forward this message to your colleagues and friends who are interested in TCM for joining our upcoming 15th CGCM Meeting.

New Institutional and Industrial Affiliate Membership - You are encouraged to take the initiative in inviting any potential institutions and companies, which are devoted to the research and development of herbal medicine, to join CGCM as Institutional or Industrial Affiliate Members. You may wish to provide the relevant contact person and information for us.

Call for Abstracts: Abstract submission for poster presentations of the Meeting is now open for all CGCM members and invited guests. Please submit your abstracts together with the attached Abstract Submission Form to centraloffice@tcmedicine.org on or before May 31, 2016 (Tuesday).

Highlights of the posters would be discussed during the relevant discussion sessions. Conclusions, action plans and milestones are expected to be drawn.



Registration: Registration fee for the 15th CGCM Meeting:

| | On or before May 31, 2016 | After May 31, 2016 |
|---|---|---|
| Member institutes (3 free participant quotas) | 10,000 NTD per head for the 4th participant and onwards | 13,000 NTD per head for the 4th participant and onwards |
| Non-members | 15,000 NTD | 18,000 NTD |
| Students and post- doctoral fellows | 4,500 NTD | 7,500 NTD |

Online registration of 15th CGCM Meeting will open soon for all participants to enroll, please visit CGCM website: www.tcmedicine.org for the update.

Travel Grant: To support postgraduates to attend the 15th CGCM Meeting, up to 50 Travel Grants are now open for application. Awardees will receive travel grant, free accommodation (shared room) and waiver of registration fee. You may wish to encourage your postgraduates to submit abstracts and apply for the Travel Grant.

Should you have any enquiries, please feel free to contact us at centraloffice@tcmedicine.org

4. On the occasion of the 60th Birthday of Prof. Dr. Rudolf Bauer, Symposium "Medicinal Plant Research in the 21st Century – Pharmacognosy, quo vadis?" will be held 30 September 2016 in Karl-Franzens-University Graz, Institute of Pharmaceutical Sciences.

- Prof. Dr. Hermann Stuppner, Institute of Pharmacy, University of Innsbruck
 The relevance of medicinal plants for drug discovery
- Prof. Dr. Verena Dirsch, Department of Pharmacognosy, University of Vienna Pharmacognosy and pharmacology two sides of one coin?
- Priv.-Doz. Mag. Dr. Karin Ardjomand-Wölkart / Mag. Dr. Eva Maria Pferschy-Wenzig, Institute of Pharmaceutical Sciences. University of Graz

Recent Developments in Pharmacognosy at University of Graz

Prof. Dr. Angelika Vollmar, Institute of Pharmacy, University of Munich
 The importance of pharmacognosy from a Munich perspective

Registration: until 1 September 2016, at the Secretariat of Pharmaceutical Sciences:

Mag. Claudia Thenius, Tel. 0043- 316 380 5525 Fax: 0043- 316 380 9860 claudia.thenius@uni-graz.at

Accomodation: Please contact Graz Tourismus http://www.graztourismus.at/

Tel.: +43 / 316 / 8075-0 Fax: +43 / 316 / 8075-15 E-Mail:

info@graztourismus.at

Health

Donations for the foundation *Plants for Health* to support medicinal plant research are highly appreciated. http://www.plantsforhealth.org/

5. The 5th International Conference on the Modernization of Traditional Chinese Medicine will be held in Chengdu, China on 23-25 October 2016. For promoting the development of traditional medicine, so as to provide better medical service to people worldwide, Prof. Lu Hua, the President of Teaching Hospital of Chengdu University of Traditional Chinese Medicine (CDUTCM), welcomes you to attend this meeting. This is a very meaningful series of conferences which has been successfully co-sponsored three times by the Ministry of Science and Technology, Ministry of Public Health, China Food and Drug Administration, State Administration of Traditional Chinese Medicine, and People's Government of Sichuan Province. Led by Prof. Lu, The Teaching Hospital of CDUTCM is organizing the 4th Panel Forum on topic of "the Development of TCM Healthcare". More information to follow.



Invitation from Journals

- 1. Invitation from World Journal of Traditional Chinese Medicine (WJTCM). WJTCM, ISSN 2311-8571, a new peer-reviewed journal (quarterly) launched in 2014, is the official journal of the World Federation of Chinese Medicine Societies (WFCMS) and the GP-TCM RA. Aim &Scope: Introduce clinical efficacy and mechanism of TCM to doctors and biomedical researchers around the world, so as to provide new ideas and methods for solving the complicated and difficult cases.
- WJTCM includes reviews and original articles focused on four aspects:
- Modern Research on Chinese Materia Medica: theories of processing, property, and compatibility of Chinese materia medica; safety of Chinese materia medica; active principles and mechanism and efficacy of crude drugs and Chinese compound formulas
- Research on TCM Theory: scientific connotation and biological foundation of TCM basic theories
- TCM clinical Research: disease and syndrome, TCM safety, efficacy evaluation, evidence-based and systematic evaluation
- Acupuncture and Moxibustion: effect mechanism of acupuncture and moxibustion, specificity of acupoint effect, acupoints compatibility, efficacy evaluation of acupuncture and moxibustion.

Submission to the Journal: All the articles can be submitted via ScholarOne: https://mc03.manuscriptcentral.com/wjtcm, Detailed information about requirements of manuscript and format can be found in "Instruction&Forms" by the above URL, or by accessing WJTCM home page www.wjtcm.org. All WJTCM articles will be published online via WJTCM website (www.wjtcm.org). PDF articles and electronic/online versions are freely available to global readers.

WJTCM has successfully published 4 issues in 2015. Full-text PDF articles and electronic/online versions are freely available to global readers: www.wjtcm.org

- **2.** China—a call for papers from the *Lancet:* In October, 2016, *The Lancet* will dedicate a weekly issue to health care and research in China—our seventh such themed issue since 2008. While the journal welcome submissions from China throughout the year and across all *Lancet* titles, the editors invite submissions of high quality research from China, or from research teams working on health in China, for this issue in particular. Submissions are welcome on all aspects of health science including, but not limited to: non-communicable disease control, health policies, and health-care reform in China. http://dx.doi.org/10.1016/S0140-6736(15)01157-5
- **3.** Cao X, et al. A call for abstracts from China. *Lancet* 2016;386:2377. ... *The Lancet*—CAMS Health Summit 2016, which will be held on Oct 30–31, 2016. Submissions are invited from across all aspects of health science including, but not limited to: translational medicine, clinical medicine, public health, global health, health policy, the environment and ecological systems and health, medical education, delivery of health services, and health-care reform.

The core of the event will consist of submitted abstracts and posters, and will include keynote presentations from leaders in China as well as from outside China. The peer-reviewed abstracts will be published online and in a conference booklet by *The Lancet*. Work completed outside China can be submitted, but only abstracts relevant to China's health science will be considered. Awards will be given each day for the best oral presentation, the best poster presentation, and the best young investigator...Please submit your abstract as a Word document through *The Lancet*'s online submission system no later than 30 April 2016, stating in your covering letter that the submission is in response to this call for abstracts from China. After peer review at *The Lancet* and CAMS, participants will be informed of acceptance of abstracts by 30 July 2016. To submit an abstract go to http://ees.elsevier.com/thelancet

4. Davies J, et al. China Diabetes Society 2016: a call for papers. *Lancet* **2016;386:e59-e60**. Two decades ago, it seemed almost inconceivable that China would be heading towards an epidemic of obesity and type 2 diabetes; HIV/AIDS and other communicable diseases were much greater concerns. Rapid economic growth and investment in health systems have led to growing income, rapidly declining infectious disease rates, and increasing life expectancy. This good news story, however, carries with it the baggage of an increasing burden of obesity and diabetes. In 1994, it was



estimated that the prevalence of diabetes was 2.5%. Estimates for 2014 suggest that this prevalence has now risen to between 9.7% and 11.6% and there is no indication that rates are going to decline soon...

For the Chinese Diabetes Society meeting in 2016, the Chinese Diabetes Society, *The Lancet Diabetes & Endocrinology* and *The Lancet* will host a session for researchers to present their findings relating to diabetes and obesity in China. Submissions that are judged to be of high enough quality will be presented either orally or as posters, with abstracts being published in *The Lancet Diabetes & Endocrinology*. Additionally, for studies judged to be of highest quality there is potential for publication as a full Article in one of the journals. http://dx.doi.org/10.1016/S0140-6736(15)01119-8

5. Journal of Zhejiang University-SCIENCE B (Biomedicine & Biotechnology) invites contributions for a special issue on "Integrative Medicine & Obstetrics and Gynaecology". This special issue invites authors to submit original research, review, perspective articles in the fields of Integrative Medicine (IM) or Obstetrics and Gynaecology (OG). Potential topics include, but are not limited to: (1) clinical trial or basic study in IM or OG, (2) methodological advantages and challenges in using qualitative and mixed methods design in IM or OG research, (3) systematic reviews or meta-analysis concerning IM or OG clinical practices, and (4) new scientific development in the fields. All submissions will undergo rigorous international peer review. This issue will be extensively publicized in SpringerLink, Twitter, Linkedin, WeChat, Blog, etc. to attract worldwide attention.

Journal Introduction: Journal of Zhejiang University-SCIENCE B (Biomedicine & Biotechnology) (JZUS-B), started in 2005, is an international peer-reviewed journal co-published by Springer & Zhejiang University Press. JZUS-B aims to present the latest developments and achievements in the broad area of Biomedicine, Biotechnology and Biochemistry, and is indexed by SCI-E (2013 IF is 1.278), MEDLINE/PubMed, PMC, JST, CA, etc. We strive to provide a superior service, including (1) fast international peer review (<2 months) and fast publication after acceptance (<3 months), (2) accepted article in press online immediately, (3) polishing service by native English speakers and rigorous editing and proof-reading, (4) English highlights and Chinese summaries accessible freely, and (5) innovative techniques: CrossCheck/CrossMark/Funding Data/ORCID/Crossref TDM. Please see our website http://www.zju.edu.cn/jzus for more details.

Note: If you would like to submit your excellent papers to *JZUS-B*, please select the Article Type "CIM&OG" in the Editorial Manager system, and then send a short message simultaneously to jzus_lhf@zju.edu.cn, jzus_b@zju.edu.cn, and qufan43@outlook.com, in order for us to collect all of the issue information correctly. We would be very appreciative of your great support.

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Professor Nicola ROBINSON, London South Bank University, UK

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Manuscript Guidelines: http://www.zju.edu.cn/jzus/manuscript.php

Submission Online: http://www.editorialmanager.com/zusb

Submission Deadline: June 30, 2016

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