

HAPPY CHINESE NEW YEAR and LANTERN FESTIVAL!





editorial

9–10 August 2016 HONG KONG: Please Mark Your Diary



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At the beginning of the Year of the Monkey, I would like to wish every one of you a year of joyful abundance, great achievements and good health! As we continue to work hard together to advance the development of Chinese medicine, it is my earnest belief that our efforts and collaborations will result in new breakthroughs and successes which would contribute to human health.

It gives me great pleasure to announce that the <u>5th Annual Meeting of GP-TCM Research</u> <u>Association-cum-Summit on Compendium of Materia Medica and Innovative Drug Discovery in</u> <u>Chinese Medicine</u> will be held in Hong Kong on 9–10 August 2016. It 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 is privileged to host the event as a part of the celebrations of the 60th anniversary of HKBU. As Dean of the School of Chinese Medicine and a member of the Board of Directors of GP-TCM RA, I have great pleasure to invite honorable members of GP-TCM RA, scholars and experts as well as postgraduate students 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:

- (1) 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;
- (2) 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; and
- (3) 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.

With the able leadership of Prof. Rudolf Bauer, Founding President of GP-TCM RA, the Executive Council and the Board of Directors of GP-TCM RA have succeeded in establishing GP-TCM RA as a prestigious association devoted to promoting and fostering research on and good practices in Chinese medicine since its establishment in 2012. It has been receiving increasingly strong



support and recognition from scholars and experts in the field from around the world. Last year, Prof. De-an Guo succeeded Prof. Bauer as GP-TCM RA President. With his strong commitment and the concerted efforts of the Executive Council and Board of Directors of GP-TCM RA under his strong leadership, it is my sincere belief that GP-TCM RA will make more laudable achievements and make even greater contributions to the advancement of TCM research and formulation of TCM good practices to foster the development of TCM for the betterment of mankind.

It is the honour of the School of Chinese Medicine to host this important academic event to celebrate the 60th anniversary of HKBU, the first tertiary institution funded by the University Grants Committee of the Hong Kong Special Administrative Region t to offer higher education in Chinese medicine in Hong Kong. The School of Chinese Medicine has attained remarkable achievements in Chinese medicine education, research, knowledge transfer and medical services since its establishment in 1999, and we are proud to play host to the Meeting-cum-Summit to be held on 9–10 August 2016. We sincerely invite you to join the scholars and researchers as well as postgraduate students attending the event on our campus this summer!

GP-TCM RA News

The 4th issue of the World Journal of TCM is published. This includes an editorial by Editor-in-chief De-an Guo entitled Nobel Prize for Artemisinin Inspires Modern TCM Research, which is followed by a review by Prof. Thomas Efferth entitled Artemisinin-Second Career as Anticancer Drug? In the column Modern Research on Chinese Materia Medica, also featured are Toxicity Classification and Detoxification Strategies of Chinese Materia Medica, a report by Prof. Zu-Guang Ye et al and Metabolomics and Its Potential in Drug Discovery and Development From TCM by Prof. Xin-Jun Wang and colleagues. In the Research on TCM Theory column, featured is Pathophysiological Characteristics of Phlegm-stasis Cementation Syndrome in Coronary Heart Disease: a Review and Update, co-athored by Prof. Jian-Xun Liu and colleagues. Regarding TCM Clinical Research, Prof. Ping Liu and colleagues report the Interventional Effect of Jianpi Bushen Granule Combined with Western Medicine on the Level of Serum Acetylcholine Receptor Antibodies in Myasthenia Gravis Patients. The current issue is further highlighted by two articles on acupuncture research, which are Clinical Practice Guideline of Acupuncture for Bell's Palsy by Prof. Fan-Rong Liang and Assessment of Short-term Acupuncture Effect Through Electroconductivity Variation of Yuan-Source Acupoints by Dr. Daniel Cerqueira Ribeiro. Finally, the current issue also presents abstracts accepted for publication at The 4th Annual Meeting of the GP-TCM Research Association, held in Mons in July 2015. www.wjtcm.org:8080/ch/index.aspx

Invitation from World Journal of Traditional Chinese Medicine (WJTCM). WJTCM, ISSN 2311-8571, a new peer-reviewed journal (quarterly), launched in 2014. It is sponsored by 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). Full text PDF articles and electronic/online versions are freely available to global readers.

Special Topic on TCM for Gastrointestinal Diseases 2016 in World Journal of TCM.

http://www.wjtcm.org:8080/config/sjzyyw/news_category/2015-11-30/Special%20Issue%20on%20Gastrointestinal%20Diseases--revision.pdf

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 (qihe.xu@kcl.ac.uk).

European Observation and EU-China Cooperation

1. Spain to host Europe's largest TCM hospital by Emma Gonzalez (China Daily) 2016-02-05 <u>http://www.chinadaily.com.cn/business/2016-02/05/content_23402044.htm</u>

Spain is to host the largest traditional Chinese medicine hospital in Europe, following the signing last week of an education and clinical practice cooperation agreement between the Beijing municipal government and Spanish authorities.

Barcelona, in the Catalonia region, will provide land for its construction, which is expected to cost 80 million euros (\$88.6 million), according to Spanish business newspaper Expansion.

"This center will be the first of its kind outside Asia, an initiative that will make Catalonia the reference point in Europe in the field," wrote the Catalonian government in a press release.

The Catalonia Trade and Investment Institute will supply temporary office space for the creation of the European Development and Promotion Center of Traditional Chinese Medicine, an institution that will work on the expansion of the discipline across the continent.

The agreement also involves the launch of a TCM Master's degree - a collaboration between the Beijing University of Chinese Medicine, the University of Barcelona and the University of Pompeu Fabra, due to start in September.

The hospital will develop a joint-research program with scientists from IDIBAPS, a biomedical research institute in Barcelona.

The clinical practice cooperation will enable the Beijing University of Chinese Medicine to send doctors to the University Hospital Clinic in Barcelona to treat patients under the supervision of local health authorities.

China has been making increased efforts to expand TCM outside the country, pushing for the ancient discipline to be accepted worldwide.

Xinyue Calduch, a spokesperson for the Spain-based European Foundation of TCM, said the plans to build Europe's largest TCM hospital reflect China's strong intention to invest in the promotion of the benefits of the use of natural medicine.

"Not only will it help us learn more about this millenary practice, but it will also have positive health benefits for Spanish patients," said Calduch.

"We are confident it will spread the advantages of the use of acupuncture, herbal remedies and many other Chinese manipulative therapies to other countries in Europe."

Although Spain is not considered a TCM pioneer, use of complementary herbal medicine is gaining traction in the country with more patients combining Western medicine with natural remedies, particularly acupuncture and herbal treatments.

The European Foundation of TCM estimates that 95.4 percent of Spaniards are familiar with natural therapies, with TCM being the most popular discipline.

Their study also suggests 23.6 percent of the country's population has used natural remedies.



2. The European Medicines Agency has recently published for public consultation:

Three draft European Union herbal monographs on:

- Salvia officinalis L., folium
- Harpagophytum procumbens DC. and/or Harpagophytum zeheyri Decne., radix
- Origanum majorana L., herba

Please, send your comments to <u>hmpc.secretariat@ema.europa.eu</u> by using the standard <u>template</u>. One call for scientific data for:

• the systematic review of the monograph on Peumus boldus Molina, folium

Please, send your comments to <u>hmpc.secretariat@ema.europa.eu</u>.

The deadline for comments is 15 May 2016.

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

With kind regards,

Nathalie Macle Stakeholders and Communication Division European Medicines Agency 30 Churchill Place London, E14 5EU United Kingdom Tel +44 (0)20 3660 7284 nathalie.macle@ema.europa.eu

3. Tunisia joins the Horizon 2020 family. Tunisia joining Horizon 2020: the country gets same rights as non-EU Members including Norway and Iceland to apply for any Horizon 2020 grants. <u>https://www.octopux.eu/tunisia-joining-horizon-2020/</u>

4. Timetable for Horizon 2020 Work Programmes 2018-2020.

The European Commission is currently planning the development of Horizon 2020 Work Programmes for the final years of the programme, 2018-2020. The current expectation is that they will work towards a Biennial Work Programme for 2018-2019 with an 'outlook' on 2020 that will contain details of what the final year's Work Programme is likely to include. This final year's Work Programme will play an important role in bridging the gap between Horizon 2020 and its successor programme. The development of the new Work Programmes will also take into account the results of the Horizon 2020 interim evaluation.

In terms of process, the first half of 2016 will see the development of Strategic Programming on the basis of the Commission's priorities and stakeholder consultation, primarily with the Advisory Groups for each area of Horizon 2020. In view of this, the Advisory Groups will be given a series of general questions to inform the development of the strategy for the final three years in their areas:

- What are the challenges in the field concerned that requires action under the Work Programme 2018-2020? And would they require an integrated approach across the societal challenges and leadership in enabling and industrial technologies?
- What is the output / impact that could be foreseen? Which innovation aspects could reach market deployment within 5 -7 years?
- Which gaps (science and technology, innovation, markets, policy) and potential game changers, including the role of the public sector in accelerating changes, need to be taken into account?
- Which areas in particular could benefit from embedding of horizontal aspects such as social sciences and humanities, responsible research and innovation, gender aspects, and climate and sustainable development?

5. Two-stage Calls in the Horizon 2020 Work Programme 2016-2017. The table of twostage topics across the programme (below) shows that the number of these is roughly the same as in the 2014 and 2015 Work Programmes; the budget share allocated to two-stage topics in 2016-2017 is, however, considerably lower. Areas where the number of two-stages calls has fallen (or where they have been dropped completely) include Energy, Climate and Health. There have also



been some improvements to the implementation of two-stage calls, which are as follows:

- A standardised page limit of 10 pages at stage one will be applied;
- Consortium members are to be listed in Part A (the online forms) of the proposal, meaning all participants know what is being submitted from their institution and that it is easier to check conflicts of interests when allocating evaluators;
- There will be a dynamic threshold used at stage one, meaning that stage two proposals will count for no more than three times the available budget;
- Successful stage one applicants will receive 'generalised' feedback; unsuccessful stage one applicants will receive full Evaluation Summary Reports.

Finally, the Commission will be monitoring the uptake of 2016 calls in early 2016, with a view to possibly introducing more two-stage calls in 2017 if necessary (with no change to the content of topics). The use of two-stage calls be will reviewed again for the 2018-2019 Work Programmes.

6. Calls for Proposals under Horizon 2020:

http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/index.html

China Observation

1. The Chinese Ministry of Science and Technology has launched the first call for applications for funding, aimed at Chinese researchers participating in Horizon 2020 projects. One of the problems facing EU-China collaborations after FP7 was that Chinese partners will not normally receive funding from the EU for participation in H2020 projects. Thus, future EU-China collaborations must rely on matched funding.

Following the creation of the so-called Co-funding Mechanism in September, the Chinese Ministry of Science and Technology has launched the first call for applications for funding, aimed at Chinese researchers participating in Horizon 2020 projects.

The Co-funding Mechanism aims at facilitating the participation of Chinese organisations in Horizon 2020 by enabling them to receive funding from the Chinese Ministry of Science and Technology (MOST). The first call for funding aimed at Chinese researchers either included in successful 2014/2015 Horizon 2020 projects, or interested in participating in the programme in the current two-year Work Programme is now open.

There will be two deadlines for applications: 31 March and 31 July 2016 covering three parts of the call; while the first deadline will apply to applications from Chinese researchers successfully selected in Horizon 2020 projects from the 2014/2015 Work Programme and to the areas open to China in the 2016/2017 Work Programme that have a deadline prior to 31 March 2016, the second one will apply to those areas open to China in the 2016/2017 Work Programme that have a deadline between 31 March and 31 July 2016.

The priority areas to be supported in 2016 mainly cover agriculture (including food), biotechnologies, ICT, space, aviation, energy, health, transport, water resources, energy conservation and emission reductions, advanced manufacturing, new materials, sustainable urbanisation, and exchange of young scientists.

Subscribers willing to involve Chinese organisations in Horizon 2020-funded projects in 2016/2017 should let their partners know about this opportunity, which is administered independently from the European Commission by MOST.

Further information about the call in Chinese and English can be found on the European Commission website dedicated to international cooperation in Horizon 2020: http://ec.europa.eu/research/iscp/index.cfm?pg=china

2. Karen McGhee & Nicky Phillips. **Nature Index 2015 China.** *Nature* **528**, S165. In the past 12 months, the growth of China's output in the index has dwarfed that of any other nation. In this supplement, three years of research output from China — from 2012 to 2014 — were analysed, providing a telling snapshot of the country's emergence as a scientific superpower, a phenomenon watched with intense interest around the globe. The articles in this index focus on cities with particularly interesting stories to tell.



- Nationally, China's weighted fractional count (WFC) rose 37% between 2012 and 2014;
- Growth in this metric was notably high in Hangzhou, Xi'an and Chengdu;
- Measuring output by WFC reinforces the status of Beijing, Shanghai and Nanjing as the dominant scientific centres;
- The index shows that cutting-edge life science has matured quickly in Shenzhen, Beijing and Wuhan;
- Nature Index data reveal that Hong Kong, Hefei and Tianjin are active in the pursuit of international or domestic associations. All three recorded a high collaboration score.

http://www.nature.com/nature/journal/v528/n7582_supp_ni/full/528S165a.html

3. China's 13th Five-Year Plan: Likely Aims and Implications. At the fifth plenary session of the 18th Central Committee of the Communist Party of China, held on 29 October 2015, the Suggestions of the Central Committee of the Communist Party of China on the 13th Five-Year Plan for National Economic and Social Development (Suggestions) were passed. It was later stated at a State Council Executive Meeting that the 13th Five-Year Plan (2016-2020) will be formulated according to the Suggestions. President Xi Jinping and Premier Li Keqiang also remarked that the core goals of the 13th Five-Year Plan are to build a "moderately well-off society" and to overcome such challenges as the "medium-income trap". While efforts will be made to optimise the economic structure, improve the environment, and enhance the quality and benefit of development, steps will be taken to achieve economic growth. Specific goals include:

- Maintaining economic growth at a medium to high speed, with average annual growth over 6.5%
- Raising per-capita GDP to US\$12,000 (up from around US\$7,600 in 2014)
- Accelerating industrial upgrade and propelling the economy to develop at medium to high level
- Balancing urban and rural development and ecological construction
- Strengthening social fairness and justice and balanced development

http://hkmb.hktdc.com/en/1X0A4K2A/hktdc-research/China's-13th-Five-Year-Plan-Likely-Aims-and-

Implications?utm_source=enews&utm_medium=email&utm_campaign=hkmb-edm

4. **Trends in cause-specific mortality in Chinese provinces.** In *The Lancet*, Maigeng Zhou and colleagues report trends in cause-specific mortality across provinces in China between 1990 and 2013.

"In 2013, the leading causes of leading causes of years of life lost (YLLs) were stroke (also the most common cause in 27 provinces), ischaemic heart disease (which is increasing in men but not in women, possibly because of high smoking prevalence in men), chronic obstructive pulmonary disease, and lung cancer. However, not all causes of death have decreased, and deaths from various cancers, such as prostate and pancreatic cancer and mesothelioma, have increased substantially. Moreover, road traffic injuries now account for an increased proportion of YLLs in all mainland provinces, and there has also been a worrying lack of progress against HIV in many parts of the country."

"The shift towards non-communicable disease has occurred in all provinces, but the major causes of death vary greatly. Zhou and colleagues suggest that China can in fact be divided into five distinct so-called nations based on the epidemiological characteristics of each. In Shanghai, Tianjin, Zhejiang, Beijing, Hong Kong, and Macao, mortality rates are low and life expectancy is high even compared with high-income countries..."

http://dx.doi.org/10.1016/S0140-6736(15)00553-X http://dx.doi.org/10.1016/S0140-6736(15)00551-6.

Meeting Reports

"Health—the Chinese dream" written in the *Lancet* by the journal's Editor-in-chief Richard Horton. In the beginning of 2016, the Government of China convened a forum of international advisers to discuss urgent challenges facing the country. Health was a prominent concern. http://dx.doi.org/10.1016/S0140-6736(16)00041-6

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. Call for Abstracts starts now till 1 April 2016. Please visit <u>http://scm.hkbu.edu.hk/gptcm-summit</u> for more information, and check updates from time to time. Please disseminate this message to your colleagues and research students who may be interested in attending this informative and inspiring event. Here below is the link of the First Announcement of the event: <u>http://scm.hkbu.edu.hk/en/onlineforms/201608_gptcm/poster_1st_announcement.pdf</u>

Should you need further information about the Meeting-cum-Summit, please contact us (email: scm@hkbu.edu.hk; phone: +852-34112064).





Symposium Learning from Nature, learning from our Ancestors From tradition to evidence based medicines

<u>Date:</u> April 14-15, 2016

<u>Place:</u> Leiden, The Netherlands Venue Naturalis, Pesthuislaan 7

<u>Costs:</u> € 200-Editors, Editorial board members, Reviewers, Students € 400-Others After February 28th add an extra € 100

<u>Registration deadline:</u> April 3rd, 2016 This symposium is particularly meant to set standards for research in this multidisciplinary field by having leading scientists of the monodisciplines speaking about the latest developments in their field so we can learn how these might be used in the natural products research.

More information: http://science.leidenuniv.nl/index.php/events/learning-form-naturelearning-from-ancestors/ leidensymposium2016@gmail.com

The symposium will be of particular interests for all editors, editorial board members and reviewers in the field as they are the ones that guard the quality of the research and spread information about the standards in the research.



Universiteit Leiden

The 2015 Nobel Prize for Physiology and Medicine was for natural products and neglected diseases. Half of the prize was for discovering the novel antimalarial drug artemisinin in a traditional Chinese medicine. The other half was for bioprospecting leading to the discovery of antibiotics that can be used to fight river blindness. This is an important recognition of natural products as potential medicines, and fits well with the rapidly increasing number of publications in this field in the past years.

This symposium is particularly meant to set standards for research in this multidisciplinary field by having leading scientists of the monodisciplines speaking about the latest developments in their field so we can learn how these might be used in the natural products research.

One of the most important tools we have to improve our field is the peer review system. Getting feedback from colleagues on our work by reviewing the papers we submit is the way we can improve our research. The symposium will therefore particularly be of interests for all editors, editorial board members and reviewers in the field as they are the ones that guard the quality of the research and spread information about the standards in the research.



As a small token of appreciation of all the work done by reviewers and to help them also to learn more about the latest trends we dedicate this symposium to the reviewers of our journals and offer them a special low registration fee. The venue has a limited number of participants of about 180, that means we have to use the "first come first served" principle.

Speakers

Bert Visser – A short introduction to the Nagoya protocol and the problems that have evolved and how to solve these. What criteria should be used to evaluate scientific publications?

Tinde van Andel – How to make regional ethnopharmacological surveys more than a list of traditional uses of plants, often already known from other regions? How can such studies contribute to evidence for safe use of the traditional medicines?

Monique Simmonds – What is the future of plant names? Squencing is getting easier and cheaper, can identification be done just by sequencing? Long term storage of DNA could be as an herbarium voucher specimen, what is the role and importance of herbaria in these new possibilities?

Nicholas Moore – Primary pharmacology. How to start studies that may lead to evidence based traditional uses of medicinal plants?

B. van de Water – Primary toxicology, animal free methods for first safety tests medicinal plants.

Giovanni Appendino – Medicinal chemistry and medicinal plants. Single target versus systems pharmacology approach for understanding activity of medicinal plants and developing new leads?

Renger Witkamp – A view on the dilemma: first chemistry or activity in medicinal plants and food? **Alvaro Viljoen** – Quality control of herbal medicine with undefined active compounds. How to link relevant activity (including toxicity) with chemical profiles?

Gudrun Ulrich-Merzenich – An overview of synergy in nature in general and how to properly proof this in medicinal plants.

Meindert Danhof – Are new approaches systems pharmacology and network pharmacology, applicable in polypharmacy and medicinal plants studies?

J. van Gerven – Aspects of developing clinical trials for traditional medicines and personalized medicine.

Young Choi – Metabolomics as a tool in studies of medicinal plants, sometimes targeted methods better? How to standardize and store medicinal plant data?

Rob van der Heijden – What can we expected from future developments of equipment in the studies of biologically active compounds? The role of systems and omics approaches.

Johannes Novak – Barcoding: how should these be used in identification and quality control for contaminations? A central repository needed?

Johan Memelink – Transcriptomics as a tool to understand the biology of a system, e.g. signal transduction. How to deal with localization and time scale of the processes involved.

Pia Vuorela – Organisms have diverse defense systems against microorganisms, antibiotics being a specific example. Can we learn other approaches from nature to deal with infections.

Thomas Efferth – How can new insights in cancer research be applied for studying medicinal plants traditionally used to treat cancer patients. Reductionist versus systemic approaches?

Herman Spaink – Can zebrafish as a model in screening biological activities be coupled with both medicinal chemistry and network pharmacology and systems biology approaches to drug discovery.

Still to be announced: big data; statistics to trace fraud; *C. elegans*

Present your own work in the Mini-poster-orals session (see website) Registration is possible via this link https://www.jotform3.leidenuniv.nl/plantmeta/53055111947

http://science.leidenuniv.nl/index.php/events/learning-form-nature-learning-from-ancestors/

3. The 9th International workshop Metabolomics Basics and Applications to Plant Sciences, Leiden, 18-22 April 2016 plantsandmetabolomics@gmail.com www.plantsandmetabolomics.nl



4. The 16th Congress of the International Society of Ethnopharmacology (ISE) will held in Yulin, Guangxi, China, on 16-18 May 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



5. The 3rd World Congress of High-Tech Acupuncture and Integrative Medicine, Beijing 20-22 May 2016. http://www.bitcongress.com/HTA&IM2016/

6. The 2nd Conference on Ethnomedicine and Traditional Medicine (CETM 2016) will be held from 1-3 June 2016 in Nanjing, China. This Conference will cover issues on Ethnomedicine and Traditional Medicine. It is dedicated to creating a stage for exchanging the latest research results and sharing the advanced research methods. Paper or abstract submission due 1 Feb. 2016. http://www.engii.org/ws2016/Home.aspx?ID=738

CETM 2016 will be co-located with the following conferences:

(1) The 2nd Conference on Pharmacovigilance and Drug Safety (CPDS 2016)
www.engii.org/conf/CPDS/2016Jun/
(2) The 2nd Int'l Conference on Pharmacology and Toxicology (ICPT 2016)
www.engii.org/conf/ICPT/2016Jun/
(3) The 2nd Int'l Conference on Reproductive Medicine (ICRM 2016)
www.engii.org/conf/ICRM/2016Jun/
(4) The 2nd Conference on Plastic and Aesthetic Medicine (CPAM 2016)
www.engii.org/conf/CPAM/2016Jun/
(5) The 2nd Conference on Advances in Medical Education (CAME 2016)
www.engii.org/conf/CAME/2016Jun/

7. The 5th International Conference on the Modernization of Traditional Chinese Medicine will be held in Chengdu, China on 7-8 July 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 conference 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.

8. JNPC 2016 - 64th International Congress (Joint Meeting with ASP, AFERP, JSP, PSE and SIF) and Annual Meeting of GA. 24-28 July 2016, Copenhagen, Denmark. http://www.jnpc2016.dk/

9. The 15th Meeting of Consortium for Globalization of Chinese Medicine (CGCM) will be held in Taipei on 22-25 August 2016. The Meeting is going to be 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. You are cordially invited to attend the meeting and submit abstracts. The preliminary programme and more details will soon be announced on our website. Should you have any enquiries, please feel free to contact us.

CGCM wishes you a healthy, happy and prosperous Year of the Monkey!

Best Regards, CGCM Central Office Email: <u>centraloffice@tcmedicine.org</u> Website: <u>www.tcmedicine.org</u>

Omics and Personalized Medicine in Progress

1. Kleinstiver BP et al. **High-fidelity CRISPR–Cas9 nucleases with no detectable genomewide off-target effects.** Nature 2016; doi:10.1038/nature16526 A high-fidelity variant of Streptococcus pyogenes CRISPR–Cas9 is reported that lacks detectable off-target events as assessed by genome-wide break capture and targeted sequencing methods. <u>http://www.nature.com/nature/journal/vaop/ncurrent/full/nature16526.html?WT.ec_id</u>

2. CRISPR—is Science's 2015 Breakthrough of the Year (Marcia McNutt. Breakthrough to genome editing. Science 2015;350:1445; John Travis. Making the cut. Science 2015; 350:1456-1457): A, T, G, C: the alphabet code for the nucleotides that are the building blocks of life. Minor, but consequential, changes in this DNA coding can change gene function. Researchers have long sought better ways to edit the genetic code in cultured cells and laboratory organisms to silence, activate, or change targeted genes to gain a better understanding of their roles. This, in turn, could open the door to beneficial applications, from ecological to agricultural to biomedical. Over the years, several editing methods have been developed, but they have suffered from a lack of specificity, difficulty in assembling the molecular constituents, or concerns about off-target effects. Recently, accomplishments in genome editing across biological disciplines have been so remarkable that the method known as clustered regularly interspaced short palindromic repeats or CRISPR—is Science's 2015 Breakthrough of the Year...

CRISPR has appeared in Breakthrough sections twice before, in 2012 and 2013, each time as a runner-up in combination with other genome-editing techniques. But this is the year it broke away from the pack, revealing its true power in a series of spectacular achievements. Two striking examples—the creation of a long-sought "gene drive" that could eliminate pests or the diseases they carry, and the first deliberate editing of the DNA of human embryos—debuted to headlines and concern. Each announcement roiled the science policy world. The embryo work (done in China with nonviable embryos from a fertility clinic) even prompted an international summit this month to discuss human gene editing. The summit confronted a fraught—and newly plausible— prospect: altering human sperm, eggs, or early embryos to correct disease genes or offer "enhancements." As a genetic counselor quipped during the discussion: "When we couldn't do it, it was easy to say we shouldn't."

http://www.sciencemag.org/content/350/6267/1445.full http://www.sciencemag.org/content/350/6267/1456

3. Jef Akst. Year in Review: CRISPR Blossoms. *The Scientist* December 17, 2015. As researchers work to improve the precision gene-editing technology, the community discusses the best way to use it.

http://www.the-scientist.com/?articles.view/articleNo/44796/title/Year-in-Review--CRISPR-Blossoms/

4. **Genome editing. Editing enzyme made more precise.** *Science* http://doi.org/9q2 (2015). By tweaking the structure of an enzyme that cuts DNA, researchers have lowered the error rate of CRISPR–Cas9 gene editing. Feng Zhang at the Broad Institute of MIT and Harvard in Cambridge, Massachusetts, and his colleagues engineered the Cas9 enzyme so that it is less likely to act at DNA sites that are not targeted by the RNA molecules that guide the enzyme. The team generated several versions of Cas9 that reduced off-target errors by at least tenfold compared with unaltered Cas9 enzymes. Three of those versions were just as active at their target sites as ordinary Cas9.



Even so, the error rate may need to be reduced further for CRISPR gene editing to be used for human therapies. http://www.sciencemag.org/content/early/2015/11/30/science.aad5227

5. Edward L. Huttlin, *et al.* **The BioPlex Network: A systematic exploration of the human interactome.** *Cell* 2015;162: 425–440. An interaction network for human proteins developed from affinity purification-mass spectrometry analyses provides a basis for understanding the architecture of protein complexes and for functional characterization of over 2,500 proteins. Highlights are as follows.

- 2,594 AP-MS experiments provide 23,744 interactions involving 7,668 proteins
- The network subdivides into complexes and clusters of functionally related proteins
- Network architecture reveals subcellular localization and PFAM domain associations
- The network offers a roadmap for characterization of poorly studied proteins

Recommended Readings

1. The Lancet. Reconciling city and country: China's lessons for a divided world. Lancet 2016; 387: 311, 23 January 2016. On Jan 12, China took an important step towards health equity. The State Council announced that two of China's three segmented health insurance schemes would merge by the end of the year. This welcome decision addresses a major cause of inequality in China: the rural–urban divide that separates the socioeconomically privileged east and southeast of the country from the less developed west and far north. Harmonising rural and urban insurance schemes is essential to achieve the country's goal of truly universal health coverage by 2020.... http://dx.doi.org/10.1016/S0140-6736(16)00151-3

2. Helen Anne Curry. **The beauty of botanicals**. *Science* 2016;351:346. A naturalist takes a round-the-world romp through the plants that have helped shape human history... http://science.sciencemag.org/content/351/6271/346.full-text.pdf+html

3. Mohamad-Zobir S.Z. et al. Global Mapping of Traditional Chinese Medicine into Bioactivity Space and Pathways Annotation Improves Mechanistic Understanding and Discovers Relationships between Therapeutic Action (Sub)classes," Evidence-Based Complementary and Alternative Medicine, vol. 2016. doi:10.1155/2016/2106465. Traditional Chinese medicine (TCM) still needs more scientific rationale to be proven for it to be accepted further in the West. We are now in the position to propose computational hypotheses for the modeof-actions (MOAs) of 45 TCM therapeutic action (sub)classes from in silico target prediction algorithms, whose target was later annotated with Kyoto Encyclopedia of Genes and Genomes pathway, and to discover the relationship between them by generating a hierarchical clustering. The results of 10,749 TCM compounds showed 183 enriched targets and 99 enriched pathways from Estimation Score ≤ 0 and $\geq 5\%$ of compounds/targets in a (sub)class. The MOA of a (sub)class was established from supporting literature. Overall, the most frequent top three enriched targets/pathways were immune-related targets such as tyrosine-protein phosphatase nonreceptor type 2 (PTPN2) and digestive system such as mineral absorption. We found two major protein families, G-protein coupled receptor (GPCR), and protein kinase family contributed to the diversity of the bioactivity space, while digestive system was consistently annotated pathway motif, which agreed with the important treatment principle of TCM, "the foundation of acquired constitution" that includes spleen and stomach. In short, the TCM (sub)classes, in many cases share similar targets/pathways despite having different indications. http://www.hindawi.com/journals/ecam/2016/2106465/

4. Gobe GC, Shen K. Chinese herbal medicines and chronic kidney disease: a positive outcome in a large patient study in Taiwan. *Kidney Int* 2015 88: 1223-1226. The worth of traditional Chinese herbal medicines for chronic kidney disease (CKD) patients remains in debate. Lin *et al.* used a research database in Taiwan to identify almost 25,000 stage 3–5 newly diagnosed CKD patients who, after diagnosis, did or did not use prescribed Chinese herbal medicines for CKD. Reduced risk of end-stage kidney disease from specific traditional medicines warrants reflection on a CKD therapy resource that is largely ignored by Western medicine.



5. Lin M-Y. et al. Association of prescribed Chinese herbal medicine use with risk of end-stage renal disease in patients with chronic kidney disease. Kidney Int 2015 88: 1365-1373. The evidence on whether Chinese herbal medicines affect outcome in patients with chronic kidney disease (CKD) is limited. Here we retrospectively explored the association of prescribed Chinese herbal medicine use and the risk of end-stage renal disease (ESRD) in patients with CKD. Patients with newly diagnosed CKD in the Taiwan National Health Insurance Research Database from 2000 to 2005 were categorized into new use or nonuse of prescribed Chinese herbal medicine groups. These patients were followed until death, dialysis initiation, or till the end of 2008. Among the 24,971 study patients, 11,351 were new users of prescribed Chinese herbal medicine after CKD diagnosis. Overall, after adjustment for confounding variables, the use group exhibited a significant 60% reduced ESRD risk (cause-specific hazard ratio 0.41, 95% confidence interval 0.37–0.46) compared with the nonuse group. The change was significantly large among patients using wind dampness-dispelling formulas (0.63, 0.51-0.77) or harmonizing formulas (0.59, 0.46-0.74), suggesting an independent association between specific Chinese herbal medicines and reduced ESRD risk. The findings were confirmed using propensity score matching, stratified analyses, and three weighting methods. However, dampness-dispelling and purgative formulas were associated with increased ESRD risk. Thus, specific Chinese herbal medicines are associated with reduced or enhanced ESRD risk in patients with CKD. www.nature.com/ki/journal/v88/n6/full/ki2015226a.html

6. Lian F, *et al.* Chinese herbal medicine Tianqi reduces progression from impaired glucose tolerance to diabetes: a double-blind, randomized, placebo-controlled, multicenter trial. J Clin Endocrinol Metab. 2014;99:648-55. http://www.ncbi.nlm.nih.gov/pubmed/24432995

CONTEXT: Living in a prediabetes state significantly increases a patient's risk for both diabetes and cardiovascular disease. Tianqi capsule, containing 10 Chinese herbal medicines, is used in China for the treatment of type 2 diabetes mellitus (T2DM).

OBJECTIVE: The purpose of this study was to assess whether Tianqi prevented T2DM in subjects with impaired glucose tolerance (IGT) over the course of a 12-month treatment.

METHODS: Individuals with IGT were randomly allocated in a double-blind manner to receive Tianqi (n=210) or a placebo (n=210) for 12 months. Oral glucose tolerance tests were conducted every 3 months to assess the development of diabetes or restoration to normal glucose tolerance. All subjects received the same lifestyle education. The primary endpoint was the conversion of IGT to T2DM. Body weight and body mass index were observed. Adverse effects were monitored.

RESULTS: Of the 420 enrolled subjects with IGT, 389 completed the trial (198 in the Tianqi group and 191 in the placebo group). At the end of the 12-month trial, 36 subjects in the Tianqi group (18.18%) and 56 in the placebo group (29.32%) had developed diabetes (P = .01). There was a significant difference in the number of subjects who had normal glucose tolerance at the end of the study between the Tianqi and placebo groups (n = 125, 63.13%, and n = 89, 46.60%, respectively; P = .001). Cox's proportional hazards model analysis showed that Tianqi reduced the risk of diabetes by 32.1% compared with the placebo. No severe adverse events occurred in the trial. There were no statistical differences in body weight and body mass index changes between the Tianqi group and the placebo group during the 12-month trial.

CONCLUSIONS: Treatment with a Tianqi capsule for 12 months significantly decreased the incidence of T2DM in subjects with IGT, and this herbal drug was safe to use.

7. Xu XL, *et al.* **Renal toxic ingredients and their toxicology from traditional Chinese medicine.** Expert Opin Drug Metab Toxicol. 2015 Dec 15. [Epub ahead of print]. There have been increasing concerns regarding adverse reactions and toxicity incidents caused by traditional Chinese medicines (TCMs), among which the nephrotoxicity is particularly worrying. Areas covered: This review summarizes the ingredients with renal toxicity from some TCMs through searching the relevant literature published over the past two decades. Renal toxicity components from TCMs include aristolochic acids (AAS), alkaloids, anthraquinones and others. TCM renal



toxicity is most commonly caused by AAS and some alkaloids. AAS mainly come from Aristolochia contorta Bunge, Aristolochia manshuriensis Kom, Clematis Chinensis Osbeck, Aristolochia cathcartii Hook. Some renal toxic alkaloids are derived from Tripterygium regelii Sprague et Takeda, Stephania tetrandra S. Moore, Strychnos nux-vomica Linn. and Aconitum carmichaeli Debx. A few kinds of anthraquinones, flavonoids, and glycosides from TCMs also cause renal toxicity. All of these renal toxicity components and their associated renal toxicity, structures and toxic mechanism are introduced in detail in this review. Expert opinion: Given the complexity of the toxic components, a lot of work needs to be done to analyze the specific modes of action of toxic components in vivo and in vitro, in particular, to elucidate the molecular mechanism of toxicity, in order to reduce the occurrence of renal toxicity of TCM. http://www.tandfonline.com/doi/abs/10.1517/17425255.2016.1132306

8. Pan SY, *et al.* New perspectives on dietary-derived treatments and food safetyantinomy in a new era. *Crit Rev Food Sci Nutr.* 2015;55:1836-59. Despite the advances in science and technology and wide use of chemical drugs, dietary intervention (or food therapy) remains useful in preventing or treating many human diseases. A huge body of evidence shows that the dietary pattern or habit is also an important contributing factor to the development of chronic diseases such as hypertension, type 2 diabetes, hyperlipidemia, and cancers. In recent years, over-the-counter health foods, nutraceuticals, and plant-derived medicinal products have been gaining popularity all over the world, particularly in developed countries. Unfortunately, owing to the contamination with various harmful substances in foods and the presence of toxic food components, food-borne diseases have also become increasingly problematic. Incidents of food poisonings or tainted food have been increasing worldwide, particularly in China and other developing countries. Therefore, the government should put in a greater effort in enforcing food safety by improving the surveillance mechanism and exerting highest standards of quality control for foods. http://www.tandfonline.com/doi/full/10.1080/10408398.2011.654286

9. Nature's 10: Ten people who mattered in 2015.

http://www.nature.com/news/365-days-nature-s-10-1.19018?WT.ec_id=NATURE-

20151224&spMailingID=50325468&spUserID=ODk3ODc2MDQwMDgS1&spJobID=823531954&spReportId=ODIzNTMx OTU0S0

10. *Nature Medicine.* The Yearbook 2015. Newsmakers this year includes some standout personalities, from a price-hiking, former hedge fund manager to a persistent and now-well-recognized immunotherapy advocate.

http://www.nature.com/nm/journal/v21/n12/full/nm1215-1379.html

Nature Medicine. **2015 in Review.** In the past year, we have witnessed a flurry of debates in the biomedical arena, from the uproar surrounding price gouging to the ethical hand-wringing over the use of CRISPR-Cas9 technology for genome editing. Beyond these topics, 2015 also made news with vaccine mandates, epigenetic mapping and even an accidental shipment of anthrax. http://www.nature.com/nm/journal/v21/n12/full/nm1215-1380.html

Nature Medicine. **Drugs that made headlines in 2015.** This year's newsworthy drugs made strides against cancer, heart disease and more. Some drugs made headlines for their inability to succeed in clinical trials, and others are still waiting, stuck in limbo, for a chance to move forward in the pipeline. Here is a look at a few of them. http://www.nature.com/nm/journal/v21/n12/full/nm1215-1382.html

Nature Medicine. Notable advances 2015. This year saw a whirlwind of insights gleaned into topics ranging from heart cell proliferation to organoid modeling. Here are a few of the research papers detailing some of these intriguing discoveries. http://www.nature.com/nm/journal/v21/n12/full/nm1215-1384.html

11. **Medicinal plants—the next generation,** published in the *Lancet* 2016;387:220–221, by Daniel R George, Wade Edris, Ryan Hanson, Falisha Gilman. http://dx.doi.org/10.1016/S0140-6736(16)00052-0



Invitations from journals

1. 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

2. Xuetao Cao, Helena Hui Wang, Selina Lo, William Summerskill, Richard Horton. The Lancet 386: 2377. A call for abstracts from China. ... 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

3. Justine Davies, Helena Wang, Weiping Jia. **China Diabetes Society 2016: a call for papers.** The Lancet 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... <u>http://dx.doi.org/10.1016/S0140-6736(15)01119-8</u>

Introducing the Chinese Lantern Festival ("Yuanxiao Festival" 元宵节)

http://wannianli.tianqi.com/news/120012.html

The Lantern Festival falls on the 15th day of the 1st lunar month, usually in February or March in the Gregorian calendar. As early as the Western Han Dynasty (206 BC-AD 25), it had become a festival with great significance. This day's important activity is watching lanterns. Throughout the Han Dynasty (206 BC-AD 220), Buddhism flourished in China. One emperor heard that Buddhist monks would watch sarira, or remains from the cremation of Buddha's body, and light lanterns to worship Buddha on the 15th day of the 1st lunar month, so he ordered to light lanterns in the



imperial palace and temples to show respect to Buddha on this day. Later, the Buddhist rite developed into a grand festival among common people and its influence expanded from the Central Plains to the whole of China.

Till today, the lantern festival is still held each year around the country. Lanterns of various shapes and sizes are hung in the streets, attracting countless visitors. Children will hold self-made or bought lanterns to stroll with on the streets, extremely excited. "Guessing lantern riddles" is an essential part of the Festival. Lantern owners write riddles on a piece of paper and post them on the lanterns. If visitors have solutions to the riddles, they can pull the paper out and go to the lantern owners to check their answer. If they are right, they will get a little gift. The activity emerged during people's enjoyment of lanterns in the Song Dynasty (960-1279). As riddle guessing is interesting and full of wisdom, it has become popular among all social strata.

People will eat yuanxiao, or rice dumplings, on this day, so it is also called the "Yuanxiao Festival." Yuanxiao also has another name, tangyuan. It is small dumpling balls made of glutinous rice flour with rose petals, sesame, bean paste, jujube paste, walnut meat, dried fruit, sugar and edible oil as filling. Tangyuan can be boiled, fried or steamed. It tastes sweet and delicious. What's more, tangyuan in Chinese has a similar pronunciation with "tuanyuan", meaning reunion. So people eat them to denote union, harmony and happiness for the family.



导读:元宵节是<u>农历</u>正月的第十五天,这是新年的第一次满月,象征着和睦和团圆。元宵节是春节的一个重要组成部分,也象征着春节长假的正式结束。以下是<u>万年历</u>带来的关于元宵节的英文介绍,快点来看看用英文是怎 么介绍元宵节的。

每年农历的正月十五日,春节刚过,迎来的就是中国的传统节日--元宵节。元宵主要的活动就是看灯。东汉明 帝时期,明帝提倡佛教,听说佛教有正月十五日僧人观佛舍利,点灯敬佛的做法,就命令这一天夜晚在皇宫和 寺庙里点灯敬佛,令士族庶民都挂灯。以后这种佛教礼仪节日逐渐形成民间盛大的节日。该节经历了由宫廷到 民间,由中原到全国的发展过程。

直到今天,元宵点灯的习俗仍然在中国的各地流传的,各式各样美丽的花灯在这一天都会点亮,孩子们提着自制的灯笼走街串巷,非常高兴。猜灯谜也是元宵节的一项重要活动,花灯的主人会将谜面写在灯笼上,挂在门口,如果有人可以猜中,就能得到小小的礼物。这项活动最早起源于宋朝,因为谜语能启迪智慧又饶有兴趣, 所以流传过程中深受社会各阶层的欢迎。

Acknowledgements

Contributions from Prof. Rudi Bauer (Graz), Prof. Pierre Duez (Mons), Dr. Tai-Ping Fan (Cambridge), Prof. De-an Guo (Shanghai), Prof. Aiping Lu (Hong Kong), Prof. Rob Verpoorte (Leiden), and Dr. Qihe Xu (London) are gratefully acknowledged.