

The October/November 2014 Newsletter of The GP-TCM Research Association



 **Editorial**

Simple and passionate

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At the centre of the FP7 GP-TCM Consortium and the GP-TCM RA, I have enjoyed and learnt very much from these groundbreaking initiatives, ever since the conception of the FP7 GP-TCM project in 2007. I am truly lucky to have these brilliant opportunities and am heartily grateful for all the excellent support that I have received from our lovely members and friends.

A big THANK YOU rightly goes to you, GP-TCM and GP-TCM RA members – wherever you are! In particular, I'd like to thank our Founding President and Founding President-Elect, Professors Rudolf Bauer and De-an Guo. Without their visions, commitments and excellent leadership, it would not have been possible for the GP-TCM RA to be as is, an exciting, respected and sustainable platform dedicated to good practice and international collaboration in TCM research. I'd like to thank Dr Tai-Ping Fan and Professor Peter Hylands for their comradeship and brotherhood, which have been indispensable for me to stand strong, to tide over highs and lows, and to magically turn the extremely complex into the simple. I'd like to thank Professors Kelvin Chan, Pierre Duez, Aiping Lu, Nicola Robinson, Monique Simmonds, Rob Verpoorte and Vivian Wong, who are lovely and considerate team players on the Board of Directors (BoD). So talented and committed, they have made my jobs in convening BoD meetings, minutes-taking and Newsletters drafting less of a task, more of great fun...

As you have noticed from the recent GP-TCM RA elections, I have decided to retire from the BoD of the GP-TCM RA. After all these exciting years, I have felt for some time that I should take a break, reflect and move on to some overdue matters. In particular, I wish to dedicate more time to develop my interests in chronic kidney disease, anti- and pro-fibrotic botanicals, and the research and teaching programmes of the *King's Centre for Integrative Chinese Medicine*, an initiative of King's College London and its NHS partners that Prof. Peter Hylands and I co-direct.

To my delight, although I will leave the BoD, most BoD members have been re-elected and Prof. Thomas Efferth will be joining the Board as new blood. Thus, the new BoD will enjoy both affluent experience and some new ideas.

I do share a strong feeling with the current BoD that many excellent candidates in these elections have not won a place on the Board, but nonetheless have a lot of unique expertise and resources to offer. Many of them are brilliant scientists, educationists and leaders – I truly enjoyed reading their election statements and sincerely hope that they will join me to participate in future GP-TCM RA initiatives, through which their expertise and visions will become better known by members and, hopefully, two years later they can submit their bids again and win seats on the Board then.

To the newly elected BoD, however, it is no time to claim victory yet. To run such a young society will prove to be hard work. For this reason, in particular, I'm truly grateful to the new Board for their courage to take on the challenges and for their willingness to share their time, network and expertise with the Association and our members.

Along with the hard work, there comes fun, which has been faithfully documented by the GP-TCM and GP-TCM RA Newsletters (<http://www.gp-tcm.org/news-list/>) ever since October 2007. When reading the first 23 issues that I edited by June 2008 (<http://www.gp-tcm.org/news-list/#year2008>), I am still thrilled by the simplicity and passion that we had shared!

In the coming two years, as a Life Member, I will stay firmly with our Association with the same simplicity and passion. I will remain an active contributor to future newsletters and will wholeheartedly support the missions of the Association and its Board under the leadership of Professor De-an Guo. I also sincerely invite your proactive participation!

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News from the GP-TCM RA

1. Mons Meeting Meeting Website Now Open!

The 4th GP-TCM RA Annual Meeting: Joint Meeting of the GP-TCM Research Association, the Traditional Chinese Medicine (TCM) Chemistry Specialty Committee and the TCM Pharmaceutical Analysis Specialty Committee of the World Federation of Chinese Medicine Societies (WFCMS) will be held in Mons, Belgium, on 13-15 July 2015.



The meeting provides a platform for regulatory-industrial-academic exchanges and potential research collaborations, on various frontiers of TCM.

Now, meeting website is open: www.umons.ac.be/tcm-mons2015

The meeting website has updated information on the scientific and local organising committees, as well as the following information:

- Flyer
- Abstract submission form
- Preliminary program
- Registration information
- Registration form and online payment
- Practical information
- Presentation of the town of Mons
- Accommodation
- Venue

With the opening of the website, **invitations for abstract submission, registration and hotel bookings are also open.** First come first served!

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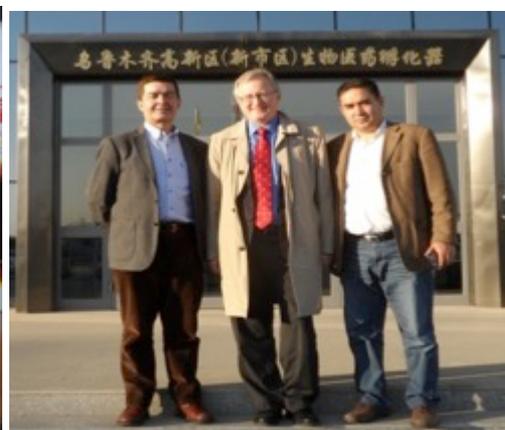


2. Wall Street Journal introduces the science of TCM to readers in the USA: Work of GP-TCM RA Honorary Members Professor Yung-Chi Cheng (Yale University, USA), Professor Jan van der Greef (University of Leiden, the Netherlands) and the FP7 GP-TCM Consortium were introduced, among others. Dr. Qihe Xu, the Coordinator of the FP7 GP-TCM Consortium and Vice President of the GP-TCM RA received interview.

<http://online.wsj.com/articles/a-push-to-back-traditional-chinese-medicine-with-more-data-1415036616>

<http://www.foxnews.com/health/2014/11/04/researchers-push-to-back-traditional-chinese-medicine-with-more-data/>

3. President Rudi Bauer's travel log. Prof. Bauer attended the 3rd International Congress of Traditional Chinese Medicine, Modern Medicine and Traditional Uighur Medicine in Urumqi (Xinjiang Province, China) from 15-16 Oct. 2014 and gave a lecture on "Holistic approach in herbal medicine research – what needs to be considered?" He also attended discussions for establishment of a Silk Road Medicine Academy.



Besides he visited the CAS Key Lab. of Chemistry of Plant Resources in Arid Region and the Xinjiang Technical Institute of Physics & Chemistry CAS and met with its Director, Prof. Dr. Haji Akber Aisa.

He also attended the 7th Shanghai International Conference on Traditional Chinese Medicine and Natural Medicine which was organized by Guo De-an and held in Shanghai on 16-17 Oct., 2014. He gave a lecture on "How to deal with complexity in TCM research". Several other members of GP-TCM RA attended as well.



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Prof. Bauer was also a member of Austrian scientific delegation during the visit of Austrian Federal Minister of Science, Research and Economy Reinhold Mitterlehner in Beijing on 20-21 Oct. 2014, and promoted funding of TCM Research.



Rudi Bauer with Austrian Vice Chancellor and Federal Minister of Science, Research and Economy Reinhold Mitterlehner, and Austrian Ambassador in China, Irene Giner-Reichl



Rudi Bauer attended a Sino-Austrian TCM Research Project "Prevention and Early Intervention of Chronic Diseases by TCM" meeting in Vienna on 25 Oct. 2014. He co-ordinates this 3-year project between 9 Austrian research groups and partners mainly from the China Academy of Chinese Medical Sciences.

Rudi Bauer attended the 17th International Congress of Oriental Medicine (ICOM) held in Taipei, during 1-3 Nov. 2014 and gave a lecture on "How to deal with complexity of Chinese herbal medicine?" On 3 Nov., he was invited by Jack Wu, President of 3i Agriculture & Biotech Group to visit his company in Taipei. He also visited Taipei Medical University invited by Professor Huang, Hsu-Shan. Subsequently on 4 Nov., he visited China Medical University in Taichung on invitation of Prof. Yuan Shiun Chang and met the President and Vice-Presidents of the University. He gave a seminar on "Introduction into Research Activities of TCM Research Center Graz" and toured the university campus and the University Hospital.



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On 8 Nov., Rudi Bauer attended the 2014 International Summit on Innovative Drug Discovery - Charting the Course of Standardization of Chinese Materia Medica at Hong Kong Baptist University, Hong Kong, and gave a talk on "European monographs about herbal medicines". The symposium was organized by Lu Aiping and also attended by Guo De-an and Kelvin Chan.

On 13-14 Nov., Rudi Bauer attended the international symposium "Natural Products and Drug Discovery – Future Perspectives" in Vienna. This meeting was the final symposium of the Austrian National Research Network "Drugs from Nature Targeting Inflammation" during which many Chinese medicinal plants have been investigated. <http://www.uibk.ac.at/pharmazie/pharmakognosie/dnti/>



The research team of the Austrian National Research Network "Drugs from Nature Targeting Inflammation"

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3. Professor Zhao Zhongzhen awarded the Medal of Honour by HKSAR Government



On 1 July 2014, Dr. Zhao Zhongzhen, Associate Dean and Chair Professor of the Hong Kong Baptist University School of Chinese Medicine (HKBU-SCM), was awarded the Medal of Honour by the Hong Kong Special Administrative Region (HKSAR) Government in recognition of his achievements in research and education in Chinese medicine. Professor Zhao has made valuable contributions to the development of Chinese medicine industry including his participation in the Chinese Medicine Council of Hong Kong and the Chinese Medicine Development Committee.

Professor Zhao said that the University and SCM provide a good platform for the development of Chinese medicine in Hong Kong and the award shows that the HKSAR Government attaches importance to the Chinese medicine industry. He hopes that the Chinese medicine industry will continue to gain momentum in the future.



News from Europe

 1. **The Future of Europe is Science:** The European Commission President's Science & Technology Advisory Council (STAC), established to provide scientific advice and evidence for the formulation of EU policies and initiatives, has published a report *The Future of Europe is Science*.

The report begins with a foreword from the current European Commission President, José Manuel Barroso, which highlights the significance of Europe scientific excellence, but stresses the importance of turning new knowledge into an advantage to help Europe and its citizens. Horizon 2020 is, of course, the EU's current main mechanism to achieve this.

This report, which builds on the first STAC report in 2013, focuses on scientific foresight in Europe

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and emphasises the need to develop systematic foresight activities to help policy-makers anticipate potential opportunities and manage threats and risks appropriately. The STAC's views in this report are informed by the development of the European Strategy and Policy Analysis System (ESPAS) project, the activities of the Commission's new Foresight Network, and a Eurobarometer survey of citizen's views on future priorities for science, engineering and technology (SET). The report is thus structured to reflect the science and technology priorities for citizens given in the Eurobarometer. These priorities, for which challenges, opportunities and recommendations are given, are:

- Health and medical care (pages 8-11);
- Jobs, ICT and learning;
- Environment, climate and energy.

The report concludes with some reflections on foresight and investment in R&D. In terms of foresight, it is accepted that the future can never be predicted, but foresight activities need to be multidisciplinary and adopt modelling and simulation. Lastly, long-term, public investment in R&D will ensure that Europe has the right skills, technologies and international collaborations to tackle societal challenges. To read the report in full, please follow the link below.

http://ec.europa.eu/commission_2010-2014/president/advisory-council/documents/the_future_of_europe_is_science_october_2014.pdf

2. The New European Commission, headed by Jean-Claude Juncker from Luxembourg, took office on 1st November. The new European Commission comprises 28 Commissioners (one from each EU Member State) who will serve for five years, until 31 October 2019. The Juncker Commission has the following ten priorities:

- A New Boost for Jobs, Growth and Investment;
- A Connected Digital Single Market;
- A Resilient Energy Union with a Forward-Looking Climate Change Policy;
- A Deeper and Fairer Internal Market with a Strengthened Industrial Base;
- A Deeper and Fairer Economic and Monetary Union;
- A Reasonable and Balanced Free Trade Agreement with the U.S.;
- An Area of Justice and Fundamental Rights Based on Mutual Trust;
- Towards a New Policy on Migration;
- A Stronger Global Actor; and
- A Union of Democratic Change.

http://ec.europa.eu/commission/2014-2019_en

New developments in China: *Science and Nature* observations

1. China opens translational medicine centre in Shanghai. First of five linked institutes aims to capitalize on basic research investments.

http://www.nature.com/news/china-opens-translational-medicine-centre-in-shanghai-1.16238?WT.ec_id=NATURE-20141030

2. The government's efforts to crack down on corruption in illegal distribution and misuse of scientific funding (30th and 16th October 2014)

http://www.nature.com/news/pillars-of-reform-1.16230?WT.ec_id=NATURE-20141030

<http://www.nature.com/news/scientists-caught-in-chinese-anti-corruption-sweep-1.16152>

3. Show me the money (24th October 2014)

<http://www.sciencemag.org/content/346/6208/411.summary?rss=1>

Meeting reports

1. The 17th GP-TCM RA Board of Directors (BoD) Teleconference was held as a Skype teleconference at 9:00-11:00 BST = 10:00-12:00 CEST = 16:00-18:00 Beijing Time, Friday 10 Oct. 2014. The meeting was attended by Rudolf Bauer (Chair), Kelvin Chan, Pierre Duez, Tai-Ping Fan,

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De-An Guo, Aiping Lu, Rob Verpoorte, Vivian Wong and Qihe Xu (Minutes). Apologies were received from Peter Hylands, Nicola Robinson and Monique Simmonds. The meeting received the presidential report by Prof. Bauer, who congratulated newly elected President-Elect and BoD (2015-2016) and the attendees joined Prof. De-An Guo in discussions on the strengths and weaknesses of the newly elected BoD (2015-2016) and on how to strengthen it by co-opting two BoD members. Prof. Bauer thanked all candidates for participation in these elections and hope that they will continue to support in different capacities. He thanked in particular Prof. Ian Sutherland and the team of AssociAction Enterprises who ran the election most professionally on behalf of GP-TCM RA. Dr Qihe Xu reported that the FP7 GP-TCM project was chosen as a case for study of "Network Analysis of FP7 Participation" by Oxford Research, an international agency authorised by the European Commission because the project "has strongly contributed to international research relations between the EU and third countries" in the HEALTH sub-programme. He coordinated telephone interviews of Senior GP-TCM / GP-TCM RA members in late September and early October. The interviews led to a 10-page report to the commission by the agency. He reiterated his warmest congratulations to the newly elected President-Elect and BoD (2015-2016) and his firm support to the new Board under the leadership of Prof. De-an Guo. Dr Tai-Ping Fan led the discussions of Secretariat business, including membership and payments, newsletters, website, experience and lessons of the elections, and progress of the Science Special Feature on Traditional Medicine. Led by Prof. Pierre Duez, issues on the 2015 Mons meeting were discussed. The theme of the meeting "Traditional Medicine: Science meets Culture" was approved and the composition of the Scientific committee was decided. The BoD decided to help scrutinize the meeting website after the meeting so that it can be launched soon. Furthermore, on GP-TCM RA Interest Groups (IG), the BoD agreed that the IGs are the structures that can really mobilise members to be involved beyond the BoD and the Annual Meetings. Thus, IG Chairs/Co-Chairs should keep their long-term and short-term objective and plans in mind and develop initiatives in a planned and coordinated manner. Finally, the BoD agreed on a series of action points and decided that the next BoD teleconference will be held on 18th November 2014.

2. The 18th GP-TCM RA BoD Teleconference was held as a Skype t/c at 9:15-11:05 GMT on Tuesday 18 November 2014. The meeting was attended by Rudolf Bauer (Chair), Kelvin Chan, Pierre Duez, Tai-Ping Fan, De-An Guo, Peter Hylands, Aiping Lu, Nicola Robinson, Rob Verpoorte, Vivian Wong and Qihe Xu (Minutes). Apology was received from Monique Simmonds. The Chairman welcomed everyone. The minutes of the 17th t/c and the agenda of the 18th t/c were approved. The meeting received reports from all Executive Council Members and reviewed progresses against the action points of the 17th t/c. In President's Report, Prof. Rudolf Bauer highlighted his series of lectures and academic visits in Urumqi, Shanghai, Beijing, Vienna, Taipei and Hong Kong, where he promoted GP-TCM RA and the 4th Annual Meeting to be held in Mons in July 2015. He and Prof. Nicola Robinson informed the Board about the open-access EuJIM editorial on and abstracts of the 3rd Annual Meeting held in Nanjing (July 2014). Prof. Bauer suggested that the 19th BoD t/c would be held in mid-December. On behalf of the BoD (2015-2016), Prof. De-an Guo proposed to co-opt Prof. Peter Hylands in the BoD (2015-2016) and the nomination was accepted by Prof. Hylands, who agreed to continue to serve as the Treasurer in the coming two years. Prof. Guo also attended many high-profile activities through which he had promoted the Association. For instance, he highlighted an important French-Chinese summit dedicated to collaboration in TCM research recently held in Kunming, where he was informed of the continued support of the GP-TCM RA by the Chinese government. Dr. Qihe Xu added that he recently received an interview by the *Wall Street Journal*, in which report the good practice guidelines developed by the FP7 GP-TCM consortium and the GP-TCM RA was disseminated. In the Report of the Treasurer, Prof. Peter Hylands updated the finance of the Association and discussed means to further streamline future financial

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management. Dr. Tai-Ping Fan updated his action points of the 17th BoD t/c by e-mail before the t/c and updated on the exciting developments of the Special Feature on Traditional Medicine published by *Science*/AAAS Custom Publishing. The BoD received reports from the 2015 Annual Meeting Chairman, Prof. Pierre Duez, and discussed in detail. Finally, the BoD emphasised the importance of Interest Groups in the next phase of development of the GP-TCM RA and approved Prof. Aiping Lu's nomination of Professor Jingyan Han as his Co-Chair of the Clinical Studies Interest Group.

Future meetings:

1. **The 8th International Workshop Metabolomics Basics and Applications to Plant Sciences, Leiden, The Netherlands, 13-17 April, 2015.** Please address enquiries to: plantsandmetabolomics@gmail.com.

www.plantsandmetabolomics.nl

2. **The 4th GP-TCM RA Annual Meeting: Joint Meeting of the GP-TCM RA, the TCM Chemistry Specialty Committee and the TCM Pharmaceutical Analysis Specialty Committee of the WFCMS will be held in Mons, Belgium, on 13-15 July 2015:** See page 2.

www.umons.ac.be/tcm-mons2015

Recommended readings:

Now 1. ***Nature, Science* and 30 other major journals unite to develop guidelines to promote reproducibility in preclinical biomedical research.** 30 major journals, representatives from funding agencies, and scientific leaders assembled at the AAAS headquarters in June of 2014 to discuss principles and guidelines for preclinical biomedical research. The gathering was convened by the U.S. National Institutes of Health (NIH), *Nature*, and *Science*. Editorial by Marcia McNutt, Editor-in-Chief of Science Journals is published by both *Nature* and *Science*, and the agreed guidelines have been published on the NIH website:

Marcia McNutt's editorial: <http://www.sciencemag.org/content/346/6210/679.full#fn-1>

The attendees agreed on a common set of Principles and Guidelines in Reporting Preclinical Research: <http://www.nih.gov/about/reporting-preclinical-research.htm>

Now 2. ***European Journal of Integrative Medicine* reports** on The 3rd Annual meeting of the GP-TCM RA and the 5th Annual Conference of the Speciality Committee of the TCM Pharmaceutical Analysis of the WFCMS, which was held in Nanjing, China, in July 2014. The report includes:

1. An editorial entitled *The therapeutic value of natural products derived from Chinese medicine—A systems based perspective* by Professors De-An Guo, Rudolf Bauer and Nicola Robinson.

<http://www.europeanintegrativemedicinejrn.com/article/S1876-3820%2814%2900300-X/fulltext>

2. Abstracts published at the meeting: <http://www.sciencedirect.com/science/journal/18763820/6/6>

Now 3. **Searching for science in India's traditional medicine**, by Priyanka Pulla. *Science* 24 October 2014: The Indian government is pushing hard to show that Indian traditional medicine, or Ayurveda, is based on sound science. With hefty government support, the nascent field of "ayurgenomics" has roped in dozens of researchers from leading institutions and it has published papers on the genetic bases of Ayurvedic traits, some of them in leading journals. But the effort has also stirred a rising chorus of criticism. Skeptics point to failed attempts to derive drugs from the herbal concoctions used in Ayurveda and other schools of traditional medicine. And some say the Ayurvedic premise of body types is unscientific, which undermines any studies that rely on them. <http://www.sciencemag.org/content/346/6208/410.short>

Now 4. **Moving forward beyond the "Rule of 5":** A famous test, colloquially called the "Rule of 5," was developed by Chris Lipinski and colleagues from Pfizer in 1997. The rule sets down four

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properties that a synthetic i.e. man-made molecule should obey if it is to have a chance of becoming a successful drug. However, the rule doesn't normally work for naturally-occurring products, that is, drugs with active ingredients that come from nature (penicillin, for example, which is produced by *Penicillium* fungi). Nearly half of new drugs are based on naturally occurring substances.

In 2013, researchers at The University of Manchester helped create a ground-breaking computer model that replicates how the human metabolic network works. A kind of 'instruction manual' for how our metabolism interacts with human diseases, this model means scientists now know most of the small molecules that are used by our bodies as part of our normal biochemistry.

http://www.dddmag.com/news/2014/10/discovery-helps-spot-what-makes-good-drug?et_cid=4186194&et_rid=45532557&type=cta

5. Eat your greens: Mustard oil glycosides, also known as glucosinolates, and their breakdown products are responsible for the flavor and nutritional qualities of many vegetables including broccoli, radishes, and cabbage. Some of these compounds can, conversely, be detrimental in some ways to health, it all depends on the preparation, according to new research from Franziska Hanschen, of the Leibniz-Institut für Gemüse- und Zierpflanzenbau, Grossbeeren, Germany. Glucosinolates comprise a glucose molecule and a variety of sulfur-containing groups. Many are known to be protective against inflammation and cancer. Others are associated with making essential amino acids less bioavailable in people who eat a lot of cabbage, for instance. But, Hanschen explains that different methods of preparation can lead to very different profiles of breakdown products. The early work has been something of a revelation but he adds that, "Further systematic studies of the chemical mechanisms involved and the substances present are necessary."

<http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291521-3773/homepage/press/201437press.html>

6. Interesting articles chosen by President Rudolf Bauer

Teschke R, Wolff A, Frenzel C and Schulze J. Review article: herbal hepatotoxicity - an update on traditional Chinese medicine preparations. *Aliment Pharmacol Ther* 2014;40:32-50

Wiebrecht A, Kalg A. Herbal hepatotoxicity - an update on traditional Chinese medicine preparations (letter). *Aliment Pharmacol Ther* 2014;40:737-8

Hirasaki S, Matsumura K. Development of phlebosclerotic colitis under treatment with Chinese herbal therapy. *Intern Med* 2014;53:1709-10

Tsai YT, Lai JN and Wu CT. The use of Chinese herbal products and its influence on tamoxifen induced endometrial cancer risk among female breast cancer patients: A population-based study. *J Ethnopharmacol* 2014;155:1256-62

Hsieh CF, Huang SL, Chen CL, Chen WT, Chang HC and Yang CC. Non-aristolochic acid prescribed Chinese herbal medicines and the risk of mortality in patients with chronic kidney disease: results from a population-based follow-up study. *BMJ Open* 2014;4:e004033

7. Experts call for strict standards to internationalize TCM

<http://www.shanghaidaily.com/metro/Experts-call-for-strict-standards-to-internationalize-TCM/shdaily.shtml>

Acknowledgements

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