

GP-TCM Newsletter October-November 2011 Issue

Special tribute and memory to one of the greatest innovators of our times:

Steve Jobs: Follow your heart: Stay hungry, stay foolish

<http://www.youtube.com/watch?v=Ip0hG7FXVgs&feature=youtu.be>

Stop press!

We are delighted to announce that the following organisations have agreed to financially support the GP-TCM Congress (p. 3) as co-organisers or sponsors: Capital Medical University (Beijing), China Medical University (Taichung), China Academy of Chinese Medical Sciences (Beijing), Chengdu University of TCM (Chengdu), Taiji Group (Chongqing), Yiling Pharmaceutical Co. Ltd. (Shijiazhuang). Thank you all for your generous support and commitment to the excellence of TCM. More good news to follow.

Express News:

1. European Directorate for Quality Medicines & Healthcare (EDQM) Signed Collaboration Agreement with the Chinese Authorities: On 24th June 2011, the EDQM signed a trilateral Memorandum of Understanding (MoU) with the State Administration of Traditional Chinese Medicine of the People's Republic of China (SATCM) and its National Key Institute of TCM Quality Control (NKI-TCM). The SATCM is the state organisation of the Chinese Ministry of Health responsible for the development of TCM and ethnic medicines. The NKI-TCM is a Chinese national key research institute, established with full support of the SATCM. The MoU sets forth the basis upon which the parties will provide for mutual assistance and exchange of information in the elaboration of quality standards for TCM herbal drugs. Under the terms of the MoU, the parties commit to strengthen the establishment of high quality standards for TCM in Europe to protect patient safety, and to further promote the modernisation of TCM so that patients can benefit from its preventive and therapeutic effects. In addition to the observership of the State Food and Drug Administration (SFDA) to the European Pharmacopoeia Commission and the MoU signed between the EDQM and the National Institutes for Food and Drug Control (NIFDC) of the People's Republic of China in 2010, this is a further step to provide appropriate quality standards for TCM that are being increasingly used by patients in Europe.

http://www.edqm.eu/medias/fichiers/New_collaboration_with_Chinese_authorities.pdf

2. First Anniversary of the Innovation Europe Flagship Initiative: The 9th October 2011 was the first anniversary of the [European Union's Innovation Europe Flagship Initiative](#). For that purpose, the European Commission has published a [press release](#) announcing the achievements so far; a [short video](#) in which 10 persons give their opinions of what innovation means; and [four short science fiction stories](#) speculating on how the world may change over the next decade.

http://ec.europa.eu/research/innovation-union/index_en.cfm

http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=videos

3. CAMbrella, another FP7 consortium, highlights GP-TCM in its website:

<http://www.cambrella.eu/home.php?il=155&l=deu>

Important meeting reports:

1. A Joint Workshop for WP1, WP3 & WP7 with experts from the EDQM Working Party for TCM responsible for drafting TCM monographs for the European Pharmacopoeia, was held in Strasbourg on 29th September 2011: The Joint Workshop was organised by Prof. Kelvin Chan (Beneficiary member of WP1, WP3, and WP7 and Co-Chair of the SOP Panel for Literature of the GP-TCM) with the help of Prof. Rudi Bauer and Prof. Gerhard Franz (both are non-beneficiary members of GP-TCM). The theme of workshop was "Quality control of Chinese materia medica (CMM) from a regulatory & toxicological perspective", a topic followed up from the discussion at the 2nd GP-TCM Annual General Meeting in Braga, July 2011. The participants included: Prof. Rudolf Bauer, Prof Kelvin Chan, Prof Pierre Duez, Dr. Tai-Ping Fan, Prof. Gerhard Franz, Mr. Alan Koo, Mr. Erich Stoeger, Prof. Mei Wang, Prof. Liz Williamson, Dr. Kim Wuthold, and Dr. Qihe Xu.

Key points of discussion focused firstly on: (i) regulatory/monographic control on quality issues of CMM decoction pieces and granules and TCM herbal products in EU and China; (ii) research issues on toxicogenomics/Omics-related safety issues/approaches in CMM/granules in the morning sections. Feedbacks in the afternoon section addressed on: (i) GP-TCM or its continuum may commence dialogue with granule manufacturers to see if an industry standard can be set to comply with the pharmacopoeia monographs on granules in the future. QC techniques for crude CMM/decoction pieces may not be suitable for granules; (ii) Comparison and toxicological evaluation

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between compositions of granules and CMM; (iii) engaging various members in drafting /reviewing for the JEP Special Issues in particular for WP7 (the regulatory section involving worldwide contributions) and WP3 (studies to demonstrate the reduced toxicity of aconite after processing, boiling in water and mixing with other herbs using Sinitang (consisting of Aconiti Lateralis Radix Praeparata, Zingiberis Rhizoma and Glycyrrhizae Radix et Rhizoma Praeparata Cum Melle), a classical TCM formula as an example.



Group photo from the Joint Workshop

Mei Wang, Alan Koo, Qihe Xu, Kelvin Chan, Rudi Bauer, Tai-Ping Fan, Pierre Duez, Erich Stoeger, Kim Wuthold, Liz Williamson, Anna Rita Bilia

2. The 2011 Shanghai International Conference on TCM and Natural Medicine (<http://www.s-tcm.com/>) was held on 22nd - 23rd October 2011. The meeting was opened by officers from China State Administration of TCM (SATCM), Shanghai Municipal Government and senior representatives of the scientific community. In addition to the traditional focus on Chinese materia medica and natural medicine, this year's programme also included the theoretical, experimental and clinical research of TCM. GP-TCM members Prof. De-an Guo and Prof. Wei-dong Zhang played important roles in the local organising team. Prof. Rudolf Bauer and Dr. Qihe Xu introduced their work and the achievements of the GP-TCM consortium at the meeting. Dr. Xu accepted interview by Shanghai Science and Technology Post after the meeting (the report was in Chinese): <http://www.duob.cn/FileUploads/pdf/111104/kj11045.pdf>.

3. Members of GP-TCM met in Neumarkt, Germany (31st October 2011) and Henley-on-Thames, UK (24th - 25th November 2011) to discuss strategies for the next ITN application. As part of the GP-TCM consortium's continuing efforts to establish further links/collaboration with expert organisations and initiate future funding applications for joint studies, the group is preparing towards submitting the third TEST-

GP project proposal (Initial Training Network, FP7 Marie Curie Actions). As a result of this, a meeting organised by Dr. Qihe Xu (GP-TCM Coordinator; KCL) and hosted by Dr. Jutta Haunschild (TEST-GP Full Partner; Bionorica SE) was held on 31st October 2011 at Bionorica SE premises in Neumarkt, Germany. The meeting was attended by Profs. Rudolf Bauer (University of Graz, Austria: Non-beneficiary GP-TCM member of WP10), Peter Hylands (KCL; WP4 Coordinator), Drs. Jutta Haunschild, Halil Uzuner (KCL) and Qihe Xu. It focused on number of issues related to the TEST-GP proposal: the two previous submissions in 2010 and 2011, the European Commission's evaluation results for the 2011 application, weaknesses and strengths, to-do items, partnership discussions, project's focus, modules and PIs of the next application, roles of full partners and possible associated partners, as well as how to develop a compact research training model with pharmaceutical companies. During their visit to Bionorica SE, the KCL Team was given a tour of company's production facilities and laboratories. In addition, WP10-related management discussions also took place.

To follow up, a more intense meeting was held in Henley Business School on 24th - 25th November, attended by Prof. Rudolf Bauer, Drs. Jutta Haunschild, Qihe Xu and Halil Uzuner, Prof. Monique Simmonds (Royal Botanic Gardens, Kew, UK; WP1 Coordinator), Dr. Hye-Kyong Kim (Leiden University, the Netherlands; representing Prof. Rob Verpoorte, WP1 Deputy Coordinator), Prof. Pierre Duez (Université Libre de Bruxelles, Belgium; WP3 Co-Coordinator), Prof. Olavi Pelkonen (University of Oulu, Finland; Non-beneficiary GP-TCM member of WP3), Prof. Verena Dirsch (University of Vienna, Austria; WP4 Deputy Coordinator), Dr. Tai-Ping Fan (University of Cambridge; WP7 Co-Coordinator). Through these two meetings, a new strategy has been agreed for strengthening our new ITN application in early 2012.



L to R: Tai-Ping Fan, Hye-Kyong Kim, Verena Dirsch, Rudi Bauer, Monique Simmonds, Pierre Duez, Olavi Pelkonen and Qihe Xu

Upcoming events and activities:

1. The GP-TCM Final Conference will be held in Kerkrade, the Netherlands, on 12th – 13th April 2012. The final conference of the consortium, which aims to disseminate the work and findings of the project, will take place in Kerkrade, the Netherlands on 12th – 13th April 2012. Kerkrade is located close to Belgium and Germany and can be easily reached by public transport or by car. From Schiphol airport (Amsterdam), it is possible to reach Kerkrade by train. Near Kerkrade are Maastricht–Aachen, Liège, and Düsseldorf airports. The venue for the final conference is “[Conference Centre Rolduc](#)”. Please visit the conference centre website (<http://www.rolduc.com/index.php?lang=en>) as well as the WP9 homepage (<http://www.gp-tcm.org/2011/04/final-conference/>) for further details.

If you travel from one of the above airports to Kerkrade by train, the website of the [Nederlandse Spoorwegen](#) or [OV9292](#) can be useful. If you prefer to drive, the website of the [ANWB](#) can be of help (in Dutch).



Conference Centre Rolduc, Kerkrade, the Netherlands

2. The GP-TCM Congress will be held on 15th – 18th April 2012 in Leiden, the Netherlands: Following the Final Conference, which is by invitation only, a public international event “GP-TCM Congress” will be held in Leiden to disseminate the work and findings of GP-TCM to a wider audience. The Congress will be held from 15th – 18th April 2012 at “Gorlaeus Laboratories” in Leiden University, the Netherlands (<http://visitors.leiden.edu/buildings/gorlaeus.html>), covering botany, extraction, “omics”, in-vivo studies, clinical studies, systems biology, acupuncture, modernization and regulatory affairs. For registration, please visit the Congress website for further details (<http://www.gp-tcm-congress.nl/>). To encourage students to attend this congress, there will be scholarships/bursaries, with the actual amount depending on the sponsorships raised. The Congress programme will be finalised in early 2012 and announced at the GP-TCM website. Web link will be provided in the consortium newsletter for your convenience.



Gorlaeus Laboratories, Leiden, the Netherlands

3. Call for applications - GP-TMR Elections for President, President-Elect and Board of Directors:

One of the key objectives and outcomes of the GP-TCM consortium is to establish a new organisation to coordinate EU-China collaboration in traditional Chinese medicine (TCM) research. Hence, the GP-TCM consortium is working towards establishing a lasting network, which will carry on coordinating TCM research beyond the 3-year funded lifetime of the consortium to ensure a sustainable development of TCM research in Europe and worldwide. Temporary name of the organisation agreed by the consortium committees is “The GP-TCM Association/GP-TMR”. (TMR = Traditional Medicine Research)

The GP-TCM Coordination Office (CO) has started working on the 1st GP-TMR elections for President, President-Elect and 11 members of Board of Directors (BoD), which will all serve for 2-year period starting shortly after the election results are announced.

In order to help us create a pool of qualified potential candidates for the CO to consider, we would like to invite **all interested GP-TCM members** to contact Dr. Halil Uzuner (halil.uzuner@kcl.ac.uk) for further information about the application process and elections. CO will accept candidate applications for the 1st GP-TMR elections until close of play **Friday 2nd December 2011**.

Appointment of new GP-TCM members:

1. Appointment of Prof. Wei-dong Zhang (Second Military Medical University, China) to GP-TCM as a non-beneficiary member devoted to WP2 (Extraction and component analysis) and WP4 (Functional Genomics of Chinese Herbal Medicine Research in Vitro). Prof. Wei-dong Zhang 张卫东 is the chief director of *Modern Research Center for Traditional Chinese Medicine* (MRCTCM) of Second Military Medical University, China. He earned his Ph.D. from Shanghai Institute of Pharmaceutical Industry in 1998 and then worked in Paul Sabatier

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University of France as a visiting scientist from 1998-2000. Prof. Zhang's major achievements were made in the field of bioactive natural products discovery from TCM, QA&QC of herbal medicine, metabonomics and chemical biology of natural products. He received an award from the National Outstanding Young Scientist Foundation of China in 2007 and Qiushi Outstanding Youth Award in 2008. In 2010, he won the National Prize for Progress in Science and Technology, and another award from the National Outstanding Young Scientist Foundation of China. Prof. Zhang has published more than 200 peer-reviewed papers in international academic journals, including *Chemical Communications*, *Organic Letters*, *Journal of Natural Products*, *Tetrahedron*, *Planta Medica*, *Journal of Chromatography A* and *Journal of Hepatology*.
Warmest welcome and congratulations, Wei-Dong!

2. Appointment of Dr. Christine Nardini (Chinese Academy of Sciences, China) to GP-TCM as a non-beneficiary member devoted to WP8 (Functional genomics in studies of acupuncture-moxibustion). Christine followed her Masters degree in biomedical engineering with a 2-year placement in a biomedical company, working in the area of anti-arrhythmic devices. After this experience in industry, she started a Ph.D. degree in computational biology working at *omic data mining*. In this context, she has taught students enrolled on the International Master in Bioinformatics at University of Bologna.

A time as visiting scientist at Stanford and San Diego Universities in USA have set the basis for a durable collaboration (now at EPFL, Switzerland) and forged the interest in translational medicine. Later, she worked at the Telethon Institute for Genetics and Medicine (TIGEM) in Naples, with Dr. di Bernardo, on gene network reconstruction.

She is associate editor to BMC Bioinformatics and ICST transactions on complex systems and member of the editorial board of BIONanoScience. She is currently principal investigator at Key Laboratory of Computational Biology, Chinese Academy of Science-Max Planck Institute for Computational Biology (PICB) where she continues to work on computational approaches to be applied to translational medicine, with a particular focus on the elucidation of the molecular mechanisms of acupuncture in the treatment of degenerative diseases. **Warmest welcome and congratulations, Christine!**

3. Appointment of Mr. Pedro Albuquerque (Westminster University, UK) to GP-TCM as a non-beneficiary member devoted to WP10 (Management). Pedro's short biography will be published in the next issue. **Warmest welcome and congratulations, Pedro!**

Recommended reading:

1. GP-TCM members at KCL pin down active chemicals in Chinese herbs

<http://www.scidev.net/en/health/traditional-medicine/news/scientists-pin-down-active-chemicals-in-chinese-herbs.html>

2. "Omics" related features in The Scientist

2.1. Speak, RNA!

<http://the-scientist.com/2011/09/01/speak-rna/>

2.2. "Omics":

<http://the-scientist.com/2011/10/01/omics/>

2.3. Mouse Genomes Catalogued: What do these two recent Nature papers mean?

<http://the-scientist.com/2011/09/14/mouse-genomes-catalogued/>

3. Network pharmacology: Networking for new drugs

http://www.nature.com/nm/journal/v17/n10/full/nm1011-1166.html?WT.ec_id=NM-201110

4. Omics and Integrated Omics for the Promotion of Food and Nutrition Science:

http://www.jtcm.org/jtcm_nportal_e6_page.php?button_num=e6&cnt_id=10

5. Exome: The exome is the part of the genome formed by exons, coding portions of genes in the genome that are expressed, that is, provide the genetic blueprint used in the synthesis of proteins and other functional gene products. It is the most functionally relevant part of the genome, with regard to coding for proteins, and, therefore, it is most likely to contribute to the phenotype of an organism. The exome of the human genome is estimated to comprise 1.5% of the total genome.

Some exome-based projects include the nonprofit Personal Genome Project (PGP), the NIH-funded Exome Project, and the microarray-based Nimblegen SeqCap EZ Exome from Roche Applied Science.

Genome Biology publishes a special issue on Exome sequencing:

<http://genomebiology.com/2011/12/9/407>

6. Meaningful Placebos — Controlling the Uncontrollable

<http://www.nejm.org/doi/full/10.1056/NEJMe1104010>
<http://www.nejm.org/doi/pdf/10.1056/NEJMoa1103319>

7. Poster perfect

<http://the-scientist.com/2011/09/01/poster-perfect/>

8. An interesting book on pesticides use throughout the world with contribution from Dr. Moustapha Ouedraogo (non-beneficiary GP-TCM Member of WP3; University of Ouagadougou, Burkina Faso).

<http://www.intechopen.com/books/show/title/pesticides-in-the-modern-world-pesticides-use-and-management>

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Funding news and other events:

1. FP7 People - Call for Proposals: Marie Curie Industry-Academia Partnerships and Pathways (IAPP) opened on the 19th October 2011.

http://ec.europa.eu/research/participants/portal/page/people?c_allIdentifier=FP7-PEOPLE-2012-IAPP

2. FP7 People - Call for Proposals: Marie Curie Co-Funding of Regional, National and International Programmes (COFUND)

http://ec.europa.eu/research/participants/portal/page/people?c_allIdentifier=FP7-PEOPLE-2012-COFUND

3. 13th International Congress of the Society for Ethnopharmacology to be held in Graz, Austria, 2nd – 6th September 2012: <http://ise13.uni-graz.at/cms/>

Your Editor's travels to Taiwan and China

In October and November 2011, Tai-Ping Fan made two extended trips to Taiwan and China, respectively. At the invitation of Director Ming-Che Shih 施明哲 of Agricultural Biotechnology Research Center, Academia Sinica, he presented a paper in 2011 International Symposium on Agricultural Biotechnology: Herbal Medicines for Immunity and Cancer. He also visited China Medical University (Taichung) and was bestowed an Honorary Chair Professorship by President Jong-Tsun Huang 黄荣村. At National Research Institute of Chinese Medicine, he had a productive meeting with the only Taiwanese GP-TCM member to date - Prof. Yi-Tsau Huang 黄怡超. In discussion with Vice-Superintendent Chang Hen-Hong 张恒鸿 and colleagues of Chang Gung Memorial Hospital, Dr. Fan explored possible research collaborations in research and academic exchange.

Invited by Director Tian Shuyan 田书彦 of Yiling Pharmaceutical Co. Ltd., Dr. Fan chaired and spoke at a TCM Symposium in the 15th Beijing International Healthcare Industry Forum, and visited Beijing Yiling Institute of Pharmaceutical R&D Co. Ltd. with Deputy Director Wang Shubin 王曙宾.

In a special dinner hosted by Dr. David Wang 王守东, Tai-Ping shared his trials, tribulations and hopes in pursuit of TCM research at Cambridge. He also gave an update on GP-TCM businesses, particularly the upcoming GP-TCM Congress in Leiden next April, to Deputy Director General Xing Jijun 邢继俊 of China Science & Technology Exchange Center, MOST; Director Wang Xiaopin 王笑频 of SATCM International Cooperation Department (Hong Kong, Macao, Taiwan Office); Director General Qian Zhongzhi 钱忠直 of State Pharmacopoeia Commission; Director Chen Shilin 陈士林 of Institute of Medicinal Plant Development, Chinese Academy of Medical Sciences; Prof. Lin Zhibin 林志彬 of Peking University; Prof. Liu Jianxun 刘建勋, Vice-President of Xiyuan Hospital of China Academy of Chinese Medical Sciences (CACMS), Prof. Zhu Liguó 朱立国, Vice-President of Wangjing Hospital of CACMS; Prof. Cheng Qi 程奇 of Chinese Academy of Agricultural Sciences, President Gao Jin 高锦

of Beijing Jing-Meng Stem Cell Technology Co., Ltd. (JMSCT) as well as Ms. Zhang Jing 张晴 of Yorhe Holding Group, Ms. Li Cuiping 李翠萍 of JMSCT and Mr. Su Enquan 苏恩泉 of Su's Enterprise Development Co., Ltd. These old and new friends pledged their support.



From L to R: Cheng Qi, David Wang, Li Cuiping, Zhu Liguó, Chen Shilin, Wang Xiaopin, Lin Zhibin, Tai-Ping Fan, Zhang Jing, Xing Jijun, Qian Zhongzhi, Liu Jianxun, Gao Jin and Su Enquan.

At the invitation of Prof. Duan Junguo 段俊国 of Chengdu University of TCM (CDUTCM), he chaired and spoke at the 5th International Conference on TCM for the Prevention and Treatment of Diabetes. This meeting was sponsored by China Association of Chinese Medicine, and presided by Deputy Director Li Daning 李大宁 of SATCM and President Fan Xinjian 范昕建 of CDUTCM.

In Shanghai, he met Profs. Zheng Xiaohui 郑晓晖 of Northwest University in Xi'an and Zhao Liping 赵立平 of Shanghai Jiaotong University about their projects on chimeric compounds inspired by Danshen Diwan, and gut microbiota, obesity and other metabolic syndromes, respectively. He also visited Prof. Shen Yuandong 沈远东 Deputy Director of Shanghai Municipal Health Bureau and Secretariat of International Organization for Standardization (ISO)/Technical Committee 249, and discussed how GP-TCM can synergise with his office to promote standardisation of TCM.

Acknowledgment: Many thanks for the contributions by Prof. **Rudolf Bauer** (Austria), Prof. **Kelvin Chan** (Australia), Prof. **Pierre Duez** (Belgium), Mr. **Alan Koo** (China), Prof. **Olavi Pelkonen** (Finland), Dr. **David Wang** (USA), Dr. **Halil Uzun** (UK), Dr. **Marianne Verberne** (the Netherlands), Dr. **Qihe Xu** (UK), and Prof. **Wei-dong Zhang** (China).

