Video Feasts

1. 7th Annual Albert Szent-Györgyi Prize (2012) Co-Winners Professor Zhu Chen and Professor Zhengyi Wang spoke at the award dinner – We cannot help but be inspired by their approaches of conducting TCM and integrative TCM research – warmest congratulations and many thanks for enlightening us!

Professor Zhu Chen's speech: http://www.youtube.com/watch?v=BYXI1AYufR4

Professor Zhengyi Wang's speech: http://www.youtube.com/watch?feature=endscreen&NR=1&v=p1126XwDc4

2. Three PCNE (also known as the Phoenix TV) reports on the GP-TCM Final Conference, the GP-TCM Congress held in Kerkrade and Leiden in mid-April 2012, and the newly launched GP-TCM Research Association:

http://www.gp-tcm.org/2012/05/gp-tcm-meetings-on-tv/

Episode 1:

It introduces the FP7 GP-TCM project in the background of the recent European Legislation on herbal products. In particular, it featured both the GP-TCM Final Conference held in Kerkrade, the Netherlands on $12^{th} - 13^{th}$ April 2012 and the GP-TCM Congress held in Leiden, the Netherlands on $16^{th} - 18^{th}$ April 2012, where the GP-TCM Research Association was officially launched.

Dr. Qihe Xu (King's College London, UK), the FP7 GP-TCM project Coordinator was interviewed in Chinese. He commented that, at the beginning of our project, TCM research was scattered around Europe; now, with the GP-TCM consortium, a large network comprising more than 200 principal investigators from more than 100 institutions (including 20% companies) in over 20 countries has been established.

Dr. Tai-Ping Fan (University of Cambridge, UK), Secretary-General of the newly launched GP-TCM Research Association, added in Chinese "with support from so many friends, we will make an even bigger difference in three years' time".

Episode 2:

Professor Jingyan Han (Peking University, China), a GP-TCM non-beneficiary member who attended both meetings, was interviewed in Chinese. He used his poster presentation at the Leiden Congress as an

example to illustrate how TCM can be used to treat stroke, a major killer in Europe.

Professor Rudolf Bauer (University of Graz, Austria), Founding President of the GP-TCM Research Association, explained (in English) the mission and objectives of the newly launched Association and call on interested parties to join the epic efforts by the GP-TCM consortium and the new Association.

Professor Xiaomin Wang (China Capital Medical University, China), the WP8 Co-Coordinator of the GP-TCM Consortium, was interviewed in Chinese. He stressed the importance of TCM modernisation and internationalisation and commented on the role for the GP-TCM consortium in this process.

Episode 3:

Professor Peter Hylands (King's College London, UK), WP4 Coordinator and Chairman of the Technological Advisory Board of the FP7 GP-TCM project, answered TV interview in English. He explained that Chinese herbal medicine is an invaluable resource and TCM uses a very different philosophy than Western medicine. These, if combined with emerging technology, could be major sources of important medical discoveries. That's why people in Europe (including himself) are interested in TCM.

Professor De-an Guo (Chinese Academy of Sciences, China), President-Elect of the GP-TCM Research Association, explained (in Chinese) that funding is no longer a major issue (in China) to TCM; the key in the future is to conduct high-quality, internationally recognised research to show how Chinese herbal medicines work as drugs, thus consolidating the scientific base for TCM.

Interacting with Stakeholders

1. The FP7 GP-TCM Consortium recommends TCM research a priority under the Health Theme of Horizon 2020.

Chinese medicine is an important part of Chinese culture, a cost-effective mode of healthcare, and is also an important source of modern discoveries in medical science and technology, as illustrated by two prestigious international awards announced in the past 6 months.

• The 2011 Lasker-DeBakey Clinical Medical Research Award to Prof. Youyou TU for the discovery of Chinese herb-derived artemisinin, a

drug for malaria that has saved millions of lives across the globe¹.

• **The 7th Annual Szent-Györgyi Prize** to Prof. Zhen-Yi WANG and Prof. Zhu CHEN for their innovative research of Chinese medicine that led to the successful development of a new therapeutic approach to acute promyelocytic leukemia².

Under FP7, GP-TCM (HEALTH-F4-2009-223154) is the first Coordination Action dedicated to evaluating the quality of Chinese medicine research and establishing guidelines on good practices in scientific validation, R&D as well as global regulation of Chinese herbal products. Through 3 years of hard work, among many other achievements and milestones, the GP-TCM project has delivered the following:

- A large collaborative network involving ~200 scientists from 24 countries (including 15 EU member states) and 107 institutions³.
- A European agenda (guidelines, priorities, challenges and opportunities) on EU-China collaborations on Chinese medicine research³.
- An international society, the GP-TCM Research Association, which will continue to coordinate Chinese medicine research beyond the lifespan of the FP7 GP-TCM project⁴.

It is concluded that, due to its **personalised** and **function-oriented** features and its **holistic** and **pre-emptive** approaches, Chinese medicine is highly complementary to the current model of western medicine and thus represents a **burgeoning field in** which China can contribute significantly to reshaping tomorrow's healthcare worldwide.

Thus, we jointly propose that **Chinese medicine be** given top priority in future EU-China collaborations under the Health Theme of Horizon 2020.

The proposal was also submitted to the **Wellcome Trust (UK)**, suggesting the funding agency to revisit its policy governing TCM research.

2. GP-TCM members in ten EU member states have endorsed the above proposal and submitted the proposal to the European Commission independently through their research offices at the Commission and their national FP7 Health Theme Contact Points. In summary, coordinators and signatories of these proposals are as follows.

- The UK (submitted): Dr. Qihe Xu, King's College London (signed by 16 Principal Investigators (PIs) including 4 Fellows of the Royal Society, involving 9 GP-TCM member institutions. The proposal was also submitted to Dr. Christina Miller, Deputy Director, UK Research Office (UKRO), Dr. Victoria Brewer, International Strategy Manager, UK National Contact Point for FP7 Health Theme and was also submitted to the Wellcome Trust, as a key stakeholder, urging the Trust to give TCM priority in their future funding.
- Austria (submitted): Professor Rudolf Bauer, University of Graz (endorsed by Vice Rector for Research and Career Development, Professor Peter Scherrer).
- Norway (submitted): Professor Odd Georg Nilsen, Norwegian University of Science and Technology (signed by 4 Norwegian PIs), submitted to Dr. Berit NYGAARD, Norwegian representative for FP7 Health at the "Research Council of Norway".
- Ireland (submitted): Dr. Helen Sheridan, Trinity College Dublin, endorsed by 10 Irish PIs.
- Romania (submitted): Dr. Joseph Mezei, Transylvanian Association of Integrated Quantum Medicine, endorsed by 3 Romanian PIs.
- Italy (submitted): Professor Enrica Bosisio, University of Milan, endorsed by 8 PIs from 5 Italian institutions.
- Luxemburg (submitted): Dr. Ning Wang, Public Research Centre for Health, endorsed by the company CEO Dr. Jean-Claude Schmit.
- Estonia (submitted): Dr. Anu Aaspõllu, Asper Biotech Ltd (endorsed by the company CEO Ms. Eneli Oitmaa).
- **Belgium** (submitted): **Prof. Pierre Duez**, University of Mons (endorsed by the university rector Prof. Calogero Conti)
- Germany (submitted): Dr. Jandirk Sendker, Institut für Pharmazeutische Biologie und Phytochemie, Münster, endorsed by 7 PIs.

Consortium and Research Association Meetings

1. The 18th e-MSM Teleconference: The management team held the 18th e-MSM teleconference on 5th July 2012, which gathered 14 e-MSM members. During the teleconference, the participants discussed a number of key issues including: (i) GP-TCM Research Association

¹ http://www.laskerfoundation.org/awards/2011clinical.htm 2

http://www.nfcr.org/index.php/component/content/article/3newsflash/1532-szent-gyoergyi-prize-for-progress-in-cancerresearch 3

http://www.sciencedirect.com/science/article/pii/S03788741 12001110

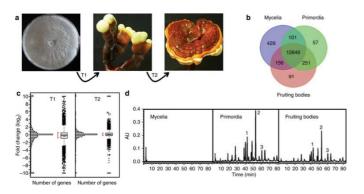
⁴ http://www.gp-tcm.org/association/

update, (ii) Consortium deliverables (months 36-42), (iii) GP-TCM 2nd EC Periodic Report, EC Final Report and Public Final Report reminder (iv) Report of the GP-TCM Final Conference and the GP-TCM Congress, and (vi) Interactions with National Contact Points (NCPs) and other funders, and grant application activities and opportunities within Europe and China.

2. The 4th Board of Directors (BoD) Teleconference of the GP-TCM Research Association was held from 10:00 – 13:00 am CEST (9:00-12:00 BST), 26th June 2012. Nine BoD members attended the online exchanges of information and discussions and Dr. Halil Uzuner also joined the discussion to receive feedback on the development of the Association website. The subjects included Reports of President and President-Elect, Report of the Secretary-General (Membership, website development and PR), Report of the Treasurer (Account setup), brochure, interest group, activities other than meetings as well as future meetings.

Members in Spotlight

1. Genome sequence of *Ganoderma lucidum* decoded by Professor Shilin Chen and colleagues (IMPLAD, Beijing, China). Shilin is a member of the Advisory Board of the GP-TCM Consortium.



Ganoderma lucidum is a widely used medicinal macrofungus in traditional Chinese medicine that creates a diverse set of bioactive compounds. Here we report its 43.3-Mb genome, encoding 16,113 predicted genes, obtained using next-generation sequencing and optical mapping approaches. The sequence analysis reveals an impressive array of genes encoding cytochrome P450s (CYPs), transporters and regulatory proteins that cooperate in secondary metabolism. The genome also encodes one of the richest sets of wood degradation enzymes among all of the sequenced basidiomycetes. In all, 24 physical CYP gene clusters are identified. Moreover, 78 CYP genes are coexpressed with lanosterol synthase, and 16 of these show high similarity to fungal CYPs that specifically hydroxylate testosterone, suggesting their possible roles in triterpenoid biosynthesis. The elucidation of the G.

lucidum genome makes this organism a potential model system for the study of secondary metabolic pathways and their regulation in medicinal fungi. http://www.nature.com/ncomms/journal/v3/n6/full/ncomms1923.html http://www.ebiotrade.com/newsf/2012-6/2012627103203476.htm

2. GP-TCM non-beneficiary member Global Regulatory Services featured in news report:

_http://www.globalregulatoryservices.com/news/bringing-home-the-global-deals-cambridge-business-magazine-julyaugust-2012-edition

Funding Calls

1. European Union – FP7 Funding Calls

This is the final year of FP7 funding and the EU has announced an indicative funding budget of 840 Million Euros. Please visit the website here:

http://ec.europa.eu/research/participants/portalplus/static/docs/calls/fp7/com mon/32745-annex_4_to_the_decision_health_wp2013-18_june_for_egreffe_en.pdf

The first deadline is 2nd October 2012.

 $\underline{http://ec.europa.eu/research/participants/portal/page/fp7_calls}$

2. The Innovative Medicines Initiative (IMI)

IMI will soon launch its 7th Call for proposals, giving researchers across Europe the opportunity to participate in **ambitious public-private partnerships** that will pave the way for the development of the **medicines of the future**. The 7th Call has two indicative topics:

- Developing a framework for rapid assessment of vaccination benefit/risk in Europe
- Incorporating real-life clinical data into drug development

An indicative version of the Call text will be published on the IMI website in the next few days at http://www.imi.europa.eu/content/7th-call-2012

Meeting Reports and Forthcoming Meetings

1. XVth International Congress "PHYTOPHARM 2010", Saint Petersburg, Russia (9-11 July 2012)

Hosted by St-Petersburg Institute of Pharmacy, this meeting took place in the Institute of Experimental Medicine of the NorthWest Branch of the Russian Academy of Medical Sciences. It attracted 152 delegates from 34 countries, including Austria, China, Egypt, Finland, France, Germany, India, Indonesia, Nigeria, Saudi Arabia, South Africa, South Korea, Taiwan, Thailand, The Netherlands, UK and USA. 150 abstracts were submitted and published in Reviews in Clinical Pharmacology and Medicinal Therapy. Several GP-TCM members presented plenary lectures and papers at this meeting: Tai-Ping Fan, De-an Guo, Svetlana Ignatova, Guo-an Luo, Alex Shikov, Rob Verpoorte, and as well as sizeable delegations from China and Russia. During the meeting, eleven delegates applied to join the GP-TCM RA.

The congress was followed by a visit to the research

facilities of St-Petersburg Institute of Pharmacy. True to the warm and generous hospitality of our Russian hosts, the delegates were also entertained with a lively banquet (with vodka, music and dance!) in Botanical Garden Restaurant, and a tour to Oranienbaum, a former Russian royal residence. Below are some photos taken by Tai-Ping Fan and De-an Guo.



Prof. Valery Makarov at the Opening Ceremony of PHYTOPHARM 2012



The Chinese Palace



Katalnaya Gorka Pavilion



Grand Menshikov Palace



Grand Peterhof Palace and the Grand Cascade

2. The 11th Meeting of Consortium for Globalization of Chinese Medicine (CGCM) was held in Macau on 21st– 23rd August 2012 (a premeeting was held on 20th August). The Meeting was organised by Macau University of Science and Technology. It provided a platform for regulatory-industrial-academic exchanges and potential research collaborations, on various frontiers of TCM among worldwide CGCM members and guests (http://www.tcmedicine.org/). The GP-TCM Consortium and the GP-TCM RA participated actively at this meeting with poster presentations and talks. [To be reported in the September Issue of our Joint Newsletter]

3. The 2012 Shanghai International Conference on TCM and Natural Medicine and the 1st Annual Meeting of GP-TCM RA will be held on 20th - 21st October 2012 in Riverfront Business Hotel in Shanghai. Hosted by Modern Biotechnology & Pharmaceutical Industry Office of Shanghai Municipality, the conference theme is "Modernization and Internationalization of TCM". For more information and online registration, please visit <u>http://www.s-tcm.com/english.html?jdfwkey=hurkb1</u>.

Further Reading

1. New Chinese SFDA draft guidelines make pharmaceutical firms more responsible for monitoring excipient quality and assessing suppliers.

http://www.in-pharmatechnologist.com/Ingredients/SFDA-draft-excipient-guidelines-place-quality-burden-on-pharmas

2. Traditional Chinese Medicine eats into big pharma market.

http://www.biospectrumasia.com/biospectrum/analysis/2724/traditionalchinese-medicine-eats-pharmamarket?WT.rss_f=Home&WT.rss_a=Traditional+Chinese+Medicine+eats+i nto+big+pharma+market#.UE3d_Y5XA-d

3. Health Axis Europe: Cambridge, Heidelberg and Leuven have formed a collaboration called Health Axis Europe (HAE) aimed at helping companies and academics form consortia to apply for EU funding. The advantages of applying for funding via Health Axis Europe are fast and easy access to collaborators and reduced administration not just in the application process but throughout the life of the grant. You don't need to be based in Cambridge to join HAE and the platform enables you to:

- Browse active EU health research & development funding calls and topics
- Express interest to lead or participate in Health Axis Europe consortia
- Find strong collaboration partners that complement your scientific excellence
- Get access to experienced coordination offices that provide professional support for grant applications and project administration

The HAE R&D Community Platform will be the nucleus for HAE project planning and EU FP7 and Horizon 2020 consortia formation. <u>http://www.health-axis.eu/</u>

4. Alternative medicines featured by *The Scientist* http://the-scientist.com/2012/07/01/alternative-medicines/

5. MHRA press release: Parents advised not to use unlicensed children's herbal medicine sold in Holland and Barrett.

A herbal remedy sold by Holland and Barrett for young children and adolescents is being taken off shelves because the product is unlicensed, is labelled incorrectly and the claimed herbal ingredients present are incorrectly described. There are concerns that this product may not be suitable for use in children and adolescents and may cause unwanted side effects.

The Medicines and Healthcare products Regulatory Agency (MHRA) has asked Holland and Barrett to stop marketing Herbal Authority: Echinacea & Golden Root for Juniors. Holland and Barrett have agreed to do this.

The pictures on the product do not match the labelling description and appears to show Goldenseal root

(Hydrastis canadensis) and not Golden root (Rhodiola rosea). The botanical name on the product Berberis aquifolium is also incorrect.

This Holland and Barrett herbal product is not registered under the traditional herbal registration scheme (THR), which is a scheme to help consumers be confident that the herbal remedies they are taking have been assessed for quality, safety and good manufacturing.

Richard Woodfield MHRA Head of Herbal Policy said:

"Parents need to remember that just because a product is labelled as natural does not mean it is safe.

"When buying herbal products you should look for those that have a traditional herbal registration which can be identified by a THR number on their label. This ensures that the product is safe and avoids consumers putting their health in jeopardy.

"Anyone that has this herbal product at home should stop using it immediately and return any unused product to Holland and Barrett. If you have taken this product and have any concerns then please speak to your GP or healthcare professional".

6. WHO names Nigeria regional hub for herbal drug research. The African Network for Drugs and Diagnostics' Innovation (ANDI), an initiative of the World Health Organisation (WHO), has named Nigeria a regional centre of excellence for research and development of phytomedicine.

http://www.ngrguardiannews.com/index.php?option=com_content&view=art icle&id=97077:who-names-nigeria-regional-hub-for-herbal-drugresearch&catid=1:national&Itemid=559

Acknowledgements: Contributions from Greer Deal (UK), Tai-Ping Fan (UK), De-an Guo (China), Olavi Pelkonen (Finland), Halil Uzuner (UK), and Qihe Xu (UK) are sincerely acknowledged.



A quiet but beautiful scene at Oranienbaum, Saint Petersburg