

Features in this Issue:

1. Introducing Traditional Herbal Registration (THR) Certification Mark in the UK



THR certification mark indicates that the herbal medicine has been registered with the MHRA under the UK Traditional Herbal Registration (THR) scheme (began on 30 October 2005) and meets the required standards relating to its quality, safety, evidence of traditional use and other criteria as set out under the Traditional Herbal Medicinal Products Directive (THMPD) 2004/24/EC.

Under this scheme, the permitted indications for the medicine are based on traditional usage and not on evidence of effectiveness of the product. More information about the THR scheme can be found on the Traditional Herbal Medicines Registration Scheme webpage at www.mhra.gov.uk.

2. How about unlicensed herbal medicines?

From 30 April 2011 all herbal medicines placed on the UK market will need a THR or product licence. Consumers will still find unlicensed herbal medicines on the shelves, without written claims, after this date. The Directive included a seven year transitional period whereby products legally on the market prior to 2004 could continue to be placed on the market until 2011. These products will not be taken off the shelves, instead they can continue to be sold legally but stock cannot be replenished after this date.

Consumers should be aware that standards of unlicensed medicines can vary widely and these products have not been assessed by the MHRA for quality and safety purposes. Unlicensed herbal medicines supplied by practitioners Section 12(1) is commonly referred to as the 'herbalist exemption' and permits unlicensed remedies to be made up and supplied by a practitioner to meet the needs of an individual patient following a one-to-one consultation. The existence of this regime is

greatly valued by herbal practitioners and by many members of the public. However, there are widely acknowledged weaknesses in the public health protection given by the regime. Section 12(1) remedies are not subject to a regime of specific safety or quality requirements. There are no restrictions in terms of those who operate under the regime. Anyone - irrespective of qualifications or experience - can practice herbal medicine and, after making a diagnosis and forming a judgment about the treatment required, can make up and supply an unlicensed herbal medicine.

Practitioners are permitted to make up and supply unlicensed medicines to meet the needs of an individual patient following a consultation. Medicines made up by practitioners are not subject to a regime of specific safety or quality requirements and do not offer adequate public health protection. The MHRA is currently developing proposals for reform alongside the Department of Health (DH) led work on regulation of herbal medicine practitioners. On 16 February 2011, a DH announcement ([external link](#)) was made about the regulation of practitioners. It is intended to move to the position that only registered practitioners would be able to operate under this regime after regulation of practitioners is in place. There will be a public consultation on formal proposals for reform of herbal remedies made up by practitioners following a consultation later in 2011. The MHRA website will be updated to reflect developments.

<http://www.mhra.gov.uk/Safetyinformation/Generalsafetyinformationandadvice/Herbalmedicines/Usingherbalmedicinessafely/index.htm>

3. Sharing knowledge, expertise and passion on YouTube: Exploration of PHY906 by Prof. Yung-Chi Cheng, Yale School of Medicine, 21 Dec 2008.



GP-TCM Monthly Newsletter April-May 2011 Issue

Part 1: <http://www.youtube.com/watch?v=orxSHKBSFKA>

Part 2:

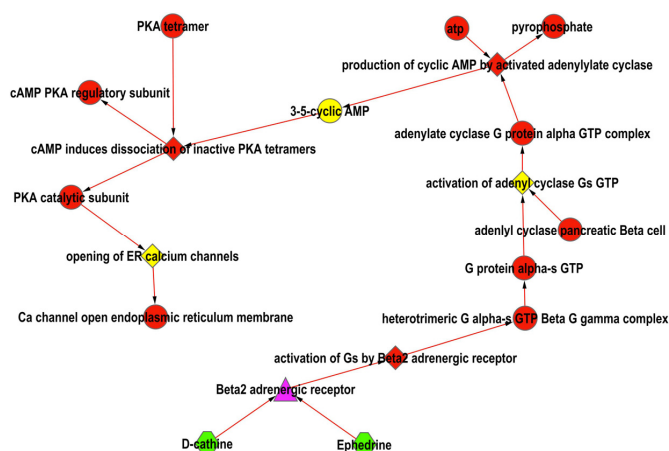
http://www.youtube.com/watch?v=OkOJ_IK0xnI&feature=related

Part 3: <http://www.youtube.com/watch?v=B-7pV32JeR0&feature=related>

leading to the publication of *The Four-Herb Chinese Medicine PHY906 Reduces Chemotherapy-Induced Gastrointestinal Toxicity in Sci Transl Med* on 18 August 2010: Vol. 2, Issue 45, p. 45ra59. DOI: 10.1126/scitranslmed.3001270

4. TCM Grammar Systems: An approach to aid the interpretation of the molecular interactions in Chinese herbal medicine. Jing Yan, Yun Wang, Si-jun Luo, Yan-jiang Qiao. *Journal of Ethnopharmacology* (In Press) Online 28 April 2011. doi:10.1016/j.jep.2011.04.057

Abstract. It is very important to interpret the molecular interactions in Chinese herbal medicine. That will help to understand the molecular mechanisms of Traditional Chinese medicines (TCM) and predict the new pharmacological effects of TCM. But now we still lack a method which could integrate the concerned pieces of parsed knowledge about TCM. To solve the problem, a new method was proposed in the present article. This method is based on the entity grammar systems and explores the possibilities to study the interactions of TCM at the molecular level. Because this method is proposed to study TCM, we call it TCM grammar system for convenience, while using Herba Ephedrae Decoction (HED) as an example to represent the application of TCM grammar systems and illustrate the feasibility of this method.



The molecular network of the target Beta2 adrenergic receptor pathway. The two green hexagons respectively represent two chemical compositions of Herba Ephedrae named Ephedrine and D-cathine. The pink triangle represents the drug target Beta2

adrenergic receptor. The circles represent endogenous molecules. The diamonds represent chemical reactions. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of the article.)

GP-TCM Activities:

1. Invitation to submit articles to European Journal of Integrative Medicine (EUJIM): The journal invites submissions from the GP-TCM members for the June 2011 issue. The journal is particularly interested in systematic reviews and articles on integrated practice. Please do pass on this message to your colleagues. The journal will be issued with an impact factor this summer. Instructions for authors can be found at: <http://www.europeanintegrativemedicinejrn.com/authorinfo>

2. The 3rd Standard Operating Procedure (SOP) Panel Teleconference was held on 9th March 2011 as a Skype session. The event was chaired by the SOP Panel Co-chair Pierre Duez and attended by 13 additional SOP Panel members and other consortium committee members. The attendees reviewed the past work of the Panel, and discussed a number of issues including (i) Data extraction for acupuncture, (ii) Comments on the SOP Manual from GP-TCM members, (iii) Future organisation of SOP activities, (iv) Herb-related naming issues, (v) Scoring system, (vi) Practicality of excel tables for consortium's use, and (vii) SOP-related review article proposal.

3. The 9th and 10th e-MSM teleconferences were held on 8th and 12th April 2011, respectively. The issues discussed during both teleconferences included (i) Month-24 deliverables reminder and progress updates from all WPs (ii) GP-TCM Special Issue to be published in *J Ethnopharmacol*, (iii) The New Society issues, (iv) 2nd AGM plans, and (v) GP-TCM Final Conference plans.

GP-TCM Announcements, Appointments and Labour Division:

1. Mr. Ron Irwin's departure from GP-TCM: Mr. Ron Irwin (Head of EU Research Funding Office, King's College London, UK), the Finance Manager/Advisor of the consortium, is leaving the consortium due to other pressing commitments. The Consortium and Dr. Qihe Xu sincerely thank Ron for his tremendous contributions to the whole consortium and wish him all the best in his future career and life! Contact details of the new GP-TCM Finance Manager will be announced in the next issue.

GP-TCM Monthly Newsletter April-May 2011 Issue

2. Appointment of Dr. Jandirk Sendker as a WP2 Co-Coordinator: We are pleased to inform you that Dr. Jandirk Sendker (University of Münster, Germany) has been appointed WP2 Co-Coordinator to lead WP2 (Extraction and component analysis of Chinese herbal medicines) in liaison with the WP2 Coordinator and Deputy Coordinator, Profs. Peter Proksch and Brigitte Kopp. The above appointment was first proposed by Peter and Brigitte in July 2010, and during the 9th e-MSM teleconference, the appointment was discussed and agreed by all e-MSM attendees. **Warmest congratulations Jandirk!**

3. Appointment of Prof. John C. Lindon (Metabotrix Ltd and Imperial College London, UK) to GP-TCM as a non-beneficiary member dedicated to the Functional Genomics Advisory Committee, affiliated to WP10 (Management; led by Dr. Qihe Xu, King's College London, UK). John is Visiting Professor and Senior Research Investigator at Imperial College. He is a founder Director of, and a Consultant to, Metabotrix Ltd, a company spun out of Imperial College to exploit the commercial possibilities of metabonomics, especially for molecular phenotyping, clinical diagnostics and toxicological screening via metabonomics and metabolomics. He obtained his B.Sc (1966), Ph.D. (1969) and D.Sc (1993) degrees from Birmingham University (UK), and after a period as a postdoctoral fellow at Columbia University, New York, USA, he joined the Chemistry Department of Southampton University to use NMR methods to research the properties of liquid crystals using NMR spectroscopy and to manage and operate the NMR laboratory. In 1976 he joined the Wellcome Foundation Ltd and held various posts and in 1995, he was Head of the Spectroscopy Section at the Wellcome Research Laboratories in the UK when they were taken over by Glaxo, now part of GlaxoSmithKline Pharmaceuticals. He has co-authored 4 books on NMR of oriented molecules and metabonomics, is Editor-in-Chief of the Encyclopaedia of Spectroscopy and Spectrometry and is on the editorial board of NMR in Biomedicine. He has authored around 50 book chapters, plus approximately 450 peer-reviewed research papers. His current research interests centre principally on NMR and the use of computer modelling methods, both molecular and chemometric, and on the application of analytical techniques to metabonomics. Since returning to

academia, he has been a named investigator or co-PI on many grants, including the COMET-1 and COMET-2 consortia for toxicological studies, the Nestle-Imperial Alliance where he is a member of the Steering Committee, a project funded by Pfizer for pharmacometabonomics, and a range of EU funded projects including the recent Marie Curie ITN application, TEST-GP. John's main research interests are development and application of NMR spectroscopy, and novel LC-MS and chemometric approaches to bioanalysis, together with computational chemistry applications relevant to understanding drug action. **Warmest welcome and congratulations, John!**

4. Appointment of Dr. Christiane Staiger (Merck Selbstmedikation GmbH, Germany) to GP-TCM as a non-beneficiary member devoted to WP10 (Management). Christiane studied pharmacy at the University of Mainz and obtained postgraduate education at the Universities of Belfast, Greifswald and Marburg. She is a specialised pharmacist in Drug Information, and obtained a PhD at the University of Marburg. She held positions in a community pharmacy and a long term situation with the Federal Union of German Associations of Pharmacists (ABDA), where she developed strategies on continuing education and specialisation for pharmacists. She has been involved in undergraduate and postgraduate training of pharmacists for 20 years, lecturing regularly at universities in Mainz, Marburg, Berlin, and Tübingen. Since 1996, she has been a member of the Royal Pharmaceutical Society. In 2002, she has joined the Pharmaceutical Industry at Merck Selbstmedikation in Darmstadt, Germany. Her current position is Senior Medical Manager at the Global Medical Affairs Department. She has managed several randomised clinical trials of herbal products, which supported the rational use of phytotherapy. As a herbal specialist, she has served for many years as co-chair of the committee "Phytotherapy" of the German Medicines Manufacturers Association (BAH), and a member of the committee "Efficacy" of the Cooperation Herbal Medicines. She has more than 270 publications, 20 book chapters, and 60 invited talks on her record. Merck KGaA is a global pharmaceutical and chemical group with approximately 40,000 employees in 64 countries. It is the world's oldest pharmaceutical and chemical company, with roots dating back to 1668. Merck Consumer Health Care is a specialised supplier of

GP-TCM Monthly Newsletter April-May 2011 Issue

over-the-counter drugs with a focus on four health themes: Cough and Cold, Mobility, Everyday Health Protection and Women's & Children's Health. Merck Consumer Health holds a leading position with herbal products in countries like Germany (Kytta®), France (Mediflor®), and the UK (Lamberts® Health Care). **Warmest welcome and congratulations, Christiane!**

www.merckselbstmedikation.de

5. Appointment of Mr. Tony Booker (the School of Pharmacy, University of London, UK) to GP-TCM as a non-beneficiary member devoted to WP10 (Management). Tony Booker recently completed an MSc in Pharmacognosy at The School of Pharmacy, University of London and is currently studying for a PhD. He has been practising Traditional Chinese Herbal Medicine since 2001. He was former President of The Register of Chinese Herbal Medicine and Director of MSc studies in Herbal Medicine at The College of Integrated Chinese Medicine, Reading. He is currently a member of The Herbal Medicines Advisory Committee (HMAC) responsible for giving advice to the Medicines and Healthcare Products Regulatory Authority (MHRA) on aspects concerning Chinese Herbal Medicine. He is a guest lecturer at The School of Pharmacy, University of London and The Confucius Institute of TCM, London South Bank University. His current research interest is the transformation of traditional Asian medical knowledge into international commodities. **Warmest welcome and congratulations, Tony!**

6. Appointment of Prof. Henry Johannes Greten (Heidelberg School of Chinese Medicine, Germany) to GP-TCM as a non-beneficiary member devoted to WP8 (Acupuncture and Moxibustion studies; led by Prof. Xiaomin Wang, CCMU, China and Prof. Nicola Robinson, London South Bank University, UK). Henry J. Greten is Professor of Chinese Medicine at the University of Porto, lecturer at the University of Heidelberg, and taught Chinese Medicine at various universities in China. He is head of the Institute of Chinese Medicine in Heidelberg (45 employees), listed within the 100 best physicians in Germany, ranking number 1 in the category of naturopathy (independent survey of TKK and Tina No. 39/2009). Henry's scientific merits include a number of contributions to the system theory of TCM, known as the Heidelberg Model of Chinese Medicine. His work includes studies on the

molecular biology and electrophysiology of plants, and of a couple of contemporary new prescriptions in Chinese pharmacology, as well as a proper system of skull acupuncture. He introduced double-blinding in acupuncture research and established the first master study programme for TCM in Europe in an international network. Some of Henry's publications: Twelve textbooks of TCM, including a standard textbook on TCM (Kursbuch Traditionelle Chinesische Medizin, Thieme) and a Manual of Chinese Pharmacology (Checkliste Chinesische Phytotherapie, Hippokrates) as well as various medical publications in peer-reviewed journals. **Warmest welcome and congratulations, Henry!**

7. Appointment of Mr. Alan Koo (Pfizer Corporation Hong Kong, China) to GP-TCM as a non-beneficiary member devoted to WP7 (Research and Development of CHM; led by Dr. Tai-Ping Fan (University of Cambridge, UK) and Prof. Kelvin Chan (University of Sydney & University of Western Sydney, Australia)). Alan Koo is an Associate Consultant at Pfizer Corporation Hong Kong where he is responsible for business operations and new business planning. Prior to this, he took charge of medical affairs and government lobbying of a paediatric pneumococcal conjugate vaccine in Hong Kong and Macau. Alan graduated from Hong Kong Baptist University with double first-class honours in Chinese Medicine and Biomedical Science. In 2008, he was enlisted by Hong Kong Science and Technology Parks as a young scholar to visit the Øresund Science Region in Scandinavia and to analyse the feasibility of applying the Øresund Innovation Model to Hong Kong. Following an internship at the Hong Kong Jockey Club Institute of Chinese Medicine, he studied at St. John's College, the University of Cambridge, where he was a Cambridge Overseas Trust Chevening Scholar fully funded by the Foreign and Commonwealth Office and obtained a Master's in Bioscience Enterprise degree in 2009. Alan received clinical training at a number of teaching hospitals and outpatient clinics in Beijing, Guangzhou and Hong Kong. He also had internship experience at Hong Kong Hospital Authority and 2 biotech start-ups based in London. **Warmest welcome and congratulations, Alan!**

8. Appointment of Dr. Anu Aaspõllu (Asper Biotech, Estonia) to GP-TCM as a beneficiary member devoted to WP7 (Research and Development of CHM), replacing Ms. Janne Üksti.

GP-TCM Monthly Newsletter April-May 2011 Issue

Anu is a biologist, who graduated from Tartu University (M.Sc., 1984) and Tallinn University of Technology (Ph.D., gene technology; Doctoral thesis: Proteinases from *Vipera lebetina* snake venom affecting hemostasis; 2006). Her research interests include biomedically important proteins and peptides in snake venom, enzymes involved in nucleotide metabolism, cellular and molecular systems biology, genome analysis (diagnostics, identification etc). Anu's competence covers wide range of methods of molecular biology (DNA analysis, RNA analysis, protein analysis, different cloning techniques etc.) as well as lab management and legal aspects. Anu founded Forensic DNA Lab at Estonian Police Forensic Service Centre and worked as a Head of Department. Besides, she has been working as a scientist at National Institute of Chemical Physics and Biophysics and Tallinn University of Technology. In addition, Anu has given lectures at Tartu University, Estonian Public Service Academy and Police School, as well as healthcare professionals, judges, prosecutors, lawyers etc. In February 2010, she joined Asper Biotech as a Research & Development Manager/Technical Supervisor, responsible for ongoing research projects management and implementation of new tests into the practice. **Warmest welcome and congratulations, Anu!**

9. Appointment of Prof. Kahumba Byanga (University of Lubumbashi, Democratic Republic of Congo) to GP-TCM as a non-beneficiary member devoted to WP3 (Functional Genomics in Toxicology Study of Chinese Herbal Medicines; led by Prof. Pierre Duez (ULB, Belgium) and Prof. Xinmin Liu (IMPLAD, China)). Prof. Byanga's short biography will be released in the next issue of Newsletter. **Warmest welcome and congratulations, Kahumba!**

10. Appointment of Dr. Moustapha Ouedraogo (University of Ouagadougou, Burkina Faso) to GP-TCM as a non-beneficiary member devoted to WP3 (Functional Genomics in Toxicology Study of Chinese Herbal Medicines). Dr. Ouedraogo's short biography will be released in the next issue of Newsletter. **Warmest welcome and congratulations, Moustapha!**

Funding and Events:

1. Innovative Approaches for Monitoring Cardiotoxicity: The Drug Safety Summit at CHI's 10th Annual World Pharma Congress to

be held in Philadelphia, USA, 7 and 8 June 2011
<http://www.WorldPharmaCongress.com/cto>

2. The Quest for Personalised Health: Exploring the Emerging Interface between Chinese Medicine and Modern System Sciences to be held in London, UK, 10 and 11 June 2011
<http://www.westminster.ac.uk/schools/science/news-and-events/events/2011/the-quest-for-personalised-health>

3. Bioscience for the 21st Century: Emerging Frontiers and Evolving Concepts – 13th International Symposium of the Society of Chinese Bioscientists in America, Guangzhou, China 25 – 29 July 2011: <http://www.scbameeting2011.org/>

4. The 8th World Congress of Chinese Medicine to be held in London, UK, 2 – 3 September 2011: <http://www.2011wccm.com/>

5. The 59th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA) to be held in Turkey, 4 – 9 September 2011:
<http://www.ga2011.org/>

6. The 10th Meeting of Consortium for Globalization of Chinese Medicine (CGCM) will be held in Shanghai on 26 – 28 August 2011. The meeting is jointly organised by Shanghai University of Traditional Chinese Medicine and Tongji University. It provides a platform for regulatory-industrial-academic exchanges and potential research collaborations on various frontiers of Traditional Chinese Medicine among worldwide CGCM members and guests.

* **Abstract submission deadline:** 16 May 2011

* **Abstract submission form** can be requested from centraloffice@tcmedicine.org and abstracts should be submitted to centraloffice@tcmedicine.org on or before the deadline.

* **Travel Grant:** To support postgraduates to attend the 10th CGCM Meeting, up to 25 Travel Grants are now open for application. Awardees will receive up to USD600 and free accommodation.

Recommended further reading:

1. *Planta Medica* Special Issue - Traditional Chinese Medicine. In order for TCM to be accepted by the conventional medical system, it is necessary to prove efficacy, safety, and quality. As TCM differs completely from Western pharmacological systems, scientific evaluation is a particular challenge. Of the new approaches available, systems biology and metabolomics offer

the most promising way forward. *Planta Medica* recently published a special review issue on TCM, providing a detailed overview of the most prominent research being done in this field. Topics covered range from the application of Good Agricultural Practice and the cultivation of medicinal plants, to processing and quality control using chemometric assessment of Chinese materia medica. Read these reviews for FREE via this link: <http://visitor.benchmarkemail.com/c/v?e=BCC73&c=7B3D&l=62B64E3&email=nNChoMAZfUztYRzuymgtZjGAA6rwhdP&relid=C6EC165>

- *GAP Production of TCM Herbs in China.*
- *Cultivation and Breeding of Chinese Medicinal Plants in Germany.*
- *New Aspects of DNA-based Authentication of Chinese Medicinal Plants by Molecular Biological Techniques.*
- *A Unique Issue in the Standardization of Chinese Materia Medica: Processing.*
- *Application of Mid-Infrared Spectroscopy in the Quality Control of Traditional Chinese Medicines.*
- *Perspective of Chemical Fingerprinting of Chinese Herbs.*
- *Modern European Monographs for Quality Control of Chinese Herbs.*
- *Toxicological Risks of Chinese Herbs.*
- *Toxicogenomics for the Prediction of Toxicity Related to Herbs from Traditional Chinese Medicine.*
- *Metabolomics: Towards Understanding Traditional Chinese Medicine.*
- *Systems Biology-Based Diagnostic Principles as Pillars of the Bridge between Chinese and Western Medicine.*
- *Clinical Studies with Traditional Chinese Medicine in the Past Decade and Future Research and Development.*

2. Drug discovery from Chinese medicine against neurodegeneration in Alzheimer's and vascular dementia. Yuen-Shan Ho, Kwok-Fai So and Raymond Chuen-Chung Chang. *Chinese Medicine* 2011, 6:15doi:10.1186/1749-8546-6-15

Abstract. Alzheimer's disease and vascular dementia are two major diseases associated with dementia, which is common among the elderly. While the etiology of dementia is multi-factorial and complex, neurodegeneration may be the major cause of these two diseases. Effective drugs for treating dementia are still to be discovered. Current western pharmacological approaches against neurodegeneration in dementia develop symptom-relieving and disease-modifying drugs. Current integrative and holistic approaches of Chinese

medicine to discovering drugs for neurodegeneration in dementia include (1) single molecules from the herbs, (2) standardized extracts from a single herb, and (3) herbal formula with definite composition. This article not only reviews the concept of dementia in western medicine and Chinese medicine but also evaluates the advantages and disadvantages of these approaches.

3. Personalized medicine can pave the way for the safe use of CB₁ receptor antagonists. Judit Lazary, Gabriella Juhasz, Laszlo Hunyady and Gyorgy Bagdy. *Trends in Pharmacological Sciences* 32 (5): 270-280. Online 16 April 2011.

Abstract. Antagonists of cannabinoid type-1 (CB₁) receptors have been explored as therapeutic agents for obesity and addiction. However, use of rimonabant (the first marketed CB₁ receptor antagonist) has been suspended due to its anxiogenic and depressive side effects (including suicide risk). Recent genomic studies provide evidence that variants of the CB₁ receptor gene (*CNRI*) alone or in combination with the gene of the serotonin transporter (*SLC6A4*) contribute to the development of anxiety and/or depression, suggesting that high-risk individuals could be identified through genetic testing. In this review, we argue that identification of high-risk individuals by a combination of genomic screening, previous risk phenotype, and environmental risk factors offers a promising method for the safe use of centrally acting CB₁ receptor antagonists. We summarize endocannabinoid signaling in pathways related to anxiety and depression, identify the serotonergic system as the most likely candidate to mediate the side effects of CB₁ receptor antagonists, and propose that polymorphisms in *CNRI*, *SLC6A4* and certain CYP 450 enzymes could help to identify individuals who may benefit from treatment with CB₁ receptor antagonist without psychiatric side effects.

Acknowledgment: Many thanks for the contributions by Dr. Anu Aaspõllu (Estonia), Mr. Tony Booker (UK), Prof. Alberto Dias (Portugal), Prof. Pierre Duez (Belgium), Prof. Henry Johannes Greten (Germany), Mr. Alan Koo (Hong Kong, China), Prof. John C. Lindon (UK), Prof. Nicola Robinson (UK), Prof. Monique Simmonds (UK), Dr. Christiane Staiger (Germany), Dr. Halil Uzuner (UK), Dr. Yun Wang (China) and Dr. Qihe Xu (UK).