



GP-TCM Monthly Newsletter April 2010 First Anniversary Special Issue

Celebrations!

GP-TCM celebrates the first year of its existence on 1st May 2010!

Now we have officially launched our website www.gp-tcm.org, all GP-TCM members are actively encouraged to use the website to submit news items that you would like to get published in the GP-TCM Monthly Newsletter. Instructions will soon be posted on the Newsletter submission page within the internal pages of the website.

The next important event will be the 4th Management and Science Meeting (MSM) at Henley Business School (Henley-on-Thames, UK) on 28th-30th July 2010. This will be the First Annual Meeting to review progress and pitfalls of the 1st year and discuss the plans for the 2nd year. Each WP coordinator and one representative per each partner have been invited to join the meeting.

Condolences ...

GP-TCM Consortium's sincere condolences go out to all those who are affected by the earthquake in Qinghai, West China.

<http://news.bbc.co.uk/1/hi/world/asia-pacific/8619135.stm>.

Appointment of new GP-TCM Members and changes of membership:

1. Dr. Jin Xu's departure from GP-TCM: Dr. Jin Xu (Warwick University), the local assistant of Prof. Kenneth Muir, the Coordinator of WP6, has left the consortium due to other pressing commitments. The Consortium and Prof. Muir sincerely thank Jin for his contributions to WP6 and the whole consortium and wish him all the best in his future career development!

Consortium Events:

1. Our Updated Website - <http://www.gp-tcm.org/> (English); <http://www.gp-tcm.org/zh/> (中文). The project website is constantly being updated by the

management team in collaboration with WPs to include latest consortium events and activities. For example, you are cordially invited to see the pictures taken at the WP1 and WP2 Phase I Kick-off Meeting held at Kew, UK: <http://www.gp-tcm.org/2010/03/joint-wp1-and-wp2-phase-i-kick-off-meeting-2/>. Some of the latest changes include the format/design of the main page, WP10 homepage, events calendar, discussion forums etc.

2. GP-TCM and KCL hosted CGCM-UK Meeting in London on the 8th March 2010. The meeting was held at KCL to strengthen the ties and promote collaborations between GP-TCM members in the UK and those who are involved in the UK chapter of the Consortium for Globalization of Chinese Medicine (CGCM-UK). The meeting was attended by Debbie Shaw, Peter Hylands, Ian Sutherland, Derek Fisher, Halil Uzuner and Qihe Xu, with Tai-Ping Fan and Monique Simmonds joining online through Skype. Participants introduced their work on Chinese medicine research in the past year and reviewed the annual reports of all CGCM-UK Members.



3. The 11th Coordination Office (CO) Teleconference was held on the 23rd March 2010: The 11th CO teleconference took place on 23rd March 2010 as a Skype meeting and gathered six CO members, and one Literature Review Standard Operating Procedure (SOP) Panel Co-Chair. Various issues have been discussed at the meeting including GP-TCM Committees and Ethnic Panel member appointments, SOP Panel update, the GP-TCM website, New Society: European Society of Chinese Medicine Research (ESCMR), conversion of CO teleconferences to e-MSMs, and the 4th MSM (the First Annual Meeting).

4. The 2nd GP-TCM Plant Lists Teleconference was held on 15th April 2010: The meeting was attended by Wei Ding, Pierre Duez, Kenneth Muir, Jandirk Sendker, Debbie Shaw, Monique Simmonds, Halil Uzuner, and Qihe Xu. Halil led a brief review of the topics discussed at the last meeting; Monique, Pierre and Ken led the discussions on the progresses on the WP1/WP2 priority plant list, WP3 lists of plants, requirements by other work packages and how all these can be integrated. Wei introduced an interesting way of presenting the listed plant species and its link to clinical use. Debbie and Qihe emphasised the importance to establish GP-TCM principles on naming Chinese medicines appropriately to support quality control and good practice in GP-TCM publications.

5. 2nd WP Website Representatives/Editorial Board Teleconference: The 2nd WP Website Representatives/Editorial Board Teleconference took place on 26th April 2010. During that meeting, Project Manager Halil Uzuner demonstrated all features/functionalities of the GP-TCM website, and the group discussed questions and further suggestions related to the project website.

The Website Editorial Board is composed of all WP website representatives, and general maintenance and update of the website contents will be handled by the members of this board. Website Representatives for each WP are as follows: Monique Simmonds (WP1), Mirko Bayer (WP2), Hani El-Nezami (WP3), Dave Barlow (WP4), Maria Laura Garcia Bermejo (WP5), Kenneth Muir (WP6), Tai-Ping Fan (WP7), Wei Ding (WP8), Marianne Verberne (WP9), and Halil Uzuner (WP10).

6. 1st Electronic Management and Science Meeting (1st e-MSM): The consortium management team has been holding regular meetings, namely "Coordination Office (CO) teleconferences", where CO members and Standard Operating Procedure (SOP) Panel Co-Chairs came together once a month to discuss

general project related issues. During the 11th CO meeting, the group has decided to change the meeting format to allow contributions from not only CO members, but also Steering Committee Members (including WP leads), Technological Advisory Committee Members, core SOP and Ethics Panel members, which will help the consortium to integrate management and science related issues at one joint platform! The new meeting has been named as the e-MSM (electronic-Management and Science Meeting) and will be held on a monthly basis. This change is taking effect from April 2010, and the first meeting was held successfully on 27th April 2010.

Editor's Choice:

1. Arsenic trioxide controls the fate of the PML-RARalpha oncoprotein by directly binding PML. Zheng XW, *et al.* Science, 2010 Apr 9; 328:240-3.

Abstract: Arsenic, an ancient drug used in traditional Chinese medicine, has attracted worldwide interest because it shows substantial anticancer activity in patients with acute promyelocytic leukemia (APL). Arsenic trioxide (As₂O₃) exerts its therapeutic effect by promoting degradation of an oncogenic protein that drives the growth of APL cells, PML-RARalpha (a fusion protein containing sequences from the PML zinc finger protein and retinoic acid receptor alpha). PML and PML-RARalpha degradation is triggered by their SUMOylation, but the mechanism by which As₂O₃ induces this posttranslational modification is unclear. Here we show that arsenic binds directly to cysteine residues in zinc fingers located within the RBCC domain of PML-RARalpha and PML. Arsenic binding induces PML oligomerization, which increases its interaction with the small ubiquitin-like protein modifier (SUMO)-conjugating enzyme UBC9, resulting in enhanced SUMOylation and degradation. The identification of PML as a direct target of As₂O₃ provides new insights into the drug's mechanism of action and its specificity for APL.

<http://www.ncbi.nlm.nih.gov/pubmed/20378816>

<http://www.ncbi.nlm.nih.gov/pubmed/20378808>

2. Metabolomic profiles delineate potential role for sarcosine in prostate cancer progression. Sreekumar A, *et al.* Nature. 2009 Feb 12; 457:910-4. This paper provides an overview of a study undertaken to better understand and profile the biochemical changes associated with prostate cancer aggressiveness. Using metabolomics, a global biochemical profiling technology, tissue, urine and plasma samples were analysed enabling researchers to identify a series of biochemicals (including sarcosine) that are key potential predictors of cancer aggressiveness: <http://www.nature.com/nature/journal/v457/n7231/>

abs/nature07762.html. Please email Dr. Grace O'Maille, Field Application Scientist, Metabolon, if you need a copy of this paper: gomaille@metabolon.com. Metabolon provides a global biochemical profiling services (Metabolon mView) which is designed to help researchers understand biochemical pathway changes in a given complex biological system by analysing relative fold changes between experimental and control groups. Metabolomics is a broad utility technology allowing for understanding of disease states, toxicities, drug interactions, mechanism of action and a variety of other research areas.

3. A flavonol glycoside, isolated from roots of *Panax notoginseng*, reduces amyloid-beta-induced neurotoxicity in cultured neurons: signaling transduction and drug development for Alzheimer's disease. Choi RC *et al.* J Alzheimers Dis. 2010 Jan; 19(3):795-811.

A Radix Notoginseng flavonol glycoside (RNFG), quercetin 3-O-beta-D-xylopyranosyl-beta-D-galactopyranoside, was isolated from roots of *Panax notoginseng*. Among different biological properties tested, RNFG possessed a strong activity in preventing amyloid-beta (Abeta)-induced cell death. In an in vitro assay, RNFG inhibited the aggregation of Abeta in a dose-dependent manner. Moreover, application of RNFG in cultured cortical neurons, or PC12 cells, reduced the Abeta-induced cell death in time- and dose-dependent manners, with the suppression of Abeta-induced DNA fragmentation and caspase-3 activation. In cultured neurons, the pre-treatment of RNFG abolished the increase of Ca²⁺ mobilization triggered by Abeta. The neuroprotective properties of RNFG required a specific sugar attachment within the main chemical backbone because the flavonol backbone by itself did not show any protective effect. In memory impairment experiments using the passive avoidance task, the administration of RNFG reduced brain damage in scopolamine-treated rats. These results therefore reveal a novel function of Radix Notoginseng and its flavonol glycoside that could be very useful in developing food supplements for the prevention, or potential treatment, of Alzheimer's disease.

4. The European Food Safety Authority (EFSA) released in March 2010 a draft guideline on the residues of plant protection products in food.

This document models Dietary Exposure to Pesticide Residues (Part one: single active substances exposure assessment) and proposes a methodology for performing probabilistic exposure assessment of single active substances in the contexts of minimal residue limits (MRL) setting.

The methodology could be interesting for GP-TCM as it provides acute and chronic exposure scenarios :

- Quality of herbs: help in thinking about pesticide residues in medicinal plants and eventually establishing MRLs
- Toxicity of herbs: help in assessing the exposure to toxic components inherent to a given medicinal plant.

The guideline is released for discussion and interested parties are invited to comment: <http://www.efsa.europa.eu/en/consultations/call/ppr100301.htm>

5. Frequently overlooked differences between metabolizing profiles.

A recent FDA warning for Plavix (clopidogrel, used to lower the risk of blood clots in prevention of cardiovascular problems) underlines that a significant part of the population have genetic variations that reduce the activity of one of the most critical enzymes (CYP2C19) required to activate the drug. FDA advises genetic testing for this variation: "certain patients with a genetic variation cannot metabolize the drug, putting them at increased risk for heart attack and stroke".

In total, poor metabolizers account for 3 percent of the population; poor metabolizers represent about 2 % of whites, 4 % of blacks and 14 % of Chinese, according to Sanofi-Aventis and Bristol-Myers Squibb.

Such differences in metabolizing profiles should be kept in mind when considering translating Chinese medicines across different populations; there are still many unknown or not-so-well-known genetic factors. <http://www.dddmag.com/news-Plavix-Hit-With-Black-Box-Warning-31510.aspx>

6. Grant writing skills adapted from *The Scientist*: <http://www.the-scientist.com/2010/4/1/79/1/>

- **Check with the agency:** Tell them about your work and ask if it fits the scope of what they are looking to fund in that particular round. Answer the questions that are asked, not the ones you wish had been asked.
- **Tell a story:** A grant proposal needs to progress logically. Make sure the order of the specific aims is arranged sensibly in the context of the bigger story.
- **Sell it like a business:** As selling something, you have to show them a) that your business is doing something that needs to be done, b) that you have the knowledge and skills to do it, and c) that you have the track record and work ethic to accomplish it.
- **Flesh out a skeleton draft:** Limit yourself to

relevant information by making a “skeleton outline” of your proposal-just the big points. Then, add in subpoints for each section detailing what you want to say about that topic, and build the story from inside out.

- **Skip the suspense:** Hit the reviewer with the significance right away. Put it first to tell the reviewers why they should continue reading on.
- **Don't bite off more than you can chew:** Sometimes people propose too much; their application is too ambitious. Limit yourself to three aims, using “sub-aims” if needed.
- **Justify the details:** Think about what experiments could answer the questions posed by your specific aims, and what controls will eliminate other possibilities. Make sure to justify any specific experimental details you include. For animal studies, do the power calculations and explain the number of animals you need to achieve a certain statistical significance.
- **Collaborate across disciplines:** If your proposal involves branching out into new scientific areas, you will need to justify your ability to conduct the proposed experiments. To strengthen your proposal, find collaborators who specialize in those other fields.
- **Be consistent:** Make sure you are consistent in your use of terms. The punctuation and font of genes should be consistent throughout. Abbreviations should only be defined once upon first reference, and then used.
- **Choose your font wisely:** Good font choice can help readability. While many writers today tend to prefer sans serif fonts, like Arial, research has shown that fonts like Times make for better readability and aid retention where large slabs of text are presented.
- **Reduce:** If you can say it shorter, it's almost always better. Grant reviewers love concision. After you write a proposal, go back through and try to cut any unnecessary words. Almost always you can eliminate 10 or 20 percent of what you've written.
- **Reread:** After you write your first draft, leave it for a while and then come back to it and have a fresh look at it. Let go of your knowledge of the document and the complexities and the meaning, and just read it plain so that you can really see where the bumps are. Then ask your colleagues to take a look, or hire a professional editing service to review your proposal.

Meetings:

WorldPharma2010 (16th World Congress on Basic and Clinical Pharmacology), 17-23 July 2010, Copenhagen, Denmark. This congress will include a 3-day focused conference (21-23 July, 2010) on *Natural Products: Past and Future?*

The programme includes

- (1) Cardioprotection by natural products,
- (2) Products derived from one single plant with convincing pharmacological data in explaining their mechanism of action,
- (3) Multiple plant products: a matter of synergy,
- (4) East meets West: from prevention to therapy,
- (5) Globalization of natural/traditional products.

For further information, please visit www.worldpharma2010.org or email: WorldPharma2010@ics.dk.

9th Meeting of Consortium for Globalization of Chinese Medicine (CGCM): The 9th CGCM meeting will be held in *Hong Kong* on 23rd -25th August 2010 (Monday - Wednesday). The Meeting provides a platform for regulatory-industrial-academic exchanges and potential research collaborations on various frontiers of Traditional Chinese Medicine among our worldwide CGCM members and guests. Three new sessions will be introduced at the upcoming meeting:

- **Acupuncture**
- **Objective and Standard Assessments of Diagnosis in TCM**
- **Bioinformatics and Database II (Application of "Omics" in TCM Research) Session**

Please refer to the program-at-a-glance for further details:

http://www.tcmedicine.org/upload_file/485/9th%20CGCM_Program%20at%20a%20glance_20100421.pdf.

CGCM cordially invites you to join the meeting and encourages to forward this message to your colleagues and friends so that more experts in various related fields and also interested in TCM would know about CGCM and join our upcoming 9th CGCM Meeting.

Registration

Registration form should be returned to centraloffice@tcmedicine.org on or before the deadline. The maximum no. of the participants of the meeting will be 600 on first-come-first-served basis. CGCM advises you to register as early as possible.

Call for Abstracts

Abstract Submission for Poster Presentations of the Meeting is now open for all CGCM members and invited guests. Any interested individual is required to submit abstract together with the attached Abstract Submission Form.

Highlights of the posters would be discussed during the relevant workshop discussion sessions.

Conclusions, action plans and milestones are expected to be drawn from the workshop sessions.

***Deadline for Abstract Submission: Abstracts should be sent to centraloffice@tcmedicine.org on or before May 14, 2010 (Friday) with the attached abstract submission form.**

Registration Fee

CGCM Members: Free

Local Universities and Academic Institutions: Free

Non-CGCM Members (Universities / Academic Institutions): HKD3,000

Non-CGCM Members (Commercial / Business Enterprises): HKD8,000

Registration fee includes:

Full access to all sessions (Closed-door Meeting is for members only)

Daily lunches and tea breaks

Program books

Proceedings

Pre-event welcoming reception (August 22)

Gala dinner (August 23)

Dinner (August 24)

Travel Grant

To support postgraduates to attend the 9th CGCM Meeting, up to 20 Travel Grants are now open for application. Awardees will receive up to USD 500 and free accommodation (shared room). You may wish to encourage your postgraduates to submit abstracts and apply for the Travel Grant.

New Institutional and Industrial Affiliate Membership

You are encouraged to take the initiative in inviting any potential institutions and companies, which are devoted to the research and development of herbal medicine, to join CGCM as Institutional or Industrial Affiliate Members. You may wish to provide the relevant contact person and information for us.

For further information, please refer to the meeting website: <http://www.hkbu.edu.hk/~cgcm2010/> or centraloffice@tcmedicine.org.

Acknowledgements:

Many thanks for the contributions by Prof. **Kenneth Muir** (UK), Prof. **Pierre Duez** (Belgium) Dr. **Halil Uzuner** (UK), and Dr. **Qihe Xu** (UK).



A toast to your health, GP-TCM members!

Since Christmas 2009, I had been suffering from cholecystitis which thankfully was treated with a course of antibiotics and then keyhole surgery on 24 March 2010. Having recovered from this ordeal, I would like to say special thanks to “Comrade” Qihe Xu, Halil Uzuzer, Peter Hylands, Hani El-Nezami, “BB” Ian Sutherland, “Captain” Derek Fisher and many friends/colleagues in WP7 for your understanding and support during this difficult time.

With a new lease of life, I will catch up on lost time and endeavour to serve you well, so that we can really use our GP-TCM platform to shape the future of TCM. To quote Leonard Ravenhill, *“The opportunity of a lifetime must be seized within the lifetime of the opportunity.”*