

## GP-TCM Monthly Newsletter July-August 2011

### GP-TCM Activities:

1. The 2<sup>nd</sup> Annual General Meeting (AGM) of the GP-TCM consortium took place in Braga (Portugal) on 21<sup>st</sup> – 24<sup>th</sup> July 2011. The meeting gathered more than 50 beneficiary as well as non-beneficiary participants and started on 21<sup>st</sup> July with a Traditional Chinese Medicine (TCM) Symposium comprising 5 talks delivered by Professors Zhongzhen Zhao, Gerhard Franz, Jeremy Nicholson, Rudolf Bauer, and Jianping Liu, respectively. Their talks introduced TCM and Chinese herbal medicines, TCM-related contents in European Pharmacopoeia, applications of systems biology in TCM research, as well as the state of the art of clinical and basic research of TCM and were hailed by participants as “a real highlight” of this year’s AGM. In addition, the colourful programme of the day also included poster exhibition, a TEST-GP discussion and an open debate entitled “TCM, phytomedicine and conventional medicine: How and where can they meet?”, where panellists Dr. Nuno Correia, Mrs. Dan Jiang, Prof. Olavi Pelkonen, and Prof. Elizabeth Mary Williamson shared their thoughts and perspectives with the audience.

The event continued with 2.5 days of closed-door WP private meetings and WP-focused workshops and interactive discussion sessions (22<sup>nd</sup> – 24<sup>th</sup> July 2011). During the WP-based presentation and discussion sessions, the presenters gave succinct overview of their WPs’ progress during the 2<sup>nd</sup> year, challenges experienced, and plans for the final year. Detailed discussions took place on a number of relevant issues during and after the WP presentations. Furthermore, the meeting participants benefited from dedicated discussion sessions on (i) founding a “Good Practice in Traditional Medicine Research” (GP-TMR) consortium to succeed GP-TCM, (ii) launching a GP-TCM Special Issue in *Journal of Ethnopharmacology* and (iii) updating Good Practice Guidelines for Scientific TCM Publications and the work of the SOP Panel.



Group photo of the 2nd AGM delegates on the harbour front of Porto, Portugal



Cheers! A free large glass of Sandeman port for the one with the best smile!

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**2. The “Grand Priorities, Challenges and Opportunities” survey:** Your opinions might well make a big difference to shape the future funding prospects in this important field of research/science. The GP-TCM Consortium is currently conducting an online survey in order to bring out a consensus on the "grand issues" in the context of the broadest field of TCM and its research. Your selections will collectively represent the wisdom of the Consortium and will determine what will come up in the final lists of "Top 15 Priorities", "Top 15 Challenges" and "Top 15 Opportunities", which will be published as part of the leading article of a *Journal of Ethnopharmacology* Special Issue, to be submitted by mid-October 2011, as well as in the official report of the GP-TCM Consortium to the European Commission. Further dissemination to other stakeholders and outreach to the public are also foreseen. In order to achieve this, we would like to invite you to complete survey via the link given below: <http://www.surveymonkey.com/s/G8DHYWW>

The deadline to complete the survey is **20<sup>th</sup> September 2011**, after which the survey will be closed for data analysis and publication.

If you are stakeholders of a relevant organisation and think that your members might be interested in participating this survey, please encourage your members to complete this questionnaire. We welcome your comments to help us to identify any appropriate links to be contacted from main Chinese/European professional bodies for questionnaire dissemination (please contact Prof. Thomas Efferth ([efferth@unimainz.de](mailto:efferth@unimainz.de)) and Dr. Halil Uzuner ([halil.uzuner@kcl.ac.uk](mailto:halil.uzuner@kcl.ac.uk))).

**3. The 11<sup>th</sup> e-MSM teleconference was held on 14<sup>th</sup> July 2011.** The issues discussed during the teleconference included (i) Month-24 deliverables reminder, (ii) WPs 1-10 highlights for 2<sup>nd</sup> year summary and future plans, (iii) GP-TCM Special Issue to be published in *J Ethnopharmacol*, and (iv) WP10 survey.

**4. The GP-TCM First Periodic Report has been approved by the Commission** and the payment for the first reporting period has been done! This confirmation was received by the Coordination Office on 2<sup>nd</sup> August 2011.

### GP-TCM Announcements, Appointments and Labour Division:

**1. Appointment of Prof. Gerhard Litscher (the Medical University of Graz, Austria) to GP-TCM as a non-beneficiary member** devoted to WP8 (Functional genomics in studies of acupuncture-moxibustion and meridians). Gerhard is Head of the Research Unit of Biomedical Engineering in Anesthesia and Intensive Care Medicine and of the TCM Research Center Graz at the Medical University of Graz in Austria. He is a Doctor of technical and Doctor of medical sciences, with several research stays and international lectures, about 550 scientific publications, partly on basic acupuncture research. He authored and/or edited eleven books, currently editor-in-chief and/or member of the editorial board of 23 international scientific journals (e.g. Editor-in-chief of the *Internet Journal of Alternative Medicine (IJAM)*, Associate Editor for Europe of *Medical Acupuncture*, Senior Editor of the *Journal of Acupuncture and Meridian Studies (JAMS)*, one of the editors of *Evidence-based Complementary and Alternative Medicine (eCAM)*). Gerhard is also the Member and Representative of Austria of the Parliament of the European Medical Laser Association (EMLA). His special interests are Neuromonitoring and High-Tech Acupuncture Research. **Warmest welcome and congratulations, Gerhard!**

**2. Appointment of Dr. Eric Ziea (Hospital Authority of Hong Kong, China) to GP-TCM as a non-beneficiary member** devoted to WP8 (Functional genomics in studies of acupuncture-moxibustion and meridians). Dr. Eric Ziea (Tat-Chi) served as an orthopedics surgeon after graduating from The Chung Shan Medical & Dental College (Taiwan, 1991). He had completed the Masters Degree in Medical Science (HKU, 2000), the diploma course in Acupuncture and Moxibustion (HKU, 2001) and PhD in medicine (CUHK, 2008). He served as a researcher at the department of Community and Family Medicine (CUHK), the Medical & Therapeutic Department (CUHK), as well as educator at the Baptist University of Hong Kong (HKBU) and the Open University of Hong Kong (OUHK). In 2010, he also completed the Fellowship of the Hospital administration and management (2010). He is now the Chief Executive Officer (CEO) of the HACM Limited and the Senior Manager (Head) of the Chinese Medicine Department, the Hospital Authority of Hong Kong. He is also in charge of the electronic Health Record (CM) project, which is tasked by Hong Kong Government to develop a territory-wide Electronic Health Record (eHR) project. This project will support healthcare reform and provide essential infrastructure for the healthcare system. In addition, he is invited to be the advisor of the international Classification of Traditional Medicine (ICTM), Topic Advisory

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Group (TAG) – informatics, World Health Organization (WHO). **Warmest welcome and congratulations, Eric!**

### Introduction to Sister Organisations and Societies

**1. GA, Society for Medicinal Plant and Natural Product Research** (“Gesellschaft für Arzneipflanzen- und Naturstoff-Forschung”), is an international, neutral and independent association of scientists from research institutions of universities and companies as well as other interested people engaged in the advancement of research and science in the field of medicinal plants, natural bioactive compounds and phytotherapy.

GA was founded in 1953 in Bad Camberg, Germany, for the purpose of promotion and dissemination of medicinal plant research. Over the years, GA has developed into an international scientific society with at present ca. 1500 members from over 85 countries. The scientific interests of GA cover nowadays all aspects of medicinally used natural products, agricultural science, biology, chemistry, pharmacy, pharmacognosy, pharmacology and medicine. The main activities of the society are as follows:

- organisation of scientific meetings
- support of the scientific journal "*Planta Medica: Natural Products and Medicinal Plant Research*" as organ of the society
- cooperation with organisations pursuing similar aims
- scientific counselling of public institutions
- financial support of research work

For more information, please visit: [http://www.ga-online.org/events\\_en.php](http://www.ga-online.org/events_en.php)

**2. The International Society for Complementary Medicine Research (ISCMR)** is a worldwide scientific non-profit professional organisation of researchers, practitioners and policy-makers devoted to fostering cooperative and multidisciplinary research and development as well as the application of knowledge in the fields of complementary, traditional and integrative medicine.

Goals of ISCMR:

- Facilitate communication and collaboration among researchers and practitioners with an interest in research on a worldwide basis.
- Provide access to Complementary Medicine research information (internationally relevant events, conferences, publications, funding).
- Provide access to an international database of ISCMR members.
- Provide reduced journal subscription rates and international meeting registration fees.
- Collaborate with individual researchers (or teams), regional societies, professional organizations and research networks to further mutual goals related to research and development agendas.
- Co-organise an annual International Congress for Complementary Medicine Research (ICCMR).

The annual ICCMRs are premier international events for researchers in complementary and integrative medical research. The 7<sup>th</sup> ICCMR is in cooperation with the International Research Congress for Integrative Medicine and Health (<http://imconsortium-congress2012.org>) and will be held in Portland, Oregon, USA, on 15<sup>th</sup>–18<sup>th</sup> May, 2012. In 2013, academic groups from University College London and the University of Southampton are combining to run the 8<sup>th</sup> ICCMR in London on 30<sup>th</sup>, 31<sup>st</sup> May and 1<sup>st</sup> June. ICCMR has always been managed by leading academics in the field representing a variety of excellent international research institutions. Previous congresses, for example, have been co-sponsored by the US National Institutes of Health, attracted between 500 and 1000 people and allowed a large number of researchers of international reputation to present their latest research. For more information, please visit: [www.iscmr.org](http://www.iscmr.org).

**3. The International Association for the Study of Traditional Asian Medicine (IASTAM)** is an international organisation in the field of Asian medicine making a serious attempt to embrace both academics and practitioners. IASTAM has always sought to give each of these communities a platform for the expression of their views, respecting the integrity of each group while nevertheless privileging the free exchange of knowledge over involvement in any particular commercial interest or therapeutic regime. Many of the leading scholars in the field of Traditional Asian Medicine have been and are still active in IASTAM. These activities include publishing an academic journal, *Asian Medicine-Tradition and Modernity*, and

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holding academic conferences on a regular basis. Both the Journal and the conferences attract practitioners and scholars from a wide range of academic backgrounds, such as history, anthropology, the physical sciences, philology, sociology and archaeology. The next major conference will be held in Sancheong, South Korea in November 2013. With the theme of Beyond Integration: Reflections on Asian Medicines in the 21st Century, the conference will feature the sub-themes of networks and systems, canonisation and textual authority, the mainstreaming of Asian medicine, efficacy and effectiveness and Asian Medicines in global health and development. Information provided by James Flowers, Secretary General, IASTAM. For further information please go to: <http://www.iastam.org/home.htm>.

### Editor's Choice

#### New Life for an Old Remedy?

##### Drug Discovery & Development - July 13, 2011

The active ingredient in a traditional Chinese herbal remedy might help treat deadly brain tumors, according to a new study by researchers at the Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James).

The researchers discovered that the compound, indirubin, both blocks the migration of glioblastoma cells, preventing their spread to other areas of the brain, and the migration of endothelial cells, preventing them from forming the new blood vessels that the tumor needs to grow.

Glioblastomas occur in about 18,500 Americans annually and kill nearly 13,000 of them yearly. Glioblastoma multiforme is the most common and lethal form of the malignancy, with an average survival of 15 months after diagnosis. The research is published online in the journal *Cancer Research*.

“We have pretty good methods to stop glioblastoma from growing in the human brain, but these therapies fail because tumor cells migrate from the original site and grow elsewhere in the brain,” says co-principal investigator Dr. E. Antonio Chiocca, professor and chair of neurological surgery and co-director of the Dardinger Center for Neuro-oncology and Neurosciences. “Our findings suggest that indirubins offer a novel therapeutic strategy for these tumors that simultaneously targets tumor invasion and angiogenesis,” Chiocca says.

“This study shows for the first time that drugs of the indirubin family may improve survival in glioblastoma, and that these agents inhibit two of the most important hallmarks of this malignancy – tumor-cell invasion and angiogenesis,” says co-principal investigator Dr. Sean Lawler, senior scientist and group leader of the Translational Neurooncology Group at the Leeds Institute of Molecular Medicine.

Indirubin is derived from the Indigo plant. It is the active ingredient in the Chinese herbal remedy called *Dang Gui Long Hui Wan*, which is used to treat chronic myeloid leukemia.

Chiocca, Lawler and their collaborators used multiple glioblastoma cell lines and two animal models to examine three derivatives of indirubin. Key findings include the following:

- When human glioblastoma cells were transplanted into one brain hemisphere of mice, indirubin-treated animals survived significantly longer than controls and showed no migration of tumor cells to the opposite hemisphere.
- In a separate experiment, indirubin reduced the migration of tumor cells by 40 percent in treated animals versus controls.
- Treated tumors showed a lower density of blood vessels, and new blood-vessel growth was reduced up to three-fold in intracranial tumors, depending on the tumor-cell line.
- A laboratory assay showed that indirubins reduced endothelial-cell migration by 52 to 41 percent compared with untreated controls.

“Overall, our findings suggest that indirubins reduce tumor invasion and tumor vasculature because of their antimigratory effects on both tumor and endothelial cells,” Chiocca says.

Date: 12<sup>th</sup> July 2011. Source: Ohio State University Comprehensive Cancer Center

#### New developments in herb sourcing in China - Tony Booker

China has a long history of trade in medicinal herbs. Due to the imposition of trade restrictions, exports in these commodities came almost to an end during the 1970's, although trading may well have continued

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through more informal channels during this time. Chinese trade in medicinal herbs began again officially in 1984 through the establishment of government sponsored Chinese export companies. International joint venture companies have been emerging in the arena of medicinal herbs since the 1990's. As part of a PhD project at the Leverhulme Centre for Integrative Research on Agriculture and Health, I am studying the value-chain in selected herbal medicines from crop to consumer (Supervisors Michael Heinrich and Deborah Johnston, London) and I visited China in April 2011. The study of this supply and value chain is part of a project which looks at this, until recently, completely overlooked aspect - the link between producers and consumers of such products, especially as it relates to international trade. Agricultural production is generally in developing countries, while the consumption is both in developing and developed countries. Clearly such a usage impacts on public health (both potentially in a beneficial but also detrimental way).

Historically, buyers have obtained their herbs predominantly from the herbal markets found throughout China. The largest of these can be found in Bozhou, Anhui province. Farmers, wild-pickers and market traders gather there from all over Anhui province and beyond to sell their goods. There are 6,000 market stalls, trading 5,000 tons of Chinese herbs, consisting of approximately 2,000 species, to the 50,000 people who visit the market each day. The daily turnover exceeds US\$ 1.2million, and annual turnover exceeds US\$ 735 million.



Tony Booker at a farm in Bozhou showing *Paeonia lactiflora* Pall.



A meeting on Chinese Medicine Resources & Sustainable Use in Anhui

This centralised market approach is the traditional way of buying medicinal plants throughout China. The quality of the herbs is chiefly determined by traditional, organoleptic methods rather than any analytical approach. Moreover, little attention is paid to documenting the source of the herbs or documenting any processes that may have been applied to them post harvesting such as drying, cutting, sieving, washing, sulphuring, stir-frying, boiling and baking. Traditionally much of this work takes place on site and it is a common occurrence to see herbs laid out over the pavement or highway to dry in the sun.

In order to satisfy the requirements of an international market, some companies have put in place systems that better address the quality concerns of foreign customers and have developed an alternative strategy to buying herbs from the herbal markets. By having direct links to the medicinal plant farms, it is deemed easier and less costly to control the quality and traceability of the herbs. In China it is often difficult for non-Chinese organisations to make direct links with individual farmers and so herbal sourcing companies have emerged to fill this gap in the export market. An example of such a company is Anhui Tienho Herbal Source Company. For the last 20 years this company has exported medicinal plants from China, firstly to Japan, and for the last 5 years, to Taiwan. They supply processed and un-processed medicinal plants, plant extracts, essential oils and some functional foods. Their main focus is on medicinal plants from the Anhui area but they also source from all over China subject to customer demand. Anhui Tienho have built good relationships with local farmers and have been instrumental in bringing together growers and buyers. Anhui Tienho claim to pay above the market price for the medicinal plants and in return they require farmers to pay closer attention to quality requirements. The material must be harvested at particular times of the year and sometimes in conjunction with phytochemical testing and pre-processing must be in accordance with established good manufacturing practices. Pesticides and fertilizers used during cultivation must be strictly controlled and documented although it was admitted that this is an area that still needs more work.

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The scientific assessment of quality is a new concept for many of those involved at the early stages of the supply chain. Some quality control testing is performed in-house whereas more complicated tests are contracted to specialist laboratories. Approximately 95% of the herbs sourced by Anhui Tienho are destined for the export market, mainly Japan and Taiwan, where they are further processed and sold internationally. Although direct sourcing represents only a minimal volume of total trade in China, it is probable that analogous strategies will be manifested by other companies with a desire to introduce Chinese herbal products to Europe.

### Funding

**1. GP-TCM encourages members to apply for various prestigious and but less competitive grants, such as the Marie Curie Industry-Academia Partnerships and Pathways (IAPPs):** The European Commission has published the evaluation results for the 2011 IAPPs Call. The results show that, of the 165 proposals submitted in total, 51 have been shortlisted in list A (proposals recommended for funding). Some 22 proposals have been placed on the reserve list (list B). No proposals are in list C (proposals which are above the threshold but not retained for funding nor on the reserve list due to lack of available budget). Therefore, all proposals which scored over the threshold are either recommended for funding (list A) or on the reserve list (list B). This is in a stark contrast with Marie Curie ITN, although more than half applications passed all thresholds, only approximately 9% applications are likely to be funded.

**2. The Innovative Medicines Initiative JU (IMI) has launched its 4<sup>th</sup> Call for Proposals on 18<sup>th</sup> July 2011. The deadline for submitting Expressions of Interest in this first stage of the Call is 18 October 2011. Details of the 7 indicative topics for the 4<sup>th</sup> Call for proposals are now available.** <http://www.imi.europa.eu/content/4th-call-2011>

**3. Strategic Plan 2010-20 of the Wellcome Trust:**

<http://www.wellcome.ac.uk/About-us/Strategy/index.htm>

[http://www.wellcome.ac.uk/stellent/groups/corporatesite/@policy\\_communications/documents/web\\_docume nt/WTDV027438.pdf](http://www.wellcome.ac.uk/stellent/groups/corporatesite/@policy_communications/documents/web_docume nt/WTDV027438.pdf); <http://www.wellcome.ac.uk/Funding/International/index.htm>

### Events:

- 1. The 10<sup>th</sup> Meeting of Consortium for Globalization of Chinese Medicine (CGCM) will be held in Shanghai (China) on 26<sup>th</sup> – 28<sup>th</sup> 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.
- 2. The 8<sup>th</sup> World Congress of Chinese Medicine will be held in London (UK) on 2<sup>nd</sup> – 3<sup>rd</sup> September 2011:** <http://www.2011wccm.com/>
- 3. The 59<sup>th</sup> International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA) to be held in Antalya (Turkey) on 4<sup>th</sup> – 9<sup>th</sup> September 2011:** <http://www.ga2011.org/>
- 4. “Towards toxicity assessment without animals” - The 28<sup>th</sup> Workshop of SSCT and the FINCOPA Seminar to be held in Scandic Rosendahl, Tampere (Finland) on 21<sup>st</sup> – 23<sup>rd</sup> September 2011:** [www.ficam.fi](http://www.ficam.fi)
- 5. The 3<sup>rd</sup> International Conference of Bioinformatics, Natural Products and Traditional Medicine with the theme "Search the Alternative Strategy to Combat Major Diseases from Traditional Medicine" to be held in Xi'an (China) on 14<sup>th</sup>-16<sup>th</sup> October 2011.** <http://www.icbnptm.org/>
- 6. The 2011 Shanghai International Conference on TCM and Natural Medicine to be held in Shanghai (China) on 22<sup>nd</sup>-23<sup>rd</sup> October 2011.** <http://www.s-tcm.com/english.html>

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