

The August 2018 Newsletter of The GP-TCM Research Association



Editorial

Traditional Chinese Medicine for Facilitating *In Vitro* Fertilization



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In vitro fertilization (IVF), as a choice for more than 1,000,000 infertile couples each year, give rise to the birth of over 3,000,000 babies worldwide¹. In Europe, over 300,000 treatment cycles of IVF or intracytoplasmic sperm injection (ICSI) are performed each year²; in the United States, babies conceived through IVF or ICSI comprise 2%-3% of total births³. As a series of traditional medical practices originating in China, Traditional Chinese Medicine (TCM) is widely used by women to improve their health, from preventing miscarriage at the early phase of pregnancy to alleviating menopausal symptoms. In recent years, many infertile couples have chosen TCM as an adjunct when they undergo IVF^{4,5}. However, conclusions from clinical trials were inconsistent. Thus, clinicians and infertile couples feel it hard to decide whether they should choose TCM to improve IVF outcomes⁶.

To standardize clinical trials. The effects of TCM on IVF outcomes depend on many factors, such as TCM diagnosis of patient's conditions, the timing of TCM treatment, selection of herbs/acupoints, expertise and qualification of the practitioners, types of acupuncture (traditional needling acupuncture, electro-acupuncture, laser acupuncture or auricular acupuncture, etc), processing of herbs and the formulation. To standardize clinical trials, the following items may be useful for the design of further research aiming to evaluate the effects of TCM on IVF outcomes: (1) selection of herbs and/or acupoints should be based on the correct TCM diagnosis; (2) standardized acupuncture methods or the standard processing or formulations of herbs should be applied to enhance comparability among different studies; (3) live birth should be the primary outcome; (4) data on hormones and psychological index during the treatment should be collected; (5) inter-country differences in infertile patients' experience, expectations and knowledge of TCM may lead to variable IVF outcomes, thus international cooperation is urgently needed to better understanding of the effects of TCM treatment on IVF outcomes; (6) to solve the confusions caused by different protocols for TCM treatment of IVF and ICSI in various centers, an international multicenter study group to evaluate the effects of acupuncture on IVF and ICSI outcomes should be established⁷; (7) different confounders, which have been shown to influence IVF outcomes, should be taken into account, including life style factors (maternal and paternal age, weight, vitamin and iodine in-take, alcohol and caffeine consumption, smoking, substance misuse, stress, environmental pollutants, oxidative stress, etc), gynecological factors (duration and cause of infertility, presence and characteristics of uterine fibroids etc), number of previous IVF or ICSI cycles, presence of male factor, race and ethnicity⁸⁻¹¹; (8) for the trials using acupuncture, standards for reporting interventions in clinical trials of acupuncture (STRICTA) criteria should be applied to make protocols reproducible¹²; (9) detailed, fixed protocols based on the correct diagnosis of the patient's syndrome according to TCM theories and expert opinion should be established; and (10) a sufficient dose of treatment over the most appropriate time period should be provided.

To find the best timing of TCM intervention before, during or after IVF. As shown in **Figure 1**, different timing in the provision of TCM intervention during IVF may account for variations in outcome and a "standardized" research is needed to define the appropriate time to provide TCM to maximize its effects. For example, in some of the studies, acupuncture was applied around the time of transvaginal oocyte retrieval (TVOR) to assess the pain-relieving effects, however, in other trials, acupuncture was applied around the time of embryonic transfer (ET). Before TVOR, TCM, including functional food extracted from Chinese herbal medicine, aims to strengthen natural menstrual cycle, improve development of follicle, increase reactivity of ovary to drugs and improve uterine endometrial

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receptivity. Non-pharmaceutical treatment is often used around TVOR and ET to relieve anxiety levels, which improves IVF outcomes¹³. However, after the confirmation of pregnancy, non-pharmaceutical treatment, especially acupuncture, should not be conducted. If used appropriately, TCM can be expected to facilitate *in vitro* fertilization in cases of unexplained infertility, early ovarian failure, polycystic ovary syndrome (PCOS) and amenorrhoea, or a prolonged menstrual cycle caused by an ovarian problem and where the patient wants to conceive quickly, such as with age over 35, or for other personal reasons, although better evidence is still needed for each of these indications.

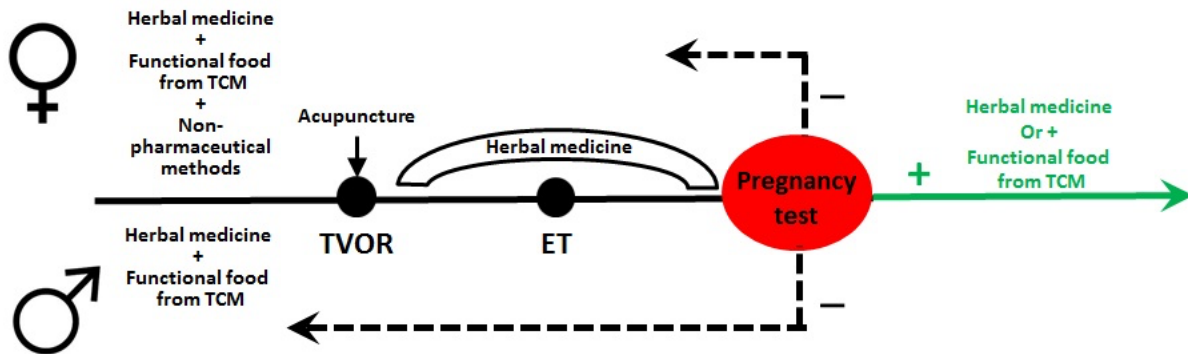


Figure 1. Find the best timing of TCM intervention before, during or after IVF

Transcutaneous electrical acupoint stimulation is promising to improve IVF outcomes.

Transcutaneous electrical acupoint stimulation (TEAS) is a new, non-invasive acupuncture treatment developed based on traditional electro-acupuncture^{14,15}. For patients unwilling to receive invasive or painful acupuncture treatment, TEAS is a good choice^{14,15}. In TEAS, skin electrodes are placed on the acupoints, instead of piercing the skin with the traditional acupuncture needles, and can increase the reproducibility of acupuncture-like stimulation^{14,15}.

In sum, more TCM theory-guided, standardized, large, randomized and multicentre trials are needed to answer whether TCM can improve IVF outcomes.

References

1. Horsey K. 3,000,000 IVF Babies born worldwide since 1979. Presented at the annual conference of the European Society of Human Reproduction and Embryology 2006.
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3. Nygren KG, Andersen AN. *Hum Reprod.* Feb 2001;16(2):384-391.
4. Cao H, et al. *PLoS one.* 2013;8(12):e81650.
5. Qu F, et al. *Journal of alternative and complementary medicine.* May 2012;18(5):429-439.
6. Myers E. *Fertil Steril.* 2006;85:1362-1363.
7. Dieterle S. *Fertil Steril.* 2006;85(5).
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12. MacPherson H, *PLoS Med.* Jun 2010;7(6):e1000261.
13. Qu F, et al. *Scientific reports.* 2014;4:5028.
14. Zhang Q, *Anaesthesia.* Aug 2014;69(8):832-839.
15. Zhang R, et al. *Fertil Steril.* Oct 2011;96(4):912-916.

Editors' Note:

Dr Fan Qu editorial has been invited to commemorate the 40th anniversary of IVF. To read more about the 40 years' history and the state of the art of IVF, readers are invited to read a recent *Lancet* paper:

Boseley S. **IVF at 40.** *Lancet* 2018;392:376-7.

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)31662-3/fulltext?](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31662-3/fulltext?)

Archives (2008-2018): www.gp-tcm.org/news-list/



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Special Feature

1. A group photo of attendees of the 6th GP-TCM RA Annual Meeting held at Royal Botanical Gardens Kew and London South Bank University, UK, 4-6 July 2018.



A group photo of attendees of the 6th GP-TCM RA Annual Meeting at Kew

European Reports:

1. Mejlgaard N, et al. Europe's plans for responsible science. *Science* 2018;361:761-2. In the past, European framework programs for research and innovation have included funding for the integration of science and society. Collaborative projects have brought together diverse sets of actors to co-create and implement common agendas through citizen science, science communication, public engagement, and responsible research and innovation (RRI) and have built an evidence base about science-society interaction. In the proposal for the upcoming Horizon Europe program, however, there is no sustained support for RRI, nor is there a program line dedicated to co-creating knowledge and agendas with civil society. These serious oversights must be corrected before the Horizon Europe program is adopted by the Council and the European Parliament...

<http://science.sciencemag.org/content/361/6404/761.2?hwshib2>

2. Marie Skłodowska-Curie Actions Innovative Training Networks. The 2019 MSCA ITN Call will be launched on **13 September 2018** with a deadline for the submission of applications on **15 January 2019**. The ITN aims to train a new generation of creative, entrepreneurial and innovative early-stage researchers, able to face current and future challenges and to convert knowledge and ideas into products and services for economic and social benefit.

<https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/msca-itn-2019.html>

3. Main Changes Expected in the 2019 ERC Work Programme. Ahead of its publication in September 2018, the ERC has shared the main changes expected in the 2019 ERC Work Programme. Changes that are intended to be made to the Work Programme are available online. Whilst none of these changes can be confirmed definitively until the publication of the 2019 Work Programme, applicants are encouraged to begin their development of proposals on this basis and to utilise the support documents available for the StG 2018 call and SyG 2018 call as an initial guide.

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Applicants are also reminded that the various ERC documents, including proposal templates from the 2018 call are available on the Horizon 2020 participant portal.

<https://erc.europa.eu/sites/default/files/content/pages/pdf/ERC-2019-Work-Programme-main-changes.pdf>

4. New Guidance and Technical Notes: Overview of the UK Government's Guarantee for EU-funded Programmes in the Unlikely Event of a No-deal Brexit, etc. The document set out to ensure that UK organisations continue to participate in and receive funding over the lifetime of the project if they have successfully bid into EU-funded programmes before the end of 2020.

Updated UK Government Q&A and Technical Notice on Horizon 2020:

<https://www.gov.uk/government/publications/horizon-2020-funding-if-theres-no-brexiteal/horizon-2020-funding-if-theres-no-brexiteal--2>

Arrangements for Human Medicines Regulations in the Unlikely Event of a No-Deal Brexit:

<https://www.gov.uk/government/publications/how-medicines-medical-devices-and-clinical-trials-would-be-regulated-if-theres-no-brexiteal/how-medicines-medical-devices-and-clinical-trials-would-be-regulated-if-theres-no-brexiteal>

Overview of the UK Government's Guarantee for EU-funded Programmes in the Unlikely Event of a No-deal Brexit: <https://www.gov.uk/government/publications/the-governments-guarantee-for-eu-funded-programmes-if-theres-no-brexiteal/the-governments-guarantee-for-eu-funded-programmes-if-theres-no-brexiteal>

5. Horizon Europe - the next research and innovation framework programme. The Commission has published its proposal for Horizon Europe, an ambitious €100 billion research and innovation programme that will succeed Horizon 2020. How is Horizon Europe being designed, legal framework, factsheets, reports and timeline...

https://ec.europa.eu/info/designing-next-research-and-innovation-framework-programme/what-shapes-next-framework-programme_en

<http://www.europarl.europa.eu/sides/getDoc.do?type=COMPARL&reference=PE-625.305&format=PDF&language=EN&secondRef=>

Reports on China and Chinese-European Cooperation

1. Yuan X. China's vaccine production scare. *Lancet* 2018;392:360. In July, China experienced its "worst public health crisis in years" as stated by South China Morning Post. Chinese vaccine maker Changsheng Biotechnology was found to have fabricated production and inspection records and to have arbitrarily changed process parameters and equipment during its production of freeze-dried human rabies vaccines. Furthermore, substandard diphtheria, pertussis, and tetanus (DPT) vaccines produced by Changsheng Biotechnology were administered to 215 184 Chinese children; and 400 520 substandard DPT vaccines produced by Wuhan Institute of Biological Products were sold in Hebei and Chongqing. On July 25, China's drug regulator launched an investigation into all vaccine producers across the country. 15 people from Changsheng Biotechnology, including the chairman, have been detained by Chinese authorities...Above all, it is the government's responsibility to ensure that the vaccines produced and used in China are effective and safe. To restore and sustain the public's confidence in China's vaccine quality and safety, it is urgent for the government to reflect on and reform where necessary the country's vaccine regulatory system. A better understanding of the concerns of the public and more transparent and open regulation are essential to protect millions of children from preventable illnesses.

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)31725-2/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31725-2/fulltext)

2. Hu Y et al. Strategies to correct the shortage of paediatricians in China. *Lancet* 2018;392:385. The shortage of paediatricians in China is alarming. According to the basic data presented in a white paper about China's current paediatric resources, there are around 100 000

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paediatricians in China but more than 200 000 additional paediatricians are needed. With a population of 260 million children aged 0–14 years, this means that, on average, each paediatrician cares for 2000 children. Several issues are contributing to the shortage of paediatricians in China...

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)31192-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31192-9/fulltext)

3. Liao J, et al. The new face of China's foreign aid: where do we go from here? *Lancet* 2018;392:636. China's recent constitutional changes have led to international headlines and debate. However, the founding of a new ministry-level agency—the China International Development Cooperation Agency—has attracted little attention, despite the effect it might have on China's foreign aid policy and global health strategy. China has been involved in foreign aid since 1950, focused primarily on developing nations in Africa and other regions. Between 2000 and 2013, more than US\$104.35 billion was invested in Africa alone, on a par with US spending. Specifically, in the field of global health, China has dispatched medical teams, constructed facilities, distributed drugs and medical devices, and trained local health workers in more than 66 countries during the past 55 years... [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)31496-X/fulltext?dgcid=](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31496-X/fulltext?dgcid=)

4. An update on the Newton Fund in China, including several funding opportunities:

- Newton Advanced Fellowships: Royal Society, Academy of Medical Sciences, NSFC: <https://royalsociety.org/grants-schemes-awards/grants/newton-advanced-fellowships/>
- PhD Placements: British Council, China Scholarship Council: <https://www.britishcouncil.cn/en/programmes/education/higher/opportunities/phd>
- Newton Advanced Fellowships and Mobility Grants: British Academy, Fudan University, Peking University: <https://www.britac.ac.uk/newton-advanced-fellowships>
<https://www.britac.ac.uk/newton-mobility-grants>

5. What drives China's growth?
<https://m.youtube.com/watch?v=PE8TYdvg7I0&feature=youtu.be>

TCM, Acupuncture and Other Traditional Medicine

1. A Video in Commemoration of the 500th Anniversary of LiShizhen's Birth shared by Prof. Zhongzhen Zhao, Hong Kong Baptist University.
https://drive.google.com/file/d/1L7eIQ2wSXjeHU_un1Mj84w-KIhwglln3/view?from=timeline&isappinstalled=0

2. Professor Zhongzhen Zhao, Hong Kong Baptist University, was invited by CCTV international channel to introduce TCM in a special programme "Hi China", ahead of the forthcoming Beijing Summit on Chinese-African Cooperation. To be held 3-4 September 2018.



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3. Zhang GX, et al. Different network pharmacology mechanisms of Danshen-based Fangjis in the treatment of stable angina. *Acta Pharmacol Sin.* 2018;39:952-960. Salvia miltiorrhiza preparations such as Danhong injection, Danshen injection, Salvianolate injection, compound Danshen injection and Sodium Tanshinone IIA Sulfonate (STS) injection are widely used in China to treat coronary heart disease. In this study we compared the network pharmacological mechanisms of the 5 Danshen preparations. Following a literature search performed in PubMed, EMBASE, Cochrane Library, China National Knowledge Infrastructure database, China Biology Medicine, China Conference Paper Database, Wanfang Database, VIP Database and Conference Proceedings Citation Index (~January 2015), 444 randomized controlled trial publications detailing the use of the 5 Danshen-based injections for treating stable angina were identified, and their combined data were analyzed using a network meta-analysis. All of the 5 Danshen-based preparations were effective in treating stable angina with clinical improvement rates of 72.4%-91.6% and ECG improvement rates of 54.5%-71.6%. According to both clinical improvement and ECG improvement, the 5 Danshen-based preparations were ranked as follows: Danhong injection > Salvianolate injection > STS injection > compound Danshen injection > Danshen injection. There were no significant differences among the safety profiles of the 5 Danshen preparations. The meta-analysis results were further examined using a network pharmacology approach and functional enrichment analysis, which revealed that Danshen and Danhong injections affected 4 and 15 signaling pathways, respectively, and that the 4 signaling pathways affected by Danshen were a subset of those influenced by Danhong. Therefore, Danhong injection affected some unique signaling pathways that might regulate lipoprotein metabolism, oxidation, and inflammation, and protect vascular endothelia, reflecting the multi-component and multi-target characteristics of this traditional formula and its strengths in treating complex diseases. <https://www.nature.com/articles/aps2017191>

4. National Natural Science Foundation of China funded 12 key TCM research programmes in 2018: https://mp.weixin.qq.com/s/ljXT0WgkxmZSiLEj7D0_1w (中文)

5. Genomes of 193 plants sequenced: <https://mp.weixin.qq.com/s/9pYXYmDFItAzA8j9QWgzw> (中文)

6. Xu W, et al. Dose-dependent target diversion of Danhong injection on the Glu-GLT-1/Gly-GlyR α dynamic balance module of cerebral ischemia. *Pharmacol Res.* 2018;135:80-88. Function-oriented modular structure analysis is a great challenge in module-based pharmacological studies. A strategy to uncover target-target interaction (TTI) and dynamic balance regularity (DBR) was established to discover the structural factors influencing modular functions and explore the mechanism of Danhong injection (DHI) in treating cerebral ischemia. The dose-related metabolic features of DHI intervention were investigated using metabolomics and modular pharmacology. The findings indicated that Glu/Gly was a biomarker and Glu-GLT-1/Gly-GlyR α was the core unit regulated by DHI. Gly and Glu displayed opposite patterns and functional roles, representing intra-modular balance. GlyR α was identified as the upstream target and GLT-1 as the downstream target by inhibiting or activating GlyR α , indicating that DHI has two dose-dependent regulatory modes. GlyR α was the major target at low doses, while GLT-1 was activated as the dominant target as doses accumulated. Our study reveals that target-target interaction and dynamic balance regularity are the key factors influencing modular functions, which is a promising breakthrough for module-based pharmacological studies. <https://www.sciencedirect.com/science/article/abs/pii/S1043661818305541> <https://mp.weixin.qq.com/s/dHaUzIHvRqtJS4rYtqVWNw> (中文)

7. Chinese materia medica: List for both dietary and medicinal use expanded. With the 86 approved by the National Health Commission of China in 2012, 15 approved in 2014 and the latest approval for 9, 110 materials have now been approved for both dietary and medicinal use. <https://mp.weixin.qq.com/s/Rc-B6lVnsmY7s1aiWQ3N7g> (中文)



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Omics in Progress

NEW 1. Young MD. **Single-cell transcriptomes from human kidneys reveal the cellular identity of renal tumors.** *Science* 2018;361:594. Understanding tumor origins and the similarities and differences between organ-specific cancers is important for determining treatment options. Young et al. generated more than 72,000 single-cell transcriptomes from healthy and cancerous human kidneys. From these data, they determined that Wilms tumor, a pediatric kidney cancer, originates from aberrant fetal cells, whereas adult kidney cancers are likely derived from a specific subtype of proximal convoluted tubular cell.

<http://science.sciencemag.org/content/361/6402/594?utm>

NEW 2. Anderson KR, et al. **CRISPR off-target analysis in genetically engineered rats and mice.** *Nat Methods* 2018; 15:512-4. Despite widespread use of CRISPR, comprehensive data on the frequency and impact of Cas9-mediated off-targets in modified rodents are limited. Here we present deep-sequencing data from 81 genome-editing projects on mouse and rat genomes at 1,423 predicted off-target sites, 32 of which were confirmed, and show that high-fidelity Cas9 versions reduced off-target mutation rates in vivo. Using whole-genome sequencing data from ten mouse embryos, treated with a single guide RNA (sgRNA), and from their genetic parents, we found 43 off-targets, 30 of which were predicted by an adapted version of GUIDE-seq.

<http://www.nature.com/articles/s41592-018-0011-5>

NEW 3. Winter SV et al. **EASI-tag enables accurate multiplexed and interference-free MS2-based proteome quantification.** *Nat Methods* 2018; 15:527-30. EASI-tag (easily abstractable sulfoxide-based isobaric-tag), a new type of isobaric labeling reagents, enables multiplexed and highly accurate proteome quantification by mass spectrometry.

<https://www.nature.com/articles/s41592-018-0037-8>

NEW 4. Li T et al. **GeNets: a unified web platform for network-based genomic analyses.** *Nat Methods* 2018;15:543-6. The GeNets web platform can identify the most informative network, as well as execute, store and share network-based analyses of RNA-seq or genomic datasets.

<https://www.nature.com/articles/s41592-018-0039-6>

NEW 5. Rusk N. **Surprising CRISPR roadblocks.** *Nat Methods* 2018;15:569. Cas9 induces larger-than-anticipated mutations in mouse and human cells. In the latter, efficient editing depends on inhibition of the DNA-damage-repair protein p53. <https://www.nature.com/articles/s41592-018-0097-9>

NEW 6. Editorial. **Keep off-target effects in focus.** *Nat Med* 2018;24:1081. Concerns about potential unintended DNA changes that might accidentally arise from CRISPR gene editing have emerged to varying degrees with the advent of the technology. As new therapies move from bench to bedside, scientists need to redouble their efforts to document the spectrum of these off-target effects while also acknowledging the reality that a certain degree of risk is embedded in many promising and successful medical therapies.

https://www.nature.com/articles/s41591-018-0150-3?WT.ec_id

Other Recommended Readings

NEW 1. Gewin V. **Teaming with bright ideas.** *Nature* 2018; 560:401-2. The number of international research collaborations continues to rise, and for good reason: it's easier than ever to connect with overseas colleagues, and doing so can be an effective way to share and advance knowledge. *Nature* spoke to four scientists who routinely participate in such teamings and who have studied how to create and look after them... (online title "Top tips for building and maintaining international collaboration")

https://www.nature.com/articles/d41586-018-05944-x?WT.mc_id



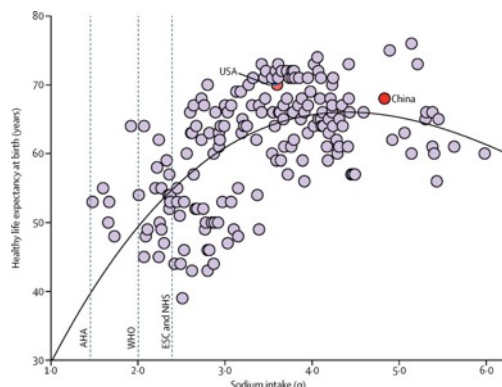
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2. Nalin DR, Cash RA. 50 years of oral rehydration therapy: the solution is still simple. *Lancet* 2018;392:536-8. 50 years ago, the first study showing that an oral solution of glucose and electrolytes was effective for replacing water and electrolyte losses in cholera was published in *The Lancet*. The 4.6 million annual deaths from diarrhoea in children younger than 5 years estimated in 1980 has fallen to under 500 000 in 2018, despite a 70% increase in the world's population. Although several factors contributed to this reduction, as of 2007 it was estimated that oral rehydration therapy (ORT) alone had prevented 54 million diarrhoeal deaths... [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)31488-0/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31488-0/fulltext)

3. National Institutes of Health (NIH) grants for non-US applicants. The NIH funding programme has a wealth of funding opportunities and more importantly, it is open to non-US applicants (both companies and academic groups). This is all good news, but how to get such a grant? <https://www.catalyze.nl/2018/07/11/nih-european-applicants/>

4. Messerli FH, et al. Salt and heart disease: a second round of “bad science”? *Lancet* 2018;392:456-8. 2 years ago, Andrew Mente and colleagues, after studying more than 130 000 people from 49 different countries, concluded that salt restriction reduced the risk of heart disease, stroke, or death only in patients who had high blood pressure, and that salt restriction could be harmful if salt intake became too low. The reaction of the scientific community was swift. “Disbelief” was voiced that “such bad science” should be published by *The Lancet*. The American Heart Association (AHA) refuted the findings of the study, stating that they were not valid, despite the AHA for many years endorsing products that contain markedly more salt than it recommends as being “heart healthy”...



[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)31376-X/fulltext?](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31376-X/fulltext?)

5. Fyshe A. How to start a research lab. *Science* 2018;361:618. As September approaches, a new cohort of junior faculty members are taking up their first positions as research group leaders. I was there 3 years ago, making career-shaping decisions—sometimes without much mentoring or support. I learned a lot in my first years—how to write a grant, manage rejection, and supervise students, to name just a few—and it was all trial by fire. Though I made it through and had some successes along the way, I certainly could have used advice about how to set up and run my lab. I've learned that my experience is the norm, which inspired me and a group of other early-career principal investigators to interview leaders in our fields about how they built successful research groups. Here are some of the lessons they shared...

<http://science.sciencemag.org/content/361/6402/618?utm>

Meeting Reports

1. Hong Kong International Summit on Chinese Medicine was successfully held in Hong Kong, China, on 5 August 2018. Organised by the Hong Kong Registered Chinese Medicine Practitioners Association, the Summit was attended by 1200 delegates.



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Opening ceremony attended by Mrs. Carrie Lam, the Chief Executive of Hong Kong Special Administrative Region (Centre), Professor FENG Jiu, Chairman of Hong Kong International Summit on Chinese Medicine Association, Mr. WANG Guo-qiang, President of China association of Chinese Medicine and Former Commissioner of State Administration of TCM, China, Mr. MA Jian-zhong, Vice Commissioner of State Administration of TCM, China, and invited speakers.



Talks by Prof. WANG Qi and Prof. Lixing Lao



Talks by Dr Qihe Xu and Prof. Zhaoxiang Bian



Talks by Prof Yitao Wang and Prof. Zhu En

The opening ceremony was hosted by the Chief Executive of Hong Kong Special Administrative Region, Mrs. Carrie Lam. During the summit, experts of Chinese Medicine from around the world shared their views on the scientific research and future development of Chinese medicine. Chinese Medicine experts from China (including Hong Kong and Macau) and 11 invited international experts attended to discuss the latest global developments in Chinese Medicine and its advantages. To mention a few: Mr. MA Jian-zhong, Vice Commissioner of China's State Administration of TCM and President of World Federation of Chinese Medicine Societies; Mr. WANG Guo-qiang, President of China association of Chinese Medicine and Former Commissioner of State Administration of TCM, China; Prof. Sophia CHAN Siu-chee, Secretary for Food and Health; Dr CHAN Hon-ye, Director of Health; Profe ZHANG Bo-li, Academician of Chinese Academy of Engineering and President of China Academy of Chinese Medical Sciences; Prof WANG Qi, Grand Master of Chinese Medicine; Dr. Archives (2008-2018): www.gp-tcm.org/news-list/

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CHEUNG Wai-lun, Project Director of the Chinese Medicine Hospital Project Office; Prof BIAN Zhaoxiang, Associate Vice-President of Hong Kong Baptist University; Dr Yue-wei Lee, Associate Professor at Harvard University; and your Editor-in-chief Dr Qihe Xu, Co-Director of King's Centre for Integrative Chinese Medicine. Highlights of the meeting can be found here: <https://en.pmasia.com/releases/apac/the-first-hong-kong-international-summit-on-chinese-medicine-concluded-successfully-218936.shtml> (English)

<http://www.qihuanghealthcare.com/article/detail/1404?from=singlemessage&isappinstalled=0> (中文)

The meeting was broadcast online real-time and watched by hundreds of thousands of people; the video capture of the event is free-access here:

<http://www.qihuanghealthcare.com/live/detail/121?from=singlemessage&isappinstalled=0>

2. The 17th Consortium for Globalization of Chinese Medicine Meeting was successfully held in Kuching, Malaysia, 8-10 August 2018. The meeting was organized by the CGCM Malaysia Chapter, with the joint effort of many local institutes and members, Malaysian Institute of Pharmaceuticals and Nutraceuticals, National Institutes of Biotechnology Malaysia in particular. The 3-day meeting covered a variety of traditional themes, including regional reports, regulation and interregional collaborations in academia and industry, acupuncture, bioinformatics, clinical investigations, education, herbal resources, natural products, polychemical activities and mechanism studies. Interactive panel discussions were the highlights of the program and the meeting once again proved to be an invaluable opportunity for experts and professionals in the field to exchange new insights and be rewarding to all participants.

Founded by Professor Yung-Chi Cheng (Yale University) and colleagues in 2003, CGCM aims to foster academic exchanges and research collaborations on various frontiers of TCM in pursuing the goal of advancing the field of TCM and benefit human kind.

Having succeeded the membership of the FP7 GP-TCM Consortium, GP-TCM RA is a European Chapter of CGCM: https://www.facebook.com/pg/CGCM2K18/photos/?ref=page_internal
<http://www.cgcm2018.com>

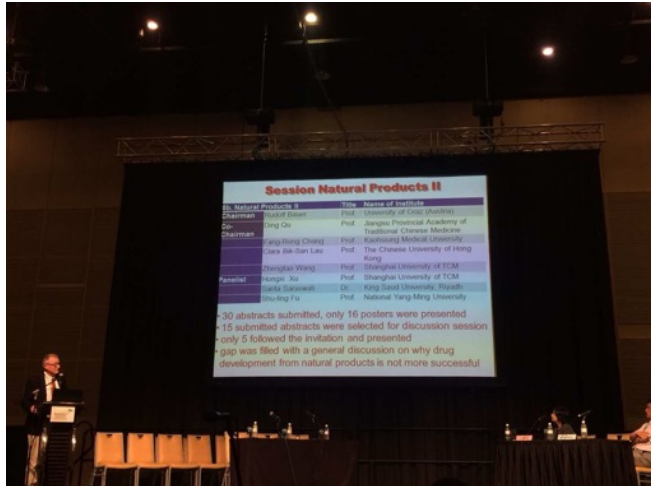


Opening ceremony: Traditional Malaysian performing arts and invited talk by Prof Zhongzhen Zhao



Well attended: TCM researchers from all over the world, including many members of GP-TCM RA, the European Chapter of CGCM, attended the meeting

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The Summary Session: CGCM Chairman Professor Yung-Chi Cheng and Prof Rudolf Bauer, CGCM Vice-Chairman and Founding President and current BoD member of the GP-TCM spoke.



After meeting activities: Some GP-TCM RA members gathered to enjoy delicious Malaysia cuisine

3. HKTDC August Fairs and Chinese Medicine Conference Concluded on 20 August 2018.



Organised by the Hong Kong Trade Development Council (HKTDC), the 29th Food Expo, the 10th Hong Kong International Tea Fair, the 3rd Beauty & Wellness Expo and the 5th Home Delights Expo, as well as the **International Conference of the Modernization of Chinese Medicine & Health Products** jointly organised with the Modernized Chinese Medicine International Association Ltd were

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successfully held in Hong Kong. The four HKTDC fairs attracted a record number of nearly 2,100 exhibitors and drew 510,000 visitors.



Exchanges: International Conference of the Modernization of Chinese Medicine & Health Products

4. A pictorial report on the 4th International Summit on Innovative Drug Discovery in Chinese Medicine: Network Pharmacology and Big Data Analysis was successfully held in Hong Kong Baptist University, Hong Kong, China, on 25-26 August 2018. Hosted by HKBU and sponsored by PuraPharm and QingFeng, the meeting was an annual grand gathering of scientists and experts in TCM, natural medicine and network pharmacology. The programme of the meeting can be found here:

https://scm.hkbu.edu.hk/online_registrations/201808_idds/poster.pdf



A grand gathering and focused forum: GP-TCM RA President-elect Professor Aiping Lu, Treasurer Professor Peter Hylands and Secretary-General Dr Clara Lau, and BoD members Professors Vivian Wong and Thomas Efferth (Left); Prof Hylands and senior GP-TCM RA member Professor Michael Heinrich were among the speakers at the Summit.

Archives (2008-2018): www.gp-tcm.org/news-list/

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5. A pictorial report on the 66th Annual Meeting of the Society of Medicinal Plant (GA) and the 11th Shanghai International Conference on TCM and Natural Medicine, which was successfully held in Shanghai on 26-29 August 2018. GA has 1600 members from 73 countries and its official journal is *Plant Medica*. Being the first time RA has ever held its annual meeting outside Europe, the 3-day meeting attracted over 600 participants. At the meeting, *Plant Medica* announced that a Special Issue dedicated to GP-TCM RA BoD Member Prof. Dr. Robert Verpoorte has been published. Prof. Verpoorte, Emeritus Professor at the Institute of Biology of Leiden University, was awarded the 2017 Egon-Stahl-Award in Gold from GA, the most prestigious award of the society, in recognition of his outstanding scientific lifetime contribution.

The *Plant Medica* Special Issue dedicated to Prof. Dr. Robert Verpoorte can be found here:

https://eref.thieme.de/ejournals/1439-0221_2018_12_13#0



6. The 5th editorial board meeting of World Journal of Traditional Chinese Medicine was successfully convened in Shanghai Parkyard Hotel, during the 66th Annual Meeting of the GA and the 11th Shanghai International Conference on TCM and Natural Medicine. A total of 32 editorial board members attended the meeting. Editor-in-Chief Professor De-an Guo reported the work of the past 3 years and future plans were discussed.



The 5th Editorial Board Meeting of WJTCM , Shanghai 2018

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Future Meetings & Events

1. **Workshop - Toxicity and risk assessment of pyrrolizidine alkaloids - current status and way forward**, Kaiserslautern, Germany, 12-13 September 2018.

https://www.chemie.uni-kl.de/fileadmin/agschrenk/unterlagen/Flyer_PA-workshop.pdf

2. **The 15th World Congress of Chinese Medicine and Belt and Road TCM Culture Week to be held in Rome, Italy, Nov. 16-20 2018.**

http://c.eqxiu.com/s/O8xAcE2w?eqrcode=1&share_level=4&from_user=a294a700-73b5-4d95-9d8b-dc428813e7cd&from_id (中文)

3. **The 19th International Congress of Oriental Medicine will be held in Taipei, Taiwan on 24-26 November 2018.** The theme of the conference is “The Applications of Traditional Medicine in Acute and Critical Care.”

<http://www.19icom2018.org.tw/index>

4. **The 30th International Symposium on the Chemistry of Natural Products and the 10th International Congress on Biodiversity will be held on Nov. 25–29 2018 in Athens, Greece.**

<http://www.iscnp30-icob10.org/Default.asp?c=6&lng=1>

<http://www.iscnp30-icob10.org/Default.asp?c=7&lng=1>

5. **The 6th World Integrative Medicine Congress is to be held in Shanghai, China, December 6-9, 2018.** In 1958, Chairman Mao Zedong issued a written instruction to encourage “Western medical doctors to learn traditional Chinese medicine” with the hope that some of them may become “brilliant theorists”. This year marks the 60th anniversary of the important instruction. The past 60 years have witnessed fruitful results in integrative medicine, coupled with its significant role in promoting medical innovation and progress. To further facilitate the international exchange in integrative medicine, the World Integrative Medicine Congress now meets every year instead of every five years. The 6th World Integrative Medicine Congress, co-hosted by Chinese Association of Integrative Medicine and Shanghai Association for Science and Technology, will be held December 6-9, 2018 at Shanghai Fuyue Hotel. <http://www.wimco2018.com/weben2018/>

<http://wimco2018.shcim.org.cn/m2018/index.asp?from=groupmessage&isappinstalled=0> (中文)

Invitation from journals

1. **World Journal of Traditional Chinese Medicine: Sincere invitation for submissions.** World Journal of Traditional Chinese Medicine (ISSN 2311-8571, CN10-1395/R) is sponsored by WFCMS, and is the official journal of GP-TCM RA. WJTCM dedicates to report the research progress in clinical efficacy and action mechanism of Traditional Chinese Medicine, Chinese materia medica, acupuncture and moxibustion to doctors and biomedical researchers around the world, so as to provide new thoughts and methods for solving complex diseases and knotty diseases. To submit your manuscripts, or to read articles in the past issues, please visit: <http://www.wjtcn.net>

2. **Frontiers in Pharmacology and Frontiers in Ethnopharmacology special topic “Metabolomics and Metabolism of Traditional Chinese Medicine”**

Submission Deadlines: 3rd September 2018 (Abstract); 1st March 2019 (Manuscript)

<https://www.frontiersin.org/research-topics/8155/metabolomics-and-metabolism-of-traditional-chinese-medicine>

3. **Call for Papers: Phytomedicine Special Issue Entitled “systems pharmacology and Metabolomics of Traditional Medicine”**

Deadline for submission of manuscripts is December 31st 2018.

Edited by

Prof. Thomas Efferth, Editor in Chief of Phytomedicine, Johannes Gutenberg University

Prof. Liang Liu, Associate Editor in Chief of Phytomedicine, Macau University of Science and

Archives (2008-2018): www.gp-tcm.org/news-list/

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Technology

Prof. Xijun Wang, Heilongjiang University of Chinese Medicine

Prof. Hua Zhou, Macau University of Science and Technology

Prof. Haitao Lu, Member of Editorial Board of Phytomedicine, Shanghai Jiao Tong University

<https://www.journals.elsevier.com/phytomedicine/call-for-papers/systems-pharmacology-and-metabolomics-traditional-medicine>

Sounding Board

This column is reserved for comments, personal views, proposals for collaborations or any other features from our readers across the world. We look forward to hearing from you! Please get in touch with your editors: Dr Qihe Xu (qihe.xu@kcl.ac.uk), Prof Pierre Duez (pierre.duez@umons.ac.be) and Prof Yuan Shiun Chang (yschang0404@gmail.com).

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Sunset on the Sarawak River in Kuching, Malaysia
(Photographed by Dr Qihe Xu on 10th August 2018)