

The December 2020 Newsletter of The GP-TCM Research Association



Contents of the GP-TCM RA Newsletter December 2020

• Editorials

- Our efforts of sustainable development of Good Practice in Traditional Chinese Medicine Research Association
- Announcement of election results, online AGM, and virtual conference 2020

• Highlights on Achievements of GP-TCM RA Members

- Warm congratulations to Dr Qihe Xu, King's College London, UK, for being awarded the 2020 Qihuang International Prize.
- Warm congratulations to Dr Jiayu Gao, Prof Olivia Corcoran and Prof Weiping Yin for winning the 2020 Gerald Blunden Award.

• Feature Stories

- Classic TCM book translated for world
- The election conference of the 13th Council of Hubei Pharmaceutical Association (HBPA) was held in Wuhan

• Selected Information on COVID-19

- Coronaviruses closely related to the pandemic virus discovered in Japan and Cambodia.
- Post-lockdown SARS-CoV-2 nucleic acid screening in nearly ten million residents of Wuhan, China.
- Safety and efficacy of the ChAdOx1 nCoV-19 vaccine (AZD1222) against SARS-CoV-2: An interim analysis of four randomised controlled trials in Brazil, South Africa, and the UK.
- Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine.
- 2020 Breakthrough of the year.

• Recommended Reading

- HERB: A high-throughput experiment- and reference-guided database of traditional Chinese medicine.
- Entecavir combining Chinese herbal medicine for HBeAg-positive chronic hepatitis B patients: A randomized, controlled trial.
- Efficacy of intensive acupuncture versus sham acupuncture in knee osteoarthritis: A randomized controlled trial.

• Invitations from WJTCM, the Official Journal of GP-TCM RA

- Pharmacology and Toxicology of Herbal Medicine
- Systems Biology and Metabolomics of Traditional Chinese Medicine
- [Diabetes and Vascular Disease with TCM](#)
- Biosynthesis-Driven Quality Design of Materia Medica
- Qi Deficiency and Blood Stasis

• Monthly Chinese Materia Medica Highlights: **Opium and corn poppies**

Acknowledgements: The editors would like to thank Dr **Chi Zhang** (Beijing), Prof **Clara Lau** (Hong Kong), Prof **Hubiao Chen** (Hong Kong), Prof **Jiqing Liu** (Shenzhen), Prof **Pierre Duez** (Mons), Prof **Rudolf Bauer** (Graz), Prof **Xuanbin Wang** (Hubei), Prof **Zhongzhen Zhao** (Hong Kong), and the **WJTCM Editorial Office** (Beijing) for their great contributions.

Editor-in-chief: Aiping Lu (lap64067611@126.com); **executive editor:** Ping Guo (s193231@hkbu.edu.hk); **consulting editor:** Qihe Xu (qihe.xu@kcl.ac.uk).

The December 2020 Newsletter of The GP-TCM Research Association



Editorials

1. Our efforts of sustainable development of Good Practice in Traditional Chinese Medicine Research Association



Current Board of Directors (2019-2020)



Aiping Lu
(President)



Clara Bik-San Lau
(Secretary-General)



Tai-Ping Fan
(Treasurer & Past-President)



Monique Simmonds
(President Elect)

Other current BoD members



Rudi Bauer



Abraham Chan



Pierre Duez



Thomas Efferth



Rongrong He



Rob Verpoorte



Vivian Taam Wong



Qihe Xu



Min Ye

In the past year, Board of Directors (BoD) meetings were held via Skype on a regular basis under the leadership of current BoD. The following efforts to promote the sustainable development of Good Practice in Traditional Chinese Medicine Research Association (GP-TCM RA) have been carried out.

Newsletters: These have been our own place for members and member

institutions to share relevant information. As a useful measure of the internationalization of Chinese medicine, GP-TCM Newsletters highlight academic, educational, social, and other achievements made by our members and member institutions. GP-TCM Newsletters aim to provide unbiased and latest information on mainstream medical and pharmaceutical progress as well as good practice of traditional Chinese medicine research. A monthly column in GP-TCM Newsletters helps readers further understand Chinese *materia medica* by means of colour pictures of Chinese medicinal plants with concise textual descriptions.



GP-TCM RA Newsletters – monthly publication



Aiping Lu
(Editor-in-chief)



Ping Guo
(Executive Editor)



Qihe Xu
(Consulting Editor)



Virtual academic conference 2020: Chinese medicines: From anti-viral effects to future global development was jointly organized by GP-TCM RA and SCM HKBU on December 18, 2020. 5 international experts from different academic fields kindly delivered inspiring speeches.



(1) Prof Zifeng Yang: The pathway for medical translation of TCM against SARS-CoV-2 based on integration of Chinese and Western medicine; (2) Prof Rudolf Bauer: What is needed for the acceptance of Chinese medicine in the fight against COVID-19 in European countries; (3) Prof Thomas Efferth: Artemisinin derivatives to combat viral diseases; (4) Prof Jianping Liu: Anti-COVID-19 with traditional Chinese medicine: Research evidence in China; (5) Prof Pangchui Shaw: Evidence-based study on traditional prescriptions for the inhibition of influenza virus infection.

The December 2020 Newsletter of The GP-TCM Research Association



Seven interest groups have been established covering the following fields: quality control-pharmacology and toxicology-clinical studies-regulatory aspects-acupuncture, moxibustion and meridians-good clinical practice guidelines-publication.

7 Interest Groups: Chairs and Co-Chairs

Quality Control	Pharmacology and Toxicology	Clinical Studies
 Min Ye (Chair)  Rudi Bauer (Co-Chair)	 Pierre Duez (Chair)  Hongxi Xu (Co-Chair)	 Zhaoxiang Bian (Chair)  Myeong Soo Lee (Co-Chair)
 Mei Wang (Chair)  Gerhard Franz (Co-Chair)		 Vivian Taam Wong (Chair)  Zehuai Wen (Co-Chair)
 Rob Verpoorte (Chair)  Thomas Efferth (Co-Chair)	 Nicola Robinson (Chair)  Lixing Lao (Co-Chair)  Jianping Liu (Co-Chair)	 Vivian Taam Wong (Chair)  Zehuai Wen (Co-Chair)

We are also exploring possibilities of the 9th GP-TCM RA Annual Meeting in 2022 to be held jointly with the phytotherapy conference in Leiden (Netherlands) of the Dutch association of phytotherapy and possibilities of seeking support by joining the international TCM alliance lead by Modernized Chinese Medicine International Association Limited (MCMIA).

For the future, we may need to collaborate with and seek more supports form different universities, industries, and relevant non-governmental organizations. We may need to let more young scientists all over the world know GP-TCM RA via our newsletters, our publications from each interest group, and our hosting of international conferences.

Time does fly even in the crisis of COVID-19 pandemic. Luckily we are approaching the end of the 2020 full of uncertainty.

May I take this opportunity to warmly congratulate our new BoD!
Thank you very much for your guidance, your support, and your contribution.
Please take care and stay healthy.
Merry Christmas and Happy New Year!



Aiping Lu (President of GP-TCM RA)

December 2020

The December 2020 Newsletter of The GP-TCM Research Association



2. Announcement of election results, online AGM, and virtual conference 2020

This year, despite of the repeatedly periods of lockdown in many countries (due to the COVID-19 global pandemic) where our members are located, resulting in disappointment of the postponement of our 8th annual meeting which was originally held in July in Lithuania. December has certainly been a more active and eventful month in 2020 for our Association as 3 important events have taken place: completion of the 5th Board of Directors (BoD) election, online Annual General Meeting (AGM) and the Virtual Conference 2020.

The new Board of Directors for 2021-2022 According to our Association Bylaws, each BoD member will serve for a term of 2 years and then needs to be re-elected. Hence, the process of the 5th GP-TCM RA election for 9 BoD members (including President-Elect) was started on 28 September, with Prof Michael Heinrich of University College London and Dr Anthony Booker of University of Westminster, United Kingdom serving as the chairpersons of this election. Following our online election conducted between 9 to 23 November, with two further reminders being sent out on 16 and 22 November to 185 eligible members, the election results were announced on 1 December by email to all members, as well as uploaded on our website. A total of 71 members (38.4 %) had voted, and the new President-Elect and new Board of Directors for 2021-2022 (2-year term) are as follows:

President-Elect (for 2023-2024): Prof Clara Bik-San Lau

The new Board of Directors: Prof Rudi Bauer, Prof Pierre Duez, Dr Qihe Xu, Dr Tai-Ping Fan, Dr Mei Wang, Prof Helen Sheridan, Prof Thomas Efferth and Prof Vivian Taam Wong.

Sincere congratulations to all those who have been elected!

Online Annual General Meeting



Prof Aiping Lu gave his President's report



Prof Clara Lau delivered her Secretary-General's report



Dr Tai-Ping Fan presented his Treasurer's report

Undoubtedly, the COVID-19 pandemic has rapidly changed how we live, work and learn, leading to what so called “new normal”. The same also applies to our Association. Due to the postponement of our 8th annual meeting this year, our usual AGM normally scheduled within our annual meeting program has also been deferred. Since the AGM is required to be held every year according to our Association Bylaws, the BoD decided to hold our first online AGM 2020 via zoom, on 16 December at 11 am UK time (7 pm China time) in order to accommodate our members from the different time zones globally. During the meeting, Prof Aiping Lu gave a very inspiring President's report. He summarized the activities and achievements during his 2-year term of presidency, for example, the new structure of our newsletter, the new interest group, etc., and also highlighted what still needs to be

The December 2020 Newsletter of The GP-TCM Research Association



developed, such as the good practice guidelines in TCM research, and more young scientists members, institutional/corporate members to be recruited. Prof Clara Lau then delivered the Secretary-General's report on the various activities of the Association from July 2019 to Dec 2020, including membership database updates, website updating progress, conducting the 5th GP-TCM RA election for members of Board of Directors, etc. This is then followed by Dr Tai-Ping Fan who presented his Treasurer's report, with details of the statements of unaudited accounts for years 2018, 2019 and 2020. The meeting then proceeded with discussions on issues such as the postponement of 8th annual meeting and the planning for the future annual meeting in 2022. The 1.5 hours online meeting was attended by 31 members and very constructive suggestions and comments have been received from our members for the future planning and development of our Association.



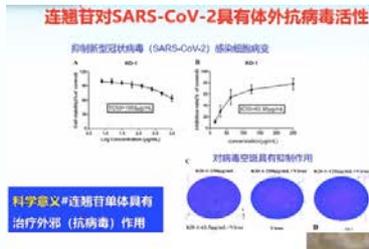
The hosts and technical staffs conducted the virtual conference in Hong Kong

Virtual Conference 2020 Apart from the first online AGM, with the postponement of our 8th annual meeting this year, the BoD also decided to have our first virtual conference titled “Chinese medicines: from anti-viral effects to future global development”, held on 18 December at 11 am UK time (7 pm China time) again in order to accommodate our global members. This GP-TCM RA virtual conference 2020 is organized by School of Chinese Medicine of the Hong Kong Baptist University. The conference started with a welcome message by our president Prof Aiping Lu. A total of 5 distinguished speakers have been invited: Prof Zifeng Yang, Prof Rudolf Bauer, Prof Thomas Efferth, Prof Jianping Liu and Prof Pang-Chui Shaw. The conference covered the hot topics such as the management of COVID-19 with traditional Chinese medicine and also the integrative approach in China, the potential use of TCM against COVID-19 from European perspectives, as well as other topics such as artemisinin derivatives and other Chinese medicines to combat different

The December 2020 Newsletter of The GP-TCM Research Association



viral diseases. The 3-hour virtual conference was very well attended, with around 80-90 participants (from different countries) throughout the conference, and with a peak record of 98 participants at certain point.



Prof Zifeng Yang: TCM against SARS-CoV-2 based on integration of Chinese and Western medicine

Prof Rudolf Bauer: European perspectives of using Chinese medicines against COVID-19



Prof Thomas Efferth: Artemisinin derivatives to combat viral diseases



Prof Jianping Liu: Research evidence of anti-COVID-19 with TCM in China



Prof Pang-Chui Shaw: Traditional prescriptions for the inhibition of influenza virus

For more details, photos and the recorded talks of speakers during the virtual conference, please kindly refer to: <http://www.gp-tcm.org/event/gp-tcm-ra-virtual-conference-2020/>



Discussion among the participants

To this end, 2020 is certainly a difficult, challenging and unforgettable year for everyone. Our Association is looking forward to the new term in 2021, under the leadership of new president Prof Monique Simmonds and new Board of Directors, and hopefully the resume of our face-to-face Annual Meeting in Lithuania and AGM sometime in 2021, and of course the continuous support from all our members and friends.

Finally, wishing you all a merry Christmas and a happy and healthy new year!

Clara Bik-San Lau (Secretary-General of GP-TCM RA)

December 2020

The December 2020 Newsletter of The GP-TCM Research Association



Highlights on Achievements of GP-TCM RA Members



1. Warm congratulations to Dr Qihe Xu, King's College London, UK, for being awarded the 2020 Qihuang International Prize. On 5th December, Dr Xu was presented the prize at a ceremony held in Beijing, in recognition of his contribution to EU-China collaboration in research of traditional Chinese medicine, including his leadership roles in the FP7 GP-TCM project, the GP-TCM Research Association and the King's Centre for Integrative Chinese Medicine (CICM), as well as his research on prevention and treatment of kidney disease

inspired by traditional Chinese medicine.

"I am honoured to receive this recognition. Despite COVID-19 and Brexit, I firmly believe in the value of UK-EU cooperation and the power of integrating wisdoms from the West and the East in catalysing innovation and in making the world a better place". Dr Xu commented, "I would like to thank everyone who has contributed to the success of the GP-TCM project, GP-TCM Research Association or supported the King's CICM initiative and my career as a researcher and teacher. I would like to dedicate this award to my mentors who have inspired me along the way, especially the late professor Peter Hylands, who was a great co-worker and enabler. I share this honour with him."

Dr Xu sits on the Board of Directors of the GP-TCM RA and is the Consulting Editor of this newsletter. He is one of the two awardees of this prestigious award from China Association of Chinese Medicine. The other awardee is Prof Chenchen Wang, Tufts University, USA. For details of the prize please visit a report on the King's College London website: <https://www.kcl.ac.uk/news/kings-academic-awarded-for-significant-contribution-to-chinese-medicine>

2. Warm congratulations to Dr Jiayu Gao, Prof Olivia Corcoran and Prof Weiping Yin for winning the 2020 Gerald Blunden Award. GP-TCM RA Life Members Dr Gao and Prof Yin, alongside Prof Corcoran are honoured by *Natural Product Communications* for their review paper, entitled "From *Scutellaria barbata* to BZL101 in cancer patients: Phytochemistry, pharmacology and clinical evidence", which discusses R&D of new drugs from Chinese herbal medicines for maintaining health of the respiratory system and for treatment of lung cancer. *Natural Product Communications*, in its 15th year, is a high-quality journal that covers a wide range of topics related to natural product research for a



for their review paper, entitled "From *Scutellaria barbata* to BZL101 in cancer patients: Phytochemistry, pharmacology and clinical evidence", which discusses R&D of new drugs from Chinese herbal medicines for maintaining health of the respiratory system and for treatment of lung cancer. *Natural Product Communications*, in its 15th year, is a high-quality journal that covers a wide range of topics related to natural product research for a

The December 2020 Newsletter of The GP-TCM Research Association



truly international audience. The 2020 Gerald Blunden Award celebrates the best original and review articles published in 2019, as judged by Editorial Board Members, who are world-leading researchers. The award recognises the journal's founding editor professor Gerald Blunden. As one of the first botanical investigational new drugs approved by FDA, BZL101 (derived from *Scutellaria barbata*) has been of increasing interest in recent years. The highly selective cytotoxicity and detoxifying effects of *Scutellaria barbata*, which denote a favourable clinical profile, may receive more interest as an adjuvant medicine to conventional chemotherapy. The numerous phytochemical and pharmacological studies reviewed in this award-winning article help to validate the anticancer potential of *Scutellaria barbata* and strongly support ongoing and any further clinical trials proposed. The research teams of Dr Gao and Prof Yin, School of Chemical Engineering & Pharmaceutics, Henan University of Science & Technology, Luoyang, China, are devoted to research on medicinal plants in the Funiu Mountain region, Henan, China. Prof Corcoran is from University of East London, UK. Details of the award: <https://journals.sagepub.com/page/npx/collections/gerald-blunden-award>

The award-winning article: <https://doi.org/10.1177/1934578X19880645>

Feature Stories

1. Classic TCM book translated for world



Eric Brand is translating a classic of traditional Chinese medicine into English in hope of promoting wider use of TCM around the world. Brand has a passion for herbs. He served as chair of the US delegation to the International Organization for Standardization technical committee for international TCM standards. He earned a PhD at the School of Chinese Medicine at Hong Kong Baptist University

focusing on Chinese herbal pharmacy, and serves as a TCM adviser to the American Herbal Pharmacopoeia, a non-profit organization that promotes responsible use of herbal medicines. On top of all that, he speaks fluent Chinese. He has been fascinated lately with Su Song's book *Bencao Tujing* ("Illustrated Pharmacopoeia"), hailing it as "a timeless teacher" that he sees great value in translating. The book, compiled and edited by Su Song, a renowned polymath of the Northern Song Dynasty (960-1127), comes from hands-on investigations with a combination of pictures and texts. The book is regarded as a ground-breaking treatise on pharmaceutical botany, zoology and mineralogy. Joseph Needham, a well-known biochemist and the founder of chemical embryology, described Su as one of the greatest naturalists and scientists of ancient China. "The book is a milestone in



The December 2020 Newsletter of The GP-TCM Research Association



the history of Chinese medicine," said Zhao Zhongzhen, a professor specializing in ancient TCM classics at Hong Kong Baptist University's School of Chinese Medicine. This year marks the 1,000-year anniversary of the birth of Su. Brand and Zhao have travelled to 17 countries across the world to promote his work. "I will work with Professor Zhao to translate more TCM works," said Brand. "My objective is to become a bridge between China and the rest of the world, allowing more people to learn the rich wisdom of Chinese medicine." (Chen Mo contributed to this story. Video by Wu Yang/chinadaily.com.cn)

Details: <https://www.chinadaily.com.cn/a/202012/14/WS5fd731efa31024ad0ba9bc1a.html>

Also see **Celebrating the 1000-year Anniversary of the Birth of Su Song** at https://scm.hkbu.edu.hk/en/knowledge_transfer/compendium_of_materia_medica_cultural_project_fund/su_song_millennial/index.html

2. The election conference of the 13th Council of Hubei Pharmaceutical Association (HBPA) was held in Wuhan

(Texts and photographs are contributed by Mengke Zhang and Wei Song) The 13th election conference of the Council of Hubei Pharmaceutical Association (HBPA) was held in Wuhan, Hubei Province, China on November 19, 2020. After opening ceremony, Prof Xiaochuan Deng (director of Medical Products Administration of Hubei Province) was elected as president, and Prof Zixin Deng (dean of School of Pharmacy, Wuhan University), Prof Qing Xiang (director of Drug Policy Division, Health Commission of Hubei Province), Prof Wenbin Liu (vice director of Medical Products Administration of Hubei Province), Prof Xuchu Pan (director of Hubei Medical Association Office), Prof Yonghui Zhang (dean of School of Pharmacy, Huazhong University of Science and Technology), and Prof Guohua Zheng (director of Science and Technology Department, Hubei University of Chinese Medicine) were elected as vice presidents. Prof Xuchu Pan was appointed as the secretary general, whilst Prof Benhong Zhou (director of Department of Pharmacy, Renmin Hospital of Wuhan University) as the deputy secretary-general and the standing member. For the professional committees of HBPA, Prof Benhong Zhou was elected as the chairman of the Traditional Chinese Medicine and Natural Medicines Professional Committee. In the following sessions, plenary speeches were delivered by 8 invited experts. More than 350 HBPA members from universities, research institutions, governments, and pharmaceutical industries attended the conference.



The opening ceremony (left); Prof Yi Yu (director of the Institute of Traditional Chinese Medicine and Natural Medicine, Wuhan University) was giving a talk (middle); Prof Benhong Zhou was chairing the meeting of Traditional Chinese Medicine and Natural Medicines Professional Committee (right).

The December 2020 Newsletter of The GP-TCM Research Association



Selected Information on COVID-19

- 1. Coronaviruses closely related to the pandemic virus discovered in Japan and Cambodia.** *Nature*. 2020. The viruses, both found in bats stored in laboratory freezers, are the first SARS-CoV-2 relatives to be found outside China. Details: [doi: https://doi.org/10.1038/d41586-020-03217-0](https://doi.org/10.1038/d41586-020-03217-0)
- 2. Post-lockdown SARS-CoV-2 nucleic acid screening in nearly ten million residents of Wuhan, China.** *Nature Communications*. 2020. Stringent COVID-19 control measures were imposed in Wuhan between January 23 and April 8, 2020. Estimates of the prevalence of infection following the release of restrictions could inform post-lockdown pandemic management. Here, we describe a city-wide SARS-CoV-2 nucleic acid screening programme between May 14 and June 1, 2020 in Wuhan. All city residents aged six years or older were eligible and 9,899,828 (92.9%) participated. No new symptomatic cases and 300 asymptomatic cases (detection rate 0.303/10,000, 95% CI 0.270–0.339/10,000) were identified. There were no positive tests amongst 1,174 close contacts of asymptomatic cases. 107 of 34,424 previously recovered COVID-19 patients tested positive again (re-positive rate 0.31%, 95% CI 0.423–0.574%). The prevalence of SARS-CoV-2 infection in Wuhan was therefore very low five to eight weeks after the end of lockdown. Details: <https://doi.org/10.1038/s41467-020-19802-w>
- 3. Safety and efficacy of the ChAdOx1 nCoV-19 vaccine (AZD1222) against SARS-CoV-2: An interim analysis of four randomised controlled trials in Brazil, South Africa, and the UK.** *The Lancet*. 2020. A safe and efficacious vaccine against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), if deployed with high coverage, could contribute to the control of the COVID-19 pandemic. We evaluated the safety and efficacy of the ChAdOx1 nCoV-19 vaccine in a pooled interim analysis of four trials. This analysis includes data from four ongoing blinded, randomised, controlled trials done across the UK, Brazil, and South Africa. Participants aged 18 years and older were randomly assigned (1:1) to ChAdOx1 nCoV-19 vaccine or control (meningococcal group A, C, W, and Y conjugate vaccine or saline). Participants in the ChAdOx1 nCoV-19 group received two doses containing 5×10^{10} viral particles (standard dose; SD/SD cohort); a subset in the UK trial received a half dose as their first dose (low dose) and a standard dose as their second dose (LD/SD cohort). The primary efficacy analysis included symptomatic COVID-19 in seronegative participants with a nucleic acid amplification test-positive swab more than 14 days after a second dose of vaccine. Participants were analysed according to treatment received, with data cutoff on Nov 4, 2020. Vaccine efficacy was calculated as $1 - \text{relative risk}$ derived from

The December 2020 Newsletter of The GP-TCM Research Association



a robust Poisson regression model adjusted for age. Studies are registered at ISRCTN89951424 and ClinicalTrials.gov, NCT04324606, NCT04400838, and NCT04444674. Between April 23 and Nov 4, 2020, 23 848 participants were enrolled and 11 636 participants (7548 in the UK, 4088 in Brazil) were included in the interim primary efficacy analysis. In participants who received two standard doses, vaccine efficacy was 62.1% (95% CI 41.0–75.7; 27 [0.6%] of 4440 in the ChAdOx1 nCoV-19 group vs 71 [1.6%] of 4455 in the control group) and in participants who received a low dose followed by a standard dose, efficacy was 90.0% (67.4–97.0; three [0.2%] of 1367 vs 30 [2.2%] of 1374; pinteraction=0.010). Overall vaccine efficacy across both groups was 70.4% (95.8% CI 54.8–80.6; 30 [0.5%] of 5807 vs 101 [1.7%] of 5829). From 21 days after the first dose, there were ten cases hospitalised for COVID-19, all in the control arm; two were classified as severe COVID-19, including one death. There were 74 341 person-months of safety follow-up (median 3.4 months, IQR 1.3–4.8): 175 severe adverse events occurred in 168 participants, 84 events in the ChAdOx1 nCoV-19 group and 91 in the control group. Three events were classified as possibly related to a vaccine: one in the ChAdOx1 nCoV-19 group, one in the control group, and one in a participant who remains masked to group allocation. ChAdOx1 nCoV-19 has an acceptable safety profile and has been found to be efficacious against symptomatic COVID-19 in this interim analysis of ongoing clinical trials. Details: [DOI:https://doi.org/10.1016/S0140-6736\(20\)32661-1](https://doi.org/10.1016/S0140-6736(20)32661-1)

- 4. Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine.** *The New England Journal of Medicine*. 2020. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and the resulting coronavirus disease 2019 (Covid-19) have afflicted tens of millions of people in a worldwide pandemic. Safe and effective vaccines are needed urgently. In an ongoing multinational, placebo-controlled, observer-blinded, pivotal efficacy trial, we randomly assigned persons 16 years of age or older in a 1:1 ratio to receive two doses, 21 days apart, of either placebo or the BNT162b2 vaccine candidate (30 µg per dose). BNT162b2 is a lipid nanoparticle–formulated, nucleoside-modified RNA vaccine that encodes a prefusion stabilized, membrane-anchored SARS-CoV-2 full-length spike protein. The primary end points were efficacy of the vaccine against laboratory-confirmed Covid-19 and safety. A total of 43,548 participants underwent randomization, of whom 43,448 received injections: 21,720 with BNT162b2 and 21,728 with placebo. There were 8 cases of Covid-19 with onset at least 7 days after the second dose among participants assigned to receive BNT162b2 and 162 cases among those assigned to placebo; BNT162b2 was 95% effective in preventing Covid-19 (95% credible interval, 90.3 to 97.6). Similar vaccine efficacy (generally 90 to 100%) was observed across subgroups defined by age, sex, race, ethnicity, baseline body-mass index, and the presence of coexisting conditions. Among 10 cases of severe Covid-19 with onset after the first dose, 9 occurred in placebo recipients and 1 in a BNT162b2 recipient. The safety profile of BNT162b2 was

The December 2020 Newsletter of The GP-TCM Research Association



characterized by short-term, mild-to-moderate pain at the injection site, fatigue, and headache. The incidence of serious adverse events was low and was similar in the vaccine and placebo groups. A two-dose regimen of BNT162b2 conferred 95% protection against Covid-19 in persons 16 years of age or older. Safety over a median of 2 months was similar to that of other viral vaccines. Details: [DOI: 10.1056/NEJMoa2034577](https://doi.org/10.1056/NEJMoa2034577)

5. **2020 Breakthrough of the year.** *Science*. 2020. Desperately needed vaccines against COVID-19, developed and tested at record speed, are 2020's breakthrough. Details: <https://vis.sciencemag.org/breakthrough2020/#/finalists/2020-breakthrough-of-the-year>

Recommended Reading

1. **HERB: A high-throughput experiment- and reference-guided database of traditional Chinese medicine.** *Nucleic Acids Research*. 2020. Pharmacotranscriptomics has become a powerful approach for evaluating the therapeutic efficacy of drugs and discovering new drug targets. Recently, studies of traditional Chinese medicine (TCM) have increasingly turned to high-throughput transcriptomic screens for molecular effects of herbs/ingredients. And numerous studies have examined gene targets for herbs/ingredients, and link herbs/ingredients to various modern diseases. However, there is currently no systematic database organizing these data for TCM. Therefore, we built HERB, a high-throughput experiment- and reference-guided database of TCM, with its Chinese name as BenCaoZuJian. We re-analyzed 6164 gene expression profiles from 1037 high-throughput experiments evaluating TCM herbs/ingredients, and generated connections between TCM herbs/ingredients and 2837 modern drugs by mapping the comprehensive pharmacotranscriptomics dataset in HERB to CMap, the largest such dataset for modern drugs. Moreover, we manually curated 1241 gene targets and 494 modern diseases for 473 herbs/ingredients from 1966 references published recently, and cross-referenced this novel information to databases containing such data for drugs. Together with database mining and statistical inference, we linked 12 933 targets and 28 212 diseases to 7263 herbs and 49 258 ingredients and provided six pairwise relationships among them in HERB. In summary, HERB will intensively support the modernization of TCM and guide rational modern drug discovery efforts. And it is accessible through <http://herb.ac.cn/>. Details: <https://doi.org/10.1093/nar/gkaa1063>
2. **Entecavir combining Chinese herbal medicine for HBeAg-positive chronic hepatitis B patients: A randomized, controlled trial.** *Hepatology International*. 2020. Traditional Chinese medicine (TCM) is widely accepted and prescribed in China alongside Nucleoside analogs (NAs). In this double-blind, placebo-controlled, randomized, multi-center trial, we evaluated whether entecavir (ETV) plus TCM

The December 2020 Newsletter of The GP-TCM Research Association



formulas Tiao-Gan-Yi-Pi granule (TGYP) and Tiao-Gan-Jian-Pi-Jie-Du granule (TGJPJD) increase the rate of hepatitis B e antigen (HBeAg) loss in Chinese patients. 596 eligible participants were randomly assigned, in a 1:1 ratio, to two study groups in this 108-week trial: The experiment group was assigned ETV plus the TCM formula. The control group was assigned ETV plus a TCM placebo. We compared the rate of HBeAg loss by the end of week 108 between the two arms as the primary outcome. Secondary outcomes included hepatitis B surface antigen (HBsAg) level, proportion of undetectable HBV-DNA, and liver enzymes (ALT, AST, GGT) at week 108. The combination therapy achieved superior HBeAg loss at 108 weeks, without additional adverse events. The rate of HBeAg loss at week 108 was 37.54% (95% CI 31.9–43.2%) in the experiment group and 27.21% (95% CI 22.0–32.4%) in the control group. There was a statistically significant difference between the two arms of 10.33% (95% CI 8.4–12.3%, $p = 0.008$). The DNA loss rate, serum HBsAg level, and liver enzymes were similar between the groups by the end of 108th week. Combining the Chinese herbal formula with ETV therapy demonstrated superior HBeAg clearance compared with ETV monotherapy. This finding indicates that this combined therapy could produce an improved therapeutic effect and safety profile. Details: <https://doi.org/10.1007/s12072-020-10097-z>

- 3. Efficacy of intensive acupuncture versus sham acupuncture in knee osteoarthritis: A randomized controlled trial.** *Arthritis & Rheumatology*. 2020. Objective: To assess the efficacy of intensive acupuncture (3 times weekly for 8 weeks) versus sham acupuncture for knee osteoarthritis (KOA). Methods: In this multi-center randomized sham-controlled trial, participants with KOA were randomly assigned to receive electro-acupuncture (EA), manual acupuncture (MA) or sham acupuncture (SA) 3 times weekly for 8 weeks. Participants, outcome assessors and statisticians were masked to treatment group assignment. The primary outcome was the response rate, which is the proportion of participants who simultaneously achieved minimal clinically important improvement in pain and function at week 8. The primary analysis was analyzed by the Z-test for proportions with the modified intention-to-treat population, which included all randomized participants who have at least one post-baseline measurement. Results: Out of 480 participants recruited in the trial, 442 were evaluated for efficacy. The response rates at week 8 were 60.3% (91/151), 58.6% (85/145), and 47.3% (69/146) in the EA, MA, and SA groups, respectively. The between-group differences were 13.0% (97.5%CI, 0.2% to 25.9%; $P=0.0234$) for EA vs SA and 11.3% (97.5%CI, -1.6% to 24.4%; $P=0.0507$) for MA vs SA. The response rates in EA and MA groups were both significantly higher than the SA group at weeks 16 and 26. Conclusion: Among patients with KOA, compared with SA, intensive EA resulted in less pain and better function at week 8 and these effects persisted though week 26. Intensive MA had no benefit for KOA at week 8, although it showed benefits during follow-up. Details: <https://doi.org/10.1002/art.41584>

The December 2020 Newsletter of The GP-TCM Research Association



Invitation from the Official Journal of GP-TCM RA

1. WJTCM Call for papers: Pharmacology and Toxicology of Herbal Medicine.

Special Issue on
Pharmacology and Toxicology of Herbal Medicine

CALL FOR PAPERS

Guest Editor
Prof. Hongxi Xu

Guest Editor
Prof. Xuanbin Wang

Guest Editor
Prof. Pulok Kumar Mukhrjee

The special issue on *Pharmacology and Toxicology of Herbal Medicine* focuses on the biological effects and mechanisms of herbal medicine. It has a broad scope, covering basic research to clinical studies regarding pharmacology and toxicology.

We cordially invite researchers and experts to contribute original research articles as well as reviews on pharmacology and toxicology of herbal medicine.

Potential topics include but are not limited to:

- Bioactive principles from herbal medicine,
- Biological, pharmacological activities and mechanisms of herbal medicine,
- Genomics, proteomics, metabolomics, pharmacoinformatics studies on herbal medicine,
- Toxicology of herbal medicine.

Authors can follow the author instructions and submit their manuscripts via the Manuscript System at:
<https://mc03.manuscriptcentral.com/wjtcn>

Guest Editors

Hongxi Xu

Ph.D, Professor
Dean, School of Pharmacy
Shanghai University of Traditional
Chinese Medicine, China
E-mail: xuhongxi88@gmail.com

Xuanbin Wang

Ph.D, Professor
Renmin Hospital
Hubei University of Medicine, China
E-mail: wangxb@hbm.u.edu.cn

Pulok Kumar Mukhrjee

Ph.D, Professor
School of Natural Product Studies
Jadavpur University, Kolkata, India
E-mail: pulokm@gmail.com

Deadline for submission

January 30, 2021

Intended publication date

April 30, 2021

The December 2020 Newsletter of The GP-TCM Research Association



2. WJTCM Call for papers: Systems Biology and Metabolomics of Traditional Chinese Medicine



Special Issue on
Systems Biology and Metabolomics of Traditional Chinese Medicine

CALL FOR PAPERS



Guest Editor
Prof. Xi-jun Wang



Guest Editor
Prof. Hai-tao Lu



Guest Editor
Prof. Toshiaki Makino

Traditional Chinese Medicines (TCMs) are evidenced to confer therapeutic actions by largely interacting with dysregulated multi-layers molecules that underlie diseases, which can be defined as the holistic characteristics of TCMs to treat different diseases.

The fact is that systems biology, and metabolomics have the robust-capacity to better understand the holistic characteristics by globally deciphering the complex interactions between TCMs and diseases associated with dysregulated molecules. Currently, they are widely used to address many key questions in TCMs involving chemical characterization, therapeutic efficacy, toxicology and metabolic features, etc.

We invite the scholars in the niches to contribute research articles, reviews, and perspectives to this special issue.

Potential topics include but are not limited to:

- metabolomics of TCMs
- multiple omics of TCMs
- network pharmacology of TCMs
- systems biology of TCMs

Authors can submit their manuscripts via the Manuscript System at <https://mc03.manuscriptcentral.com/wjtcmm>

Guest Editors

Xi-jun Wang

Ph.D., Professor
Heilongjiang University of Chinese Medicine, China
E-mail: xijunw@sina.com

Hai-tao Lu

Ph.D., Professor
Shanghai Jiao Tong University, China
E-mail: haitao.lu@sjtu.edu.cn

Toshiaki Makino

Ph.D., Professor
Nagoya City University, Japan
E-mail: makino@phar.nagoya-cu.ac.jp

Deadline for submission
May. 30, 2021

Intended publication date
October 30, 2021

The December 2020 Newsletter of The GP-TCM Research Association



3. WJTCM Call for papers: **Diabetes and Vascular Disease with TCM**

World Journal of Traditional Chinese Medicine (WJTCM)

The official journal of WFCMS and GP-TCM



Special Issue on
Diabetes and Vascular Disease with TCM

CALL FOR PAPERS



Guest Editor
Prof. Qiao-Bing Huang



Guest Editor
Prof. Zi-Lin Sun



Guest Editor
Prof. Jing Li

The diabetic incidence is increasing worldwide, with vascular disease as one of the common complications of diabetes, which is also one of the major causes of death of diabetic patients. The most common vascular diseases include cardio-cerebral vascular disease, renal, retinal, and skin microvascular lesions. The earliest Chinese medical classics “Huangdi’s Classic on Medicine” has regarded Diabetes as “Xiaoke Lesion”. Vascular complications could be classified into Jingmai (Meridians)-related syndromes in TCM, offering theoretic basis for its clinical treatment based on differentiation of signs.

We invite researchers home and abroad to contribute original research articles as well as reviews on the topic of Diabetes and Vascular Disease with TCM.

Potential topics include but are not limited to:

- The new idea of TCM category of diabetic vascular complications
- TCM treatment strategy of different diabetic vascular complications
- The effect of promoting blood circulation and removing blood stasis (Huo-xue-hua-yu) in the treatment of diabetic vascular complications
- Advanced development regarding diabetic vascular complications

Authors can submit their manuscripts via the Manuscript System at <https://mc03.manuscriptcentral.com/wjtcms>.

Guest Editors

Qiao-Bing Huang
Ph.D, Professor
Southern Medical University
China
E-mail: bing@smu.edu.cn

Zi-Lin Sun
Ph.D, Professor
Southeast University
China
E-mail: 101007988@seu.edu.cn

Jing Li
Ph.D, Professor
Guangzhou University of Chinese
Medicine
China
E-mail: bmsjingl@gzucm.edu.cn

Manuscript Due
January 30, 2022

Intended publication date
March 25, 2022

The December 2020 Newsletter of The GP-TCM Research Association



4. WJTCM Call for papers: Biosynthesis-Driven Quality Design of Materia Medica

World Journal of Traditional Chinese Medicine (WJTCM)

The official journal of WFCMS and GP-TCM



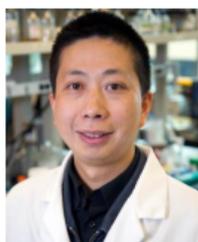
Special Issue on

Biosynthesis-Driven Quality Design of Materia Medica

CALL FOR PAPERS



Guest Editor
Prof. Wan-Sheng Chen



Guest Editor
Prof. Ji-Xun Zhan



Guest Editor
Prof. Shu-Juan Zhao

Biosynthesis and metabolic engineering together with molecular breeding provides an attractive approach to enhance the yield of effective components in medicinal plants and thus to improve or design the quality of Chinese Materia Medica, which is a great motivation for the sustainable development of the entire supply chain of traditional Chinese medicines.

We invite researchers home and abroad to contribute original research articles as well as reviews on the topic of biosynthesis-driven quality design of Chinese Materia Medica and other herbs.

Potential topics include but not limited to:

- Elucidation and mapping of biosynthetic pathways of the effective components.
- Metabolic engineering or regulation for the improvement of herbal quality.
- Progress in understanding the biosynthesis of effective components.
- Application of molecular breeding technology to medicinal plants.

.....

Authors can submit their manuscripts via the Manuscript System at <https://mc03.manuscriptcentral.com/wjtcms>.

Guest Editors

Wan-Sheng Chen
Ph.D, Professor
chenwansheng@smmu.edu.cn
Changzheng hospital, Second
Military Medical University

Ji-Xun Zhan
Ph.D, Professor
jixun.zhan@usu.edu
Department of Biological
Engineering, College of
Engineering, Utah State
University

Shu-Juan Zhao
Ph.D, Professor
zhaoshujuan@shutcm.edu.cn
Institute of Chinese Materia
Medica, Shanghai University of
Traditional Chinese Medicine

Manuscript Due Date
March 30, 2021

Intended Publication Date
June 25, 2021

The December 2020 Newsletter of The GP-TCM Research Association



5. WJTCM Call for papers: Qi Deficiency and Blood Stasis

World Journal of Traditional Chinese Medicine (WJTCM)

The official journal of WFCMS and GP-TCM



Special Issue on
Qi Deficiency and Blood Stasis

CALL FOR PAPERS



Guest Editor
Prof. Jing-Yan Han



Guest Editor
Prof. Jian-Xun Liu



Guest Editor
Prof. Jing-Yuan Mao



Guest Editor
Prof. Ming-Jun Zhu

Qi deficiency and blood stasis is a common feature in coronary heart disease, cardiac hypertrophy, myocardial ischemia-reperfusion injury and heart failure, for which there is a lack of effective prevention and treatment methods in modern medicine. Some traditional Chinese medicine (TCM) has shown beneficial effect on heart diseases in clinic, and increasing clinical and basic studies have been carried out devoting to the mechanism behind these medicines, particularly focusing on their potential of tonifying Qi and promoting blood circulation, as well as the scientific essence of the Qi deficiency and Blood Stasis. In order to exchange the latest research results in this field, we have organized special issues of Qi deficiency and blood stasis, tonifying Qi and promoting blood circulation. Experts from this field are welcome to contribute original research articles or reviews.

Potential topics include but not limit to:

- Reviews on Qi deficiency and blood stasis, tonifying Qi and promoting blood circulation
- Clinical studies regarding Qi deficiency and blood stasis and tonifying Qi and promoting blood circulation
- Basic studies regarding Qi deficiency and Blood Stasis and tonifying Qi and promoting blood circulation
- Pharmacological mechanisms of tonifying Qi and promoting blood circulation

Authors can submit their manuscripts via the Manuscript System at <https://mc03.manuscriptcentral.com/wjtcn>.

Guest Editors

Jing-Yan Han

Ph.D, Professor
Department of integrative Chinese and western medicine, Peking University
E-mail: hanjingyan@bjmu.edu.cn

Jian-Xun Liu

Ph.D, Professor
Xiyuan hospital, China academy of the Qi Chinese medical sciences
E-mail: liujx0324@sina.com

Jing-Yuan Mao

Ph.D, Professor
First teaching hospital of Tianjin university of TCM
E-mail: jymao@126.com

Ming-Jun Zhu

Ph.D, Professor
The first affiliated hospital of Henan university of TCM
E-mail: zhumingjun317@163.com

Accept submission date:

July. 30, 2020-July, 25, 2021

The December 2020 Newsletter of The GP-TCM Research Association



Monthly Chinese Materia Medica Highlights

Opium poppy (*Papaver somniferum*, Papaveraceae, 罂粟, left) and
corn poppy (*Papaver rhoeas*, Papaveraceae, 虞美人, right)



Native to Europe, opium poppy is the oldest effective medicine in continuous use. The dried latex or sap obtained from its incised unripe fruits is the well-known opium. Selling huge amount of opium from Britain to China caused the opium wars in the 19th century. The main components of opium, morphine and codeine, are typical opiate drugs. Drug abuse has been causing serious worldwide social problems. Corn poppy is a common field poppy native to Europe. Also known as red poppy, it is of medicinal, culinary, and ornamental values, and is a symbol of World War I. From opium and corn poppies, relationships of health, life, death, and our knowledge of medicinal plants can be observed.

Both plants were introduced into China since ancient times. The dried pericarp of the ripe fruit of *Papaver somniferum* (papaveris pericarpium) is the Chinese medicinal *yingsuqiao* (opium poppy husk). Official in current Chinese Pharmacopeia, opium poppy husk constrains the lung, binds up the intestines, stabilizes the kidney, and alleviates pain. The aerial part, flower, fruit, and seed of *Papaver rhoeas* are Chinese folk medicinals that stop coughing, alleviate pain, and relieve diarrhea.

罂粟

园中罂粟色缤纷
碧叶宽花唤作神
远道而来常荐客
初逢便识痛时人

虞美人

娇柔多彩色宜人
次第花开总是春
古有悲歌为寓意
雕栏玉砌月中尘

The above colour photographs, English texts and Chinese poems are contributed by Prof **Hubiao Chen** (Hong Kong), Dr **Ping Guo** (Hong Kong) and Prof **Jiqing Liu** (Shenzhen), respectively. This column is advised by Prof **Zhongzhen Zhao** (Hong Kong).