

Organizers:



香港浸會大學
HONG KONG BAPTIST UNIVERSITY

School of **中醫藥學院**
Chinese Medicine

GP-TCM Research Association
Virtual Conference 2020

Chinese Medicines: from Anti-viral Effects to Future Global Development

18 December 2020

(11:00 – 14:00 UK time, 19:00 – 22:00 China/HK time)



Meeting link by Zoom:

<https://hkbu.zoom.us/j/99343889304>

Meeting ID: 993 4388 9304



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[Conference Organizing Committee]

Prof Aiping LYU	President of GP-TCM RA and Dean of School of Chinese Medicine, Hong Kong Baptist University
Prof Clara Bik-San LAU	Secretary-General of GP-TCM RA
Prof Tai-Ping FAN	Treasurer and Past President of GP-TCM RA
Prof Monique SIMMONDS	President-Elect of GP-TCM RA
Prof Vivian TAAM WONG	BoD member of GP-TCM RA and Chair of Interest Group (Good Practice Guidelines) of GP-TCM RA
Prof Nicola ROBINSON	Chair of Interest Group (Acupuncture – Moxibustion and Meridians) of GP-TCM RA

[Conference Secretariat]

**Good Practice in Traditional Chinese Medicine
Research Association**
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Good Practice in Traditional Chinese Medicine (GP-TCM) Research Association

GP-TCM is the EU's first coordination action dedicated to traditional Chinese medicine (TCM) research. Funded by the European Commission under its 7th Framework Programme (FP7), the project has engaged more than 200 scientists and clinicians from 112 institutions in 24 countries in discussions on good practice issues related to various aspects of Chinese herbal medicine and acupuncture research, leading to state-of-the-art reports and guidelines published in *Journal of Ethnopharmacology* as an open-access special issue.

These guidelines need dissemination, validation, and further development through continued interregional, interdisciplinary and intersectoral collaborations. To promote this, a new international association has been established to succeed the 3-year fixed term FP7 GP-TCM consortium. Twelve eminent scientists from seven countries and regions have been elected to form the Board of Directors (BoD), which is led by Founding President Professor Rudolf Bauer, University of Graz, Austria.

For more details, please visit <http://www.gp-tcm.org/>



香港浸會大學
HONG KONG BAPTIST UNIVERSITY

**School of Chinese Medicine,
HKBU**

Hong Kong Baptist University (HKBU), the first institution funded by the University Grants Committee (UGC) to offer undergraduate education in Chinese medicine and pharmacy in Chinese medicine in Hong Kong, established the School of Chinese Medicine (SCM) in 1999. SCM is committed to providing quality academic programmes, conducting cutting-edge research and technology development, offering first-rate Chinese medicine healthcare service, and contributing to the standardization, modernization and internationalization of Chinese medicine. SCM is proud to have achieved a leading position in Chinese medicine in the higher education sector in Hong Kong.

With our quality teaching staff and following the whole person education ethos of the University, SCM provides quality Chinese medicine programmes to nurture new generations of Chinese medicine professionals and scientists and advance the development of Chinese medicine in Hong Kong and beyond. The School offers a wide range of academic programmes leading to the award of different academic qualifications, including UGC-funded undergraduate and research postgraduate programmes as well as self-financed taught master's, diploma and certificate programmes.

For more details please visit <https://scm.hkbu.edu.hk>



Welcome Message from President of GP-TCM RA

by Prof Aiping LYU

Dear our honourable speakers, members and friends,



Firstly, as the President, I sincerely welcome all of you to the first ever virtual conference of GP-TCM RA, jointly organized with the School of Chinese Medicine, Hong Kong Baptist University.

The outbreak of COVID-19 pandemic has given the world, especially for the medical field, a big challenge over the past year. It is deeply sad to see that there are over 70 million confirmed cases and 1.6 million deaths. It results the massive shutdown measures worldwide and have plunged the global economy into the deepest recession.

While we regret that COVID pandemic causes a big tragedy to our planet, we are excited to explore the opportunity for using traditional Chinese medicine in the anti-viral effect on the coronavirus diseases, its application on beating other infectious and fatal diseases, and global development in future as well.

I would like to express my gratitude for the support of our distinguished speakers. It is our honour to have your presence at this virtual conference to share with us your knowledge and experience which inspire us with your insight.

Also, I would like to thank our members and friends for your active and enthusiastic participation. You are helping our association to break new ground in our pandemic era and beyond. This conference will bring us together in this very difficult time and serves as the platform for us to learn from each other.

We are eager to work closely with you all to achieve advancement in research of Chinese medicine, to fight against diseases and strive for a better World.

Stay healthy and safe!

[Programme Rundown]

18 December 2020 (Friday)

11:00 – 11:05 (UK Time) / 19:00 – 19:05 (China/HK time)	Opening and Welcoming
11:05 – 11:45 (UK Time) / 19:05 – 19:45 (China/HK time)	<i>The pathway for medical translation of TCM against SARS-CoV-2 based on integration of Chinese and Western medicine</i> Speaker: Prof Zifeng YANG
11:45 – 12:15 (UK Time) / 19:45 – 20:15 (China/HK time)	<i>What is needed for the acceptance of Chinese medicine in the fight against COVID-19 in European countries</i> Speaker: Prof Rudolf BAUER
12:15 – 12:45 (UK Time) / 20:15 – 20:45 (China/HK time)	<i>Artemisinin derivatives to combat viral diseases</i> Speaker: Prof Thomas EFFERTH
12:45 – 13:15 (UK Time) / 20:45 – 21:15 (China/HK time)	<i>Anti-COVID-19 with Traditional Chinese Medicine: research evidence in China</i> Speaker: Prof Jianping LIU
13:15 – 13:45 (UK Time) / 21:15 – 21:45 (China/HK time)	<i>Evidence-based study on traditional prescriptions for the inhibition of influenza virus</i> Speaker: Prof Pang-Chui SHAW
13:45 – 1400 (UK Time) / 21:45 – 22:00 (China/HK time)	Discussion and Closing Remarks

* All sessions of speaker's presentation include Q & A session

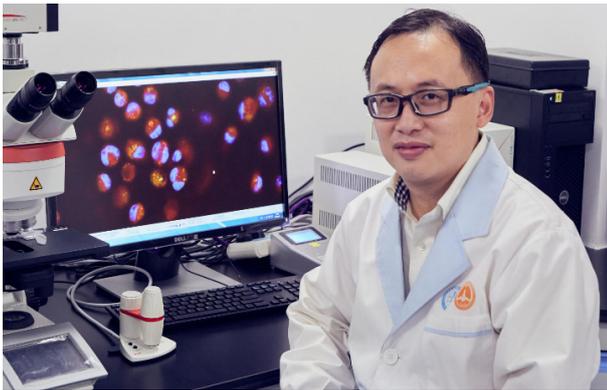
** Medium of Language: English

[Speaker's Biography]

Professor Zifeng YANG (楊子峰)

Assistant Dean, Guangzhou Institute of Respiratory Health, the First Affiliated Hospital of Guangzhou Medical University, China

Executive Director, Virus Diagnostic Research Center , National Clinical Research Center of Respiratory Disease



Prof. Zifeng YANG is currently Assistant Dean, Guangzhou Institute of Respiratory Health, the First Affiliated Hospital of Guangzhou Medical University, Executive Director of Virus Diagnostic Research Center, National Clinical Research Center of Respiratory Disease. He is a principal investigator of State Key Laboratory of Respiratory Disease and Integrated Traditional Chinese and Western Medicine Group.

Prof Yang is the Executive Director, World Federation of Chinese Medicine Societies Society of Immunology. He was awarded as "Chang Jiang Scholar" by the Ministry of Education of China. He received 3 national awards and 4 provincial and ministerial awards. Prof Yang is also principal investigator to scientific projects.

Prof Yang's research areas including virus diagnosis, Chinese and Western medicine prevention and treatment of respiratory infections. Prof Yang is a special issue guest editor of Phytomedicine and peer reviewer of other academic journals. He has published his research papers including 50 SCI papers in both international and Chinese peer reviewed journals such as NEJM, Science, EID etc.

Abstract

The pathway for medical translation of TCM against SARS-CoV-2 based on integration of Chinese and Western medicine

We took the lead in combining the diagnosis and treatment system of respiratory infectious diseases with Warm Disease Theory, to cover the shortage of etiology cognition and rules of disease treatment in integrative Chinese and Western Medicine, and his contributions, including updating the outdated theories for Flu treatment with integrated Chinese and Western medicine, were summarized as followed: 1) be the

first to interpret the excessive immune response and the bacterial and viral coinfection was the result of internal infection base on the host immune response after Flu infection; proposed that the internal and external synergies of infection maybe the pathogenesis of severe infection, and had won the First Prize of Progress of Guangdong Province by saving the critically ill patients with internal and external strategies. 2) Base on the internal and external synergies of infection, he started an evaluation system for traditional Chinese medicines (TCMs) with antiviral and anti-inflammatory activities and had demonstrated the superiority of TCMs, such as Lianhua Qingwen Capsule/Granule and Radix Isatidis, in forms of "single drug, multiple targets" or "multiple drugs,multiple targets". 3) To reveal the occurrence and development of respiratory infectious diseases, he and his team developed a tree shrew model which can embodying the characteristics of internal and external synergies of infection. 4)Base on the internal and external synergies of infection, he took the lead in discovering a batch of TCMs with efficacy of anti-SARS-CoV-2 and carried out evidence-based application.

Professor Rudolf BAUER

Institute of Pharmaceutical Sciences, University of Graz, TCM Research Center Graz



Prof. Rudolf Bauer studied pharmacy and got his PhD at University of Munich, Germany; 1993 he became Associate Professor at University of Düsseldorf, Germany; since 2002 he is full professor of pharmacognosy at University of Graz, Austria. He has acted as Head of the Institute of Pharmaceutical Sciences from 2004 – 2020, and is now Deputy Head. Since 2007 he is director of the TCM Research Center Graz (Medicinal Plant Research).

He is expert in natural product chemistry, analysis, and activity-guided isolation of plant constituents. His major research focuses are phytochemical and pharmacological investigations of traditionally used medicinal herbs, discovery and identification of the active constituents, plant metabolomics and interactions with gut microbiota.

He acted as president of the International Society of Ethnopharmacology from 2015-2017, of the Society for Medicinal Plant and Natural Product Research (GA) 2002-2007, and as the founding president of GP-TCM Research Association (中醫藥規範研究學會) during 2012 - 2014.

He has published more than 380 research papers and has edited several books. He is chairman of the TCM expert group and member of expert group 13A of the European Pharmacopoeia Commission.

He received many awards, like in 2017 the Qihuang International Prize of China Association of Chinese Medicine, in 2018 the Outstanding International Scientist Award (Pranab Banerji Memorial Award) of Society for Ethnopharmacology India (SFE), and in 2019, the Varro Tyler Prize of the American Society of Pharmacognosy, as well as the Honorary Doctorate of University of Helsinki.

Abstract

What is needed for the acceptance of Chinese medicine in the fight against COVID-19 in European countries

COVID-19 has become pandemic and a global threat. In Europe, infection numbers have dramatically increased during the second wave. Treatment options with antiviral agents are still very limited. It will take time until vaccines will protect the entire global communities. Therefore, it is necessary to explore other options, like traditional medicines, which are widely available and have been used for centuries to treat fever and infectious diseases.

Since ancient times, certain herbal mixtures have been used for the treatment of

febrile infections in China. Also, during the first SARS-CoV crisis, 40 to 60% of the infected patients in China received Chinese medicine treatment on top of the standard modern medicine treatment. During the recent infections, more than 85 % of SARS-CoV-2 infected patients in China have received TCM treatment, which may have contributed to prevent severe symptoms so that China could overcome the crisis quite well.

Also people outside China could benefit from the preventive and curative effects of TCM. However, for being accepted as medicinal products, it is necessary to prove efficacy, safety, and quality of these preparations. Some clinical studies have already been performed with specific preparations, but more are randomized controlled studies are needed. Also, the mechanisms of action and the active principles should to be elucidated.

Some TCM derived products are on the European market already as dietary supplements, but no drugs have been registered so far. The European Union has established detailed guidelines for marketing authorization of herbal drugs, which have to be followed. They also include quality standards which guarantee high and reproducible quality and prevent from contaminations and adulterations. An international expert group of the European Pharmacopoeia has established already more than 70 monographs of Chinese herbs. Many of them are on herbs which have been used in prevention and treatment of COVID-19. They could be used for marketing authorization of corresponding products in Europe.

Professor Thomas EFFERTH

Chair of the Department of Pharmaceutical Biology, Institute of Pharmacy and Biochemistry, Johannes Gutenberg University, Mainz, Germany

Prof. Thomas Efferth is biologist by training (Technical University of Darmstadt, Germany). His doctoral thesis was completed at the German Cancer Research Center (DKFZ), Heidelberg, Germany (1990). He was awarded the Ludolf-Krehl-Prize of the Southwest German Association for Medicine (1991), the Willmar-Schwabe-Award of the German Society for Medicinal Plant Research (2006), the citizen medal of the City of Heidelberg, Germany (2008), the CESAR Award for Translational Oncology (2011), the SCENTEdrop Award on medicinal and fragrant herbs (2015), and the Qihuang International Award of the Chinese Association of Chinese Medicine (2017). Since 2018, he is full member of the World Academy of Sciences.



Prof Efferth headed a research group for Pharmaceutical Biology at DKFZ (2005-2009) and was adjunct professor (apl.) at the University of Heidelberg (2007-2009). In 2009, he took over the Chair of Pharmaceutical Biology (full professorship) at the Johannes Gutenberg University, Mainz.

The focus of Prof. Efferth's research is on tumor pharmacology, network pharmacology, and recently also on COVID-19. A major topic is research on chemical entities from natural sources:

Prof. Efferth has published 660 PubMed-listed papers and in peer-reviewed journals in the field of cancer research, pharmacology, and natural products (Hirsch-factor: 83; citation rate: >30,000; acc. Google Scholar) and a textbook on 'Molecular Pharmacology and Toxicology' (Springer Publisher; 2006). He holds 7 patents. The scientific results were communicated in over 270 oral presentation and invited lectures and over 200 poster presentations at national and international conferences and meetings. He is editor-in-chief of Phytomedicine as well as co-editor, associate editor and editorial board member of several other scientific journals and scientific advisory board member of the German Pharmaceutical Society and several other institutions.

Abstract

Artemisinin derivatives to combat viral diseases

Traditional Chinese medicine commands a unique position among all traditional medicines because of its 5000 years of history. Our own interest in natural products from traditional medicines was triggered in the 1990s, by artemisinin-type sesquiterpene lactones from *Artemisia annua* L. As demonstrated in recent years by us and others, this class of compounds has activity against malaria, cancer cells, and schistosomiasis.

Interestingly, the bioactivity of artemisinin and its semisynthetic derivative artesunate is even broader and includes the inhibition of certain viruses, such as human cytomegalovirus and other members of the Herpesviridae family (e.g., herpes simplex virus type 1 and Epstein-Barr virus), hepatitis B virus, hepatitis C virus, and bovine viral diarrhea virus. A role against SARS-CoV-2 mediated COVID-19 is discussed. Analysis of the complete profile of the pharmacological activities and molecular modes of action of artemisinin and artesunate and their performance in clinical trials have further elucidated the full antimicrobial potential of these versatile pharmacological tools from nature.

Selected references:

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- Hutterer et al. The broad-spectrum antiinfective drug artesunate interferes with the canonical nuclear factor kappa B (NF- κ B) pathway by targeting RelA/p65. *Antiviral Res.* 2015;124:101-9.
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Professor Jianping LIU (劉建平)

Dean, School of Basic Medical Science, Beijing University of Chinese Medicine

Director, Centre for Evidence-Based Chinese Medicine, Beijing University of Chinese Medicine

Prof. Jianping LIU is currently Dean of School of Basic Medical Science, Beijing University of Chinese Medicine (BUCM) where he is head of the Evidence-Based Chinese Medicine Center for Clinical Research and Evaluation, BUCM. He was awarded as "Chang Jiang Scholar" by the Ministry of Education of China (2006). He visited various countries including United Kingdom, Australia, Denmark and Norway as Visiting Scholar.



Prof. Liu is also principal supervisors of postgraduate research students, and principal investigator to more than 10 major scientific projects, including being funded by the Ministry of Science and Technology of China, Ministry of Education of China.

He is the Chair of the International Society of CAM Research (ISCMR), Advisor, WHO-WPRO Traditional Medicine since 2005, Chairman of EBM Specialty Committee under the Chinese Association of Integrated Traditional Chinese and Western Medicine from 2011

Prof Liu are an editor and peer reviewer for more than 30 academic journals. He has published more than 500 research papers in both international and Chinese peer reviewed journals, including 209 papers in SCI journals. His publications have received 5043 citations. Besides, he authored 9 books and co-authored 9 books monographs

Abstract

Anti-COVID-19 with traditional Chinese Medicine: Research evidence in China

There was an immediate response to the pandemic of COVID-19 in China, which turned out to be very successful in the control of the pandemic. Among the measures, traditional Chinese medicine (TCM) played a great role in both prophylactic and therapeutic approaches. Among the diagnostic and treatment protocols developed in China from 23 provinces, herbal remedy was recommended for the prevention of COVID-19 infection. In the national clinical guidance, TCM was recommended in a way of pattern specific herbal formulae and Chinese proprietary medicines. Until May 14 2020, 161 TCM trials were identified from three registries. Of these, 94 (58.4%) were

randomized controlled trials, and 114 trials (70.8%) assessed therapeutic effects of TCM; while the remainder focused on prevention, rehabilitation, and the epidemiology of TCM syndromes. Due to the immediate control of the epidemic and lack of participants in China, most of the registered trials was not completed. Thus, studies on therapeutic effect were largely from real world clinical data, which showed beneficial effects in both symptom improvement and potentials in reducing patients with COVID-19 to become severe or critical cases. From this anti-COVID-19 battle, much to be learnt and well thought plan for future clinical trials needs to be on agenda.

Professor Pang-Chui SHAW

School of Life Sciences, Li Dak Sum Yip Yio Chin R & D Centre for Chinese Medicine; State Key Laboratory of Research on Bioactivities and Clinical Applications of Medicinal Plants, The Chinese University of Hong Kong, Hong Kong, China.

Prof. Pang-Chui Shaw obtained his Ph.D degree from Imperial College, University of London, UK. He is now Director of Li Dak Sum Yip Yio Chin R & D Centre for Chinese Medicine, Professor and Director of Biochemistry Programme, School of Life Sciences and Deputy Director of Institute of Chinese Medicine at the Chinese University of Hong Kong. He has served as Chairman of the Endangered Species Advisory Committee, Agriculture, Fisheries and Conservation Department, HKSAR and now member of the Advisory Committee, Government Chinese Medicines Testing Institute, HKSAR.



Prof Shaw's research areas include authentication, quality control and pharmacological study of Chinese medicinal material and structure-function study on pharmacological important proteins. He has trained 34 Ph.D and 31 M.Phil. students, published more than 250 refereed articles, three books and has obtained four USA and four Chinese patents.

Abstract

Evidence-based study on traditional prescriptions for the inhibition of influenza virus

Influenza is a contagious respiratory illness and the frequent reassortment of influenza virus may cause high mortality and over-burden of the healthcare system. Chinese prescriptions have been used in treating high fever, thirsty and anxiety for centuries and many of them are also used to treat flu symptoms.

Our study aims at evaluating the anti-influenza effect of selected classics prescriptions and elucidating the possible mechanism involved. Influenza virus infected MDCK cells and BALB/c mice were employed to evaluate the efficacy as in vitro and in vivo model and the effect on the influenza proteins and cellular immune markers were studied. Results on selected heat-clearing and detoxicating prescriptions showed a broad-spectrum of inhibitory effects on multiple influenza virus strains. As an illustration, we have found that Sheng Jiang San (SJS) significantly protected influenza virus infected mice from death. SJS was found to target on the neuraminidase of influenza virus, down-regulate TNF- α and up-regulate IL-2 of influenza virus induced mice. Upon SJS treatment, the lung index and the lung viral load of virus were significantly decreased.

Our work has substantiated the clinical observation on anti-flu symptoms of selected heat-clearing and detoxicating prescriptions and contributed to the increase of public confidence and modernization of Chinese medicine.

[Acknowledgement]

A sincere thanks to organizations including our co-organizer and individuals contributed to this conference.

We wholeheartedly thank their support to the GP-TCM RA Virtual Conference 2020.

⌘ Thank you for your participation ⌘