From the Sino-German collaboration on purines to the Chinese Purine Club

Yong Tang^{1,2,3} · Hai-Yan Yin^{1,2,3} · Peter Illes^{2,4} · Geoffrey Burnstock^{5,6} · Jiang-Fan Chen⁷

Received: 28 May 2019 / Accepted: 14 June 2019 / Published online: 26 June 2019
© Springer Nature B.V. 2019

Keywords Chinese Purine Club · History · Sino-German Center · Membership

In the winter of 2011, Prof. Yong Tang and Dr. Zhan-Guo Gao met for lunch at the NIH (Bethesda, Maryland, USA). Based on the suggestion of Dr. Gao, Prof. Geoffrey Burnstock (Melbourne, Australia) was contacted, who recommended to set up a broad collaboration between Chinese scientists to investigate the purinergic hypothesis of acupuncture and also to promote the development of purine research in China. On this occasion, Prof. Peter Illes (University of Leipzig, Germany) was proposed by Prof. Burnstock to write a proposal together with Prof. Yong Tang (Chengdu University of Traditional Chinese Medicine (TCM), China) and submit it to the Sino-German Center (Beijing, China) for financing the “1st Sino-German Symposium on Purinergic Signalling, Pain and Acupuncture” in Chengdu.

Apart from the “1st and 2nd Sino-German Symposia on Purinergic Signalling, Pain and Acupuncture” held in Chengdu between October 10 and 15, 2012 (Fig. 1), and in Leipzig between September 26 and October 12, 2017,

respectively, the Sino-German purine collaboration supported by the Sino-German Center was extended to the following research projects and conferences. Three co-operative projects were financed by the Center: (1) “Role of purinergic signalling in acupuncture-induced analgesia” (Peter Illes, Yong Tang, and Wei-Fang Rong); (2) “Purine signalling in depression and antidepressant effect of transcutaneous auricular vagus electroacupuncture” (Ute Krügel and Pei-Jing Rong); and (3) “P2X receptor channels: novel targets of analgesic traditional Chinese herbs” (Hong Nie and Günther Schmalzing). Financial support was made also available to organize two Summer Schools: (1) “Traditional Chinese Medicine (TCM) for depression: empiricism and evidence” (Ute Krügel and Pei-Jing Rong, Guangzhou, 2017); and (2) “Frontiers in Purinergic Signalling and Acupuncture” (Peter Illes and Yong Tang, Chengdu, 2018).

In 2018, the Chinese Purine Club was founded with the Co-Chairs Yong Tang and Jiang-Fan Chen as well as the Honorary Chairs Geoffrey Burnstock and Peter Illes. Afterwards the “1st Chinese Purine Club Meeting” was organized in Chengdu between October 10 and 12, 2018 (Fig. 2). Prof. Burnstock delivered the opening lecture at the “1st Chinese Purine Club Meeting” and also at the “1st and 2nd Sino-German Symposia on Purinergic Signalling, Pain and Acupuncture” (Chengdu, 2012 and Leipzig, 2017).

In 2018, Yong Tang and Peter Illes founded the “International Collaborative Center on Big Science Plan for Purine Signalling” at the Chengdu University of TCM with generous financial support from the Sichuan Provincial Administration of Foreign Experts Affairs and the Chengdu University of TCM. This center aims at bringing together scientists from different countries or regions to work together on common projects related to the purine field, to furnish fruitful discussions among them, and to promote the career development of junior scientists or Master/PhD students working on purines.

✉ Peter Illes
peter.illes@medizin.uni-leipzig.de

¹ School of Acupuncture and Tuina, Chengdu University of Traditional Chinese Medicine, Chengdu 610075, China

² International Collaborative Center on Big Science Plan for Purine Signalling, Chengdu University of Traditional Chinese Medicine, Chengdu 610075, China

³ Key Laboratory of Sichuan Province for Acupuncture & Chronobiology, Chengdu 610075, China

⁴ Rudolf-Boehm-Institut für Pharmakologie und Toxikologie, Universität Leipzig, 04107 Leipzig, Germany

⁵ Autonomic Neuroscience Centre, University College Medical School, Rowland Hill Street, London NW3 2PF, UK

⁶ Department of Pharmacology and Therapeutics, The University of Melbourne, Melbourne, Australia

⁷ Wenzhou Medical University, Wenzhou 325000, China

Fig. 1 Participants of the “1st Sino-German Symposium on Purinergic Signalling, Pain and Acupuncture” (Chengdu, October 10–15, 2012). First row middle from left to right: Yong Tang, Peter Illes, Geoffrey

Burnstock and Walter Zieglgänsberger (photo by courtesy of Chao Zhang, Chengdu, October 12, 2012)

Fig. 2 “1st Chinese Purine Club Meeting” (Chengdu, October 10–12, 2018). First row from left to right: Shang-Dong Liang, Jiang-Fan Cheng, Nomi Burnstock, Geoffrey Burnstock, Peter Illes, Patrizia

Rubini, Guang-Yin Xu, Yong Tang (photo by courtesy of Xiao-Chao Luo, Chengdu, October 11, 2018).

In 2019, the Center hosted the Symposium “International Forum on Purinergic Signalling and Brain Science” in Chengdu. Peter Illes (Germany), Guang-Yin Xu (China), Bruno Frenguelli (United Kingdom), Jiang-Fan Chen (China), Ivan Milenkovic (Germany), De-Zhong Yao (China), Henning Ullrich (Brazil), Pei-Jing Rong (China), Shang-Dong Liang (China), Patrizia Rubini (Germany), Shu-Xin Zhang (China), and Yong Tang delivered presentations on their research activities about extracellular purines.

In China, a couple of excellent scientists are concentrating on purine-related research. Just a few prominent names are those of Shu-Min Duan and Zhi-Hua Gao (Zhejiang University), Guang-Yin Xu (Soochow University), Tian-Ming Gao (South Medical University), Jiang-Fan Chen (Wenzhou Medical University), Zhi-Qi Zhao, Yu-Qiu Zhang, Zhi-Li Huang, and Guang-Hong Ding (Fudan University), Qiang Zhou (Shanghai Institute of Materia Medica, Chinese Academy of Sciences), Huai-Zhen Ruan and Yuan-Qiang Zhou (Third Military Medical University), Shang-Dong Liang, Gui-Lin Li, and Yun Gao (Nanchang University), Pei-Jing Rong (China Academy of Chinese Medical Science), Jian-Qiao Fang (Zhejiang University of Chinese Medicine), Huan-Gan Wu (Shanghai Institute of Acupuncture and Meridian), Yi Guo (Tianjin University of Chinese Medicine), Bei Ma and Zheng-Hua Xiang (Second

Military Medical University), and Xiang-Rui Wang, and Wei-Fang Rong (Shanghai Jiaotong University).

It is anticipated that the Chinese Purine Club will make in the future important contributions to the development of our knowledge on purines and will acquire a high international visibility.

Funding We are grateful to the Sino-German Centre for the Promotion of Science (GZ800, GZ919, GZ1402, GZ1479) for financial support. We also received grants from the Sichuan Provincial Administration of Foreign Affairs (SZD201731, SZD201846), the National Natural Science Foundation of China (81373735, 81774437, 81873240), and Sichuan Science and Technology Program (2019YFH0108).

Compliance with ethical standards

Conflict of interest Yong Tang declares that he does not have a conflict of interest.

Hai-Yan Yin declares that she does not have a conflict of interest.

Peter Illes declares that he does not have a conflict of interest.

Geoffrey Burnstock declares that he does not have a conflict of interest.

Jiang-Fan Chen declares that he does not have a conflict of interest.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.