中华中医药学会科学技术奖•岐黄国际奖推荐书

(2020年度)

一、被提名人情况

序号：QH-20201067

<table>
<tr><td>推荐单位或提名专家</td><td colspan="5">The GP-TCM Research Association（中医药规范研究学会）
2017 岐黄奖得主 Robert Verpoorte 教授和 2018 年岐黄奖得主王梅博士</td></tr>
<tr><td>英文名或英文译名</td><td colspan="2">Qihe Xu</td><td>中文译名</td><td colspan="2">徐启河</td></tr>
<tr><td>出生日期</td><td colspan="2">1967 年 11 月 17 日</td><td>国　籍</td><td>英国</td><td>性　别　男</td></tr>
<tr><td>职　　务</td><td colspan="2">国王学院整合中医药中心主任</td><td>职　称</td><td colspan="2">高级讲师（副教授）</td></tr>
<tr><td>专业、专长</td><td colspan="2">中西医汇通肾脏病学、药理学</td><td>学　位</td><td colspan="2">博士</td></tr>
<tr><td rowspan="2">工作单位</td><td>英文</td><td colspan="4">King’s College London (KCL), The University of London, UK</td></tr>
<tr><td>中文</td><td colspan="4">英国，伦敦大学，伦敦国王学院</td></tr>
<tr><td>通讯地址及邮编</td><td colspan="2">10 Meadow Way, London NW9 0TB, United Kingdom</td><td>电子信箱</td><td colspan="2">qihe.xu@kcl.ac.uk</td></tr>
<tr><td>电　　话</td><td colspan="2">+44 7961067996</td><td>传真</td><td colspan="2"></td></tr>
<tr><td>国际学术组织任职</td><td colspan="5">欧盟第七框架计划《后基因组时代传统中医药研究的良好实践》负责人 (2009-12)</td></tr>
<tr><td rowspan="2">代表性成果名称</td><td>中文</td><td colspan="4">《后基因组时代传统中医药研究的良好实践》与中西医汇通肾脏病防治研究</td></tr>
<tr><td>英文</td><td colspan="4">GP-TCM and Integrative Chinese Medicine for Prevention and Treatment of Kidney Diseases</td></tr>
<tr><td>与国内合作的主要单位</td><td colspan="5">北京中医药大学、首都医科大学、中国医学科学院药用植物研究所、上海中医药大学、上海针灸研究所、香港大学等。</td></tr>
<tr><td>声明</td><td colspan="5">本人严格按照《中华中医药学会科学技术奖•岐黄国际奖奖励办法》有关规定和中华中医药学会对推荐工作的具体要求，如实提供了本推荐书及相关材料，且不存在任何违反有关法律法规的情况。如有不符，本人愿意承担相关后果并接受相应的处理。

本人签字：Qihe Xu
2020 年　1 月 21日</td></tr>
</table>

二、代表性科技成果主要创新：

作为中国本土培养的医学博士，徐启河曾在北京任肾科医师，荣立三等军功（1998），并获国家科技进步二等奖（第三作者，1998）。1999 年，受国际肾脏病学会奖学金资助到伦敦大学做博士后，留校历任讲师、高级讲师、结合中医药中心共同主任（2013）、主任（2019）。

从事肾脏病学 30 年，徐博士的研究聚焦世界性医学难题急性肾损伤（AKI）和慢性肾脏病（CKD）的防治：AKI 发生于 10-15%住院患者，在重症监护室的发生率高达 50%以上，而且死亡率极高（*Lancet* 2019;394:1949）；CKD 通过诱导肾脏纤维化导致慢性肾衰，而且发病率增长迅速，据预测将与 2040 年成为全球前 5 位死因（*Lancet* 2018;392:2052）。

徐博士是研究维甲酸防治肾脏病的国际知名专家。2001-2003 年，他发表于美国和欧洲肾脏病学会、英国药理学会、美国生物化学学会会刊的代表作分别被引用 32、51、71、70、81 次；2004 年，他受邀在国际肾脏病学会会刊发表专题综述，被引用 68 次。近年来， 徐博士的研究明确证明了维甲酸在肾脏的活性局限于集合管，并明确揭示了维甲酸在集合管细胞内调控的一系列具有防御功能的基因（*PLoS One* 2011,2012）。

受《黄帝内经》正气存内邪不可干理论启发，徐博士首创《集合管肾脏中心防御》假说，认为现代科学对肾脏防御机制研究的严重不足是西医防治 AKI、CKD 失败的主要原因，而肾脏集合管及其维甲酸信号是防御 AKI、CKD 的重要机制。去年 8 月，应国际肾脏病学学术期刊鼻祖 *Nephron* 邀请，徐博士以“特别文章”形式发表了这一原创学术思想，文章被 8 位同行推特分享；替代计量学积分 6 分，位列同期发表文章的前 25%。围绕这一中西医汇通的理论，与中医正气、肾虚、补肾概念相呼应，徐博士受邀在中英两国的医院、医药院所、英国肾脏病年会、世界华人肾科医师学会年会、成都、深圳和香港中医药现代化学术会议等就中西医汇通 AKI、CKD 防治发表专题演讲，受到广泛赞誉。

徐博士对促纤维化、抗纤维化、肾毒性和补肾中草药抱有浓厚的兴趣。2006 年，他从英国肾脏病基金会申请到该基金会有史以来首个专注于中草药研究的资助，采用他首创的、可定量的高通量筛选模型(被引 88 次)，开展抗纤维化、促纤维化中草药研究，发现多个扶正、活血化瘀、化痰、清热解毒单味中药、复方和草药化合物具有抗纤维化活性，而益母草等具有促纤维化活性。该系列研究发表于欧洲肾脏病学会会刊（2009）、《科学》特刊（2014）等，被引用逾百次。此研究涉及广泛的跨区域、跨学科合作，为徐博士领导的欧盟第七框架计划中医药现代化重大专项 GP-TCM（2009-2012）奠定了基础。

徐博士致力于将中医药带入世界著名大学、欧洲最大的健康专业人士培养中心伦敦国王学院（2019 世界大学排名: 牙医、护理世界排名第 2；药学第 14；医学第 20）。2013 年，他和伦敦国王学院药物研究所所长 Peter Hylands 教授等一起牵头筹建国王学院整合

中医药中心，获得大学批准，并于 2016 年赢得大学资金募集团队的支持。徐博士积极推动网络药理学和组学技术在中医药研究的应用，三篇论文分别被引 61、62、132 次。他成功指导整合中医药中心首位博士生研究纤维化蛋白组学和抗纤维化中药的网络药理学。这位来自中国的学者已于 2019 年学成归国，成为中医药现代化研究的新鲜血液。除了开设《中医药现代化》、《英国健卫工作者为何要关注中医药》、《草药与肾脏健康》等课程，徐博士还将教学成果在国际大会和学术期刊发表，以扩大影响。2014 年，他发表草药研究重要性以及如何提高研究质量的 *eJTCM* 评述被引 41 次；2015 年，带领国内来的进修生深入分析中草药在防治急性肾功能损伤方面的价值，文章在 WJTCM 发表；同年他与同事合作发表《科学》特刊文章，提出了草药毒理学研究的整合策略；2019 年，他组织医学生和临床专家研讨草药的肾毒性问题，并提出了创新的解决方案，文章《驯服肾毒性草药之火》（通讯作者）在 *WJTCM* 发表后，受到伦敦国王学院、英国肾脏病基金会、英国肾脏学会会刊专题推介。

Dr Qihe Xu earned his MBBS (1989), MD (1992) and PhD (1998) in China. Before taking an International Society of Nephrology postdoctoral fellowship in the UK in 1999, he had worked in Beijing for 10 years as a renal physician and scientist, being awarded a Class-3 military medal of merit (1998) and a Class-2 National Prize for Scientific & Technological Advances (1998, 3rd Author). After postdoctoral training, he has taken up lectureship (2006) and senior lectureship (2010), and served as Co-Director（2013）and Director (2019) of King's Centre for Integrative Chinese Medicine.

Dr Xu has been a nephrologist for thirty years and his research has focused on acute kidney injury (AKI) and chronic kidney disease (CKD), the top challenges facing the world of nephrology: AKI occurs in approximately 10-15% of patients admitted to hospitals, while its incidence in intensive care units has been reported in more than 50% of patients (*Lancet* 2019;394:1949); by inducing renal fibrosis, CKD causes chronic renal failure and is becoming increasingly prevalent, being predicted to become a top-5 cause of mortality worldwide by 2040 (*Lancet* 2018;392:2052).

Dr Xu is a renowned expert in studying the roles for retinoic acid (RA) and retinoic acid receptors (RAR) in nephrology. His publications in *Journal of American Society of Nephrology* (2001)、*Nephrology Dialysis & Transplantation* (2002)、*British Journal of Pharmacology* (2003)、*Journal of Biological C*hemistry (2001,2002) have been cited 32, 51, 71, 70 and 81 times. His invited in-depth review in *Kidney International* (2004), the official journal of International Society of Nephrology, has been cited 68 times. Recently, his laboratory has determined that the activity of the retinoic acid signalling is solely confined to the collecting duct of the kidney and has determined all the genes controlled by the signalling in collecting duct cells, many of which have critical defence roles (*PLoS One* 2011, 2012).

Inspired by the viewpoint of *Yellow Emperor's Inner Canon* "When there is sufficient protective *qi* inside, pathogenic factors have no way to hurt the body", Dr Xu has creatively put forward the "Renal Collecting Duct Rises to the Defence" hypothesis, which symbolises the approach of traditional Chinese medicine (TCM)-inspired research that he has adopted in his research. According to this hypothesis, modern nephrology has an important "blind spot" in understanding the defence capacity of the kidney and this in turn explains why existing treatment regime has largely failed the prevention and

treatment of AKI and CKD. Dr Xu hypothesises that the renal collecting duct and its RA/RAR signalling have critical defensive functions and has provided evidence to support that this function is repressed when injury is deteriorating and disease intractable. Upon invitation by Editor-in-Chief of *Nephron*, the oldest international journal of nephrology, the hypothesis has been published as an open-access "Special Article" in August 2019. By end of the year, the paper has been recommended by 8 Twitter users, with an Altmetric score of 6, higher than 75% of papers published in the same period. Revolving around this theoretical innovation inspired by the TCM theories of *qi*, kidney deficiency and kidney-tonifying therapies, Dr Xu's invited talks on an integrative Chinese medicine approach to understanding and treating AKI and CKD were warmly received and widely commended at British and Chinese hospitals and medical institutions, UK Kidney Week, Annual Meeting of the World Association of Chinese Renal Physicians, and TCM Modernisation Congresses in Chengdu, Shenzhen and Hong Kong.

Dr Xu has intense interests in profibrotic, antifibrotic, nephrotoxic and kidney-tonic Chinese herbal medicines. In 2006, he was awarded the first ever Kidney Research UK research grant on herbal medicine, verifying the activities and examining the mechanisms of antifibrotic and profibrotic Chinese herbal medicines, in an innovative quantitative in-vitro model of fibrosis that he invented (cited 88 times). This project found a number of Fu-Zheng, Huoxue-Huayu, Huatan and Qingre-Jiedu remedies and related herbal compounds with antifibrotic activities, while some others, e.g. Yi Mu Cao (*Leonurus japonicus* Houtt.), being profibrotic. By publishing in the official journal of European Renal Association, Nephrology Dialysis & Transplantation (2009), an InTech book chapter (2012) and a Science special feature (2014), this series of work has been cited over 100 times. Dr Xu's research on Chinese herbal medicine involves wide interregional, interdisciplinary and intersectoral cooperation, which has laid the foundation of the FP7 GP-TCM project (2009), EU's first ever major programme dedicated to TCM, to which Dr Xu was the Principal Investigator.

Dr Xu has strived to bring TCM to King's College London, one of UK's most prestigious medical and pharmaceutical research universities and biggest European centres for training healthcare professionals. The university is ranked No. 2 in the world in Dentistry and Nursing, No. 14 in Pharmacy and Pharmacology and No. 20 in Medicine in the 2019 QS World University Rankings. Together with Prof Peter Hylands, Director of KCL's Institute of Pharmaceutical Science, he drafted the blueprint of King's Centre for Integrative Chinese Medicine (CICM), which was approved by the university in 2013. By 2016, the initiative has won the backing of the fundraising team of the university.

Dr Xu is a strong advocate for applying network pharmacology and omic technologies in TCM research and development, with three publications cited by 61, 62 and 132 times respectively. He has successfully trained the first PhD student of the King's CICM through a project on proteomic and network-pharmacological studies of fibrogenesis and mechanisms of the antifibrotic effect of Chinese herbal medicines. The Chinese student graduated in 2019 and has taken up an employment in China, becoming new blood for future modernisation of TCM.

Besides teaching in modules entitled Modernisation of TCM, Why Healthcare Providers in the UK Should Care about TCM, and Botanicals and Renal Care, Dr Xu's invited talks and academic publications on related subjects have been widely commended. In 2014, Dr Xu published an *eJTCM* commentary on the importance of herbal research and how its quality can be enhanced (second author), which has been cited 41 times; in 2015, Dr Xu and collaborators critically evaluated literature on TCM intervention in AKI, which has been published in *WJTCM*. In the same year, Dr Xu and

colleagues published a *Science* special feature article (3rd author), in which an integrative approach for evaluation of herbal toxicity has been proposed. In 2019, Dr Xu assembled a team of medical students, junior doctors and senior nephrologists to thoroughly evaluate the nephrotoxic issue of botanicals. The resulting publication in *WJTCM* entitled *Taming the Fire of Nephrotoxic Botanicals* (corresponding author) has been featured by press release from KCL and KRUK, and has been recommended by *Journal of Kidney Care*, official journal of British Renal Society.

论文或专著发表情况(请注明第几作者)：***通讯作者**
1. **Xu Q***. The renal collecting duct rises to the defence. *Nephron* 2019;143:148-152. Commented in GP-TCM Research Association Newsletters: http://www.gp-tcm.org/wp-content/uploads/2019/08/August-2019-GP-TCM-RA-NL.pdf
2. Holden F, Amin V, Kuek D, Kopp JB, Hendry BM and **Xu Q*. Taming the fire of nephrotoxic botanicals.** *WJTCM* 2019;5:151-63. (2 citations by 26th Jan. 2020) Recommended by: • Journal of Kidney Care: https://www.magonlinelibrary.com/doi/abs/10.12968/jokc.2019.4.4.232 • GP-TCM Research Association Newsletters: http://www.gp-tcm.org/wp-content/uploads/2019/03/GP-TCM-RA-NL-Mar-2019.pdf • KCL press release: https://www.kcl.ac.uk/news/news-article?id=3b151982-ff7d-4bb5-a457-e2031d45fe8b • Kidney Research UK press release: https://www.kidneyresearchuk.org/news/researchers-call-for-international-collaboration-to- prevent-kidney-injury-caused-by-plant-based-drugs-or-food?
3. Bunel V, Qu F, Duez P, **Xu Q*. Herbal medicines for acute kidney injury: Evidence, gaps and frontiers.** *WJTCM*. 2015;1:47-66.
4. Williamson EM, Chan K, **Xu Q**, Nachtergael A, Bunel V, Zhang L, Ouedraogo M, Nortier J, Qu F, Shaw D, Liu X, Stévigny C, Kahumba J, Pelkonen O, Duez P. **Evaluating the safety of herbal medicines: Integrated toxicological approaches.** *Science* 2015, 347(6219 Suppl), S21-S23. (Impact factor 41)
5. **Xu Q***, Feng Y, Duez P, Hendry BM, Hylands PJ. **The hunt for anti-fibrotic and pro-fibrotic botanicals.** *Science* 2014;346 (6216 Suppl):S19-S20. (Impact factor 41)
6. Pelkonen O, **Xu Q**, Fan T-P. **Why is research on herbal medicinal products important and how can we improve its quality?** *Journal of Traditional and Complementary Medicine （eJTCM）* 2014;4:1-7. (41 citations by 25th Jan. 2020) http://www.jtcm.org/temp/JtraditCompMed411-2619047_071630.pdf
7. **Xu Q***, Bauer R, Hendry BM, Fan TP, Zhao ZZ, Duez P, Simmonds MSJ, Witt CM, Lu AP, Robinson N, Guo DA, Hylands PJ. **The Quest for Modernisation of Traditional Chinese Medicine.** *BMC Complement Altern Med*. 2013, 13:132. (93 citations by 26th Jan. 2020)
8. Uzuner H, Bauer R, Fan TP, Guo DA, Dias A, El-Nezami H, Efferth T, Williamson EM, Heinrich M, Robinson N, Hylands PJ, Hendry BM, Cheng YC, **Xu Q***. **Traditional Chinese medicine research in the post-genomic era: Good practice, priorities, challenges and opportunities.** *J Ethnopharmacol.* 2012;140:458-468. (76 citations by 25th Jan. 2020)

9. Pelkonen O, Pasanen M, Lindon JC, Chan K, Zhao L, Deal G, **Xu Q**, Fan TP. **Omics and its potential impact on R&D and regulation of complex herbal products.** *J Ethnopharmacol.* 2012;140:587-593 (61 citations by 25th Jan. 2020)

10. Buriani A, Garcia-Bermejo ML, Bosisio E, **Xu Q**, Li H, Dong X, Simmonds MS, Carrara M, Tejedor N, Lucio-Cazana J, Hylands PJ. **Omic techniques in systems biology approaches to traditional Chinese medicine research: Present and future.** *J Ethnopharmacol.* 2012;140:535-544. (133 citations by 25th Jan. 2020)

11. Chan K, Shaw D, Simmonds MS, Leon CJ, **Xu Q**, Lu A, Sutherland I, Ignatova S, Zhu YP, Verpoorte R, Williamson EM, Duez P. **Good practice in reviewing and publishing studies on herbal medicine, with special emphasis on traditional Chinese medicine and Chinese materia medica.** *J Ethnopharmacol.* 2012;140:469-475. (Cited by 139 by 25th Jan. 2020)

12. **Xu Q**, Qu F, Pelkonen O. **Network Pharmacology and Traditional Chinese Medicine.** In Sakagami H, ed. Alternative Medicine. ISBN 978-953-51-0903-7, Intech, 2012; pp277-297 (2079 downloads and 62 citations by 25th Jan. 2020) http://cdn.intechopen.com/pdfs/41526/InTech-Network_pharmacology_and_traditional_chinese_medicine.pdf

13. Wong YF, Qu S, Kong Q, Zhang XL, Liang XM, Hu Q, Noor M, Hendry BM, **Xu Q**. **Knowledge-based discovery of anti-fibrotic and pro-fibrotic activities from Chinese materia medica.** In Kuang X, ed. Recent Advances in Theories and Practice of Chinese Medicine, Intech, 2012, pp337-352. ISBN 978-953-307-695-9. (2551 downloads and 3 citations by 26th Jan. 2020) http://www.intechopen.com/articles/show/title/knowledge-based-discovery-of-anti-fibrotic-and-pro-fibrotic-activities-from-chinese-materia-medica

14. Uzuner H, Fan T-P, Dias A, Guo D-A, El-Nezami HS, **Xu Q**. Establishing an EU-China consortium on traditional Chinese medicine research. *Chin Med.* 2010;5:42. (20 citations by 26th Jan. 2020)

15. Hu Q, Noor M, Wong YF, Hylands P, Simmonds MSJ, Qing Xu, Jiang D, Hendry BM, **Xu Q*. *In vitro* anti-fibrotic activities of herbal compounds and herbs.** *Nephrol Dial Transplant.* 2009; 24:3033-3041. (98 citations by 25th Jan. 2020)

16. Feng Y, Yuen M-F, **Xu Q**, Wen X-Y, and Wang DQH. New exploration of Chinese herbal medicines in hepatology. *Evid Based Complement Alternat Med*. 2016;2016:3056438. http://www.hindawi.com/journals/ecam/2016/3056438/

17. Wang N, **Xu Q**, Tan HY, Hong M, Sha L, Yuen M-F and Feng Y. Berberine inhibits fibrogenesis in a rat model of liver fibrosis and in hepatic stellate cells. *Evid Based Complement Alternat Med*. 2016;2016:8762345. (19 citations by 26th Jan. 2020) http://www.hindawi.com/journals/ecam/2016/8762345/

18. Zhou S, Yin X, Noor M, Mayr M, Hylands P, **Xu Q.** Proteomic landscape of an in-vitro model of TGF-β1-induced fibrogenesis in renal fibroblasts. UK Kidney Week June 2019, Brighton, UK (Poster No. 346). UK Kidney Week 2019 Proceedings. p71 http://www.ukkw.org.uk/wp-content/uploads/2019/05/2nd-Announcement-UKKW-2019-Website.pdf
Abstract：https://britishrenal.org/ukkw2018-2/abstracts-2-2/

19. Zhou S, Yin X, Yuan J, Liang Z, Song J, Noor M, Li Y, Peng C, Mayr M, Hylands PJ, Zhao Z and **Xu Q**. A proteomic roadmap comparing mechanisms of action of antifibrotics in an in-vitro model of TGF-β1-induced fibrogenesis in renal fibroblasts. UK Kidney Week June 2019, Brighton, UK (Poster No. 347). UK Kidney Week 2019 Proceedings. p71. http://www.ukkw.org.uk/wp-content/uploads/2019/05/2nd-Announcement-UKKW-2019-Website.pdf Abstract：https://britishrenal.org/ukkw2018-2/abstracts-2-2/
20. 胡秦，江丹，徐青，**徐启河**。体外纤维化模型与中草药抗纤维化活性的再认识。牛建昭 主编，器官纤维化基础及中医药防治，人民卫生出版社，678页-682页。
知识产权（获得的专利、计算机软件版权和其他知识产权）：

三、对推动中外科技合作和中国科学技术事业发展做出的主要贡献

徐博士笃信非洲箴言：“独行求速，同行致远”。在留英的 20 年里，他积极倡导中西方相互学习，并通过一系列学术、慈善岗位践行“以沟通、交流、分享促合作”的理念，积极为祖国服务，推动中、西医药科技的国际交流。担任伦敦中心中国学生学者联谊会执委（2000-2003）和主席（2002-2003）、全英中国学生学者联谊会秘书长（2003-2004）期间，负责组织接待数十家国内各省市的访问、交流、人才招聘活动，在伦敦大学学生会组织了由 130 位主要业者领袖和利益攸关方参加的里程碑式的研讨会《中医在英国：机遇与挑战》（《人民日报海外版》 2000 年 8 月 21 日第三版)。担任全英华人生命科学学会主席（2007-2009）期间积极组织“春晖计划”等为国服务项目，领导成立了由具有高级职称的各大学华人生物医学学者组成的全英华人生命科学院，担任创院副院长，为在更高层面上为祖国服务提供了平台。他还邀请资深中医师在学会年会上作报告，为中医药研究牵线搭桥。这些历史事件成为英国中医界与学界精诚合作的重要发端之一。

近 10 年来，应邀在中国的 11 个省、20 多个城市发表了 53 场演讲，并在亚洲、欧洲、美洲的 10 个国家的国内或国际大会上发表演讲，积极促进中医药国际交流。近 5 年来，作为伦敦国王学院药理系硕士课题召集人，为中国培养了 23 名硕士生，其中超过半数为中医药大学毕业生。作为博士和博士后导师，徐博士自己的实验室近年来培养了博士后、博士各三名，培养了三位来自中国的硕士生，其中各有两位硕士、博士生从事中药相关研究，为中医药现代化的未来培育了火种。近年来，作为编委（2014-）、副主编（2019-）为 WJTCM 献计献策，供稿、审稿，为建设中医药国际交流的旗舰学术刊物做出了贡献。

作为首席科学家、协调办公室和指导委员会主席（2009-2012），徐博士成功组织了欧盟第七框架计划百万欧元协调行动项目《后基因组时代传统中医药研究的良好实践》(FP7 GP-TCM）。该项目是欧盟有史以来首个中医药领域的重大欧中合作专项，是 24 国、逾百单位 (含 31 个中国大学院所和企业)、200 多名科学家的大协作。徐博士领导起草、编辑、审核了向欧盟委员会提交的 117 份研究报告，为欧中中医药科研合作提供了科学依据和指南。该协作组发表了 40 多篇影响深远的文章。2012 年，受邀共同主编《*Journal of Ethnopharmacology*》GP-TCM 专集，该专集中的 20 篇论文单篇平均被引用 90 次。徐博士领衔的总论定义了中医药现代化及其所需要的各方面规范，揭示了中医药科研合作的机遇、挑战和优先领域，被引 76 次，两篇聚焦组学技术在中医药领域应用和中医药论文撰写规范的文章被引 130-140 次。

为了欧盟项目结束后欧中合作能够可持续发展，于 2012 年领导创立中医药规范研究学会。担任创会副会长、三届理事、信息通报主编等，继续坚守，再为欧中中医药合作做了 8 年义工，为学会成长为信誉良好的慈善组织、权威的欧盟药监局顾问机构、宝贵的中医药国际化合作交流平台做出了核心贡献。2013 年，牵头在*BMC Complement Altern*

Med. 发表中医药规范研究学会白皮书，分阶段论证了中医药现代化的成果和未来发展的三项基本原则（规范、整合、创新），被引 93 次。

为了凝聚欧中中医药合作、促进交流，13 年如一日，主编、共同主编 89 期，副主编 53 期《GP-TCM 信息通报》（后更名为《中医药规范研究学会信息通报》）。该英文信息通报追求即时、专业、权威、公正，被誉为中医药规范研究学会最好的名片之一、中医药国际传播的一面旗帜。

Dr Xu is a strong believer of an African proverb: *If you want to go fast, go alone; if you want to go far, go together.* In the two decades of work in the UK, he has taken on a series of academic and charitable positions, striving to facilitate exchanges and cooperation between China, UK and the EU, and between TCM, conventional medicine and the scientific community. As Committee Member (2000-2003) and President (2002-2003), Chinese Students & Scholars Association of Central London and Secretary-General, Chinese Students & Scholars Association in the UK (2003-2004), he and his colleagues hosted delegations from tens of Chinese provinces and cities, assisted their exchanges and recruitment of talents, and organised the historic "TCM in the UK: Opportunities and Challenges" seminar (2000) at the University of London Union, a grand forum attended by 130 leaders and key stakeholders, which has played an important role in promoting cooperation among TCM practitioners and academics (reported in page 3, *People Daily Overseas Edition*, 21st August 2000). As President of Chinese Life Scientists Society in the UK (2007-2009), he actively organised a series of events to promote Sino-British cooperation, e.g. "Chunhui Plan", led the founding of the Academy of Life Sciences for Chinese in the UK (Founding Vice-President), which convened senior Chinese biomedical scientists in British universities to collaborate and to better promote Sino-British cooperation. Besides, he invited senior TCM practitioners to talk at annual meetings of the society, so as to bridge collaboration.

In the past 10 years, he has delivered 53 lectures in 11 provinces and more than 20 cities in China and spoke to promote TCM research at national and international meetings in 10 other countries in Asia, Europe and America. In the recent 5 years, as the Organiser of master research projects, Department of Pharmacology, KCL, Dr Xu has trained 23 Chinese MSc Pharmacology students. More than half of these students are graduates from Chinese TCM universities. As a PhD and postdoctoral supervisor, Dr Xu has trained three PhD students and three postdoctoral fellows, as well as three MSc students from China, among whom two MSc Pharmacology students and two PhD students' research had a strong TCM element. More recently, as Editorial Board Member (2014-) and Associate Editor-in-Chief (2019-) of *WJTCM*, he has actively contributed and reviewed manuscripts and advised proactively, aiming to foster the development of the journal into a flagship magazine for modernisation of TCM.

As the Principal Investigator, Chairman of the Steering Committee and Coordination Office (2009-2012), Dr Xu successfully led the *Good Practice in Traditional Chinese Medicine Research in the Post-genomic Era (GP-TCM)* project, EU's first ever major research programme dedicated to TCM funded a million Euro under its Seventh Framework Programme (FP7). He led the development of a large collaborative network, successfully coordinated the cooperation between 200 scientists from more than 100 institutions in 24 countries, including scientists

from 31 Chinese universities, research institutes and companies, and oversaw the development, quality control and submission of 117 official reports to the EU as guidance for future policy-making, in addition to more than 40 impactful papers. In 2012, Dr Xu was invited to co-edit a special issue of the *Journal of Ethnopharmacology* dedicated to main deliverables of the FP7 GP-TCM project. The special issue contains 20 papers, which have been cited 90 time each in average, with the general introduction defining TCM modernisation and related good practices (corresponding author) cited 76 times and two other articles on omic studies of TCM and on guidelines on reviewing and writing TCM-related scientific papers (4th and 5th author) cited 130-140 times.

To ensure sustainable development of EU-China collaboration in the field of TCM after the conclusion of the FP7 GP-TCM project, Dr Xu has led the founding of the GP-TCM Research Association in 2012. Since then, as a Founding Vice-President, a Board Member for three terms, and a Newsletter Editor, his contributions persisted, and he has continued his voluntary work for the EU-China collaboration in TCM for 8 years. Indeed, as the godfather of the GP-TCM Research Association, he has played a central role in establishing the organisation as a reputable charity, an authoritative Interested Party of the Committee on Herbal Medicinal Products, European Medicines Agency, and an invaluable platform for international exchange and collaboration in TCM. In 2013, as the corresponding author, he led the publication of the GP-TCM Research Association white paper in *BMC Complementary & Alternative Medicine*, characterising the history of modernisation of TCM into three phases and proposing Integrity, Integration and Innovation as principles to guide future developments. The position paper has been cited 93 times.

To unite members and to promote exchanges and collaboration in EU-China collaboration in TCM, Dr Xu has led the development of the GP-TCM Newsletters (renamed the *GP-TCM Research Association Newsletters* in 2012) for 13 years, having served as the chief- or co-editor of 89 issues and deputy editor for 53 issues. The newsletters strive for timely, professional and fair exchanges, sharing of state of the art and dissemination of good practices, and have been known as one of the best business cards of the GP-TCM Research Association and a banner for TCM international dissemination and outreach.

四、国内主要合作单位情况表(无合作可不填此页)

<table>
<tr><td>是否与国内有合作</td><td colspan="2">有</td><td>合作起始时间</td><td colspan="2">2006-2020</td></tr>
<tr><td>合作单位</td><td colspan="5">1.首页列举的 6 个直接接受欧盟资助的 FP7 GP-TCM 国内合作单位;
2.不直接接受欧盟资助但参与学术协作的 25 家 FP7 GP-TCM 国内合作单位。
（FP7 GP-TCM 成员名单：http://project.gp-tcm.org/about/partners）</td></tr>
<tr><td>国内联系人</td><td>彭成教授</td><td>移动电话</td><td>1370823709</td><td>单位电话</td><td>02861800018</td></tr>
<tr><td>通讯地址</td><td colspan="3">四川省成都市温江区柳台大道 1166 号成都中医药大学药学院</td><td>邮政编码</td><td>611137</td></tr>
<tr><td>电子邮箱</td><td colspan="3">pengchengchengdu@126.com</td><td>传　　真</td><td></td></tr>
<tr><td colspan="6">合作概况：

与中国合作是 FP7 GP-TCM 项目的重中之重，中国科学家也在该里程碑式的重大项目中发挥了不可替代的作用。中科院上海药物研究所果德安研究员是该项目的副总负责人，是中医药规范研究学会创会候任会长、第二任会长。首都医科大学王晓民教授和药用植物研究所刘新民教授分别担任课题组负责人。徐博士与刘新民教授的合作始于 2006 年。那一年，徐博士邀请刘教授的博士生到他的实验室工作两年，完成了高引 NDT 论文(2009) 和 Intech 书稿（2012）一篇。此研究还得益于与中科院大连物化所梁鑫淼研究员合作成功申请的中英创新计划资助（3 万英镑）。与北京中医药大学的合作始于 2008 年。那一年，徐博士获得一项皇家学会与国家留学基金委共同资助的项目，到北京与牛建昭教授探讨抗纤维化中药研究，并与李健博士（现任北中医教授）就事业发展开展一对一交流。此行的成果包括邀请北中医牛建昭教授、乔延江教授加盟 GP-TCM 项目，支持牛教授出版中医药防治纤维化专著一部，并为该中文书籍撰写了一个章节。此后，与乔教授团队成员董玲、吴青教授合作于 2013 年和 2016 年两次成功申请教育部特色教学项目，连续六年邀请欧洲专家（包括徐博士本人）到北中医讲学、交流。成都中医药大学是 GP-TCM 合作单位。作为成都中医药大学附属医院客座教授，徐博士积极邀请该校参与 GP-TCM 国际合作，支持彭成教授领导的四川道地草药研究，并促成了伦敦国王学院与成中医签署了 3 项教学、科研的合作协议。彭教授积极支持徐博士抗纤维化草药的蛋白组学、网络药理学研究，合作初步成果已经在国际会议发表(全文整理中)。这一研究得到培力集团陈宇龄主席提供的慷慨博士生助学金赞助，培力协助采购药材，进行严格的质量控制。香港浸会大学赵中振教授课题组协助炮制、提取和化学分析，并一起协助培力建立了高质量的草药鉴定标准。浙江大学曲凡博士的学术成长是 GP-TCM 促进成员进步的一个缩影。通过 GP-TCM，曲博士建立了与项目组成员的广泛合作。徐博士支持曲博士获得国家留学基金委资助，并在伦敦为曲博士提供了一年的培训,成果包括一篇关于网络药理学与中医药的高引文章(2012)，一篇 WJTCM 综述(2015)，一篇 Science 特刊文章（2015）。 2016 年，曲博士成为中医药规范研究学会最年轻的兴趣组共同主席。香港在 GP-TCM 和中医药规范研究学会发挥着重要作用——香港浸会大学吕爱平教授担任中医药规范研究学会会长；香港中文大学刘碧珊教授担任学会秘书长；香港大学黄谭智媛教授自 2012 年创会以来连续四届当选学会理事。徐博士坚定支持香港的中医药研究，经常到香港交流，即使在最近香港比较困难的时期也不例外。作为与港大冯弈斌教授合作的一部分，为其课题组骨干王宁博士提供了 3 个月的培训，合作撰写 Science 特刊文章（2014），共同编辑 eCAM 特集(2016)，并合作撰写了特集的两篇文章。徐博士还与浸会大学赵中振教授和中文大学林鸽教授合作分别竞得12.8万港币 (2015-2016)、1百万港币(2017-2020)经费，研究吡啶生物碱、川乌的促纤维活性活性，初步成果已在国际会议上发表。徐博士积极致力于中西医结合肾脏病学研究，是香港中文大学梁秉忠教授中药延缓肾衰进展研发项目的顾问；介绍郑州大学邢国兰教授到伦敦国王学院进修，并担任邢教授回国后的科研顾问，合著论文两篇(Clin Exp Immunol. 2017;189:60; Kidney Blood Press Res. 2018;43:639)。</td></tr>
</table>

Collaboration with China: Yes; **Duration of the cooperation:** 2006-2020

Collaborators:

1. Six Chinese institutions receiving EU funding in the FP7 GP-TCM project;
2. 25 Chinese universities, research institutes and companies joining the project as academic collaborators;

(Full list of the GP-TCM Collaboration: http://project.gp-tcm.org/about/partners/)

Summary to the collaboration: Collaboration with China was the key theme throughout the FP7 GP-TCM project, and indeed, Chinese scientists played irreplaceable roles in the monumental international collaboration. Prof De-an Guo, Shanghai Institute of Materia Medica, Chinese Academy of Sciences (CAS), was Deputy Coordinator of the project and was the founding President-Elect (2012-2014) and the 2nd President (2014-2016) of the GP-TCM Research Association. Prof. Xiaomin Wang, Beijing Capital Medical University, and Prof. Xinmin Liu, Institute of Medicinal Plant Development (IMPLAD), were leaders of two working packages.

Dr Xu's collaboration with IMPLAD started in 2006. He trained one of Prof. Xinmin Liu's PhD students at KCL for 2 years, leading to a highly cited *NDT* paper (2009) and a book chapter on TCM knowledge-based discovery of anti-fibrotics and pro-fibrotics (2012). The latter work also involved Prof Xinmiao Liang and Dr Qing Xu, Dalian Institute of Physical Chemistry (DIPC), CAS, who provided herbal materials to be tested in London, and together they successfully applied for an *Innovation China UK* grant (£30,000).

Collaboration with Beijing University of Chinese Medicine (BUCM), a GP-TCM beneficiary member, started in 2008, when Dr Xu paid a Royal Society- and Chinese Scholarship Council-sponsored trip to BUCM, aimed at exploring collaboration in TCM antifibrotic therapy with Prof Jianzhao Niu and one-to-one career development exchange with Dr Jian Li, now a BUCM professor. This led to a collaboration with Prof Niu in publication of a book entitled *Fundamentals on Fibrosis and its TCM Prevention & Treatment* and Dr Xu's contribution of a chapter (2008). Afterwards, Dr Xu came to know Professors Yanjiang Qiao, Ling Dong and Qing Wu, whom Dr Xu supported to secure funding from Ministry of Education in 2013 and 2016, which has enabled BUCM to invite European scientists, including Dr Xu himself, to lecture and exchange annually in Beijing for 6 consecutive years.

As a Guest Professor of Chengdu University of TCM (CDUTCM), a GP-TCM non-beneficiary member, Dr Xu has supported CDUTCM's research of Sichuan *daodi* medicinal plants, has arranged three cooperation agreements signed between CDUTCM and KCL, and has lectured at CDUTCM annually. Dr Xu's proteomics- and network pharmacology-based research of antifibrotic herbal remedies was in collaboration with Prof Cheng Peng and they have co-authored a few meeting abstracts, with original papers in preparation. This project has been made possible by a PuraPharm PhD scholarship, generous procurement, quality control and certification of herbal materials by PuraPharm, as well as processing, extraction and chemical analysis by Prof Zhongzhen Zhao's group at Hong Kong Baptist University (HKBU). Together, they have helped PuraPharm to develop a standardised procedure for certifying herbal materials to high standards.

How Chinese scientists could benefit from GP-TCM is illustrated by the academic growth of Dr Fun Qu, Zhejiang University. Dr Qu has established

excellent collaborations in GP-TCM. Dr Xu supported him to secure a China Scholarship Council Fellowship Award in 2013 and hosted him in London for 1 year. As a result, they co-authored a highly cited book chapter on Network Pharmacology and TCM in 2012 (2nd author), a *WJTCM* paper in 2015 (2nd author) and a *Science* special feature in 2015 (9th author). In 2016, Dr Qu became the youngest co-Chair of an Interest Group of the GP-TCM Research Association.

Hong Kong has played an outstanding role in GP-TCM and GP-TCM Research Association, as illustrated by the GP-TCM Research Association Presidency of Prof Aiping Lu (HKBU), Secretariat presided over by Dr Clara Lau (Chinese University of Hong Kong, CUHK) and 4 terms of board membership of Prof Vivian Wong (University of Hong Kong, HKU). Dr Xu has always firmly supported TCM development in Hong Kong and lectured in Hong Kong regularly, even in the recent difficult times. As part of an academic collaboration with Dr Yibin Feng, HKU, Dr Xu's lab trained Dr Ning Wang, a young HKU academic in London for 3 months. The collaboration has led to a *Science* special feature in 2014 (Drs Xu and Feng are 1st and 2nd author), co-editing an eCAM special issue in 2016 and co-authoring two papers in the special issue. Dr Xu also collaborated with Prof Zhongzhen Zhao, BUHK, and Prof Ge Lin, CUHK, to secure research funding of HK$128k (2015-2016) and HK$1m (2017-2020), respectively, to study profibrotic effects of pyrrolizidine alkaloid and Aconite, leading to co-authored abstracts at national and international meetings.

Dr Xu is particularly passionate about promoting kidney research in an integrative Chinese medicine approach. He is an advisor of a R&D project of Prof PC Leung, CUHK, using Chinese herbs to slow down renal failure, and he has introduced Prof Guolan Xing, Zhengzhou University First Hospital, to be trained at KCL. Upon her return to China, Dr Xu continued to advise her research, leading to two co-authored papers (4th author) (*Clin Exp Immunol*. 2017;189:60-70; *Kidney Blood Press Res.* 2018;43:639-650).

推荐单位声明

(专家提名不填写此表)

我单位严格按照《中华中医药学会科学技术奖·岐黄国际奖奖励办法》的有关规定和中华中医药学会对推荐工作的具体要求，对推荐书内容及全部附件材料进行了严格审查，确认该项目符合《中华中医药学会科学技术奖·岐黄国际奖奖励办法》规定的推荐资格条件，推荐材料全部内容属实，且不存在任何违反法律法规的情形。

我单位承诺将严格按照中华中医药学会的有关规定和要求，认真履行作为推荐单位的义务并承担相应的责任。

中医药规范研究学会主席

吕爱平教授

（推荐单位公章)

2020年1月16日

提名单位联系方式：

联系人姓名： 刘碧珊教授（中医药规范研究学会秘书长）

通讯地址：gptcmrasecretariat@gmail.com

邮政编码：/

固定电话： 852-39436109

手　　机：/

传　　真： 852-26035248

提名人声明

(单位推荐不填写此表)

本人严格按照《中华中医药学会科学技术奖•岐黄国际奖奖励办法》的有关规定和中华中医药学会对推荐工作的具体要求，推荐上述被提名人为中华中医药学会科学技术奖•岐黄国际奖候选人。

本人承诺将严格按照中华中医药学会的有关规定和要求，认真履行作为提名专家的义务并承担相应的责任。

2020 年 1 月 27 日

提名人联系方式：

姓　　名：**王梅教授**

通讯地址：Leiden University-European Center for Chinese Medicine and Natural Compounds, Institute of Biology, Leiden University, Sylviusweg 72, Leiden, 2333 BE The Netherlands.

邮政编码：2333 BE

手　　机：/

传　　真：/

单位电话：+31 71 527 5027

家庭电话：/

电子信箱：M.wang@biology.leidenuniv.nl

提名人声明

(单位推荐不填写此表)

本人严格按照《中华中医药学会科学技术奖•岐黄国际奖奖励办法》的有关规定和中华中医药学会对推荐工作的具体要求，推荐上述被提名人为中华中医药学会科学技术奖•岐黄国际奖候选人。

本人承诺将严格按照中华中医药学会的有关规定和要求，认真履行作为提名专家的义务并承担相应的责任。

2020年 1 月 16 日

提名人联系方式：

姓　　名： Robert Verpoorte教授

通讯地址： Natural Products Laboratory, The Institute of Biology, Leiden University, PO Box 9505, 2300 RA, Leiden, The Netherlands

邮政编码： 2300 RA

手　　机： /

传　　真： /

单位电话： +31646755772

家庭电话： /

电子信箱：verpoort@chem.leidenuniv.nl

Universiteit Leiden
Dr. Mei Wang
LU-European Center for Chinese Medicine and
Natural compounds
Institute of Biology Leiden
Sylviusweg72, 2333 BE Leiden
The Netherlands
T: +31 (0) 715275027
E: M.Wang@biology.leidenuniv.nl

LU-EUROPEAN CENTER
FOR CHINESE MEDICINE
AND NATURAL COMPOUNDS
INSTITUTE OF BIOLOGY

Leiden, 27-1-2020

To whom it may concern,

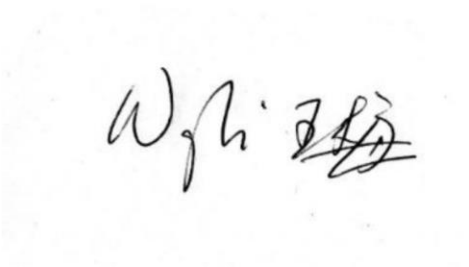
It is my great pleasure to recommend Dr. Qihe Xu for the China Association of Chinese Medicine Qihuang International Award 2020. Dr. Xu is an outstanding scientist who merits the QiHuang award 2020 for the following reasons:

Dr. Xu has been working in the field of integrative Chinese medicine and anti-fibrotic and pro-fibrotic botanicals at King's College, University of London. His successful scientific research has led to the award of the €1m Good Practice in Traditional Chinese Medicine Research in the Post-genomic Era grant (GP-TCM) in 2009 — the EU's first Coordination Action dedicated to TCM research. Funded by the European Commission under its 7th Framework Programme (FP7), the 3.5-year project 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.

The successful FP7 GP-TCM project has then led to the establishment of Good Practice in Traditional Chinese Medicine Research Association (GP-TCM RA). Dr. Xu has been actively leading and supporting this association as a sustainable platform for enabling scientists in and outside China to work together. As an editor of The GP-TCM RA Newsletter, he made a major contribution to disseminate important information related to Chinese Medicine to scientists around the world. All his efforts have contributed immensely to the international standing of Chinese Medicine in Europe.

In summary, Dr. Qihe Xu has proven through many years that he is an excellent candidate for this Qihuang award 2020. He has conducted outstanding research in the field of Chinese Medicine, is an international leader in promoting collaborations in the field of Chinese Medicine research and has played a great role in promoting Chinese Medicine globalization, especially in Europe. His continuous contributions in promoting Chinese Medicine research and recognition have made him a deserving candidate for the Qihuang prize.

Sincerely yours,



Dr. Mei Wang
LU-European Center for Chinese Medicine and Natural compounds
Institute of Biology Leiden

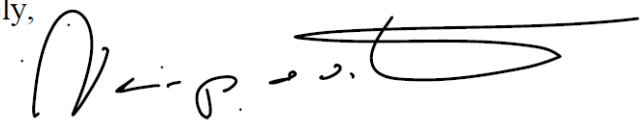
Institute of Biology Leiden
Prof.dr. Rob Verpoorte
Natural Products Laboratory
Phone: (+31)71-5274528
Fax: (+31)71-5274511
E-mail: Verpoort@Chem.leidenuniv.nl

Leiden, 22-1-2020

L.s.,

It is my great pleasure to write a letter to support the nomination of Mr. Dr. Qihe Xu for the China Association of Chinese Medicine Qihuang International Award. Since the start of the EU-supported project of Good Practice in Traditional Chinese Medicine Research in the Post-genomic Era (GP-TCM) project in 2009, I have seen how dr. Xu has been the inspiring leader who was able to direct a large group of scientists from China and Europe into a very close collaboration that was able to set standards for research in the area of Chinese Medicine. It was a major step towards a close collaboration between leading scientists from both regions. After the project was finished the GP-TCM research association was set up as a charity to continue the activities that started with the EU-project. As an editor of the GP-TCM RA newsletter, he made a major contribution to spread important information about Chinese medicine to the readership. All this pioneering work has contributed to a very much improved understanding of CM in Europe. The successful yearly symposia are the best evidence for that. Besides this integration in the research, Dr. Xu also made a major effort to make students in the UK aware of the CM and its approach. That obviously resulted in an increased awareness and respect for the achievements of CM. His successful and innovative research on CM worked as an eye-opener for both researchers and students. He is a modest person, who showed great leadership in organizing the EU-project and is the driving force behind the GP-TCM RA with the aim to further support the development of evidence-based CM. Dr. Xu fully deserves to become a recipient of the prestigious Qihuang International Award, as a real leader in CM research and education.

Sincerely,



Prof. Dr. Rob Verpoorte
Natural Products Laboratory. IBL, Leiden University
The Netherlands