

CURRICULUM VITAE of Prof. CHEN HUBIAO (hbchen@hkbu.edu.hk)

Education:

9/1979 - 7/1983: Department of Biology, Hunan Normal University, graduated with B.Sc. degree.

9/1983-12/1988: Department of Botany, School of Pharmaceutical Sciences,
Beijing Medical University, graduated with Ph.D. degree.

Professional Chronology:

12/1988 - 12/1990: Lecturer in Department of Botany, School of Pharmaceutical Sciences,
Beijing Medical University, P.R.China.

12/1990 - 06/1997: Associate Professor, the same department.

06/1997 - 08/2006: Professor, Department of Natural Medicines, School of Pharmaceutical
Sciences,

Peking University Health Science Center

06/1995 - 08/1995: Visiting Scholar, Tokyo Metropolitan University, Japan.

11/2000 - 04/2002: Assistant Professor, Kanazawa University, Japan.

09/2006 - 08/2010: Assistant Professor, School of Chinese Medicine, Hong Kong Baptist
University

09/2010 - 09/2015: Associate Professor, School of Chinese Medicine, Hong Kong Baptist
University

09/2012 - present: Programme Director, Bachelor of Pharmacy (Hons) in Chinese Medicine

09/2015 - present: Professor, School of Chinese Medicine, Hong Kong Baptist University

Research Fields:

1) Plant Taxonomy; 2) Medicinal Plant Resources Study and Natural Products Chemistry; 3) Quality
Assessment and Control of Chinese Materia Medica

Representative publication in the past five years (* corresponding author):

1. Yi-Na Tang, Yu-Xin Pang, Xi-Cheng He, Ya-Zhou Zhang, Jian-Ye Zhang, Zhong-Zhen Zhao,
Tao Yi*, **Hu-Biao Chen***. UPLC–QTOF–MS Identification of Metabolites in Rat Biosamples
after Oral Administration of *Dioscorea* saponins: A Comparative Study. *Journal of
Ethnopharmacology*. 2015; 165:127-140.
2. Jia-Yan Fang, Lin Zhu, Tao Yi*, Jian-Ye Zhang, Ling Yi, Zhi-Tao Liang, Li Xia, Jia-Fu Feng,
Jun Xu, Yi-Na Tang, Zhong-Zhen Zhao and **Hu-Biao Chen***. Fingerprint analysis of processed
Rhizoma Chuanxiong by high -performance liquid chromatography coupled with diode array

detection. *Chinese Medicine*. 2015; 10:2.

3. Tao Yi, Lin Zhu, Wan-Ling Peng, Xi-Cheng He, Hong-Li Chen, Jie Li, Tao Yu, Zhi-Tao Liang, Zhong-Zhen Zhao, **Hu-biao Chen***. Comparison of ten major constituents in seven types of processed tea using HPLC-DAD-MS followed by principal component and hierarchical cluster analysis. *LWT - Food Science and Technology*. 2015; 62(1):194-201.
4. Tian-Bo Zhang, Rui-Qi Yue, Jun Xu, Hing-Man Ho, Dik-Lung Ma, Chung-Hang Leung, Siu-Leung Chau, Zhongzhen Zhao, **Hu-Biao Chen***, Quan-Bin Han*. Comprehensive quantitative analysis of Shuang-Huang- Lian oral liquid using UHPLC-Q-TOF-MS and HPLC-ELSD. *Journal of Pharmaceutical and Biomedical Analysis*. 2015; 102:1-8.
5. Tao Yi, Shuk-Man Li, Jia-Yi Fan, Lan-Lan Fan, Zhi-Feng Zhang, Pei Luo, Xiao-Jun Zhang, Jian-Gang Wang, Lin Zhu, Zhong-Zhen Zhao and **Hu-Biao Chen***. Comparative analysis of EPA and DHA in fish oil nutritional capsules by GC-MS. *Lipids in Health and Disease*. 2014; 13:190.
6. Jun Xu, Song-Lin Li, Rui-Qi Yue, Chun-Hay Ko, Jiang-Miao Hu, Jing Liu, Hing-Man Ho, Tao Yi, Zhong-Zhen Zhao, Jun Zhou, Ping-Chung Leung, **Hu-Biao Chen***, Quan-Bin Han*. A novel and rapid HPGPC-based strategy for quality control of saccharide-dominant herbal materials: *Dendrobium officinale*, a case study. *Analytical and Bioanalytical Chemistry*. 2014; 406(25):6409-6417.
7. Ya-Zhou Zhang, Feng Xu, Jian-Ye Zhang, Tao Yi, Yi-Na Tang, Jun Xu, Wan-Ling Peng, **Hu-Biao Chen***. The analysis of the fragmentation behaviors of 11 isoflavones with ESI-IT-TOF-MSⁿ. *Journal of Chinese Pharmaceutical Sciences*. 2014; 23(9):631-641.
8. Shuk-Ching Tze, Zhong-Zhen Zhao, **Hu-Biao Chen***, Statistical analysis of Chinese herbal medicines commonly used in Hong Kong Chinese medicine clinics. *Hong Kong Chinese Medicinal Journal*. 2014; 9(3):43-47. (in Chinese)
9. Tao Yi, Lan-Lan Fan, Hong-Li Chen, Guo-Yuan Zhu, Hau-Man Suen, Yi-Na Tang, Lin Zhu, Zhongzhen Zhao, **Hu-biao Chen***, Comparative analysis of diosgenin in *Dioscorea* species and related medicinal plants by UPLC-DAD-MS. *BMC Biochemistry*. 2014; 15:19.
10. Jia-Yi Fan, Tao Yi *, Chui-Mei Sze-To, Lin Zhu, Wan-Ling Peng, Ya-Zhou Zhang, Zhong-Zhen Zhao and **Hu-Biao Chen***. A Systematic Review of the Botanical, Phytochemical and Pharmacological Profile of *Dracaena cochinchinensis*, a Plant Source of the Ethnomedicine “Dragon’s Blood”. *Molecules*. 2014; 19:10650-10669.
11. Qilei Chen, Tao Yi*, Yina Tang, Lailai Wong, Xiaoxuan Huang, Zhongzhen Zhao, and **Hu-biao Chen***. Comparative authentication of three “Snow Lotus” herbs by macroscopic and microscopic features. *Microscopy Research and Technique*. 2014; 77:631-641.

12. Guangyi Yang, **Hubiao Chen***, Zhongzhen Zhao, Tao Yi, Jiyan Chen. Resources and utilization of Taoist Medicinal Plants Distributed in Wudang Mountain. *Journal of Chinese Pharmaceutical Sciences*. 2014; 23(6):412-420.
13. Tao Yi, Lin Zhu, Yi-Na Tang, Jian-Ye Zhang, Zhi-Tao Liang, Jun Xu, Zhong-Zhen Zhao, Zhi-Ling Yu, Zhao-Xiang Bian, Zhi-Jun Yang, **Hu-biao Chen***. An integrated strategy based on UPLC–DAD–QTOF-MS for metabolism and pharmacokinetic studies of herbal medicines: Tibetan “Snow Lotus” herb (*Saussurea laniceps*), a case study. *Journal of Ethnopharmacology*. 2014;153 (3) :701-713.
14. Zhang Yazhou, Xu Feng, Yi Tao, Zhang Jianye, Xu Jun, Tang Yinna, He Xichen, Liu Jing, **Chen Hubiao***. Chemical profile analysis and comparison of two versions of the classic TCM formula Danggui Buxue Tang by HPLC-DAD-ESI-IT-TOF-MSⁿ. *Molecules*. 2014; 19:5650-5673.
15. Jun Xu, Rui-Qi Yue, Jing Liu, Hing-Man Ho, Tao Yi, **Hu-Biao Chen***, Quan-Bin Han*. Structural diversity requires individual optimization of ethanol concentration in polysaccharide precipitation. *International Journal of Biological Macromolecules*. 2014; 67:205-209.
16. Yina Tang, Xichen He, Quanlan Chen, Lanlan Fan, Jianye Zhang, Zhongzhen Zhao, Lisha Dong, Zhitao Liang, Tao Yi*, and **Hubiao Chen***. A Mixed Microscopic Method for Differentiating Seven Species of “Bixie”- Related Chinese Materia Medica. *Microscopy Research and Technique*. 2014; 77:57-70.
17. Kun-Zi Yu, Jing Liu, Bao-Lin Guo, Zhong-Zhen Zhao, Hao Hong, **Hu-Biao Chen***, Shao-Qing Cai*. Microscopic research of a multi-source traditional Chinese medicine: *Asdragli Radix*. *Journal of Natural Medicines*. 2014; 68(2):340-50.
18. Lan-Lan Fan, Tao Yi, Feng Xu, Ya-Zhou Zhang, Jian-Ye Zhang, Dian-Peng Li, Yang-Jiao Xie, Shan-Ding Qin,, **Hu-Biao Chen***. Characterization of flavonoids in the ethnomedicine *Fordiaea Cauliflora Radix* and its adulterant *Millettiae Pulchra Radix* by HPLC-DAD-ESI-IT-TOF-MSⁿ. *Molecules*. 2013; 18(12):15134-15152.
19. Jian-ye Zhang, Min-Ting Lin, Tao Yi, Yi-Na Tang, Lan-Lan Fan, Xi-Cheng He, Zhong-Zhen Zhao and **Hu-biao Chen***. Apoptosis sensitization by Euphorbia factor L1 in ABCB1-mediated MDR K562/ADR cells. *Molecules*. 2013; 18(10):12793-12808.
20. Jun Xu, **Hu-Biao Chen***, Jing Liu, Ka-Yan Kwok, Rui-Qi Yue, Tao Yi, Hing-Man Ho, Zhong-Zheng Zhao, Quan-Bin Han*. Why are *Angelicae Sinensis radix* and *Chuanxiong Rhizoma* different? An explanation from a chemical perspective. *Food Research International*. 2013; 54:439-447.
21. Jun Xu, Quan-Bin Han, Song-Lin Li*, Xiao-Jia Chen, Xiao-Ning Wang, Zhong-Zhen Zhao, **Hu-Biao Chen***. Chemistry, bioactivity and quality control of *Dendrobium*, a commonly used

- tonic herb in traditional Chinese medicine. *Phytochemistry Reviews*. 2013; 12:341–367.
22. Lanlan Fan, Yazhou Zhang, Renbin Huang, Tao Yi, Feng Xu, Shanding Qin, Yina Tang, Xiaosheng Qu, **Hubiao Chen*** and Jianhua Miao*. Determination of five flavonoids in different parts of *Fordia cauliflora* by ultra performance liquid chromatography/triple-quadrupole mass spectrometry and chemical comparison with the root of *Millettia pulchra* var. *laxior*. *Chemistry Central Journal*. 2013; 7:126.
 23. Tao Yi, Qilei Chen, Xicheng He, Suiwai So, Yuenling Lo, Lanlan Fan, Jun Xu, Yina Tang, Jianye Zhang, Zhongzhen Zhao and **Hubiao Chen***. Chemical Quantification and Antioxidant Assay of Four Active Components in *Ficus Hirta* Root using UPLC-PAD-MS Fingerprinting Combined with Cluster Analysis. *Chemistry Central Journal*. 2013; 7:115.
 24. Yina Tang, Tao Yi*, Haomin Chen, Zhongzhen Zhao, **Hubiao Chen***. Quantitative Comparison of Multiple Components in *Dioscorea nipponica* and *D. panthaica* by Ultra Performance Liquid Chromatography Coupled with Quadrupole Time-of-Flight Mass Spectrometry. *Phytochemical Analysis*. 2013; 24(4):413-22.
 25. Tian-Min Wang, Ru-Feng Wang, **Hu-Biao Chen***, Ming-Ying Shang*, Shao-Qing Cai. Alkyl and phenolic glycosides from *Saussurea stella*. *Fitoterapia*. 2013; 88:38-43.
 26. Liu Jing, Wan Yuk-Lam, Zhao Zhong-Zhen, **Chen Hu-Biao***. Determination of the content of rosmarinic acid by HPLC and analytical comparison of volatile constituents by GC-MS in different parts of *Perilla frutescens* (L.) Britt. *Chemistry Central Journal*. 2013; 7:61.
 27. Jian-ye Zhang, Tao Yi, Jing Liu, Zhong-zhen Zhao, **Hu-Biao Chen***. Quercetin Induces Apoptosis via Mitochondrial Pathway in KB and KBv200 cells. *Journal of Agricultural and Food Chemistry*. 2013; 61:2188-2195.
 28. ZHANG Hua, DONG Li-sha*, **CHEN Hu-biao***, HE Xi-cheng, GE Xiang-qian, ZHANG Xi-gui, ZHOU Ying-ying. Content determination of total tannin in *Smilax glabra* with reddish brown and off-white colored cross section. *China Journal of Chinese Materia Medica*. 2013; 38(6):852-855. (in Chinese)
 29. Jia-Li Li, **Hu-Biao Chen***, Zhong-Zhen Zhao. Cause analysis of Chinese medicine's adverse reactions occurred in recent years in Hong Kong. *Hong Kong Chinese Medicinal Journal*. 2012; 7(4):38-43. (in Chinese)
 30. Tao Yi, Yina Tang, Jianye Zhang, Zhongzhen Zhao, Zhijun Yang and **Hubiao Chen***, Characterization and determination of six flavonoids in the ethnomedicine “Dragon’s Blood” by UPLC-PAD-MS. *Chemistry Central Journal*. 2012;6:116.
 31. Wang Tian-min, Xu Shi-zhao, Zhang Hui, **Chen Hu-biao***, Kang Ting-guo*. Dynamic variation of total tannins content in the stems, leaf and fruit of *Juglans mandshurica*. *Chinese Traditional*

Patent Medicine. 2012;34(8):1567-1569. (in Chinese)

32. Wang Tian-min, Zhai Yan-jun, Xu Shi-zhao, **Chen Hu-biao***, Kang Ting-guo. Study on the dynamic variation of juglone content in the branches of *Juglans mandshurica*. *Chinese Journal of Hospital Pharmacy*. 2012;32(15):1166-1168. (in Chinese)
33. Tao Yi, Hongwing Lo, Zhongzhen Zhao, Zhiling Yu, Zhijun Yang and **Huibiao Chen***, Comparison of the Chemical Composition and Pharmacological Effects of the Aqueous and Ethanolic Extracts of a Tibetan “Snow Lotus” (*Saussurea laniceps*) Herb. *Molecules*. 2012 ; 17 :7183-7194.
34. Tian-Min Wang, Li Liu, Xue Di, Liang Xu Ting-Guo Kang*, **Hu-Biao Chen***, Impacts on contents of juglone in the stems of *Juglans mandshurica* Maxim. by different drying methods. *Chinese Journal of Hospital Pharmacy*. 2011; 31(17):1461-1463. (in Chinese)
35. Ling-Ling Zhuang, Tao Yi, Zhong-Zhen Zhao, **Hu-Biao Chen***, Analysis on Volatile Components of “Huoluoyou” sold in Hong Kong Market by GC-MS. *Hong Kong Chinese Medicinal Journal*. 2011; 6(4):28-29. (in Chinese)
36. Jing Liu, **Hu-Biao Chen***, Bao-lin Guo, Zhong-Zhen Zhao, Zhi-Tao Liang, Tao Yi. Study on the relationship between genetics and geography in determining the quality of Astragali Radix. *Biological & Pharmaceutical Bulletin*. 2011; 34(9):1404-1412.
37. LIU Jing, YANG Hua, ZHAO Zhongzhen, **CHEN Huibiao***. Comparative Study of Wild and Cultivated Astragali Radix in Daqingshan District in Wuchuan of Neimenggu. *China journal of Chinese Materia Medica*. 2011;36(12):1577-1581. (in Chinese)
38. LIU Jing, ZHAO Zhong-zhen, **CHEN Hu-biao***. Review of Astragali Radix. *Chinese Herbal Medicine*. 2011; 3(2):90-105.
39. Dong-Jian Zhang, Zhong-Zhen Zhao, **Hu-Biao Chen***, Comparative study on decoction pieces of traditional Chinese crude drugs from Hong Kong and mainland of China. *Hong Kong Chinese Medicinal Journal*. 2011; 6(2):24-27. (in Chinese)
40. Tao Yi, **Hu-Biao Chen***, Zhong-Zhen Zhao, Zhi-Ling Yu, Zhi-Hong Jiang. Comparison of the Chemical Profiles and Anti-platelet Aggregation Effects of Two “Dragon’s Blood” Drugs Used in Traditional Chinese Medicine. *Journal of Ethnopharmacology*. 2011; 133:796–802.
41. WANG Tianmin, SUN Xiaoli, PENG Xue, ZHAI Yanjun, CHU Zhengyun, ZHANG Hui, KANG Tingguo*, **CHEN Huibiao***, Determination of total tannins in the roots, branches, leaves and pericarps of *Juglans mandshurica*. *China journal of Chinese Materia Medica*. 2011; 36(1):32-36. (in Chinese)
42. Tian-Min Wang, **Hu-Biao Chen***, Ting-Guo Kang, Zhong-Zhen Zhao, Characteristics and current status of Chinese herbs resources in Hong Kong and Macao. *Lishizhen Medicine and*

Materia Medica Research. 2010; 21(12):3375-3377. (in Chinese)

43. YU Kunzi, LIU Jing, HONG Hao, GUO Baolin, CAI Shaoqing, **CHEN Hubiao***. Ecological environment of cultivated Astragali Radix and market specification of prepared slices. *China journal of Chinese Materia Medica*.2010;35 (9): 1112-1115. (in Chinese)
44. Tao Yi, Zhong-Zhen Zhao, Zhi-Ling Yu, **Hu-Biao Chen***. Comparison of the anti-inflammatory and anti-nociceptive effects of three medicinal plants known as “Snow Lotus” in the traditional Uighur and Tibetan medicines. *Journal of Ethnopharmacology*. 2010; 128:405-411.
45. Jing Liu, Xu-Guang Hu, Zhi-Ling Yu, Zhong-Zhen Zhao, Tao Yi, **Hu-Biao Chen***. Comparison of the immunoregulatory function of different constituents in Radix Astragali and Radix Hedysari. *Journal of Biomedicine and Biotechnology*. 2010; 2010:479426.
46. **Hu-Biao Chen**, Tao Yi. The Development of Hong Kong Chinese Materia Medica (HKCMM) Standards. *Journal of Chinese Pharmaceutical Sciences*. 2010; 19(2):87-94.
47. Lan-Lan Fan, Peng-Fei Tu, **Hu-Biao Chen***, Shao-Qing Cai. Simultaneous quantification of five major constituents in stems of *Dracaena* plants and related medicinal preparations from China and Vietnam by HPLC–DAD. *Biomedical Chromatography*. 2009; 23:1191-1200.
48. Tao Yi, **Hu-Biao Chen***, Zhong-Zhen Zhao, Zhi-Hong Jiang, Shao-Qing Cai, Tian-Min Wang. Comparative analysis of the major constituents in the traditional Tibetan medicinal plants *Saussurea laniceps* and *S. medusa* by LC–DAD–MS. *Chromatographia*.2009;70: 957-962.
49. Tao Yi, **Hu-Biao Chen***, Zhong-Zhen Zhao, Zhi-Hong Jiang, Shao-Qing Cai, Tian-Min Wang. Identification and determination of the major constituents in the traditional Uighur medicinal plant *Saussurea involucrata* by LC-DAD-MS. *Chromatographia*. 2009;69:537-542.
50. Jing Liu, **Hu-Biao Chen***, Xin-Gang Du, Zhong-Zhen Zhao, Bin Wang, Yu-Ying Zhao, Tao Yi: Quality evaluation of Radix Astragali from different sources in China. *Journal of Chinese Pharmaceutical Sciences*. 2009;18(1):14–19.

Granted projects as principal investigator (in the last 5 years):

1. HKCMMS Phase IX: Chemical assay of Polygonati Rhizoma and Homalomenae Rhizoma. Dept. of Health, HKSAR. 2014. HK\$ 741,405.
2. Anticancer Mechanism of Alpiniae Officinarum Rhizoma against Gastric Cancer: from the Combinational Treatment of Curcumin and Quercetin. HKBU-FRG. 2014. HK\$ 90,000.
3. Chemical and Biological Assessment of Herbal Decoction Dangui Buxue Tang using Hedysari Radix instead of Astragali Radix. HKBU-FRG. 2013. HK\$ 90,000.
4. HKCMMS Phase VIII: Chemical assay of Hedysari Radix and Saussureae Involucratae Herba. Dept. of Health, HKSAR. 2013. HK\$ 290,000.

5. HKCMMS Phase VII: Chemical assay of *Dendrobii Caulis* and *Dendrobii Officinalis Caulis*. Dept. of Health, HKSAR. 2012. HK\$ 260,000.
6. Active Components Screening and Metabolism Study of Tibetan “Xuelianhua” (*Saussurea laniceps*). Research Grants Council (GRF). 2011. HK\$ 751,019.
7. HKCMMS Phase VI: Collection of CMM samples and Chemical assay of *Carthami Flos*. Dept. of Health, HKSAR. 2011. HK\$ 251,000.
8. Active Components Screening and Metabolism Study of Dragon’s Blood (*Daemonorops Draco*). HKBU-FRG. 2011. HK\$ 120,000.
9. HKCMMS Phase V(A): Chemical assay of *Perillae Caulis* and *Tribuli Fructus* and HKCMMS Phase V(B): Chemical assay of *Gleditsiae Spina* and *Piperis Longi Fructus*. HKBU-FRG. 2011. HK\$ 396,800.
10. Active Components Screening and Metabolism Study of Tibetan “Xuelianhua” (*Saussurea laniceps*). HKBU-FRG. 2010. HK\$ 127,500.
11. Comparative Study on the Chemical Composition and Anti-platelet Aggregation Activity of Imported & Domestic Dragon’s Blood. HKBU-FRG. 2009. HK\$ 100,000.

Selected Books (as chief editor):

1. **Hu-Biao Chen** & Zhong-Zhen Zhao. “Illustrated Taxonomic Identification of Chinese Medicinal Plant Origins”. *Fujian Science and Technology Press*. Fuzhou. (in press)
2. Zhong-Zhen Zhao & **Hu-Biao Chen**. “Chinese Medicinal Microscopic Identification”. *Fujian Science and Technology Press*. Fuzhou. (in press)
3. Zhongzhen Zhao & **Hubiao Chen**: “Chinese Medicinal Identification: An Illustrated Approach”. *Paradigm Publications*, Brookline, Mass and Taos, New Mexico. 2014.
4. **Hu-Biao Chen**, Quan Yang. “An Illustrated Book of Chinese Herbs”. *Fujian Science and Technology Press*. Fuzhou. 2013.
5. **Hu-Biao Chen**. “Fuzi Ejiao”. *Wanli Ltd*. Hong Kong, 2012.
6. Zhong-Zhen Zhao, **Hu-Biao Chen**. “Illustrated Chinese Materia Medica” (Japanese Version). *New Technology New Science Inc.(NTS)*. Japan. 2012.
7. Zhong-Zhen Zhao, **Hu-Biao Chen**. “Illustrated Chinese Materia Medica” (Simplified Chinese Version). *Fujian Science and Technology Press*. Fuzhou. 2010.
8. Zhong-Zhen Zhao, **Hu-Biao Chen**. “Illustrated Chinese Materia Medica” (Traditional Chinese Version). *Wanli Ltd*. Hong Kong. 2010. (chief editor)

9. **Hu-Biao Chen**, Yu-Feng Guo: “Hong Kong Herbal Tea and Paste”. *Wanli Ltd.* Hong Kong. 2009.
10. **Hu-Biao Chen**, Yu-Feng Guo, Jian-Yan Li. “Complete Book of *Dongchongxiacao* for Health”. *Wanli Ltd.* Hong Kong. 2008.