

UKCGCM 2017-2018 Report

Dr. Qihe Xu, King's College London

on behalf of

Chair:

Professor Ian Sutherland, Brunel University London

Co-chair:

Dr. Tai-Ping Fan, University of Cambridge

UKCGCM

- **1) Brunel University London**
- **2) University of Cambridge**
- **3) King's College London**
- 4) Royal Botanic Gardens, Kew
- **5) UCL School of Pharmacy**
- 6) Nottingham University
- **7) Oxford University**
- 8) Bradford University
- 9) Wolverhampton University (Kelvin Chan in the past)
- 10) The University of West London
- **11) The University of Westminster**

- **?) Liverpool John Moores University** (Prof Kelvin Chan & co)

Mission & Goals of UKCGCM

- To advance the field of Chinese herbal medicine to benefit human kind through **joint efforts of the academic institutions, industries and regulatory agencies throughout the UK.**
- To develop **platform technologies** required for advancing Chinese herbal medicine by joint efforts.
- To facilitate the interaction and collaboration among different institutes in advancing Chinese herbal medicine by **sharing information.**
- To promote a **high quality evidence-based research** and develop Chinese herbal medicine internationally.
- To assist industry with the development of **new products and their regulatory acceptance**

Brunel University London Report

- Brunel's Advanced Bioprocessing Centre is the lead global centre on the extraction and scale-up of active compounds from natural products and CHMs
- Prof Ian Sutherland, Guest Professor at Sichuan University's National Key Lab of Biotherapy
- The SKLB in the process of Phase 1 clinical trials of their anti lung-cancer drug Honokiol, which is manufactured using Brunel's Counter-Current Chromatography technology. Results are promising



Prof Ian Sutherland

- Visiting Professor, Aihua Peng –NSFC funded project on improving the efficiency of liquid-liquid extraction for Natural Product purification, particularly for cancer drug candidates. Working visit from July-December 2017.
- New results from this visit presented at CCC2018 in Braunschweig on increasing the efficiency and throughput of CCC by 50x



Dr Svetlana Ignatova

University of Cambridge Report

Dr Tai-Ping Fan 樊台平

Meetings

- Attended and chaired sessions in the 10th Pong Ding Yuen International Symposium on Traditional Chinese Medicine, University of Hong Kong (1-3 December 2017)
- Co-organised and chaired sessions in the 6th Annual Meeting of GP-TCM Research Association (Royal Botanic Gardens Kew and London South Bank University 4-6 July 2018)
- Co-organised and co-chaired the First Cambridge Belt-and-Road Initiative International Conference (5-7 July 2018) and chaired “Future Trends in Global Healthcare: Fusion of Traditional Medicine and Modern Technologies” (7 July 2018)



Appointments

- President, GP-TCM Research Association (Jan. 2017 – Dec. 2018)
- European Coordinator “Medicinal Plants 4.0” Project (2017 –)
- Wenzhou Medical University (2017 –)
- Beijing Genomic Institute College (2017 –)
- Zhejiang University College of Pharmaceutical Sciences (2017 –)

Collaboration with Xi’an Northwest University

- Shaanxi Province 1000 Talents Plan Distinguished Professor (2018 –)

Collaboration with Beijing University of Chinese Medicine (BUCM)

- Visiting Professor of School of Chinese Medicine (2017 –)
- Member of BUCM 国家中医体质与治未病研究院 (2017 –)
- Hosted Post-doctoral Fellow Dr Zhu Yingli (April 2018 - March 2020)



King's College London Report

- **PI appointments at GP-TCM RA**
- **King's CICM's research** focuses on QC, TCM antifibrotics & kidney-tonics
- **King's CICM's education programme**
 - PhD student S Zhou will submit in September. Zhou S et al. *Proteomic Studies of TGF- β -induced Fibrogenesis and Mechanisms of Herbal Antifibrotics* presented at UKKW2018, GP-TCM2018 and CGCM 2018.
 - TCM-themed MBBS projects, leading to *Taming the Fire of Nephrotoxic Botanicals* in final touch for WJTCM
- **Peter and Qihe talk internationally**, e.g. Qihe was invited as a speaker at International Summit on Chinese Medicine Hong Kong, 5 August 2018



Prof Peter Hylands



Dr Qihe Xu

Pharmacognosy and Phytotherapy

UCL School of Pharmacy, Univ. London

- Invited speaker at the (2018) Li Shizhen International Summit Forum on TCM & Comprehensive Health in Hubei organised by ZZ Zhao and colleagues.
- Supporting the organisation of the first congress of the Society for Medicinal Plant and Natural Product Research in Shanghai (organiser De-An GUO)
- A project on a complex hexa-herbal TCM preparation continues. The first results on LC-MS-based metabolomics analysis have been published (*Planta medica* 2016;82:1134-1141)
- Research on value chains continues, most recently focusing on the quality and sustainable supply of maca and St. John's Wort
- MH is the Specialty Editor-in-Chief, Ethnopharmacology section of *Frontiers in Pharmacology*, a leading journal in the field
- Strong links with the U. Westminster (Dr. A Booker)



Prof Michael Heinrich

University of Westminster

PhD Projects

- Hepatoprotective properties of *Gentiana* spp against non-alcoholic fatty liver disease
- The quality of Chinese medicines entering the UK, analytical methods and analysis of the China – UK values chains.
- Elucidating the emergent interface between Chinese medicine and systems biology: A multi-sited ethnography.



Dr. Anthony Booker

MSc Projects (In collaboration with UCL)

- *Antrodia camphorata* inhibits the mitochondrial respiration of 3T3-Li Adipocytes
- The effects of Taiwan mushroom (*Antrodia cinnamomea*) on lipid accumulation
- Comparison of *Angelica sinensis* supplied for the UK practitioner market and investigation of potential adulterant species
- Quality assessment of *Angelica sinensis* supplements: a HPTLC densitometric method
- *Cyperus rotundus*: HPTLC method development in collaboration with the National Institute of Biological Standards and Control

University of Oxford

- Dr Ma established a Chinese herbal medicine research Lab in 2015 in Oxford to study a 11-herb TCM drug for treating Cardiac arrhythmia
- A MOU was signed in Dec. 2017 between the University of Oxford and sponsors in China and Dr Ma's research lab was upgraded into a centre.
- In early 2018, Dr Ma was invited to talk at a UNESCO/WFCMS meeting promoting EU legislation on TCM



Dr Yuling Ma



Oxford Centre funding



Talk in Paris



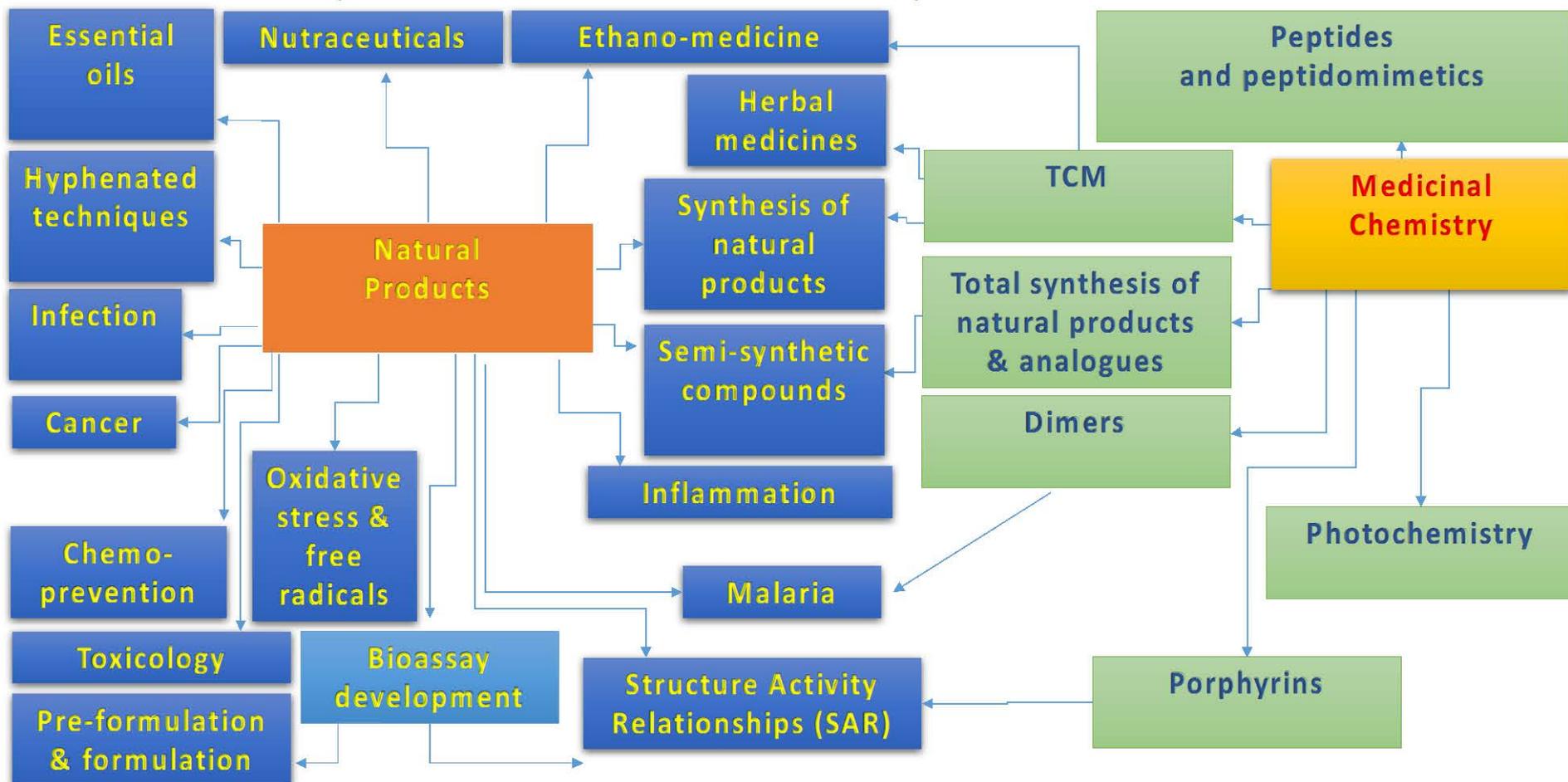
An update from Professor Kelvin Chan

Visiting Professor in Natural Products & TCM Research

Liverpool John Moores University

Medicinal Chemistry and Natural Products Research Group

Prof Satya Sarker- Director of Scholl of Pharmacy & Biomolecular Sciences



Thank you!

