



Collaborative Research at Queen Mary

- The China Connection

Hong Qian *PhD*
ICUK Project Manager
Queen Mary, University of London

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Outline

- Overview
- Sino-Britain Collaborative Programs
 - Education and Training Programs
 - Joint Research Programs
- Showcase of Joint Innovation
- Summary



Overview - Queen Mary's Academic Sectors

**Science &
Technology**

School of
Medicine and
Dentistry

Humanities,
Social
Sciences and
Law



Overview - Queen Mary's China Connection

Physical Sciences and Engineering

- Computer Science
- Electrical Engineering
- Engineering
- Material Science
- Physics
- Biological and Chemical Sciences

Barts and the London Queen Mary's School of Medicine and Dentistry

- Institute of Cancer
- Institute of Cell and Molecular Science
- The Institute of Health Sciences Education (IHSE)



Education & Training Programs

- In 2004, Queen Mary launched two joint degree programmes with Beijing University of Posts and Telecommunications (BUPT)
 - Telecommunication Engineering with Management
 - e-Commerce Engineering with Law
- Currently attract over 1300 students and this number is set to rise to 2000 in 2008



北京邮电大学

BEIJING UNIVERSITY OF POSTS AND TELECOMMUNICATIONS



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Education & Training Programs

- In 2005, the Institute of Health Sciences Education (IHSE) won the bid from the Royal College of General Practitioners (RCGP) to host a training programme for primary care doctors and health service managers from Zhejiang province
- China - UK Community Health Services Conference was held in Hangzhou in 2006
- Nurse teachers from the Hangzhou Normal University visit the IHSE and City University for training in curriculum development in 2006





Joint Research Programs

- Space Technology
 - QMUL and its Chinese partners was funded by an International Research Program Grant from China National Space Administration (CNSA) for a total of 19.5 million RMB covering a wide range of technology areas
 - Space Bioreactor Platform for Cell and Tissue Engineering
 - Effects of Microgravity on Cardiovascular Systems
 - Nanopropulsion and its applications
 - Space Telecommunication



Joint Research Programs

- Space Technology
 - Partners in this program include
 - Professor Wen Wang/Professor John Stark, School of Engineering and Materials Science, Queen Mary
 - Professor Xiaodong Chen, Department of Electric Engineering, Queen Mary
 - Beihang University
 - Beijing University of Post & Telecommunication
 - Huazhong University of Science & Technology
 - Southern Medical University





Joint Research Programs

- Cancer Research
 - April 2006, Sino-Britain Research Centre for Molecular Oncology established in Zhengzhou University
 - 3 EU-China grants and substantial support and investment from Henan Province
 - Development of novel virus based cancer therapy lead by
 - Prof. Nick Lemoine
 - Dr. Yaohe Wang
 - Potential ICUK support: short term staff exchange



郑州大学

China . Zhengzhou University

中文版

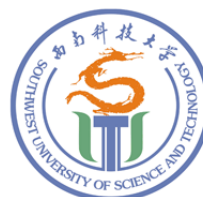


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Joint Research Programs

- Nano Technology
 - Novel molecular nano materials which has the potential to greatly improve biomedical NMR imaging.
 - The program is led by:
 - Dr. John Dennis, Department of Physics, Queen Mary
 - Beijing Institute of Chemistry, Chinese academy of Science
 - Southwest University of Science & Technology
 - Potential ICUK support: PoC fund to support process scale up





Joint Research Programs

- Nano Technology
 - Novel antiviral nanomaterials
 - Dr. Guogang Ren, School of Engineering and Material Science, Queen Mary
 - Nankai University
 - Beihang University
 - Potential ICUK support: PoC fund to support toxicology study





Joint Research Programs

- Environment and Sustainable Development
 - School of Biological and Chemical Sciences is embarking on a joint research program on aqua ecosystems in China, led by
 - Prof. Allan Hildrew, School of Biological and Chemical Sciences, Queen Mary
 - Institute of Hydrobiology, Chinese Academy of Science
 - Potential ICUK support: network building through partnership grant





Joint Research Programs

- Queen Mary and BUPT set up a joint research laboratory in 2003. The collaboration is led by Prof. Xiaodong of Queen Mary
- In 2006, the QM-BUPT joint laboratory participated in the EU-China Grid Inter-Networking program
 - Grid foundations: architecture, design and development of technologies and systems for the Grid
 - Grid-enabled applications and services for business and society: promote global adoption of Grid environments and tools



Showcase of Joint Innovation (1)

Department of Engineering,
Queen Mary

Led by Prof. Wen Wang



Soft Tissue
Image
Technology

Huazhong University of
Science & Technology



Southern Medical University



- Tissue modeling software enables to quantitative analysis of soft tissue imaging that can be incorporated into existing Ultrasound and X-ray systems
- Significant commercial interests both from the UK and China.
- Potential ICUK support : PoC fund to support the incorporation of the software into hardware systems for clinical demonstration in patients



Showcase of Joint Innovation (2)

Institute of Cell and
Molecular Science
Led by Prof. Ping Wang



Hepatitis B
treatment

Peking University



The Third Military Medical
University



- A new generation microsomal vaccine capable of inducing of anti-HBV and cancer immune responses:
 - reverse tolerant state of viral or cancer specific T lymphocytes
- Results from animal models showed high efficacy
- IP protected technology
- Potential ICUK support: PoC fund to support clinical trial in China
 - China has the largest population of HBV adult carriers



Summary

- Queen Mary has already forged strong connections with Chinese Universities in
 - ❖ Education & Training
 - ❖ Academic Research
 - ❖ Technology Development
- ICUK will provide a platform to strengthen existing collaborations, facilitate technology commercialisation; it will also help open future opportunities in all the above areas



Thank you

谢谢