

Cardiff strengthens links with China to create more effective cancer treatments



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Working collaboratively by pooling the best researchers, facilities and resources from likeminded, world-leading institutions has always been a priority for Cardiff University. In the field of medical research and in particular cancer research, this approach has led to the development of partnerships between Cardiff University and some of China's leading cancer organisations.

The University's latest venture has resulted in the Cardiff University-Yiling Group Joint Medical Research Centre. This was established in 2013 in partnership with a leading institution, the Yiling Group Medical Research Institute. It will develop new treatments for cancer and infectious diseases, with a focus on Chinese medicine. The Centre will also offer training opportunities for medics and scientists.

Cardiff, along with colleagues at Peking University and at the Yiling Group, have been testing the benefits of the Chinese herbal medicine *Yangzheng Xiaoji*. The herbal formula had been shown to be beneficial to cancer patients, but until now the way in which it works had remained unknown. The collaboration investigated how the formula works and discovered that it blocks a pathway involved in reducing

conventional therapies such as chemotherapy. The Centre will also extend the research collaboration to other areas of medicine.

Cardiff's collaboration with Yiling has also allowed the creation of new scholarship opportunities for Chinese medical scholars, enabling them to undertake study and training in the UK. Likewise, UK students will be able to gain overseas experience by spending time in China. By 2017, 17% of Cardiff University's home students will have studied, worked or volunteered abroad for at least a month.

The venture between Cardiff University and Yiling, with the support of the Welsh Government, will also create

... new treatments for cancer and infectious diseases ...

The Yiling Group Medical Research Institute was formed in 1992 by Professor Yiling Wu, a highly accomplished scientist, medic, academician, entrepreneur and politician. Yiling Pharmaceuticals is one of China's high-tech pharmaceutical companies, devoted to R&D, manufacture and marketing of new medicines. It has some unique approaches in therapeutic development for diseases such as arrhythmia, heart failure, flu and cancer.

Cardiff University has been collaborating with Yiling Group for the past two years, initially investigating the potential mechanism(s) of some anti-cancer medicines. The team at

the spread of cancer cells around the body. The Chinese formula has been shown to be beneficial to patients with certain solid tumours when used alone, and in particular when used as an adjuvant treatment alongside



Launch of the Cardiff University – Yiling Group Joint Medical Research Centre by Professor Yiling Wu and Cardiff University's President and Vice Chancellor Professor Colin Riordan

opportunities to attract inward investment to the UK for R&D in anti-cancer medicines.

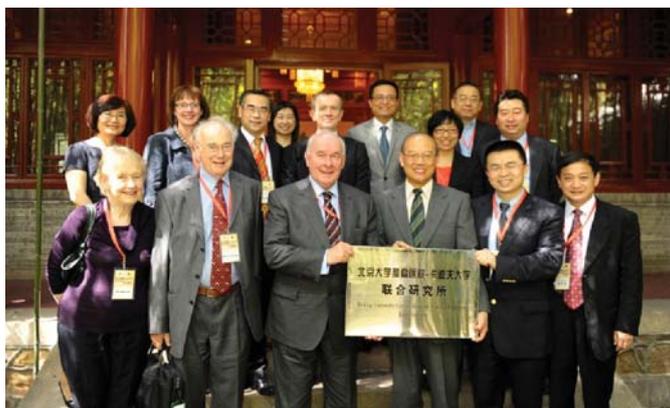
As one of the UK's leading centres for cancer research, Cardiff University established the Cardiff University-Peking University Cancer Institute in 2011. It has been collaborating with Peking University in Beijing for over a decade and has hosted many of their scientists and specialists. Peking University is the top ranked university in China and one of the premier universities in the world. The Cardiff-Peking Cancer Institute consists of two centres. Cardiff University has invested in the provision of new space, equipment and research posts to support the collaboration. At Peking, the Institute is located in the University Cancer Hospital and Beijing Cancer Institute, one of the leading hospitals and research centres. Joint directorship and management synchronise the research, training and education activities.

... reducing the spread of cancer cells ...

Currently, the focus is on some of the most aggressive forms of cancer, including gastrointestinal cancers, pancreatic cancer, lung cancer and endocrine-related cancers, which are amongst the priority areas in both the UK and China. Research also concentrates on cancer metastasis, angiogenesis, biomarkers and new methods of treatment, including alternative medicine such as traditional Chinese medicine.

Every year, a symposium is held either in Cardiff or Beijing at which speakers present their latest research on cancer biology, genetics and treatments. It highlights key areas in cancer research and cancer treatment to explore in the future.

Based on the success of the Institute, Cardiff University went



The official launch of the Cardiff University - Peking University Cancer Institute



The official launch of the Cardiff University - Capital Medical University Joint Centre for Biomedical Research

on to establish the Cardiff University-Capital Medical University Joint Centre for Biomedical Research. Cardiff

projects have focused on brain metastasis and gastrointestinal cancers.

Cardiff's relationship with CMU has led to a Cardiff University China Medical Scholarship. This has already supported more than 50 Chinese medics in the last 5 years to spend time in Cardiff. The scholars have the opportunity to undertake some research away from their workplace and the chance to share views and expertise with

... focus is on some of the most aggressive forms of cancer ...

Cardiff's academic staff. This programme has led to many joint papers. Scholars benefit from the chance to live and learn in a different city and University, and to make contacts and friends that will be for life. Cardiff is also keen for its staff and PhD students to spend time in China. Last year for the first time, 2 PhD students from Cardiff spent 6 weeks working with scientists at Capital Medical

University. This gave them the opportunity to embrace a different environment and learn different techniques and approaches which complement their experiences in Cardiff.

World-wide partnerships are important in helping a University to build a global reputation. Cardiff University's aim is to be consistently ranked in the top 100 universities, and such

... not only for breast cancer but also for prostate and kidney cancer ...

collaborations play a role in achieving this ambition. More importantly however, it is through such collaboration that advances in the understanding and treatment of global diseases will be made.

Cardiff's ground-breaking cancer research partnership work with China won the International Collaboration category at the annual *Times Higher Education* awards in 2011. All 3 partnerships are under the directorship of world-leading breast cancer researcher Professor Wen G Jiang. Professor Jiang is a Professor of Surgery and Tumour Biology and Academic Director of International Relations at Cardiff University.

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