

21st century database of traditional Chinese medicine released

October 18 2011

A comprehensive database developed by King's College London researchers that features the chemical components found in traditional Chinese medicines has been released to market this month, allowing researchers to explore age-old remedies in the search for tomorrow's new drugs.

Provided under licence to Tim Tec LLC, a US-based life science company, the 'Chem-TCM' database is the most comprehensive of its kind. Featuring over 12,000 chemicals found in plants used in [Chinese medicine](#), the database provides a valuable research tool for the pharmaceutical and biotechnology industries, [academic researchers](#), and the medical profession (including the complementary health sector).

Part-funded by Innovation China UK (ICUK), the database has been developed through collaboration between researchers in the Institute of Pharmaceutical Science at King's, Dr David Barlow, Dr Thomas Ehrman and Professor Peter Hylands, and the Shanghai Institute of Materia Medica (SIMM).

To create the Chem-TCM database, the King's researchers analysed patterns in the known and predicted biological activities of 12,000 chemicals from over 300 Chinese herbs in relation to their usage in [traditional Chinese medicine](#). Their results reveal that many categories in Chinese medicine are translatable into Western terminology.

Dr David Barlow said: 'Traditional Chinese medicine has undergone a

remarkable renaissance in recent years. However, the unique language used to describe categories of medicines has hindered effective understanding of one of the most developed and mature systems of alternative medicine in existence.

'With the Chem-TCM database, future researchers will now be better able to understand the chemical basis of remedies that have been in use for thousands of years. This is likely to be of benefit both in the search for [new drugs](#) and, equally significantly, in understanding how Chinese medicine works.'

Chem-TCM features four major parts: chemical identification, botanical information, predicted activity against Western therapeutic targets, and estimated molecular activity according to traditional Chinese medicine categories.

Dr. Marat Niazoff, CEO of TimTec LLC, said: 'This database is a comprehensive attempt to link Chinese and Western medicine on the molecular level. It is a great contribution to the further study of natural products and their pharmacological potential. The [database](#) gathers diverse structural material and a wealth of phytochemical information, opening new possibilities for virtual screening in particular.'

Manyi Cristofoli, Director of ICUK, said: 'I am pleased another ICUK-funded proof-of-concept project has now been commercialised in the pharmaceutical industry – this is a very good example of how academia and industry can successfully collaborate for innovation at a truly international level. The partnership with TimTec opens up a new global channel to jointly realise the wide potential in traditional Chinese medicine.'

Provided by King's College London

Citation: 21st century database of traditional Chinese medicine released (2011, October 18)
retrieved 4 May 2024 from

<https://medicalxpress.com/news/2011-10-21st-century-database-traditional-chinese.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.