## Building BioIPMall: a Biotechnology Transferring Marketplace in Taiwan

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## **Abstract**

This project aims at designing and building a resource-sharing and online transaction platform to support and facilitate the technology transfer from the biotech academia to the industry and to prosper Biotech industry in Taiwan. This project constructs a web-based platform, namely BioIPMall, for biomedical IP trading, analyzing and developing strategy. To facilitate the classification and categorization of biotechnology, a tree-structured classification framework was constructed to create the taxonomy system in this project. The framework is composed of two main categories: "Industrial Application" and "Biotechnology" and 259 sub-categories totally. This biotechnology classification tree has been used to facilitate data mining and tech matchmaking process in BioIPMall. A prototypical business model was developed for providing IP management and technology transfer services. Currently 342 bio-related patents or technologies have been gathered from research institutes and have been posted on BioIPMall

**Keywords**: Information system, Intellectual Property, IP trading, IP analysis, Patent search, Biotechnology, Taxonomy system

## 摘要

本研究目的為建置一個資源共享之線上交易平台,輔助生物科技技術在學術界與產業界之間的技術交流與轉移,期能促進台灣生物科技工業之發展。本研究建構了一個網路平台,名為 BioIPMall。主要功能為生物科技之專利及技術之交易、分析與策略發展。為了便利分類眾多的生物技術項目,本研究使用樹狀分類架構建置一套分類系統。主要分類架構包含兩大分類項目:「產業應用」與「生物科技」,其中共有 259 個子技術項目。利用 BioIPMall 之生物科技分類樹,使得資料探勘與技術媒合處理更加容易進行。本計劃已經發展成為一個典型的商業模式,提供專利管理與技術轉移服務。目前 BioIPMall 已從研究單位收集了 342 項生技相關專利或技術,並公佈於網站上。本研究以在國內既有之生物資訊研究成果基礎,透過協力與輔助的角色扮演上,來協助及引領國內既有之生物技術相關研究成果,使其能融入生技產業資訊的階段性發展過程,進一步將資訊提升為知識智慧財產,使之能透過適當的市場開發管理,成功為我國發展生技產業所用。