## 國立清華大學第4屆傑出產學研究獎得獎人簡介



## 分子與細胞生物研究所張大慈教授

張大慈教授於 1993 年獲得美國約翰霍浦金斯大學化學博士後即返台加入本 校生命科學系,建立我國首個大學生專用的分子生物實驗室,指導學生基因工程、 重組蛋白質設計、表達、純化技術與應用,奠定生科院跨領域實作人才培育的基 礎。張教授的專長為蛋白質分子工程、及蛋白質-醣分子交互作用,利用細菌及 酵母菌生產重組蛋白質並分析功能。張教授長期從事產學合作,積極推廣生物技 術產業化應用開發,擔任本校研發處智財技轉組組長期間強化創新技術之智慧財 產保護、提升技術授權與移轉績效。近五年張教授共發表學術研究論文 29 篇、 執行 24 件產學合作計畫累計金額超過新台幣 3,800 萬元;已獲證 25 項國內外發 明專利中,其中 7 項完成技術授權或移轉,創造本校技轉收入超過新台幣 700 萬元。張教授非常重視生技人才培育及長期校友服務,認為高品質人才培育是高 等教育最重要的研發成果!直接指導之 19 名博士畢業生目前全數服務於生技醫 藥領域,半數擔任高階主管;約100名碩士畢業生中超過70%服務於生技醫藥與 智慧財產公司。張教授創辦全國第一個生技產業博士學位學程,輔導學生以碩博 五年一貫、清大三年加產業二年的全新模式進修博士學位,培育新世代生技博士 菁英為台灣生技產業注入生力軍。張教授產學兼優,累計獲得學術獎項包括:國 立清華大學教師學術卓越獎勵(2004~2017)、清大生命科學院傑出研究獎(2008)、 清大傑出學術研究出版獎勵(2011~2013)、科技部大專生創作獎(2016 指導教授); 產業獎項包括:台北生技獎產學合作銀獎(2006)、國立清華大學第一屆傑出產學 合作獎(2007)、國科會績優技轉中心獎(2007~2010)、生策會國家新創獎(2010)、 經濟部大學產業經濟貢獻獎(2010 團體組)、TIX 創新學社產業學者獎助(2017)、 清大產學合作績優獎(2017)、及傑出產學研究獎(2017)

Dr. Margaret Dah-Tsyr Chang, Professor of NTHU Institute of Molecular and Cellular Biology, has investigated structure-function relationship of human and fungal enzymes with special focus on novel protein-glycan interaction and function employing integrated molecular and cellular biological, biochemical, biophysical, and bioinformatics methodologies since she got PhD from Chemistry Department, Johns Hopkins University, U. S. A in 1993. She has high interest in industry-academic collaboration for many years, and has served as Director of NTHU Division of Intellectual Property and Technology License to facilitate patent engineering, technology promotion, and technology licensing for NTHU colleagues. From 2012 to Sep. 2017, a total of 29 SCI journal articles have been published, and 24 industry-academic collaboration projects (>NT\$38 M) have been executed, leading to in total 25 international and domestic patents issued and 7 patents have been licensed for industry application (>NT\$7 M).Prof. Chang considers that high quality graduate students are the most important product of higher education in She has established the first undergraduate molecular biology laboratory at Department of Life Science in Taiwan, and cultivated 19 PhD and about 100 MS students at NTHU with expertise in recombinant protein engineering and functional Most students of her lab have pursued professional career characterization. development in biotech industry worldwide. More recently, Prof. Chang has established the first "PhD in Bioindustry Program" at NTHU in Taiwan to cultivate next generation talents with 5-year training (MS1-to-PhD4) including 3-ear basic research training at NTHU and 2-year industry training at biotech companies. basic research achievement has been awarded NTHU Outstanding Research Awards (2004~2017), NTHU College of Life Science Outstanding Research Award (2008), NTHU Outstanding Publication Awards (2011~2013), MOST Research Innovation Award (2016); her technology development achievement has been awarded Taipei Biotech Award (2006), NTHU Outstanding Academic-Industry Collaboration Award (2007), National Innovation Award (2010), MOEA University Industry Economic Contribution Award (2010), MOST Outstanding Technology Licensing Awards (2008~2011), TIX Industry Scholar Award (2017), NTHU Industry Collaboration Excellence Award (2017), and NTHU Outstanding Industry-Academic Research Award (2017).