

37



生物醫學聯合學術年會

2023 The 37th Joint Annual Conference of Biomedical Science

Metabolism in Human Health



2023

3.18

3.19

國防醫學院

學生論文集




大會手冊

- 台灣藥理學會
- 中華民國解剖學學會
- 中華民國免疫學會
- 台灣分子生物影像學會
- 台灣生物化學及分子生物學學會
- 中華民國細胞及分子生物學學會
- 中華民國臨床生物化學會
- 台灣毒物學學會
- 中國生理學會







基因平台 Gene Platforms


 RNA技術平台與基因操控核心設施
▶ 中研院 林淑端特聘研究員


 基因體學臨床及產業應用發展中心
▶ 陽明交通大學 楊慕華教授


 國家基因體醫學研究中心
▶ 中研院 鄔哲源研究員

 藥物基因體實驗室
▶ 台大 俞松良教授


動物模式 Animal Models


 基因轉殖鼠核心設施
▶ 台大 林淑華教授/游益興助理研究員


 台灣斑馬魚技術與資源中心
▶ 國衛院 江運金副研究員

 台灣小鼠診所與動物設施聯盟—
國家綜合小鼠表現型暨藥物測試中心
▶ 中研院 陳志成研究員

影像結構 Imaging and Structural Analysis

 同步輻射蛋白質結晶學核心設施
▶ 國輻 黃駿翔博士/徐嘉鴻主任

 生醫光學影像核心平台
▶ 成大 邱文泰教授

 生醫轉譯影像分析平台
▶ 國家生技研園區 沈家寧副研究員

 國際巨分子與奈米醫學創新研發實驗室
▶ 成大 吳尚蓉副教授


平台辦公室 Administrative office


計畫主持人 李新城教授
▶ 國立陽明交通大學藥理學研究所

生技醫藥核心設施平台辦公室
▶ 計畫經理 林藎儀博士
▶ 計畫專員 向慧祺


▶ 計畫專員 林秀玲
▶ 計畫專員 許仁祺


生物資訊 Bioinformatics


 國家生醫數位資料與分析運算雲端服務平台
▶ 國網 王聿泰組長


 生技醫藥生物資訊核心設施
▶ 國衛院 熊昭名譽研究員


生物資源 Bioresources


 人類疾病誘導型多潛能幹細胞服務聯盟
▶ 中研院 謝清河研究員

 台灣地區肝細胞癌研究網及資料庫之建立
和台灣肺癌組織樣品資源中心
▶ 長庚 廖運範院士


 天然物藥庫暨高通量篩選核心平台
▶ 高醫 顏嘉宏副教授


 生技醫藥果蠅模式資源中心
▶ 台大 丁照棟教授


 台灣線蟲核心設施
▶ 台大 吳益群特聘教授

 台灣酵母菌生物資源中心
▶ 台大 李芳仁教授

BSL-3實驗室 BSL-3 Laboratories

 P3-2實驗室: 新興傳染病研究核心設施平台
▶ 國防 高治華研究員

 P3-1實驗室核心設施
▶ 成大 柯文謙教授

 P3-3研究與檢驗實驗室
▶ 台大 張淑媛教授



37 生物醫學 聯合學術年會

2023 The 37th Joint Annual Conference
of Biomedical Science

2	大會會長的話
3	交通示意圖 & 接駁車訊息
4	會場平面圖
7	第 37 屆生物醫學聯合學術年會參與學會暨理事長與秘書長名單
8	會議資訊暨特別演講及會員大會時間表
9	大會議程
12	大會特別演講
16	陳炯霖轉譯醫學講座 特別演講暨頒獎典禮
20	學會特別演講
44	研討會演講
140	科技新知研討會
148	口頭論文報告資訊
164	壁報論文目錄
270	贊助廠商

CONTENTS





大會會長的話

生物醫學聯合學術會議是由國內藥理、解剖、免疫、分子影像、生化、細分、臨床生化、毒物、生理等九大學會所共同舉辦，是國內生物醫學領域歷史最悠久、最重要的年度聯合會議。很榮幸第三十七屆生物醫學聯合學術年會由台灣藥理學會負責籌備，將於 2023 年 3 月 18-19 日於台北市內湖國防醫學院舉行。在此，首先謹代表第三十七屆生物醫學聯合學術年會籌備委員會，誠摯邀請您出席此一年度生物醫學領域最大的盛會！

有鑒於促進人類健康是我們生醫領域研究的重要目標，而相關之代謝研究關係到許多種重要的疾病，因此「代謝健康 - Metabolism in Human Health」是本屆大會的主題，所以大會特別邀請到中央研究院林慧觀院士擔任大會的 Keynote speaker，於 3 月 18 日上午之大會主題演講中，請林慧觀院士分享他在癌症代謝和癌症 / 免疫交互調節作用領域的豐碩研究成果；此次會議也首度舉辦第一屆陳炯霖轉譯醫學講座特別演講，將由楊慕華教授分享他的研究成果與經驗。

籌備委員會為了讓本屆生物醫學聯合學術年會能夠順利成功，已於會前召開了多次籌備會議進行討論與協調，以期符合所有與會者的期待與需求。此次會議將延續歷年優良傳統，由九大學會各邀請國內外專家學者進行特別演講，並舉辦多場重要且具突破性課題的研討會，同時也將舉行多項口頭及壁報論文競賽（例如：大會主題論文競賽、李天德壁報論文競賽等），另外，亦有科技新知研討會、廠商展示、會員大會等相關活動，希望鼓勵與會者能踴躍參與、聆聽各項演講、進行跨領域交流、討論與溝通。我們相信籌備委員會所安排兩天的會議內容，將涵蓋基礎及轉譯醫學等研究領域，內容將是精采可期，並對產、官、學研界的同仁均會受益良多。

最後本人謹代表第三十七屆生物醫學年會籌備委員會：感謝所有參與籌備工作之人員的辛勞與努力，感謝承攬大會事務工作的會議公司之協助，感謝各廠商的踴躍參展與贊助，以及感謝國防醫學院的全力支援與安排，這背後一切的努力使得在 COVID-19 疫情趨緩的 2023 年，能夠讓本屆生醫年會順利舉行。

謹祝福 2023 年第三十七屆生物醫學年會大會圓滿成功！

台灣藥理學會 理事長 **林琬琬**



交通示意圖 & 接駁車訊息

前往國防醫學院交通示意圖 & 接駁車訊息

年會舉辦地點：

國防醫學院 (114 臺北市內湖區民權東路六段 161 號)



接駁車時刻表

- 皆安排 45 人大巴
- 每 15 分鐘一班

日期	地點	時間
3/18	捷運昆陽站 → 國防醫學院	07:30-10:30
	國防醫學院 → 捷運昆陽站	15:30-18:30
3/19	捷運昆陽站 → 國防醫學院	07:30-10:30
	國防醫學院 → 捷運昆陽站	15:30-18:30

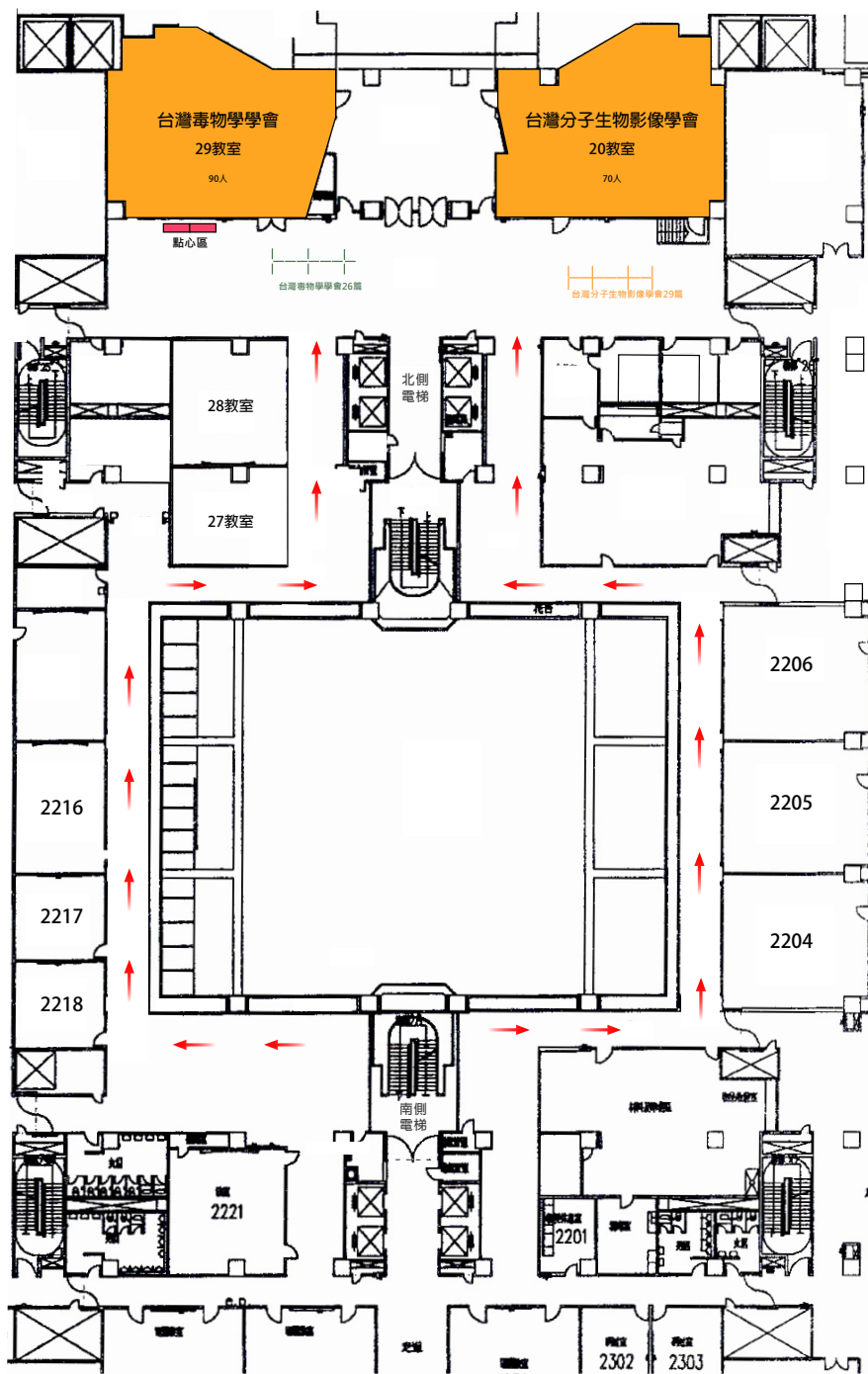
停車相關事宜

國防醫學院之停車場為免費停放。(由於停車位有限，建議搭乘大眾運輸工具。)
三軍總部之停車場，採計時方式計費，每小時為 40 元。
請勿占用專屬停車位。



2F 平面圖

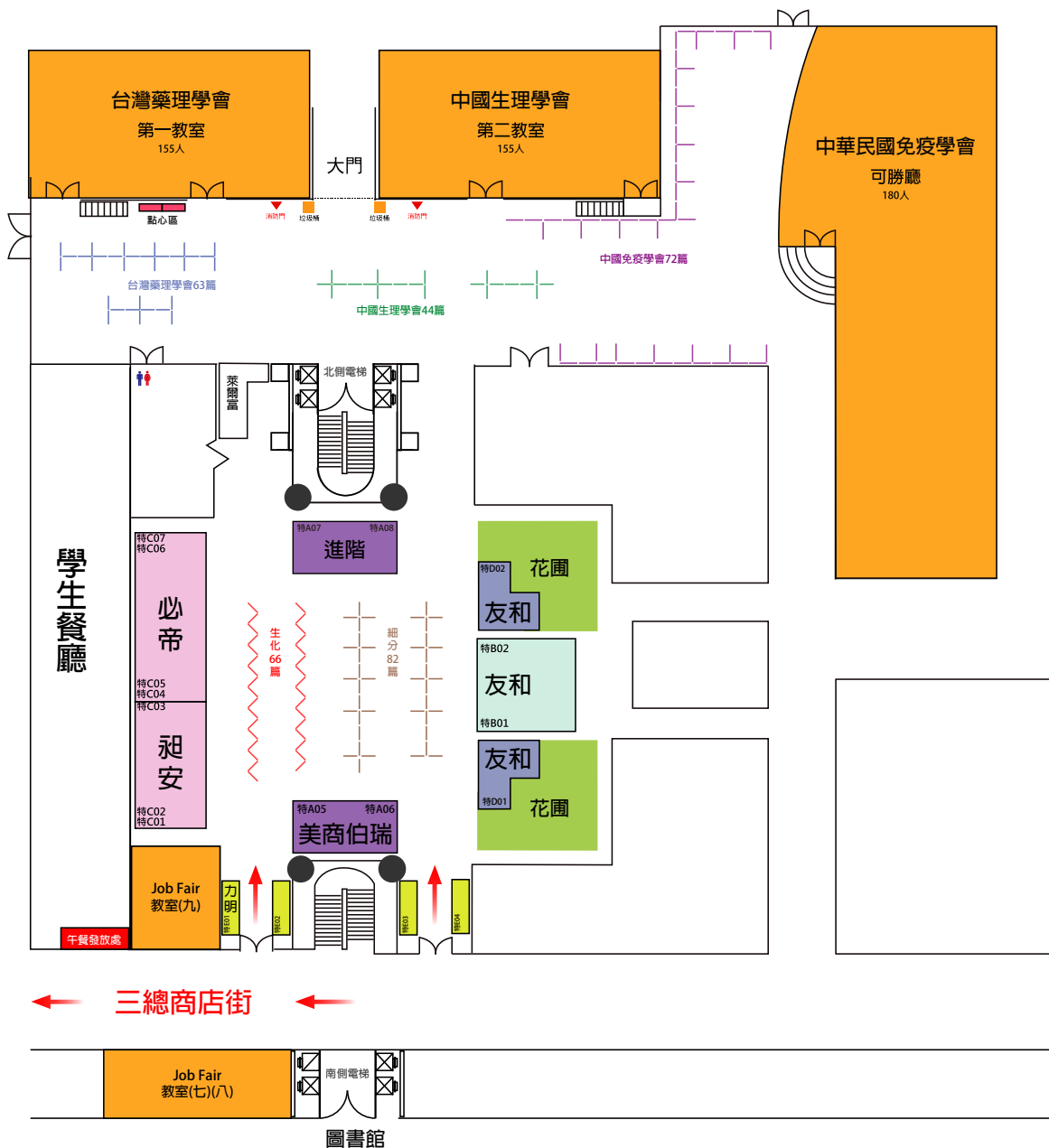
- 海報版 = 26篇 (台灣毒物學學會)
- 海報版 = 29篇 (台灣分子生物影像學會)





1F 平面圖

- 海報版 = 63篇 (台灣藥理學會)
- 海報版 = 44篇 (中國生理學會)
- 海報版 = 72篇 (中華民國免疫學會)
- 海報版 = 66篇 (台灣生物化學及分子生物學學會)
- 海報版 = 82篇 (中華民國細胞及分子生物學學會)





第 37 屆生物醫學聯合學術年會 參與學會暨理事長與秘書長名單

學會名稱	理事長	秘書長
台灣藥理學會	林琬琬	林泰元
中華民國解剖學學會	陳天華	江青樹
中華民國免疫學會	司徒惠康	莊雅惠、徐嘉琳
台灣分子生物影像學會	林康平	楊邦宏
台灣生物化學及分子生物學學會	鄭子豪	王琬菁
中華民國細胞及分子生物學學會	陳瑞華	郭紘志
中華民國臨床生化學會	徐慧貞	郭靜穎
台灣毒物學學會	王應然	郭靜娟
中國生理學會	陳景宗	盧主欽



第 37 屆生物醫學聯合學術年會 會議資訊

	時間	地點
開幕式	112 年 3 月 18 日 10:45-11:00	3 樓致德堂
大會特別演講	112 年 3 月 18 日 11:00-12:00	3 樓致德堂
陳炯霖轉譯醫學講座 特別演講 暨頒獎典禮	112 年 3 月 18 日 13:00-14:20	3 樓致德堂

學會特別演講及會員大會時間表

學會名稱	學會特別演講	學會會員大會	地點
台灣藥理學會	112 年 3 月 18 日 14:30-15:30	112 年 3 月 18 日 15:40-16:40	1 樓 第 1 教室
中華民國解剖學學會	112 年 3 月 18 日 09:30-10:40	112 年 3 月 18 日 14:30-15:30	3 樓 第 32 教室
中華民國免疫學會	112 年 3 月 18 日 09:30-10:30		1 樓 可勝廳
台灣分子生物影像學會	112 年 3 月 19 日 10:20-11:40	112 年 3 月 19 日 11:45-12:00	2 樓 第 20 教室
台灣生物化學及分子生物學學會	112 年 3 月 18 日 09:40-10:40	112 年 3 月 19 日 15:20-15:40	3 樓 第 33 教室
中華民國細胞及分子生物學學會		112 年 3 月 19 日 15:20-16:00	3 樓 第 30 教室
中華民國臨床生化學會	112 年 3 月 18 日 09:30-10:30	112 年 3 月 18 日 14:30-15:00	3 樓 第 31 教室
台灣毒物學學會	112 年 3 月 18 日 14:30-15:30	112 年 3 月 18 日 15:40-16:40	2 樓 第 29 教室
中國生理學會	112 年 3 月 18 日 14:30-15:30	112 年 3 月 19 日 11:00-12:00	1 樓 第 2 教室



大會議程

3月18日	一樓			二樓		三樓			
	藥理學會 1 教室	生理學會 2 教室	免疫學會 可勝廳	分子影像 20 教室	毒物學會 29 教室	細分學會 30 教室	臨床生化 31 教室	解剖學會 32 教室	生化學會 33 教室
08:30-10:30	09:00-10:30 【研究生論文獎】 決選演講 Moderator: 張文昌 院士	09:00-10:30 口頭論文競賽 Moderator: 吳偉立 助理教授	09:30-10:30 特別演講 Speaker: Prof. Gillian Griffiths Moderator: 司徒惠康 理事長	09:00-12:00 壁報論文展示	08:30-10:30 口頭論文競賽 Moderator: 邱惠雯 教授	09:30-09:40 細分 x 生化學會 開幕式 (33 教室) 09:40-10:40 特別演講 Speaker: 唐堂 院士 Moderators: 鄭子豪 理事長 陳瑞華 理事長	09:30-10:30 特別演講 Speaker: Prof. Andrew Hoofnagle Moderator: 徐慧貞 理事長	09:30-10:40 特別演講 Speaker: 沈家寧 研究員 Moderator: 陳天華 理事長	09:30-09:40 細分 x 生化學會 開幕式 (33 教室) 09:40-10:40 特別演講 Speaker: 唐堂 院士 Moderators: 鄭子豪 理事長 陳瑞華 理事長
10:45-11:00	大會開幕式 (致德堂)								
11:00-12:00	大會特別演講 (致德堂) Speaker: 林慧觀 院士 Moderator: 林琬琬 理事長								
12:00-14:00	午餐 科技新知研討會 (雷文虎克) 壁報論文展示與 競賽	午餐 科技新知研討會 (台灣活性脂質) 壁報論文競賽	午餐 科技新知研討會 (伯森生物科技)	午餐 壁報論文競賽	午餐 壁報論文展示	午餐 科技新知研討會 (萊富生命科技) 壁報論文展示與 競賽 I	午餐 科技新知研討會 (台灣活性脂質) 壁報論文競賽	午餐 科技新知研討會 (諾倫科技) 壁報論文展示	午餐 科技新知研討會 (進階生物科技) 壁報論文展示與 競賽
13:00-14:20	陳炯霖轉譯醫學講座 特別演講 (致德堂) Speaker: 楊慕華 講座教授 Moderator: 鄭子豪 理事長								
14:30-16:40	大會主題論文競賽 (致德堂)								
14:30-15:00	14:30-15:30 特別演講 Speaker: 楊鑑鍵 教授 Moderator: 林琬琬 理事長	14:30-15:30 特別演講 Speaker: Dr. Susan Wray Moderator: 華瑜 特聘講座 教授	14:30-14:45 Café Break	14:30-15:00 Plenary Speech I Speaker: 陳賢燁 教授 Moderator: 林康平 教授	14:30-15:30 特別演講 Speaker: 陳冠宇 教授 Moderator: 王應然 理事長	14:40-14:50 Café Break	14:30-15:00 會員大會	14:30-15:30 會員大會	14:40-14:50 Café Break
15:00-15:30				15:00-15:30 Café Break			15:00-15:10 Café Break		
15:30-16:00	15:30-15:40 Café Break		14:45-16:45 口頭論文競賽 Moderator: 徐嘉琳 副秘書長	15:30-16:00 Plenary Speech II Speaker: 廖愛禾 教授 Moderator: 楊邦宏 副教授	15:30-15:40 Café Break	14:50-16:50 細分與生化 聯合學術 研討會 Metabolic Disease (33 教室) Speakers: 阮麗蓉 研究員 蔡曜聲 教授 王雯靜 特聘教授 蔡亭芬 特聘教授 Moderators: 王琬菁 秘書長 郭紘志 秘書長	15:10-17:10 研討會 Speakers: 蕭明熙 特聘教授 謝建台 講座教授 葉振聲 教授 Moderator: 林佳霓 理事	15:30-15:40 Café Break	14:50-16:50 細分與生化 聯合學術 研討會 Metabolic Disease (33 教室) Speakers: 阮麗蓉 研究員 蔡曜聲 教授 王雯靜 特聘教授 蔡亭芬 特聘教授 Moderators: 王琬菁 秘書長 郭紘志 秘書長
16:00-16:30	15:40-16:40 會員大會 學會研究獎項 頒獎	15:40-17:40 新進人員研討會 Speakers: 孫宏羽 助理教授 林佑融 助理研究 員 葉儀君 助理教授 蕭逸澤 副教授 Moderator: 李昆澤 教授		16:00-16:30 Plenary Speech III Speaker: 蘇家豪 教授 Moderator: 曹勤和 主任	15:40-16:40 第 11 屆第四次 理監事暨 會員大會			15:40-17:40 研討會 多元應用創新 研究 Speakers: 蔣偉程 助理教授 彭偉豪 助理教授 許佩玲 助理教授 Moderator: 許鍾瑜 副教授	
16:30-17:00				16:30-17:00 Plenary Speech IV Speaker: 連韋雄 副研究員 Moderator: 張御展 助理教授					
17:00-17:30							17:10-17:30 壁報論文 競賽頒獎		



大會議程

3月19日	一樓			二樓		三樓						
	藥理學會 1 教室	生理學會 2 教室	免疫學會 可勝廳	分子影像 20 教室	毒物學會 29 教室	細分學會 30 教室	臨床生化 31 教室	解剖學會 32 教室	生化學會 33 教室			
08:30-09:30				08:30-10:10 口頭論文競賽 Moderators: 蘇家豪 教授 柯建志 助理教授				08:30-10:00 口頭論文競賽 Moderator: 江青樹 秘書長				
09:30-10:00	09:10-12:00 藥理與毒物 聯合學術 研討會 蛇毒蛋白毒理、 藥理、藥物研發 和其應用 (1 教室) Speakers: 宋旺洲 博士 毛彥喬 醫師 黃德富 教授 莊偉哲 教授 余玉萍 教授 Moderators: 黃德富 教授 李志恒 教授	10:00-11:00 壁報論文展示	09:30-10:50 研討會 Vaccine and immunity to SARS-CoV2 infection Speakers: 陶秘華 研究員 黃冠穎 副教授 Moderator: 謝世良 特聘 研究員	10:20-11:00 特別演講 I Speaker: 姚維仁 院長 Moderator: 黃文盛 教授	09:10-12:00 藥理與毒物 聯合學術 研討會 蛇毒蛋白毒理、 藥理、藥物研發 和其應用 (1 教室) Speakers: 宋旺洲 博士 毛彥喬 醫師 黃德富 教授 莊偉哲 教授 余玉萍 教授 Moderators: 黃德富 教授 李志恒 教授	09:00-12:30 徐千田優秀論文 競賽 Moderator: 郭紘志 秘書長	09:00-11:30 口頭論文競賽	10:00-12:00 創意解剖教學影 片及繪畫競賽 播放及展示 I	09:10-10:40 壁報論文競賽 I			
10:00-10:30			10:50-11:10 Café Break	11:00-11:40 特別演講 II Speaker: 馬國興 教授 Moderator: 李易展 教授						11:30-13:30 午餐 壁報論文展示與 競賽 II	11:50-12:00 口頭論文 競賽頒獎	11:00-12:30 壁報論文競賽 II
11:00-11:30			11:10-13:00 壁報論文展示及 競賽	12:00-13:30 午餐 壁報論文展示與 競賽						12:00-13:30 午餐	12:30-13:00 午餐	
11:30-12:00	11:00-12:00 會員大會		13:40-14:40 研討會 Immune Regulation Speakers: 陳斯婷 副教授 徐志文 副研究員 Moderator: 許秉寧 教授	13:40-14:40 研討會 毒理學家認證考 試論壇 I Speakers: 陳容甄 副教授 傅煦媛 博士 陳柏霖 博士 Moderator: 王應然 理事長	14:10-15:10 吳成文院士 學術講座 Speaker: 龔行健 院士 Moderator: 陳瑞華 理事長	13:30-15:30 研討會 New Strategies for Cancer Therapy Speakers: 陳政義 助理教授 陳學亭 助理教授 蘇柏全 助理教授 Moderator: 馮琮涵 教授	13:00-15:10 研討會 RNA Biology in Precision Medicine Speakers: 蔡欣佑 助理教授 王健家特聘教授 呂佩融 特聘教授 莊樹諄 研究員 Moderator: 譚賢明 教授					
12:00-12:30	11:30-13:30 午餐 壁報論文展示	12:00-13:30 生理學會餐會	14:40-15:10 研討會 Immune Regulation Speakers: 陳斯婷 副教授 徐志文 副研究員 Moderator: 許秉寧 教授	14:40-14:50 Café Break	14:50-15:50 研討會 毒理學家認證 考試論壇 II Speakers: 王湘翠 副教授 陳柏霖 博士 Moderator: 劉興華 教授	15:10-15:20 Café Break	15:30-15:40 Café Break	15:10-15:20 Café Break				
13:00-13:30			15:10-15:30 Café Break	15:30-16:20 閉幕式以及口 頭、壁報論文競 賽頒獎典禮	15:50-16:20 閉幕式暨論文 競賽頒獎典禮	15:20-16:00 閉幕式 細分學會 第 17 屆第 1 次 會員大會暨頒獎 典禮	15:40-16:30 壁報論文展示與 競賽 & 創意解剖 教學影片播放及 解剖繪畫競賽 展示 II	15:20-15:40 第 27 屆第 3 次 會員大會				
13:30-14:00	13:40-15:50 生理與藥理 聯合學術 研討會 代謝疾病 (1 教室) Speakers: 劉興華 教授 洪明秀 研究員 Moderator: 羅怡卿 教授	13:40-15:50 生理與藥理 聯合學術 研討會 代謝疾病 (1 教室) Speakers: 劉興華 教授 洪明秀 研究員 Moderator: 羅怡卿 教授	15:30-16:20 閉幕式以及口 頭、壁報論文競 賽頒獎典禮									
14:00-14:30	13:40-14:40 Speakers: 劉興華 教授 洪明秀 研究員 Moderator: 羅怡卿 教授	13:40-14:40 Speakers: 劉興華 教授 洪明秀 研究員 Moderator: 羅怡卿 教授										
14:30-15:00	14:40-14:50 Café Break	14:40-14:50 Café Break										
15:00-15:30	14:50-15:50 (1 教室) Speakers: 阮琪昌 教授 謝博軒 教授 Moderator: 李宗玄 教授	14:50-15:50 (1 教室) Speakers: 阮琪昌 教授 謝博軒 教授 Moderator: 李宗玄 教授										
15:30-16:00												
16:00-16:30		16:00-16:30 口頭及壁報 論文競賽頒獎 典禮										
16:30-17:00												

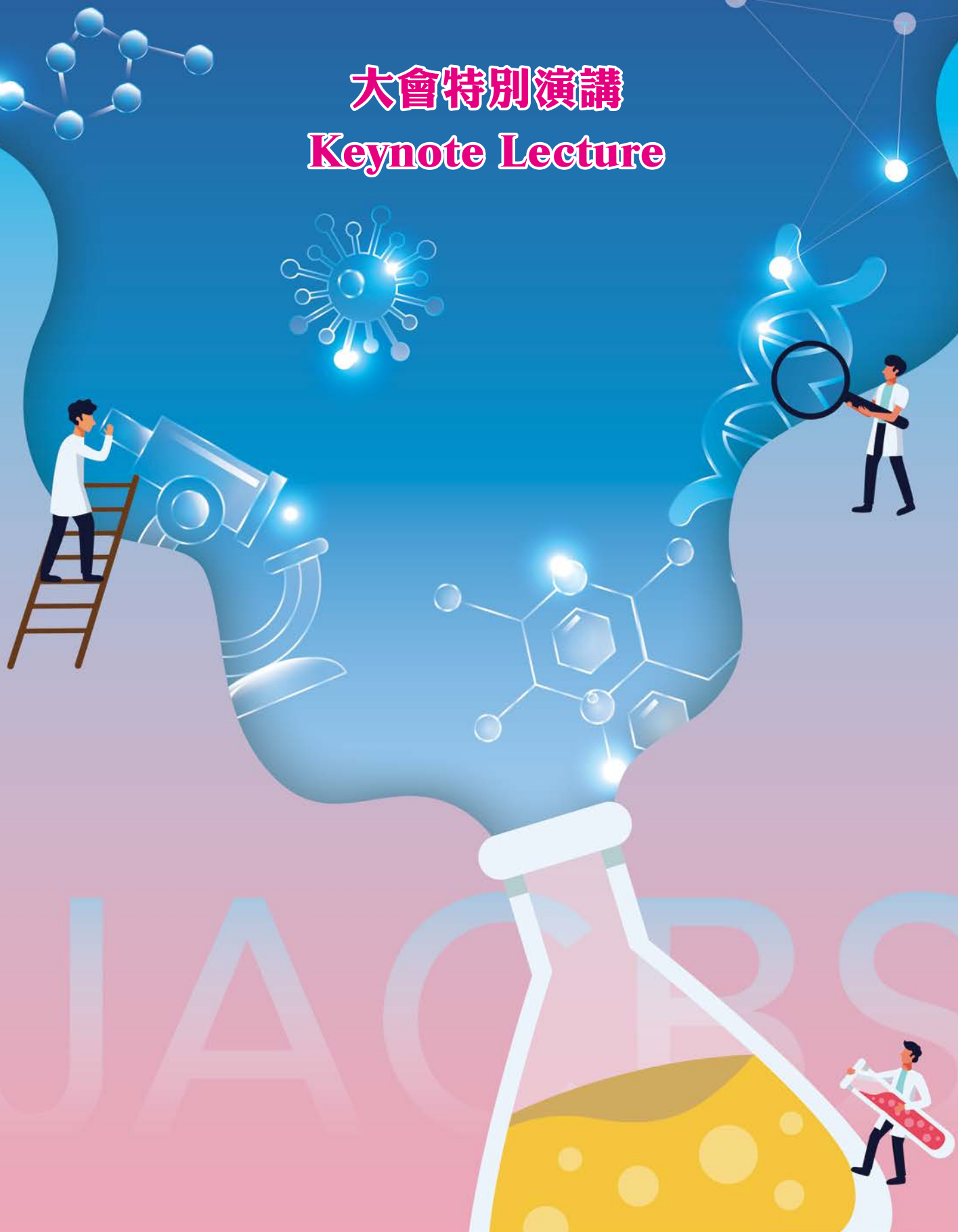
37



生物醫學聯合學術年會

2023 The 37th Joint Annual Conference of Biomedical Science

大會特別演講 Keynote Lecture



JACOBS



大會特別演講

112 年 3 月 18 日 (週六) 11:00-12:00

地點：3 樓致德堂

座長：林琬琬 理事長

講題：Glucose metabolism and its signaling in cancer and immune regulation

講員：林慧觀 院士

單位：Department of Cancer Biology, Wake Forest University School of Medicine



Speaker /

林慧觀
Hui-Kuan Lin

Current Position:

Director of Prostate Cancer Center of Excellence
Co-Leader of Signaling and Biotechnology Program
Anderson Discovery Professor for Cancer Research
Department of Cancer Biology
Wake Forest University School of Medicine
美國維克森林醫學院癌症生物系講座教授、前列腺癌研究中心主任、
訊號生技 (Signaling and Biotechnology) program 共同主任 (Co-Director)

Education/Training:

National Taiwan University, Taipei, Taiwan, Taiwan, BS, 1993, Pharmacy
National Taiwan University, Taipei, Taiwan, Taiwan, MS, 1995, Pharmacology
University of Rochester, Rochester, NY, PHD, 2002, Pathology (Cancer Biology)

Postgraduate Training:

Research Fellow, Cancer Biology and Genetics Program, Memorial Sloan-Kettering Cancer Center, New York, NY

Professional and Research Experience:

Dr. Hui-Kuan Lin is currently a Director of Prostate Cancer Center of Excellence, Co-Leader of Signaling and Biotechnology program and Anderson Discovery Professor for Cancer Research at Department of Cancer Biology in Wake Forest University School of Medicine. He serves as an editorial board member in Cancer Research, Journal of Biological Chemistry, and Frontiers in Molecular and Cellular Oncology and an honorary editor in Molecular and Cellular Oncology. He has served as Academic Advisory Committee of the Institute of Biomedical Sciences (IBMS) at Academia Sinica since 2020 and Member of the AACR Basic Cancer Research Grants Scientific Review Committee since 2021. He also serves a reviewer in numerous high impact/profile journals, such as Nature, Science, Nature review Cancer, and Cancer Cell, Nature, Genetics, Nature Cell Biology, Cell Metabolism. He has served on numerous grant review panels such as NIH and DOD study sections and NHRI and MOST and Academia Sinica from Taiwan. He has published more than 120 peer-reviewed articles in leading journals, such as Nature, Cell, Science, Nature Cell Biology, Molecular Cell, Blood, and EMBOJ. The research interest in his laboratory is focused on the posttranslational modifications and cancer metabolism in signaling and cancer/immune regulation. His study not only reveals fundamental insights for cancer biology and cancer immunity, but also offers novel therapeutic strategies for targeting human cancer and overcoming drug resistance. His study could potentially translate basic science into the clinical practice.



3/18 (六) 11:00-12:00
3 樓，致德堂

Glucose metabolism and its signaling in cancer and immune regulation

林慧觀 Hui-Kuan Lin

Department of Cancer Biology

Wake Forest University School of Medicine

Deregulated cell metabolism has merged to play a key role in cancer and immune regulation. Recent advances reveal that cancer cell metabolism not only provides energy and building blocks and orchestrates redox balance for maintaining cancer cell proliferation and survival, but also generates a series of unique metabolites that are critically involved in signaling and epigenetic regulation. Glucose is a major source for cancer cell metabolism and plays a pivotal role in diverse biological processes involved in cancer and human diseases. In this talk, I will highlight our recent findings revealing how glucose metabolism and its signaling orchestrate cancer and immune regulation and discuss the therapeutic strategies to target glucose metabolism and its signaling for cancer intervention. Our studies open the new avenue and frontiers for studying and understanding the metabolism, but also offer novel paradigms and therapeutic strategies for targeting cancer and likely many other diseases associated with derailed metabolism.

37



生物醫學聯合學術年會

2023 The 37th Joint Annual Conference of Biomedical Science

**陳炯霖轉譯醫學講座
特別演講暨頒獎典禮**

**The Chung-Lin Chen
Translational Medicine Award**



JACBS



陳炯霖轉譯醫學講座 特別演講暨頒獎典禮

112 年 3 月 18 日 (週六) 13:00-14:20

地點：3 樓致德堂

座長：鄭子豪 理事長

講題：Communication between cancer cells and immune cells during tumor progression

講員：楊慕華 講座教授

單位：Institute of Clinical Medicine, National Yang Ming Chiao Tung University



Speaker /

楊慕華
Muh-Hwa Yang

Current Position:

Chair professor of Institute of Clinical Medicine, National Yang Ming Chiao Tung University
Vice President of National Yang Ming Chiao Tung University
Director of Department of Oncology, Taipei Veterans General Hospital

Education/Training:

M.D., National Yang-Ming University
Ph.D., National Yang-Ming University
Resident and clinical fellow of Division of Hematology-Oncology, Taipei Veterans General Hospital

Professional and Research Experience:

Attending Physician, Director of Division of Hematology-Oncology, Taipei Veterans General Hospital
Assistant Professor, Associate Professor, Professor of Institute of Clinical Medicine, National Yang-Ming University
Director of Cancer Progression Research Center & Immunology Research Center, National Yang-Ming University

Awards and Honors:

Outstanding Research Achievement Award of 60th Anniversary of Taipei Veterans General Hospital (2019)
Outstanding Research Award of Ministry of Science and Technology (2016)
Outstanding Research Award of National Science Council (2013)
Academia Sinica Early Career Academic Achievement Award (2011)

Selected Publications:

1. Chen HY, Hsieh, CH, Lin PH, Chen YT, Hsu DS, Tai SK, Chu PY, Yang MH*. Snail regulated microRNA-21 suppresses NLRP3 inflammasome activity to enhance cisplatin resistance. *J Immunother Cancer* 2022;10:e004832.
2. Ou DL, Chen CW, Hsu CL, Chung CH, Feng ZR, Lee BS, Cheng AL, Yang MH*, Hsu C*. Regorafenib enhances antitumor immunity via inhibition of p38 kinase/Creb1/Klf4 axis in tumor-associated macrophages. *J Immunother Cancer* 2021;9:e001657.



3/18 (六) 13:00-14:20
3 樓，致德堂

Communication between cancer cells and immune cells during tumor progression

楊慕華 Muh-Hwa Yang

Institute of Clinical Medicine, National Yang Ming Chiao Tung University

The communication and mutual influences between cancer cells and immune cells have been well established. However, understanding the dynamic interaction between cancer cells and microenvironmental immune cells during different stages of cancer progression is relatively limited. Epithelial-mesenchymal plasticity has been recognized as a major mechanism of cancer cells for the adaptation of different environments to facilitate cancer progression. Here, we investigate the interplay between cancer cells within different epithelial-mesenchymal spectrum and immune cells. We previously have shown that acetylation of the epithelial-mesenchymal transition (EMT) transcriptional factor Snail in cancer cells modulates the cytokinome through transcriptional activation of the key cytokines. Our recent data demonstrated the colocalization of the ferroptosis and EMT signature together with a pro-inflammatory feature on the invasive fronts of head and neck cancer samples. Regarding communication between tumor and immune cells, we show that acetylated Snail promotes the recruitment of tumor-associated macrophages (TAMs) through the secretion of CCL2 and CCL5. The miR-21-abundant exosomes from Snail-expressing cancer cells polarize TAMs into an M2-like phenotype. Furthermore, exosomal miR-21 suppresses NLRP3 inflammasome activities in TAM to attenuate therapy-induced immune responses. Cancer stem cell secreted exosomal triphosphate RNAs induce IL-1 β expression in neutrophils to sustain their survival. In metastatic microenvironments, TAM secreted interleukin-35 promotes colonization of tumor cells. In summary, our result indicates that the dynamic interaction between cancer cells and immune cells through cytokines, chemokines, and exosomes is a crucial driver for malignant progression via microenvironmental remodeling.

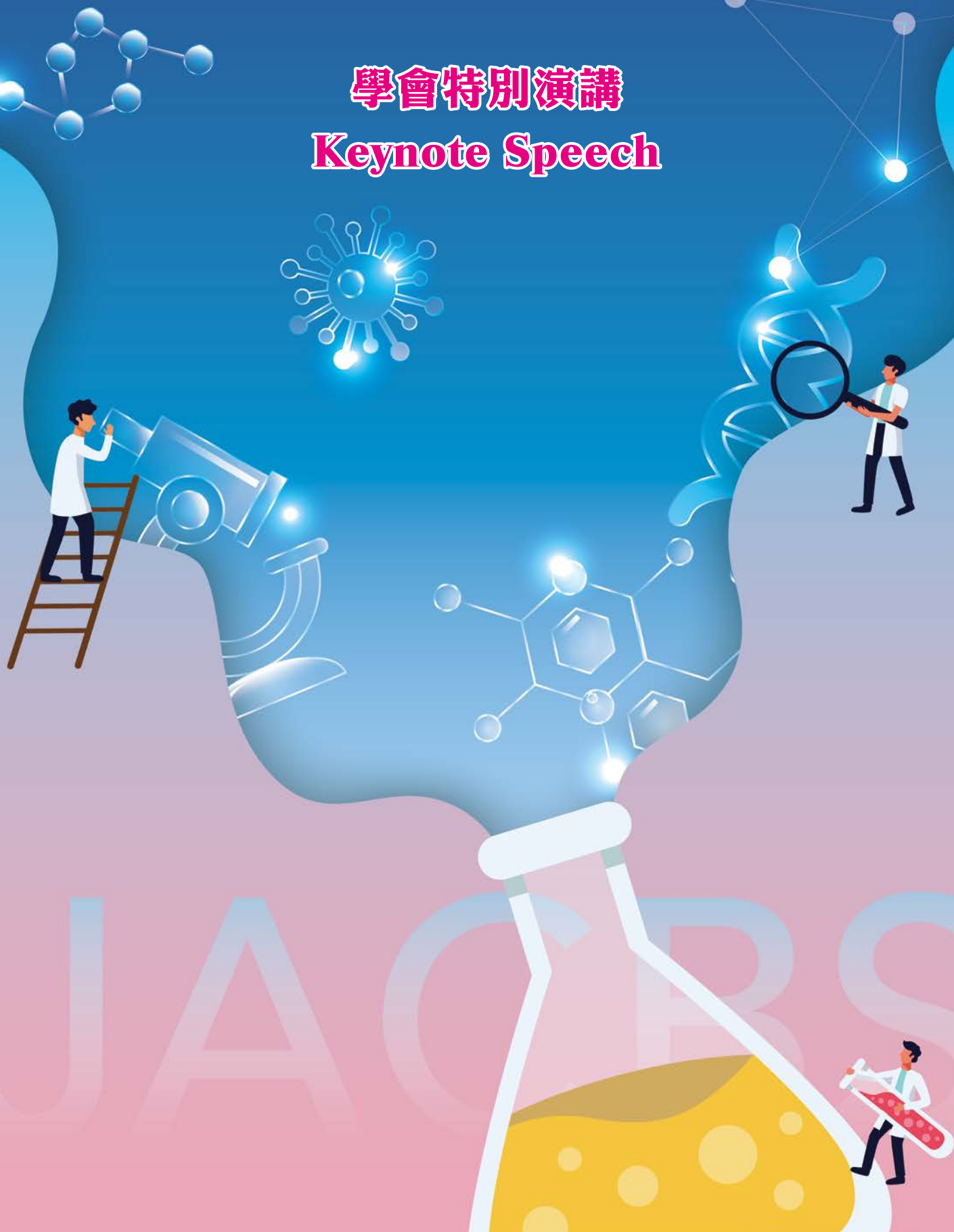
37



生物醫學聯合學術年會

2023 The 37th Joint Annual Conference of Biomedical Science

學會特別演講 Keynote Speech





學會特別演講

論文編號：L1 (台灣藥理學會)

112年3月18日(週六) 14:30-15:30

地點：1樓，第1教室

座長：林琬琬 理事長

講題：ER Protein TXNDC5 as a Novel Therapeutic Target against Organ Fibrosis and Atherosclerosis

講員：楊鎧鍵 教授

單位：Graduate Institute and Department of Pharmacology, NTU

Division of Cardiology, Department of Internal Medicine, NTU Hospital

論文編號：L2 (中華民國解剖學學會)

112年3月18日(週六) 09:30-10:40

地點：3樓，第32教室

座長：陳天華 理事長

講題：Application of organoid technologies in colorectal cancer modeling and developing precision medicine

講員：沈家寧 研究員

單位：Genomics Research Center, Academia Sinica, Taipei, Taiwan

論文編號：L3 (中華民國免疫學會)

112年3月18日(週六) 09:30-10:30

地點：1樓，可勝廳

座長：司徒惠康 理事長

講題：Cancer assassins: fine-tuning the killers inside us

講員：Prof. Gillian Griffiths

單位：University of Cambridge, UK

論文編號：L4 (台灣分子生物影像學會)

112年3月19日(週日) 10:20-11:00

地點：2樓，第20教室

座長：劉仁賢 教授

講題：How to Cultivate Yourself as a Distinctive Biomedical Scientist

講員：姚維仁 院長

單位：Chia-Yi Christian Hospital



論文編號：L5 (台灣分子生物影像學會)

112年3月19日(週日) 11:00-11:40

地點：2樓，第20教室

座長：李易展教授

講題：How to Cultivate Yourself as a Distinctive Biomedical Scientist

講員：馬國興教授

單位：Department of Research and Development, National Defense Medical Center
Graduate Institute of Biology and Anatomy, National Defense Medical Center

論文編號：L6 (台灣生物化學及分子生物學學會 X 中華民國細胞及分子生物學學會)

112年3月18日(週六) 09:40-10:40

地點：3樓，第33教室

座長：鄭子豪 理事長、陳瑞華 理事長

講題：Centriole, Centrosome, and Cilium: How These Organelles are Built in Cells and Their Associated Diseases

講員：唐堂 院士

單位：Institute of Biomedical Sciences, Academia Sinica

論文編號：L7 (中華民國細胞及分子生物學學會)

112年3月19日(週日) 14:30-15:10

地點：3樓，第30教室

座長：陳瑞華 理事長

講題：Therapy Resistance and Metabolic Plasticity in Prostate Cancer

講員：龔行健 院士

單位：Taipei Medical University

論文編號：L8 (中華民國臨床生化學會)

112年3月18日(週六) 09:30-10:30

地點：3樓，第31教室

座長：徐慧貞 理事長

講題：Clinical Metabolomics: Current state and future directions

講員：Prof. Andrew N. Hoofnagle

單位：Department of Laboratory Medicine and Pathology, University of Washington

論文編號：L9 (台灣毒物學學會)

112年3月18日(週六) 14:30-15:30

地點：2樓，第29教室

座長：王應然 理事長

講題：From Organs-on-chips to Digital Twins：Bring Healthcare to Life

講員：陳冠宇 教授

單位：Institute of Biomedical Engineering, College of Electrical and Computer Engineering,
National Yang Ming Chiao Tung University



論文編號：L10 (中國生理學會)

112年3月18日(週六) 14:30-15:30

地點：1樓，第2教室

座長：華瑜 特聘講座教授

講題：Can a better understanding of physiology be translated to better births

講員：Prof. Susan Wray

單位：University of Liverpool



Speaker /

楊鎧鍵
Kai-Chien Yang

Current Position:

Professor, Graduate Institute of Pharmacology, National Taiwan University
Division of Cardiology, Department of Internal Medicine, National Taiwan University Hospital

Education/Training:

1994-2000 M.D. National Taiwan University, Taipei, Taiwan
2003-2005 M.Sc., Medical Sciences, National Taiwan University, Taipei, Taiwan
2007-2012 Ph.D., Molecular Genetics and Genomics, Division of Biology and Biomedical Sciences, Washington University, St Louis, MO

Professional and Research Experience:

2019-2022 Associate Professor, Graduate Institute of Pharmacology, National Taiwan University, Taipei, Taiwan
2020 Aug- Joint Associate Research Fellow, Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan
2021 Aug- Deputy director, Center for Frontier Medicine, National Taiwan University Hospital
2022 Aug- Professor, Graduate Institute of Pharmacology, National Taiwan University, Taipei, Taiwan

Awards and Honors:

2022 The 18th Tien Te Lee Biomedical Awards 第 18 屆永信李天德青年醫藥科技獎
2022 台灣藥理學會李鎮源教授傑出研究獎
2022 Boehringer Ingelheim "Grass Roots" Support Program
百靈佳殷格翰生醫新創獨角獸 Grass Roots 支持計畫

Selected Publications:

1. ICT Hung, TH Su, YT Chen, YF Wu, YT Chen, SJ Lin, SL Lin, KC Yang*. Targeting ER Protein TXNDC5 in Hepatic Stellate Cell Mitigates Liver Fibrosis by Repressing Non-Canonical TGF Signaling. Gut 2022 Sep;71(9):1876-1891. (Corresponding author)
2. CF Yeh, SH Cheng, YS Lin, TP Shentu, RT Huang, J Zhu, YT Chen, S Kumar, MS Lin, HL Kao, PH Huang, E Rosello-Sastre, F Garcia, H Jo, Y Fang*, KC Yang*. Targeting Mechano-sensitive Endothelial TXNDC5 to Stabilize eNOS and Reduce Atherosclerosis in vivo. Science Advances 2022 Jan 21; 8(3):eabl8096 (Co-corresponding author)



3/18 (六) 14:30-15:30
1 樓，第 1 教室

ER Protein TXNDC5 as a Novel Therapeutic Target against Organ Fibrosis and Atherosclerosis

楊鎧鍵 Kai-Chien Yang

Graduate Institute and Department of Pharmacology, NTU

Division of Cardiology, Department of Internal Medicine, NTU Hospital

Background

Increased ER stress has been implicated in the pathogenesis of organ fibrosis and atherosclerosis. The underlying molecular mechanisms by which ER stress contributes to fibrogenesis and atherogenesis, however, remain incompletely understood.

Approach

Using an approach of combined system biology and transcriptome profiling of human/mouse fibrotic and atherosclerotic tissue, we identified an ER protein thioredoxin domain containing 5 (TXNDC5) as a potentially important mediator of tissue fibrosis and atherosclerosis. We conducted a series of in vitro and in vivo experiments to determine the molecular mechanisms by which TXNDC5 mediates the development of organ fibrosis and atherogenesis.

Results

TXNDC5 was found to be both required and sufficient to promote organ (heart, lung, kidney and liver) fibrosis and disturbed flow-induced atherosclerosis. TXNDC5 promotes tissue fibrosis through enhancing the folding and stability of TGFBR1 and extracellular matrix (ECM) proteins, leading to the augmentation of fibrogenic TGF β signaling, fibroblast activation and ECM production. TGF β induces TXNDC5 upregulation in tissue fibroblasts through increased ER stress level and ATF6-mediated transcriptional control. Conditional knockout of TXNDC5 in tissue fibroblasts significantly mitigates cardiac, lung, kidney and liver fibrosis in response to injury. On the other hand, TXNDC5 is induced in arterial endothelial cells in response to disturbed flow under the regulation of mechanical sensing transcription factor KLF2, leading to endothelial dysfunction and atherogenesis by downregulating eNOS through HSF1-HSP90 signaling axis. Conditional knockout of endothelial TXNDC5 and treatment with TXNDC5-targeting CRISPR-nanoparticles both mitigates atherosclerosis in vivo.

Significance

This series of investigations identified a critical yet previously unidentified function of ER protein TXNDC5 in the pathogenesis of organ fibrosis and atherosclerosis. Targeting TXNDC5 can be a novel and powerful therapeutic approach against fibrosis-related organ dysfunction and atherogenesis.



Speaker /

沈家寧
Chia-Ning Shen

Dr. Chia-Ning Shen is currently a research fellow in the Genomics Research Center, Academia Sinica, Taiwan. Dr. Shen earned his PhD from Developmental Biology Program, Department of Biology and Biochemistry, University of Bath, United Kingdom in 2002. From 2002 to 2004, Dr. Shen worked as a research officer in the Centre for Regenerative Medicine in University of Bath. Dr. Shen came back to Taiwan and joined the Genomics Research Center of Academia Sinica in the summer of 2004. Dr. Shen's research interest primarily focuses on two fields, cancer stem cells and regenerative medicine. He currently focuses on investigating mechanisms involved in naturally occurring somatic cell reprogramming. Based dissecting the basis of cell differentiation and transdifferentiation, Dr. Shen aims to develop methodologies to trigger tissue regeneration and to identify the initial factors for neoplastic transformation in somatic cells. For example, Dr. Shen is applying organoid technologies to dissect cancer causes and to develop precision medicinal strategies. As of today, Dr. Shen has published over 90 articles in world-renowned journals which have been cited for more than 3600 times.

Dr. Shen had spared time to attend several training courses. In 2008, he has completed the course program in legal studies in National Taiwan University. In 2012, he also attended the international training program of Multidisciplinary Management of Technology in National Cheng-Chi University. Aside from conducting research, Dr. Shen has also been responsible for coordinating academic activities and overseeing administrative work at the Genomics Research Center as the Deputy Director from 2013 to 2019. He has also served as Acting Division Director of Biotechnology Incubation Center in the Genomics Research Center for incubating biotechnology companies that licensed technologies from Academia Sinica. Dr. Shen joined Biomedical Translation Research Center in September 201. From 2019-2022, Dr. Shen served as CEO of BioHub Taiwan (Innovation & Incubation Center, Biomedical Translation Research Center) to establish Biotech Ecosystem and to incubate biotech startups at National Biotechnology Research Park. Currently, Dr. Shen is a chief PI managing the core facilities for translational medicine at National Biotechnology Research Park.

Dr. Shen was involved in the establishment of Taiwan Society for stem cell research (TSSCR) in 2005 aiming at providing opportunities for close interactions among stem cell researchers in Taiwan. Dr. Shen has been served as TSSCR president from 2017 to 2021 to cooperates with the government to implement relevant cell therapy legislation and policies. Dr. Shen is currently an Executive Supervisor in TSSCR.



3/18 (六) 09:30-10:40
地點：3樓，第32教室

Application of organoid technologies in colorectal cancer modeling and developing precision medicine

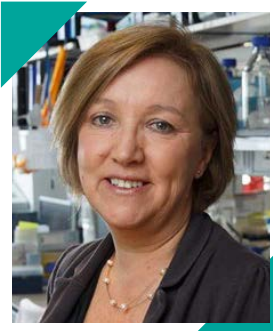
Chia-Ning Shen¹, Khamushavalli Geevimaan¹, Vang Pham Huu^{1,2}, Mei-Jung Wang¹, Jeou-Yuan Chen³ and Shung-Haur Yang⁴

¹Genomic Research Center, Academia Sinica, Taipei, Taiwan; ²International PhD Program in Medicine, College of Medicine, Taipei Medical University; ³Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan; ⁴Division of Colon and Rectal Surgery, Department of Surgery, Taipei Veterans General Hospital, Taipei, Taiwan

Advances in stem cell research have given rise to organoid technology for generation of in vitro self-assembling three-dimensional cellular structures that stably retain key characteristics of the respective organs, can be generated either from adult tissue stem cells or induced pluripotent stem cells (iPSCs) of patients. In fact, cancer patient-derived organoids (PDOs) that have been shown to recapitulate the structures, specific functions, molecular characteristics, genomic alterations, expression profiles, and tumor microenvironment of primary tumors. The finding suggests cancer PDOs may be ideal platforms to not only be used to understand cancer mechanisms but also to identify and assess the efficacy of drugs for patients.

Although the five-year survival rate of colorectal cancer (CRC) is significantly high with localized stage (90%), only 38% of the patients are diagnosed at this stage. Therefore, finding high risk factors of CRC could prevent the disease at the early stage. Obesity and high-fat diet consumption are risk factors of CRC. In detail, oleic acids (OA) were found to accumulate in the adipose tissues of obese patients as well as being the most common long chain fatty acid in dietary lipid. The role of OA in colorectal cancer development is still controversial. In order to dissect how long chain fatty acid can contribute to malignant transformation of Kras-mutant colonic epithelia, organoids, derived from Lgr5+EGFP mice (normal colon control), Lgr5+EGFP-creER;LSL-KrasG12D mice (colonic epithelium harbored KrasG12D mutation) and AOM/DSS-induced CRC mice (cancerous colon control) were generated. We discovered that oleic acid can promote the malignant transformation of Kras-mutant colonic organoids through NFATc-relating pathway. The expansion of tumorigenic stem cells via induction of abnormal Paneth cell, possibly contribute to the potential of cancer-toward metaplasia in Kras-mutant organoids when exposing to high levels of oleic acid.

Clinically, addition of oxaliplatin to adjuvant 5-FU, such as FOLFOX (leucovorin calcium (folinic acid), fluorouracil, and oxaliplatin), has significantly improved the disease-free survival in advanced colorectal cancer (CRC) patients, and serves as the first line adjuvant chemotherapy. However, more than 40% of patients remains refractory to oxaliplatin-based treatment. It is urgent to be able to predict the responsiveness toward oxaliplatin and to improve the efficacy in the resistant patients. Initially, we have established organoid lines from the biopsies of CRC patients, and performed drug sensitivity against oxaliplatin using patients-derived organoids. Notably, oxaliplatin sensitivity assessed in PDO lines in vitro was correlated to oxaliplatin sensitivity in PDO-xenografted tumors in vivo. In summary, our findings suggest organoid technologies can possibly be used to dissect role of metabolic reprogramming in development of CRC and PDOs are useful in informing decision-making on chemotherapy and in designing personalized chemotherapy for CRC patients.



Speaker /

Gillian Griffiths

Current Position:

Wellcome Trust Principal Research Fellow
Professor of Immunology and Cell Biology
Cambridge Institute for Medical Research

Honours and awards:

Royal Society Buchanan medal (2019)
Fellow of the Royal Society (2013)
Fellow of King's College, Cambridge (2007)
Fellow of Exeter College Oxford (2001-2007)
Royal Society Wolfson Research Merit Award (2006) EMBO member (2006)
Fellow of Academy of Medical Sciences (2005)

Research contributions

Our research lies at the interface between cell biology and immunology. We have used insights from human genetic disorders to understand the cell biology of cytotoxic T lymphocytes, immune cells that destroy cancerous and virally infected cells. Our work has revealed new concepts in both immunology and cell biology by identifying important parallels between biological systems. These include the observations that many cells of the immune system use lysosomes as secretory organelles, and that their polarised secretion involves a unique role for the centrosome that closely mimics centrosome polarisation during ciliogenesis. These findings not only link the fields of immunology, cell and developmental biology but provide new avenues for understanding molecular mechanisms relevant to health and disease, providing the foundations for the development of targeted cancer immunotherapy.

Research career and education

2012-2017	Director of the Cambridge Institute for Medical Research
2007-	Wellcome Trust Principal Research Fellowship, Cambridge
2007-	Professor of Immunology and Cell Biology, Cambridge
2006-2007	Professor of Experimental Pathology, Oxford
1997-2006	Wellcome Trust Senior Research Fellow, Sir William Dunn School of Pathology, Oxford
1995-1997	Wellcome Trust Senior Research Fellow, Laboratory of Molecular Cell Biology, UCL
1990-1995	Principal Investigator, Basel Institute for Immunology, Switzerland
1985-1990	Postdoctoral Fellow, Pathology, Stanford, USA
1984	PhD in Molecular Biology, MRC LMB, Cambridge
1980	BSc 1 st class in Zoology, University College London



Speaker /

姚維仁
Wei-Jen Yao

Current Position:

Chairman, Chia-Yi Christian Hospital
嘉義基督教醫院 院長

Education/Training:

National Defense Medical College, Department of Medicine

Professional and Research Experience:

Vice Dean, College of Medicine, National Cheng Kung University

Director, Department of Medicine, College of Medicine, National Cheng Kung University

Director, Department of Nuclear Medicine, College of Medicine, National Cheng Kung University

Researcher, PET Center, UCLA

President, Society of Nuclear Medicine, Taiwan (R.O.C)

Selected Publications:

1. Shih Hsien Lin¹, Mei Hung Chi¹, I. Hui Lee¹, Kao Chin Chen¹, Ying Chun Tai¹, Wei Jen Yao¹, Nan Tsing Chiu¹, Dong Yu Yang¹, Chun Yu Lin¹, Po See Chen¹, Yen Kuang Yang, 2021, A pilot study on the association between the blood oxygen level-dependent signal in the reward system and dopamine transporter availability in adults with attention deficit hyperactivity disorder. *CNS Spectrums*,
2. Dom-Gene Tu, Hsuan-Yu Chen¹, Wei Jen Yao, 2021, Verification of the Efficacy of New Diagnostic Criteria for Retropharyngeal Nodes in a Cohort of Nasopharyngeal Carcinoma Patients. *International Journal of Medical Sciences (Ivyspring International Publisher)*-Vol. 18, Iss: 15, pp 3463-3469.
3. Ying Chun Tai¹, Mei Hung Chi¹, Ching Lin Chu¹, Nan Tsing Chiu¹, Wei Jen Yao¹, Po See Chen¹, Yen Kuang Yang, 2019, Availability of Striatal Dopamine Transporter in Healthy Individuals With and Without a Family History of ADHD, *Journal of Attention Disorders (SAGE Publications)*-Vol. 23, Iss: 7, pp 665-670

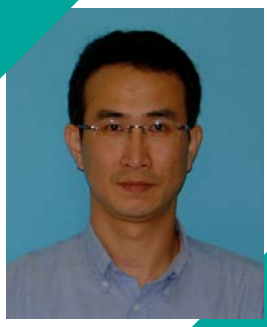


3/19 (日) 10:20-11:00
2樓，第20教室

How to Cultivate Yourself as a Distinctive Biomedical Scientist

姚維仁 Dr. Wei-Jen Yao
Chairman, Chia-Yi Christian Hospital

In my past 40 years of working experiences in medical practice, teaching, and hospital management, I deeply feel that continuing to engage in the latest academic research and exploring the latest medical knowledge development and technological innovation is to enable myself to continue to improve the medical care of patients. It is the only way to implement and improve the medical quality is an important rule to maintain the same level as that of world-class hospitals. I look forward to taking this opportunity to introduce some of my practical experience and case sharing. When we face scientific knowledge, the foundation of medicine and the problems of combining the latest engineering technology, how can we realistically make the most sense for patients and the hospital in a holistic consideration that combined both patient care purpose and healthcare system mission can be achieved. Based on this experience sharing, these provide young biomedical science researchers as a reference rule for future works.



Speaker /

馬國興
Kuo-Hsing Ma

Current Position:

Director, Department of Research and Development, National Defense Medical Center/ 國防醫學院 研究發展室 主任

Professor, Graduate Institute of Biology and Anatomy, National Defense Medical Center/ 國防醫學院生物及解剖學研究所 教授

Education/Training:

B.S., School of Pharmacy, National Defense Medical Center

M.S., Graduate Institute of Biology and Anatomy, National Defense Medical Center

Ph.D., Graduate Institute of Life Sciences, National Defense Medical Center

Professional and Research Experience:

2003-2008 Assistant Professor, Graduate Institute of Biology and Anatomy, National Defense Medical Center

2008-2012 Associate Professor, Graduate Institute of Biology and Anatomy, National Defense Medical Center

2012-2017 Director, Graduate Institute of Biology and Anatomy, National Defense Medical Center

2012- Professor, Graduate Institute of Biology and Anatomy, National Defense Medical Center

2019- Director, Department of Research and Development, National Defense Medical Center

Awards and Honors:

2022 國防部優良教師獎

2020 盧致德先生 SCI/SSCI 優良醫學論文獎

2018 梁序穆暨許織雲教授傑出研究獎

2016 國防部優良教師獎

2016 國家新創獎

Selected Publications:

1. Lin LF, Zhao YT, Chiu CH, Sun LH, Chou TK, Shiue CY, Cheng CY*, Ma KH*. Bezafibrate Exerts Neuroprotective Effects in a Rat Model of Sporadic Alzheimer's Disease. *Pharmaceuticals (Basel)*. 2022 Jan 18;15(2):109. doi: 10.3390/ph15020109.
2. Weng SJ, Chen CF, Huang YS, Chiu CH, Wu SC, Lin CY, Chueh SH, Cheng CY, Ma KH*. Olfactory ensheathing cells improve the survival of porcine neural xenografts in a Parkinsonian rat model. *Xenotransplantation*. 2020 Mar;27(2):e12569.
3. Huang KF#, Ma KH#, Jhap TY, Liu PS, Chueh SH. Ultraviolet B irradiation induced Nrf2 degradation occurs via activation of TRPV1 channels in human dermal fibroblasts. *Free Radic Biol Med*. 2019 Sep;141:220-232. #Co-first author



3/19 (日) 11:00-11:40
2樓，第20教室

Investigation of neurodegenerative disorders: applications of PET neuroimaging

馬國興 Kuo-Hsing Ma

Director, Department of Research and Development, National Defense Medical Center
Professor, Graduate Institute of Biology and Anatomy, National Defense Medical Center

Neurodegenerative disorders, caused by the progressive loss of structure or function of neurons, affect millions of people worldwide. Due to their long course of disease progression, studies for the development of treatments of neurodegenerative disorders require research tools that can be used to chronically evaluate the disease severity, as well as the changes following treatments. In addition, since neurodegenerative disorders often involve diffuse brain areas, it is of critical importance to monitor the spatial distribution of the specific bio-makers and their metabolism in the brain.

Positron emission topography (PET) provides a valuable tool that fits both needs. In combination with specific imaging agents, the PET imaging enables in vivo monitoring targeted molecules and their distributions in the brain. Here, we provide two examples of using PET imaging in the preclinical studies of the Parkinson's disease (PD) and Alzheimer's disease (AD), respectively, and show how that may facilitate the development of new treatments:

Parkinson's disease (PD) is caused by the degeneration of dopaminergic projections from the substantia nigra pars compacta (SNpc) to the striatum. Patients with PD are characterized by bradykinesia, resting tremor, muscular rigidity, and postural imbalance. Intra-striatal transplantation of human ventral mesencephalic tissue has been shown to improve motor functions in PD patients and thus a promising treatment. To further investigate the therapeutic potentials of tissue grafting in PD, we have developed an in vivo pig-to-rat xenotransplantation PD model – using swine fetal ventral mesencephalic co-grafted with the immunomodulatory cells. We demonstrated that the xenograft survival rate can be effectively monitored using PET with [18F] ADAM (a specific imaging agent for serotonin transport), [18F] FDOPA (levodopa analogue) and [18F] FE-PE2I (a specific imaging agent for dopamine transport).

Alzheimer's disease (AD) is the most common form of dementia. Patients with AD are characterized by the deposition of β -amyloid peptide ($A\beta$) in the brain and progressive memory deficits and cognitive decline. Activating a group of nuclear receptors, the peroxisome proliferator-activated receptors (PPARs), has been shown to reduce brain $A\beta$ levels in AD patients, therefore PPARs represent a promising therapeutic target for AD. Based on that, we have conducted a series of studies to investigate the therapeutic effect of bezafibrate (a pan-PPAR agonist) in streptomycin-induced AD-like mouse model. We demonstrated that using [18F] FDG and [18F] T807, PET imaging can specifically monitor the concentration and distribution of Tau protein (a biomarker for AD) in the brain.

Taken together, PET with specific imaging agents enables in vivo monitoring the distributions of targeted molecules that provides useful diagnostic or treatment information for PD or AD.



Speaker /

唐堂
Tang K. Tang

Current Position:

Vice President, Academician
Distinguished Research Fellow
Institute of Biomedical Sciences
Academia Sinica

Education/Training:

1974-1978 B.S. Dept. of Biology, Tunghai University, Taiwan
1981-1983 M.S. Dept. of Microbiology and Immunology
National Yang-Ming Medical College, Taiwan
1984-1988 M.Ph./Ph.D. Dept. of Human Genetics, Yale University, USA

Professional and Research Experience:

1988-1989 Postdoctoral Fellow
Dept. of Medicine, Hematology Section, Yale University
1989-2010 Associate Research Fellow and Research Fellow
Institute of Biomedical Sciences (IBMS), Academia Sinica
1997-1999 Deputy Director, IBMS, Academia Sinica
2004-2006 Deputy Executive Secretary, The Central Advisory Committee, Academia Sinica
2006-2007 Executive Secretary, The Central Advisory Committee, Academia Sinica
2008-2009 Director, Advisory office, Ministry of Education
2011-2012 Advisory member, Advisory Office, Ministry of Education
2010- Distinguished Research Fellow, IBMS, Academia Sinica
2022- Academician and Vice President, Academia Sinica

Awards and Honors:

Academician, Academia Sinica (2022)
Academia Sinica Investigator Award (2010, 2015, 2020)
Wang, Ming-Lin Outstanding Research Award (2014)
The Ministry of Education Academic Award (2014)
The Outstanding Research Award (National Science Council) (1992, 1995, 1998)

Selected Publications:

1. An HL, Kuo HC, Tang TK (2022) Modeling human primary microcephaly with hiPSC-derived brain organoids carrying CPAP-E1235V disease-associated mutant protein. *Front Cell Dev Biol.* 10:830432.
2. Chang CH, Chen TY, Lu IL, Li RB, Tsai JJ, Lin PY, Tang TK (2021) CEP120-mediated KIAA0753 recruitment onto centrioles is required for timely neuronal differentiation and germinal zone exit in the developing cerebellum. *Genes & Development.* 35:1445–1460.



3/18 (六) 09:40-10:40
3樓，第33教室

Centriole, Centrosome, and Cilium: How These Organelles are Built in Cells and Their Associated Diseases

唐堂 Tang K. Tang

Institute of Biomedical Sciences, Academia Sinica

The centrosome is the primary microtubule-organizing center (MTOC), which is composed of two centrioles surrounded by pericentriolar material (PCM). In vertebrates, centrioles are composed of nine triplet microtubules and are required for the formation of dynamic arrays of microtubules (MTs), the mitotic spindle, cilia, and flagella. Centrosome abnormalities have been proposed to contribute to aneuploidy, cancer, and microcephaly, while ciliary defects have been attributed to human diseases collectively known as ciliopathies, including retinal degeneration, polycystic kidney disease, Bardet-Biedl syndrome, and Joubert Syndrome. During the past 20 years, my laboratory has identified several key proteins, including CPAP (Nat Cell Biol 2009, Cell Rep 2016, J Cell Sci 2020, Front Cell Dev Biol 2022), STIL (EMBO J 2011), CEP135 (EMBO J 2013), CEP120 (J Cell Biol 2013, Sci Rep 2019, Genes & Dev 2021), RTTN (Nat Commun 2017), and Myosin-Va (Nat Cell Biol 2019) that participate in centriole duplication and cilia formation. Primary microcephaly (MCPH) is a neurodevelopmental disorder characterized by small brain size with mild to severe intellectual disability. Interestingly, mutations in many centrosomal genes were reported to cause MCPH, while their overexpression cause tumors. In my laboratory, we have used a combination of molecular and cellular, genetic, animal model, and hiPSC-derived organoid approaches to elucidate how these cellular organelles (centrioles or cilia) are built and how mutations in these genes interfere brain development resulting in primary microcephaly in humans.



Speaker /

龔行健
Hsing-Jien Kung

Current Position:

Chair Professor, Taipei Medical University, Taipei, Taiwan
Distinguished Chair Professor for Research, National Taiwan University, Taipei
Distinguished Professor Emeritus, Department of Biochemistry and Molecular Medicine
University of California Davis School of Medicine, Sacramento, CA
President Emeritus, NHRI, Taiwan

Education/Training:

National Taiwan University, BS 65-69 Chemistry
California Institute of Technology, PhD 70-75 Chemistry
University of California, San Francisco, Postdoc, 76-78 Molecular virology

Professional and Research Experience:

1990-1998 Associate Director of Basic Science, CWRU Cancer Center
1998-2012 Professor, Dept. Biochemistry and Molecular Medicine, UC Davis, School of Medicine
1998-2018 Deputy Director and Director of Basic Research, UC Davis Cancer Center
2008-2018 Distinguished Professor, Dept. Biochemistry and Molecular Medicine, UC Davis, School of Medicine
2012-2015-2018 President, National Health Research Institutes, Taiwan

Awards and Honors:

37th Joint conference in Biomedical Science, Cheng-Wen Wu Award lectureship, 2023
Bioretreat keynote speaker, Hua-Lien Taiwan, 2022
EMBO-MAC 2021, Singapore, invited speaker 2021
NIH Norman Salzman Lectureship, 2012
UC Davis symposium keynote, 2018

Selected Publications:

1. Jiang N, Xie B, Xiao W, Fan M, Xu S, Duan Y, Hamsafar Y, Evans AC, Huang J, Zhou W, Lin X, Ye N, Wanggou S, Chen W, Jing D, Fragoso RC, Dugger BN, Wilson PF, Coleman MA, Xia S, Li X, Sun LQ, Monjazebe AM, Wang A, Murphy WJ, Kung HJ, Lam KS, Chen HW, Li JJ. Fatty acid oxidation fuels glioblastoma radioresistance with CD47-mediated immune evasion Nat Commun. Mar 21;13(1):1511. (2022)
2. Chen CL, Hsu SC, Chung TY, Chu CY, Wang HJ, Hsiao PW, Yeh SD, Ann DK, Yen Y, Kung HJ. Arginine is an epigenetic regulator targeting TEAD4 to modulate OXPHOS in prostate cancer cells. Nat Commun (2021) 12:2398
3. Tseng LL, Cheng HH, Yeh TS, Huang SC, Syu YY, Chuu CP, Yuh CH, Kung HJ, Wang WC. Targeting the histone demethylase PHF8-mediated PKC α -Src-PTEN axis in HER2-negative gastric cancer. Proc Natl Acad Sci U S A. (2020) 117:24859



3/19 (日) 14:10-15:10
3樓，第30教室

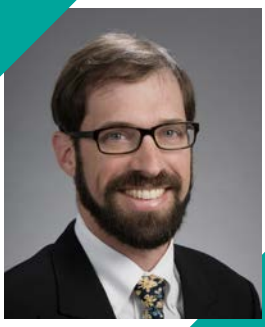
Therapy Resistance and Metabolic Plasticity in Prostate Cancer

龔行健 Hsing-Jien Kung
Taipei Medical University

Therapy resistance is among the most troubling aspects of cancer treatment. In response to the harsh treatment, cancer cells may adopt stem cell-like properties to drift to different lineages, often referred to as cell plasticity. Cell plasticity is often transcription-driven and epigenetic by nature. A case in point is prostate cancer, which initially responds to anti-androgen (e.g., enzalutamide) treatment, but later becomes resistant by trans-differentiation to neuroendocrine lineage. This lineage drift from androgen receptor (AR) positive adenocarcinoma to AR negative neuroendocrine cell types goes through a stem cell like intermediate stage where both androgen receptor and neuroendocrine markers co-exist at low level. Interestingly, cell plasticity goes hand in hand with metabolic plasticity, which very much depends on the activity state of mitochondria. Recently, we and our collaborators found that transcription factor TEAD4, a partner of YAP, plays a dual role in cell and metabolic plasticity. It is a driver of mitochondrial OXPHOS activities and is also involved in the stem cell like stage. Knockdown or knockout of TEAD affects the growth and colony formation of all three phases, adenocarcinoma, stem cell like and neuroendocrine types. TEAD regulates cell fate by being associated with super-enhancer for target genes, which are different in different phases of lineage transition. At the stem cell like stage, knockout of TEAD suppresses the expression of all critical stem cell factors. For prostate cancer which carries DNA repair deficiency such as BRCA1/2 and ATM mutation, PARP inhibitors are also used for treatment. Interestingly, TEAD is also involved in therapy resistance and the YAP/TEAD inhibitor is effective in suppressing the growth of prostate cancer cells resistant to PARP inhibitors. Our results suggest that YAP/TEAD axis represents an ideal target to thwart therapy resistance for prostate cancer.



L8



Speaker /

Andrew N. Hoofnagle

Current Position:

Professor, Department of Laboratory Medicine and Pathology, University of Washington
Head, Division of Clinical Chemistry
Director, Clinical Mass Spectrometry
Assistant Director, Clinical Immunology
Director, Nutrition and Obesity Research Center, Analytical Core
Department of Laboratory Medicine and Pathology, University of Washington

Education/Training:

M.D., University of Colorado School of Medicine, Denver, CO, USA
Ph.D., University of Colorado at Boulder, Boulder, CO, USA
Resident, Clinical Pathology, Departments of Laboratory Medicine and Pathology
University of Washington Medical Center, Seattle, WA, USA
Chief Resident, Clinical Pathology, Departments of Laboratory Medicine and Pathology
University of Washington Medical Center, Seattle, WA, USA

Professional and Research Experience:

Assistant Professor, Department of Laboratory Medicine, University of Washington
Associate Professor, Department of Laboratory Medicine, University of Washington
Head, Division of Chemistry, Department of Laboratory Medicine
Director, Clinical Mass Spectrometry, Department of Laboratory Medicine
Assistant Director, Clinical Immunology, Department of Laboratory Medicine
Deputy Director, Northwest Lipid Metabolism and Diabetes Research Laboratory
Director, Reference Laboratory Services, Department of Laboratory Medicine

Awards and Honors:

Travelling Lectureship, Canadian Society of Clinical Chemists (2019)
David Rothfield Memorial Oration, Australasian Association of Clinical Biochemists (2018)
Kubasik Award, American Association of Clinical Chemistry (AACC, 2017)

Selected Publications:

1. Pablo A, Hoofnagle AN, Mathias PC. Listening to your mass spectrometer: An open-source toolkit to visualize mass spectrometer data. (2021) *J Mass Spectrom Adv Clin Lab.* 23:44-49.
2. Huang D, Chowdhury S, Wang H, Savage SR, Ivey RG, Kennedy JJ, Whiteaker JR, Lin C, Hou X, Oberg AL, Larson MC, Eskandari N, Delisi DA, Gentile S, Huntoon CJ, Voytovich UJ, Shire ZJ, Yu Q, Gygi SP, Hoofnagle AN, Herbert ZT, Lorentzen TD, Calinawan A, Karnitz LM, Weroha SJ, Kaufmann SH, Zhang B, Wang P, Birrer MJ, Paulovich AG. (2021) Multiomic analysis identifies CPT1A as a potential therapeutic target in platinum-refractory, high-grade serous ovarian cancer. *Cell Rep Med.* 2(12):100471.



3/18 (六) 09:30-10:30
3樓，第31教室

Clinical Metabolomics: Current state and future directions

Andrew N. Hoofnagle

Department of Laboratory Medicine and Pathology, University of Washington

Clinically, small molecules are most commonly quantified using spectrophotometry and immunoassays. There are instances when these approaches are limited with respect to sensitivity, specificity, and accuracy. Many laboratories have developed alternative solutions using LC-MS/MS to improve patient care. This presentation will describe work in our laboratory and others that builds a firm foundation for the widespread application of this superior technology to meet the needs of care providers and potentially expand our clinical use of the multiplexed measurement of small molecule metabolites.



Speaker /

陳冠宇
Guan-Yu Chen

Current Position:

Professor, Institute of Biomedical Engineering, National Yang Ming Chiao Tung University

Education/Training:

Postdoctoral Fellow (2014-2015), Whitehead Institute for Biomedical Research, MIT
Postdoctoral Associate (2011-2014), Department of Chemical Engineering, NTHU
Ph.D. (2007-2011), Department of Chemical Engineering, NTHU

Professional and Research Experience:

Biosensors, Editor Board Member
臺灣奈米生醫學會 理事
臺灣生醫材料藥物釋放學會 學術委員

Awards and Honors:

科技部 2019 未來科技展「未來科技突破獎」&「最佳人氣技術獎」
MOST Young Scholar Fellowship
LUSH Prize Young Researcher Award-Asia
國立陽明交通大學 - 「李西川青年講座教授」

Selected Publications:

Materials Today Bio. Volume 15, June 2022, 100326
Computers in Biology and Medicine. Volume 143, April 2022, 105300
Materials Today Bio. Volume 14, March 2022, 100253
Applied Materials Today. Volume 26, March 2022
Communications Biology. 2022 Jan 19;5(1):70.



3/18 (六) 14:30-15:30
2樓，第29教室

From Organs-on-chips to Digital Twins: Bring Healthcare to Life

陳冠宇 Guan-Yu Chen

Institute of Biomedical Engineering, College of Electrical and Computer Engineering, National Yang Ming Chiao Tung University

The global biomimic technology has made breakthroughs in recent years. We have also reconstituted in vitro lung models, lung-on-a-chip (LoC), respiratory system and intelligent detection technologies, aiming to replace animal experiments and achieve more accurate and reliable preclinical experimental data. These platforms include alveolar and airway models and simulated respiratory systems. We have also completed health assessments of air pollution and viral infections, and established in vitro disease models of chronic pulmonary obstructive disease and pulmonary fibrosis, and it also established the operation of lung tissue for more than 45 days in vitro, realizing the functions of inflammatory response, barrier damage, particle penetration, and integrated artificial intelligence image analysis. It can even simulate different breathing patterns to explore the therapeutic evaluation of inhaled nano-based therapeutics.

In recent years, the application of digital twins (DTs) in technology has received increasing attention and has been shown to reduce medical development time and costs. Therefore, we combine the innovative concepts of LoC and DTs, deepen the application of blockchain with LoC, integrate the personal health data database platform we created: Anivance AI, and build digital personalized virtual lungs: Lungteller, extending from real-world organs-on-chips to organs-on-cards of the metaverse. We hope that this biomimic platform will popularize daily health management in the future, assist doctors in diagnosis and improve the accuracy of medication, and promote the global health industry market, so as to achieve the vision of using digital medicine to change the traditional healthcare model.



L10



Speaker /

Susan Christina Wray

Current Position:

Professor, Department of Women and Children's Health, The University of Liverpool, Liverpool Women's Hospital, Crown Street, Liverpool, L8 7SS.

Education/Training:

BSc University College London
PhD University College London

Professional and Research Experience:

Postdoctoral Assistant & Fellow, Physiology Dept., University College London
Appointed Lecturer, Physiology Dept, University of Liverpool 1990
Promoted to Chair, 1996
Head of Department

Awards and Honors:

President, International Union of Physiological Sciences (IUPS). 2022 – 2025
President, Federation of European Physiological Societies, 2020-2023
Fabio Ruzzier Plenary lecturer, Ann Mtg Italian Physiological Soc 2021
Dr Bagabaldo Plenary Lecturer, Philippines Physiological Society, Cebu. 2019
Fellow Royal College of Obstetricians and Gynaecologists,

Selected Publications:

1. Wray S, Arrowsmith, S & Sharp, A (2023) Pharmaceutical interventions in labour and delivery *Annu. Rev. Pharmacol. Toxicol.* 63:
2. Wray S & Arrowsmith S (2021) Uterine Excitability and Ion Channels, and Their Changes with Gestation and Hormonal Environment *Ann Rev Physiol* Feb 10;83:331-357.
3. Muttenthaler M, Andersson Å, Vetter I, Menon R, Busnelli M, Ragnarsson L, Bergmayr C, Arrowsmith S, Deuis JR, Chiu HS, Palpant NJ, O'Brien M, Smith TJ, Wray S, Neumann ID, Gruber CW, Lewis RJ, Alewood PF (2017). Subtle modifications to oxytocin produce ligands that retain potency and improved selectivity across species. *Science Signaling* 5;10(508). doi: 10.1126/scisignal.aan3398
4. Alotaibi, M; Arrowsmith, S; Wray S (2015). Hypoxia-induced force increase (HIFI) is a novel mechanism underlying the strengthening of labor contractions, produced by hypoxic stresses *PNAS*, 112: 9763-9768
5. Burdyga T & Wray S. (2005). Action potential refractory period in ureter smooth muscle is set by Ca sparks and BK channels. *Nature* 436, 559-562



3/18 (六) 14:30-15:30
1樓，第2教室

Can a better understanding of physiology be translated to better births

Susan Wray
University of Liverpool

As biomedical scientists we know, the uterus is centre stage in the teaching of reproduction. The uterus accepts an implanting embryo, protects and nurtures it, and at parturition, undergoes prolonged muscular activity to deliver the neonate. We also acknowledge that we cannot answer all the questions our students or patients may have in terms of its physiology. Why does the uterus not accept so many embryos? What determines the timing of parturition? Why do so many human labours require medical interventions? There remains a great need to better the physiology of reproduction.

My research focuses on the myometrium and its physiology and pathology. Despite being vital, there is still much that we do not understand about this unique smooth muscle. This limits our ability to predict, prevent and treat conditions which are major killers of mothers and babies – preterm deliveries and dysfunctional labours. Studies from my group have shown how myometrial blood flow, biochemistry and function are all intimately linked. In my presentation I will discuss what we know about the causes of, and effects of low pH on uterine contractions, and the clear link to dysfunctional labours. I will also report on a small randomized clinical trial which indicates that correction of the acidity by oral bicarbonate, can greatly improve delivery outcomes, and reduce the need for, potentially dangerous surgical interventions.

References

- Wray S, Arrowsmith S. (2021). Uterine *Excitability and Ion Channels, and Their Changes with Gestation and Hormonal Environment*. *Annu Rev Physiol.*; 83: 331-357.
- Wray S, Alruwaili M, Prendergast C (2021) *Hypoxia and labour*. *Reproduction*. 161(1): F67-F80.
- Wiberg-Itzel E, Wray S, Åkerud H.J. (2018). *A randomized controlled trial of a new treatment for labor dystocia*. *Matern Fetal Neonatal Med.* ;31(17): 2237-2244.
- Wray S. (2015). *Insights from physiology into myometrial function and dysfunction*. *Exp Physiol.* ;100(12): 1468-76

37



生物醫學聯合學術年會

2023 The 37th Joint Annual Conference of Biomedical Science

研討會演講 Symposia



JACOBS



台灣藥理學會 X 台灣毒物學會聯合學術研討會

主 題：蛇毒蛋白毒理、藥理、藥物研發和其應用

時 間：112 年 3 月 19 日 (週日)

地 點：1 樓，第 1 教室

主持人：黃德富 教授、李志恒 教授

編號	時段	講題 & 演講者
S01	09:10-09:44	Application of proteomic technologies in the development of novel antivenom against cobrabite envenoming 宋旺洲 博士 Wang-Chou Sung / National Health Research Institutes
S02	09:44-10:18	臺灣毒蛇咬傷現況並深入描述青竹絲咬傷凝血病變 Snake envenomation in TW and perspectives on Trimeresurus stejnegeri bite related coagulopathy 毛彥喬 醫師 Yan-Chiao Mao/ Division of Clinical Toxicology, Department of Emergency Medicine, Taichung Veterans General Hospital
S03	10:18-10:52	The potential application of disintegrins in arterial thrombosis and ischemic inflammatory diseases 黃德富 教授 Tur-Fu Huang/ Department of Medicine, Mackay Medical College & Graduate Institute of Pharmacology, College of Medicine, National Taiwan University
S04	10:52-11:26	Design of Integrin-specific Disintegrin for treating retinal diseases 莊偉哲 教授 Woei-Jer Chuang/ Department of Biochemistry and Molecular Biology, National Cheng Kung University College of Medicine
S05	11:26-12:00	Explore the novel function of ADAM9 in cancer progression 佘玉萍 教授 Yuh-Pyng Sher/ China Medical University



台灣藥理學會 X 中國生理學會聯合學術研討會

主 題：代謝疾病

時 間：112 年 3 月 19 日 (週日)

地 點：1 樓，第 1 教室

主持人：羅怡卿 教授、李宗玄 教授

編號	時段	講題 & 演講者
S06	13:40-14:10	Risk Factors for Diabetes, Sarcopenia, and Chronic Kidney Disease-Advanced Glycation End Products and Acrolein 劉興華 教授 Shing-Hwa Liu / Institute of Toxicology, College of Medicine, National Taiwan University
S07	14:10-14:40	Drug Discovery and Metabolic Functions of G Protein-coupled Receptors 洪明秀 研究員暨副所長 Ming-Shiu Hung / Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Taiwan
S08	14:50-15:20	Role of FKBP51 on development of obesity-associated metabolic disorders 阮琪昌 教授 Chi-Chang Juan / Institute of Physiology, College of Medicine, National Yang Ming Chiao Tung University
S09	15:20-15:50	New target in the treatment of obesity – associated metabolic syndrome and type 2 diabetes: The CCR5-mediated signaling 謝博軒 教授 Chi-Chang Juan / Institute of Physiology, College of Medicine, National Yang Ming Chiao Tung University



中華民國解剖學學會

主 題：多元應用創新研究
時 間：112 年 3 月 18 日 (週六)
地 點：3 樓，第 32 教室
主持人：許鍾瑜 副教授

編號	時段	講題 & 演講者
S10	15:40-16:20	結合幹細胞與三維列印聚癸二酸甘油酯丙烯酸支架於血管組織工程之應用 The Combination of Stem Cells and Three-dimensional Printed PGSA Scaffolds for Vascular Tissue Engineering Applications 蔣偉程 助理教授 Wei-Cheng Jiang / Department of Anatomy and Cell Biology, School of Medicine, National Yang Ming Chiao Tung University
S11	16:20-17:00	RET 對視網膜的影響 The Effect of RET Activation in mice Retina 彭偉豪 助理教授 Peng Wei Hao/ School of Medicine and Institute of Biotechnology, College of life science and medicine, National Tsing Hua University
S12	17:00-17:40-	核風暴行動：阻斷“TYRO3”核彈任務可避免大腸癌的惡性發展 Operation nuclear storm: Blocking the "TYRO3" missile to ameliorate colon cancer malignancy 許佩玲 助理教授 / Department of Anatomy, School of Medicine, College of Medicine, Kaohsiung Medical University

主 題：New Strategies for Cancer Therapy
時 間：112 年 3 月 19 日 (週日)
地 點：3 樓，第 32 教室
主持人：馮琮涵 教授

編號	時段	講題 & 演講者
S13	13:30-14:10	Anterior gradient 2 induces resistance to sorafenib via endoplasmic reticulum stress regulation in hepatocellular carcinoma 陳政義 助理教授 Cheng-Yi Chen / Department of Cell Biology and Anatomy, College of Medicine, National Cheng Kung University
S14	14:10-14:50	Functional roles of mucin-type O-glycosylation in gastric cancer 陳學亭 助理教授 Syue-Ting Chen / Department of Anatomy, College of Medicine, Chang Gung University
S15	14:50-15:30	The role of hedgehog signaling in paclitaxel sensitivity of EGFR wild-type non-small cell lung cancer 蘇柏全 助理教授 Bor-Chyuan Su / Department of Anatomy and Cell Biology, School of Medicine, College of Medicine, Taipei Medical University



中華民國免疫學會

主 題：Vaccine and immunity to SARS-CoV2 infection

時 間：112 年 3 月 19 日 (週日)

地 點：1 樓，可勝廳

主持人：謝世良 特聘研究員

編號	時段	講題 & 演講者
S16	09:30-10:10	Application of nanoparticle platforms for development of SARS-CoV-2 vaccines 陶秘華 研究員 Mi-Hua Tao/ Institute of Biomedical Sciences/ Biomedical Translation Research
S17	10:10-10:50	Anti-SARS-CoV-2 human antibodies 黃冠穎 副教授 Kuan-Ying A. Huang/ Department of Pediatrics, National Taiwan University Hospital

主 題：Immune Regulation

時 間：112 年 3 月 19 日 (週日)

地 點：1 樓，可勝廳

主持人：許秉寧 教授

編號	時段	講題 & 演講者
S18	14:00-14:30	The innate immune checkpoint NLRP12 represses IFN signatures and attenuates the progression of lupus nephritis 陳斯婷 副教授 Szu Ting Chen / Institute of Clinical Medicine, National Yang Ming Chiao Tung University
S19	14:30-15:00	Gut Paneth cells controls cholesterol homeostasis and microbiota-dependent steatosis 徐志文 副研究員 Jr-Wen Shui/ Institute of Biomedical Sciences, Academia Sinica



台灣分子生物影像學會

時 間：112 年 3 月 18 日 (週六)

地 點：2 樓，第 20 教室

主持人：林康平 教授、楊邦宏 副教授、莊惠燕 助理教授、張御展 助理教授

編號	時段	講題 & 演講者
S20	14:30-15:00	Vapor-Phase Fabrication of Scaffolds for Cellular and Tissue Engineering Applications 陳賢燁 教授 Hsien-Yeh Chen/ Department of Chemical Engineering, National Taiwan University
S21	15:30-16:00	Development and application of multifunctional microbubbles for unconventional ultrasound mediated drug delivery: transdermal and inner ear 廖愛禾 教授 Ai-Ho Liao/ Graduate Institute of Biomedical Engineering, National Taiwan University of Science and Technology
S22	16:00-16:30	Biocompatible nanomedicine for theranostic imaging 蘇家豪 教授 / Center for General Education, Chang Gung University
S23	16:30-17:00	Comprehensive Characterization of Bone & Joint Phenotypes 連韋雄 副研究員 Lian Wei Shiung/ Core Laboratory for Phenomics and Diagnostics, Kaohsiung Chang Gung Memorial Hospital



**台灣生物化學及分子生物學學會 X
中華民國細胞及分子生物學學會聯合學術研討會**

主 題：Metabolic Disease

時 間：112 年 3 月 18 日 (週六)

地 點：3 樓，第 33 教室

主持人：王琬菁 秘書長、郭紘志 秘書長

編號	時段	講題 & 演講者
S24	14:50-15:20	Protein N-terminal Acetylation in Development and Disease 阮麗蓉 研究員 Li-Jung Juan / Genomics Research Center, Academia Sinica
S25	15:20-15:50	Inflammation-induced macrophage lysyl oxidase in adipose stiffening and dysfunction in obesity 蔡曜聲 教授 Yau-Sheng Tsai / Institute of Clinical Medicine, National Cheng Kung University
S26	15:50-16:20	Metabolic Reprogramming in Health and Disease 王雯靜 特聘教授 Wen-Ching Wang / Department of Life Science & Institute of Molecular and Cellular Biology, National Tsing Hua University
S27	16:20-16:50	提升 C1SD2 長壽基因表現以開發非酒精性脂肪肝之新穎治療法 Developing novel therapeutics for nonalcoholic fatty liver disease via enhancing C1SD2 longevity gene 蔡亭芬 特聘教授 Ting-Fen Tsai / Department of Life Sciences and Institute of Genome Sciences, National Yang Ming Chiao Tung University



台灣生物化學及分子生物學學會

主 題：RNA Biology in Precision Medicine

時 間：112 年 3 月 19 日 (週日)

地 點：3 樓，第 33 教室

主持人：譚賢明 教授

編號	時段	講題 & 演講者
S28	13:00-13:30	Exploring the biogenesis of sperm-related small RNAs in <i>C. elegans</i> 蔡欣佑 助理教授 Hsin-Yue Tsai/ Institute of Molecular Medicine, National Taiwan University
S29	13:30-14:00	Mutation in human Thg1 leads to cerebellar ataxia 王健家 特聘教授 Chien-Chia Wang/ Department of Life Sciences, National Central University
S30	14:00-14:30	Non-coding RNAs act as Prognostic Indicator for Central Nervous System Metastasis in Triple-Negative Breast Cancer 呂佩融 特聘教授 Pei-Jung Lu/ Institute of Clinical Medicine, College of Medicine, National Cheng Kung University
S31	14:30-15:00	Investigation of causal relationships between genetic variants and circular RNA expression in autism 莊樹諄 研究員 Trees-Juen Chuang/ Genomics Research Center, Academia Sinica

中華民國臨床生化學會

時 間：112 年 3 月 18 日 (週六)

地 點：3 樓，第 31 教室

主持人：林佳霓 理事

編號	時段	講題 & 演講者
S32	15:10-15:50	Metabolomics Enables Precision Medicine 蕭明熙 特聘教授 Ming-Shi Shiao / Department Biomedical Sciences, Chang Gung University, Professor Emeritus
S33	15:50-16:30	Rapid Characterization and Imaging of Drugs and Potential Metabolic Disease Biomarkers on Human Skin with Ambient Ionization Tandem Mass Spectrometry 謝建台 講座教授 Jentaie Shiea / 國立中山大學化學系
S34	16:30-17:10	The laboratory evaluation of glucose and lipid metabolism from Biochemical perspectives 葉振聲 教授 Tjin-Shing Jap/ Division of Endocrinology and Metabolism, Taipei Veterans General hospital



台灣毒物學學會

主 題：毒理學家認證考試論壇 I：毒理學家認證簡介與考試經驗分享

時 間：112 年 3 月 19 日 (週日)

地 點：2 樓，第 29 教室

主持人：王應然 特聘教授

編號	時段	講題 & 演講者
S35	13:50-14:05	DTSTA 認證經驗 /My professional experience as a DTSTA 陳容甄 副教授 Rong-Jane Chen/ 國立成功大學食品安全衛生暨 風險管理研究所 Department of Food Safety/Hygiene and Risk Management, College of Medicine, National Cheng Kung University
S36	14:05-14:20	DTSTA 認證經驗 /Safety assessment of recombinant proteins using as food ingredients 傅煦媛 博士 / 研發長 Hsu-Yuan Fu/ 麴法生物技術股份有限公司 MycoMagic Biotech. Co., Ltd.
S37	14:20-14:40	美國毒物學家 (DABT) 認證流程說明 陳柏霖 博士 / 專案經理 Bo-Lin Chen/ 瑞昶科技股份有限公司 Veolia group-Apollo Technology Co., LTD

主 題：毒理學家認證考試論壇 II：美國毒理學家認證經驗分享

時 間：112 年 3 月 19 日 (週日)

地 點：2 樓，第 29 教室

主持人：劉興華 教授

編號	時段	講題 & 演講者
S38	15:00-15:15	DABT 認證經驗 /The role of the toxicologist in the academic field 王湘翠 副教授 Hsiang-Tsui Wang/ 國立陽明交通大學藥理學研究所 National Yang Ming Chiao Tung University
S39	15:15-15:30	DABT 認證經驗 /The application of toxicology on chemical substance regulation 陳柏霖 博士 / 專案經理 Bo-Lin Chen/ 瑞昶科技股份有限公司 Veolia group-Apollo Technology Co., LTD



中國生理學會

主 題：新進人員研討會
時 間：112 年 3 月 18 日 (週六)
地 點：1 樓，第 2 教室
主持人：李昆澤 教授

編號	時段	講題 & 演講者
S40	15:40-16:10	Reversing nonalcoholic fatty liver disease via antagonizing stress-induced Apolipoprotein J 孫宏羽 助理教授 Hung-Yu Sun/ Department of Physiology, National Cheng Kung University
S41	16:10-16:40	The role of exosome in multiple drug resistance and tumor progression 林佑融 助理研究員 Yu-Jung Lin/ Cardiovascular and Mitochondrial Related Disease Research Center, Hualien Tzu Chi hospital
S42	16:40-17:10	Meet the "point of no return" of renal fibrosis- Can we conquer it? 葉儀君 助理教授 Yi-Chun Yeh/ Department of Physiology and Pharmacology
S43	17:10-17:40	Fear memory in the ventral hippocampus disrupts sleep in mice 蕭逸澤 副教授 Yi-Tse Hsiao/ School of Veterinary Medicine at National Taiwan University



Speaker /

宋旺洲
Wang-Chou Sung

Current Position:

Associate Investigator

Education/Training:

PhD degree in National Cheng-Kung University, Taiwan/ Protein Chemistry and Immunology.

Professional and Research Experience:

2004-2009 Postdoctoral in National Cheng-Kung University.

2009-2011 Postdoctoral in Vaccine Research and Development Center, National Health Research Institutes.

2011-2019 Assistant Investigator in National Institute of Infectious Diseases and Vaccinology

Selected Publications:

1. Ho Phin Chong, Kae Yi Tan, Bing-Sin Liu, Wang-Chou Sung*, and Choo Hock Tan*, Cytotoxicity of Venoms and Cytotoxins from Asiatic Cobras (*Naja kaouthia*, *Naja sumatrana*, *Naja atra*) and Neutralization by Antivenoms from Thailand, Vietnam, and Taiwan, *Toxins*, 2022, 14,334.
2. Jing-Hua Lin , Wang-Chou Sung, Han-Wei Mu, Dong-Zong Hung, Local Cytotoxic Effects in Cobra Envenoming: A Pilot Study, *Toxins*, 2022, 14, 122.
3. Bing-Sin Liu, Bo-Rong Jiang, Kai-Chieh Hu, Chien-Hsin Liu, Wen-Chin Hsieh, Min-Han Lin and Wang-Chou Sung, Development of a broad spectrum antiserum against cobra venoms using recombinant three-finger toxins, *Toxins*, 2021, 13, 556.
4. Jing-Hua Lin , Wang-Chou Sung, Jiunn-Wang Liao, Dong-Zong Hung, A Rapid and International Applicable Diagnostic Device for Cobra (Genus *Naja*) Snakebites, *Toxins*, 2020, 12, 572.
5. Hsuan-Wei Huang, Bing-Sin Liu, Kun-Yi Chien, Liao-Chun Chiang, Sheng-Yu Huang, Wang-Chou Sung*, Wen-Guey Wu*, "Cobra venom proteome and glycome determined from individual snakes of *Naja atra* reveal medically important dynamic range and systematic geographic variation", *J. Proteomics*, 2015, 128, 92-104.



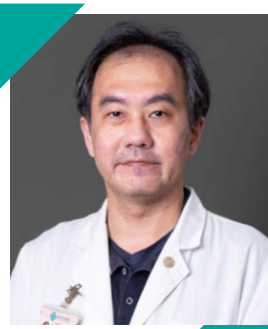
Application of proteomic technologies in the development of novel antivenom against cobrabite envenoming

宋旺洲 Wang-Chou Sung
National Health Research Institutes

Cobra snakes (genus *Naja*) are some of the most dangerous snake species in Asia, as their bites cause severe life-threatening respiratory failure and local tissue destruction. Adequate treatment of cobrabite envenoming has been critically dependent on the administration of an appropriate antivenom that contains antibodies capable of neutralizing venom toxicity. Based on field surveys and literature, cobras are widely distributed in tropical and subtropical regions and this implies the intra-species geographical variation in venom composition might affect the neutralization of antivenom. In the presentation, we demonstrate the proteomic methodologies used for generating knowledge on geographic venom variability. We also profile the cross-reactivity of antivenom and venoms from different cobra species. Our results revealed the wild dynamic of three-finger toxins in venom composition and the types of three-fingered neurotoxins (NTXs) could be critical to the potency of antivenom against the venom lethality. We further analyze the proteins contained in the blisters or tissue exudates of cobrabite victims, and results suggested three-fingered cytotoxins (CTXs) play roles in causing severe tissue necrosis in the bitten area. We will demonstrate the application of the proteomic information to design the toxin-based formulations used for developing anti-cobra antivenom with broad-spectrum potency.



S2



Speaker /

毛彥喬
Yan-Chiao Mao

Current Position:

Director of Clinical Toxicology, Department of Emergency Medicine, Taichung Veterans General Hospital

Education/Training:

MD, National Defense Medical Center

MD, Institute of Environmental and Occupational Health Sciences, National Yang-Ming University

PhD, Institute of Environmental and Occupational Health Sciences, National Yang-Ming University

Student, PhD program in Medical Biotechnology, Taipei Medical University

Professional and Research Experience:

Clinical Toxicology and Toxinology

2012-2020 中華民國環境與職業醫學會副祕書 (A deputy secretary general, Taiwan Environmental and Occupational Medicine Association)

2016 中區勞工健康服務中心副主任

2018- 國防醫學院醫學系 部定助理教授

2021- 中興大學醫學院學士後醫學系 合聘助理教授

2021-2023 臺中市政府食品安全會報委員

2022- 國軍臺中總醫院毒物檢驗中心特約醫師

2022- 臺灣毒物學學會副祕書

Selected Publications:

1. Chiang L-C, Chien K-Y, Su H-Y, et al. Comparison of Protein Variation in Protobothrops mucrosquamatus Venom between Northern and Southeast Taiwan and Association with Human Envenoming Effects. *Toxins*. 2022;14(9):643 (共同通信作者)
2. Lai C-S, Liu P-Y, Lee C-H, et al. The development of surgical risk score and evaluation of necrotizing soft tissue infection in 161 Naja atra envenomed patients. *PLOS Neglected Tropical Diseases*. 2022;16(2):e0010066 (通信作者)
3. Mao Y-C, Chuang H-N, Shih C-H, et al. An investigation of conventional microbial culture for the Naja atra bite wound, and the comparison between culture-based 16S Sanger sequencing and 16S metagenomics of the snake oropharyngeal bacterial microbiota. *PLOS Neglected Tropical Diseases*. 2021;15(4):e0009331. (共同第一作者)
4. Mao Y-C, Liu P-Y, Chiang L-C, et al. Clinical manifestations and treatments of Protobothrops mucrosquamatus bite and associated factors for wound necrosis and subsequent debridement and finger or toe amputation surgery. *Clinical Toxicology*. 2020:1-10. (第一作者)
5. Chiang L-C, Tsai W-J, Liu P-Y, et al. Envenomation by Trimeresurus stejnegeri stejnegeri: clinical manifestations, treatment and associated factors for wound necrosis. *Journal of Venomous Animals and Toxins including Tropical Diseases*. 2020;26. (通信作者)



臺灣毒蛇咬傷現況並深入描述青竹絲咬傷凝血病變 Snake envenomation in TW and perspectives on *Trimeresurus stejnegeri* bite related coagulopathy

毛彥喬 Yan-Chiao Mao

Division of Clinical Toxicology, Department of Emergency Medicine, Taichung Veterans General Hospital

School of Medicine, National Defense Medical Center

College of Medicine, National Chung Hsing University

PhD Program in Medical Biotechnology, School of Medical Laboratory Science and Biotechnology, Taipei Medical University

In Taiwan, *Trimeresurus stejnegeri stejnegeri* (green pit viper) is responsible for more than half of all the venomous snakebites annually. Envenoming syndromes primarily affect the local tissue, leading to tissue swelling and pain, occasional local ecchymosis, bullae and blister formation, and lymphangitis and lymphadenitis. Defibrinogenation and coagulopathy have rarely been reported, and the treatment remains unexplored. Herein, we described the case of a man who was bitten by *T. s. stejnegeri* on his right first toe, which later developed into grade 2 limb swelling. Severe hypofibrinogenemia (fibrinogen level <50 mg/dL), low activities of factors V and XI, plasminogen, and α 2-antiplasmin, as well as prolonged prothrombin time were observed. However, a favorable outcome was achieved by administering the antivenom specific for treating the patient without systemic bleeding or thrombosis. Therefore, knowledge of specific coagulation factor deficiencies and further biochemical evaluation of the venom's effects on coagulation factors may improve our understanding of the relationship between hemotoxins and the resulting envenoming syndromes.



Speaker /

黃德富
Tur-Fu Huang

Current Position:

2017- 馬偕醫學院 醫學系 名譽教授
2017- 台大醫學院 藥理研究所 兼任教授

Education/Training:

1985-1987 Temple University 血栓中心 博士後研究
1984 台大醫學院 藥理研究所 博士
1975 台大醫學院 藥理研究所 碩士
1972 高雄醫學院 藥學系 學士

Professional and Research Experience:

1991-2017 台大醫學院 藥理研究所 教授
2002-2008 台大醫學院 藥理研究所 教授兼主任
1985-1991 台大醫學院 藥理研究所 副教授

Awards and Honors:

2012 李天德卓越醫藥科技獎
2009 台灣大學研發創新傑出獎
2001 行政院傑出科技榮譽獎
2000 侯金堆基礎醫學生物類獎
1998~2005 國科會特約研究員

Selected Publications:

1. Yu-Ju Kuo, Yao Tsung Chang, Ching-Hu Chung, Woei-Jer Chuang, Tur-Fu Huang*. Improved antithrombotic activity and diminished bleeding side effect of a pegylated α IIb β 3 antagonist, Disintegrin. *Toxins*. 12:e426-e426, 2020.
2. Yu-Ju Kuo, Ching-Hu Chung, Tzu-Yu Pan, Woei-Jer Chuang, Tur-Fu Huang*. A novel α IIb β 3 antagonist from snake venom prevents thrombosis without causing bleeding. *Toxins*. 12:e11-e11, 2019.
3. Sung PS, Huang TF, Hsieh SL. Extracellular vesicles from CLEC2-activated platelets enhance dengue virus-induced lethality via CLEC5A/TLR2. *Nature Communications*. 3:2402-2402, 2019.
4. Kuo, Y.J., Chen, Y.R., Hsu, C.C., Peng, H.C., Huang, T.F.*. An α IIb β 3 antagonist prevents thrombosis without causing Fc γ RIIa-mediated thrombocytopenia. *Journal of Thrombosis and Hemostasis*. 15:2230-2244, 2017.
5. Chang, C.H., Chung, C.H., Tu, Y.S., Tsai, C.C., Hsu, C.C., Peng, H.C., Tseng, Y.J., Huang, T.F.*. Trowaglerix venom polypeptides as a novel antithrombotic agent by targeting immunoglobulin-Like domains of glycoprotein VI in platelet highlights. *Arterioscler Thromb Vasc Biol*. 37:1307-1314, 2017.



3/19 (日) 10:18-10:52
1樓, 第1教室

The potential application of disintegrins in arterial thrombosis and ischemic inflammatory diseases

黃德富 Tur-Fu Huang

Department of Medicine, Mackay Medical College & Graduate Institute of Pharmacology, College of Medicine, National Taiwan University

Integrins, a family of non-covalently linked $\alpha\beta$ heterodimeric cell adhesion receptors, play vital roles in platelet aggregation, inflammatory reaction, cell adhesion, cell migration, angiogenesis, and tumor progression. Disintegrins, a family of naturally-occurring Arg-Gly-Asp (RGD)/Lys-Gly-Asp (KGD)-containing polypeptides from viper snake venom, specifically bind to integrin $\alpha\text{IIb}\beta 3$, $\alpha v\beta 3$ and other integrins expressed on platelets, vascular endothelial cells, phagocytes and tumor cells, leading to blockade of platelet aggregation, angiogenesis, inflammation and tumor progression. In this talk, we explore the possible application of the novel disintegrin variants, KGDRR, a specific pure antagonist of platelet $\alpha\text{IIb}\beta 3$ and a dual $\alpha\text{IIb}\beta 3/\alpha v\beta 3$ in arterial thrombosis and bacterial infection-induced sepsis, respectively. Current clinically used platelet $\alpha\text{IIb}\beta 3$ antagonists such as Eptifibatide (Ept), are highly efficacious antithrombotic agents. However, the incidences of bleeding and thrombocytopenia are frequently reported. Our earlier study revealed that disintegrin mutants acting as $\alpha\text{IIb}\beta 3$ antagonist exhibit anti-thrombotic activity with little bleeding risk. Thus, developing a novel $\alpha\text{IIb}\beta 3$ antagonist with little bleeding risk is critical for treatment of arterial thrombosis diseases.

Through a structure-activity relationship experiment, we found an optimized $\alpha\text{IIb}\beta 3$ antagonist KGDRR mutant (8036 Da) endowed with a residue Arg55 in the KGD-loop. This mutant exhibits a highly potent activity in blocking platelet aggregation induced by collagen without causing a significant prolongation of mice tail bleeding time even administered at an intravenous dose equivalent to 20-time higher concentration while Ept caused a profound increase of bleeding time when given at 10-time effective concentration for antiplatelet aggregation. Intravenous injection of KGDRR mutant or Ept markedly delayed the occlusion time in FeCl₃-induced thrombosis model.

KGDRR mutant did not prime the platelets in binding to fibrinogen and AP5, a specific LIBs monoclonal antibody while Ept did. KGDRR mutant did not affect resting platelet binding to immobilized fibrinogen while Ept did. KGDRR mutant did not cause platelet activation in presence of AP2, an inhibitory mAb of $\alpha\text{IIb}\beta 3$ while Ept did. In contrast to Ept, KGDRR did not inhibit the hemostatic function in whole blood as measured by thromboelastometry. Thrombin-induced clot retraction of platelet-rich plasma was suppressed by Ept but not by KGDRR. Ept significantly decreased platelet count and prolonged bleeding time in Fc γ R1a transgenic mice, however, KGDRR mutant did not.

On the other hand, our earlier results showed that disintegrin Rhodostomin (Rn) exhibits anti-inflammatory activity through blocking $\alpha v\beta 3$ -induced NF- κ B and MAPK pathways and MyD88-dependent Toll-like receptor (TLR) including TLR2 and TLR4 in the production of cytokines in phagocytes. Furthermore, Rn attenuates the acute inflammatory responses in mice caused by bacterial infection, increases significantly the survival rate of the septic mice. We re-examined the effect of RGDRR on polymicrobial inflammatory caecal ligation and puncture (CLP) model. Post-treatment of RGDRR (IV) significantly reduced the seral TNF and IL-6 of CLP-treated mice, and increased the survival rate. The necrosis of hepatocytes and CLP-induced acute organ failure in mice are normalized by RGDRR treatment. Co-administration of RGDRR with cefmetazole exhibits additive therapeutic effects, providing a promising lead for drug treatment in infectious diseases caused by complicated microbial infections.

In conclusion, the novel KGDRR and RGDRR variants may provide safer therapeutic agents in arterial thrombosis, bacterial-infection induced inflammatory disorder and other integrin-related diseases.



Speaker /

莊偉哲
Woei-Jer Chuang

Current Position:

National Cheng Kung University Senior Vice President/ 國立成功大學 助理副校長

Education/Training:

Ph.D., Department of Chemistry, Florida State University

Professional and Research Experience:

Postdoctoral Fellow, Johns Hopkins University School of Medicine

Director General, Department of Life Sciences, Ministry of Science and Technology,

Chair Professor, National Cheng Kung University

Senior Vice President, National Cheng Kung University

Awards and Honors:

Outstanding Research Award of Ministry of Science and Technology

Outstanding Technology Transfer Award of Ministry of Science and Technology

K.T. Li Foundation Honorary Scholar Award

Outstanding Research Award of National Science Council of Taiwan

Outstanding Technology Transfer Award of National Science Council of Taiwan

Selected Publications:

1. Chen, Y.-C., Chang, Y.-T., Chen, C.-Y., Shiu, J.-H., Cheng, C.-H., Huang, C.-H., Chen, J.-F., and Chuang, W.-J.* (2020) "Structural insight into integrin recognition and anticancer activity of echistatin" , *Toxins*, 12, 709.
2. Chang, Y.-S., Shiu, J.-H., Jeng, W.-Y., Chen, C.-Y., Chen, Y.-C., Chang, Y.-T., Huang, C.-H., and Chuang, W.-J.* (2017) "Effects of the RGD loop and C-terminus of rhodostomin on regulating integrin α IIb β 3 recognition" , *PLoS One*, 12, e0175321.



3/19 (日) 10:52-11:26
1樓, 第1教室

Design of Integrin-specific Disintegrin for treating retinal diseases

莊偉哲 Woei-Jer Chuang

Department of Biochemistry and Molecular Biology, National Cheng Kung University College of Medicine, Tainan, Taiwan.

Integrins are $\alpha\beta$ heterodimers that are expressed on virtual all cells with adhesive capacity. They are involved in fundamental cellular processes and contribute to the initiation and/or progression of many common diseases. Disintegrins are a family of RGD-containing proteins found in snake venoms that contain 47 to 84 amino acids with 4-7 disulfide bonds. Disintegrins are snake venom proteins that bind to different types of integrins with high affinity. In our study we have successfully expressed rhodostomin (Rho), a 68-residue disintegrin with six disulfide bonds, in *Pichia pastoris* and demonstrated that we can use Rho as a molecular scaffold to design integrin specific antagonists. We showed that the residues flanking the RGD motif and in the linker region and C-terminus of disintegrins affect their integrins binding specificities and affinities. In order to design integrin-specific disintegrins, we expressed >500 Rho mutants in *Pichia pastoris* and used platelet aggregation and cell adhesion assays to identify the mutant proteins that can selectively inhibit integrins $\alpha\text{IIb}\beta 3$, $\alpha v\beta 3$, and $\alpha 5\beta 1$. We found that the mutant proteins containing the AKGDWN and ARLDDL motifs can selectively inhibit integrins $\alpha\text{IIb}\beta 3$ and $\alpha v\beta 3$, respectively. 3D structures and backbone dynamics of integrin-specific disintegrins were determined by NMR spectroscopy and X-ray crystallography. 3D structure of the integrin $\alpha v\beta 3$ -Rho complex were also determined by cryogenic electron-microscopy. According to the results of animal disease models, we found that integrins-specific disintegrins can be used for the treatment of integrins-related diseases, such as osteoporosis, age-related macular degeneration, metastatic tumors, and obstructive coronary artery disease. We now partnered with Allgenisis Biotherapeutics Inc. to design AG-73305, a single molecule that simultaneously inhibits integrin- and vascular endothelial growth factor (VEGF)-associated signal transduction. It can block inflammation, angiogenesis and fibrosis that are key to treating retinal diseases. This partnership with Allgenisis is the first academia-industry collaboration program from Taiwan to have reached the phase II clinical trial in US FDA (NCT05301751) for diabetic macular edema using disintegrins.



Speaker /

余玉萍
Yuh-Pyng Sher

Current Position:

Professor/ 教授

Education/Training:

PH.D: Institute of Molecular Medicine, College of Medicine, National Taiwan University

Professional and Research Experience:

2022- Professor, Graduate Institute of Biomedical Sciences, China Medical University
2016- Associate Professor, Graduate Institute of Biomedical Sciences, China Medical University
2015- Associate Professor, Graduate Institute of Clinical Medical Science, China Medical University
2009-2015 Assistant Professor, Graduate Institute of Clinical Medical Science, China Medical University

Awards and Honors:

2022 Boehringer Ingelheim's Grass Roots Program (Cancer Therapies)
2020 The 17th National Innovation Award in the Academic Research Category

Selected Publications:

1. Lin YS, Kuo TT, Lo CC, Cheng WC, Chang WC, Tseng GC, Bai ST, Huang YK, Hsieh CY, Hsu HS, Jiang YF, Lin CY, Lai LC, Li XG, and Sher YP*. ADAM9 functions as a transcriptional regulator to drive angiogenesis in esophageal squamous cell carcinoma. *International Journal of Biological Sciences* 17(14): 3898-3910, September 7, 2021.
2. Cheng WC, Chang CY, Lo CC, Hsieh CY, Kuo TT, Tseng GC, Wong SC, Chiang SF, Huang KCY, Lai LC, Lu TP, Chao KSC*, and Sher YP*. Identification of theranostic factors for patients with metastasis in early-stage lung adenocarcinoma. *Theranostics* 11(8):3661-3675. January 26, 2021.
3. Chou CW, Huang YK, Kuo TT, Liu JP, Sher YP*. An Overview of ADAM9: Structure, Activation, and Regulation in Human Diseases. *International Journal of Molecular Sciences* 21:7790. October 21, 2020.
4. Lin CC, Huang YK, Cho CF, Lin YS, Lo CC, Kuo TT, Tseng GC, Cheng WC, Chang WC, Hsiao TH, Lai LC, Shih JY, Liu YH, Chao KSC, Hsu JL, Lee PC, Sun X, Hung MC, Sher YP*. Targeting positive feedback between BASP1 and EGFR as a therapeutic strategy for lung cancer progression. *Theranostics* 10(24):10925-10939. August 29, 2020.
5. Lin CY, Chen HJ, Huang CC, Lai LC, Lu TP, Tseng GC, Kuo TT, Kuok QY, Hsu JL, Sung SY, Hung MC*, Sher YP*. ADAM9 promotes lung cancer metastases to brain by a plasminogen activator-based pathway. *Cancer Research* 74(18):5229-43. September 2014



Explore the novel function of ADAM9 in cancer progression

佘玉萍 Yuh-Pyng Sher
China Medical University

Metastasis is a major cause of high mortality in different types of cancers including lung cancer. The suppression of cancer metastasis is an urgent therapeutic need. We discover that membrane surface protein ADAM9 increases the plasminogen activator-based pathway, a major function to cleave blood clots, in brain-metastatic lung cancer cells. In clinical application, we can combine the two clinical-use drugs targeting this pathway to dramatically inhibit cancer cell growth. By evidence from animal models and clinical specimens, we demonstrated that ADAM9-mediated pathways promote lung cancer metastasis. Moreover, we show that ADAM9 regulates the plasminogen activator pathway in esophageal squamous cell carcinoma (ESCC). Current knowledge of membrane ADAM9 protein only focuses on its protease shedding function, which releases growth factors and angiogenic factors for tumor growth. Surprisingly, we found that ADAM9 can translocate into the nucleus and occupy chromatin to regulate the transcription of genes involved in angiogenesis. Hypoxia and stressed condition trigger the nuclear translocation of ADAM9. Our findings uncover that ADAM9 promotes angiogenesis through a previously unappreciated mechanism of transcriptional repression of genes participating in the negative regulation of angiogenesis by interacting with transcription factors p53, HIF1 α , and USF1. Nuclear ADAM9 functions as a transcriptional repressor to maintain PAI-1 at a low level. Therefore, ADAM9 is a potential target for therapeutic strategies in regulating angiogenesis and cancer metastasis. We have developed small molecule ADAM9 inhibitors that can specifically inhibit the protease activity of ADAM9. Notably, we provide innovative therapeutic strategies with ADAM9 inhibitors and combination therapy with current clinical chemotherapy in preclinical murine tumor models. Our study illustrates a more in-depth understanding of ADAM9-mediated cancer metastasis and provides a promising strategy for reducing tumor metastasis.



S6



Speaker /

劉興華
Shing-Hwa Liu

Current Position:

Professor / 教授

Education/Training:

- 1991 Ph.D., Institute of Pharmacology, College of Medicine, National Taiwan University, Taipei, Taiwan
- 1986 M.S., Institute of Pharmacology, College of Medicine, National Taiwan University, Taipei, Taiwan
- 1984 B.S., School of Pharmacy, College of Pharmacy, China Medical University, Taichung, Taiwan

Professional and Research Experience:

- 1991-1993 Instructor, Institute of Toxicology, College of Medicine, National Taiwan University
- 1993-1999 Associate Professor, Institute of Toxicology, College of Medicine, National Taiwan University
- 2005-2012 Director, Institute of Toxicology, College of Medicine, National Taiwan University
- 1999-present Professor, Institute of Toxicology, College of Medicine, National Taiwan University; Adjunct Research Fellow, Department of Pediatrics, National Taiwan University Hospital

Awards and Honors:

- The World's Top 2% Scientists by Stanford University in 2020, 2021.
- The Excellent Contribution to Journal of Food and Drug Analysis as Best Reviewer (2022)
- Award of Senior Excellent Teacher of National Taiwan University (2016)
- The 8th National Innovation Award in the Academic Research Category (2011)
- Outstanding Research Award by the Pharmacological Society in Taiwan (2009).

Selected Publications:

1. Chiu HC, et al. A ubiquitous endocrine disruptor tributyltin induces muscle wasting and retards muscle regeneration. *J Cachexia Sarcopenia Muscle*. 2022 Nov 16. Epub ahead of print.
2. Lin CY, et al. Therapeutic ultrasound halts progression of chronic kidney disease in vivo via the regulation of markers associated with renal epithelial-mesenchymal transition and senescence. *Int J Mol Sci*. 2022 Nov 2;23(21):13387.
3. Liu SH, et al. Fish Oil Enriched n-3 Polyunsaturated fatty acids improve ketogenic low-carbohydrate/high-fat diet-caused dyslipidemia, excessive fat accumulation, and weight control in rats. *Nutrients*. 2022 Apr 25;14(9):1796.
4. Chen HJ, et al. Adverse effects of acrolein, a ubiquitous environmental toxicant, on muscle regeneration and mass. *J Cachexia Sarcopenia Muscle*. 2019 Feb;10(1):165-176.
5. Huang KH, et al. Role of Calbindin-D28k in diabetes-associated advanced glycation end-products-induced renal proximal tubule cell injury. *Cells*. 2019 Jun 30;8(7):660.

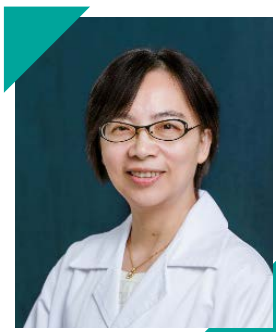


Risk Factors for Diabetes, Sarcopenia, and Chronic Kidney Disease - Advanced Glycation End Products and Acrolein

劉興華 Shing-Hwa Liu

Institute of Toxicology, College of Medicine, National Taiwan University

Metabolic diseases alter the metabolism process, which the body uses to create or obtain energy from food intake, leading to produce too much or too little of certain essential substances needed to stay healthy. Diabetes is a metabolic disease. Skeletal muscle is known as a major organ of insulin-induced glucose metabolism. The accumulated evidence has linked the mechanisms underlying sarcopenia and metabolic disease, including insulin resistance and obesity. Metabolic syndrome has been demonstrated to be associated with chronic kidney disease. Studies in our laboratory over the past few years have shown that advanced glycation end products (AGEs) and acrolein may be the risk factors for diabetes, sarcopenia, and chronic kidney disease. AGEs are generated in nonenzymatic Maillard reactions between proteins, lipids, or nucleic acids and reducing sugars. AGEs are associated with the pathogenesis of diabetic vascular complications. Our *in vitro* and *in vivo* findings suggested that the AGEs-induced endothelial-to-mesenchymal transition in islet microvasculature might contribute to islet fibrosis in diabetes. Accumulation of AGEs has been identified in ageing human skeletal muscles. Our study found that AGEs induced muscle atrophy/myogenesis impairment via a receptor for AGE (RAGE)-mediated AMPK-down-regulation of the Akt signalling pathway, suggesting that AGEs may play an important role in diabetic myopathy, and AGEs inhibitor may offer a therapeutic strategy for managing the dysfunction of muscle due to diabetes or ageing. Diabetes-associated AGEs is known to increase extracellular matrix (ECM) expression and induce renal fibrosis. We further found that inducible calbindin-D28k protein protected against AGEs/RAGE axis-induced ER stress-activated ECM induction and cell injury in renal proximal tubule cells. Acrolein, a small molecule and an extremely electrophilic aldehyde from endogenous and exogenous sources, is a dietary and environmental pollutant. A positive association of urinary acrolein metabolites and their molar sum (Σ acrolein) with diabetes and insulin resistance has been demonstrated. Acrolein has also been found to play a role in the pathogenesis of diabetic nephropathy. Our *in vitro* and *in vivo* findings suggested that low-dose acrolein inhibited myogenic differentiation *in vitro* through inhibition of Akt signaling, and induced muscle wasting and retarded muscle regeneration in mice. We further found that acrolein at doses relevant to human exposure dysregulates glucose metabolism in skeletal muscle cells and impairs glucose tolerance in mice. Taken together, these findings suggest that the endogenous and exogenous AGEs and acrolein may be the risk factors for the pathological progression of diabetes, sarcopenia, and chronic kidney disease.



Speaker /

洪明秀
Ming-Shiu Hung

Current Position:

Investigator and Associate Director/ 研究員暨副所長

Education/Training:

B.S. National Taiwan University, Taiwan

M.S. National Sun Yat-sen University, Taiwan

Ph.D. Rutgers University, New Jersey, USA

Professional and Research Experience:

Assistant Investigator, Division of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Taiwan (2004/11-2011/09)

Associate Investigator, Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Taiwan (2011/10-2022/9)

Investigator, Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Taiwan (2022/10-present)

Associate Director, Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Taiwan (2017/09-2020/08; 2020/11-2022/10; 2023/01-present)

Acting Director, Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Taiwan (2020/09-2020/10; 2022/11-2022/12)

Awards and Honors:

2021 2021 National Innovation Award renewal and Excelsior Award, Taiwan

2019 Future Tech Award, Taiwan

2017 Future Tech Award, Taiwan

2016 13th National Innovation Award, Taiwan

2016 Highlight project of National Research Program for Biopharmaceuticals

Selected Publications:

1. Hsiao, W.C., *et al.* Modulating the affinity and signaling bias of cannabinoid receptor 1 antagonists. *Bioorg. Chem.* 130:106236 (2023)
2. Yeh, T.K. *et al.* Discovery and development of a novel N-(3-bromophenyl)- [(phenylcarbamoyl)amino]methyl}-N-hydroxythiophene-2-carboximidamide indoleamine 2,3-dioxygenase inhibitor using knowledge-based drug design. *Eur. J. Med. Chem.* 229:114043, 2022.
3. Yeh, Y.N. *et al.* A structure-function approach identifies L-PGDS as a mediator responsible for glucocorticoid-induced leptin expression in adipocytes. *Biochem. Pharmacol.* 166: 203-211, 2019.
4. Chang, C.P., *et al.* Fluorine-18 isotope labeling for positron emission tomography imaging. Direct evidence for DBPR211 as a peripherally restricted CB1 inverse agonist. *Bioorg. Med. Chem.* 27: 216-223, 2019.



Drug Discovery and Metabolic Functions of G Protein-coupled Receptors

洪明秀 Ming-Shiu Hung

Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Taiwan

G protein-coupled receptor (GPCR) with seven transmembrane domains is the largest class of membrane proteins with around 800 members in the human genome. It transduces extracellular signals via its downstream trimeric G protein complex-mediated and β -arrestin-mediated pathways. Around one third of the drugs used in clinics target on GPCRs, making them attractive therapeutic options for various diseases, including metabolic disorders. Cannabinoid receptor 1 (CB1) is abundantly expressed in the brain, but moderately or barely in other peripheral tissues. Its activation by orexigenic endocannabinoids stimulates appetite. Besides, they promote lipogenesis and reduce thermogenesis. Blockade of CB1 receptors resists diet-induced obesity in preclinical models. Similarly in clinical trials, CB1 antagonists reduce body weight in obese patients. However, psychological side effects restrict the marketing of CB1 antagonists. By reversing the compound properties favorable for penetration to blood-brain barrier, DBPR211 was designed with restricted distribution to peripheral tissues. Various preclinical models demonstrate the effectiveness of DBPR211 in treating obesity, type 2 diabetes and non-alcoholic steatohepatitis, suggesting that antagonism of central CB1 receptor is not essential for these functions. DBPR211 has received IND approval to conduct phase 1 clinical trial. On the other hand, analysis of mouse tissue samples after treatment of CB1 antagonists identifies that the expression levels of several GPCRs is correlated to adiposity. One is shown to regulate fatty acid uptake in adipocytes. Subsequent studies are ongoing to investigate its regulation in metabolism.



Speaker /

阮琪昌
Chi-Chang Juan

Current Position:

Professor / 教授

Education/Training:

- 1998 Ph.D. in Physiology, National Yang-Ming University, Taipei, Taiwan
- 1993 M.S. in Physiology, National Yang-Ming University, Taipei, Taiwan
- 1991 B.S. in Biology, Tunghai University, Taichung, Taiwan

Professional and Research Experience:

- 7/1998 Postdoctoral Fellow, Department of Medical Research & Education, Veterans General Hospital-Taipei.
- 2/2003 Assistant Professor, Institute of Physiology, National Yang-Ming University.
- 8/2005 Associate Professor, Institute of Physiology, National Yang-Ming University.

Selected Publications:

1. Endothelin-1 induces lipolysis through activation of the GC/cGMP/Ca²⁺/ERK/CaMKIII pathway in 3T3-L1 adipocytes. *Biochim Biophys Acta Mol Cell Biol Lipids*. 1867: 159071, 2022.
2. Nitric oxide mobilizes intracellular Zn²⁺ via the GC/cGMP/PKG signaling pathway and stimulates adipocyte differentiation. *Int J Mol Sci*. 23: 5488, 2022.
3. Increased regulated on activation, normal T-cell expressed and secreted levels and cysteine-cysteine chemokine receptor 5 upregulation in omental adipose tissue and peripheral blood mononuclear cells are associated with testosterone level and insulin resistance in polycystic ovary syndrome. *Fertil Steril*. 116: 1139, 2021.
4. Curcumin attenuates adipogenesis by inducing preadipocyte apoptosis and inhibiting adipocyte differentiation. *Nutrients*. 11: 2307, 2019.



Role of FKBP51 on development of obesity-associated metabolic disorders

阮琪昌 Chi-Chang Juan

Institute of Physiology, College of Medicine, National Yang Ming Chiao Tung University

Abnormal adipogenesis and adipocyte dysfunctions have been suggested to be important mechanisms underlying the development of metabolic syndrome. Obesity is associated with a chronic, low-grade inflammation status. The pathogenic mechanisms at the molecular level in obesity-associated inflammation and insulin resistance are not fully understood and need to be elucidated. The 51 KD FK506-binding protein 51 (FKBP51), encoded by *Fkbp5* gene, is one of the of immunophilin family members. *Fkbp5* gene is highly expressed in adipose tissues and FKBP51 expression is most abundant in adipose tissue. Previous study indicated that FKBP51 expression progressively increases during 3T3-L1 adipocytes differentiation and play an important regulator of cellular adipogenesis. In addition, FKBP51 expression in human adipose tissue increases following dexamethasone exposure and is associated with insulin resistance. Therefore, we hypothesize that FKBP51 is a mechanism linking obesity-associated inflammation and insulin resistance. The results showed that high-fat diet (HFD) feeding induced adipose *Fkbp5* mRNA up-regulation in wild-type (WT) mice. Global *Fkbp5*-knockout (KO) can ameliorate the obesity, insulin resistance and inflammation induced by HFD feeding in mice. We also demonstrated that *Fkbp5* regulated adipocyte differentiation in vitro. For example, *Fkbp5* overexpression promoted adipogenic differentiation in 3T3-F442A preadipocytes. Suppression of endogenous FKBP51 expression by transfecting *Fkbp5* shRNA suppressed adipogenic differentiation in 3T3-F442A preadipocytes. Besides, bone marrow *Fkbp5* deficiency is successful to protecting against HFD-induced obesity, insulin resistance and inflammation in WT mice transplanted with bone marrow from *Fkbp5*-KO mice. These results suggested that FKBP51 is a novel link between obesity, adipose inflammation and insulin resistance.



Speaker /

謝博軒
Po-Shiuan Hsieh

Current Position:

Professor / 教授

Education/Training:

1982-89 M.D. (Medical Degree) National Defense Medical Center (NDMC), Taipei, Taiwan
1994-99 Ph.D. Department of Molecular Physiology and Biophysics, Vanderbilt University Medical School, USA

Professional and Research Experience:

2008-2014 Professor/Chair, Department of Physiology & Biophysics, NDMC
2014-2020 Director, Institute of Preventive Medicine, NDMC
2020- Professor, Department of Physiology & Biophysics, NDMC
2021- Director, Graduate Institute of Medical Science, NDMC

Awards and Honors:

2020 年度梁序穆暨許織雲教授基金會 傑出研究獎
2020 年度第十七屆國家新創獎 學研新創獎

Selected Publications:

1. Chan, Pei-Chi, Chieh-Hua Lu, Hung-Che Chien, Yu-Feng Tian, and Po-Shiuan Hsieh*. (2022, Nov). Adipose Tissue-Derived CCL5 Enhances Local ProInflammatory Monocytic MDSCs Accumulation and Inflammation via CCR5 Receptor in High-Fat Diet-Fed Mice. *International Journal of Molecular Sciences*, 23, 22: 14226.
2. Chan, Pei-Chi, and Po-Shiuan Hsieh* (2022, Aug). The Role and Regulatory Mechanism of Brown Adipose Tissue Activation in Diet-Induced Thermogenesis in Health and Diseases. *International Journal of Molecular Sciences*, 23,16: 9448.
3. Pei-Chi Chan, Li-Man Hung, Jiung-Pang Huang, Yuan-Ji Day, Chao-Lan Yu, Feng-Chih Kuo, Chieh-Hua Lu, Yu-Feng Tian, Po-Shiuan Hsieh* (2022, Jan). Augmented CCL5/CCR5 signaling in brown adipose tissue inhibits adaptive thermogenesis and worsens insulin resistance in obesity. *Clinical Science*, 2022, 136 (1): 121–137.
4. Pei-Chi Chan, Po-Shiuan Hsieh* (2021, Dec). The chemokine systems at the crossroads of inflammation and energy metabolism in the development of obesity. *International Journal of Molecular Science*, 2021; 22(24):13528.
5. Pei-Chi Chan, Min-Tser Liao, Chieh-Hua Lu, Yu-Feng Tian, Po-Shiuan Hsieh* (2021, Jan). Targeting inhibition of CCR5 on improving obesity-associated insulin resistance and impairment of pancreatic insulin secretion in high fat-fed rodent models. *European Journal of Pharmacology*, 891, 2021, 173703.



3/19 (日) 15:20-15:50
1樓, 第1教室

New target in the treatment of obesity – associated metabolic syndrome and type 2 diabetes: The CCR5-mediated signaling

謝博軒 Hsieh, Po-Shiuan

Department of Physiology and Biophysics, National Defense Medical Center, Taipei, Taiwan

Chemokine receptor (C–C motif) receptor 5 (CCR5) have been reported to be highly expressed in white adipose tissue (WAT) and are associated with the progression of inflammation and the development of insulin resistance in obese humans and mice. However, the causal relationship between CCR5 signaling and obesity-associated dysregulation of energy metabolism, metabolic syndrome and type 2 diabetes remains unclear. This aim was undertaken to investigate whether the inhibition of the augmented CCR5-mediated signaling could be a common target for treatment of obesity-associated energy dysregulation, insulin resistance and impairment of pancreatic insulin secretion in high-fat diet (HFD) induced rodent models and the underlying mechanism. Our data showed that HFD-induced body weight gain and impaired OGTT were significantly attenuated in those combined with Maraviroc (CCR5 antagonist) treatment in SD rats. Accordingly, mice with CCR5 deletion significantly attenuated HFD-induced impairment of OGTT and the elevated HOMA-IR value and hyperlipidemia along with HFD-suppressed gene expressions of GLUT4 and IRS-1 in epididymal adipose tissue. On the other hand, the HFD-associated islet macrophage and T-cell infiltration and H₂O₂-suppressed glucose-stimulated insulin secretion in isolated islets were significantly reversed in those cotreated with CCR5 mAb. H₂O₂ failed to change GSIS in those of CCR5 KO mice. The palmitate-induced reactive oxygen species production was significantly decreased in those cotreated with CCR5 antagonist in RIN-m5F cells. Collectively, it is suggested that targeting inhibition of the CCR5 mediated inflammatory pathway could not only improve obesity-associated insulin resistance but also directly alleviate pancreatic β -cell dysfunction. On the other hand, we demonstrated that global CCL5/CCR5 double knockout (DKO) mice have higher cold stress-induced energy expenditure and thermogenic function in brown adipose tissue (BAT) than wildtype (WT) mice. DKO mice have higher cold stress-induced energy expenditure and thermogenic function in BAT than WT mice. In primary brown adipocytes of DKO mice, the augmentation of CL-316243-stimulated thermogenic and lipolysis responses was reversed by co-treatment with AMPK α 1 and α 2 short interfering RNA (siRNA). Chronic knockdown of BAT CCL5/CCR5 signaling improved HFD-induced insulin resistance in WT mice. It is suggested that obesity-induced augmentation of adipose tissue (AT) CCL5/CCR5 signaling could, at least in part, suppress energy expenditure and adaptive thermogenesis by inhibiting AMPK-mediated lipolysis and oxidative metabolism in thermogenic AT to exacerbate the development of obesity and insulin resistance.



Speaker /

蔣偉程
Wei-Cheng Jiang

Current Position:

Assistant Professor, Department of Anatomy and Cell Biology, School of Medicine, National Yang Ming Chiao Tung University/ 國立陽明交通大學醫學系解剖學及細胞生物學科 助理教授

Education/Training:

- Ph.D. Biomedical engineering, National Yang Ming University, Taipei, Taiwan
- M.S. Anatomy & Cell Biology, National Yang Ming University, Taipei, Taiwan
- B.S. Chemical engineering, National Chung Hsing University, Taichung, Taiwan

Professional and Research Experience:

- 2022-present Assistant Professor, Department of Anatomy and Cell Biology, School of Medicine, National Yang Ming Chiao Tung University, Taipei, Taiwan
- 2016-2022 Postdoctoral Fellow, Institute of Cellular and System Medicine, National Health Research Institutes, Zhunan, Taiwan
- 2015-2016 Ph.D. On-the-job Training Program (生技高階人才培訓與就業計畫), National Health Research Institutes, Zhunan, Taiwan

Awards and Honors:

- 2022 Postdoctoral Researcher Academic Research Award, Ministry of Science and Technology (MOST), Taiwan, 2021 (科技部博士後研究人員學術研究獎)
- 2021 Excellent Poster Award, 2021 National Health Research Institutes Research Day, Zhunan, Taiwan
- 2019 2nd Prize in Poster Presentation Award, 2019 International Conference on Biology and Medical Sciences, Okinawa, Japan
- 2018 Excellent Paper (Oral Presentation) Award, 2018 National Health Research Institutes Research Day, Zhunan, Taiwan
- 2013 Travel Award to ISSCR, 2013 International Symposium on Development, Morphogenesis, and Stem Cells, The 9th Annual Meeting of Taiwan Society for Stem Cell Research, Taipei, Taiwan

Selected Publications:

- Chen CH, Ho HH, Jiang WC, Ao-leong WS, Wang J, Orekhov AN, Sobenin IA, Layne MD, Yet SF. Cysteine-rich protein 2 deficiency attenuates angiotensin II-induced abdominal aortic aneurysm formation in mice. *J Biomed Sci.* 2022;12;29(1):25.
- Jiang WC, Hsu WY, Ao-leong WS, Wang CY, Wang J, Yet SF. A novel engineered vascular construct of stem cell-laden 3D-printed PGSA scaffold enhances tissue revascularization. *Biofabrication.* 2021;13(4):045004.
- Jiang WC[†], Chen CM[†], Hamdin CD, Orekhov AN, Sobenin IA, Layne MD, Yet SF. Therapeutic Potential of heme oxygenase-1 in aneurysmal diseases. *Antioxidants (Basel).* 2020;9(11):1150. [[†], equal contribution]



3/18 (六) 15:40-16:20
3 樓，第 32 教室

結合幹細胞與三維列印聚癸二酸甘油酯丙烯酸支架於血管組織工程之應用

The Combination of Stem Cells and Three-dimensional Printed PGSA Scaffolds for Vascular Tissue Engineering Applications

蔣偉程 Wei-Cheng Jiang

Department of Anatomy and Cell Biology, School of Medicine, National Yang Ming Chiao Tung University, Taipei, Taiwan

Traditional tissue engineering was considered a promising strategy for repairing, replacing, or even regenerating damaged tissues or organs. However, the limited cell source and lacking an ideal scaffold to generate vascular networks obstructed the development of transplantable engineered tissue. With the advance of stem cell research and the advent of three-dimensional (3D) printing technology, combining stem cells with 3D printed scaffolds has shown great potential in the fabrication and customization of engineered vascular constructs. Recently, we have utilized embryonic stem cells (ESCs) and a designed poly(glycerol sebacate) acrylate (PGSA)-based scaffold with novel 3D architecture to generate vascular construct. PGSA provides an inductive substrate in terms of supporting the three-germ layer differentiation of ESCs and also promoting ESCs-derived vascular progenitor cells (VPCs) differentiation into endothelial cells (ECs). The differentiation efficiency of VPCs into ECs on PGSA was much higher than that on collagen IV or fibronectin. The results from seeding VPCs in the rotating hexagonal PGSA scaffold suggested that this 3D architectural framework was highly efficient for cell engraftment. After long-term suspension culture of the VPCs in the scaffold under directed differentiation condition, VPC-differentiated ECs were populated in the scaffold and expressed EC markers. Furthermore, transplantation of the vascular construct in mice resulted in the integration of the preformed microvasculature into the existing vasculature of host tissue, leading to revascularization and enhanced blood perfusion at the implant site. Based on these findings, our ongoing work is to adopt human induced pluripotent stem cells to efficiently differentiate into vascular cells and to create elastic hollow or bifurcated tubes by 3D printing to mimic the blood vessels in the body. Most importantly, the innovative tissue-engineered vascular construct recapitulating biological function and physical structure provides an alternative therapeutic strategy for the advancement of vascular tissue engineering in the future.



S11



Speaker /

彭偉豪
Peng Wei Hao

Current Position:

Assistant Professor in School of Medicine and Institute of Biotechnology, College of life science and medicine, National Tsing Hua University
清華大學 生命科學暨醫學院 學士後醫學系 / 生物科技研究所 助理教授

Education/Training:

Ph.D., Graduate Institute of Anatomy & Cell Biology, National Taiwan University.
B.S., Department of Physical Therapy, Chung Shan Medical University

Professional and Research Experience:

2018-2022 Assistant professor, School of Medicine for International Students, College of Medicine, I-Shou University

Selected Publications:

1. Peng WH, Kan HW, Ho YC: "Periaqueductal gray is required for controlling chronic stress-induced depression-like behavior", *Biochem Biophys Res Commun*, vol. 593, pp. 28-34, 2022.02
2. Liao ML, Kung HN, Lu KS, Shen JH, Peng WH: Alterations in the von Ebner's gland secretion and implications for taste sensation in diabetic (db/db) mice. *Histology and histopathology* 2022, 37(1):69-79 .
3. Peng WH, Liao ML, Huang WC, Liu PK, Levi SR, Tseng YJ, Lee CY, Yeh LK, Chen KJ, Chien CL, Wang NK: Conditional Deletion of Activating Rearranged During Transfection Receptor Tyrosine Kinase Leads to Impairment of Photoreceptor Ribbon Synapses and Disrupted Visual Function in Mice. *Frontiers in Neuroscience* 2021, 15:728905
4. Lee NC, Peng WH, Tsai LK, Lu YH, Wang HC, Shih YC, Pung ZX, Hu HY, Hwu WL, Tseng WI, Chien YH: Ultrastructural and diffusion tensor imaging studies reveal axon abnormalities in Pompe disease mice. *Scientific Reports* 2020, 10(1):202395.
5. Liao ML, Peng WH, Kan D, Chien CL: Distribution patterns of the zebrafish neuronal intermediate filaments in a and in ab. *Journal of Neuroscience Research* 2019, 97(2):202-214.



RET 對視網膜的影響 The Effect of RET Activation in mice Retina

彭偉豪 Peng Wei Hao

School of Medicine and Institute of Biotechnology, College of life science and medicine, National Tsing Hua University

Purpose

The receptor tyrosine kinase RET plays a key role in transducing signals related to cell growth and differentiation. Ret mutant mice show abnormal retinal activity and abnormal levels and morphology of bipolar cells, yet die on the 21st day after birth as a result of renal underdevelopment. To extend the observation period, we generated the Ret conditional knockout Chx10-Cre;C-RetI \times /I \times mouse model and analyzed the retinal function and morphological changes in mature and aging Chx10-Cre;C-RetI \times /I \times mice.

Methods

Retina-specific depletion of Ret was achieved using mice with floxed alleles of the Ret gene with CHX10-driven Cre recombinase; floxed mice without Cre expression were used as controls. Retinal function was examined using electroretinography (ERG), and 2-, 4-, 12-, and 24-month-old mice were analyzed by hematoxylin staining and immunohistochemistry to evaluate retinal morphological alterations. The ultrastructure of photoreceptor synapses was evaluated using electron microscopy.

Results

The results of the ERG testing showed that b-wave amplitudes were reduced in Chx10-Cre;C-RetI \times /I \times mice, whereas a-waves were not affected. A histopathological analysis revealed a thinner and disorganized outer plexiform layer at the ages of 12 and 24 months in Chx10-Cre;C-RetI \times /I \times mice. Moreover, the results of immunohistochemistry showed defects in the synapses of photoreceptor cells. This result was confirmed at the ultrastructural level, thus supporting the participation of Ret in the morphological changes of the synaptic ribbon.

Conclusions

Our results provide evidence of the role of Ret in maintaining the function of the retina, which was essential for preserving the structure of the synaptic ribbon and supporting the integrity of the outer plexiform layer.



Speaker /

許佩玲
Pei-Ling Hsu

Current Position:

Kaohsiung Medical University/ 高雄醫學大學

Education/Training:

2010/09-2016/06 國立成功大學 基礎醫學研究所 博士
2009/02-2010/06 國立成功大學 細胞生物與解剖學研究所 逕修博士
2004/09-2008/06 國立中興大學 昆蟲學系 學士

Professional and Research Experience:

2016/09-2017/12 國立成功大學 細胞生物與解剖學研究所 博士後研究員
2018/01-2020/07 國立成功大學 生理學科暨研究所 博士後研究員
2020/08-2022/01 國立成功大學 生理學科暨研究所 助理研究學者
2022/02- 迄今 高雄醫學大學 醫學系解剖學科 助理教授

Awards and Honors:

2020- 延攬研究學者暨執行專題研究計畫
2019- 李鎮源教授醫學研究青年學者獎
2016- 國立成功大學醫學院研究日博士班論文競賽優秀論文獎
2016- 第 14 屆中華民國解剖學會碩博士研究生學術論文競賽博士組第三名
2015- 第 83 屆歐洲動脈粥狀硬化學會大會青年研究員獎學金

Selected Publications:

1. Sheng-Feng Tsai, Pei-Ling Hsu, Yun-Wen Chen, Mohammad Shahadat Hossain, Pei-Chun Chen, Shun-Fen Tzeng, Po-See Chen, Yu-Min Kuo*. High-fat diet induces depression-like phenotype via astrocyte-mediated hyperactivation of ventral hippocampal glutamatergic afferents to the nucleus accumbens. *Molecular Psychiatry*.2022. 27(11):4372-4384.
2. Wan-Ning Li, Kuei-Yang Hsiao, Chu-An Wang, Ning Chang, Pei-Ling Hsu, Chung-Hsien Sun, Shang-Rung Wu, Meng-Hsing Wu, Shaw-Jenq Tsai*. Extracellular vesicle-associated VEGF-C promotes lymphangiogenesis and immune cells infiltration in endometriosis. *Proceedings of the National Academy of Sciences of the United States of America*. 2020. 117(41):25859-25868.
3. Pai-Sheng Chen, Wen-Tai Chiu, Pei-Ling Hsu, Shih-Chieh Lin, I-Chen Peng, Chia-Yih Wang, Shaw-Jenq Tsai*. Pathophysiological implications of hypoxia in human diseases. *Journal of Biomedical Science*. 2020. 27(1):63.
4. Chu-An Wang, I-Heng Chang, Pei-Chi Hou, Yu-Jing Tai, Wan-Ning Li, Pei-Ling Hsu, Shang-Rung Wu, Wen-Tai Chiu, Chien-Feng Li, Yan-Shen Shan, Shaw-Jenq Tsai*. DUSP2 regulates extracellular vesicle-VEGF-C secretion and pancreatic cancer early dissemination. *Journal of Extracellular Vesicles*. 2020. (1):1746529.



3/18 (六) 17:00-17:40
3 樓，第 32 教室

核風暴行動：阻斷“TYRO3”核彈任務可避免大腸癌的惡性發展 Operation nuclear storm: Blocking the "TYRO3" missile to ameliorate colon cancer malignancy

許佩玲 Pei-Ling Hsu

Department of Anatomy, School of Medicine, College of Medicine, Kaohsiung Medical University, Kaohsiung, Taiwan

Department of Medical Research, Kaohsiung Medical University Hospital, Kaohsiung, Taiwan

Colorectal cancer (CRC) is the third leading cause of cancer mortality in the world. To prevent CRC carcinogenesis, it is important to completely decipher the mechanisms underlying pathogenesis of CRC. We previously reported that aberrant expression of TYRO3, one of the TAM receptor tyrosine kinase members, plays an oncogenic role in CRC. Surprisingly, we found a strong nuclear TYRO3-immunoreactive signal in the lesion obtained from patients with advanced CRC. Herein, we aim to study the functions of nuclear TYRO3 in CRC development and identify downstream effector that transmits the cellular functions of nuclear TYRO3. We found that levels of TYRO3 nuclear translocation are positively correlated with advanced stages of CRC and negatively correlated with overall survival. Matrix metalloproteinase (MMP)-2 releases the intracellular domain of TYRO3 (ICD-TYRO3) for nuclear translocation and high MMP-2/high TYRO3 predicts the worst overall survival of CRC patients. ICD-TYRO3 promotes cell transformation in normal colon cell, epithelial-mesenchymal transition in CRC cell, and metastasis in orthotopic mouse model. Proteomic analysis identifies bromodomain-containing protein 3 (BRD3), an acetyl-lysine reading epigenetic regulator, as one of nuclear TYRO3's partners. Chromatin immunoprecipitation-next generation sequencing data reveal that TYRO3-phosphorylated BRD3 regulates genes involve in anti-apoptosis, cell cycle regulation, and epithelial-mesenchymal transition. Inhibition of MMP-2 or BRD3 activity by selective inhibitors abrogates nuclear TYRO3-induced cell proliferation, anti-apoptosis, and drug resistance *in vitro*. These data demonstrate that MMP-2-mediated TYRO3 missile is a critical process leading to BRD3 activation and aberrant gene expression, contributing to the "nuclear storm" of CRC.



S13



Speaker /

陳政義
Cheng-Yi Chen

Current Position:

Assistant professor/ 助理教授

Education/Training:

2004. 9-2006. 6 M.S., Anatomy and Cell Biology, National Yang-Ming University, Taipei, Taiwan
2006. 9-2012. 6 Ph.D., Biomedical Sciences, Chang Gung University, Taoyuan, Taiwan
2013. 8-2020. 1 Assistant Research Fellow, Department of Medical Research, Mackay Memorial Hospital, Taipei, Taiwan
2020. 2-present Assistant professor, Department of Cell Biology and Anatomy, College of Medicine, National Cheng Kung University, Tainan, Taiwan

Awards and Honors:

Travel Award

The 65th Annual Meeting of the Society for Reproductive Investigation (SRI), San Diego, USA, March 6-10, 2018.

Selected Publications:

1. Li CJ, Tsai HW, Chen YL, Wang CI, Lin YH, Chu PM, Chi HC, Huang YC, Chen CY*. Cisplatin or Doxorubicin reduces cell viability via the PTPN1A3- JAK2-STAT3 cascade in hepatocellular carcinoma. Journal of hepatocellular carcinoma, In Press
2. Chen YL, Hsieh CC, Chu PM, Chen JY, Huang YC and Chen CY*. Roles of protein tyrosine phosphatases in hepatocellular carcinoma progression ONCOLOGY REPORTS, In Press
3. Cheng CC, Ho AS, Peng CL, Chang JS, Sie ZL, Wang CL, Chen YL, Chen CY*. Sorafenib suppresses radioresistance and synergizes radiotherapy-mediated CD8+ T cell activation to eradicate hepatocellular carcinoma. International Immunopharmacology 112 (2022) 109110
4. Wang CI, Chu PM, Chen YL, Lin YH, Chen CY*. Chemotherapeutic drug-regulated cytokines might influence therapeutic efficacy in HCC. International journal of molecular sciences 2021 Dec 20; 22: 13627



Anterior gradient 2 induces resistance to sorafenib via endoplasmic reticulum stress regulation in hepatocellular carcinoma

陳政義 Cheng-Yi Chen

Department of Cell Biology and Anatomy, College of Medicine, National Cheng Kung University

Hepatocellular carcinoma (HCC) accounts for almost 80% of all liver cancers and is the sixth most common cancer and the second most common cause of cancer-related death worldwide. The survival rate of sorafenib-treated advanced HCC patients is still unsatisfactory. Unfortunately, no useful biomarkers have been verified to predict sorafenib efficacy in HCC. We assessed a sorafenib resistance-related microarray dataset and found that anterior gradient 2 (AGR2) is highly associated with overall and recurrence-free survival and several clinical parameters in HCC. However, the mechanisms underlying the role of AGR2 in sorafenib resistance and HCC progression remain unknown. We found that sorafenib induces AGR2 secretion via posttranslational modification, and AGR2 plays a critical role in sorafenib-regulated cell viability and endoplasmic reticulum (ER) stress and induces apoptosis in sorafenib-sensitive cells. Sorafenib downregulated intracellular AGR2 and conversely induces AGR2 secretion, which suppresses its regulation of ER stress and cell survival in sorafenib-sensitive cells. In addition, AGR2 is highly intracellularly expressed in sorafenib-resistant cells, which supports ER homeostasis and cell survival. We suggest that AGR2 regulates ER stress to influence HCC progression and sorafenib resistance. This is the first report that AGR2 can modulate ER homeostasis via the IRE1 α -XBP1 cascade to regulate HCC progression and sorafenib resistance. Elucidation of the predictive value of AGR2 and its molecular and cellular mechanisms in sorafenib resistance could provide additional opportunities for HCC treatment.



Speaker /

陳學亭
Syue-Ting Chen

Current Position:

Assistant Professor, Department of Anatomy, College of Medicine, Chang Gung University
長庚大學醫學院解剖學科 - 助理教授

Education/Training:

Ph.D./ Graduate Institute of Anatomy and Cell Biology, College of Medicine, National Taiwan University

M.S./ Graduate Institute of Anatomy and Cell Biology, College of Medicine, National Taiwan University

Professional and Research Experience:

2018-2020 Postdoctoral Researcher / Graduate Institute of Anatomy and Cell Biology, College of Medicine, National Taiwan University

2020-2021 Associate Researcher/ Biotechnology Company: Renorigin Innovation Institute

2021- Assistant Professor/ Department of Anatomy, College of Medicine, Chang Gung University

Selected Publications:

1. Chang KS#, Chen ST#, Sung HC, Hsu SY, Lin WY, Hou CP, Lin YH, Feng TH, Tsui KH*, and Juang HH* (2022, Sep). WNT1 Inducible Signaling Pathway Protein 1 Is a Stroma-Specific Secreting Protein Inducing a Fibroblast Contraction and Carcinoma Cell Growth in the Human Prostate. *International Journal of Molecular Sciences*, 23, 11437.
2. Sung HC#, Chang KS#, Chen ST, Hsu SY, Lin YH, Hou CP, Feng TH, Tsui KH*, and Juang HH* (2022, Aug). Metallothionein 2A with Antioxidant and Antitumor Activity Is Upregulated by Caffeic Acid Phenethyl Ester in Human Bladder Carcinoma Cells. *Antioxidants*, 11(8), 1509.
3. Hou CP#, Tsui KH#, Chen ST, Chang KS, Sung HC, Hsu SY, Lin YH, Feng TH and Juang HH* (2022, Jul). The Upregulation of Caffeic Acid Phenethyl Ester on Growth Differentiation Factor 15 Inhibits Transforming Growth Factor β /Smad Signaling in Bladder Carcinoma Cells. *Biomedicines*, 10(7), 1625.
4. Lee PC, Chen ST, Kuo TC, Lin TC, Lin MC, Huang J, Hung JS, Hsu CL, Juan HF, Lee PH, Huang MC*. C1GALT1 is associated with poor survival and promotes soluble Ephrin A1-mediated cell migration through activation of EPHA2 in gastric cancer. *Oncogene*. 2020 Mar;39(13):2724-2740.
5. Chen ST, Kuo TC, Liao YY, Lin MC, Tien YW*, Huang MC*. Silencing of MUC20 suppresses the malignant character of pancreatic ductal adenocarcinoma cells through inhibition of the HGF/MET pathway. *Oncogene*. 2018 Nov;37(46):6041-6053.



Functional roles of mucin-type O-glycosylation in gastric cancer

陳學亭 Syue-Ting Chen

Department of Anatomy, College of Medicine, Chang Gung University

Glycosylation of proteins is one of the most common post-translational modification. It creates diverse proteoforms with different functions and greatly amplifies the proteome. The known glycan structures of proteins are generated through 14 different glycosylation pathways, including N-glycosylation, 11 types of O-glycosylation, C-mannosylation and generation of GPI-anchored proteins. Our lab is interested in roles of the mucin-type O-glycosylation in cancers. We have reported that several receptor tyrosine kinases (RTKs), including EGFR and MET, are decorated with mucin-type O-glycans and their activities are modulated in cancers. C1GALT1 is a β 1,3-galactosyltransferase responsible for the critical step of mucin-type O-glycan biosynthesis. In gastric cancer, we recently found that:

1. C1GALT1 is overexpressed in gastric tumors and its high expression predicts poor prognosis.
2. C1GALT1 enhances phosphorylation of multiple RTKs.
3. C1GALT1 modifies O-glycans on EPHA2.
4. C1GALT1 increases tyrosine phosphorylation of EPHA2 induced by Ephrin A1.
5. Silencing of C1GALT1 inhibits Ephrin A1-triggered migration and decreases Ephrin A1 binding to cell surfaces.

In addition, we also observed that mutation of O-glycosylation sites on EPHA2 induces its tyrosine phosphorylation triggered by Ephrin A1. Taken together, our findings revealed that not only overall O-glycan structures but also site-specific O-glycosylation can regulate EPHA2 activity in gastric cancer cells.



S15



Speaker /

蘇柏全
Bor-Chyuan Su

Current Position:

Department of Anatomy and Cell Biology, School of Medicine, Taipei Medical University
Assistant Professor
臺北醫學大學醫學系解剖學暨細胞生物學科 助理教授

Education/Training:

國立成功大學基礎醫學研究所 博士

Professional and Research Experience:

臺北醫學大學醫學科學研究所 助理教授 (合聘)
中央研究院細胞與個體生物學研究所臨海研究站 博士後研究員
國立成功大學細胞生物與解剖學研究所 / 微生物與免疫學研究所 (合聘) 博士後研究員

Selected Publications:

Yun-Chieh Tu#, Wei-Chen Yeh#, Hsin-Hsien Yu, Yu-Cheng Lee, Bor-Chyuan Su*. Hedgehog Suppresses Paclitaxel Sensitivity Through Regulating Akt-Mediated Phosphorylation of Bax in EGFR Wild Type Non-Small Cell Lung Cancer Cells. *Frontiers in Pharmacology*. 2022 Feb 18;13:815308.



3/19 (日) 14:50-15:30
3樓，第32教室

The role of hedgehog signaling in paclitaxel sensitivity of EGFR wild-type non-small cell lung cancer

蘇柏全 Bor-Chyuan Su

Department of Anatomy and Cell Biology, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan.

Non-small cell lung cancer (NSCLC) is a common and deadly disease around the world. For the nearly 50% of NSCLC patients with tumors harboring wild-type epidermal growth factor receptor (EGFR WT), therapeutic options are highly limited, and chemotherapy is the primary treatment. Compounding this issue, EGFR WT NSCLC patients usually have poor response to chemotherapy. Thus, new therapeutic strategies are urgently needed to improve chemotherapy response in EGFR WT NSCLC patients. Previous work demonstrated that hedgehog signaling is highly induced in NSCLC, and its expression levels is associated with poor clinical outcome. However, its role in chemotherapy response of EGFR WT NSCLC patients is still unclear. In the present study, we demonstrate that hedgehog signaling is induced by paclitaxel (PTX) in EGFR WT NSCLC cells. Furthermore, suppression of hedgehog signaling by a specific hedgehog inhibitor, GDC-0449 (Vismodegib), increases NSCLC cell sensitivity to PTX. GDC-0449 also enhances PTX-induced mitochondrial damage and reactive oxygen species production. We also found that hedgehog induces Akt phosphorylation, which in turn phosphorylates Bax at Ser184. This phosphorylation event switches the activity of Bax from pro- to anti-apoptotic, promoting resistance of EGFR WT NSCLC cells toward PTX. Together, our findings suggest that inhibition of hedgehog might be a promising strategy to enhance the therapeutic sensitivity of EGFR WT NSCLC to PTX.



S16



Speaker /

陶秘華
Mi-Hua Tao

Current Position:

Research Fellow and CEO, Institute of Biomedical Sciences/Biomedical Translation Research Center, Academia Sinica/ 中央研究院生物醫學研究所研究員 / 生醫轉譯中心執行長

Education/Training:

- 1979-1983 B.S. National Taiwan University, Taipei, Taiwan
- 1985-1986 Master, Microbiology&Immunology, Columbia University, New York, U.S.A.
- 1985-1990 Ph.D., Microbiology&Immunology, Columbia University, New York, U.S.A.
- 1990-1993 Postdoctoral fellow, Oncology, Stanford University, U.S.A.

Professional and Research Experience:

- 2019-present CEO, Translational Medicine Division, Biomedical Translation Research Center, Academia Sinica
- 2006-2008 Deputy Director, IBMS, Academia Sinica.
- 2004-present Research Fellow, IBMS, Academia Sinica, Taipei, Taiwan
- 2005-2006 Coordinator, Division of Infectious Disease and Immunology, IBMS, Academia Sinica.
- 1998-2004 Associate Research Fellow, IBMS, Academia Sinica, Taipei, Taiwan
- 1997-1999 Coordinator, Division of Cancer Research, IBMS, Academia Sinica.
- 1993-1998 Assistant Research Fellow, IBMS, Academia Sinica, Taipei, Taiwan

Awards and Honors:

- 2022 Outstanding Biomedical Award (卓越醫藥科技獎), 18th Tien Te Lee Biomedical Awards (第十八屆永信李天德醫藥科技獎)
- 2003 Outstanding Research Award, National Science Council, Taiwan (國科會傑出研究獎).
- 2001 ISI Citation Classic Award for "Most-Cited Papers" from 1981-1999 in Taiwan. ISI Thomson Scientific and National Science Council, Taiwan. (ISI 台灣經典引文獎, 台灣地區 1981-1999 年引用次數最多的 20 篇論文).
- 2000 Outstanding Research Award, National Science Council, Taiwan (國科會傑出研究獎).
- 1999 Research Award for Junior Research Investigators, Academia Sinica, Taipei, Taiwan (中央研究院年輕學者研究著作獎).

Selected Publications:

1. Lee I. J., Y. H. Lan, P. Y. Wu, Y. W. Wu, T. H. Chen, Y. H. S. C. Tseng, T. J. Kuo, C. P. Sun, J. T. Jan, H. H. Ma, C. C. Liao, J. J. Liang, H. Y. Ko, C. S. Chang, W. C. Liu, Y. A. Ko, Y. H. Chen, Z. L. Sie, S. L. Tsung, Y. L. Lin, I. H. Wang and M. H. Tao*. *A receptor-binding domain-based nanoparticle vaccine elicits durable neutralizing antibody responses against SARS-CoV-2 and variants of concern. Emerg Microbes Infect.* 2023



Application of nanoparticle platforms for development of SARS-CoV-2 vaccines

陶秘華、李逸容、孫承溥、藍玉樺、吳品逸

Mi-Hua Tao, I-Jung, Lee, Cheng-Pu Sun, Yu-Hua Lan and Ping-Yi Wu

Institute of Biomedical Sciences/Biomedical Translation Research

The COVID-19 pandemic has highlighted the need for effective vaccines against SARS-CoV-2. In this study, we aimed to develop such vaccines to overcome the challenges posed by the emergence of new variants. We first developed the subunit vaccine ASD254, which uses a nanoparticle platform to deliver the spike receptor-binding domain (RBD) protein of the virus and induces high levels of neutralizing antibodies. Our results show that the neutralizing antibodies produced by the vaccine are long-lasting and effective against variants of concern. To address the emergence of new variants, we also developed a panel of next-generation vaccines using mRNA-lipid nanoparticle technology, including Delta-specific, Omicron-specific, and Hybrid vaccines. Our findings suggest that the Hybrid vaccine, which combines RBD sequences from the two dominant strains, generates strong neutralizing antibodies against the Omicron variant and low but significant levels against other variants. When used as a third booster dose, the Hybrid vaccine showed the highest potency of neutralizing antibodies against Omicron. Our study highlights the potential of nanoparticle vaccines and variant-specific mRNA vaccines for fast response to new variant outbreaks.

COVID-19 大流行突顯了對 SARS-CoV-2 有效疫苗的需求。本研究旨在開發疫苗，以克服新變種帶來的挑戰。我們首先開發了一種名為 ASD254 的次單位疫苗，該疫苗使用奈米顆粒平台傳送新冠病毒刺突蛋白受體結合區 (RBD) 為抗原，產生高濃度的中和抗體和保護性免疫反應。疫苗產生的中和抗體持久，至少可以保持一年，並對新冠病毒高關注變異株有效。我們還使用 mRNA 脂質奈米顆粒技術開發了一系列次世代疫苗，包括 Delta 特異性、Omicron 特異性和混合疫苗。混合疫苗包含了 Delta 和 Omicron (BA.1) 兩個主要株的 RBD 序列，能產生高價的對 Omicron 的中和抗體以及對其他變種的低但明顯的中和抗體濃度。當作為第三次加強劑時，混合疫苗對 Omicron 的中和抗體效力最強。我們的研究證實了以奈米顆粒遞送變種特異性 mRNA 疫苗具快速回應新病毒變種爆發的潛力。



Speaker /

黃冠穎
Kuan-Ying A. Huang

Current Position:

台大醫院 兒童感染科 主治醫師
台灣大學 免疫學研究所 副教授

Education/Training:

台灣大學 醫學系 學士
牛津大學 臨床醫學系 博士

Awards and Honors:

2022 年 年度傑出研究論文獎，台灣感染症醫學會
2021 年 第 17 屆永信李天德醫藥科技獎 青年醫藥科技獎

Selected Publications:

1. Chen et al, A randomized controlled trial of heterologous ChAdOx1 nCoV-19 and recombinant subunit vaccine MVC-COV1901 against COVID-19. *Nature Communications*. 2022.
2. Huang et al, Structures and therapeutic potential of anti-RBD human monoclonal antibodies against SARS-CoV-2. *Theranostics*. 2022.
3. Huang KA, Structural basis for neutralization of enterovirus. *Current Opinion in Virology*. 2021.
4. Huang et al, Breadth and function of antibody response to acute SARS-CoV-2 infection in humans. *PLoS Pathogens*. 2021.
5. Huang et al, Structural and functional analysis of protective antibodies targeting the threefold plateau of enterovirus 71. *Nature Communications*. 2020.



Anti-SARS-CoV-2 human antibodies

黃冠穎 Kuan-Ying A. Huang

Department of Pediatrics, National Taiwan University Hospital
Graduate Institute of Immunology, National Taiwan University

Antibody-mediated immune response plays a key role in protection against SARS-CoV-2 infection in humans. Spike is one major antigen that elicits antibody response to SARS-CoV-2 in humans and our study tries to delineate multiple facets of anti-spike antibodies generated upon the antigen exposure. Anti-RBD antibodies constitute the primary part of virus neutralization activities in the antibody response. However, spike has been accumulating mutations and those RBD mutations substantially affect the activity of neutralizing antibodies induced by natural infection and immunization. We are also interested in deciphering the function and targeting epitopes of broadly neutralizing anti-RBD antibodies in humans.



Speaker /

陳斯婷
Szu-Ting Chen

Current Position:

Associate Professor/ 國立陽明交通大學臨床醫學研究所 副教授

Education/Training:

Ph.D., Life Science (Immunology), National Yang-Ming University, Taiwan
MS., Life Science (Plant genetic engineering), National Taiwan University, Taiwan
BS., Agronomy, National Taiwan University, Taiwan

Professional and Research Experience:

Post-doctoral fellow, Genomic Research Center, Academia Sinica, Taiwan.
Post-doctoral fellow, Lineberger Comprehensive Cancer center, University of North Carolina at Chapel Hill, USA

Awards and Honors:

2019 中華免疫學會傑出研究學者獎
2020 科技部指導大專生研究計畫研究創作獎

Selected Publications:

1. Yen-Po Tsao, Fang-Yu Tseng, Chih-Wei Chao, Ming-Han Chen, Yi-Chen Yeh, Babamale Olarewaju Abdulkareem, Se-Yi Chen, Wen-Ting Chuang, Pei-Ching Chang, I-Chun Chen, Pin-Hsuan Wang, Chien-Sheng Wu, Chang-Youh Tsai, and Szu Ting Chen*. NLRP12 is an innate immune checkpoint for repressing IFN signatures and attenuating lupus nephritis progression. *Journal of Clinical Investigation*, 134, (1), (2023) *corresponding author
2. Chen S-T*, Chen L, Lin S-C., Chen, S-Y., Tsao Y-P., Guo-H., Li-F-J., Tseng W-T., Tam-Jason., Chao C-W., Ting P.J.*, NLRP12 Regulates Anti-viral RIG-I Activation via Interaction with TRIM25. *Cell Host & Microbe* 25, 1-15 (2019) *corresponding author
3. Chen S-T, Li, F-J, Hsu, T-Y, Liang, S-M, Yeh, -Y-C, Liao, W-Y, Chou, T-Y, Chen, N-J and Hsieh, S-L, CLEC5A is a critical receptor in innate immunity against Listeria infection. *Nature Communications*, 8 Article number:299 (2017)
4. Chen, S-T, Liu R-S, Wu M-F, Lin Y-L, Chen S-Y, Hsieh S-L et al. CLEC5A Regulates Japanese Encephalitis Virus-Induced Neuroinflammation and Lethality. *PLoS Pathogens*, 8(4): e1002655 (2012)
5. Chen, S-T, Lin, Y-L, Huang, M-T, Wu, M-F, Cheng, S-C, Lei, H-Y, Lee, C-K, Chiou, T-W, Wong, C-H, and Hsieh, S-L, CLEC5A is critical for dengue virus-induced lethal disease. *Nature* 453, 672-676 (2008).



3/19 (日) 14:00-14:30
1 樓，可勝廳

The innate immune checkpoint NLRP12 represses IFN signatures and attenuates the progression of lupus nephritis.

曹彥博，曾方禹，趙之偉，巴巴馬，陳斯逸，莊雯婷，陳斯婷

Yen-Po Tsao, Fang-Yu Tseng, Chih-Wei Chao, Babamale Olarewaju Abdulkareem, Se-Yi Chen, Wen-Ting Chuang, Szu Ting Chen*

Institute of Clinical Medicine, National Yang Ming Chiao Tung University

Signaling driven by nucleic acid sensors participates in interferonopathy-mediated autoimmune diseases. NLRP12, a pyrin-containing NLR protein, is a negative regulator of innate immune activation and type I interferon (IFN-I) production. Peripheral blood mononuclear cells (PBMCs) derived from systemic lupus erythematosus (SLE) patients expressed lower levels of *NLRP12*, with an inverse correlation with *IFNA* expression and high disease activity. *NLRP12* expression was transcriptionally suppressed by runt-related transcription factor 1-dependent (RUNX1-dependent) epigenetic regulation under IFN-I treatment, which enhanced a negative feedback loop between low *NLRP12* expression and IFN-I production. Reduced NLRP12 protein levels in SLE monocytes was linked to spontaneous activation of innate immune signaling and hyperresponsiveness to nucleic acid stimulations. Pristane-treated *Nlrp12*^{-/-} mice exhibited augmented inflammation and immune responses; and substantial lymphoid hypertrophy was characterized in NLRP12-deficient lupus-prone mice. The NLRP12 deficiency mediated- increase of autoantibody production, intensive glomerular IgG deposition, monocyte recruitment, and the deterioration of kidney function were bound to IFN-I signature-dependent manner in the mouse models. Collectively, we reveal a remarkable link between low *NLRP12* expression and lupus progression, which suggests the impact of NLRP12 on homeostasis and immune resilience.



Speaker /

徐志文
Jr-Wen Shui

Current Position:

Associate Research Fellow, Institute of Biomedical Sciences, Academia Sinica
副研究員，中研院生物醫學科學研究所

Education/Training:

1995 MS in Immunology, National Taiwan University, Taiwan
2004 PhD in Immunology, Baylor College of Medicine, Houston, USA

Professional and Research Experience:

2004 Postdoctoral fellow, Baylor College of Medicine, Houston, USA
2006 Postdoctoral fellow, La Jolla Institute, San Diego, USA
2013 Instructor, La Jolla Institute, San Diego, USA
2014 Assistant Research Fellow, Institute of Biomedical Sciences, Academia Sinica

Awards and Honors:

2021 Grand Challenge Program Seed Grant Award, Academia Sinica
2015 Career Development Award, Academia Sinica
2014 Career Development Award, Crohn's & Colitis Foundation of America, USA
2008 NIH-F32 Postdoctoral Fellowship Award, USA
2006 NIH-T32 Postdoctoral Fellowship Award, USA

Selected Publications:

1. GY Seo, D Takahashi, Q Wang, Z Mikulski, A Chen, TF Chou, P Marcovecchio, S McArdle, A Sethi, JW Shui, M Takahashi, CD Surh, H Cheroutre, and M Kronenberg. Epithelial HVEM maintains intraepithelial T cell survival and contributes to host protection. *Science Immunology* 7: eabm6931 (Jul 2022)
2. C Stienne, RV Slane, L Elmen, M Veny, S Huang, J Nguyen, E Chappell, MO Balmert, JW Shui, MA Hurchla, M Kronenberg, SN Peterson, KM Murphy, CF Ware, and JR Sedy. Btla signaling in conventional and regulatory lymphocytes coordinately tempers humoral immunity in the intestinal mucosa. *Cell Reports* 38:110533 (Mar 2022)
3. HY Chiang, HH Lu, JN Sudhakar, YW Chen, NS Shih, YT Weng, and JW Shui*. IL-22 initiates an IL-18-dependent epithelial response circuit to enforce intestinal host defense. *Nature Communications* 13:874 (Feb 2022)
4. JN Sudhakar, HH Lu, HY Chiang, CS Suen, MJ Hwang, SY Wu, CN Shen, YM Chang, FA Li, FT Liu, and JW Shui*. Luminal Galectin-9-Lamp2 interaction promotes lysosome stabilization and facilitates autophagy to prevent pathogenesis in the pancreas and intestine. *Nature Communications* 11:4286 (Aug 2020)



Gut Paneth cells controls cholesterol homeostasis and microbiota-dependent steatosis

蘇塔克，呂學翰，陳郁文，江宏宇，徐志文

Janaki N Sudhakar, Hsueh-Han Lu, Yu-Wen Chen, Hung-Yu Chiang, Jr-Wen Shui
Institute of Biomedical Sciences, Academia Sinica, Taiwan

Carbohydrate-binding protein, Galectin-9, is a risk factor for inflammatory Crohn's disease in the gut. We previously reported that Galectin-9, by binding to N-glycosylated Lamp2 at N¹⁷⁵, is crucial for lysosome function and colitis prevention, predominantly by acting on autophagy-active Paneth cells in the small intestine. Besides Lamp2, Galectin-9 also interacts with Niemann-Pick type C1 (NPC1), an authentic cholesterol transporter on the lysosome membrane, in an N-glycan-dependent manner. Specifically, Galectin-9^{R64} in the N-terminal carbohydrate-recognition domain (CRD) preferentially interacts with glycosylated Lamp2^{N175}, while Galectin-9^{R238} in the C-terminal CRD is crucial for binding to glycosylated NPC1. Mechanistically, the Galectin-9-Lamp2^{N175} interaction maintains an optimal lysosomal NPC1 level to facilitate cholesterol egress out of lysosome which is indispensable for autophagy and host defense.

Mutation of NPC1 in humans causes progressive and lethal neurodegeneration and is also associated with hepatotoxicity and Crohn's disease in the gut. Intriguingly, in vitro disruption or ablation of the Lamp2^{N175}-Galectin-9-NPC1 trimeric interaction in gut epithelial cells causes cholesterol accumulation and autophagy blockade. In vivo, conditional deletion of Galectin-9 in gut Paneth cells or Lamp2^{N175D} knock-in mice causes reduced crypt immunity, hepatic bacterial translocation, and progressive lipid accumulation in gut epithelium, adipose tissues, and liver, which consequently lead to fatty liver in aged mice. Correlated to steatosis progression, kinetic analysis of fecal microbiota in mutant mice reveals a microbial dysbiosis, characterized by a common and significant loss of *Lactobacillus spp.* To establish a causal link between *Lactobacillus* and steatosis, concurrent analyses of fecal microbiota, liver pathology, and ileum RNA seq were performed in mice after 12 weeks of daily oral *Lactobacillus* gavage. Significantly, without causing any gut tissue alterations, *Lactobacillus* injection in steady-state mutant mice indeed expand *Lactobacillus* levels but reduced hepatic cholesterols and fatty liver pathology, likely by promoting gut epithelial tryptophan metabolism and fatty acid oxidation. It appears that injected *Lactobacillus spp.* could promote host gut epithelium to produce more Ahr (aryl hydrocarbon receptor) ligands during metabolism, which subsequently upregulate Ahr target genes known to associate with fatty liver, such as *Il22*, *Rorc*, *Fut2*, *Cdkn1b*, and *Slc22a1*. Collectively, our findings pinpoint a crucial role of NPC1-mediated Paneth cells in host defense, as well as microbiota-regulated cholesterol homeostasis and steatosis. We therefore propose that Paneth cells are the key metabolic and pathologic origin of NPC1 mutation in the gut and this explains why NPC1 patients might have concurrent increased bacterial infection, Crohn's disease, accumulated cholesterol, obesity, and hepatic disorders.



S20



Speaker /

陳賢燁
Hsien-Yeh Chen

Current Position:

Professor/ 教授

Education/Training:

Ph.D.

Chemical Engineering

University of Michigan- Ann Arbor

Professional and Research Experience:

Biomaterials, biomolecular engineering, implant devices, macro- and nano- particles, surface modification, polymer science

Awards and Honors:

2023 生策會國家新創獎 - 精進獎

2021 The SCEJ (日本化工學會) Award for Outstanding Asian Researcher and Engineer

2021 台灣化學產業菁英獎 - 卓越研發獎

2021 行政院環保署 - 第 2 屆綠色化學應用及創新獎

2017 國科會 - 吳大猷先生紀念獎

Selected Publications:

1. C.-Y. Wu, T.-Y. Wu, Z.-Y. Guan, P.-Y. Wang, Y.-C. Yang, C.-W. Huang, T.-H. Lin, H.-Y. Chen* *Nature Communications*, 2021, 12, 3413.
2. Y.-R. Chiu, Y.-T. Hsu, C.-Y. Wu, T.-H. Lin, Y.-Z. Yang, H.-Y. Chen* *Chemistry of Materials*, 2020, 3, 1120.
3. H.-Y. Tung, Z.-Y. Guan, T.-Y. Liu, H.-Y. Chen* *Nature Communications*, 2018, 9, 2564.
4. S.-T. Chen, C.-Y. Wu, H.-Y. Chen*. *ACS Applied Materials & Interfaces*, 2018, 10, 31882.
5. C.-Y. Wu, C.-W. Chang, R.-H. Yuan, Y.-C. Chiang, J.-T. Chen, D.-Y. Kang, H.-Y. Chen* *Nanoscale*, 2017, 9, 14787.



3/18 (六) 14:30-15:00
2樓，第20教室

Vapor-Phase Fabrication of Scaffolds for Cellular and Tissue Engineering Applications

陳賢燁 Hsien-Yeh Chen

Department of Chemical Engineering/National Taiwan University
Molecular Imaging Center/ National Taiwan University

Functionalized poly(p-xylylenes) can be deposited via chemical vapor deposition (CVD) polymerization to generate polymer materials. For instance, such a CVD process can prepare the polymer as a thin polymer coating that can be generically applied to a wide variety of substrates and establish a reactive interface that allows for further modification; related applications have been shown to provide engineered interface properties to resist bacteria/biofilm formation, to prevent non-specific adsorption of proteins and cells (antifouling), and to manipulate cellular activities including proliferation, differentiation, and spheroids formation for a range of cells and stem cells. Furthermore, the coating technology has been used for the encapsulation of liquids and to result in a revolutionary production of an intraocular lens (IOL), and the new IOL exhibited: (i) enhanced compatibility and stability to avoid leaching of potential harmful substances to the surrounding biological environment and (ii) customizable optical and biological properties for diverse patient needs. Finally, instead of forming conventional thin films, the vapor deposition of the poly-para-xylylene polymers on a dynamic substrate, i.e., sublimating ice, was found to produce three dimensional bulk materials and composites with controllable porosity and size. Following such a vapor-phase process, we fabricated aligned polychloro-p-xylylene scaffold with controllable pore size, alignment structures, as well as the biochemical properties. The study was examined by first accommodating (pre-loading cells) 3T3 cells to verify the inducibility of the cell alignment for the polychloro-p-xylylene scaffold. Follow-up experiments with additions of growth factors (Wnt-3a and FGF-2) were performed for accommodations of hDPSCs and were cultured on the fabricated aligned scaffolding materials. The results by Live/Dead kit demonstrated enhanced cell metabolic activities of the hDPSCs by showing upregulated expressions of OCN and DSPP markers. Moreover, imaging techniques by SEM and confocal microscopy revealed the populated hDPSCs with differentiation to produce dental pulp cells along the aligned structures and the regulated microenvironments. The studies are expandable for more mimicry of physical and biological scaffolding devices for regenerative therapies and applications



S21



Speaker /

廖愛禾
Ai-Ho Liao

Current Position:

Professor/Vice dean in NTUST R & D office 教授兼副研發長

Education/Training:

Ph.D. Electrical Engineering, National Taiwan University, Taiwan

M.S. Biomedical Imaging and Radiological Science (molecular imaging and nuclear medicine), National Yang-Ming University, Taiwan

B.S. Biomedical Imaging and Radiological Science, National Yang-Ming University, Taiwan

Professional and Research Experience:

02/2018-Present Professor, Graduate Institute of Biomedical Engineering, National Taiwan University of Science and Technology, Taipei, Taiwan.

02/2018-Present Adjunct Professor, Department of Biomedical Engineering, National Defense Medical Center, Taipei, Taiwan.

Awards and Honors:

Dr. Liao has received Outstanding Young Researcher Project Award from 2011 to 2014, Dr. Ta-You Wu Memorial Award (Outstanding Young Researcher Award) from Ministry of Science and Technology (MOST) in 2017, Taiwan Innovation Award (two awards) in 2018, Taiwan Innovation Advanced Award in 2020, 2021, and 2022. She published a paper "Effectiveness of a Layer-by-Layer Microbubbles-Based Delivery System for Applying Minoxidil to Enhance Hair Growth to Enhance Hair Growth" in "Theranostics (2020 IF=11.556) 2016, 6(6), 817-827." and used as the journal front cover page image.

Selected Publications:

1. Ai-Ho Liao, Chih-Hung Wang, Bo-Han Wang, Yi-Chun Lin, Ho-Chiao Chuang, Hao-Li Liu, and Cheng-Ping Shih. Combined use of microbubbles of various sizes and single-transducer dual-frequency ultrasound for safe and efficient inner ear drug delivery. *Bioengineering & Translational Medicine*, e10450, 2022. (SCI) IF: 10.684, 12/98. Q1 (ENGINEERING, BIOMEDICAL)
2. Ai-Ho Liao, Yu-Chen Chen, Chia-Yu Chen, Shun Cheng Chang, Ho-Chiao Chuang, Dao-Lung Lin, Chien-Ping Chiang, Chih-Hung Wang, Jehng-Kang Wang. Mechanisms of ultrasound-microbubble cavitation for inducing the permeability of human skin. *Journal of Controlled Release*, 349:388-400, 2022. (SCI) IF: 11.467, 12/279. Q1 (PHARMACOLOGY & PHARMACY).
3. Ai-Ho Liao, Cheng-Ping Shih*, Ming-Wei Li, Yi-Chun Lin, Ho-Chiao Chuang, Chih-Hung Wang*. "Development of a thermosensitive poloxamer 407-based microbubble gel for ultrasound-mediated inner ear drug delivery" *Drug Delivery*, 28(1):1256-1271, 2021. (SCI) IF:6.819, 34/279. Q1 (PHARMACOLOGY & PHARMACY)



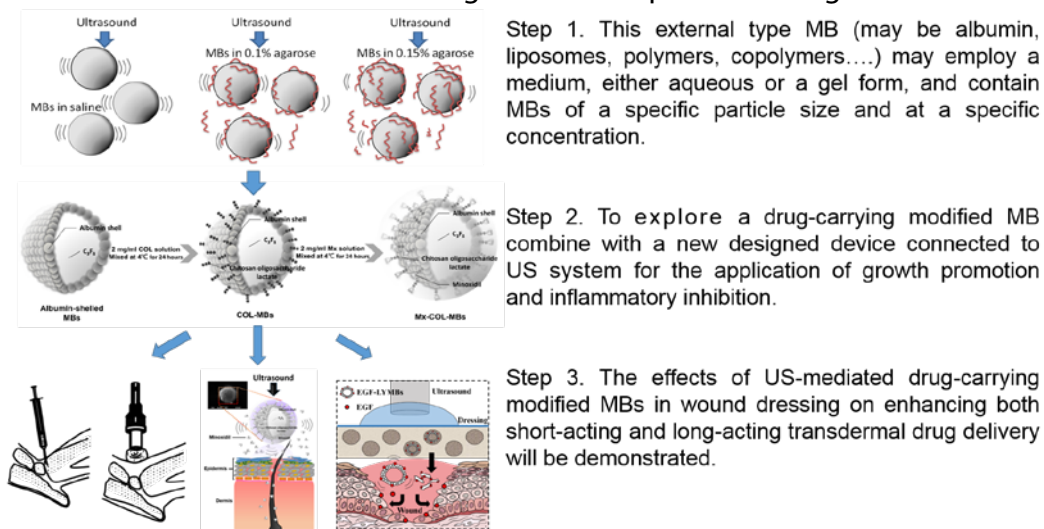
3/18 (六) 15:30-16:00
2樓，第20教室

Development and application of multifunctional microbubbles for unconventional ultrasound mediated drug delivery: transdermal and inner ear

廖愛禾 Ai-Ho Liao

Graduate Institute of Biomedical Engineering, National Taiwan University of Science and Technology

For the ultrasonic technology, the microbubble (MB) ultrasound (US) contrast agent is applied intravascularly and the tiny bubbles of the MB US contrast agent in the blood vessel are excited by ultrasonic energy to generate harmonic resonance, which enhances the received US images or drug treatment, drug delivery, gene transfection. Our present invention firstly provides a new multifunctional MB which can be applied to a topical region of the body surface of organisms by applying, instead of using injection. This external type MB may employ a medium, either aqueous or a gel form, and contain MBs of a specific particle size and at a specific concentration. The material of the MBs may be albumin, liposomes, polymers, copolymers or mixtures of the aforementioned material or a combination of those above. The MB could be widely used in medical or beauty fields, to help strengthen the absorption of painkillers after surgery or the absorption of beauty care ingredients. We have found that US-MB enhanced transdermal drug delivery via disruption of epidermal cell-cell junctions and increased matrix metalloproteinase activity. The study also explores: 1. US-aided MBs facilitate the delivery of drugs to the inner ear via the round window membrane, 2. US-mediated EGF-coated-MB cavitation in dressings for wound-healing applications, 3. drug-carrying modified MB combine with a new designed device to connect to US system for the application of hair growth promotion and clinical trial, and 4. combined US-MBs-Mediated diclofenac gel delivery to enhance transdermal permeation in adjuvant-induced rheumatoid arthritis in the rat. This invention has designed an external drug accelerators based on the principle of designing ultrasonic molecular imaging probes. It is further designed as a composite medical material for MBs dressings and develops a wide range of use values.





S22



Speaker /

蘇家豪
Chia-Hao Su

Current Position:

Professor/ 教授

Division of Natural Science, Center for General Education, Chang Gung University

Education/Training:

09/1997-10/2003 Ph. D. in Department of Chemistry, National Cheng Kung University, Tainan, Taiwan

09/1993-06/1997 B.S. in Department of Chemistry, National Cheng Kung University, Tainan, Taiwan

Professional and Research Experience:

1. Magnetic Resonance Imaging
2. Animal molecular imaging for disease model
3. Nanocontrast agents and Nanoprobes for cell targeting and tracking
4. Nanomedicine for cancer therapy
5. Organic synthesis

Awards and Honors:

Posters Award, Annual Meeting of Biomaterials and Controlled Release Society in Taiwan, Tainan, Taiwan, Dec., 2021.

Exhibitor Selected Posters Award, 2019 World Molecular Imaging Congress, Montréal, Canada, Sep., 2019.

Exhibitor Selected Posters Award, 2017 World Molecular Imaging Congress, Philly, USA, Sep., 2017.

Young Investigator Award, 2017 KSMI-FASMI Joint Conference on Molecular Imaging, Seoul, Korea, Aug 2017.

Exhibitor Selected Posters Award, 2015 World Molecular Imaging Congress, Hawaii, USA, Sep., 2015.

Selected Publications:

1. Chen, Y. C.; Liu, Y. J.; Lee, C. L.; Pham, K. Y.; Manoharan, D.; Thangudu, S.; Su, C. H.*; Yeh, C. S.* "Engineering H₂O₂ and O₂ self-supplying nanoreactor to conduct synergistic chemiexcited photodynamic and calcium-overloaded therapy in orthotopic hepatic tumors" *Adv. Healthc. Mater.* 2022, 2201613. (SCI, IF: 11.092 Material science, Biomaterials 9/53) (Corresponding author)
2. Thangudu, S.; Yu, C. C.; Lee, C. L.; Liao, M. C.; Su, C. H.* "Magnetic, biocompatible FeCO₃ nanoparticles for T₂-weighted magnetic resonance imaging of in vivo lung tumors" *J. NanoBiotechnol.* 2022, 20:157, 1-13. (SCI, IF: 10.435 Biotechnology & Applied microbiology 8/159) (Corresponding author)



3/18 (六) 16:00-16:30
2樓, 第20教室

Biocompatible nanomedicine for theranostic imaging

蘇家豪^{1,2,3}, Suresh Thangudu¹, 陳英齊⁴, 葉晨聖⁴

Chia-Hao Su^{1,2,3}, Suresh Thangudu¹, Ying-Chi Chen⁴, Chen-Sheng Yeh⁴

1.Center for General Education, Chang Gung University, Taoyuan, Taiwan.

2.Department of Biomedical Imaging and Radiological Sciences, National Yang Ming Chiao Tung University, Taipei, Taiwan.

3.Department of Radiation Oncology, Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan.

4.Department of Chemistry, National Cheng Kung University, Tainan, Taiwan.

Nanomaterials mediated cancer therapy has attracted significant attention for conquering the non-curable cancer disease models. However, low accumulation of the therapeutic NPs/drugs at targetd site is still a critical hurdle for an efficient therapeutic outcome and further transforms to the clinical settings. To address this unexplored area in associated with the mediated cancer therapeutics (specifically in lung and liver cancer models), we developed the different nanomaterials with various fabrication to investigate their therapeutic effacacy and behavior in both *in vitro* and *in vivo* models. Herein, we reported two topic for nanomedicine applications, one is fabrication of an ultra-small iron carbonate nanoparticles (FeCO_3 NPs) for the first time via modified literature method. In addition, we have evaluated the MR contrast abilities of FeCO_3 NPs and observed the remarkable T2 weighted MRI contrast abilities in a concentration dependent manner, moreover, r_2 values of present FeCO_3 NPs are higher than the clinically approved contrast agents at 9.4T respectively. *In vivo* MRI abilities of FeCO_3 demonstrate an enhanced T2 weighted contrast of *in vivo* lung tumors within 5h of post intravenous administration of NPs without apparent systemic toxicity or induction of inflammation is observed *in vivo* mice models; another is develpment of a nanohybrid ($\text{mSiO}_2/\text{CaO}_2/\text{CPPO}/\text{Ce6}$: mSCCC) nanoparticles (NPs) is designed to achieve synergistic CRET-mediated PDT and calcium (Ca^{2+})-overload-mediated therapy. The CaO_2 formed inside mesoporous SiO_2 (mSC) with the inclusion of the chemiluminescent agent (CPPO) and photosensitizer (Ce6) self-supplies H_2O_2 , O_2 , and Ca^{2+} allowing for the subsequent processes for treatments. The Ce6 in mSCCC NPs is excited by chemical energy *in situ* following the supply of H_2O_2 and O_2 to produce singlet oxygen ($^1\text{O}_2$). The nanohybrid NPs are coated with stearic acid to avoid decomposition during blood circulation through contact with aqueous environment. This nanohybrid showed promising performance in the generation of $^1\text{O}_2$ for external light-free PDT and the release of calcium ions for calcium-overloaded therapy against orthotopic hepatocellular carcinoma.



Speaker /

連韋雄
Wei Shiung Lian

Current Position:

Associate Research Fellow/ 副研究員

Education/Training:

Ph.D., Department of Animal Science and Technology, National Taiwan University, Taipei, Taiwan
Training, Assistant Research Fellow (2017-2021), Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan.

Professional and Research Experience:

- 2014~2017 Post-doctoral fellow, Core Laboratory for Phenomics and Diagnostics, Department of Pediatrics, Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan.
- 2011~2014 Post-doctoral fellow, Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan. Department of Medical Research, Tzu Chi General Hospital and Department of Pediatrics, Tzu Chi University, Hualien, Taiwan.

Awards and Honors:

Nonmember 2020 Honorable Mention of Post presentation, TSMRM, Hualien, Taiwan.
October 2019 Award of Orthoregeneration Foundation ON/EORS, Netherland. \$1000(CHF).

Selected Publications:

1. Lian WS, Wu RW, Ko JY, Chen YS, Wang SY, Yu CP, Jahr H, Wang FS. (2022, Jun). Histone H3K27 demethylase UTX compromises articular chondrocyte anabolism and aggravates osteoarthritic degeneration. *Cell Death Dis.*, 13(6):538.
2. Lian WS, Wu RW, Chen YS, Ko JY, Wang SY, Jahr H, Wang FS. (2021, Aug). MicroRNA-29a Mitigates Osteoblast Senescence and Counteracts Bone Loss through Oxidation Resistance-1 Control of FoxO3 Methylation. *Antioxidants (Basel).*, 10(8):1248.
3. Wang FS, Kuo CW, Ko JY, Chen YS, Wang SY, Ke HJ, Kuo PC, Lee CH, Wu JC, Lu WB, Tai MH, Jahr H, Lian WS. (2020, Sep). Irisin Mitigates Oxidative Stress, Chondrocyte Dysfunction and Osteoarthritis Development through Regulating Mitochondrial Integrity and Autophagy. *Antioxidants (Basel).*, 9(9):810.
4. Lian WS, Ko JY, Chen YS, Ke HJ, Hsieh CK, Kuo CW, Wang SY, Huang BW, Tseng JG, Wang FS. (2019, Sep). MicroRNA-29a represses osteoclast formation and protects against osteoporosis by regulating PCAF-mediated RANKL and CXCL12. *Cell Death Dis*, 10(10):705.
5. Lian WS, Ko JY, Chen YS, Ke HJ, Wu SL, Kuo CW, Wang FS (2018, Sep). Chaperonin 60 sustains osteoblast autophagy and counteracts glucocorticoid aggravation of osteoporosis by chaperoning RPTOR. *Cell Death Dis*, 9(10):938.



3/18 (六) 16:30-17:00
2 樓，第 20 教室

Comprehensive Characterization of Bone & Joint Phenotypes

連韋雄 Lian Wei Shiung

Core Laboratory for Phenomics and Diagnostics, Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan.

A useful animal model for mimicking human disease is essential for understanding pathogenesis mechanisms, evaluating the therapeutic efficacy of new and emerging drugs, and developing precision medicine development. Animal disease models must be similar to the disease condition or related to human clinical observation. However, the strategies for adequately identifying and characterizing established animal disease patterns will be crucial. Ideally, animal diseases on systemic and functional phenotypes of features include physiology, biochemistry, metabolism, behavior, and genetic and molecular mechanisms. Notably, develop phenotyping characterization facilities, real-time and high throughput systems, and a one-stop for diagnosing pathogenesis, enhancing the articles' quality and competition. In this sense, we established a high-quality phenotype characterization platform of experimental animals to support scientists from diverse expertise to make a significant breakthrough in figuring out mechanisms underlying diseases, develop pharmaceutical strategies, and gain cutting-edge biomedical science discovery. We have actively established the analysis methods of osteoarthritis and osteoporosis in laboratory animals to reveal causality implicit in musculoskeletal diseases. For bone and cartilage image analysis, including high-resolution micro-CT and Tissue section scanning. For animal behavior and activity, Multiple function conditioning, CatWalk, and Water Maze. Conduct primary chondrocyte culture, micro mass formation, and stem cell differentiation for molecular mechanisms. Correspondingly, translational research aims to transform the results obtained in animal models into a new version of human disease mechanisms and therapeutic methods and believes that it can be used as a bridge from experimental models to clinical medicine.



S24



Speaker /

阮麗蓉
Li-Jung Juan

Current Position:

Professor and Research Fellow, Genomics Research Center, Academia Sinica
中央研究院基因體研究中心研究員

Education/Training:

Ph.D. training with Jerry Workman, The Pennsylvania State University 美國賓州州立大學
(01/1992- 08/1996)

Postdoctoral Fellow (06/1997-10/2000) and Assistant Investigator (10/2000-03/2006), National Health Research Institutes 國家衛生研究院, Taiwan ROC

Professional and Research Experience:

Assistant Professor (04/2006-07/2009), Associate Professor (07/2009-07/2015) and Professor (07/2015-present), Genomics Research Center, Academia Sinica, 中研院基因體研究中心, Taiwan ROC

Adjunct Assistant Professor (08/2006-02/2010), Adjunct Associate Professor (02/2010-01/2016), and Adjunct Professor (02/2016-present), Institute of Molecular Medicine, College of Medicine, National Taiwan University, 台灣大學分子醫學研究所, Taiwan ROC

Awards and Honors:

Outstanding Scholar Award, Foundation for the Advancement of Outstanding Scholarship 傑出人才發展基金會傑出人才講座, 2022

MOST Outstanding Research Award 科技部傑出研究獎, 2021

Academia Sinica Investigator Award 中研院深耕計畫, 2017 and 2021

18th YZ Hsu Science and Technology Paper Award 有庠科技論文獎, 2020

4th TienTe Lee Biomedical Foundation Young Scientist Research Award 李天德青年醫藥科技獎, 2009

Selected Publications:

1. Lee CC*, Shih YC, Kang ML, Chang YC, Chuang LM, Devaraj R, Juan LJ*, 2019, "Naa10p Inhibits Beige Adipocyte-Mediated Thermogenesis through N-alpha-acetylation of Pgc1alpha.", *Molecular Cell*, 76(3), 500-515.e8.
2. Lee CC, Peng SH, Shen L, Lee CF, Du TH, Kang ML, Xu GL, Upadhyay AK, Cheng X, Yan YT, Zhang Y*, Juan LJ*, 2017, "The Role of N-alpha-acetyltransferase 10 Protein in DNA Methylation and Genomic Imprinting.", *Molecular Cell*, 68(1), 89-103.e7.
3. Teng YC, Lee CF, Li YS, Chen YR, Hsiao PW, Chan MY, Lin FM, Huang HD, Chen YT, Jeng YM, Hsu CH, Yan Q, Tsai MD, Juan LJ*, 2013, "Histone demethylase RBP2 promotes lung tumorigenesis and cancer metastasis.", *Cancer Research*, 73(15), 4711-21.



Protein N-terminal Acetylation in Development and Disease

阮麗蓉 Li-Jung Juan

Genomics Research Center, Academia Sinica

As an important metabolite, acetyl-CoA is involved in distinctive protein acetylation modifications. Protein N-terminal acetylation is carried out co-translationally by N- α -acetyltransferases to transfer the acetyl group from the acetyl-CoA to the α -amino group of the first amino acid of most eukaryotic proteins. Despite the prevalence of the modification, its function is largely unknown. The N-terminal acetyltransferase Naa10p forms a ribosome-associated NatA complex with the auxiliary subunit Naa15p and the huntingtin-interacting protein HYPK. Mutations of human Naa10p cause Ogden syndrome and/or Naa10p-related developmental syndrome manifested by infant mortality, premature aging, lack of subcutaneous fats, intellectual disability, autism, etc. We accidentally identified a catalytic-independent epigenetic function of Naa10p in the nucleus. Naa10p facilitates tumor suppressor gene methylation and silencing in lung cancer (JCI 2010) and is required for embryonic global DNA methylation and genomic imprinting (Mol Cell 2017). We further demonstrated that the acetylase activity of Naa10p controls fat metabolism by promoting obesity via inhibiting beige adipogenesis and thermogenesis (Mol Cell 2019). Moreover, we found that Naa10p maintains the hippocampal neuron function by regulating actin dynamics (submitted). Our studies not only link protein N-terminal acetylation to developmental control but also provide the underlying mechanisms for Naa10p-related human diseases.



S25



Speaker /

蔡曜聲
Yau-Sheng Tsai

Current Position:

Professor / 教授

Institute of Clinical Medicine, National Cheng Kung University

Education/Training:

- 2005-2006 Postdoctoral fellow, Department of Pathology and Laboratory Medicine, University of North Carolina at Chapel Hill, USA
- 2000-2005 PhD, Department of Pathology and Laboratory Medicine, University of North Carolina at Chapel Hill, USA
- 1994-1996 MS, Department of Biochemistry, National Cheng Kung University, Taiwan

Professional and Research Experience:

- 2017-2021 Director, Laboratory Animal Center, National Cheng Kung University
- 2016-present Professor, Institute of Clinical Medicine, National Cheng Kung University
- 2011-2016 Associate Professor, Institute of Clinical Medicine, National Cheng Kung University
- 2006-2011 Assistant Professor, Institute of Clinical Medicine, National Cheng Kung University

Awards and Honors:

- 2021 Fulbright-Formosa Plastics Group Scholarship
- 2016 Research Award from NHRI
- 2010 Distinguished Research Award in Basic Medicine, NCKU
- 2009 Young Investigator Research Award in Basic Medicine, NCKU

Selected Publications:

1. YS Chang, SY Hou, SS Yu, SY Tsai, YY Chen, LJ Hsu, PJ Tsai, HK Lin, CH Lin*, and YS Tsai*. Postnatal dexamethasone therapy impairs brown adipose tissue thermogenesis and autophagy flux in neonatal rat pups. *Theranostics*. 2022 Jul 25;12(13):5803-5819.
2. CC Hsu[#], YS Tsai[#], HK Lin. UHRF1: a novel metabolic guardian restricting AMPK activity. *Cell Research*. 2022 Jan;32(1):3-4. (# equal contribution)
3. Liu CJ, Cheng CW, Tsai YS, Huang HS. Crosstalk between Renal and Vascular A Huang, YS Lin, LZ Kao, YW Chiou, GH Lee, HH Lin, CH Wu, CS Chang, KT Lee, YY Hsueh, PJ Tsai, MJ Tang, YS Tsai*. Inflammation-induced macrophage lysyl oxidase in adipose stiffening and dysfunction in obesity. *Clinical and Translational Medicine*. 2021 Sep;11(9):e543.
4. Chen JY, Wu YP, Li CY, Jheng HF, Kao LZ, Yang CC, Leu SY, Lien IC, Weng WT, Tai HC, Chiou YW, Tang MJ, Tsai PJ, Tsai YS*. PPAR γ activation improves the microenvironment of perivascular adipose tissue and attenuates aortic stiffening in obesity. *J Biomed Sci*. 2021 Mar 29;28(1):22.
5. CC Yang, DC Lin, YN Chang, CH Wu, CS Chang, KT Lee, PJ Tsai, and YS Tsai*. Inhibitory effect of PPAR γ on NLRP3 inflammasome activation. *Theranostics*. 2021 Jan 1;11(5):2424-2441.



Inflammation-induced macrophage lysyl oxidase in adipose stiffening and dysfunction in obesity

蔡曜聲 Yau-Sheng Tsai

Institute of Clinical Medicine, National Cheng Kung University, Tainan, Taiwan

Although the association between obesity and adipose tissue (AT) fibrosis and stiffening has been suggested, the origin of AT fibrosis and its consequences remain unclear. Here, we reported increased collagen crosslinking and AT stiffness in obese humans and mice. AT of obese mice and humans demonstrated lysyl oxidase (LOX) upregulation, particularly within macrophage-enriched regions; while peritoneal macrophages in obese mice and circulating immune cells in obese humans claim this elevation. Macrophages exhibited a significant LOX induction by inflammatory stimulation, generating a stiffened environment that impaired the functioning of adipocytes subsequently seeded on. Macrophage depletion or LOX inhibition attenuated obesity-induced LOX and adipose stiffening. LOX knockdown in bone marrow cells of ob/ob mice recovered adipose plasticity and metabolic profiles. Together, these results indicated that obesity-associated inflammation increased macrophage LOX, leading to AT stiffening and dysfunction.



S26



Speaker /

王雯靜
Wen-Ching Wang

Current Position:

Distinguished Professor/ 特聘教授

Department of Life Science & Institute of Molecular and Cellular Biology, National Tsing Hua University

Education/Training:

1992 Ph.D. in Chemistry Department, California Institute of Technology, Pasadena, CA, U.S.A. (Dr. P. J. Bjorkman's lab)

1985 M.S. in Chemistry Department, University of California, Santa Barbara, CA, U.S.A.

1983 B.S. in Agricultural Chemistry, National Taiwan University, Taiwan

Professional and Research Experience:

2002-2009 Professor at Institute of Molecular and Cellular Biology & Department of Life Science, National Tsing Hua University, Taiwan

2008-2009 Chair of Bioresource Section (生物處學門召集人), Biology Division, National Science Council, Taiwan, R.O.C.

2010 Senior Counselor, National Applied Research Laboratory, Taiwan, R.O.C.

2008-2011 Professor and Director at Institute of Molecular and Cellular Biology & Department of Life Science, National Tsing Hua University, Taiwan

2009-2016 Director, Center for BioMedical Science and Engineering (生醫中心主任)

2009-now Distinguished Professor, National Tsing Hua University, Taiwan (特聘教授)

Awards and Honors:

The 56th Zhongshan Academic Writing Award (110 年度中山學術著作獎)

NTHU Distinguished Professor (98-111 年度)

NTHU Research Excellency Professor (96-97 年度)

NSC Outstanding Scholar Award (92 年度國科會傑出獎)

Wu Da-You Memorial Award (91 年度吳大猷先生紀念獎)

Selected Publications:

1. Liu J S, Fang W., Yang SM, Wu M., Chen TJ, Chen CM, Lin TY, Liu KL, Wu CM, Chen YC, Chuu CP, Wang LY, Hsieh HP, Kung HJ, and Wang WC* (2022) Natural product myricetin is a pan-KDM4 inhibitor which with poly lactic-co-glycolic acid formulation effectively targets castration-resistant prostate cancer. *J. Biomed. Sci.* 29, 29
2. Wu MJ, Chen CJ, Lin TY, Liu YY, Tseng LL, Cheng ML, Chuu CP, Tsai HK, Kuo WL, Kung HJ*, and Wang WC* (2021). Targeting KDM4B that coactivates c-Myc-regulated metabolism to suppress tumor growth in castration-resistant prostate cancer. *Theranostics*, 11(16), 7779-7796. doi:10.7150/thno.58729 (IF: 11.556)
3. Tseng LL, Cheng HH, Yeh TS, Huang SC, Syu YY, Chuu CP, Yuh CH, Kung HJ, Wang WC* (2020). Targeting the histone demethylase PHF8-mediated PKC α -Src-PTEN axis in HER2-negative gastric cancer. *Proc Natl Acad Sci USA*, 117(40), 24859-24866. Epub, 23 September 2020 (IF: 11.205)



Metabolic Reprogramming in Health and Disease

王雯靜 Wen-Ching Wang

Department of Life Science & Institute of Molecular and Cellular Biology, National Tsing Hua University

Abnormal metabolism is a hallmark of cancer cells, essential to tumor progression. Cancer cells prefer aerobic glycolysis, known as the Warburg effect, glutaminolysis, and fatty acid oxidation to withstand tumor growth and oncogenesis. Pyruvate kinase M2 (PKM2), which catalyzes the final step of glycolysis, plays a crucial role in the switch between aerobic glycolysis and mitochondrial oxidative phosphorylation through allosteric regulation and post-translational modifications. In addition, PKM2 can be translocated into the nucleus, a co-activator of HIF1 α , contributing to the Warburg metabolism. High levels of PKM2 and the oncogenic demethylase KDM8 are often associated with breast cancer. We have demonstrated that KDM8 partners with PKM2 to facilitate its translocation, resulting in increased HIF1 α -mediated transactivation activity. We have also shown that PKM2 exon-10 mutations with reduced allostery increase oncogenicity, providing mechanistic insight into the versatility of PKM2 in meeting specific metabolic needs. A deeper understanding of the reprogramming of the PKM2-mediated pathways offers promising opportunities for developing new therapeutic targets, biomarkers, and diagnostic and therapeutic applications.



Speaker /

蔡亭芬
Ting-Fen Tsai

Current Position:

Distinguished Professor/ 特聘教授

Department of Life Sciences and Institute of Genome Sciences, National Yang Ming Chiao Tung University

Education/Training:

- 1989-1995 Ph.D., Molecular Biology, Graduate Institute of Microbiology and Immunology, National Yang-Ming University, Taipei, Taiwan
- 1995-1999 Postdoc, Genetics and Inherited Diseases, Department of Molecular and Human Genetics, Baylor College of Medicine, Houston, TX, USA
- 1995-1999 Associate, Genetics and Inherited Diseases, Howard Hughes Medical Institute, Baylor College of Medicine, Houston, TX, USA

Professional and Research Experience:

- 2017-present Distinguished Professor, Department of Life Sciences and Institute of Genome Sciences, National Yang Ming Chiao Tung University, Taipei, Taiwan.
- 2017-2019 Deputy Dean, School of Life Sciences, National Yang-Ming University
- 2017-2019 Director, Biomedical Industry PhD Program, National Yang-Ming University
- 2012-2015 Director, Department of Life Sciences and Institute of Genome Sciences, National Yang-Ming University, Taipei, Taiwan.
- 2012-present Investigator (Joint Appointment), Institute of Molecular and Genomic Medicine, National Health Research Institute, Zhunan, Miaoli County, Taiwan.

Awards and Honors:

- 2022 The 19th National Innovation Award (第19屆國家新創獎)
- 2022 Future Tec Winner, Taiwan Innotech Expo. (2022 & 2020 未來科技獎)
- 2020 Who is Who of Taiwan in Biotechnology and Medicine (榮登首屆臺灣生物科技與醫學名人錄)
- 2010 Award of Far Eastern Y. Z. Hsu Science and Technology Memorial Foundation (有庠科技論文獎)
- 2009-2012 Distinguished Research Award of National Science Council (國科會傑出研究獎)

Selected Publications:

1. Yeh CH, Shen ZQ, Wang TW, Kao CH, Teng YC, Yeh TK, Lu CK, Tsai TF*. Hesperetin promotes longevity and delays aging via activation of Cisd2 in naturally aged mice. *J Biomed Sci* 29, 53 (2022 July; IF 12.771).
2. Huang YL, Shen ZQ, Huang CH, Lin CH, Tsai TF*. Cisd2 slows down liver aging and attenuates age-related metabolic dysfunction. *Aging Cell* 20(12): e13523 (2021 Dec; IF 11.005).
3. Yeh CH*, Shen ZQ, Hsiung SY, Wu CY, Wu PC, Teng YC, Fang SW, Chen CF, Tzeng TY, Yan YT, Kao LS, Kao CH, Tsai TF*. Cisd2 is essential to delaying cardiac aging and to maintaining heart functions. *PLoS Biology* 17(10): e3000508 (2019 Oct; IF 9.593).



提升 C1SD2 長壽基因表現以開發非酒精性脂肪肝之新穎治療法 Developing novel therapeutics for nonalcoholic fatty liver disease via enhancing C1SD2 prolongevity gene

蔡亭芬 Ting-Fen Tsai

Department of Life Sciences and Institute of Genome Sciences, National Yang Ming Chiao Tung University, Taipei, Taiwan.

Non-alcoholic fatty liver (NAFL) and its more severe form, nonalcoholic steatohepatitis (NASH), which is characterized by inflammation and fibrosis, is the most common liver disorder with an incidence of 20-30% in general population worldwide. However, no medicines specifically for NAFL or NASH had received approval for the efficient treatment of NAFL/NASH currently. Moreover, despite there are several ongoing clinical trials, it seems that no single regimen or combination has proven efficacy for treating NAFL/NASH. Thus, new interventions and novel therapeutic approaches are in urgent need. Previously we have published that C1SD2 down-regulation leads to NAFL/NASH. A 50% (or less) of C1SD2 protein is insufficient to maintain normal liver function and causes the development of NAFL/NASH. This provides a rationale and forms an experimental basis that increase the C1SD2 level by C1SD2 activators may attenuate the pathogenesis of NAFL/NASH in the liver. Our overall objective is to develop new therapeutic strategies and obtain drug-like compounds as C1SD2 activators that are able to effectively increase C1SD2 expression to treat NAFL/NASH, thus preventing metabolic complications and malignant progression to cancer and liver failure. In this talk, I will discuss about our current progress on the development of novel drug-like compounds as C1SD2 activators which exert potent anti-NAFL/NASH efficacy as well as their mechanism of action. We anticipate that this study will get insights into the molecular mechanism underlying the transcriptional regulation of C1SD2 prolongevity gene, and will reveal the mechanism of action for the compounds to treat NAFL/NASH with high industrial values and international competitiveness.



Speaker /

蔡欣祐
Hsin-Yue Tsai

Current Position:

Assistant professor/ 助理教授

Education/Training:

B.S. Zoology/ National Taiwan University

Ph.D. (2006)/Dr. Venkat Gopalan /MCDB program /The Ohio State University

Professional and Research Experience:

2006-2013 Post doctor / Dr. Craig Mello / IMM /University of Massachusetts Medical School

2013-2015 Post doctor /Dr. Ming-Daw Tsai/ IBC/ Academia Sinica

2015-Assistant Professor /IMM / National Taiwan University

Selected Publications:

1. *Tsai, H.Y., Cheng, H.T., Yi-Ting Tsai (2022). Biogenesis of *C. elegans* spermatogenesis small RNAs is initiated by a *zc3h12a*-like ribonuclease. *Science Advances* 8(32): eabm0699.
2. Lin, C. C., Shen, Y. R., Chang, C.C., Guo, X.Y., Young, Y.Y., Lai, T.Y., Yu, I.S., Lee, C.Y., Chuang, T.H., Tsai, H.Y., *Hsu, L.C. (2021). Terminal uridylyltransferase 7 regulates TLR4-triggered inflammation by controlling Regnase-1 mRNA uridylation and degradation. *Nature Communications* 12(1) 3878.
3. Lee, H.C., Fu, C.Y., Lin, C.Y., Hu, J.R., Huang, T.Y., Lo, K.Y., Tsai, H.Y., Sheu, J.C., *Tsai, H.J. (2021). Poly(U)-specific endoribonuclease ENDOU promotes translation of human CHOP mRNA by releasing uORF element-mediated inhibition. *The EMBO Journal* 40(11) e104123.
4. Tsai, H.Y., Chen, C.C., Conte, D. Jr, Moresco, J.J., Chaves, D.A., Mitani, S., Yates, J.R. 3rd, Tsai, M.D., and *Mello, C.C. (2015) A ribonuclease coordinates siRNA amplification and mRNA cleavage during RNAi. *Cell* 160(3), 407.



Exploring the biogenesis of sperm-related small RNAs in *C. elegans*

蔡欣祐 Hsin-Yue Tsai

Institute of Molecular Medicine, National Taiwan University

Using RNA to express or knockdown a particular gene has been proven as an efficient therapeutic tool. Though using small interfering RNA (siRNA) to knock down gene expression is well studied, little is known about small RNA mediated gene activation, which has been shown in mouse sperm-related small RNAs.

Small RNAs are known regulate spermatogenesis across species ranging from *Caenorhabditis elegans* to human. Missing sperm-related small RNAs cause severe defects in sperm function, and several small RNA targeted sperm-related proteins are found decreased in the absence of related small RNAs. The sperm-related small RNAs in *C. elegans* are *alg-3/4* 26G small RNAs and they are complexed with two Argonaute proteins, ALG-3 and ALG-4. The *alg-3/4* 26G-small RNAs are antisense to their target mRNAs and produced by the RNA-dependent RNA polymerase, RRF-3. **Why only 1/10th of mRNAs among total transcripts are selected as templates for *alg-3/4* 26G small RNAs biogenesis** are not known, and little is also known how the newly synthesized *alg-3/4* 26G small RNAs target back to their own mRNAs to regulate their protein quantity. Here, we have identified the ribonuclease activity of NYN-3, a newly identified ribonuclease protein, is essential for *alg-3/4* 26G small RNA biogenesis. We have further used biochemical methods to show NYN-3 is the currently known the most upstream protein in *alg-3/4* 26G small RNA biogenesis pathway. How the discovery of NYN-3 facilitates our understanding in *alg-3/4* 26G small RNA biogenesis will be further discussed.



S29



Speaker /

王健家
Chien-Chia Wang

Current Position:

NCU Distinguished Professor 中央大學特聘教授

Education/Training:

Tulane University: PhD

MIT: postdoc

The Scripps Research Institute: postdoc

Professional and Research Experience:

NCU Distinguished Professor 中央大學特聘教授

NCU Chair 中央大學生科系系主任

Awards and Honors:

中研院年輕學者研究著作獎

中央大學特聘教授獎

中央大學研究傑出獎

Selected Publications:

1. Antika, T. R., Nazilah, K. R., Lee, Y. H., Lo, Y. T., Yeh, C. S., Yeh, F. L., Chang, T. H., Wang, T. L., and Wang, C. C.* (2022) Human Thg1 displays tRNA-inducible GTPase activity. *Nucleic Acids Res.* 50:10015-10025 (http://ncusec.ncu.edu.tw/news/event_content.php?E_ID=338)
2. Antika, T. R., Chrestella, D. J., Ivanesthi, I. R., Rida, G. R. N., Chen, K. Y., Liu, F. G., Lee, Y. C., Chen, Y. W., Tseng, Y. K., and Wang, C. C.* (2022) Gain of C-Ala enables AlaRS to target the L-shaped tRNA^{Ala}. *Nucleic Acids Res.* 50: 2190-2200 (<https://www.ncu.edu.tw/tw/news/show.php?num=2132>)



Mutation in human Thg1 leads to cerebellar ataxia

王健家 Chien-Chia Wang

Department of Life Sciences, National Central University

Histidine tRNA (tRNA^{His}) is unique among tRNAs by carrying an extra G nucleotide, G-1, at its 5' end. G-1 is the major identity element for almost all known tRNAs^{His}. As a consequence, tRNA^{His} lacking G-1 cannot be charged by its cognate enzyme histidyl-tRNA synthetase (HisRS). In eukaryotes (such as yeast), the cytoplasmic tRNA^{His} (denoted as $\text{tRNA}_n^{\text{His}}$) is encoded by the nuclear genome and carries G-1:A73 identity elements, while the mitochondrial tRNA^{His} (denoted as $\text{tRNA}_m^{\text{His}}$) is encoded by the mitochondrial genome and carries G-1:C73 identity elements. Notably, G-1 on yeast $\text{tRNA}_m^{\text{His}}$ is genome encoded and retained after processing, while G-1 on its cytoplasmic isoacceptor is added by tRNA^{His} guanylyltransferase (Thg1) through a post-transcriptional process. Thg1 is the only enzyme known to possess a 3'-5' polymerase activity. A recent report demonstrated that human Thg1 can add G-1 to both $\text{tRNA}_n^{\text{His}}$ (forming a G-1:A73 mismatch, thereby disrupting continuous template-dependent polymerization) and $\text{tRNA}_m^{\text{His}}$ (forming a G-1:C73 base pair, thereby permitting continuous template-dependent polymerization). As C73 is immediately followed by the CCA (74-76) end in $\text{tRNA}_m^{\text{His}}$, this raised the question of how human Thg1 can prevent multiple G incorporation into $\text{tRNA}_m^{\text{His}}$ (yielding G-2:C74 and G-3:C75) through a template-dependent mechanism. Note that tRNA^{His} with G-2/G-3 cannot be charged by HisRS and in vivo-isolated $\text{tRNA}_m^{\text{His}}$ indeed contains only G-1. Moreover, a homozygous mutation in human Thg1 (V55A) was found to cause cerebellar ataxia and developmental delay, but the underlying mechanism remains elusive. We show herein that human Thg1 is a dual-functional enzyme that not only adds G-1 to tRNA^{His} but also hydrolyzes GTP. This study suggests that human Thg1 might downregulate the concentration of GTP to prevent multiple G incorporation into $\text{tRNA}_m^{\text{His}}$.



Speaker /

呂佩融
Pei-Jung Lu

Current Position:

Distinguished Professor
Institute of Clinical Medicine, College of Medicine, National Cheng Kung University

Education/Training:

Ph.D. in Pharmaceutical Sciences
Department of Pharmaceutical Sciences, College of Pharmacy, University of Kentucky

Professional and Research Experience:

Cell Cycle Research and Alzheimer's disease
Tumor metastasis
Mechanism of non-coding RNA involved in tumor progression

Awards and Honors:

1990-2002 Leukemia Society of America Career Development Award U.S.A
2009-2012 Journal of Alzheimer's Disease, Associate Editor
2013-2022 Distinguished Professor, National Cheng Kung University, Taiwan.

Selected Publications:

1. Lin CH, Lin WD, Huang YC, Chen YC, Loh ZJ, Ger LP, Lin FC, Li HY, Cheng HC, Lee KH, Michael Hsiao, Lu PJ*. Carboxyl-terminal modulator protein facilitates tumor metastasis in triple-negative breast cancer. *Cancer Gene Ther.*, 2022; doi: 10.1038/s41417-022-00559-x.
2. Pan JK, Lin CH, Kuo YL, Ger LP, Cheng HC, Yao YC, M. Hsiao, Lu PJ*. MiR-211 determines brain metastasis specificity through SOX11/NGN2 axis in triple-negative breast cancer. *Oncogene*, 2021;40(9):1737-1751.
3. Lin CH, Hsu TI, Chiou PY, M. Hsiao, Wang WC, Chen YC, Lin JT, Wang JY, Lin PC, Lin FC, Tseng YK, Cheng HC, Chen CL, Lu PJ*. Downregulation of STK4 promotes colon cancer invasion/migration through blocking β -catenin degradation. *Mol Oncol.*, 2020;14(10):2574-2588.
4. Lin CH, Li HY, Liu YP, Kuo PF, Wang WC, Lin FC, Chang WL, Sheu BS, Wang YC, Hung WC, Cheng HC, Yao YC, Calkins MJ, Hsiao M, Lu PJ*. High-CLDN4 ESCC cells harbor stem-like properties and indicate for poor concurrent chemoradiation therapy response in esophageal squamous cell carcinoma. *Ther Adv Med Oncol.*, 2019;11:1758835919875324. eCollection 2019.
5. Chang YC, Chiou Jean, Yang YF, Su CY, Lin YF, Yang CN, Lu PJ, Huang MS, Yang CJ and Michael Hsiao. Therapeutic targeting of aldolase a interactions inhibits lung cancer metastasis and prolongs survival. *Cancer Res.*, 2019;79(18):4754-4766



3/19 (日) 14:00-14:30
3樓，第33教室

Non-coding RNAs act as Prognostic Indicator for Central Nervous System Metastasis in Triple-Negative Breast Cancer

呂佩融 Pei-Jung Lu

Institute of Clinical Medicine, College of Medicine, National Cheng Kung University

Breast cancer (BC) is the most common cancer and the leading cause of cancer-related deaths in women worldwide. The 5-year survival rate is over 90% in breast cancer patients, but less than 30% once cancer metastasis into distal organs. Especially, 30% of triple-negative breast cancer (TNBC) patients with CNS metastasis exhibit poor clinical outcomes, including cognitive disorders and a poor survival (less than 1 year), and therapeutic strategies are limited. Therefore, identifying early diagnostic biomarkers and potential therapeutic approaches is critical clinical issues for TNBC patients with CNS metastasis.

Central nervous system (CNS) metastasis includes parenchymal metastasis (PM) and leptomeningeal metastasis (LM). In PM, tumor cells enter the parenchyma through the blood–brain barrier (BBB), which consists of endothelium surrounding the vasculature and the connected astrocytes, thereby causing perivascular proliferation. In our study, microRNA array of parental and brain metastasis TNBC demonstrated high level of miR-211 in brain metastasis TNBC. High miR-211 drives early and specific brain colonization through enhancing trans-BBB migration, BBB adherence, and stemness properties of tumor cells and causes poor survival *in vivo*. SOX11 and NGN2 are the downstream targets of miR-211 to mediate TNBC brain metastasis *in vitro* and *in vivo*. Most importantly, high miR-211 is correlated with poor survival and brain metastasis in TNBC patients. In LM, tumor cells enter the CSF compartment by penetrating the blood–cerebrospinal fluid barrier (BCB) and adhere to the pia mater surrounding the brain and spinal cord. Through proteomic analysis of the parental and leptomeningeal metastatic TNBC cells, we identified high expression of ICAM2 in leptomeningeal metastatic TNBC cells. Two-way demonstration indicated that high levels of ICAM2 promoted BCB adhesion, trans-BCB migration, and stemness abilities and determined the specificity of LM *in vitro* and *in vivo*. Furthermore, bioinformatic analysis and antibody-neutralizing assay revealed that ICAM2 determined the specificity of LM through interactions with ICAM1 in the choroid plexus epithelial cells. Therefore, neutralizing ICAM2 can attenuate the progression of LM and prolong survival *in vivo*. The 3'UTR of ICAM2 is predicted to be targeted by 6 candidate miRNAs by miRDB including miR-3944-3p, miR214-5p, miR-3181, miR4750-5p and miR-548an, which are investigated the regulatory role in ICAM2 mediated LM in the future *in vitro* and *in vivo*.

Taken together, our findings suggest that miR-211 may be used as an indicator for TNBC brain metastasis and targeting ICAM2 is a potential therapeutic strategy for LM in TNBC.



S31



Speaker /

莊樹諄
Trees-Juen Chuang

Current Position:

Research Fellow/Division Director of Physical & Computational Genomics

Education/Training:

- 1998 Ph.D. Institute of Computer and Information Science, National Chiao Tung University, Taiwan
1992 B.S. Department of Computer Science, Soochow University, Taiwan

Professional and Research Experience:

2014-present: Research Fellow; 2007-2014: Associate Research Fellow; 2003-2007: Assistant Research Fellow; Genomics Research Center, Academia Sinica, Taiwan
1998-2003: Postdoctoral Fellow, Institute of Biomedical Sciences, Academia Sinica, Taiwan

Awards and Honors:

- 2014-2018 Project for Excellent Junior Research Investigators Award, Ministry of Science and Technology, Taiwan
2012 Pius XI Medal, the Pontifical Academy of Sciences, Vatican
2007 Academia Sinica Research Award for Junior Research Investigators
2007 Wu Ta-Yuo Memorial Award, National Science Council
2001 Post-doctoral Research Award of National Health Research Institutes, Taiwan
1999-2000 Academia Sinica Post-doctoral Fellowship
1998 Academic Paper Awards from the Image Processing and Pattern Recognition Society

Selected Publications:

1. Te-Lun Mai, Chia-Ying Chen, Yu-Chen Chen, Tai-Wei Chiang, and Trees-Juen Chuang* (2022) *Trans*-genetic effects of circular RNA expression quantitative trait loci and potential causal mechanisms in autism. *Molecular Psychiatry*, 27: 4695-4706.
2. Yen-Ju Chen, Chia-Ying Chen, Te-Lun Mai, Chih-Fan Chuang, Yu-Chen Chen, Sachin Kumar Gupta, Laising Yen, Yi-Da Wang, and Trees-Juen Chuang* (2020) Genome-wide, integrative analysis of circular RNA dysregulation and the corresponding circular RNA-microRNA-mRNA regulatory axes in autism. *Genome Research*, 30(3):375-391.
3. Te-Lun Mai and Trees-Juen Chuang* (2019). A-to-I RNA editing contributes to the persistence of predicted damaging mutations in populations. *Genome Research*, 29(11):1766-1776.
4. Trees-Juen Chuang*, Yen-Ju Chen, Chia-Ying Chen, Te-Lun Mai, Yi-Da Wang, Chung-Shu Yeh, Min-Yu Yang, Yu-Ting Hsiao, Tien-Hsien Chang, Tzu-Chien Kuo, Hsin-Hua Cho, Chia-Ning Shen, Hung-Chih Kuo, Mei-Yeh Lu, Yi-Hua Chen, Shan-Chi Hsieh, and Tai-Wei Chiang (2018). Integrative transcriptome sequencing reveals extensive alternative *trans*-splicing and *cis*-backsplicing in human cells. *Nucleic Acids Research*, 46(7): 3671-3691.



Investigation of causal relationships between genetic variants and circular RNA expression in autism

莊樹諄 Trees-Juen Chuang

Genomics Research Center, Academia Sinica, Taiwan

Genetic risk variants and transcriptional expression changes in autism spectrum disorder (ASD) were widely investigated, but their causal relationship remains largely unknown. Circular RNAs (circRNAs) are abundant in brain and often serve as upstream regulators of mRNAs. By integrating RNA-sequencing with genotype data from autistic brains, we assessed expression quantitative trait loci of circRNAs (circQTLs) that cis-regulated expression of nearby circRNAs and trans-regulated expression of distant genes (*trans*-eGenes) simultaneously. We conducted two different types of approaches, mediation and partial correlation tests (MPT), to determine the axes with mediation effects of circQTLs on *trans*-eGene expression through circRNA expression. We showed that the mediation effects of the circQTLs (*trans*-eQTLs) on circRNA expression were positively correlated with the magnitude of circRNA-*trans*-eGene correlation of expression profile. We further performed causal inference test (CIT) and identified circQTL-*trans*-eGene-ASD diagnosis propagation paths. We showed that the CIT-passing genes were significantly enriched for ASD risk genes, genes encoding postsynaptic density proteins, and other ASD-relevant genes. Integration of MPT- and CIT-passing axes further constructed circQTL-circRNA-*trans*-eGene-ASD diagnosis propagation paths, wherein the circRNA-*trans*-eGene axes may act as causal mediators for the circQTL-ASD diagnosis associations. This study provided the first framework for systematically investigating *trans*-genetic effects of circQTLs and inferring the corresponding causal relations in diseases.



S32



Speaker /

蕭明熙
Ming-Shi Shiao

Current Position:

- 2019/8- Consultant and CRO, GeneOnLink, New Taipei City
2019/8- Adjunct Professor, Graduate Institute of Traditional Medicine, National Yang Ming Chau Ton University, Taipei

Education/Training:

- 1974-1978 Ph.D., Bioorganic Chemistry, Brown University, Providence, RI, USA
1968-1972 B.S., Chemistry, National Taiwan University, Taipei, Taiwan

Professional and Research Experience:

- 2019/8/1- Formally retired (Department of Biomedical Sciences, Chang Gung University)
2016/8-2019/7 Visiting Professor, Department of Biomedical Sciences, College of Medicine, Chang Gung University, Taoyuan, Taiwan
2015/11-2016/7 Professor, Department of Biomedical Sciences, College of Medicine, Chang Gung University, Taoyuan, Taiwan
2012/11-2015/11 Distinguished Professor, Department of Biomedical Sciences, College of Medicine, Chang Gung University, Taoyuan, Taiwan, R
2006/8-2012/10 Professor, Department of Biomedical Sciences, College of Medicine, Chang Gung University, Taoyuan, Taiwan
1985-2006 Investigator, Department of Medical Research & Education, Taipei Veterans General Hospital, Taipei, Taiwan
1993-2007 Adjunct Professor, Graduate Institute of Biochemistry, National Yang Ming University, Taipei, Taiwan
1990-1991 Visiting Scientist, Department of Atherosclerosis Research and Department of Biochemical Regulation, Merck Research Laboratories, Merck & Co., Rahway, NJ, USA
1980-1985 Associate Research Fellow, Institute of Botany, Academia Sinica, Taipei, Taiwan
1983-1984 National Institute of Health Fogarty Fellow, Department of Chemistry, Columbia University, New York, NY, USA
1979-1980 Postdoctoral Research Fellow, Department of Physiological Chemistry, Medical School, University of Wisconsin- Madison, Madison, WI, USA and Project Biochemist, Lipid Metabolism Laboratory, W. S. Middleton Memorial Administration Hospital, Madison, WI, USA

Awards and Honors:

- 1991 Outstanding Research Award, National Science Council, Taiwan
1987, 1988 Outstanding Research Prize, Vocational Assistance Commission for Retired Servicemen, Taiwan
1983 Public Health Service International Research Fellowship, John E. Fogarty International Center, National Institute of Health, USA



3/18 (六) 15:10-15:50
3樓，第31教室

Metabolomics Enables Precision Medicine

蕭明熙 Ming-Shi Shiao

Department Biomedical Sciences, Chang Gung University, Professor Emeritus

Precision medicine takes prevention and treatment strategies with individual variabilities into consideration. It chooses cancer as the top diseases target. Diabetes and CVD are also high in priority. Currently, the drawback of precision medicine is the lack of effective therapy for individual patients. Before the drug development can catch up, precision nutrition may help. Precision nutrition is defined as a field that leverages human individuality to promote nutritional strategies in disease prevention and treatment, particularly in type 2 diabetes (T2D) and cardiovascular disease (CVD). This lecture will briefly outline the metabolomic characteristics of these diseases and highlight why they are most helpful in precision medicine and precision nutrition.

Diabetes is the common soil for cardiometabolic disease, which is the most prevalent degenerative disease in humans. We propose that for achieving whole-body wellness, individual should avoid diabetes and its complications, maintain functional energy metabolism, and achieve healthy gut microbiota. Starting with insulin resistance, obesity, metabolic syndrome, T2D and its complications, such as CVD and diabetic nephropathy (DN), a new trend of their detection has shifted from elevated plasma glucose to elevated muscle protein wasting. Elevations of branched-chain amino acids (BCAAs; Val, Leu, and Ile) in the plasma, due to muscle protein breakdown, and aromatic amino acids (Trp, Phe, Tyr and His) have become the new targets to delineate prediabetes, early T2D and CVD. Muscle sets the pace of aging of other tissues. Sarcopenia, commonly found in T2D patients, is a disease in losing muscle mass and function. Precision medicine allows us to monitor these diseases. Precision nutrition may help us manage them more effectively.

Elevation of triacylglycerols (TG) and decrease in HDL-C, not LDL-C, is a sign for entering metabolic syndrome and T2D. The disease progression of metabolic syndrome, T2D, CVD and DN remains correlated with plasma BCAAs and their short-chain organic acids as catabolic metabolites. Diabetes patients have a higher risk for developing several types of cancer, especially liver, colorectal, breast, and prostate cancers. Current genomic and epigenomic analyses have identified many risk loci and the metabolomic platform has identified many onco-metabolites. Combination of genomics and metabolomics is the best approach to explore the potential portfolio of omics-based biomarkers.



Speaker /

謝建台
Jentaie Shiea

Current Position:

國立中山大學西灣講座教授，毒藥物暨生醫快篩科技研究中心主任

Education/Training:

- 1977-1981 國立中興大學化學系畢業
- 1985-1991 美國蒙大拿州立大學 (Montana State Univ) 有機地球化學碩士及分析化學博士
- 1991 賓州州立大學 (Pennsylvania State Univ) 材料科學系博士後研究
- 1995-1996 美國蒙大拿州立大學訪問副教授
- 2004-2005 美國加州大學洛杉磯分校 (UCLA) 訪問教授
- 1991 起 國立中山大學化學系副教授、教授、特聘教授

Professional and Research Experience:

- 2009-2012 台灣質譜學會會長
 - 2009-2016 世界質譜基金會執行理事兼亞太區代表
 - 2009-2011 國立中山大學理學院副院長
- 國際學術期刊編輯委員或諮詢委員 (editorial or advisory board member): J. Am. Soc. Mass Spectrom. (ACS)、J. Mass Spectrom. & Adv. Clin. Lab. (Elsevier)、Mass Spectrom. (Tokyo) (Elsevier)、Mass Spectrom. Let. (KSMS)、Int. J. Mass Spectrom. (Elsevier)、Anal. Methods (RSC)、Green Anal. Chem. (Elsevier) 以及 Cur. Chromatogr. (Benson)
- 國際學術期刊之專刊編輯委員 (special issue editor): Clin. Chim. Acta. (Elsevier)、J. Food Drug Anal. (Elsevier)、J. Mass Spectrom. (Elsevier)、Rapid Commun. Mass Spectrom. (Wiley)、以及 Mass Spectrom. Tokyo (Elsevier)。

Awards and Honors:

- 2009 國科會『傑出研究獎』
- 2010 經濟部『國家創作發明獎』
- 2010 獲英國皇家化學會 (RSC) 頒發『英國皇家化學會會士』(FRSC) 頭銜
- 2011 中國化學會『化學技術獎章』
- 2012 遠東集團有庠基金會『有庠科技發明獎』
- 2013 美國質譜學會『傑出論文審查人獎』
- 2013 台灣質譜學會『優秀質譜研究學者獎』
- 2017 科技部『傑出技術移轉貢獻獎』及『未來科技突破獎』
- 2017 中國化學會『「化學」年度最佳論文獎』
- 2019 台灣質譜學會『台灣質譜學會獎章』
- 2019 科技部『未來科技突破獎』
- 2019 科技部『傑出研究獎』
- 2020 日本學術振興會『邀請訪問教授』
- 2020 國立中興大學『第 24 屆傑出校友』。在中山大學服務期間獲得三次『國立中山大學研究傑出獎』(2002、2006 及 2009)，以及『中山發明獎』及『產學傑出獎』



Rapid Characterization and Imaging of Drugs and Potential Metabolic Disease Biomarkers on Human Skin with Ambient Ionization Tandem Mass Spectrometry

謝建台 Jentaie Shiea
國立中山大學化學系 (Chemistry, NSYSU)

Skin, the largest organ of human body, plays a key role in protecting the body against environmental pathogens and with numerous glands under the skin continually releasing metabolites and wastes onto the skin's surface. Even some of these metabolites may be potential biomarkers for diseases, current analytical techniques are unable to efficiently characterize them for the difficulties in sampling, sample pretreatment, and their presence in extremely low quantity. In this study, an ambient ionization mass spectrometric technique—thermal desorption electrospray ionization tandem mass spectrometry (TD-ESI/MS/MS) was developed and applied to rapidly characterize trace drugs and potential metabolic biomarkers on skin without sample pretreatment, blood withdrawals, or urine collection. A stainless steel probe was used to gently scap the skin surface for noninvasively skin sampling; the probe was then inserted into the ionization source to thermally desorb the analytes on it. The analytes were subsequently delivered by a nitrogen stream into an electrospray plume, where the analytes were ionized by reacting with the charged solvent species in the plume. Each analysis took less than 30 seconds to complete. With the features of simple, rapid and highly sensitive, TD-ESI/MS/MS was applied to determine metabolites profiles of patients with different diseases and normal controls. The results are helpful in understanding the relationship between skin metabolites and diseases.

Several drugs for targeted therapy of lung cancer patients were detected on patients' skin. Detection of these drugs on skin without blood withdrawals or urine collection has the advantages for rapidly evaluating the effectiveness of the drugs and determination of individual pharmacokinetic profiles of drug on skin has the potential for precision medicine. The influence of physical therapy on the neurotransmitters on skin was studied. It was found that different individuals reacted differently on physical therapy. For some patients, it was found that certain metabolites were successfully stimulated on skin by physical therapy.

To explore the distribution of a metabolite or drug on whole body skin, three dimensional molecular imaging of skin metabolites were constructed from the data generated by multiple probe sampling (1400 probes) and TD-ESI/MS/MS analysis. The color of each sampling spot was assigned based on the intensity of the targeted metabolite signals. The molecular imaging reveal the distribution of drugs and nonpolar metabolites such as cholesterol and squalene on the surface of whole body.



Speaker /

葉振聲
Tjin-Shing Jap

Current Position:

Professor, School of Medicine, National Yang Ming University
Physician, Division of Endocrinology and Metabolism, Taipei-Veterans General Hospital
Physician, Division of Endocrinology Weigong Memorial Hospital, Toufen, Miao-Li county
1975/11- 臺北榮民總醫院 新陳代謝科醫師

Professional and Research Experience:

National Defense Medical Center, School of Medicine, Taiwan, Graduated in
Research fellow, School of Medicine, The Johns Hopkins University, Baltimore, MD, USA 1982
Chief, Section of Biochemistry, Taipei, Veterans General Hospital 1991-2011.
Chief, Division of Endocrinology and Metabolism, 2011-2015.
Immediate Past President, The Endocrine Society of ROC (Taiwan) 2013-2016.

Awards and Honors:

The Doctor of the year 2013, Veterans General Hospital- Taipei
The Endocrine Society of the ROC for Research Award 2008, Taiwan
The Endocrine Society of the ROC for Research Award 2003, Taiwan
The National highest Research award in lipid Research 2000, Taiwan
The 6th ACCP for Research award 2000, Korea

Selected Publications:

1. Chang WL, Huang CJ, Lei TH, Niu DM, Chiu CY, Jap TS (corresponding author). A novel mutation of KCNJ11 gene in a patient with permanent neonatal diabetes mellitus. *Diabetes Res Clin Pract* 2014, 104: e29-e32
2. Jap TS, Jenq SF, YC Wu, CT Chiu, HM Cheng. Mutations in the lipoprotein lipase gene as a cause of hypertriglyceridemia and pancreatitis in Taiwan. *Pancreas* 2003, 27: 122-6.
3. Cheng HM, Jap TS, CF Kwok, LT Ho. Arginine-induced insulin secretion in newly onset non-insulin-dependent diabetes mellitus. *Chin Med J (Taipei)* 1992;50:184-8.
4. Jap, TS, Ho LT, Justin GS Won. Insulin secretion and sensitivity in hyperthyroidism. *Hormone and Metabolic Research* 1989;21:261-6. (SCI)
5. Tai WH, Jap, TS, Ho LT. Comparison of glucose, glucagon and standard meal-induced insulin release in patients with newly onset non-insulin dependent diabetes mellitus. *Chin Med J (Taipei)* 1988;42:353-8.



The laboratory evaluation of glucose and lipid metabolism from Biochemical perspectives.

葉振聲 Tjin-Shing Jap, M.D.

Division of Endocrinology and Metabolism, Taipei Veterans General hospital

In the early 1950, It revealed how complex carbohydrates are synthesized from, and broken down into simple sugars, and pathways for biosynthesis of pentose, and the catabolism of fatty acids. The Glucose-lipid metabolism is always mentioned as the Randle cycle, also known as glucose-fatty acid cycle. This process involves the competition of glucose and fatty acids for substrates. It is theorized to play a role in explaining type 2 diabetes and insulin resistance.

The laboratory evaluation of glucose metabolism includes glucagon, arginine, and oral glucose tolerance test to evaluate insulin secretion; HOMA and glucose clamp to evaluate the degree of resistance. We have studied insulin secretion by using oral glucose tolerance and arginine test and glucose clamp to evaluate insulin resistance in the patients with hyperthyroidism.

Although acetyl-CoA is both an end point of fatty acid catabolism and starting substrate for fatty synthesis, but entirely taking place in a different compartment of the cell. During starvation, severe insulin deficiency, the transfer of acyl-CoA from extra mitochondria to mitochondria through the action of carnitine acyl transferase, which glucagon playing an important role and ketone bodies formation through a numerous step in the process of beta oxidation.

On the other hand, for lipid metabolism especially triglyceride one, there are several types of lipases got involved including pancreatic lipase in patient with acute pancreatitis, hormone sensitive lipase in adipose tissue and lipoprotein lipase in blood vessel endothelium. So far, we also studied lipoprotein lipase activity and mass in the patients with hypertriglyceridemia.

In summary, from biochemical perspective in the process of glucose and lipid metabolic derangement, it may manifest a numerous aspects of laboratory test spectrum.



Speaker /

陳容甄
Rong-Jane Chen

Current Position:

Associate Professor- Department of Food Safety/Hygiene and Risk Management, College of Medicine, National Cheng Kung University

Education/Training:

Ph.D.- Department of Environmental and Occupational Health, National Cheng Kung University

Professional and Research Experience:

Assistant Professor– Department of Food Safety/Hygiene and Risk Management, College of Medicine, National Cheng Kung University (2017/08~2022/01)

Certified Toxicologist of Toxicology Society of Taiwan (DTSTA No. 0008, 2018/08/13)

Awards and Honors:

2022 年成杏醫學文教基金會優秀論文獎

國立成功大學 111 年卓越學術研究獎

國立成功大學 110 年度科技部研究獎勵

指導學生獲獎：2021 年第二屆生態毒理研討會海報論文競賽第一名

國立成功大學 109 教研人員彈性薪資暨研究獎勵

Selected Publications:

1. Rachele D. Arcega, Rong-Jane Chen, Pei-Shan Chih, Yi-Hsuan Huang, Wei-Hsiang Chang, Ting-Khai Kong, Ching-Chang Lee, Trias Mahmudiono, Chun-Chih Tsui, Wen-Che Hou, Hsin-Ta Hsueh, Hsiu-Ling Chen. Toxicity prediction: An application of alternative testing and computational toxicology in contaminated groundwater sites in Taiwan. *Journal of Environmental Management*. 328 (2023) 116982. (2022 Dec 8;328:116982. doi: 10.1016/j.jenvman.2022.116982.) (IF=8.910, 34/279=12.2% in ENVIRONMENTAL SCIENCES) (Co-first author)
2. Yuan-Hua Wu, Rong-Jane Chen, Hui-Wen Chiu, Li-Xing Yang, Yung-Li Wang, Yu-Ying Chen, Ya-Ling Yeh, Mei-Yi Liao, Ying-Jan Wang. Nanoparticles augment the therapeutic window of RT and immunotherapy for treating cancers: pivotal role of autophagy. *Theranostics* 2023; 13(1): 40-58. doi: 10.7150/thno.77233 (2023.01.01) (IF= 11.600, 13/139=9.3% in MEDICINE, RESEARCH & EXPERIMENTAL) (Co-first author)
3. Yu-Ying Chen, Yu-Hsuan Lee, Bour-Jr Wang, Rong-Jane Chen*, Ying-Jan Wang*. Skin damage induced by zinc oxide nanoparticles combined with UVB is mediated by activating cell pyroptosis via the NLRP3 inflammasome-autophagy-exosomal pathway. *Particle and Fibre Toxicology*. 2022 Jan 5;19(1):2. doi: 10.1186/s12989-021-00443-w. (IF=9.112, 4/94=4.2% in Toxicology) (Co-Corresponding author)



My professional experience as a DTSTA

陳容甄 Rong-Jane Chen

Department of Food Safety/Hygiene and Risk Management, College of Medicine, National Cheng Kung University

Toxicology is a practical science that is involved in many aspects such as drug development, clinical trials, consumer product development, chemical management in the environment and industries, and so on. In 2018, I was the eighth DTSTA in Taiwan to receive the Certified Toxicologist certification from the Toxicology Society of Taiwan (DTSTA). This certification is required for academics who teach and research toxicology. Most importantly, numerous businesses require certified toxicologists with experience in professional toxicology colloquies. Within my department, I teach toxicology, molecular toxicology, and alternative toxicology. I also assist the "Toxic and Chemical Substances Bureau Environmental Protection Administration Executive Yuan, Taiwan" as a reviewer for chemical substance registration. My professional background and DTSTA certification enable me to review documents and make recommendations for chemical substance registration. Furthermore, in my research, I am interested in molecular toxicology mechanisms, and I use several novel techniques to study alternative toxicology. Toxicology research is evolving at a rapid pace, with novel techniques and knowledge such as computer toxicology, alternative toxicology, and toxicogenomics becoming increasingly popular. To keep up with this novel toxicology, we need more professional education and expertise to devote their experiences in teaching, research, and occupational fields related to toxicology.



Speaker /

傅煦媛
Hsu-Yuan Fu

Current Position:

磨法生物科技股份有限公司 MycoMagic Biotech. Co., Ltd. 研發長 CSO

Education/Training:

2008-2013 Ph.D./Department of Biochemical Science and Technology/National Taiwan University
2006-2008 M.S./Department of Biochemical Science and Technology/National Taiwan University
2002-2006 B.S./Department of Biochemical Science and Technology/National Taiwan University

Professional and Research Experience:

Structural and Functional Studies on Membrane Proteins; Protein Engineering and Production; Translational Studies and Regulatory Affairs; Safety Assessment for Novel Functional Ingredients

Awards and Honors:

2022 Toxicology Society of Taiwan, Certified in General Toxicology
2019 MOEA, Certified Food Quality Assurance Engineer
2017 FIRDI, Certificate for Professional Health Food Engineer
2008 Phi Tau Phi Scholastic Honor Society of the Republic of China, Honorary member

Selected Publications:

1. H.-Y. Fu, R.-S. Hseu. Safety assessment of the fungal immunomodulatory protein from *Ganoderma microsporum* (GMI) derived from engineered *Pichia pastoris*: Genetic toxicology, a 13-week oral gavage toxicity study, and an embryo-fetal developmental toxicity study in Sprague-Dawley rats. *Toxicol Rep.* 2022
2. A. Bandyopadhyay, S. O'Brien, L. Zhao, H.-Y. Fu, N. Vishwanathan, W.-S. Hu. Recurring genomic structural variation leads to clonal instability and loss of productivity. *Biotechnol Bioeng.* 2019
3. H. Pei, H.-Y. Fu, H. Hirai, D. Cho, T. O'Brien, J. Dutton, C. Verfaillie, W.-S. Hu. Generation of induced pluripotent stem cells from Chinese hamster embryonic fibroblasts. *Stem Cell Res.* 2017
4. H.-Y. Fu, H.-P. Yi, Y.-H. Lu, C.-S. Yang. Insight into a single halobacterium using a dual-bacteriorhodopsin system with different functionally optimized pH ranges to cope with periplasmic pH changes associated with continuous light illumination. *Mol Microbiol.* 2013



Safety assessment of recombinant proteins using as food ingredients

傅煦媛 Hsu-Yuan Fu
MycoMagic Biotech. Co., Ltd.

Non-conventional food ingredients - novel food, also known as new dietary ingredients - are constantly being developed as a direct result of the evolving demands of biotechnology, nutrition, and medical care.

Genetically modified microorganisms (GMM) have been one of the most important tools for the advancement of scientific disciplines such as recombinant protein studies and synthetic biology over the last two decades. There is not only a scientific hurdle to determining how the research findings can be incorporated into consumer products, but there is also a regulatory consideration.

Here, I'd like to take advantage of the opportunity to discuss the importance of toxicology in the translational work of bringing recombinant proteins produced by GMM from the laboratory to the biotechnology food industry, as well as how this has been accomplished over the last decade.



Speaker /

陳柏霖
Bo-Lin Chen

Current Position:

Project manager/ 專案經理

Education/Training:

國立臺灣大學 毒理學研究所 博士
中山醫學大學 生物醫學科學學系 學士

Professional and Research Experience:

2015-2018 Taiwan Food and Drug Administration/ Research and development substitute services
2018-2020 Yuchen Environmental Consulting/manager
2020- Veolia group-Apollo Technology Co., LTD./project manager

Selected Publications:

1. Liao YS, Kuo JH, Chen BL, Tsuei HW, Lin CY, Lin HY, Cheng HF. Development and Validation of the Detection Method for Wheat and Barley Glutens Using Mass Spectrometry in Processed Foods. Food Anal. Methods (2017) 10: 2839-2847.
2. Chen BL, Sheu ML, Tsai KS, Lan KC, Guan SS, Wu CT, Chen LP, Hung KY, Huang JW, Chiang CK, Liu SH. CCAAT-Enhancer-Binding Protein Homologous Protein Deficiency Attenuates Oxidative Stress and Renal Ischemia-Reperfusion Injury. Antioxid Redox Signal. (2015) 23:1233-45.
Biochem. (2014) 25:1226-1234.



Speaker /

王湘翠
Hsiang-Tsui Wang

Current Position:

Associate Professor/ 副教授

Education/Training:

- 2008-2012 Ph.D., Environmental Medicine (Molecular Toxicology and Carcinogenesis), New York University
- 2004-2006 M.S., Biochemistry and Molecular Biology, National Taiwan University
- 2001-2004 B.S., Pharmacy, National Taiwan University

Professional and Research Experience:

- 2012-2014 Post-Doctor, New York University Langone Medical center
- 2014-2020 Assistant Professor, National Yang-Ming University/ Department of Pharmacology
- 2020-2021 Associate Professor, National Yang-Ming University/ Department of Pharmacology
- 2021-present Associate Professor National Yang Ming Chiao Tung University/ Department of Pharmacology

Awards and Honors:

Award for Junior Research Investigator, Dr. TsungMing Tu Foundation, 2019

Selected Publications:

1. Tsou HH, Wang PH, Ting TH, Ping YH, Liu TY, Cheng HW, Wang HT*. Effect of heated tobacco products and traditional cigarettes on pulmonary toxicity and SARS-CoV-2-induced lung injury. *Toxicology* .2022 Sep;479:153318. doi: 10.1016/j.tox.2022.153318. Epub 2022 Sep 9.
2. Tong ZJ, Kuo CW, Yen PC, Lin CC, Tsai MT, Lu SH, Chang YP, Liu WS, Tsou HH, Cheng HW, Wang HT*. Acrolein plays a culprit role in the pathogenesis of diabetic nephropathy in vitro and in vivo. *Eur J Endocrinol* 2022 Aug 1;EJE-22-0493. doi: 10.1530/EJE-22-0493.
3. Hong JH, Tong ZJ, Wei TN, Lu YC, Huang CY, Huang CY, Chiang CH, Jaw FS, Cheng HW, Wang HT*. Cigarette smoke containing acrolein contributes to cisplatin resistance in human bladder cancers through the regulation of HER2 pathway or FGFR3 pathway. *Mol Cancer Ther*. 2022 Mar 21, doi: 10.1158/1535-7163.MCT-21-0725. (*Corresponding author).
4. Wang HT, Lee HW, Weng MW, Liu Y, Huang WC, Lepor H, Wu XR, Tang MS. The role of TAp63 γ and P53 point mutations in regulating DNA repair, mutational susceptibility and invasion of bladder cancer cells. *Elife*. 2021 Nov 8;10:e71184. doi: 10.7554/eLife.71184.
5. Tsai HC, Wei KC, Chen PY, Huang CY, Chen KT, Lin YJ, Cheng HW, Chen YR, Wang HT*. Valproic Acid Enhanced Temozolomide-Induced Anticancer Activity in Human Glioma Through the p53-PUMA Apoptosis Pathway. *Front Oncol*. 2021 Oct 1;11:722754. doi: 10.3389/fonc.2021.722754. eCollection 2021. (*Corresponding author).



3/19 (日) 15:00-15:15
2樓，第29教室

The role of the toxicologist in the academic field

王湘翠 Hsiang-Tsui Wang
National Yang Ming Chiao Tung University

During the doctoral program at New York University in the United States, the professors or researchers who are qualified toxicologists usually collaborate with government or industries, which broadens the research fields. It motivates me to pursue DABT certification even if I remain in academia. Although toxicologists cannot play the same significant role in academia as they do in industry, the qualification will enable me to apply for more extensive research grants. Toxicological backgrounds are required by industry and can be applied not only in academic research, but also in relevant collaboration projects with relevant industries.



Speaker /

陳柏霖
Bo-Lin Chen

Current Position:

Project manager/ 專案經理

Education/Training:

國立臺灣大學 毒理學研究所 博士
中山醫學大學 生物醫學科學學系 學士

Professional and Research Experience:

2015-2018 Taiwan Food and Drug Administration/ Research and development substitute services
2018-2020 Yuchen Environmental Consulting/manager
2020- Veolia group-Apollo Technology Co., LTD./project manager

Selected Publications:

1. Liao YS, Kuo JH, Chen BL, Tsuei HW, Lin CY, Lin HY, Cheng HF. Development and Validation of the Detection Method for Wheat and Barley Glutens Using Mass Spectrometry in Processed Foods. Food Anal. Methods (2017) 10: 2839-2847.
2. Chen BL, Sheu ML, Tsai KS, Lan KC, Guan SS, Wu CT, Chen LP, Hung KY, Huang JW, Chiang CK, Liu SH. CCAAT-Enhancer-Binding Protein Homologous Protein Deficiency Attenuates Oxidative Stress and Renal Ischemia-Reperfusion Injury. Antioxid Redox Signal. (2015) 23:1233-45.
Biochem. (2014) 25:1226-1234.



3/19 (日) 15:15-15:30
2樓，第29教室

The application of toxicology on chemical substance regulation

陳柏霖 Bo-Lin, Chen

Veolia group-Apollo Technology Co., LTD.

Toxicology is applied in different human and environmental safety fields, like food supplements, medicine, biocides, chemical substances and medical devices. In chemical regulation, toxicological and eco-toxicological data is used to identify substance hazards in order to establish proper management policy and promote green alternatives development. The Regulations of New and Existing Chemical Substances Registration were announced in 2014 in Taiwan. For standard registration, registrants need to submit up to 9 items of toxicological information and 16 items of eco-toxicological information. The information need to be further reviewed and analyzed for making regulation policy and establishing the hazard document which is used to communicate with public. Regulatory toxicologists play an important role in the process. We need not only professional knowledge, but also a good understanding of regulations. Furthermore, the ability for communicating with the public is also required.



Speaker /

孫宏羽
Hung-Yu Sun

Current Position:

Assistant professor/ 助理教授

Education/Training:

1998-2002 B.S., Department of Zoology, National Chung Hsing University
2002-2004 M.S., Institute of Molecular Medicine, National Cheng Kung University
2004-2011 Ph.D., Institute of Basic Medical Sciences, National Cheng Kung University
2012-2018 Postdoctoral Fellow, National Cheng Kung University

Professional and Research Experience:

2018-2022 Professor, Institute of Pathogen Biology and Immunology, College of Biology, Hunan University
2022- Assistant Professor, Department of Physiology, National Cheng Kung University

Awards and Honors:

2017 Outstanding Academic Paper Award, Liver Disease Prevention & Treatment Research Foundation, Taiwan
2013 Postdoctoral Fellow Outstanding Publication Awards, National Science Council of Taiwan

Selected Publications:

1. Shuangdi Duan, Nong Qin, Jiayi Pi, et al. Antagonizing apolipoprotein J chaperone promotes proteasomal degradation of mTOR and relieves hepatic lipid deposition. *Hepatology*, 2022. (Corresponding Author) (Accepted)
2. Pin-Nan Cheng, Hung-Yu Sun, I-Che Feng et al. Interdependence of glycemic and lipid modulation in cured chronic hepatitis C patients by direct-acting antiviral agents. *J Microbiol Immunol Infect.* 2022;S1684-1182(22)00095-0 (Co-first author)
3. Hung-Yu Sun, Tzu-Ying Chen, Yu-Ching Tan, et al. Sterol O-acyltransferase 2 chaperoned by Apolipoprotein J facilitates hepatic lipid accumulation following viral and nutrient stresses. *Commun Biol.* 2021;4(1):564.
4. Sun HY, Cheng PN, Tseng CY, et al. Favouring modulation of circulating lipoproteins and lipid loading capacity by direct antiviral agents grazoprevir/elbasvir or ledipasvir/sofosbuvir treatment against chronic HCV infection. *Gut.* 2018;67(7):1342-1350.
5. Sun HY, Lin CC, Tsai PJ, et al. Lipoprotein lipase liberates free fatty acids to inhibit HCV infection and prevent hepatic lipid accumulation. *Cell Microbiol.* 2017;19(4):e12673

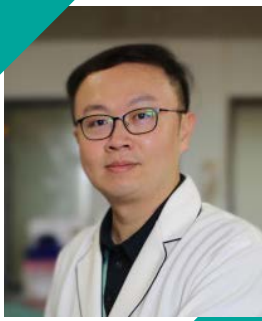


Reversing nonalcoholic fatty liver disease via antagonizing stress-induced Apolipoprotein J

孫宏羽 Hung-Yu Sun

Department of Physiology, National Cheng Kung University

Hepatic lipid deposition represents the central manifestation of metabolic syndromes and is considered the first step in the development of nonalcoholic fatty liver disease (NAFLD). Here, we show that stress-induced apolipoprotein J (ApoJ) competes with FBW7 ubiquitin ligase for mammalian target of rapamycin (mTOR), facilitates mTOR-mediated suppression of lipophagy, and results in hepatic lipid deposition. Targeting ApoJ facilitates mTOR ubiquitination, reactivates lipophagy, and reduces intracellular lipid accumulation in vitro and in vivo. Furthermore, a proof-of-concept ApoJ antagonist peptide showed potential effects in improving lipid/glucose homeostasis and insulin sensitivity in mouse models of NAFLD and T2DM. These findings demonstrate an ApoJ/mTOR/lipophagy axis in hepatic lipid deposition and indicate that ApoJ is a potential therapeutic target for lipid-associated metabolic disorders.



Speaker /

林佑融
Yu-Jung Lin

Current Position:

Assistant Research Fellow 助理研究員

Education/Training:

Ph.D. Institute of Molecular Biology, National Chung-Hsing University

M.S. Graduate Institute of Basic Medical Science, China Medical University

Professional and Research Experience:

Tumor microenvironment and stem cell therapy.

New/repurpose drug development for drug addiction and cancer therapy.

Nanoparticle conjugated antibodies for immunotherapy.

New compound and Chinese Medicine for cancer and neurodegeneration diseases.

Finding diagnosis markers/mechanism for diabetes and its complications.

Awards and Honors:

2019 Berkeley Skydeck Program Stipend Award

2018 National Innovation Award 國家新創獎 (New Drug Development For Addiction Treatment)

2017 The Phi Tau Phi Scholastic Honor Society (斐陶斐)

2010 Student Travel Stipend Award (World Molecular Imaging Congress, Japan)

Selected Publications:

1. T cells mediate kidney tubular injury via impaired PDHA1 and Autophagy in type 1 diabetes. *J Clin Endocrinol Metab.* 2022 Aug 18;107(9):2556-2570. doi: 10.1210/clinem/dgac378. (Co-corresponding), IF= 6.134
2. Artemisia argyi extract induces apoptosis in human gemcitabine-resistant lung cancer cells via the PI3K/MAPK signaling pathway. *J Ethnopharmacol.* 2022 Dec 5;299:115658. doi: 10.1016/j.jep.2022.115658. Epub 2022 Sep 6. (Co-corresponding) , IF= 5.195
3. RGS4 deficit in prefrontal cortex contributes to the behaviors related to schizophrenia via system xc⁻ mediated glutamatergic dysfunction in mice. *Theranostics.* 2018; 8(17):4781-4794. doi:10.7150/thno.25189. (Co-First author), IF=11.6
4. Tumor Hypoxia Regulates Forkhead Box C1 to Promote Lung Cancer Progression. *Theranostics.* 2017; 7(5):1177-1191. doi:10.7150/thno.17895.(First author), IF=11.6
5. Combination of fucoidan-based magnetic nanoparticles and immunomodulators enhances tumour-localized immunotherapy. *Nature Nanotechnology* volume 13, pages746–754 (2018). (Second author), IF=40.523



The role of exosome in multiple drug resistance and tumor progression

林佑融 Yu-Jung Lin

Cardiovascular and Mitochondrial Related Disease Research Center, Hualien Tzu Chi hospital

Colorectal cancer (CRC) is the top five common cancers and incidence rates increased these decades. Due to drug resistance and metastasis, CRC is also the second leading cause of cancer death worldwide. Exosome in tumor are now been reported as key mediator for drug resistance, metastasis and recurrence. However, the role of exosome play in CRC remains unclear. GRB2 is a well-known signal transduction intermedator. Its role in several cancers has also been identified could promote tumor progression. Besides, some studies pointed out GRB2 were abundant in tumor derived exosome. Here, we revealed the role of exosomal GRB2 in modulating CRC drug resistance and metastasis. We collected the multiple drug resistance (MDR)-exosomes treated with parental LoVo and SW480 cells to explore the cell viability under oxaliplatin treatment. We found the viability of parental LoVo and SW480 cells showed drug resistance with MDR-exosomes dose dependent manner. We tested the cells with transwell assay and found the MDR LoVo cells increased the migration capacity than parental cells. We then performed the NGS to analyze the mRNA and miRNA expression pattern in parental LoVo cells after MDR-GRB2 shRNA exosomes treatment. We found several interested targets were suppressed and the KEGG pathway prediction showed significant difference in both mRNA and miRNA. MDR exosomes can promote oxaliplatin insensitive in animal model. However, tumor volumes were reduced when treated with MDR-GRB2 shRNA exosomes. Taken together, these results suggest that GRB2 is a crucial regulator in CRC exosomes mediated multiple drug resistance and metastasis.



Speaker /

葉儀君
Yi-Chun Yeh

Current Position:

Assistant professor/ 助理教授

Education/Training:

- 2005.09-2010.12 Ph.D., Basic Medical Science, Institute of Basic Medical Science, National Cheng Kung University
- 2003.09-2005.06 M.S., Physiology, Department of Physiology, Medical College, National Cheng Kung University
- 1999.09-2003.07 B.S., Biology, Department of Biology, Tunghai University

Professional and Research Experience:

- 2022.02-until now Assistant Professor, Department of Physiology and Pharmacology, Chang Gung University
- 2018.07-2022.01 Research Assistant Professor, International Center of Wound Repair and Regeneration, National Cheng-Kung University
- 2012.07-2018.06 Postdoctoral Researcher, Department of Physiology, Anatomy, and Genomics, Oxford University, UK

Selected Publications:

1. Dulloo I, Atakpa-Adaji P, Yeh YC, Lvet C, Muliylil S, Lu F, Taylor CW, Freeman MA. iRhom pseudoproteases regulate ER stress-induced cell death through IP3 receptors and BCL-2. *Nat. Commun.*, 10;13(1):1257.
2. Grieve AG, Yeh YC, Chang YF, Huang HY, Zarccone L, Breuning J, Johnson N, Strišovsky K, Brown MH, Parekh AB, Freeman M. Conformational surveillance of Orai1 by a rhomboid intramembrane protease prevents inappropriate CRAC channel activation. *Mol. Cell.*, 1;81(23):4784-4798.
3. Yeh YC, Lin YP, Kramer H and Parekh AB. Single nucleotide polymorphisms in Orai1 associated with atopic dermatitis inhibit protein turnover, decrease calcium entry and disrupt calcium-dependent gene expression. *Hum. Mol. Genet.*, 21;29(11):1808-1823.
4. Yeh YC, Lin HH, and Tang MJ. Dichotomy of DDR1 functions in epithelial cells. *Biochem. Biophys. Acta. Mol. Cell Res.*, 1866(11):118473. (Review paper).
5. Yeh YC, and Parekh AB. Calcium Entry Channels in Non-Excitable Cells. Chapter of CRAC channels and Ca²⁺-dependent gene expression. Editors: Kozak JA and Putney JW. CRC Press. (Contribute a Book chapter).



Meet the "point of no return" of renal fibrosis- Can we conquer it?

葉儀君 Yi-Chun Yeh

Department of Physiology and Pharmacology

Chronic kidney disease (CKD) is a global health issue and a prodigious burden of public health expenditure in an aging society. Infectious diseases, diabetes, hypertension, and cardiorenal syndrome can lead to CKD, and diabetic kidney disease (DKD) is now the leading cause of CKD and end-stage of renal disease (ESRD). Kidney fibrosis in glomerular and tubulointerstitial compartments is associated with the decline of renal function in both diabetic and nondiabetic renal diseases. Tubulointerstitial fibrosis is in particular the common and inevitable consequence of CKD and an indispensable factor leading to ESRD. Identifying distinguishable characters along the time frame of renal fibrosis is crucial to seek the key factors contributing to its reversible or irreversible status. The current animal model of renal fibrosis did provide the aspect of disease progression but not recovering phase, in which plenty of clues may hint at possible reversible mechanisms of renal fibrosis. Here, we have established the reversal unilateral ureteral obstruction (RUUO) animal model which provides a clear time sequence of renal fibrosis and an intuitive surgery to diminish the pathological insult without other disturbance from additional medical agents. Further, the RUUO animal model is compatible with the clinical scenario of acute and chronic kidney diseases with further reversible or irreversible consequences, which could be adopted for translational study or drug screening. Myofibroblasts with the features of extracellular matrix (ECM) deposition and remodeling are known as the major player in tubulointerstitial fibrosis, and activation of resident fibroblasts or trans-differentiation of pericytes are the main sources of myofibroblasts. In the RUUO animal model, we showed that an increase in mechanical signal due to collagen deposition and crosslink orchestrated by discodin domain receptor 2 (DDR2) signaling is not only a result but a determinant in disease progression. The blocking of DDR2 signaling breaks the curse from the "point of no return" of renal fibrosis and makes DDR2 a potential therapeutic target.



S43



Speaker /

蕭逸澤

Yi-Tse Hsiao

Current Position:

School of Veterinary Medicine at National Taiwan University; Associate professor/
國立臺灣大學獸醫專業學院 / 副教授

Education/Training:

POST DOCTORAL RESEARCH

2014.7-2016.7 Dr. Laura Colgin's lab at Center for Learning and Memory, the University of Texas at Austin.

EDUCATION

2013-Current Ph.D. in Veterinary Medicine

2008-2013 Ph.D. Student in Veterinary Medicine, National Taiwan University, Taipei, Taiwan

2007-2008 M.S. Student in Veterinary Medicine, National Taiwan University, Taipei, Taiwan

2002-2006 B.S. in Veterinary Medicine, National Taiwan University, Taipei, Taiwan

Professional and Research Experience:

Learning and memory, Sleep science, Rodent skull surgery, Electroencephalogram (EEG), Brain rhythm, Animal behaviors, Computational neuroscience, Matlab program writing, Multi-tetrode drive building and recording, Behavioral tasks, In vivo calcium imaging, Optogenetics, Chemogenetics, Fiber photometry.

Selected Publications:

1. Yun Lo, Yi-Tse Hsiao*, Fang-Chia Chang* (2022, May) Use electroencephalogram entropy as an indicator to detect stress-induced sleep alteration. *Applied Sciences* 12.10: 4812.
2. Yun Lo, Pei-Lu Yi, Yi-Tse Hsiao, Fang-Chia Chang (2021, Dec) Hypocretin in locus coeruleus and dorsal raphe nucleus mediates inescapable footshock stimulation (IFS)-induced REM sleep alteration. *SLEEP*
3. Yi-Tse Hsiao, Ta-Ching Chen, Pin-Huan Yu, Ding-Siang Huang, Fung-Rong, Hu, Cheng-Ming Chuong, Fang-Chia Chang (2020, Nov) . Connectivity between nidopallium caudolateral and visual pathways in color perception of zebra finches. *Scientific Reports*, 19382
<https://www.nature.com/articles/s41598-020-76542-z>
4. Wan-Ting Liao, Chao-Lin Chang, Yi-Tse Hsiao (2020, Jun) Activation of cannabinoid type 1 receptors decreases the synchronization of local field potential oscillations in the hippocampus and entorhinal cortex and prolongs the interresponse time during a differential reinforcement of low rate task. *European Journal of Neuroscience*
<https://onlinelibrary.wiley.com/doi/abs/10.1111/ejn.14856>
5. Yi-Tse Hsiao, Yun Lo, Pei-Lu Yi, Fang-Chia Chang (2019, Jun). Hypocretin in median raphe nucleus modulates footshock stimuli-induced REM sleep alteration. *Scientific Reports*, 9:8198.
<https://www.nature.com/articles/s41598-019-44731-0>



3/18 (六) 17:10-17:40
1 樓，第 2 教室

Fear memory in the ventral hippocampus disrupts sleep in mice

李婷嫣，張晉源，廖彩君，蕭逸澤*

Ting-Yen Lee, Chin-Yuan Chang, Tsai-Chun Liao, Yi-Tse Hsiao
School of Veterinary Medicine at National Taiwan University

Traumatic daytime experiences may lead to sleep disturbances at night. Sometimes these traumatic experiences replay after falling asleep and subsequently disrupt sleep. In the present study, we hypothesize the activation of neurons that encode fear memory in the hippocampus causes sleep disturbance in animals.

To observe the brain activity, we performed in vivo calcium imaging in the ventral CA1 of the hippocampus (vCA1) and recorded the electrical field for both vCA1 and basal amygdala (BA) in mice during sleep. Then, we compared the neuronal activity before/after the subjects were fear conditioned. In addition, optogenetic, chemogenetic, and activity-dependent neural tagging techniques were used to tag and manipulate neurons that had activated during fear conditioning.

The results demonstrated that neurons in vCA1 were robustly activated during sleep when we applied conditioned stimuli. The electrical field was mainly transferred from vCA1 to BA when the subject heard the conditioned stimuli. Moreover, inhibition of the vCA1-BA pathway reduced sleep disruption following fear conditioning. In addition, stimulation of the neurons that had activated during fear conditioning caused sleep disturbance.

Our results suggest the reactivation of neurons in vCA1 keeps fear memory and contributes to sleep disturbance. The vCA1 to BA is one of the main pathways leading to this type of sleep disturbance.

37



生物醫學聯合學術年會

2023 The 37th Joint Annual Conference of Biomedical Science

科技新知研討會 Technology Symposium



JACOBS



科技新知研討會

時間：3月18日(六) 12:00-13:00
地點：1樓，第1教室
單位：雷文虎克生物技術股份有限公司

生醫新視野－雷文虎克與您重新發現微生物

Speaker /

徐丞志
台大化學系 副教授 / 雷文虎克 創辦人

Moderator /

鄒欣蓓
雷文虎克 分析化學組研究員兼組長

雷文虎克是由三大核心實驗室所組成，分別為「代謝體與精準健康研究室」、「次世代益生菌研究室」以及「微菌功效研究室」，本公司技術團隊藉由所擅長之標靶及非標靶代謝體分析、無菌小鼠養殖與特定菌定植小鼠實驗技術，致力於協助學研界探索微生物與宿主的交互作用與生物機制，透過調節微生態改善宿主健康的研究工作，並加速產業界健康食品與藥品的篩選與開發時程。雷文虎克研發團隊以科學為依歸，與客戶一同創造價值和影響力為目標。本演講將分成三大部分分別介紹雷文虎克三大研究室以及可提供之技術服務，並且展示如何水平整併各種體學的資料，作為學研界探討微生物與宿主交互作用之一大利器。



時間：3月18日(六) 12:00-13:00
地點：3樓，第32教室
單位：諾倫科技股份有限公司

我需要 3D 全組織影像嗎？3D 全組織影像技術說明講座

Speaker /

黃元孝
諾倫科技股份有限公司 執行長

Moderator /

許筑瑩
諾倫科技股份有限公司 行銷專員

諾倫科技投過自有研發技術建立起「3D Pathology Platform」，並推出首項技術服務「3D 全組織病理影像服務」，提供一站式服務給進行醫療研究單位、醫院、藥廠。從老師實驗結束準備要犧牲取組織開始，包含組織透明化、免疫染色標定，到最後出影像或 3D 動畫等，協助神經科學、生殖發育學、動物行為學、腫瘤醫學、藥物篩選等領域研發。幫助單位省下條件測試、儀器採買與人員訓練等成本，在高品質與價格高報酬率的情況下，協助研究人員的實驗有突破性的進展。

本次講座將會詳細講說展示組織製備(透明及染色)、層光顯微鏡 lightsheet 的處理原理以及服務流程，歡迎有興趣的嘉賓蒞臨參與！



時間：3月18日(六) 12:00-13:00

地點：1樓，可勝廳

單位：伯森生物科技股份有限公司

Western blotting - Optimization tips and useful tools

Speaker /

陳美齡 Dr. Eileen Tan

Scientific Support Specialist, Abcam Singapore

Moderator /

楊鎰鍵

台大藥理所教授

Western blotting (WB) is an important technique used in cell and molecular biology to visualize proteins within a complex mixture by gel electrophoretic separation, evaluate the size of proteins of interest, and to semi-quantitate protein expression. To achieve this, western blot implements three steps: (1) separation by size, (2) transfer to a solid support, and (3) visualizing target protein using primary and secondary antibodies. Among these steps, primary and secondary antibodies are critical for specific detection of proteins of interest. This technical talk will cover the basic principles and essential steps of the WB protocol, and focus on optimization and troubleshooting tips for common issues such as no signal, high background etc. We will also introduce the vast range of WB tools Abcam offers to help researchers like you to obtain quality results efficiently with confidence.

- WB application principles
- Troubleshooting and optimization tips for WB
- Discussion on current challenges in performing WB and potential approaches to overcome this



時間：3月18日(六) 12:00-13:00
地點：3樓，第33教室
單位：進階生物科技股份有限公司

1. Modern Drug Discovery with Human Organ Chip

Speaker /

葉家賢 生醫行銷 / 副總經理
台大地質系 / 台大免疫學研究所 碩士

Moderator /

陳炳憲 生醫行銷 / 資深產品經理
長庚大學醫學技術研究所 碩士，國立政治大學企管系科技管理研究班

眾所周知藥物開發是一條漫長而且昂貴的歷程，但藥物可幫助人類解決或減緩各類疾病的進程提升生活水平又是刻不容緩的工作，因此一個能強化藥物開發的現代化平台顯得非常重要。過往由靜態細胞培養平台篩選後且通過臨床前生體試驗的候選藥物，進到臨床試驗階段仍存在 90% 失敗的風險，也有不少候選藥物因為物種差異而在前臨床試驗被意外的淘汰，延緩了開發時程。因此若能以更接近人體的微生理環境器官晶片進行藥物開發的輔助，這種包含拉伸與液體流動動態三維多種細胞共培養平台，能取得影像與終點生化與基因分析，得到藥理與毒理的重要資訊，將是未來新型態的藥物開發重點輔助平台！

2. From Human Organ Chip to Toxicology Research

Speaker /

曾湘文 臨床前試驗 / 副總經理，美國認證毒理師
陽明交通大學 / 藥理學研究所 博士

Moderator /

陳炳憲 生醫行銷 / 資深產品經理
長庚大學醫學技術研究所 碩士，國立政治大學企管系科技管理研究班

新藥開發過程中，在首次進行臨床試驗前及獲得核准上市前，都必須經過一系列的臨床前毒性試驗，以提供新藥的安全性訊息。以進入臨床一期試驗前，須完成的安全性評估包含基因毒理、兩物種系統性毒性試驗以及安全藥理學(中樞神經、呼吸、及心血管安全藥理學)的評估。並且所有的試驗均需符合各國的監管機構以及依據國際協會會議(ICH, International Conference for Harmonization)發佈了指引綱要，進行各項 GLP 的臨床前試驗，以提供足夠的新藥安全評估及首次人類用藥(FIH, First in human)的使用劑量。本演講將介紹藥物研發在進入臨床前試驗所需的各種安全性評估項目(non-GLP 以及 GLP)，提供完整的臨床前安全性試驗概念。



時間：3 月 18 日 (六) 12:00-13:00

地點：3 樓，第 30 教室

單位：萊富生命科技股份有限公司

1. 利用基因組編輯從 iPSC 創建疾病模型 Leveraging genome editing of iPSCs to create disease models

Speaker /

曾俞楨 產品經理

Thermo Fisher Scientifics

在革新性的 CRISPR 技術推動下，使用基因組編輯開發下一代疾病模型和新療法是可行的新方向，以使用於多種疾病的臨床治療與開發。為了幫助您將研究提升到一個新的水平，我們將概述如何設計基因組編輯實驗，分享幹細胞疾病模型中的應用，並討論重要的考慮因素，包括脫靶效應和 GMP 等級試劑的使用，提供完整解決方案，促進細胞療法的開發和商業規模生產。

2. 數位 PCR 與即時定量 PCR: 兩全其美，各取其長 Digital PCR & qPCR: The Best of Both Worlds

Speaker /

趙乃蓁 Nai-Chen Chao 產品經理

Thermo Fisher Scientifics

當使用即時定量 PCR (qPCR) 進行目標核酸定量，已成為廣泛使用技術之時，針對需要更高精準度和絕對定量的需求，搭配數位 PCR (dPCR) 則能夠協助您進行更進一步的研究與檢測。

我們將介紹 TaqMan assay 系統所帶來的高專一性與多色分析能力、qPCR 與 dPCR 的使用時機、新型 dPCR：Applied Biosystems QuantStudio Absolute Q system 如何提升操作的方便性，以及目前 dPCR 的各種應用，如何能夠協助您的研究。



時間：3月18日(六) 12:00-13:00
地點：3樓，第31教室
單位：台灣活性脂質股份有限公司

Lipidomics for Metabolic Syndrome and Obesity Pandemics Researches

Speaker /

Kai Simons

Honorary Professor, Max-Planck-Institute of Molecular Cell Biology and Genetics

Moderator /

楊顯丞 Juan-Cheng Yang

CEO, Taiwan BioActive Lipid, Ltd.Co

Today we are under threat not only from Covid-19 but another even worse pandemic is spreading worldwide and that is obesity, unhealthy weight. This disease does not only cause serious health problems globally but it can also lead to other diseases such as diabetes type 2, cardiovascular disease, liver disease, dementia and cancer. Obesity is driven by the consumption of processed foods, snacks, and soft drinks that are designed so that they even can become addictive. Metabolic parameters can long be maintained in a physiological range. However, once the metabolic overload has overwhelmed the homeostatic control systems, the damage leads to disease.

It is here that the lipids come into play. Lipid homeostasis is central to health. When lipid metabolism becomes dysfunctional, it can turn into a driver for the gamut of obesity-related complications. Amazingly, what is lacking are diagnostic tests that can recognize dysmetabolism before it turns into disease and becomes irreversible. The situation for obesity is like trying to combat Covid without an assay for the virus.

Most excitingly, our studies demonstrate that lipids could provide a means to monitor dysmetabolism. Plasma cholesterol and triglycerides have already proven their worth as useful biomarkers. When you add the complement of lipids in our lipidomes to the analysis, then the differentiation power becomes formidable. The fact that pathological changes occurring in our body organs seem to be mirrored in the blood lipidome could provide the basis for the diagnosis of dysmetabolism. Strangely neglected, lipid metabolism is now emerging as a research area with great potential.

Here is what you can learn

- What are the drivers of the obesity pandemic
- Lipid metabolism homeostasis as a key to dysmetabolism diagnostics
- Lipidomics analysis as a quick and reliable tool to monitor dysmetabolism



時間：3月18日(六) 12:00-13:00

地點：1樓，第2教室

單位：台灣活性脂質股份有限公司

Brown adipose tissue-derived signal lipids ameliorate metabolic dysfunction and inflammation in diet-induced obesity

Speaker /

Chih-Hao Wang

Assistant Professor, Graduate Institute of Biomedical Sciences, College of Medicine, China Medical University

Moderator /

Wen-Lung Ma

Professor, Graduate Institute of Biomedical Sciences, College of Medicine, China Medical University

Brown adipose tissue (BAT) can utilize glucose and fatty acid as fuels to generate heat in the cold condition, which is known as thermogenesis. BAT also serves as an endocrine organ to communicate with other tissues for maintenance of systemic energy and glucose metabolism via secreted metabolites, lipids, proteins. Thus, obese people with high BAT activity display well-controlled blood glucose and triglycerides as well as low risks to develop type 2 diabetes and cardiovascular diseases. Although cold stimulation is a potent way to activate human BAT, it causes many side effects. Finding the alternatives or cold mimetics to imitate BAT activation and bypass undesirable effects is imperative. Using targeted liquid chromatography with tandem mass spectrometry, we aimed to discover the BAT-derived lipid mediators and their biological functions upon cold stimulation. We identified that cold stimulation promoted the biosynthesis and release of 12-lipoxygenase (12-LOX) metabolites from BAT. One of 12-LOX product, 12-HEPE, targeted to adipocytes and skeletal muscle to promote glucose uptake via insulin-like signaling pathway. Moreover, cold also stimulated BAT to secrete maresin 2 (MaR2), one of the specialized pro-resolving lipid mediators. MaR2 targeted to macrophages in the liver for resolving obesity-induced inflammation. Mice with 12-LOX deficiency in BAT were unable to release these lipid mediators and revealed impairments in glucose homeostasis and thermogenesis in response to cold environment. Taken these together, BAT-derived lipid mediators may serve as cold mimetics to provide us new therapeutic approaches to combat obesity and metabolic disorders.

37



生物醫學聯合學術年會

2023 The 37th Joint Annual Conference of Biomedical Science

口頭論文報告資訊 Oral Presentation



JACBS



口頭論文報告資訊

3月18日

學會	地點	時間	編號
大會主題競賽	3樓 致德堂	14:30-16:40	O01- O09
台灣藥理學會 (杜聰明博士研究生論文獎決選)	1樓 第1教室	09:00-10:30	O10- O14
中華民國免疫學會	1樓 可勝廳	14:45-16:45	O15- O23
台灣毒物學學會	2樓 第29教室	08:30-10:30	O24- O29
中國生理學會	1樓 第2教室	09:00-10:30	O30- O34

3月19日

學會	地點	時間	編號
中華民國解剖學學會	3樓 第32教室	08:30-10:00	O35- O48
台灣分子生物影像學會	2樓 第20教室	08:30-10:10	O49- O57
中華民國細胞及分子生物學學會 (徐千田優秀論文競賽)	3樓 第30教室	09:00-12:30	O58- O66
中華民國臨床生化學會	3樓 第31教室	09:00-11:30	O67- O72



大會主題競賽

時 間：3 月 18 日 (六) 14:30-16:40

地 點：3 樓，致德堂

編號	論文題目
O01	Naringenin improves estrogen deficiency-induced obesity via adipose tissue browning through regulation of mitochondrial dynamics and AMPK pathway 盤彤, 李燕媚, 顏茂雄, 沈信學 Tong Pan, Yen-Mei Lee, Mao-Hsiung Yen, Hsin-Hsueh Shen
O02	Dysregulation of SOX17/NRF2 axis confers chemoradiotherapy resistance and emerges as a novel therapeutic target in esophageal squamous cell carcinoma 謝智雄 ^{1#} , 官彰徽 ¹ , 張維倫 ² , 郭懿瑩 ^{1,3} , 劉薰 ¹ , 謝達斌 ⁴ , 劉軒 ⁵ , 譚賢明 ⁵ , 王憶卿 ^{1,6*} Chih-Hsiung Hsieh ^{1#} , Wen-Hui Kuan ¹ , Wei-Lun Chang ² , I-Ying Kuo ^{1,3} , Hsun Liu ¹ , Dar-Bin Shieh ⁴ , Hsuan Liu ⁵ , Bertrand Tan ⁵ , and Yi-Ching Wang ^{1,6*}
O03	Dysfunction of Paneth cells causes intestinal Atoh1-driven secretory cell remodeling with compromised Type 2 immunity and tumorigenesis 陳郁文 ^{1,2} , 蘇塔克 ² , 徐志文 ^{2*} Yu-Wen Chen ^{1,2} , Janaki N. Sudhakar ² , Jr-Wen Shui ^{2*}
O04	Overexpression of the de novo purine biosynthesis enzyme PFAS confers urothelial carcinoma proliferation and tumorigenicity via Myc positive feedback loop 林柏玄, 蔡惠宇, 張御展 Bo-Syuan Lin, Huei-Yu Cai, Yu-Chan Chang
O05	Stabilization of AMPK/PFKL/RPIA in the Glycolytic Bodies Transduces IL6/STAT3 Signal in Hepatocarcinogenesis 蕭茱筠, 程俊嘉, 沈伯尼, 蕭瑋鈴, 邱于庭, 王怡文, 郭呈欽, 王雯靜, 吳京穎, 林冠豪, 楊琬渝, 魏孔懷, 翁林皓文, 汪宏達, 喻秋華 Jia-Zih Dai, Yen-Ju Wang, Cheng-Hsun Chen, I-Lin Tsai, Yi-Chun Chao, and Cheng-Wei Lin
O06	Obesity-mediated YAP activation facilitates breast cancer progression by inducing metabolic reprogramming and immunosuppression 戴嘉孜, 王嫻茹, 陳政勳, 蔡伊琳, 趙苡均, 林政緯 Jia-Zih Dai, Yen-Ju Wang, Cheng-Hsun Chen, I-Lin Tsai, Yi-Chun Chao, and Cheng-Wei Lin
O07	Spint1 knockout in mouse pancreatic β cells results in glucose intolerance and impaired insulin production via HEPsin signaling 林欣賢, 游益興, 鄭名珊, 林辰蔚, 林心滢, 黃祥博, 李明學 Hsin-Hsien Lin, I-Shin Yu, Ming-Shan Cheng, Chen-Wei Lin, Hsin-Ying Lin, Hsiang-Po Huang*, and Ming-Shyue Lee*



編號	論文題目
O08	A Novel Angelicin Derivative BPR2P0001S0 Inhibits Human Squamous Cell Carcinoma by Reprogramming Cancer Metabolism 李立璿 ¹ , 吳承祐 ¹ , 莊永仁 ² , 江士昇 ³ , 葉燈光 ¹ , 黃致翔 ¹ , 湯雅筑 ¹ , 張俊彥 ⁴ , 謝興邦 ¹ , 張壯榮 ⁵ , 郭靜娟 ^{*1} Li-Hsuan Li ¹ , Cheng-Yu Wu ¹ , Yung-Jen Chuang ² , Shih-Sheng Jiang ³ , Teng-Kuang Yeh ¹ , Chih-Hsiang Huang ¹ , Ya-Chu Tang ¹ , Jang-Yang Chang ³ , Hsing-Pang Hsieh ¹ , Chuang-Rung Chang ⁴ , Ching-Chuan Kuo ^{*1}
O09	Neuronal KATP Channels Are Dispensable for Glucose Homeostasis in Mice 李昫潔, 蔡欣汝, 蔡文豪, 楊世斌 Hsin-Ju Tsai, Wen-Hao Tsai, Shi-Bing Yang



台灣藥理學會 (杜聰明博士研究生論文獎決選)

時間：3月18日(六) 09:00-10:30

地點：1樓，第1教室

主持人：張文昌 院士

編號	論文題目
O10	<p>Targeting Endoplasmic Reticulum Protein TXNDC5 in Hepatic Stellate Cells Mitigates Liver Fibrogenesis by Repressing Non-Canonical Transforming Growth Factor-β Signaling</p> <p>洪振庭¹, 蘇東弘^{2,9}, 陳彥廷¹, 吳岳峰³, 陳祐宗⁴, 林頌然^{3,5,6,7}, 林水龍^{6,8,9,10}, 楊鎧鍵^{1,6,7,9,11*}</p> <p>Chen-Ting Hung¹, Tung-Hung Su^{2,9}, Yen-Ting Chen¹, Yueh-Feng Wu³, You-Tzung Chen⁴, Sung-Jan Lin^{3,5,6,7}, Shuei-Liong Lin^{6,8,9,10}, Kai-Chien Yang^{1,6,7,9,11*}</p>
O11	<p>Generational Synaptic Functions of GABAA Receptor β3 Subunit Deteriorations in an Animal Model of Social Deficit</p> <p>初銘家, 李旂緯, 林惠菁</p> <p>Ming-Chia Chu, Chi-Wei Lee, Hui-Ching Lin</p>
O12	<p>PARP-1 Regulates Inflammasome Activity by Poly ADP-ribosylation of NLRP3 and Interaction with TXNIP in Primary Macrophages</p> <p>邱鈴雅, 黃婷茵, 林琬琬</p> <p>Ling-Ya Chiu, Duen-Yi Huang, Wan-Wan Lin</p>
O13	<p>ERα determines the chemo-resistant function of mutant p53 involving the switch between lincRNA-p21 and DDB2 expressions</p> <p>何宥豪^{1,2}, 葉名燮^{3,4}, 陳筱凡^{2,5}, 王祖興⁶, 翁瑞宏^{7,8}, 魏雅鈴², Thanh Kieu Huynh^{2,9}, 胡玘璋^{2,9}, 鄭方茹^{2,10}, 陳貞妤², 胡書瑋^{2,9}, 黃家禎⁷, 陳擘^{5,11}, 游家鑫¹², 鄭維中^{1,13}, 沈培鈞¹³, 劉良智¹⁴, 黃至豪¹⁴, 張雅貞^{1,15}, 黃偉謙^{1,2,5,9,13,16}</p> <p>Yu-Hao He^{1,2}, Ming-Hsin Yeh^{3,4}, Hsiao-Fan Chen^{2,5}, Tsu-Shing Wang⁶, Ruey-Hong Wong^{7,8}, Ya-Ling Wei², Thanh Kieu Huynh^{2,9}, Dai-Wei Hu^{2,9}, Fang-Ju Cheng^{2,10}, Jhen-Yu Chen², Shu-Wei Hu^{2,9}, Chia-Chen Huang⁷, Yeh Chen^{5,11}, Jiaxin Yu¹², Wei-Chung Cheng^{1,13}, Pei-Chun Shen¹³, Liang-Chih Liu¹⁴, Chih-Hao Huang¹⁴, Ya-Jen Chang^{1,15} and Wei-Chien Huang^{1,2,5,9,13,16}</p>
O14	<p>A chemical probe inhibitor targeting STAT1 restricts cancer stem cell traits and angiogenesis in colorectal cancer</p> <p>周佩萱, 羅琮凱, Niaz Wal, 林文彥, 黃襄國, 王俊皓, 趙明濤, 林聖偉, 楊培銘, 劉品蓉, 謝俊結, 魏子堂</p> <p>Pei-Hsuan Chou, Cong-Kai Luo, Niaz Wali, Wen-Yen Lin, Shang-Kok Ng, Chun-Hao Wang, Mingtao Zhao, Sheng-Wei Lin, Pei-Ming Yang, Pin-Jung Liu, Jiun-Jie Shie, Tzu-Tang Wei</p>



中華民國免疫學會

時 間：3 月 18 日 (六) 14:45-16:45

地 點：1 樓，可勝廳

主持人：徐嘉琳 副秘書長

編號	論文題目
O15	A receptor-binding domain-based nanoparticle vaccine elicits durable neutralizing antibody responses against SARS-CoV-2 and variants of concern 李逸容, 藍玉樺, 吳品逸, 吳彥璋, 陳毓宏, 曾聖哲, 郭姿均, 孫承溥, 陶秘華 I-Jung Lee, Yu-Hua Lan, Ping-Yi Wu, Yan-Wei Wu, Yu-Hung Chen, Sheng-Che Tseng, Tzu-Jiun Kuo, Cheng-Pu Sun, Mi-Hua Tao
O16	Self-recognition dictating TCR signal strength of diabetogenic antigen-specific CD8+ T cells modulates the spectrum of T cell pathogenicity in non-obese diabetic mice 何佳瑤 ^{1,2,4} , 葉禮慈 ³ , 與司徒惠康 ^{2,3,4} Chia-Lo Ho ^{1,2,4} , Li-Tzu Yeh ³ , and Huey-Kang Sytwu ^{2,3,4}
O17	Respiratory Virus-Induced NETosis and Its Impact on Steroid-Resistant Asthma 薛佳宜, 張雅貞 ¹ Chia-Yi Hsueh, Ya-Jen Chang ¹
O18	NLRP12 negatively regulates noncanonical inflammasome, type 1 IFN-mediated suicidal Lytic NETosis, and antibacterial impairment of neutrophils 周明莉, 陳斯婷 Ming-Li Chou, Szu-Ting Chen
O19	Optimization of Superantigen Immunomodulatory Landscape for Cancer Therapy 于耀安 ^{1,2} , 連婉汝 ¹ , 牟昀 ^{1*} Yao-An Yu ^{1,2} , Wan-Ju Lien ¹ , Kurt Yun Mou ^{1*}
O20	Enteric Helminth Infection Confers Bystander Protection against Subsequent Unrelated Pulmonary Virus Infection 戴琪, 謝佳勳, 林志萱 Chi Tai, Jia-Xun Xie, and Jr-Shiuan Lin
O21	The interactive role of ketogenic diet and microbiota on T cell glycosylation and immunopathogenicity in non-obese diabetic mice 陳文凱 ^{1,2} , 傅馨慧 ^{2,3} , 簡明偉 ^{2,3} , 司徒惠康 ^{2,3*} Ung-Kai Ting ^{1,2} , Shin-Huei Fu ^{2,3} , Ming-Wei Chien ^{2,3} , Huey-Kang Sytwu ^{2,3*}
O22	CD40 Signaling Rewires Metabolic Circuits in Macrophages to Boost Antitumor Therapy 陳哲, Yi-Ting Chen, Xiaoyun Li, Pei-Chun Hsueh, Sheue-Fen Tzeng, Pei-Zhu Shi, Xin Xie, Sweta Parik, Sara-Maria Fendt, Ping-Chih Ho, 劉卜慈 Hsi Chen, Yi-Ting Chen, Xiaoyun Li, Pei-Chun Hsueh, Sheue-Fen Tzeng, Pei-Zhu Shi, Xin Xie, Sweta Parik, Sara-Maria Fendt, Ping-Chih Ho, Pu-Ste Liu*
O23	Reveal and exploit the underlying mechanism of intratumoral bacteria: Engineered bacteria as an iron scavenger for cancer therapy 黃信偉, 牟昀 Sin-Wei Huang, Yun Mou



台灣毒物學學會

時 間：3 月 18 日 (六) 08:30-10:30

地 點：2 樓，第 29 教室

主持人：邱惠雯教授

編號	論文題目
O24	Blockage of Nrf2 and Autophagy by L-selenocystine Induces Selective Death in Nrf2-addicted Colorectal Cancer Cells through p62-Keap-1-Nrf2 Axis 徐偉倫, 王傑民, 姚少凌, 陳師慶, 粘仲毅, 孫揚和, 曾琮祐, 羅月霞 Wei-Lun Hsu, Chieh-Min Wang, Chao-Ling Yao, Ssu-Ching Chen, Chung-Yi Nien, Yang-Ho Sun, Tsung-Yu Tseng, Yueh-Hsia Luo
O25	Decipher the Obesogenic Effects and Hepatotoxicity of Perfluoroalkyl Substances (PFAS) in Humans Using in Vitro High-Content Imaging Technique 應任彥 ¹ , 陳宣廷 ² , 詹長權 ³ , 羅宇軒 ^{1,4*} Ren-Yan Ying ¹ , Xsuan-Ting Chen ² , Chang-Chuan Chan ³ , Yu-Syuan Luo ^{1,4*}
O26	Role of Pro-tumor Secreted Protein Chitinase-3-like-1 in Cancer Progression: from Transcriptional Regulations to Clinical Applications 蘇珮嘉 ^{1#} , 陳鏡宇 ² , 王憶卿 ^{1,2*} Pei-Chia Su ^{1#} , Ching-Yu Chen ² , Yi-Ching Wang ^{1,2*}
O27	ITIH4 involved in Hippo signalling pathway-regulated apoptosis on type 2 alveolar epithelial cells of acute respiratory distress syndrome 施育暄 ¹ , 莊校奇 ^{1*} Yu-Xuan Shih ¹ , Hsiao-Chi Chuang ^{1*}
O28	Hyperbaric oxygen therapy attenuates the pulmonary immune-inflammatory response and diminishes pyroptosis after carbon monoxide poisoning 陳子豪 ^{1,2} , 張菁萍 ² , 黃建程 ^{1,3} , 王應然 ^{1*} Tzu-Hao Chen ^{1,2} , Ching-Ping Chang ² , Chien-Cheng Huang ^{1,3} , Ying-Jan Wang ^{1*}
O29	Hippo signaling pathway regulated branching morphogenesis of fetal lung under hypoxia 廖紫安 ¹ , 莊校奇 ^{1*} Zih-An Liao ¹ , Hsiao-Chi Chuang ^{1*}



中國生理學會

時 間：3 月 18 日 (六) 09:00-10:30

地 點：1 樓，第 2 教室

主持人：吳偉立 助理教授

編號	論文題目
O30	<p>Peroxisome proliferator-activated receptor delta reduces features of atherosclerotic plaques instability by regulating smooth muscle cell phenotypic switching 連志峯^{1†}, 林錦生^{1†}, 徐松鋨², 謝博軒^{3,4}, 陳思州⁵, 林宜丹⁴, 錢煦⁶, 蔡旻倩^{4*} Chih-Feng Lien^{1†} PhD, Chin-Sheng Lin^{1†} MD, PhD., Song-Kun Shyue² PhD., Po-Shiuan Hsieh^{3,4} MD, PhD., Sy-Jou Chen⁵ MD, MS., Yi-Tan Lin⁴ MS., Shu Chien⁶ MD, PhD., and Min-Chien Tsai^{4*} PhD.</p>
O31	<p>Role of Pleckstrin Homology Domain Containing A2 in the Hippocampus 吳冠妤, 黃國正 Kuan-Yu Wu, Guo-Jen Huang</p>
O32	<p>A novel NMDA receptor modulator rises a new hope for the treatment of multiple system atrophy: From preclinical models to patients 羅達中, 賴文崧 Da-Zhong Luo, Wen-Sung Lai</p>
O33	<p>Downregulation of Endometrial Primary Cilia by TGF-β 1 Is Associated with Infertility in Endometriosis 侯奐慈, 吳孟興, 蔡少正 Huan-Tzu Hou, Meng-Hsing Wu, Shaw-Jenq Tsai</p>
O34	<p>Hypothalamic SF1-expressing neurons encode a conspecific-tuned, investigation-driving behavioral state 林士哲, 李翰撰, 陳一誠, 楊世斌 Shih-Che Lin, Han-Jhuan Lee, Yi-Cheng Chen, Shi-Bing Yang</p>



中華民國解剖學學會

時 間：3 月 19 日 (日) 08:30-10:00

地 點：3 樓，第 32 教室

主持人：江青樹秘書長

編號	論文題目
O35	How Does Centrosome Abnormality Facilitate Pancreatic Adenocarcinoma Chemoresistance? 趙鈺瑛, 王家義 Yu-Ying Chao, Chia-Yih Wang
O36	Guggulsterone inhibits migration and invasion through proteasomal and lysosomal degradation in human glioblastoma cells 楊仁富, 陳姿閔, 張欣翰, 蔡佑靈, 蔡文銓, 黃文彥, 羅承翔, 林群書, 沈伯鍵, 陳滢 Jen-Fu Yang, Tzu-Min Chen, Hsin-Han Chang, Yu-Ling Tsai, Wen-Chiuan Tsai, Wen-Yen Huang, Cheng-Hsiang Lo, Chun-Shu Lin, Po-Chien Shen, Ying Chen*
O37	To study the particulate matter 2.5-induced cardiac damage and the related mechanisms 任藝, 李紫琳, 陳雅君, 賴財春, 陳玉伶 Yi Ren, Tzu-Lin Lee, Ya-Chun Chen, Tsai-Chun Lai, Yuh-Lien Chen
O38	The Therapeutic Effects and The Relative Mechanisms of Propolin C on Restenosis 陳楷婷, 王淑慧 * Kai-Ting Chen, Shu-Huei Wang*
O39	To study the effect of particulate matter and high fat diet on endothelial inflammation 虞景筌, 李紫琳, 陳雅君, 賴財春, 陳玉伶 Ching-Chuan Yu, Tzu-Lin Lee, Ya-Chun Chen, Tsai-Chun Lai, Yuh-Lien Chen
O40	Effects of exercise on social stress and high-fat diets-induced depression: the role of frontostriatal circuit 王允辰, 趙子緯, 郭余民 Yun-Chen Wang*, Zi-Wei Zhao#, Yu-Min Kuo*#
O41	Investigating the role of developing corticostriatal projections in vocal communication 龐皓仔, 劉福清, 郭曉縈 Hao-Yu Pang, Fu-Chin, Liu, Hsiao-Ying Kuo
O42	Fbxo25 mutant mice exhibit aberrant hippocampal protein expression and more aggressive behaviors 林思妤 ¹ , 鄭丞鈞 ¹ , 張荷清 ¹ , 李立仁 ^{1,2,3*} , 高淑芬 ^{2,3,4} Szu-Yu Lin ¹ , Cheng-Jiun Cheng ¹ , Ho-Ching Chang ¹ , Li-Jen Lee ^{1,2,3*} , Susan Shur-Fen Gau ^{2,3,4}



編號	論文題目
O43	The Protective Role of Wild Bitter Melon Leaf Extract against High-Fructose Diet induced Renal Disease 王品竣, 林妤叡, 蕭安, 蔡帛蓉, 龔秀妮 Pin-Jun Wang, Yu-Jui Lin, An Hsiao, Po-Jung Tsai, Hsiu-Ni Kung
O44	Protective Effects of Allium macrostemon Bunge Extracts Against High-Fructose Corn Syrup-Induced Skeletal Muscle Damage and Decreased Exercise Performance 許勝崑, 蔡帛蓉*, 龔秀妮* Sheng-Wei Hsu, Po-Jung Tsai*, Hsiu-Ni Kung*
O45	To explore the effect of JAK2 on migration, invasion and angiogenesis after regulating Farnesoid X receptor human glioblastoma cells 陳姿閔, 陳滢 Tzu-Min Chen, Ying Chen
O46	Spared Nerve Injury-Induced Neuropathic Pain in Diabetes 林辰蓁 ¹ , 謝松蒼 ^{1,2,3} Cheng-Chen Lin ¹ , Sung-Tsang Hsieh ^{1,2,3}
O47	Investigate the Molecular Mechanism of MiR-20b-5p in Regulating Trophoblast Migration and Invasion 林芮綺, 王家義 Ruei-Ci Lin, Chia-Yih Wang
O48	The Effect of Cell Free Pleural Effusion on Proliferation and Migration in Fibroblast 許宸瑄 ¹ , 陳滢 ^{1*} , 蔡鎮良 ² Chen-Hsuan, Hsu ¹ , Ying Chen ^{1*} , Chen-Liang Tsai ²



台灣分子生物影像學會

時 間：3 月 19 日 (日) 08:30-10:10

地 點：2 樓，第 20 教室

主持人：蘇家豪 教授、柯建志 助理教授

編號	論文題目
O49	Biocompatible and Ligand free Nanomaterials for T2-weighted Magnetic Resonance Imaging of In vivo Lung Tumors Suresh Thangudu, Chun-Chieh Yu, Chin-Lai Lee, Min-Chiao Liao & Chia-Hao Su
O50	Investigate the effect of immunoadjuvant glycosylated chitosan adjuvant radiotherapy on syngeneic breast tumors model 葉書彰, 黃禮文, 李易展 Shu-Wen Yeh, Li-Wen Huang, Yi-Jang Lee
O51	Combination of Extracellular Vesicles, Alendronate, and Curcumin for the Treatment of Osteoporosis 呂承杰, 陳怡安, 柯建志, 王逢興, 劉仁賢 Cheng-Hsiu Lu, Yi-An Chen, Chien-Chih Ke, Feng-Sheng Wang, Ren-Shyan Liu
O52	Comparison of 18F-FBPA-Fructose, 18F-fluciclovine, and 18F-FET PET for Imaging-Guided Boron Neutron Capture Therapy (BNCT) 李紫瑜, 張庭瑀, 辜敏慈, 張文議, 吳駿一* Tzu-Yu Lee, Ting-Yu Chang, Min-Tzu Ku, Wen-Yi Chang, Chun-Yi Wu*
O53	Monitoring the PD-L1 Expression Level of Murine Glioblastoma Multiforme Xenograft after Boron Neutron Capture Therapy (BNCT) 蔡依婷 ¹ , 張庭瑀 ¹ , 洪文翔 ¹ , 樊修秀 ² , 吳駿一 ¹ Yi-Ting Tsai ¹ , Ting-Yu Chang ¹ , Wen-Hsiang Hong ¹ , Shiou-Shiow Farn ² , Chun-Yi Wu ^{1*}
O54	Developing RGD-Functionalized Boron-Containing Nanoparticles for Boron Neutron Capture Therapy 洪文翔, 張庭瑀, 陳夙容, 樊修秀, 吳駿一 Wen-Hsiang Hong, Ting-Yu Chang, Su-Jung Chen, Shiou-Shiow Farn, and Chun-Yi Wu
O55	β -caryophyllene increases radiotherapy efficacy through upregulating PPAR γ on the glioblastoma model 詹惠雯, 莊惠燕 Hui-Wen Chan, Hui-Yen Chuang
O56	Investigation of angiogenesis in cancer initiating cells from remnant living cells of human head and neck squamous cell carcinoma using pDots-NIR II ultrabright molecular imaging 林旻穎, 余學彥, 詹揚翔, 蘇世博, 江惠華, 楊慕華, 李易展 Min-Ying Lin, Hsueh-Yen Yu, Yang-Hsiang Chan, Shih-Po Su, Huihua Kenny Chiang, Muh-Hwa Yang, Yi-Jang Lee



編號

論文題目

- O57 The Therapeutic Efficacy of Gold Nanostar-Mediated Photothermal Therapy in Combination with Immunotherapy in a Colon Carcinoma-Bearing Mouse Model
謝昕樺¹, 詹惠雯¹, 王義明^{2,3}, 吳駿一¹, 林明佳⁴
Hsin-Hua Hsieh¹, Hui-Wen Chan¹, Yi-Ming Wang^{2,3}, Chun-Yi Wu¹, and Ming-Chia Lin^{4*}



中華民國細胞及分子生物學學會 (徐千田優秀論文競賽)

時 間：3 月 19 日 (日) 09:00-12:30

地 點：3 樓，第 30 教室

主持人：郭紘志秘書長

編號	論文題目
O58	<p>Single-cell Transcriptomic Analysis Reveals Diversity Within Mammalian Spinal Motor Neurons</p> <p>廖于緬^{1,2†}, 金鎖欽^{3,4†}, 陳彥中², 柳維思², Maëliiss Calon^{5,6,7}, Stéphane Nedelec^{5,6,7}, 聶青^{4*}, 陳俊安^{1,2,8*}</p> <p>Ee Shan Liao^{1,2†}, Suoqin Jin^{3,4†}, Yen-Chung Chen², Wei-Szu Liu², Maëliiss Calon^{5,6,7}, Stéphane Nedelec^{5,6,7}, Qing Nie^{4*}, Jun-An Chen^{1,2,8*}</p>
O59	<p>WAKE-mediated modulation of cVA perception via a hierarchical neuro-endocrine axis in Drosophila male-male courtship behaviour</p> <p>陳秀玲^{**}, 劉柏廷^{**}, 李旺宝^{**}, 廖信博, 鄧耀邦, 吳嘉霖, 何淑敏, 沈秉賢, 邱原富, 徐偉強, 張芷瑄, 石卉文, 溫榮崑, 藍祚鴻, 林志堅, 蔡玉真[*], 曾惠芬[*], 傅在峰[*]</p> <p>Shiu-Ling Chen^{**}, Bo-Ting Liu^{**}, Wang-Pao Lee^{**}, Sin-Bo Liao, Yao-Bang Deng, Chia-Lin Wu, Shuk-Man Ho, Bing-Xian Shen, Guan-Hock Khoo, Wei-Chiang Shiu, Chih-Hsuan Chang, Hui-Wen Shih, Jung-Kun Wen, Tsuo-Hung Lan, Chih-Chien Lin, Yu-Chen Tsai[*], Huey-Fen Tzeng[*], Tsai-Feng Fu[*]</p>
O60	<p>Phosphorylation of Arl4A/D Promotes Their Binding by the HYPK Chaperone for Their Stable Recruitment to the Plasma Membrane</p> <p>林明潔^{1,2}, 游佳融^{3,4}, 李芳仁^{1,2,5*}</p> <p>Ming-Chieh Lin^{1,2}, Chia-Jung Yu^{3,4}, and Fang-Jen S. Lee^{1,2,5*}</p>
O61	<p>Calpain-2 Mediates MBNL2 Degradation and a Developmental RNA Processing Program in Neurodegeneration</p> <p>王李馨¹, 林建宇¹, 林郁玟¹, Luc Buée², Nicolas Sergeant², David Blum², 陳儀莊¹, 王桂馨¹</p> <p>Lee-Hsin Wang¹, Chien-Yu Lin¹, Yu-Mei Lin¹, Luc Buée², Nicolas Sergeant², David Blum², Yijuang Chern¹, Guey-Shin Wang¹</p>
O62	<p>LipidSig: A Web-based Tool for Lipidomic Data Analysis</p> <p>林文仁¹, 沈培鈞², 劉修誠², 卓奕君², 徐敏恭², 林依真¹, 陳芳馨^{3,4}, 楊顯丞⁵, 馬文隆¹, 鄭維中^{1,6,7}</p> <p>Wen-Jen Lin¹, Pei-Chun Shen², Hsiu-Cheng Liu², Yi-Chun Cho², Min-Kung Hsu², I-Chen Lin¹, Fang-Hsin Chen^{3,4}, Juan-Cheng Yang⁵, Wen-Lung Ma¹, Wei-Chung Cheng^{1,6,7}</p>
O63	<p>TIAM-1 differentially regulates dendritic and axonal microtubule organization in patterning neuronal development through its multiple domains</p> <p>林芷嫻, 陳映君, 詹世鵬, 歐展言</p> <p>Chih-Hsien Lin, Ying-Chun Chen, Shih-Peng Chan, Chan-Yen Ou</p>



編號	論文題目
O64	Receptor adaptation of SARS-CoV-2 variants breaks host restriction in both human and primates 邱鈺庭, 潘昱辰, 李文雄, 王慧菁 Yu-Ting Chiou, Yu-Chen Pan, Wen-Hsiung Li, and Lily Hui-Ching Wang
O65	Membrane Protein Modification Modulates Big and Small Extracellular Vesicle Biodistribution and Tumorigenic Potential in Breast Cancers in vivo 吳晏瑋, 陳妍如, 翁婉庭, 卓庭煜, 黃璽倩, 宋雲傑, 謝心慈, 黃柏雅, 李康正, 黃冠璋, 陳瑞華, 陳韻晶, 賴品光 Anthony Yan-Tang Wu, Yen-Ju Chen, Wan-Ting Wong, Steven Ting-Yu Chuo, Hsi-Chien Huang, Yun-Chieh Sung, Hsin Tzu Hsieh, Poya Huang, Kang-Zhang Lee, Kuan-Wei Huang, Ruey-Hwa Chen, Yunching Chen, Charles Pin-Kuang Lai
O66	HDAC6 involves in regulating the lncRNA-microRNA-mRNA network to promote the proliferation of glioblastoma cells 吳安智 ¹ , 楊文賓 ² , 張文昌 ³ , 陳品元 ^{1*} , 莊健盈 ^{4*} An-Chih Wu ¹ , Wen-Bin Yang ² , Wen-Chang Chang ³ , Pin-Yuan Chen ^{1*} , Jian-Ying Chuang ^{4*}



中華民國臨床生化學會

時 間：3 月 19 日 (日) 09:00-11:30

地 點：3 樓，第 31 教室

編號	論文題目
O67	Evaluation of anti-toxic metal effect by Ganoderma extracts by MALDI mass spectrometry 張惠嵐, 張倬林, 蘇剛毅, 林亮音, 方偉宏 Hui-Lan Chang, Hsing-Lin Chang, Kang-Yi Su, Liang-In Lin, Woei-horng Fang
O68	SLC34A2 Exacerbates Tubular Interstitial Fibrosis via Induction of Apoptosis and Cell Cycle Arrest in S Phase 胡亮萱 ¹ , 張勝程 ¹ , 蔡嘉慧 ¹ , 吳春靜 ² , 黃阮芳草 ² , 張瑋哲 ² , 張惟雅 ² , 楊雅倩 ³ , 饒梓明 ^{1*} Liang-Shuan Hu ¹ , Sheng-Cheng Zhang ¹ , Chia-Hui Tsai ¹ , Chun-Ching Wu ² , Hoang Nguyen Phuong Thao ² , Wei-Che Chang ² , Wei-Ya Chang ² , Ya-Chien Yang ³ , Tzu-Ming Jao ^{1*}
O69	A comparative Metabolomic Study of Multiple Urological Diseases by Isotope Dansylation Labeling and LC-MS/MS 王尉軒 ¹ , 謝雅如 ¹ , 陳建綸 ² , 張英勛 ³ , 陳怡婷 ¹ Wei-Xuan Wang ¹ , Ya-Ju Hsieh ¹ , Chien-Lun Chen ² , Ying-Hsu Chang ³ , Yi-Ting Chen ¹
O70	Identification of Salivary Autoantibodies as Biomarkers of Oral Cancer with Immunoglobulin A Enrichment Combined with Affinity Mass Spectrometry 劉巧柔, 朱浩維, 張凱評, 吳治慶 Chiao-Rou Liu, Hao-Wei Chu, Kai-Ping Chang, Chih-Ching Wu
O71	Development of A Bioinformatics Pipeline for KIR Genotyping with Next-generation Sequencing Data 劉萬騏 ¹ , 許書睿 ² , 陳沛隆 ^{2,3} , 賴勝凱 ^{3,4} , 李宜哲 ¹ , 陳泓仁 ¹ , 蔡明宏 ⁵ , 楊雅倩 ^{1*} Wan-Chi Liu ¹ , Shu-Jui Hsu ² , Pei-Lung Chen ^{2,3} , Sheng-Kai Lai ^{3,4} , Yi-Che Lee ¹ , Hung-Jen Chen ¹ , Ming-Hong Tsai ⁵ and Ya-Chien Yang ^{1*}
O72	Ugonin L ameliorates LPS-induced early pulmonary fibrosis via modulating TGF-β/Smad signaling and autophagy 夏子嵐, 邱韋中, 黃瑋 Tzu-Lan Hsia, Wei-Chung Chiou, Cheng Huang

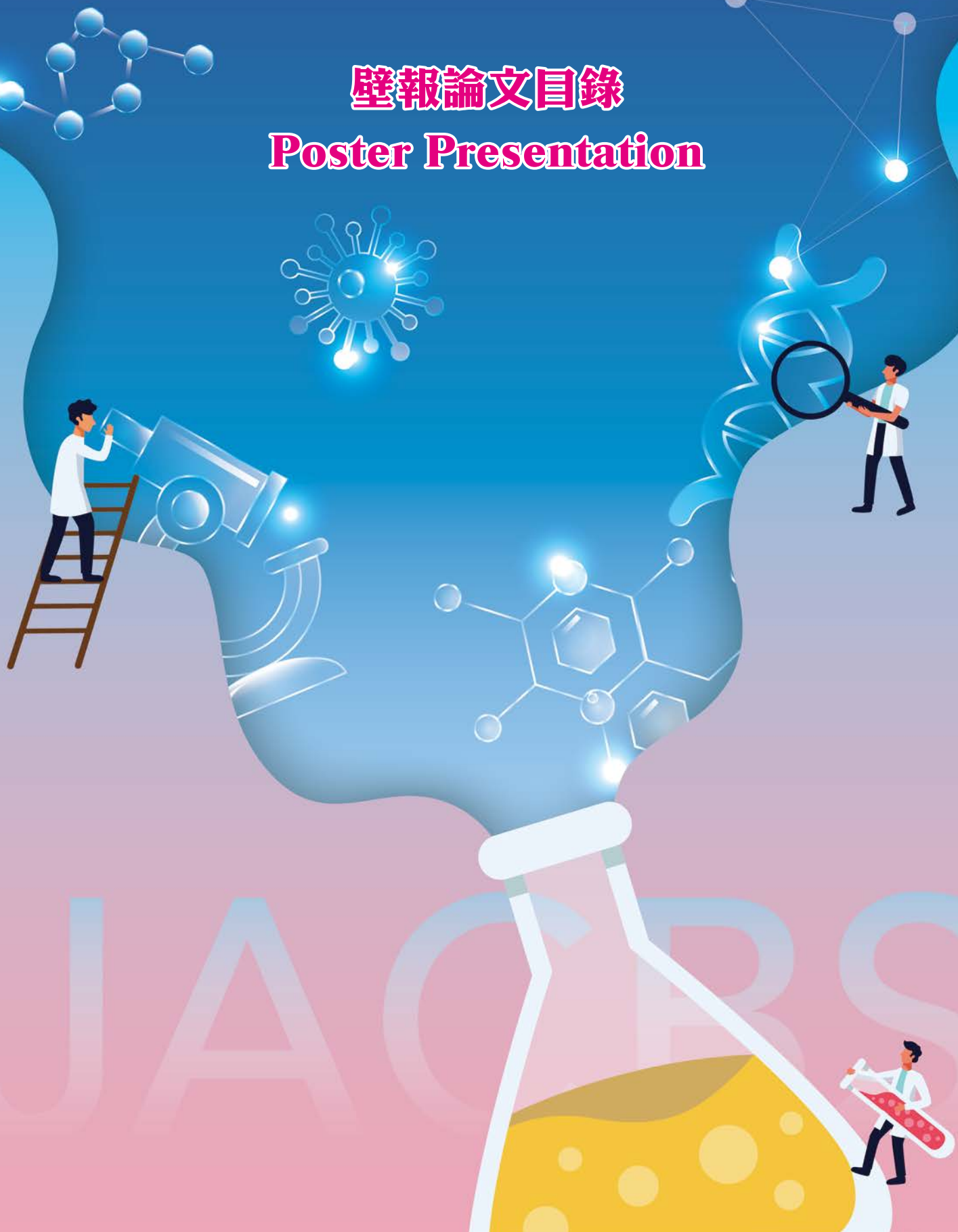
37



生物醫學聯合學術年會

2023 The 37th Joint Annual Conference of Biomedical Science

壁報論文目錄 Poster Presentation





PH 台灣藥理學會

編號	論文題目
PH001	Epigenetic Regulation of Myocardial SERCA2a and Ca ²⁺ Homeostasis by Long Noncoding RNA Inc-SYNPO 宋瑋倫, 游閔亦, 何沛瑾, 楊鎧鍵 Wei-Lun Song, Min-Yi You, Pei-Jin Ho, Kai-Chien Yang (corresponding author)
PH002	Inhibitory Mechanism of Metformin in Human Platelets 黃威傑, 許準榕 * Wei-Chieh Huang, Joen-Rong Sheu*
PH003	The indispensable role CD36 ⁺ -tissue resident macrophages in cardiac regeneration 洪晏羚 ¹ , 劉冠妤 ¹ , 余翔嘉 ¹ , 洪振庭 ¹ , 楊鎧鍵 ^{1,2*} Yen-Ling Hung ¹ , Kuan-Yu Liu ¹ , Hsiang-Chia Yu ¹ , Chen-Ting Hung ¹ , Kai-Chien Yang ^{1,2*}
PH004	The adipokine nesfatin-1 facilitates CCL2 production and subsequently increases polarization of M1 macrophage in rheumatoid arthritis 張郡崑 ¹ , 湯智昕 ^{1,2*} Jun-Way Chang ¹ , Chih-Hsin Tang ^{1,2*}
PH005	Wip1 inhibitor CCT007093 downregulates the gene transcription of inhibitory receptors to enhance anti-viral and anti-tumor immunity in mice 張婉婷, 游雨璇, 王惠盈, 曾賢忠 * Wan-Ting Chang, Yu-Syuan You, Hui-Ying Wang, Shiang-Jong Tzeng*
PH006	α 6GABAAR-Selective PAMs as a Dental Pain Killer via Depolarization Block of Trigeminal Ganglionic Neurons in Mice 葉宸濬 ¹ , 李鳴達 ^{2,3} , Werner Sieghart ⁴ , Daniel E. Knutson ⁵ , James Cook ⁵ , 陳志成 ⁶ , 邱麗珠 ^{1,2*} Chen-Jiun Yeh ¹ , Ming-Tatt Lee ^{2,3} , Werner Sieghart ⁴ , Daniel E. Knutson ⁵ , James Cook ⁵ , Chih-Cheng Chen ⁶ and Lih-Chu Chiou ^{1,2*}
PH007	The Role of the CASK on DcR3 Expression in Skin Keratinocytes 張華景, 林琬琬 Hua-Ching Chang, Wan-Wan Lin
PH008	The interaction between miR-150-5p and XIST regulates VCAM-1-mediated monocyte adherent to osteoarthritis synovial fibroblasts: implications for the amelioration of osteoarthritis progression 蔡俊灝 ^{2,3} , 劉軒誌 ⁴ , 湯智昕 ^{1,5,6,7} Chun-Hao Tsai ^{2,3} , Shan-Chi Liu ⁴ , and Chih-Hsin Tang ^{1,5,6,7}
PH009	Silica Nanoparticles-Induced COX-2/PGE2 Up-Regulation Through ROS-Dependent Activation of Protein Kinase Pathways in Human Pulmonary Alveolar Epithelial Cells 林彥均, 楊建中, 楊春茂 Yan-Jyun, Lin, Chien-Chung Yang, and Chuen-Mao Yang
PH010	The effect of CCR5 in SARS-CoV-2 infection 陳柏儒, 陳祐萱, 瞿立威, 兵岳忻 PO-RU CHEN, YU-Hsuan CHEN, Li-Wei Chu, Yueh-Hsin Ping



編號	論文題目
PH011	Protective effects and mechanisms of NRICM101 on the amelioration of COVID-19 brain fog in hACE2 transgenic mice 張哲嘉, 嚴錦城, 蘇奕彰, 沈郁強 Cher-Chia Chang, Jiin-Cherng Yen, Yi-Chang Su, Yuh-Chiang Shen
PH012	DBPR376, an Anti-Cancer Peptide-Drug Conjugate Targeting Luteinizing Hormone-Releasing Hormone Receptor-Expressing Tumors 邱泰裕, 劉于維, 徐嘉瑜, 黃冠勳, 蔡靜樺, 王敏先, 陳錦萍, 黃貞龍, 黃郁珍, 葉燈光, 鄒倫, 陳炯東 * Tai-Yu Chiu, Chia-Yu Hsu, Yu-Wei Liu, Kuan-Hsun Huang, Ching-Hua Tsai, Min-Hsien Wang, Ching-Ping Chen, Chen-Lung Huang, Yu-Chen Huang, Teng-Kuang Yeh, Lun K. Tsou and Chiung-Tong Chen*
PH013	Visfatin accelerates VEGF-D-synthesis and facilitates lymphangiogenesis in human chondrosarcoma cells 宋昌諭, 湯智昕 ¹ Chang-Yu Song, #Chih-Hsin Tang
PH014	The Potential Effects of Fenofibrate in Triple-Negative Breast Cancer 陳彥錫 ¹ , 葉威蘭 ^{1,2*} Yen-Chang Chen ¹ , Wei-Lan Yeh ^{1,2*}
PH015	ER α determines the chemo-resistant function of mutant p53 involving the switch between lincRNA-p21 and DDB2 expressions 何宥豪 ^{1,2} , 葉名焮 ^{3,4} , 陳筱凡 ^{2,5} , 王祖興 ⁶ , 翁瑞宏 ^{7,8} , 魏雅鈴 ² , Thanh Kieu Huynh ^{2,9} , 胡玳璋 ^{2,9} , 鄭方茹 ^{2,10} , 陳貞好 ² , 胡書瑋 ^{2,9} , 黃家禎 ⁷ , 陳擘 ^{5,11} , 游家鑫 ^{1,2} , 鄭維中 ^{1,13} , 沈培鈞 ^{1,3} , 劉良智 ^{1,4} , 黃至豪 ^{1,4} , 張雅貞 ^{1,15} , 黃偉謙 ^{1,2,5,9,13,16} Yu-Hao He ^{1,2} , Ming-Hsin Yeh ^{3,4} , Hsiao-Fan Chen ^{2,5} , Tsu-Shing Wang ⁶ , Ruey-Hong Wong ^{7,8} , Ya-Ling Wei ² , Thanh Kieu Huynh ^{2,9} , Dai-Wei Hu ^{2,9} , Fang-Ju Cheng ^{2,10} , Jhen-Yu Chen ² , Shu-Wei Hu ^{2,9} , Chia-Chen Huang ⁷ , Yeh Chen ^{5,11} , Jiaxin Yu ¹² , Wei-Chung Cheng ^{1,13} , Pei-Chun Shen ^{1,3} , Liang-Chih Liu ^{1,4} , Chih-Hao Huang ^{1,4} , Ya-Jen Chang ^{1,15} , Wei-Chien Huang ^{1,2,5,9,13,16}
PH016	Generational Synaptic Functions of GABAA Receptor β 3 Subunit Deteriorations in an Animal Model of Social Deficit 初銘家, 李旂緯, 林惠菁 Ming-Chia Chu, Chi-Wei Lee, Hui-Ching Lin
PH017	Role of ER Protein TXNDC5 in the Desmoplastic Change and Progression of Pancreatic Adenocarcinoma 王馨慧 ¹ , 廖偉智 ⁵ , 田郁文 ⁶ , 楊鎧鍵 ^{1,2,3,4*} Hsin-Hui Wang ¹ , Wei-Chih Liao ⁵ , Yun-Wen Tien ⁶ , Kai-Chien Yang ^{1,2,3,4*}
PH018	Effects Of Calycosin On Platelet Activation: An Ex Vivo And In Vivo Study 陳亭宇 ^{1,2} , 林冠宏 ³ , 陳瑞杰 ^{4,5} , 呂婉榕 ^{2,6*} Ting-Yu Chen ^{1,2} , Kuan-Hung Lin ³ , Ray-Jade Chen ^{4,5} , Wan-Jung Lu ^{2,6*}
PH019	Exploring the Role of GTP- and GDP-dependent Rab37 in Pancreatic β cells 張智翔, 陳韻雯 * Chih-Hsiang Chang, Yun-Wen Chen*



編號	論文題目
PH020	Methyl Eugenol Prevents Osteoporosis and Improves Insulin Sensitivity of Adipose Tissues in Type 2 Diabetes Mellitus in Rats 馬雨岑, 沈信學, 李燕媚 Yu-Chen Ma, Hsin-Hsueh Shen ¹ , Yen-Mei Lee
PH021	Cerebellar α 6GABAA receptors as a therapeutic target for essential tremor: Proof-of-concept study with ethanol and pyrazoloquinolinones 黃亞弦 ¹ , 李鳴達 ^{1,6} , 薛涵云 ¹ , Daniel E. Knutson ³ , James Cook ³ , Marko D. Mihovilovic ⁴ , Werner Sieghart ⁵ , 邱麗珠 ^{1,2,7} *Ya-Hsien Huang ¹ , Ming Tatt Lee ^{1,6} , Han-Yun Hsueh ¹ , Daniel E. Knutson ³ , James Cook ³ , Marko D. Mihovilovic ⁴ , Werner Sieghart ⁵ , Lih-Chu Chiou ^{1,2,7*}
PH022	Dissecting the Neural Circuitry of TIAM2S-mediated Cognitive Improvement Benefits in Alzheimer's Disease Model Mice 陳敬安, 蕭雅心 Ching-An Chen, Ya-Hsin Hsiao
PH023	Exploring the Role of Cathepsin S in Status Epilepticus-Induced Hippocampal Neurodegeneration 施欣伶 ¹ , 余亭萱 ² , 張俊彥 ³ , 許桂森 ^{1,2*} Hsin-Ling Shih ¹ , Ting-Hsuan Yu ² , Jang-Yang Chang ³ and Kuei-Sen Hsu ^{1,2*}
PH024	The Neural Circuits for Reinstatement of Methamphetamine-Related Memory 沈育琪, 簡伯武 Yu-Qi Shen, Po-Wu Gean
PH025	Elucidation of insistence on sameness in Cc2d1a conditional knockout mice 黃楷馨, 程冠翔, 洪毓傑, 凌斌, 許桂森 Kai-Hsin Huang ¹ , Kuan-Hsiang Cheng ² , Yu-Chieh Hung ² , Pin Ling ³ and Kuei-Sen Hsu ^{1,2*}
PH026	The Therapeutic Effects of Placenta Choriodecidual-Derived Mesenchymal Stromal Cells for Angiogenesis and Myogenesis in Mouse Model of Critical Limb Ischemia 高先穎, 劉鴻祺, 林信宏, 林泰元 Hsien-Yin Kao, Houn-Chi Liou, Hsin-Hung Lin, Thai-Yen Ling
PH027	Loganin Ameliorates Neuropathic Pain Modulating Neuronal Autophagic Flux in a Chronic Constriction Injury Rat Model 張毓秦, 謝素玲, 安麗梅, 吳炳男 Yu-Chin Chang, Su-Ling Hsieh, Li-Mei An, Bin-Nan Wu
PH028	In Silico Identification and Biological Evaluation of Discoidin Domain Receptor 1 Inhibitor in Human Glioblastoma Cells 蔡佳怡 ¹ , 杜皇儒 ¹ , 郭奕辰 ¹ , 蔡宇鈞 ¹ , 謝興邦 ² , 許凱程 ^{1,3,4,5} , 潘秀玲 ^{1,3,4,5*} Chia-Yi Tsai ¹ , Huang-Ju Tu ¹ , Yi-Chen Kuo ¹ , Yu-Chun Tsai ¹ , Hsing-Pang Hsieh ² , Kai-Cheng Hsu ^{1,3,4,5} , Shioh-Lin Pan ^{1,3,4,5,*}
PH029	Tumor Suppressive Impacts of Sesamin on Human Lung Adenocarcinoma 邱昱綺, 趙家佳, 張安辰 Yu-Chi Chiu, Chia-Chia Chao, An-Chen Chang



編號	論文題目
PH030	CASK Involves in Docetaxel-induced DNA Damage and Cell Death in Human Prostate Cancer Cells 陳思彤, 林琬琬 * Sih-Tong Chen, Wan-Wan Lin*
PH031	Rab37 regulates M2 macrophage polarization by attenuating type I IFN pathway 洪晨泰 ^{1#} , 楊侑恩 ² , 王憶卿 ^{1,2*} Chen-Tai Hong ^{1#} , You-En Yang ² , Yi-Ching Wang ^{1,2*}
PH032	Phosphorylation of PD-1 promotes its protein stability and membrane presentation in CD8 T cells 陳冠宇 ^{1#} , 劉易嫻 ¹ , 謝宏嘉 ² , 王憶卿 ^{1,2*} Kuan-Yu Chen ¹ , Yi-Shan Liu ¹ , Hung-Chia Hsieh ² , Yi-Ching Wang ^{1,2}
PH033	Investigating the Role of ER-Mitochondria Junction on Store-Operated Ca ²⁺ Entry 林鈺喬, 蔡丰喬 Yu-Chiao Lin ¹ , Feng-Chiao Tsai ^{1,2}
PH034	Basic Fibroblast Growth Factor Regulates Cancer Metastasis in Osteosarcoma 黃昱景 ^{1,2} , 陳暉錚 ² , 尤振霖 ¹ , 張定國 ² , 劉如芳 ^{3*} , 王士維 ¹ Yu-Ching Huang ¹ , Wei-Cheng Chen ² , Chen-Lin Yu ¹ , Ting-Kuo Chang ² , Ju-Fang Liu ¹ , Shih-Wei Wang ¹
PH035	Investigation on the mechanism underlying the DNA damaging and genomic destabilizing effects of survivin-regulated autophagy 郭仲穎, 張雋曦 Chung-Ying Kuo ¹ , Chun Hei Antonio Cheung *
PH036	The Study of Multivesicular Bodies and Exosome Transfer in Mediating of The Chemoresistance of Bladder Cancer Cells 黃晟碩, 何嘉益, 于大雄, 于承平 Cheng-Shuo Huang ^{1,2} , *Jar-Yi Ho ^{1,2} , *Dah-Shyong Yu ^{1,3} *Cheng-Ping Yu ^{1,2}
PH037	Investigating Eps8 – IRSp53 pathway in the regulation of colorectal cancer formation 呂增宏 Tzeng-Horng Leu
PH038	Investigating the role of EPS8 in gout inflammation treated with Colchicine 陳亮均, 呂增宏 Liang-Chun Chen, Tzeng-Horng Leu
PH039	Optimization of a Coagulation Factor XIII-Binding Aptamer FA121 張芷瑄 ² , 曾郁軒 ² , 馬蘊華 Chih-Hsuan Chang, Yu-Shiuan Tzeng, Yunn-Hwa Ma
PH040	CASK is a tumor promoter of prostate cancer and regulates cell migration and invasion 林琬琬 Wan-Wan Lin



編號	論文題目
PH041	Putative miRNAs Biomarkers for Encapsulating Peritoneal Sclerosis in Patients 蔡仁傑 ^{1,2,4} , 吳坤霖 ^{5,6} , 吳柏儒 ⁵ , 馬念涵 ^{5*} , 楊嘉鈴 ^{1,2} , 陳炯東 ^{1,3,4*} Jen-Chieh Tsai ^{1,2,4} , Kun-Lin Wu ^{5,6} , Po-Ju Wu ⁵ , Nianhan Ma ^{5*} , Jia Ling Yang ^{1,2*} , Chiung-Tong Chen ^{1,3,4*}
PH042	PERP mutation caused left ventricular non-compaction cardiomyopathy 高臆茹, 廖安德, 李宥苙, 吳雅婷, 陳文彬 Yi-Ju Kao, An-Der Liao, You-Yi Li, Ya-Ting Wu, Wen-Pin Chen
PH043	The role of ER protein TXNDC5 in arteriovenous fistulae dysfunction 林瑞娥 JUI-O LIN
PH044	Development of functional soybean derived products in cardiovascular protection via inhibition of cannabinoid CB1 receptor 鍾岱融, 許宸, 蘇南維, 魏子堂 Dai-Jung Chung, Chen Hsu, Nan-Wei Su, Tzu-Tang Wei
PH045	Metformin ameliorates adverse cardiac electrophysiological and mechanical remodeling in renovascular hypertensive rats 張國志 ^{1,2*} , 葉勇信 ² , 陳偉踐 ² , 賴盈如 ^{2,3} , 陳思達 ⁴ Gwo-Jyh Chang ^{1,2*} , Yung-Hsin Yeh ² , Wei-Jan Chen ² , Ying-Ju Lai ^{2,3} , Su-Ta Chen ⁴
PH046	The possible protective role of Salubrinal in doxorubicin-induced cardiotoxicity in mice 黃相碩, 嚴錦城, 王笙帆 Shiang-Suo Huang ² , Jiin-Cherng Yen ¹ , Sheng-Fan Wang ^{1,3}
PH047	Apolipoprotein C3-Rich Low-Density Lipoprotein Promotes ADP-Induced Platelet Activation and Its Inhibition by Kansuine A 徐鈺婷 ¹ , 潘柏毅 ¹ , 陳振聲 ² , 陳芳玉 ¹ , 沈明毅 ^{1,3*} Yu-Ting Hsu ¹ , Bo-Yi Pan ¹ , Chen-Sheng Chen ² , Fang-Yu Chen ³ , Min-Yi Shen ^{3*}
PH048	Cardioprotective Effect of Sodium-Glucose Cotransporter-2 Inhibitors against Myocardial Ischemia-Reperfusion Injury 周佩儀 ¹ , 蘇郁雯 ¹ , 王羿忻 ^{1,2,3} , 蔡青峰 ^{1,4} , 黃相碩 ^{1,5,6*} Pei-I Chou ¹ , Yu-Wen Su ¹ , Yi-Hsin Wang ^{1,2,3} , Chin-Feng Tsai ^{1,4} , Shiang-Suo Huang ^{1,5,6}
PH049	Investigating the Cardioprotective Effects of ML213 Derivatives on SD Rats Subjected to Myocardial Ischemia-Reperfusion Injury 劉佳雯 ¹ , 劉沛勳 ² , 王羿忻 ³ , 廖娟妙 ³ , 黃相碩 ^{4,5*} Chia-Wen Liu ¹ , Pei-Hsun Liu ² , Yi-Hsin Wang ³ , Juan-Miaw Liao ³ , Shiang-Suo Huang ^{4,5} *
PH050	Polycomb Group Complex Protein YAF2 Is an Evolutionarily Conserved Mediator of Cardiac Regeneration 謝采恩, 蔡亦為, 楊鎧鍵 * Tsai-En Hsieh, Yi-Wei Tsai, Kai-Chien Yang*



編號	論文題目
PH051	Protective Effects of KCNQ Channel Opener, ML213, Against Myocardial Ischemia-Reperfusion Injury 劉沛勳 ¹ , 林惠菁 ¹ , 黃相碩 ^{2,3} Pei-Hsun Liu ¹ , Hui-Ching Lin ¹ , Shiang-Suo Huang ^{2,3}
PH052	Dapagliflozin Prevents ERK Activation and SGLT2-Dependent CD105 Upregulation in Mechanically-stretched Cardiomyocytes 鄭珮玟, 葉同成, 孫國清, 曾清俊 Pei-Wen Cheng, PhD ^{1,2*} ; Tung-Chen Yeh, MD, PhD ^{2,3} ; Gwo-Ching Sun, MD, PhD ⁴ ; Ching-Jiunn Tseng, MD, PhD ^{1,2}
PH053	Bortezomib Inhibits Proliferation and Migration of Rat Thoracic and Pulmonary Arterial Smooth Muscle Cells 關雨心, 林孟萱, 黃上恩, 葉竹來 Yu-Hsin Kuan, Meng-Xuan Lin, Shang-En Huang, Jwu-Lai Yeh
PH054	Loganin Improves Mitochondrial Function and Glucose Homeostasis in A Cellular Model of Chemotherapy-Induced Muscle Atrophy 吳彩榕, 張婉萱, 羅怡卿 Cai-Rong Wu, Wan-Hsuan Chang, Yi-Ching Lo
PH055	Spathelichromen Attenuates Hydrogen Peroxide-Induced Myotube Atrophy via Inhibiting Protein Degradation and Enhancing Antioxidant Signaling 鄭琳, 張婉萱, 余思穎, 顏嘉宏, 張芳榮, 羅怡卿 Lin Cheng, Wan-Hsuan Chang, Szu-Yin Yu, Chia-Hung Yen, Fang-Rong Chang, Yi-Ching Lo
PH056	Attenuation of hyperglycemia-aggravated pleural fibrosis by enalapril and ketotifen through upregulating glyoxalase-1 in pleural mesothelium 謝政穎, 陳育彬 Cheng-Ying Hsieh, Yu-Pin Chen
PH057	Purple Sweet Potato Powder Containing Anthocyanin Mitigates High Fat Diet Induced Dry Eye Disease 吳岱霖, 江明晟, 李慧禎 Ming-Cheng Chiang, Dai-Lin Wu, Huei-Jane Lee
PH058	Effects of a edible plant leaf extract against nonalcoholic fatty liver disease. 林芊孜, 柯慧芳, 賴至中, 顏嘉宏 Chien-Tzu Lin, Hui-Fang Ke, Chih-Chung Lai and Chia-Hung Yen
PH059	Application of mass spectrometry analysis for metabolomics study in functional dyspepsia with psychophysical burden patients 涂芳岑, 翁銘彰, 劉晉宏 Fang-Cen Tu, Ming-Wun Wong, Chin-Hung Liu
PH060	Investigation of Effects of Free Fatty Acids (FFAs) on Myogenic Differentiation 何嘉紘, 陳韻雯 Jia-Yun Ho and Yu-Wen Chen



編號	論文題目
PH061	Glossogyne Tenuifolia Extract Regulates Glucose Metabolism by Activating AMPK in Diabetic Mice 邱雅琪, 李欣曄, 李珈妤, 紀宗呈 Ya-Ci Ciou, Hsin-Yeh Lee, Chia-Yu Li, Tzong-Cherng Chi
PH062	Exploring the Role of RNA editing enzyme in Fatty Liver Disease 洪子琪, 陳韻雯 Tzu-Chi Hung, Yun-Wen Chen
PH063	Evaluation of the Anti-Fibrotic Properties of a-Mangostin and Potential Synergistic Effects with AST-120 in Renal Fibrosis 丁頤瑄, 謝逸憲 Yi-Hsuan Ting, Yi-Hsien Hsieh
PH064	Extract of Pre-germinated Brown Rice Protection Against High Fructose/Fat Diet-induced Non-alcoholic Fatty Liver Disease in Rats 林慧麗 Hui-Li Lin
PH065	Lycopene Attenuates Blue Light-mediated Apoptosis in Retinal Pigment Epithelial Cells by Promoting Mitochondrial Biogenesis and Autophagy 蔡鎧鴻, 連翊姘, 李采裕, 翁炳孫 * Kai-Hung Tsai, Yi-Wen Lian, Tsai-Jung Lee and Being-Sun Wung*
PH066	Hydrogen sulfide promotes both PGC1- α /TFAM-mediated mitochondrial biogenesis and mitophagy to protect against blue light-induced retinal pigment epithelial cell Damage 鍾佩琳, 蔡俊彥, 翁炳孫 Pei-Lin Choong, Jiun-Yan Tsai and Being-Sun Wung*
PH067	NETosis in Neutrophilic Asthma 林欣樺 ¹ , 翁志銘 ^{2,3} , 李孟容 ⁴ , 林鈺蓉 ⁴ , 郭漢彬 ^{4,5*} Hsin-Hua Lin ¹ , Chih-Ming Weng ^{2,3} , Meng-Jung Lee ⁴ , Yuh-Rong Lin ⁴ , Han-Pin Kuo ^{4,5*}
PH068	To investigate the anti-arthritic function of omentin-1 on the rheumatic joint model 林彥佑, 黃建中, David Achudhan, 劉軒誌, 湯智昕 Yen-You Lin, Chien-Chung Huang, David Achudhan, Shan-Chi Liu, and Chih-Hsin Tang
PH069	Effects of electroacupuncture on chemotherapy-induced xerostomia in the mouse model 阮武清軒, 謝宗明, 陳易宏 Thanh-Hien Vu Nguyen, Tzong-Ming Shieh, Yi-Hung Chen
PH070	P2X7 enhances the retinal degeneration through the paracrine action of ATP/P2X7 axis in different retinal cells Chi-Ming Chan ^{1,2} , Ponarulselvam Sekar ^{3,4} , George Hsiao ⁴ , Wan-Wan Lin ^{1,2*} , Chi-Ming Chan ^{1,2} , Ponarulselvam Sekar ^{3,4} , George Hsiao ⁴ , Wan-Wan Lin ^{1,2*}



編號	論文題目
PH071	One-Year Healthcare Utilization and Expenditures Among Patients with Clinically Significant Mitral Regurgitation in Taiwan 鍾鏡湖 CHING-HU CHUNG
PH072	Trends of Pharmaceutical Expenditure in Taiwan National Health Insurance among difference Hospital level 鍾鏡湖 CHING-HU CHUNG
PH073	Transcatheter Aortic Valve Implantation VS. Surgical Aortic Valve Replacement For Aortic Stenosis In Taiwan: A Population-Based Cohort Study 鍾鏡湖 CHING-HU CHUNG
PH074	Metformin inhibits methylglyoxal-induced retinal pigment epithelial cell death and retinopathy via AMPK-dependent mechanisms: reversing mitochondrial dysfunction and upregulating glyoxalase 1 Ponarulselvam Sekar ^{1,2} , George Hsiao ² , Wan-Wan Lin ^{1*} and Chi-Ming Chan ^{3,4}
PH075	Protective Effect of HSP90 Inhibitor EC144 in Heatstroke-Induced Organ Dysfunction in Rats 黃品燁, 李燕媚, 沈信學 Pin-Ye Huang, Yen-Mei Lee, Hsin-Hsueh Shen
PH076	Chronic toxicity of Fluorescent Gold Nanoclusters Conjugated with α -Lipoic Acid 陳韻芳 ¹ , 鍾鏡湖 ^{1*} Yun-Fang Chen ¹ , Ching-Hu Chung ^{1*}
PH077	The Possible Anti-migraine Effect of Acupuncture and its Action Mechanism(s) in the Intermittent Repeated NTG-treated Animal Model of Migraine 奉冠荃 ¹ , 李欣蓉 ¹ , 楊金倉 ² , 邱麗珠 ¹ Kuan-Chuan Feng ¹ , Hsin-Jung Lee ¹ , Chin-Tsang Yang ² , Lih-Chu Chiou ¹
PH078	Possible mechanisms involved in the suppression of cortical spreading depression and cyclooxygenase-2 expression by auricular vagus nerve stimulation in mice 嚴錦城 ¹ , 陳世彬 ² Jiin-Cherng Yen ¹ , Shih-Pin Chen ²
PH079	To Explore The Potential Mechanism of The Glymphatic System and Meningeal Lymphatic System on Neuroinflammation in Migraine Animal Model 姜子柔, 陳世彬, 嚴錦城 Zi-Rou Jiang, Shih-Pin Chen, Jiin-Cherng Yen
PH080	Melatonin Receptors MT1 and MT2 Involve in Regulating Repeated Social Defeat Stress-induced Anxiety-like Behaviors in Mice 陳昭維 ¹ , 盧大宇 ^{2*} , 葉威蘭 ^{3*} Chao-Wei Chen ¹ , Dah-Yuu Lu ^{2*} , Wei-Lan Yeh ^{3*}



編號	論文題目
PH081	Meningeal immunity of anti-NMDA receptor encephalitis mouse model 陳世彬, 嚴錦城, 黃郁倫 Shih-Pin Chen, Jiin-Cherng Yen, Yu-Lun Huang
PH082	Investigating the Effect of Codon Usage Bias of CREB in Learning and Memory 呂承澤, 余建泓, 姜學誠 Chen-tse Lu, Chien-hung Yu, Hsueh-cheng Chiang
PH083	Sleep Associated Intermittent Hypoxia Depletes the Tyrosine Hydroxylase-containing Neuron in Mouse Brain 陳秀蘭, 朱家慧, 游青霖, 李婉寧 Shiou-Lan Chen, Chia-Hui Chu, Ching-Lin Yu, Wan-Ning Li
PH084	Investigation of the Mechanism for Transient Forgetting 連亭喻 ¹ , 姜學誠 ^{1*} Ting-Yu Lien ¹ , Hsueh-Cheng Chiang ^{1*}
PH085	The effect of aFGF on spinal cord injury-induced immune deficiency 葉美吟, 陳雅慈, 李婉瑄, 黃文成, 鄭宏志 Mei-Yin Yeh, Ya-Tzu Chen, Wan-shuan Lee, Wen-Cheng Huang and Henrich Cheng
PH086	Neuroprotective Effect of Probiotics on Ischemic Stroke Mice 王羿忻 ^{1,2} , 吳定蓁 ³ , 黃相碩 ^{4,5,6*} Yi-Hsin Wang ^{1,2} , Ding-Jen Wu ³ , Shiang-Suo Huang ^{4,5,6*}
PH087	Developing Treatment Strategy in Essential Tremor: Drugs Targeting Cerebellar a6GABAA Receptors 薛涵云 ¹ , 黃亞弦 ¹ , 李鳴達 ¹ , Werner Sieghart ⁴ , James Cook ⁵ , 邱麗珠 ^{1,2,3*} Han-Yun Hsueh ¹ , Ya-Hsien Huang ¹ , Ming-Tatt Lee ¹ , Werner Sieghart ⁴ , James Cook ⁵ , Lih-Chu Chiou ^{1,2,3*}
PH088	The Transcranial Direct Current Stimulation Inhibits Ischemic Stroke-Induced Blood Pressure Increased by Renin-Angiotensin System and Autophagy Regulation 許筠, 林宙晴, 張雅雯 Yun Hsu, Chou-Ching Lin, Alice Y.W. Chang
PH089	Mitigating Scar Formation Promotes the Functional Recovery after Spinal Cord Injury 林鶯汝 ¹ , 黃文宏 ^{1,2} , 曹義海 ³ , 鄭宏志 ^{1,2*} Yan-Ru Lin ¹ , Wen-Hung Huang ^{1,2} , Yihai Cao ³ , Henrich Cheng ^{1,2*}
PH090	Lumbrokinase Regulates Endoplasmic Reticulum Stress to Improve Neurological Deficits in Ischemic Stroke 王羿忻 ^{1,2} , 廖娟妙 ^{1,2} , 黃相碩 ^{3,4,5*} Yi-Hsin Wang ^{1,2} , Juan-Miaw Liao ^{1,2} , Shiang-Suo Huang ^{3,4,5*}
PH091	Oleanolic Acid Modulates Mitochondrial Energy Metabolism and Oxidative Stress in Dopaminergic Neurons 楊翰彬, 洪詩雅 Han-Bin Yang, Shih-Ya Hung



編號	論文題目
PH092	Exploring SLK effects on adhesion cytoskeletons 林芸宇, 林軒兆, 周彥萱, 范誠佑, 蔡丰喬 Yun-Yu Lin, Hsuan-Chao Lin, Yen-Hsuan Jo, Cheng-Yu Fan, Feng-Chiao Tsai
PH093	FGFR mediates TGF β R signaling to switch fibroblast differentiation between adipocytes and myofibroblasts 洪堂萌, 呂庭瑄, 顏爾言, 蔡丰喬 Tang-Meng Hong, Ting-Xuan Lu, Er-Yen Yen and Feng-Chiao Tsai
PH094	CASK, a Novel Mediator of Adhesion Cytoskeletons 曾宇岑, 林鈺喬, 蔡丰喬 Yu-Chen Tseng, Yu-Chiao Lin, Feng-Chiao Tsai
PH095	The role of casein kinase 2 in interleukin-6-induced connective tissue growth factor expression in human lung fibroblast and airway fibrosis 莊沛儒, 李宏聖, 陳炳常, 林建煌 Pei-Ru, Jhuang, Hong-Sheng Lee, Bing-Chang Chen, and Chien-Huang Lin
PH096	The disruption of HDAC2/Sin3A/MeCP2 corepressor complex participates in endothelin-1-induced connective tissue growth factor expression in human lung fibroblasts 溫恒京, 李宏聖, 翁志銘, 郭漢彬, 陳炳常, 林建煌 Heng-Ching Wen, Hong-Sheng Lee, Chih-Ming Weng, Han-Pin Kuo, Bing-Chang Chen, and Chien-Huang Lin
PH097	Investigating the C-terminal of KCNT1 to see its regulatory effects on K ⁺ & Ca ²⁺ homeostasis, inspired from a patient with Brugada syndrome 蔡沛儒, 蔡蔓綺, 潘建源, 廖怡萱, 莊志明, 蔡丰喬 Pei-Ju Tsai, Man-Chi Tsai, Chien-Yuan Pan, Yi-Hsuan Liao, Jyh-Ming Jimmy Juang, Feng-Chiao Tsai
PH098	M.tb-induced CTGF expression through JAK2/STAT3 and p300 pathway in human lung fibroblasts 李宏聖, 黃冠閔, 花弘盛, 陳炳常, 林建煌 Hong-Sheng Lee, Kuan-Min Huang, Hung-Sheng Hua, Bing-Chang Chen, and Chien-Huang Lin
PH099	HDAC9 mediates TGF- β -induced connective tissue growth factor expression via p300 and Smad3 activation in human lung fibroblasts 廖能立, 花弘盛, 陳炳常, 林建煌 Neng-Li Liao, Hung-Sheng Hua, Bing-Chang Chen, Chien-Huang Lin
PH100	The role of PARP1 in regulation of human skin keratinocyte differentiation 邱鈴雅, 呂柏萱, 林琬琬, 吳南霖 Ling-Ya Chiu ^{1,2} , Po-Hsuan Lu ^{1,3} , Wan-Wan Lin ⁴ , Nan-Lin Wu ^{1,3,5}
PH101	The Roles of NLRX1 in Regulation of TLR4-mediated Inflammation and Cell Death in Microglia 黃于玲, 洪翊筑, Ponarulselvam Sekar Yu-Ling Huang, Yi-Chu Hung, Ponarulselvam Sekar



編號	論文題目
PH102	Interleukin 6-induced HCT116 colorectal cancer epithelial-mesenchymal transition via Src-FAK signaling 莊晉惠, 周恩如, 黃愈涵, 黃綉文, 許銘仁 Chin-Hui Chuang, En-Ju Chou, Shiu-Wen Huang, Ming-Jen Hsu
PH103	CASK regulates adipocyte differentiation via regulation of the insulin and TNF- α signaling in 3T3-L1 cells. 許藍心, 鄭景元, 林琬琬 Lan-Hsin Shu, Ching-Yuan Cheng, Wan-Wan Lin
PH104	Effects of Ca ²⁺ -adhesion interactions on cell migration and vasculogenic mimicry in heterogeneous ovarian clear cell carcinoma (OCCC) 陳厚任, 朱沛羽, 黃韻如, 蔡丰喬 Hou-Jen Chen, Pei-Yu Chu, Ruby Yun-Ju Huang, and Feng-Chiao Tsai
PH105	EGFR-dependent upregulation of Blimp-1 expression by TGF β can promote cell proliferation and inhibit cell invasion 黃婷茵, 李惠岷, 林佳宜, 林琬琬 Duen-Yi Huang, Hyemin Lee, Chia-Yee Lin and Wan-Wan Lin
PH106	The Interplay of CASK and EGFR in the Regulation of Microglial Activation and Cell Death 張鈞顯, 林琬琬 Keith Jun-Hao Cheong, Wan-Wan Lin
PH107	NLRX1 reduces cisplatin induced apoptosis by maintaining mitochondrial homeostasis and regulating renal tubule cell growth 張鈞顯 ¹ , 林思安 ¹ , 黃婷茵 ¹ , Ponarulselvam Sekar ^{1,2} , 林琬琬 ^{1*} Keith Jun-Hao Cheong ¹ , Szu-An Joseph Lin ¹ , Duen-Yi Huang ¹ , Ponarulselvam Sekar ^{1,2} , Wan-Wan Lin ^{1*}
PH108	Intracellular galectin-1 involves in erythropoiesis via regulating STATs and Smad2/3 signaling 鄭景元, 林琬琬 Ching-Yuan Cheng, Wan-Wan Lin
PH109	Mitochondrial ROS and PARP-1 activation upon UV radiation are regulated by AMPK and lead to autophagic death in retinal epithelial cells 吳晏瑋 ^{1,2} , 彭阿魯 ^{1,3} , 黃婷茵 ¹ , 許書豪 ⁴ , 陳志明 ^{4,5} , 林琬琬 ^{1,3,*} Anthony Yan-Tang Wu ^{1,2} , Ponarulselvam Sekar ^{1,3} , Duen-Yi Huang ¹ , Shu-Hao Hsu ⁴ , Chi-Ming Chan ^{4,5} , Wan-Wan Lin ^{1,3*}
PH110	The role of TRPM8 involved in Electroacupuncture for CFA-induced Inflammatory Pain 范廷仲, 陳易宏 Pham Dinh Trong, Yi Hung Chen
PH111	The Effects of Electroacupuncture (EA) to Relief Allergic Rhinitis induced by Ovalbumin 陳易宏 Yi-Hung Chen



編號	論文題目
PH112	The study of the mangiferin-loaded microemulsion delivery system ameliorates dextran sodium sulfate-induced colitis in mice. 吳寶珠 Pao-Chu Wu
PH113	HMGB1 impedes skeletal muscle regeneration by downregulating Pax-7 via miR-342-5p expression in C2C12 myoblast 蘇振銘, 湯智昕 Chen-Ming Su, Chih-Hsin Tang
PH114	CXCL13 promotes TNF- α expression in human synovial fibroblasts: implications for the treatment of rheumatoid arthritis 林彥佑 ² , 劉軒誌 ³ Yen-You Lin ² , Shan-Chi Liu ³
PH115	P2X7-mediated cellular stress responses contributing to mitochondrial dysfunction and phagocytic impairment in microglial cells. Ponarulselvam Sekar ^{1,2} , Chi-Ming Chang ^{3,4} and Wan-Wan Lin ^{1,2*} Ponarulselvam Sekar ^{1,2} , Chi-Ming Chang ^{3,4} and Wan-Wan Lin ^{1,2*}
PH116	Neuroinflammation Promotes Heterodimer Formation of μ -Opioid Receptor AT1R Causes Microglial Activation to Modulate Blood Pressure Control in the Central Nervous System 孫國清 ^{1*} , 何秋億 ¹ , 鄭珮姮 ^{2*} Gwo-Ching Sun ^{1*} , Chiu-Yi Ho ¹ , Pei-Wen Cheng ^{2*}
PH117	Extracellular Vesicles of Cutibacterium acnes Induced Inflammation in Human THP-1 Monocytes 黃彥瑜, 陳冠鈞, 楊昭順, 黃煜璿 Yan-Yu Huang, Kuan-Chun Chen, Chao-Hsun Yang, Yu-Chun Huang
PH118	C-C Motif Chemokine Ligand 20 Expression Induced by Tumor Necrosis Factor- α through Activation of FoxO1 or the NF- κ B Pathway in Human Cardiac Fibroblasts 楊建中, 楊春茂 Chien-Chung Yang, Chuen-Mao Yang
PH119	The effects of a pure compound from Bletilla in the treatment of acute liver injury 陳柏任*, 陳舜華, 謝佳妤, 黃聰龍* Chen Po-Jen*, Shun-Hua Chen, Jia-Yu Sie, and Tsong-Long Hwang*
PH120	Inhibitory Mechanism of Morin Hydrate on Cell Migration in Lipopolysaccharide-Induced Macrophages: Regulatory Roles of the NF- κ B/Src/FAK Cascade 夏志瑄 ^{1,2} , 許準榕 ^{2*} Chih-Hsuan Hsia ^{1,2} , Joen-Rong Sheu ^{2*}
PH121	High glucose accelerates intervertebral disc fibrosis through NF- κ B pathway 劉軒誌, 曾準, 湯智昕 Shan-Chi Liu, Chun Tseng, Chih-Hsin Tang



編號	論文題目
PH122	The Role of Non-peptide AT2R Agonist Compound 21 in the Therapy of Peritonitis 王柏翔 ¹ , 陳亦柔 ² , 施志勤 ² , 吳錦楨 ² , 曹正明 ¹ Bo-Siang Wang ^{1*} , Yi-Rou Chen ² , Chih-Chin Shih ² , Chin-Chen Wu ² , Cheng-Ming Tsao ^{1*}
PH123	DcR3 suppresses LPS-Induced Aggresome-like induced structures in Macrophages via inhibition of ROS and p38 MAPK 黃婷茵, 李駿宏, 林琬琬 Duen-Yi Huang, Chun-Hung Lee, Wan-Wan Lin
PH124	The Roles of NLRX1 in Regulation of Mitochondrial Function and Innate Immune Response in Macrophages 黃婷茵, 洪翊筑, 林琬琬 Duen-Yi Huang, Yi-Chu Hung, Wan-Wan Lin
PH125	CASK downregulation by UVB leads to increased EGFR activation and inflammation in keratinocytes 鄭景元, 連羿婷, 張華景, 林琬琬 Ching-Yuan Cheng, Yi-Ting Lien, Hua-Ching Chang, Wan-Wan Lin
PH126	Melatonin regulates Pax7 expression through Wnt signaling pathway in myoblasts 吳宜璇, 湯智昕, 蘇振銘 Yi-Syuan Wu, Chih-Hsin Tang, Chen-Ming Su
PH127	Effects of Human Platelet Lysate on Rats with Heat Stroke 曾鏞儀 ¹ , 施志勤 ¹ , 吳錦楨 ^{1*} Chiang-Yi Tzeng ¹ , Chih-Chin Shih ¹ , Chin-Chen Wu ^{1*}
PH128	The Effects of Anthelmintic Niclosamide on Multiple Organ Failure in Lipopolysaccharide-Induced Septic Rats 黎光皓 ^{1,2} , 簡良宇 ³ , 曹正明 ⁴ , 陳明華 ⁵ , 許向平 ⁶ , 蔡欣容 ⁴ , 廖美惠 ⁷ , 吳錦楨 ¹ , 施志勤 ^{1*} Guang-Hao Li ^{1,2} , Liang-Yu Chien ³ , Cheng-Ming Tsao ⁴ , Ming-Hua Chen ⁵ , Hiong-Ping Hii ⁶ , Hsin-Jung Tsai ⁴ , Mei-Hui Liao ⁷ , Chin-Chen Wu ¹ , Chih-Chin Shih ^{1*}
PH129	A novel cell model for mimicking implantation through placenta-choriodecidual mesenchymal stem/stromal cells (pcMSCs) and trophoblast co-culture system 劉祐榛 ¹ , 林信宏 ¹ , 林泰元 ^{1*} You-Zhen, Liu ¹ , Hsin-Hung Lin ¹ , Thai-Yen Ling ^{1*}
PH130	Understanding the Mechanism of Human Placenta Choriodecidual-derived Mesenchymal Stromal Cells (pcMSCs) for the Treatment of Acute Respiratory Distress Syndrome (ARDS) 林信宏 ¹ , 吳佳玲 ¹ , 蕭皓云 ¹ , 林泰元 ^{1*} Hsin-Hung Lin ¹ , Chia-Ling Wu ¹ , Hao-Yun Hsiao ¹ , Thai-Yen Ling ¹
PH131	To Generate Alveolar Type-1 Pneumocytes by a Pulmonary Stem/progenitor Cells Expressed Coxsackie-adenovirus Receptor (CAR) from the Neonatal Mouse Lung 林信宏 ¹ , 滕民豪 ¹ , 林泰元 ^{1*} Hsin-Hung Lin ¹ , Ming-Hao Teng ¹ , Thai-Yen Ling ^{1*}



編號	論文題目
PH132	The Therapeutic Effects of Targeted Exosomes Produced by Placenta Choriodecidual-Derived Mesenchymal Stromal Cells for Acetaminophen-induced Liver Injury 呂彥葶 ¹ , 林信宏 ¹ , 林泰元 ^{1*} Yen-Ting Lu ¹ , Hsin-Hung Lin ¹ , Thai-Yen Ling ^{1*}
PH133	EpCAM Regulate Mammosphere Formation in Luminal-A Type Breast Cancer 林泰元 ^{1,2} Thai-Yen Ling ^{1,2}
PH134	Administration of Dimethylxalylglycine (DMOG) Provides a New Potential Therapeutic Option for Treating Premature Birth Babies or Patients with Lung Damage 滕民豪 ¹ , 汪承威 ¹ , 林信宏 ¹ , 張哲嘉 ¹ , 曹伯年 ^{2,3} , 林泰元 ^{1,2*} Ming-Hao Teng ¹ , Cheng-Wei Wang ¹ , Hsin-Hung Lin ¹ , Che-Chia Chang ¹ , Po-Nien Tsao ^{2,3} , Thai-Yen Ling ^{1,2*}
PH135	The Therapeutic Effect and Mechanism of Placenta Choriodecidual-derived Mesenchymal Stromal Cells in Acute Kidney Injury Mouse Model 張立揚 ¹ , 林信宏 ¹ , 林泰元 ¹ Li-Yang Chang ¹ , Hsin-Hung Lin ¹ , Thai-Yen Ling ¹
PH136	Application of flavone C-glycosides from Lophatherum gracile for COVID-19 陳俞利, 賴奎宏, 張祐嘉, 邱言純, 趙佩妤, 黃聰龍 Yu-Li Chen, Kuei-Hung Lai, Yu-Chia Chang, Yan-Chun Qiu, Pei-yu Chao, Tsong-long Hwang
PH137	Effects of niclosamide on enterovirus A71 (EV-A71) infection in vitro 練庭宇, 賴政宗 Ting-Yu Lien, Zheng-Zong Lai
PH138	Effects of Human Platelet Lysate on Rats with Endotoxin-Induced Sepsis 吳軒萱 ¹ , 施志勤 ¹ , 吳錦楨 ^{1*} Syuan-Syuan Wu ¹ , Chih-Chin Shih ¹ , Chin-Chen Wu ^{1*}
PH139	Trichodermin inhibits migration and invasion by regulating CTSV expression via ERGR-ERK pathway in human colorectal cancer 林佳良 ^{1,2} , 孫文俊 ^{2,3} , 尤振霖 ² , 謝逸憲 ^{1*} , 王士維 ^{2*} Chia-Liang Lin ^{1,2} , Wen-Chun Sun ^{2,3} , Chen-Lin Yu ² , Yi-Hsien Hsieh ^{1*} , Shih-Wei Wang ^{2*}
PH140	Ovatodiolide Inhibits SARS-CoV-2 Replication and Ameliorates Pulmonary Fibrosis through Suppression of the TGF- β / T β Rs Signaling Pathway 邱韋中 ¹ , 夏子嵐 ¹ , 黃瑋 ^{1*} Wei-Chung Chiou ¹ , Tzu-Lan Hsia ¹ , and Cheng Huang ^{1*}
PH141	Loganin Inhibits ATP-Sensitive K ⁺ Channels and Stimulates Insulin Secretion in a Rat Pancreatic β -Cell Line 王亮鈞, 吳峻誠, 張毓秦, 吳炳男 Liang-Jun Wang, Jun-Cheng Wu, Yu-Chin Chang, Bin-Nan Wu*



編號	論文題目
PH142	Preventive effects of urolithin A on organ injury in heat stroke rats 張宜嬪 ¹ , 曹正明 ² , 廖美惠 ³ , 吳錦楨 ¹ , 施志勤 ^{1*} Yi-Chen Chang ¹ , Cheng-Ming Tsao ² , Mei-Hui Liao ³ , Chin-Chen Wu ¹ , Chih-Chin Shih ^{1*}
PH143	Discovery of HDAC6, HDAC8, and 6/8 Inhibitors and Development of Cell-Based Drug Screening Models for the Treatment of TGF-β-Induced Idiopathic Pulmonary Fibrosis 尤韋傑, 葉宗祐, 葉致宏, 莊俊庭, 葉嘉意, 游舒涵, 余兆武 Wei-Chieh Yu, Tsung-Yu Yeh, Chih-Hung Ye, Patrick Chun Theng Chong, Kah Yi Yap, Shu-Han Yu*, Chao-Wu Yu*
PH144	Novel Bioactivity of Urolithin A in Inhibiting Human Platelet Activation 黃詩婷, 吳錦楨, 施志勤 Shih-Ting Huang, Chin-Chen Wu, and Chih-Chin Shih
PH145	The role of ATG4D on autophagy and survival in osteosarcoma cells 楊玟芯, 楊善為, 林怡伶, 徐志文 Wen-Hsin Yang, Shan-Wei Yang, I-Ling Lin, Chih-Wen Shu
PH146	Brain Protective Effect of Resveratrol via Ameliorating Interleukin-1b-Induced MMP-9-Mediated Disruption of ZO-1 Arranged Integrity 陳吟貞, 蔡明明, 謝喜龍 Yin-Chen Chen, Ming-Ming Tsai, Hsi-Lung Hsieh
PH147	MCL1 Expression Level Affects Therapeutic Efficacy of HDAC6 Inhibitor, MPT0G211, in Human Non-Small Cell Lung Cancer (NSCLC) 施皖曦 ¹ , 黃瀚立 ^{3,4,5*} , 潘秀玲 ^{1,2,3,4,5*} Wan-Hsi Shih ¹ , Han-Li Huang ^{3,4,5*} , Shio-Lin Pan ^{1,2,3,4,5*}
PH148	Coral-derived polyoxygenated steroids as potent anti-inflammatory agents 黃心嵐, 黃聰龍 Hsin-Lan Huang, Tsong-Long Hwang
PH149	Ugonin V inhibits chondrosarcoma metastasis 湯智昕 Chih-Hsin Tang
PH150	Development of IDO1 inhibitors for cancer treatment 陳品丞, Suat Sari, Euphemia Leung, Jóhannes Reynisson, 張雋曦 Pin-Chen Chen, Suat Sari, Euphemia Leung, Jóhannes Reynisson, Chun Hei Antonio Cheung
PH151	The role of Antcin K in inflammation responses of myoblasts 湯智昕, 蘇振銘, 黃琳筑 Chih-Hsin Tang, Chen-Ming Su, Lin-Chu Huang
PH152	Cinchonidine exerts cell-protective effect on indoxyl sulfate--induced cell damage in human umbilical vein endothelial cells through p53 protein degradation and MDM2 cytoplasmic-nuclear shuttling 鄧睿敦, 楊志豪, 鍾啟禮, 許準榕, 謝政穎 Ruei-Dun Teng, Chih-Hao Yang, Chi-Li Chung, Joen-Rong Sheu, Cheng-Ying Hsieh,



編號	論文題目
PH153	Timosaponin AIII inhibits migration and invasion abilities in human cervical cancer cells through inactivation of p38 MAPK-mediated uPA expression in vitro and in vivo 林佳良 ^{1,2} , 謝逸憲 ^{1,3*} Chia-Liang Lin ^{1,2} , Yi-Hsien Hsieh ^{1,3*}
PH154	Quinazolinone derivatives are novel antimitotic agents against colorectal cancers 王滢婷 ¹ , 黃子瑄 ¹ , 侯曼貞 ¹ , 陳泰霖 ² Ying-Ting Wang, Tzu-Hsuan Huang, Mann-Jen Hour, Tai-Lin Chen
PH155	MJ66, a quinazoline derivative exhibits potent activity against pancreatic cancer 黃子瑄 ¹ , 林涵羽 ¹ , 侯曼貞 ¹ , 陳泰霖 ² Tzu-Hsuan Huang, Han-Yu Lin, Mann-Jen Hou, Tai-Lin Chen
PH156	Inhibition of CFTR by Elexacaftor (VX-445), a Dual Action Compound with Potentiator and Corrector Activity 林柔伸, 葉翰宜, 黃自強 Rou-Shen Lin, Han-I Yeh, Tzyh-Chang Hwang
PH157	Platform Establishment and Identification of Non-electrophilic Nrf2 Activators 王蕙婷 ¹ , 林文璋 ² , 顏嘉宏 ^{1*} Yi-Ting Wang ¹ , Wen-Wei Lin ² , Chia-Hung Yen ^{1*}
PH158	Flavonoid Composition and Anti-melanogenic Activity of Red Bean Seed Coat Extracts prepared by Different Methods 何宥廣, 陳冠鈞, 張凱雁, 楊昭順*, 黃煜琿* You-Guang He, Kuan-Chun Chen, Kai-Yen Chang, Chao-Hsun Yang*, Yu-Chun Huang*
PH159	Aryl Hydrocarbon Receptor Agonist FICZ Impedes Retinal Pathogenesis in Glaucomatous Mice 林凡立 ¹ , 吳亮寰 ¹ , 顏敬倫 ¹ , 王宗仁 ² , 鄭幼文 ^{3,*} , 蕭哲志 ^{1,*} Fan-Li Lin ¹ , Liang-Huan Wu ¹ , Jing-Lun Yen ¹ , Tsung-Jen Wang ² , Yu-Wen Cheng ^{3,*} , George Hsiao ^{1,*}
PH160	Aristolactam All resensitizes cancer multidrug resistant cancer cells through interaction with P-glycoprotein ATPase activity 蘇靖惠 ^{1,2} , 錢柏宇 ^{1,2} , 洪靚娟 ^{1,2,3*} Ching-Hui Su ^{1,2} , Po-Yu Chien ^{1,2} , Chin-Chuan Hung ^{1,2,3*}
PH161	Pharmacokinetics and Biodistribution of Fluorescent Gold Nanoclusters Conjugated with α -Lipoic Acid 陳韻芳 ¹ , 鍾鏡湖 ^{1*} Yun-Fang Chen ¹ , Ching-Hu Chung ^{1*}
PH162	Goniothalactam enhances apoptosis of multidrug resistant cancer cells via P-glycoprotein inhibition 錢柏宇 ^{1,2#} , 蕭語荷 ^{2#} , 洪靚娟 ^{1,2,3*} Po-Yu Chien ^{1,2#} , Yu-Ho Hsiao ^{2#} , Chin-Chuan Hung ^{1,2,3*}



編號	論文題目
PH163	Targeting DRD2 by the antipsychotic drug, penfluridol, retards growth of renal cell carcinoma via inducing stemness inhibition and autophagy-mediated apoptosis 簡銘賢 ^{1,2,3,*} , 楊奕婕 ^{1,4} Ming-Hsien Chien ^{1,2,3,*} , Yi-Chieh Yang ^{1,4}
PH164	Attenuation of cancer multidrug resistance by Aristolactam AIIIa from Fissistigma genus 陳俊華 ¹ , 錢柏宇 ^{1,2} , 洪靚娟 ^{1,2,3} Jun-Hua Chien ¹ , Po-Yu Chien ^{1,2} , Chin-Chuan Hung ^{1,2,3}
PH165	Digicitrin combats multidrug-resistant cancer cells via stimulating P-gp ATPase 吳依庭 ¹ , 洪靚娟 ^{1,2,3*} I-Ting Wu ¹ , Chin-Chuan Hung ^{1,2,3*}
PH166	Anti-tumor Activity of an Alkaloid Analogue in Breast Cancer Cells 翁靖如, 張誌祥 Jing-Ru Weng, Chih-Shiang Chang
PH167	Anti-tumor effects of a novel hydroxamate-based compound, WMJ-J-09 in triple-negative breast cancer cells 黃寶儀, 黃偉展, 黃綉文, 許銘仁 Pao-Yi Huang, Wei-Jan Huang, Shiu-Wen Huang, Ming-Jen Hsu
PH168	Anti-glioblastoma actions of a novel naphthoquinone derivative, WTH 陳詠靖, 許銘仁, 黃綉文 Yung-Ching Chen, Ming-Jen Hsu, Shiu-Wen Huang
PH169	Anti-microglial Properties of An Antioxidant Caffeic Acid Phenethyl Amide 薛博仁 ¹ , 林凡立 ¹ , 吳亮寰 ¹ , 顏敬倫 ¹ , 郭悅雄 ² , 鄭幼文 ³ , 蕭哲志 ^{1,*} Po-Jen Hsueh ¹ , Fan-Li Lin ¹ , Liang-Huan Wu ¹ , Jing-Lun Yen ¹ , Yueh-Hsiung Kuo ² , Yu-Wen Cheng ^{3*} , George Hsiao ^{1*}
PH170	HDAC8 Inhibitor WK2-16 Attenuates Müller Glia-mediated Inflammatory Responses and Protects Retinal Function in Mice with N-methyl-D-aspartate-induced Excitotoxicity 吳亮寰, 林凡立, 顏敬倫, 黃偉展, 鄭幼文, 蕭哲志 Liang-Huan Wu, Fan-Li Lin, Jing-Lun Yen, Wei-Jan Huang, Yu-Wen Cheng and George Hsiao
PH171	The effects of Aglaia elliptifolia on autophagy essential protease ATG4B and cell viability in colorectal cancer cells 吳亞純, 翁靖如, 劉佩芬, 徐志文 Ya-Chun Wu, Jing-Ru Weng, Pei-Feng Liu, Chih-Wen Shu
PH172	Anti-inflammatory action of MT116, a coumarin-based natural product, in LPS-stimulated RAW 264.7 macrophages 許銘仁, 陳琇珍, 黃綉文 Ming-Jen Hsu, Hsiu-Chen Chen, Shiu-Wen Huang



編號	論文題目
PH173	A novel indol-based natural compound derivative impairs tumor growth and angiogenesis by interfering with the VEGF-A/VEGFR2 pathway 黃綉文, 許銘仁 Shiu-Wen Huang, Ming-Jen Hsu
PH174	Blockage of Autophagy Increases Timosaponin AIII-Induced Apoptosis of Glioma Cells In Vitro and In Vivo 陳永璿 ¹ , 謝逸憲 ^{1,2} Yong-Syuan Chen ¹ , Yi-Hsien Hsieh ^{1,2}
PH175	Trichodermin inhibit the proliferation and metastasis of human prostate cancer through modulating the ESM1 expression 林怡安 ¹ , 林佳良 ^{1,2} , 王士維 ² , 謝逸憲 ^{1,3} Yi-An Lin ¹ , Chia-Liang Lin ^{1,2} , Shih-Wei Wang ² , Yi-Hsien Hsieh ^{1,3}
PH176	Evaluation on the kidney protecting effect of modified Danggui Buxue Decoction 羅慧婷, 劉怡旻, 劉崇喜 Hui-Ting Lo, I-Min Liu, Shorong-Shii Liou
PH177	Chaetoglobosin A inhibits tumor growth of human colorectal cancer in vitro and in vivo 孫文俊, 林佳良, 李宗徽, 葉彥秀, 賴正大, 陳建勳, 劉建國, 謝逸憲, 王士維 Wen-Chun Sun ^{1,2} , Chia-Liang Lin ³ , Tzong-Huei Lee ⁴ , Yen-Hsiu Yeh ⁵ , Cheng-Ta Lai ² , Jian-Syun Chen ² , Chien-Kuo Liu ² , Yi-Hsien Hsieh ^{3*} , Shih-Wei Wang ^{1*}
PH178	Impairment of MZF-1 by Cantharidin Reduces Glioblastoma Proliferation: Exosome-based Therapy 許宸璋 ^{1,3} , 王紹銘 ^{1,2} Chen-Wei Hsu ^{1,3} , Shao-Ming Wang ^{1,2}
PH179	Investigation on lipase activity, triglyceride accumulation in 3T3-L1 cells and apocarotenoids of lotus leaves 鍾成沛, 李明怡, 吳宜娟, 胡菱, 李佳芸, 邱思妤, 邱群惠, 李昱宗, 林雲蓮, 林弘育, 夏詩閔 Cheng-Pei Chung, Ming-Yi Lee, Yi-Chuan Wu, Ling Hu, Jia-Yun Li, Si-Yu Ciou, Chun-Hui Chiua, Yu-Tsung Lee, Yun-Lian Lin, Hong-Yu Lin, Shih-Min Hsia
PH180	Therapeutic Potentials of α 6GABA-A Receptor-Selective Positive Modulators on Arrhythmias Induced by Myocardial Ischemic-Reperfusion 蘇倬慧 ¹ , 葉宸濬 ² , 邱麗珠 ^{2*} , 黃相碩 ^{1*} Hsing-Hui Su ¹ , Chen-Chun Yeh ² , Lih-Chu Chiou ^{2*} , Shiang-Suo Huang ^{1*}
PH181	Frangulin B Inhibits Tumor Angiogenesis In Vitro and In Vivo 紀智文, 陳裕仁, 陳光偉, 王士維 Chih-Wen Chi, Yu-Jen Chen, Guang-Wei Chen, Shih-Wei Wang
PH182	Oridonin modulates cytotoxic ability of NK cells against Lung cancer cells 張傳馨, 黃聰龍 Chuan-Hsin Chang, Tsong-Long Hwang



編號	論文題目
PH183	Stelletin B, a marine-sponge-derived compound, inhibits VEGF-induced angiogenesis in human endothelial progenitor cells in vitro and in vivo 許志宏, 王士維 Jyh-Horng Sheu, Shih-Wei Wang
PH184	Co-treatment with Xin-yi-san Decreased Theophylline Clearance Through the Inhibition of Cytochrome P450 1A in Rats 翁芸芳 ^{1,2,3*} , 王鴻展 ⁴ , 陳安琦 ^{1,2} , 陳信穎 ⁴ , 鄭信忠 ⁴ , 高立庭 ⁴ , 盧重光 ⁵ , 蔡耿彰 ⁵ , 李宜融 ⁶ Yune-Fang Ueng ^{1,2,3*} , Hong-Jaan Wang ⁴ , An-Chi Chen ^{1,2} , Hsin-Ying Chen ⁴ , Hsin-Chung Cheng ⁴ , Li-Ting Kao ⁴ , Chung-Kuang Lu ⁵ , Keng-Chang Tsai ⁵ , I-Jung Lee ⁶
PH185	Evaluation of 3-arylidene-2-oxyindole GSK3B inhibitors as antiplatelet and antithrombotic agents 埃利亞斯 Othman Elias
PH186	Cryptocaryone Induces Apoptosis by Inhibiting Glycolysis in Human Hepatocellular Carcinoma Cells 尤振霖, 陳日榮, 李居仁, 黃楨藁, 江儀嘉, 劉士嘉, 陳光偉, 王士維 Chen-Lin Yu, Jih-Jung Chen, Jie-Jen Lee, Chen-Chen Huang, Yi-Jia Chiang, Shih-Chia Liu, Guang-Wei Chen, Shih-Wei Wang
PH187	Additional Azaphilones from the Marine Algae-Derived Fungus <i>Penicillium sclerotiorum</i> with Anti-angiogenic Activity 王士維, 陳姝蓉, 鄭源斌 Shih-Wei Wang, Shu-Rong Chen, Yuan-Bin Cheng
PH188	Formononetin, the active component in Astragali Radix, inhibits lymphangiogenesis through Akt/mTOR pathway in Human Lymphatic Endothelial Cells 黃楨藁, 尤振霖, 顏睿毓, 陳栢均, 王士維 Chen-Chen Huang, Chen-Lin Yu, Juei-Yu Yen, Po-Chun Chen, Shih-Wei Wang
PH189	SUMOylation of DHX9 modulates RNA processing and suppresses genome instability. 楊秉澤, 林耿如, 鄭慶安, 吳青錫 Bing-Ze Yang, Ken-Ru Lin, Chin-An Cheng, and Ching-Shyi W
PH190	Ellagic Acid Resensitizes Gemcitabine-Resistant Bladder Cancer Cells by Inhibiting Epithelial-Mesenchymal Transition and Gemcitabine Transporters 吳穎羲, 何嘉益, 于承平, 卓君蓉, 吳嘉倫, 黃晟碩, 高鴻偉, 于大雄 Ying-Si Wu, Jar-Yi Ho, Cheng-Ping Yu, Chun-Jung Cho, Chia-Lun Wu, Cheng-Shuo Huang, Hong-Wei Gao, Dah-Shyong Yu
PH191	The Study of Non-Coding RNA in Mediated the Epithelial-to-Mesenchymal Transition and Aggressive of Bladder Cancer Cell 黃晟碩, 蔡振華, 于承平, 吳穎羲, 余明豐, 何嘉益*, 于大雄* Cheng-Shuo Huang ^{1,2} , Chen-Hua Tsai ³ , Cheng-Ping Yu ^{1,2} , Ying-Si Wu ^{1,2} , Ming-Fong Yee ⁴ , Jar-Yi Ho ^{1,2*} , Dah-Shyong Yu ^{1,5*}



編號	論文題目
PH192	Nerve growth factor increases human osteosarcoma metastasis by inhibiting miR-92a-1-5p expression via the MEK/ERK signaling pathway 陳威利 ¹ , 林智暘 ¹ , 侯勝茂 ^{2,3*} Wei-Li Chen ¹ , Chih-Yang Lin ¹ , and Sheng-Mou Hou ^{2,3*}
PH193	Bone sialoprotein promotes anoikis resistant in lung cancer cells via regulate ERK pathway and mir-150-5p effect on levels of MMP14 expression 湯智昕 Chih-Hsin Tang
PH194	Melatonin inhibits chondrosarcoma cell proliferation and metastasis by enhancing miR-520f-3p production and suppressing MMP7 expression Chih-Hsin Tang
PH195	Nerve Growth Factor (NGF) facilitates LOX expression and promotes tumor metastasis by Inhibiting miR-149-5p in human chondrosarcoma cells Chih-Yang Lin
PH196	To explore the inhibitory effect of the BMI1-miR-26B-5p axis on head and neck squamous cancer cells 嚴鈞賢 ¹ , 廖彩岑 ^{1*} Chun-Hsien, Yen ¹ , Tsai-Tsen, Liao ^{1*}
PH197	Lidocaine can Inhibit Migration of Glioblastoma 江柔蕙, 張智泳, 黃心妤, 陳瑞傑 Jou-Wei Chiang, Zhi-Yong Chong, Hsin-Yu Haung, Jui-Chieh Chen
PH198	SPOCK1 as a poor prognostic marker promotes malignant progression of clear cell renal cell carcinoma via triggering the Snail/Slug-MMP-2 axis-mediated epithelial-to-mesenchymal transition 簡銘賢 ^{1,2,3*} , 李維駿 ^{1,4} , Ming-Hsien Chien ^{1,2,3*} , Wei-Jiunn Lee ^{1,4}
PH199	Anti-cancer effects of induced pluripotent stem cell (iPSC)-based vaccine in colorectal cancer 卓思涵, 黃襄國, 李丞鈺, 林志萱, 魏子堂 Si-Han Jwo, Shang-Kok Ng, Cheng-Fan Lee, Jr-Shiuan Lin, Tzu-Tang Wei
PH200	The Effects of UVA on Metabolic Change and Intracellular pH Homeostasis in Melanoma Cells (A375) 林品辰, 黃筱愷, 黃翊恭 Pin-Chen Lin, Hsu-Kai Huang, Eagle Yi-Kung Huang
PH201	Investigating the role of CK1 inhibitors in the progression of clear cell renal carcinoma and evaluating its feasibility and pharmacological mechanism 林于箴 ^{1,2} , 謝宗翰 ³ , 陳俊翰 ^{1,2*} Yu-Chen Lin ^{1,2} , Tsung-Han Hsieh ³ , Chun-Han Chen ^{1,2*}
PH202	Compound YT Induced Ferroptosis to Inhibit Proliferation of Oral Squamous Cell Carcinomas 林雨彤, 李建興 Yu-Tong Lin, Chien-Hsing Lee



編號	論文題目
PH203	High NLRX1 Expression in Prostate Tumors and Involves in Cell Growth, Survival and Migration of Prostate Cancer Cells 林琬琬 Wan-Wan Lin
PH204	The ROS-dependent effects of Aaptos-derived natural components in the treatment of colorectal cancer 陳舜華, 張祐嘉, 陳柏任 Shun-Hua Chen, Yu-Chia Chang, Po-Jen Chen
PH205	Rab37-mediated secretory autophagy regulates osteopontin secretion in tumor-associated macrophages 林俞安 ^{1#} , 郭琬婷 ¹ , 王憶卿 ^{1,2} Yu-An Lin ^{1#} , Wan-Ting Kuo ¹ and Yi-Ching Wang ^{1,2*}
PH206	Lidocaine Enhances TMZ Sensitivity in Glioblastoma Multiforme 陳燕旻, 張智泳, 黃心妤, 陳瑞傑 Yan-Min Chen, Zhi-Yong Chong, Hsin-Yu Haung, Jui-Chieh Chen
PH207	CCL2 Stimulates Cell Migration in Human Osteosarcoma via the Mir-574-3p/MMP-3 Axis 張喻翔, 蔡筱琪, 湯智昕 Yu-Hsiang Chang, Hsiao-Chi Tsai, Chih-Hsin Tang
PH208	The Roles of SH3GLB1 on Regulation of CD133 Expression in GBM Cells 簡嘉宏 ^{1,2} , 賴建成 ¹ , 莊健盈 ³ , 朱瑞美 ¹ , 劉嬋娟 ¹ , 張光裕 ^{1,4*} Chia-Hung Chien ^{1,2} , Chien-Cheng Lai ¹ , Jian-Ying Chuang ³ , Jui-Mei Chu ¹ , Chan-Chuan Liu ¹ , Kwang-Yu Chang ^{1,4*}
PH209	Investigating the role of inflammatory bowel disease-associated stress on CRC progression 王妤, 陳炳焜* Yu Wang, Ben-Kuen Chen*
PH210	Ugonin P inhibits human lung cancer migration and invasion by suppressing DPP4 via RAF/MEK/ERK signaling pathways. Chih-Chuang Liaw
PH211	Oxyresveratrol Suppresses metastasis ability in Hepatocellular Carcinoma Cells via Regulation of CFAP45 Expression 陳永璿 ¹ , 謝逸憲 ^{1,2} Yong-Syuan Chen ¹ , Yi-Hsien Hsieh ^{1,2}
PH212	Epigenetic upregulation of spleen tyrosine kinase in cancer cells through p53-dependent downregulation of DNA methyltransferase 黃婷茵, 呂上德, 林琬琬 Duen-Yi Huang ¹ , Shang-Te Lu ² , Wan-Wan Lin ^{1,2}



編號	論文題目
PH213	Investigate the Molecular Mechanism of Metabolic Reprogramming in Chemotherapeutic-derived Surviving Cancer Cells 許卉婕, 陳炳焜 Grace Hii Hui Jie, Ben-Kuen Chen
PH214	Apelin enhances prostate cancer migration by up-regulating $\alpha v \beta 3$ integrin expression via p38/JNK signaling pathway 荷琇媛 ¹ , 劉軒誌 ² , 湯智昕 ^{3,4,5*} Xiu-Yuan He ¹ , Shan-Chi Liu ² , Chih-Hsin Tang ^{3,4,5*}
PH215	To investigate the role of neutrophils in colorectal cancer 王亭雅, 鄧豪偉, 童振傑, 王湘翠 Tean-ya wang, Hao-wei teng, Chen-chieh tung, Hsiang-tsui wang
PH216	Study on the Pro-tumor Function of UBE2C Gene in Metastatic Prostate Cancer and Its Potential as a Therapeutic Marker 陳彥臻, 黃一勝, 張安辰 Yen-Chen Chen, Thomas I-Sheng Hwang, An-Chen Chang
PH217	Investigating the Interplay between Chemo-surviving Cells And the Tumor Microenvironment in the Regulation of Colorectal Cancer Progression 黃映瑄, 陳炳焜 Ying-Hsuan Huang, Ben-Kuen Chen
PH218	Nanoparticles for Combined Therapy of Afatinib and microRNA to Inhibit Progression of Gastric Cancer via Regulating Metabolic Mechanisms 駱雨利 ^{1,2*} , 王澤元 ¹ , 李曜蓉 ¹ , 沈秀如 ¹ Yu-Li Lo ^{1,2*} , Tse-Yuan Wang ¹ , Yao-Rong Lee ¹ , Siou-Ru Shen ¹
PH219	Innovative pH/charge adjustable nanoparticles for the nuclear/cytoplasmic delivery of chemotherapy and miRNA in the treatment of cancer 駱雨利 [*] , 曾維宣, 林郁娟, 沈秀如 Yu-Li Lo [*] , Wei-Hsuan Tseng, Yu-Juan Lin, Siou-Ru Shen
PH220	ER Protein TXNDC5 Promotes Lung fibrosis by Augmenting Endothelial-to-Mesenchymal Transition Objectives 游靖靖, 楊鎧鍵 Jing-Jing Yo, Kai-Chien Yang
PH221	Methadone Dosage from Neurofilament Light Chain Point of Analyses 劉玉麗, 王聲昌, 劉腫夏, 郭湘維 Yu-Li Liu, Sheng-Chang Wang, Tung-Hsia Liu, Hsian-Wei Kuo



AN 中華民國解剖學學會

編號	論文題目
AN001	Investigation of S1P expression in Ovariectomized rats treated with calcitonin 朱慈暉, 賴怡廷, 羅友志, 江青樹, 王宣護, 王耀群, 蔡裕民, 康玉承, 徐佳福 *Tzu-Hui Chu ¹ , Yi-Ting Lai ¹ , Yu-Chih Lo ² , Cing-Shu Jiang ³ , Hsuan-Hsuan Wang ¹ , Yao-Chun Wang, Yu-Min Tsai ⁴ , Yu-Cheng Kang ⁴ , Jia-Fwu Shyu ^{1*}
AN002	The investigation of the potential therapeutic candidate of adiponectin in osteoporosis 朱慈暉, 賴怡廷, 羅友志, 江青樹, 王宣護, 王耀群, 蔡裕民, 康玉承, 徐佳福 *Tzu-Hui Chu ¹ , Yi-Ting Lai ¹ , Yu-Chih Lo ² , Cing-Shu Jiang ³ , Hsuan-Hsuan Wang ¹ , Yao-Chun Wang, Yu-Min Tsai ⁴ , Yu-Cheng Kang ⁴ , Jia-Fwu Shyu ^{1*}
AN003	To establish bone organoids for the tissue engineering study 徐佳福, 羅友志, 江青樹, 朱慈暉, 賴怡廷, 王宣護, 王耀群, 蔡裕民, 康玉承, 徐佳福* Jia-Fwu Shyu ¹ , Yu-Chih Lo ² , Cing-Shu Jiang ³ , Tzu-Hui Chu ¹ , Yi-Ting Lai ¹ , Hsuan-Hsuan Wang ¹ , Yao-Chun Wang ¹ , Yu-Min Tsai ⁴ , Yu-Cheng Kang ⁴ , Jia-Fwu Shyu ^{1*}
AN004	Effects of Mechanical Loading on PIEZO 1 for Osteoblasts in 3D Printed Bone Organoids 羅友志, 賴怡廷, 康玉承, 朱慈暉, 蔡裕民, 王宣護, 王耀群, 徐佳福 Yu-Chih Lo, Yi-Ting Lai, Yu-Cheng Kang, Tzu-Hui Chu, Yu-Min Tsai, Hsuan-Hsuan Wang, Yao-Chuan Wang, Jia-Fwu Shyu
AN005	Investigation of changing teaching methods in gross anatomy course on dental students' performance during the Covid-19 pandemic 廖孟琳, 葉啓娟, 呂俊宏, 賴逸儒, 張銘峰 Meng-Lin Liao, Chi-Chuan Yeh, June-Horng Lue, I-Rue Lai and Ming-Fong Chang
AN006	Adult Human Brain Vascular Pericytes Express Promotive Factors for Revascularization Under Stress 吳敏瑜, 許鍾瑜 Min-Yu Wu, Jung-Yu Hsu
AN007	Odor Perception in a Mouse Model of Autism Spectrum Disorder 陳予芙 ¹ , 陳郁唐 ² , 張荷清 ³ , 張雅涵 ³ , 王俞鈞 ⁴ , 李光永 ¹ , 陳嘉祥 ⁵ , 李立仁 ^{2,3} , 高淑芬 ^{2,6} Yu-Fu Chen ¹ , Yuh-Tarnng Chen ² , He-Cing Chang ³ , Ya-Han Chang ³ , Yu-Chun Wang ⁴ , Kuang-Yung Lee ¹ , Chia-Hsiang Chen ⁵ , Li-Jen Lee ^{2,3*} , Susan Shur-Fen Gau ^{2,6}
AN008	Platinum-based chemotherapeutic agents affect a neuro-immune axis in the skin for the establishment of mechanical hypersensitivity 黃紹軒, 林酪原, 陳彥博, 謝黛菱, 陳儷友, 廖智凱, 曾拓榮 Shao-Hsuan Huang, Ming-Yuan Lin, Yen-Bo Chen, Tai-Ling Hsieh, Li-ou Chen, Chih-Kai Liao, To-Jung Tseng



編號	論文題目
AN009	Evaluating the Effects of MANF on the Ventral Mesencephalic Tissue Transplantation in a PD Rat Model 楊承勳 ¹ , 趙韻婷 ¹ , 孫綠涵 ¹ , 邱創新 ² , 周大凱 ² , 馬國興 ¹ Cheng-Syun Yang ¹ , Yun-Ting Jhao ¹ , Lu-han Sun ¹ , Chuang-Hsin Chiu ² , Ta-Kai Chou ² , Kuo-Hsing Ma ¹
AN010	Protective Effects of GM1 Ganglioside Against LPS-induced Neuroinflammatory and Oxidative Responses by Inhibiting the Activation of Akt, TAK1 and NADPH Oxidase in MG6 Microglial Cells 黃雍協, 黃雍協
AN011	Protective effects of epigallocatechin gallate on LPS-induced inflammatory model of depression in rats 林沛樺, 葉桂鶯 Pei-Hua Lin, Kuei-Ying Yeh
AN012	Polyphenol-rich extract of <i>Ocimum gratissimum</i> attenuates inflammation via suppression of galectin-3 signaling in ischemia/reperfusion mouse model of acute kidney injury 陳欽昶 ¹ , 李采珍 ² , 張子瑜 ² , 劉哲育 ³ , 汪貴珍 ^{4*} Chin-Chang Chen ¹ , Tsai-Jean Lee ² , Zi-Yu Chang ² , Jer-Yuh Lin ³ , Guei-Jane Wang ^{4*}
AN013	Therapeutic Implications of human dermis-derived mesenchymal stem cells in streptozotocin induced type 1 diabetic rats 蕭鎮源 ¹ , 徐佳福 ² , 朱慈暉 ² , 陳韋佑 ³ , 陳天華 ^{3,5} , 蔡佩君 ^{3,4} Chen-Yuan Hsiao ¹ , Jia-Fwu Shyu ² , Tzu-Hui Chu ² , Wei-Yu Chen ³ , Tien-Hua Chen ^{3,5} , Pei-Jiun Tsai ^{3,4}
AN014	Isolation, expansion and phenotypical characterization of human dermis-derived mesenchymal stem cells 蕭鎮源 ¹ , 徐佳福 ² , 朱慈暉 ² , 陳韋佑 ³ , 陳天華 ^{3,5} , 蔡佩君 ^{3,4} Chen-Yuan Hsiao ¹ , Jia-Fwu Shyu ² , Tzu-Hui Chu ² , Wei-Yu Chen ³ , Tien-Hua Chen ^{3,5} , Pei-Jiun Tsai ^{3,4}
AN015	Comparisons of Differentiation Potential in Human Mesenchymal Stem Cells from Wharton's Jelly, Bone Marrow, and Pancreatic Tissues 彭俊維, 陳天華, 蕭鎮源, 徐佳福, 蔡佩君 Chun-Wei Peng, Tien-Hua Chen, Chen-Yuan Hsiao, Jia-Fwu Shyu, Pei-Jiun Tsai
AN016	Comparison between the Therapeutic Effects of Differentiated and Undifferentiated Wharton's jelly Mesenchymal Stem Cells in Rats with Streptozotocin-induced Diabetes 蔡佩君 ^{1,2} , 蕭鎮源 ³ , 徐佳福 ⁴ , 陳天華 ^{1,5*} Pei-Jiun Tsai ^{1,2} , Chen-Yuan Hsiao ³ , Jia-Fwu Shyu ⁴ , Tien-Hua Chen ^{1,5*}
AN017	Human Umbilical Mesenchymal Stem Cell Xenografts Repair UV-Induced Ocular Disorders in a Rat Model 陳柏儒, 郭文娟, 曾廣文 Po-Ru Chen, Wen-Chuan Kuo, Kuang-Wen Tseng



編號	論文題目
AN018	Reversal of Rat Pulmonary Fibrosis: Antifibrotic Medications versus Umbilical Mesenchymal Stem Cells 許慎言, 朱國安, 郭馥嫻, 蔡珮君, 傅毓秀 Shen-Yan Xu, Kuo-An Chu, Fu-Hsien Kuo, Pei-Jiun Tsai, Yu-Show Fu
AN019	The Application of Mesenchymal Stem Cells for Spinocerebellar Ataxia type 1 黃渝涵, 黃婉禎, 宋秉文, 傅毓秀 Yu-Han Huang, Wan-Jhen Huang, Bing-Wen Soong, Yu-Show Fu
AN020	Cell standardization of the human umbilical mesenchymal stem cells for the clinical trial of idiopathic pulmonary fibrosis 陳翔昱, 朱國安, 傅毓秀 Xiang-Yu Chen, Kuo-An Chu, Yu-Show Fu
AN021	Mesenchymal Stem Cells Therapy for Treating Left Ventricular Heart Failure in Rats 葉建宏, 蕭鎮源, 黃柏勳, 黃正雄, 傅毓秀 Jian-Hong Ye ¹ , Chen-Yuan Hsiao ² , Po-Hsun Huang ³ , Cheng-Hsiung Huang ⁴ , Yu-Show Fu ⁵
AN022	Study of Bis-aziridinylnaphthoquinone inhibited viability of non small cell lung cancer 羅淑今, 劉芳綺, 林鈺玲, 徐中濟 Shu-Chin Lo, Fang-Qi Liu, Yuh-Ling Lin, Chung-Chi Hsu
AN023	Bis-aziridinylnaphthoquinone inhibits viability of gastric cancer cell line 劉芳綺, 羅淑今, 林鈺玲, 徐中濟 Fang-Qi Liu, Shu-Chin Lo, Yuh-Ling Lin, Chung-Chi Hsu
AN024	The Biological Effects of Nostoc Commune Extract 劉靜安, 黃博文, 劉威忠 Ching-Ann Liu, Albert Wong, Wei-Chung Liu
AN025	The Influence of Digitalized Examination of the Histology Laboratory Course on Medical and Dental Students: A Retrospective Study 江明憲, 藍心婕, 鄭珈毘, 陳正繹, 殷鳳儀, 林谷峻 Ming-Hsien Chiang, Hsin-Chieh Lan, Chia-Pi Cheng, Jang-Yi Chen, Fon-Yi Yin, Gu-Jiun Lin
AN026	Oxaliplatin-induced neuronal calbindin D28k and calretinin activation is modulated by the non-peptidergic nerve terminals in the trigeminal nucleus caudalis 陳漢平, 王亮凱, 張祥樺, 朱培銘, 蔡如愷, 曾拓榮 Han-Ping Chen, Liang-Kai Wang, Shiang-hua Chang, Pei-ming Chu, Ru-Yin Tsai, To-Jung Tseng
AN027	Construction of Augmented Reality APP for Human Respiratory System Development 王霽 Pei Wang



編號	論文題目
AN028	A Model of Hepatectomy Induced Liver Failure in Rabbits 郭威廷 ^{1,4} , 蔡佩君 ^{2,3} , 廖凱聖 ^{1,5} , 陳天華 ^{2,3} Wei-Ting Kuo ^{1,4} , Pei-Chun Tsai ^{2,3} , Kai-Sheng Liao ^{1,5} , Tien-Hua Chen ^{2,3}
AN029	Diabetes Is the Most Critical Risk Factor of Adverse Complications After Peritoneal Dialysis Catheter Placement 江青樹, 蕭鎮源, 陳天華, 蔡佩君 Ching-Chu Chiang ^{1,2} , Chen-Yuan Hsiao ^{3,4} , Tien-Hua Chen ^{1,5} and Pei-Jiun Tsai ^{5,6,7}
AN030	Open Suture Repair and Open Onlay Technique for Incisional Hernia in Elderly Patients with Multiple Comorbidities 陳天華 ^{1,2} , 蕭鎮源 ³ , 徐佳福 ⁴ , 蔡佩君 ^{1,5*} Tien-Hua Chen ^{1,2} , Chen-Yuan Hsiao ³ , Jia-Fwu Shyu ⁴ , Pei-Jiun Tsai ^{1,5*}
AN031	Auxiliary virtual reality for anatomy courses: development of brain structure augmented reality 3D APP 王霽 Pei Wang
AN032	Anatomic Study of Vaginal Width in Male-to-Female Transsexual Surgery 彭俊維, 陳天華, 蕭鎮源, 徐佳福, 蔡佩君 Chun-Wei Peng, Tien-Hua Chen, Chen-Yuan Hsiao, Jia-Fwu Shyu, Pei-Jiun Tsai
AN033	Distribution of Superficial Temporal Artery in the Chinese Adult 徐兆儀, 陳天華, 蕭鎮源, 徐佳福, 蔡佩君 Chou-I Hsu, Tien-Hua Chen, Chen-Yuan Hsiao, Jia-Fwu Shyu, Pei-Jiun Tsai
AN034	Variations of the Cystic Artery in Chinese Adult 徐兆儀, 陳天華, 蕭鎮源, 徐佳福, 蔡佩君 Chou-I Hsu, Tien-Hua Chen, Chen-Yuan Hsiao, Jia-Fwu Shyu, Pei-Jiun Tsai
AN035	The Anatomical Variations of the Palmar Cutaneous Branch of the Median Nerve in Chinese Adults 邱聖豪, 蔡佩君, 蕭鎮源, 徐佳福, 陳天華 Sheng-Hao Chiu, Pei-Jiun Tsai, Chen-Yuan Hsiao, Jia-Fwu Shyu, Tien-Hua Chen
AN036	Applied Anatomy of the Radial Nerve in Treatment of Humeral Shaft Fracture 邱聖豪, 蔡佩君, 蕭鎮源, 徐佳福, 陳天華 Sheng-Hao Chiu, Pei-Jiun Tsai, Chen-Yuan Hsiao, Jia-Fwu Shyu, Tien-Hua Chen
AN037	The protective effects of alpha lipoic acid on testicular dysfunction following sleep deprivation 林郁晉, 林杏純, 曾拓榮, 廖智凱, 蔡如愷, 朱培銘, 陳儷友 Yu-Jin Lin ¹ , Hsing-Chun Lin ² , To-Jung Tseng ¹ , Chih-Kai Liao ¹ , Ru-Yin Tsai ¹ , Pei Ming Chu ¹ , Li-You Chen ¹
AN038	Treatment of Necrotizing Pancreatitis with the Concept of Retroperitoneal organs 周書正, 陳天華, 蕭鎮源, 蔡佩君 Shu-cheng Chou ^{1,2} , Tien-Hua Chen ^{1,3} , Chen-Yuan Hsiao ^{4,5} , Pei-Jiun Tsai ^{3,6,7}



編號	論文題目
AN039	Variation of the Arterial Supply of Adrenal Gland in Chinese Adult 蔡佩君 ^{1,2} , 蕭鎮源 ³ , 徐佳福 ⁴ , 陳天華 ^{1,5*} Pei-Jiun Tsai ^{1,2} , Chen-Yuan Hsiao ³ , Jia-Fwu Shyu ⁴ , Tien-Hua Chen ^{1,5*}
AN040	The Investigation of Blended Learning with Engaging Learning Strategy on Anatomy 邱美妙 Mei-Miao Chiu
AN041	Gastric Body Partition to Avoid Ulcerogenic Risk and Hypergastrinemia 顧佳辰 ¹ , 陳天華 ¹ , 蕭鎮源 ² , 徐佳福 ³ , 蔡佩君 ^{1,4*} Jia-Chen Gu ¹ , Tien-Hua Chen ¹ , Chen-Yuan Hsiao ² , Jia-Fwu Shyu ³ , Pei-Jiun Tsai ^{1,4*}
AN042	The Relationships between Afferents, Striosomes, Parvalbumin Neurons, and Medium Spiny Neurons in the Striatum 曾國藩, 陳儷今, 王玲嘉, 江至文 Guo-Fang Tseng, Li-Jin Chen, Ling-chia Wang, Chin-Wen Chiang
AN043	The Impact of Body Donor Family Interaction on Students in the Silent Mentor Program of the Tzu Chi University 曾國藩, 朱紹盈, 曾鼎鈞, 何縉琪 Guo-Fang Tseng, Shao-Yin Chu, Ting-Chun Tseng, Yun-Chi Ho
AN044	Surgical Anatomy of the Recurrent Laryngeal Nerve in Chinese Adults and its Clinical Applications 李霓 ¹ , 蔡佩君 ^{1,2} , 蕭鎮源 ³ , 徐佳福 ⁴ , 陳天華 ^{1*} Ni Lee, Pei-Jiun Tsai ^{1,2} , Chen-Yuan Hsiao ³ , Jia-Fwu Shyu ⁴ , Tien-Hua Chen ^{1*}
AN045	An Aberrant Muscle from the Angle of the Third Rib to the Medial-most Anterior Border of the Scapula 曾國藩, 賴昆城, 譚旭文, 陳儷今 Guo-Fang Tseng, Kuen-Cherng Lai, Hsu-Wen Tan, Li-Jin Chen
AN046	Courses of Axillary and Radial Nerves Differ Between Chinese and Caucasians 賴詠琳, 蔡佩君, 蕭鎮源, 徐佳福, 陳天華 Yong-Lin Lai ¹ , Pei-Jiun Tsai ^{1,2} , Chen-Yuan Hsiao ³ , Jia-Fwu Shyu ⁴ , Tien-Hua Chen ^{1*}
AN047	Surgical Anatomy of the External Branch of the Superior Laryngeal Nerve in Chinese Adults and its Clinical Applications 莊艾霖 ¹ , 陳天華 ^{1,2} , 蕭鎮源 ³ , 徐佳福 ⁴ , 蔡佩君 ^{1,5*} Ai-Lin Cuang ¹ , Tien-Hua Chen ^{1,2} , Chen-Yuan Hsiao ³ , Jia-Fwu Shyu ⁴ , Pei-Jiun Tsai ^{1,5*}
AN048	Relationship of the Gastroduodenal Artery and the Common bile duct 陳韋佑 ¹ , 蔡佩君 ^{1,2} , 蕭鎮源 ³ , 徐佳福 ⁴ , 陳天華 ^{1,5*} Wei-Yu Chen ¹ , Pei-Jiun Tsai ^{1,2} , Chen-Yuan Hsiao ³ , Jia-Fwu Shyu ⁴ , Tien-Hua Chen ^{1,5*}
AN049	Applied anatomy of the genital branch of the genitofemoral nerve in open inguinal herniorrhaphy 陳韋佑 ¹ , 陳天華 ^{1,2} , 蕭鎮源 ³ , 徐佳福 ⁴ , 蔡佩君 ^{1,5*} Wei-Yu Chen ¹ , Tien-Hua Chen ^{1,2} , Chen-Yuan Hsiao ³ , Jia-Fwu Shyu ⁴ , Pei-Jiun Tsai ^{1,5*}



編號	論文題目
AN050	Differential olfaction-to-emotion pathways beyond olfactory cortex 陳建甫 Chien-Fu F Chen
AN051	Explore the Role of Oxidative Stress in the Pathogenesis of FASD Rats and the Possible Therapeutic Effect and ATX Treatment 陳睦軒 ¹ , 林筱淳 ¹ , 趙慈 ¹ , 王慈娟 ² , 陳建榮 ^{1*} Mu-Hsuan Chen ¹ , Hsiao-Chun Lin ¹ , Tzu Chao ¹ , Tsyrr-Jiuan Wang ² , Jeng-Rung Chen ^{1*}
AN052	Correction of LQT2-associated ERG1 Mutants via Facilitating Protein Forward Trafficking 方雅菁 ^{1,2} , 湯志永 ² , 鄭瓊娟 ^{1,3*} Ya-Ching Fang ^{1,2} , Chih-Yung Tang ² , and Chung Jiuan Jeng ^{1,3*}
AN053	Activation of Astrocytes but Not Microglia in a Modified Rat Model of Adult Chronic Communicating Hydrocephalus 王芷玲, 江至文, 曾國藩, 陳儷今 Chih-Ling Wang, Zhi-Wen Jianj, Guo-Fang Tseng, Li-Jin Chen
AN054	The Astrocyte Mediates the Inflammatory Effect in Chronic Kidney Disease- induced Brain Injury 袁紹禾 Shao- Ho Yuan
AN055	P-cresyl sulfate cause skeletal muscle atrophy through fibrosis in mice 李宇恆, 龔秀妮 Yu-Heng Lee, Hsiu-Ni Kung
AN056	Attenuation of in vitro and in vivo melanin synthesis using a Chinese herbal medicine through the inhibition of tyrosinase activity 許美玲, 賴德偉 Meei-Ling Sheu, De-Wei La
AN057	Mechanical Loading Drives Osteogenesis by YAP Activation in 3D Bioprinted Bone Organoids 康玉承 ^{1*} , 朱慈暉 ² , 羅友志 ³ , 蔡裕民 ¹ , 賴怡廷 ² , 王宣護 ² , 王耀群 ² , 徐佳福 ^{2#} Yu-Cheng Kang ¹ , Tzu-Hui Chu ² , Yu-Chih Lo ³ , Yu-Min Tsai ¹ , Yi-Ting Lai ² , Hsuan-Hsuan Wang ² , Yao-Chun Wang ² , Jia-Fwu Shyu ²
AN058	The Role of CCN1 in Aortic Aneurysm Calcification 蔡宜霖, 莫凡毅 Yi-Lin Tsai, Fan-E Mo
AN059	Investigate the effect of 3D bio-printing skin tissue engineering by GelMA-Alginate on wound healing 郭晏岑 ¹ , 歐冠伶 ² , 王怡文 ¹ Yen-Tsen Kuo ¹ , Kuang-Ling Ou ² , Yi-Wen Wang ¹



編號	論文題目
AN060	Fabrication of GelMA-based 3D tissue constructs that promote functional capillaries formation 顏子容 ¹ , 陳正繹 ² , 歐冠伶 ³ , 王怡文 ^{2*} Tzu-Jung Yen ¹ , Jang-Yi Chen ¹ , Kuang-Ling Ou ² , Yi-Wen Wang ^{1*}
AN061	To investigate the effect of IL-26 on angiogenesis in rheumatoid arthritis 張云柔, 鄭珈昆, 王奕勳 Yun-Jou Chang, Chia-Pi Cheng, Yi-Hsun Wang
AN062	Immunoproteomic approach to development a novel epitope-based vaccine against Elizabethkingia anopheles 黃韻玲, 陳宏睿, 湯宏仁, 陳筱珺, 楊仲玄, 楊雅頌, 江明憲 Yun-Ling Huang, Hung-Jui Chen, Hung-Jen Tang, Xiao-Chun Chen, Tsung-Hsuan Yang, Ya-Sung Yang, Ming-Hsien Chiang
AN063	Identification of Monoclonal Antibodies Against to Elizabethkingia anopheles 陳筱珺 ¹ , 黃韻玲 ² , 潘玉翎 ² , 楊仲玄 ³ , 楊雅頌 ⁴ , 陳德禮 ⁵ , 江明憲 ^{2,5} Xiao-Chun Chen ¹ , Yun-Ling Huang ² , Yu-Ling Pan ² , Tsung-Hsuan Yang ³ , De-Li Chen ⁴ , Ya-Sung Yang ⁵ , Ming-Hsien Chiang ^{2,4}
AN064	Explore the influence of compressive force in 3D bioprinting vascularized bone organoid (VBO) 賴怡廷 ¹ , 朱慈暉 ¹ , 羅友志 ² , 蔡裕民 ³ , 康玉承 ³ , 王宣護 ¹ , 王耀群 ¹ , 徐佳福 ^{1*} Yi-Ting Lai ¹ , Tzu-Hui Chu ¹ , Yu-Chih Lo ² , Yu-Min Tsai ³ , Yu-Cheng Kang ³ , Hsuan-Hsuan Wang ¹ , Yao-Chuan Wang ¹ , Jia-Fwu Shyu ^{1*}
AN065	Chronic sleep restriction in adolescence impairs hippocampal neurogenesis and hippocampus-related cognition 林郁芯, 葉晉維, 黃姿珉, 李立仁, 段立珩 Yu-Xin Lin, Jin-Wei Yeh, Tzu-Min Huang, Li-Jen Lee, Li-Heng Tuan
AN066	Effect of sevoflurane on hippocampal development before adolescence in mice 楊子墨, 陳明山, 郭余民 Tzu-Mo Yang, Ming-San Chen, Yu-min Kuo
AN067	Characterization of the Interaction Between Filamin A and Kv4.3 Potassium Channel 陳善群, 方雅菁, 湯志永, 鄭瓊娟 Shan-Chun Chen, Ya-Ching Fang, Chih-Yung Tang, Chung Jiuan Jeng
AN068	Effects of exercise on depression with metabolic disorder in the frontostriatal circuit 王允辰 ¹ , 趙子緯 ² , 郭余民 ^{1,2} Yun-Chen Wang ¹ , Zi-Wei Zhao ² , Yu-Min Kuo ^{1,2}
AN069	Investigation of Mechanisms underlying the Attenuation Neuropathic Pain by Sciatic Nerve Stimulation - Focus on the Dorsal Root Ganglia 李榮順, 羅欣恬 Hsin Tien Lo, Jung Shun Lee
AN070	Postmitotic Foxg1 Expression Defines Cortical Boundary 王詠傑, 侯珮珊 Yung-Chieh Wang, Pei-Shan Hou



編號	論文題目
AN071	Degree of Dispersion in the Cerebral Cortex and the Correlation with Mental Illness. 林書馥, 楊智傑, 侯珮珊 Shu-Fei Lin, Albert Chih-Chieh Yang, Pei-Shan Hou
AN072	The Effects of Astaxanthin Treatment on Vascular Dementia 林筱淳, 陳睦軒, 趙慈, 王慈娟, 陳建榮 Hsiao-Chun Lin, Mu-Hsuan Chen, Tzu Chao, Tsy-Jiuan Wang, Jeng-Rung Chen
AN073	Test the Synaptic Over-elimination Hypothesis of Schizophrenia Using Heterozygous Disc1 Mutant Mice, an Animal Model of Schizophrenia 張恩齊 ¹ , 王培育 ^{1,2} , 李立仁 ^{1,2,3} En-Chi Chang ¹ , Pei-Yu Wang ^{1,2} and Li-Jen Lee ^{1,2,3}
AN074	Sleep Deprivation Induces Maladaptation in The Dopamine System of Adolescent Mice and Escalated Corticotrophin-releasing Factor Signaling 段立珩 ^{1,2,3,4} , 葉晉維 ¹ , 李俊賢 ⁵ , 李立仁 ^{1,6,7*} Li-Heng Tuan ^{1,2,3,4} , Jin-Wei Yeh ¹ , Lukas Jyuhn-Hsiarn Lee ⁵ , and Li-Jen Lee ^{1,6,7*}
AN075	The High Phosphate Diet Causes Latent Neurovascular Unit Injury 郭勁昇, 鄭雅云, 鍾芷萍, 李學德 Chin-Sheng Kuo, Ya-Yu Cheng, Chin-Ping Chung, Hsueh-Te Lee
AN076	The Neuroprotective Effect of Astaxanthin on Alzheimer's Disease 劉顯儀, 胡瑄云, 李學德* Yong-Yi Liu, Hsuan-Yun Hu, Hsueh-Te Lee*
AN077	Effects of SARS-CoV-2 Pseudovirus on Hormone Production of Leydig Cells 黃玥綺 ¹ , 應靜雯 ¹ , 林谷峻 ² , 藍心婕 ^{2*} Yue-Ci Huang ¹ , Jing-Wun Ying ¹ , Gu-Jiun Lin ² , Hsin-Chieh Lan ^{2*}
AN078	To investigate the role of C1GALT1 -mediated O-glycosylation in rheumatoid arthritis 林容安, 林能裕, 黃敏銓 Jung-An Lin, Neng-Yu Lin, Min-Chuan Huang
AN079	To investigate the immune response of the transplantation of universal iPSC-derived RPE cells 李霓 ¹ , 周士傑 ^{2,3} , 樋口亞紺 ⁴ , 邱士華 ^{2,3} , 陳天華 ^{1,5,*} Ni Lee ¹ , Shih-Jie Chou ^{2,3} , Akon Higuchi ⁴ , Shih-Hwa Chiou ^{2,3} , Tien-hua Chen ^{1,5,*}
AN080	The underlying mechanism of HSP27-mediated myogenesis 林宜樺 ¹ , 黃品嘉 ¹ , 王仰高 ¹ I-Hua Lin ¹ , Pin-Jia Huang ¹ , Yang-Kao Wang ¹
AN081	Protective Effects of Allium macrostemon Bunge Extract on High Fructose Corn Syrup-Induced NAFLD 吳喬莉, 許勝崑, 蔡帛蓉, 龔秀妮 Chiao-Li Wu, Sheng-Wei Hsu, Po-Jung Tsai, Hsiu-Ni Kung
AN082	B-Cell Lymphoma 6 Promotes Gastric Cancer Peritoneal Metastasis via the STAT1 Pathway 周健朗, 許美鈴 Kin-Long Chou, Meei-Ling Sheu



編號	論文題目
AN083	Lymph node metastases are seeded via two distinct ways in phylogenetic study of gastric cancer 鄭珮淇, 洪維廷, 鄭永銘, 賴逸儒 Pei-Chi Cheng, Wei-Ting, Hung, Yung-Ming Jeng, I-Rue, Lai
AN084	To investigate the role of UDP-galactose transporter SLC35A2 in Neuroblastoma 張秀玲, 林能裕, 張修豪 Hsiu-Ling Chang, Neng-Yu Lin, Hsiu-Hao Chang
AN085	RXRB reduces EMT by blocking the ZEB1-mediated transcription repression of E-cadherin in metastatic dissemination of gastric cancer 黃振庭 ¹ , 許美鈴 ^{1*} Zhen-Ting Huang ¹ , Meei-Ling Sheu ^{1*}
AN086	MiR-194 Overexpression Inhibit ECT2 and Sensitize HCC cells to Doxorubicin-Induced DNA Damages 許書豪 Shu-Hao Hsu
AN087	Secreted frizzled-related protein 4 induces cell migration via epithelial-mesenchymal transition in 5-fluorouracil- and cisplatin-resistant gastric cancer. 黃意晴, 陳政義 Huang, Yi-Ching, Cheng-Yi Chen
AN088	Chondroitin 4-Sulfate Binding Peptide Suppressed CHST11-Induced Malignant Phenotypes Via Interrupting CSPG4 Activity In GBM Cell. 林祐丞 ¹ , 朱殷弘 ¹ , 陳家嬋 ³ , 廖玟潔 ² , 劉焜輝 ^{1,2*} You-Cheng Lin ¹ , Yin-Hung Chu ¹ , Chia-Hua Chen ³ , Wen-Chieh Liao ² , and Chiung-Hui Liu ^{1,2*}
AN089	Novel Approach of the Neurological Medication in Breast Cancer Brain Metastasis 張嘉珣, 李學德 Chia-Hsun Chang, Wen-Wei Chang, Hsueh-Te Lee
AN090	Fibroblast growth factor 9 promotes TM3 mouse Leydig progenitor cells into TM3 cancer stem cells 林沁如, 李一平, 黃步敏 Chin-Ru Lin, Yi-Ping Lee, Bu-Miin Huang
AN091	CHPF Coordinates with SDC1 to Regulate Macropinocytosis in Breast Cancer Cells 黃映璋, 蘇盈媛, 周毓倫, 劉焜輝 Ying-Wei Huang, Ying-Ai Su, Yu Lun Chou, Chiung-Hui Liu
AN092	Mechanisms of Transglutaminase 2-Mediated Cisplatin Resistance in Ovarian Cancer Cells 王仰高 Yang-Kao Wang



編號	論文題目
AN093	A 3D-printed Polylactic Acid Scaffold Modified with Heparan Sulfate Proteoglycans for Bone Repair Applications 顧崇耀, 劉炯輝, 朱殷弘, 蔡如愔, 曾顯群, 廖玟潔* Chung-Yao Ku, Chiung-Hui Liu, Yin-Hung Chu, Ru-Yin Tsai, Hsien-Chun Tseng, Wen-Chieh Liao*
AN094	Effects of BPA-treated trophoblast on macrophage 李芷芊 ^{1*} , 黃謙 ¹ , 鄭珈昆 ² , 藍心婕 ^{2#} Chih-Chien Li ^{1*} , Chian Huang ¹ , Chia-Pi Cheng ² , Hsin-Chieh Lan ^{2#}

IM 中華民國免疫學會

編號	論文題目
IM001	NLRP12 negatively regulates noncanonical inflammasome, type 1 IFN-mediated suicidal Lytic NETosis, and antibacterial impairment of neutrophils 周明莉, 陳斯婷 Ming-Li Chou and Szu-Ting Chen
IM002	Enteric Helminth Infection Confers Bystander Protection against Subsequent Unrelated Pulmonary Virus Infection 戴琪, 謝佳勳, 林志萱 Chi Tai, Jia-Xun Xie, and Jr-Shiuan Lin
IM003	CD40 Signaling Rewires Metabolic Circuits in Macrophages to Boost Antitumor Therapy 陳哲, Yi-Ting Chen, Xiaoyun Li, Pei-Chun Hsueh, Sheue-Fen Tzeng, Pei-Zhu Shi, Xin Xie, Sweta Parik, Sara-Maria Fendt, Ping-Chih Ho, 劉卜慈 Hsi Chen, Yi-Ting Chen, Xiaoyun Li, Pei-Chun Hsueh, Sheue-Fen Tzeng, Pei-Zhu Shi, Xin Xie, Sweta Parik, Sara-Maria Fendt, Ping-Chih Ho, Pu-Ste Liu*
IM004	Dysfunction of Paneth cells causes intestinal Atoh1-driven secretory cell remodeling with compromised Type 2 immunity and tumorigenesis 陳郁文 ^{1,2} , 蘇塔克 ² , 徐志文 ^{2*} Yu-Wen Chen ^{1,2} , Janaki N. Sudhakar ² , Jr-Wen Shui ^{2*}
IM005	The anti-UL94 antibody as a mediator for epitope spreading to promote systemic sclerosis: the role of galectin-9 萬磊, 許好安 Lei Wan, Yu-An Hsu
IM006	The Relationship between Candida tropicalis and Intestinal Barrier Function 邱翊綾, 江皓森 Yi-Ling Chiu, Hao-Sen Chiang



編號	論文題目
IM007	Polyfunctional endogenous EBV-specific T cell response in nasopharyngeal carcinoma 陳一攸, 廖立人, 邱彥霖 I Yu Chen, Li Jen Liao, Yen Ling Chiu
IM008	Optimize The Generation of CD8+ T cells from Induced Pluripotent Stem Cells (iPSCs) 葉曉妮 ¹ , 程泓儒 ² , 葉致宏 ³ , 宋柏儀 ¹ Siao Ni, Ye ¹ , Hong-Ru Chang ² , Chih-Hung Ye ³ , Bo-Yi Sung ¹
IM009	IL-10 activates and expands tumor-infiltrating CD8+ T cells in hepatocellular carcinoma 邱奕璋, 王禹文, 莊雅惠 Yi-Wei Chiu, Yu-Wen Wang, and Ya-Hui Chuang
IM010	T-cell dysfunction in end stage kidney disease 徐愷翔, 廖秀蓉, 賈景山, 邱彥霖 Kai-Hsiang Shu, Hsiu-Jung Liao, Jean-San Chia, Yen-Ling Chiu
IM011	ADSC-derived exosomes inhibit cbl-cathepsin K-dependent osteoclast activation in inflammatory arthritis 廖秀蓉 ¹ , 沈宜珊 ^{2,3} , 盧賜蓉 ² , 沈家寧 ⁴ , 張至宏 ^{2,5} Hsiu-Jung Liao ¹ , Yi-Shan Shen ^{2,3} , Ssu-Jung Lu ² , Chia-Ning Shen ⁴ , Chih-Hung Chang ^{2,5}
IM012	Blimp-1 deficiency exacerbates the pathogenic processes of autoimmune diabetes in NOD mice harboring islet antigen-specific TCR repertoire 劉鈺文 ¹ , 傅馨慧 ^{1,2} , 簡明偉 ^{1,2} , 林明宏 ³ , 司徒惠康 ^{1,2} Yu-Wen Liu ¹ , Shin-Huei Fu ^{1,2} , Ming-Wei Chien ^{1,2} , Ming-Hong Lin ³ , Huey-Kang Sytwu ^{1,2}
IM013	The role of cancer-associated myelopoiesis in tumor progression of bone metastatic prostate cancer 蘇子婷, 陳岱陽, 王聖傑, 張如一, 馮敬珊, Sravya Mandava, 蕭培文, 陳繪名 Tzu-Ting Su, Tai-Yang Chen, Shen-Chieh Wang, Ju-I Chang, Ching-Shan Feng, Sravya Mandava, Pei-Wen Hsiao, Hui-Ming Chen
IM014	The Impact of Sialylated Glycocalyx of Malignant Tumors on Intracranial Neuroimmunity through Interaction of Myeloid Cells 施拉亞, 王聖傑, 馮敬珊, 陳岱陽, 蘇子婷, 張如一, 陳繪名 Sravya Mandava, Sheng-Chieh Wang, Ching-Shan Feng, Tai-Yang Chen, Tzu-Ting Su, Ju-I Chang, Hui-Ming Chen
IM015	Excess Salt Consumption Activates IL-21-mediated Autoimmune Diabetogenesis via A Salt-sensing STE20/SPS1-Related Proline/Alanine-Rich Kinase in CD4 T Cells 傅馨慧 ^{1,2} , 邱敬絜 ² , 許詔淵 ² , 簡明偉 ^{1,2} , 劉鈺文 ^{1,2} , 楊松昇 ³ , 林石化 ³ , 司徒惠康 ^{1,2*} Shin-Huei Fu ^{1,2} , Jing-Jie Ciou ¹ , Chao-Yuan Hsu ² , Ming-Wei Chien ^{1,2} , Yu-Wen Liu ^{1,2} , Sung-Sen Yang ³ , Shih-Hua Lin ³ , Huey-Kang Sytwu ^{1,2*}
IM016	To investigate the Effects of Sleep Deprivation on Mouse Immune Profiling 林品融 ^{1,2*} , 程泓儒 ³ , 宋柏儀 ^{4#} Pin-Rung Lin ^{1,2*} , Hong-Ru Chang ³ , Bo-Yi Sung ^{4#}



編號	論文題目
IM017	The GLP-1 receptor agonist exenatide ameliorates neuroinflammation in mice with diet-induced obesity through the modulation of microglial M2 polarization and downregulation of SR-A4 邱馨瑩, 林明宏 Hsin-Ying Clair Chiou ¹ , Ming-Hong Lin ²
IM018	The Role of GSDME Regulated Tumor Progression in Head and Neck Squamous Cell Carcinoma 程含鄢, 林伯涵, 陳雨彤, 李子瑜, 楊慕華 Han-Ying Cheng, Po-Han Lin, Yu-Tung Chen, Zih-Yu Li, and Muh-Hwa Yang
IM019	Crosstalk between mitochondrial stress in cancer cells and macrophages and dendritic cells in the immunosuppressive tumor microenvironment 林映辰 ¹ , 周含諭 ¹ , 郭政良 ¹ , 忻振宇 ² , 朱清良 ² , 莊宗顯 ³ , 李岳倫 ^{1*} Ying-Chen Lin ¹ , Han-Yu Chou ¹ , Cheng-Liang Kuo ¹ , Jenn-Yeu Shin ² , Ching-Liang Chu ² , Tsung-Hsien Chuang, Alan Yueh-Luen Lee ^{1*}
IM020	Cooperatively Boost Immune Responses to SARS-CoV-2 RBD Vaccine by Combined CpG-ODN and Cyclic Dinucleotide Adjuvant through an Increased Germinal Center B Cell Response and Reshaped T Helper Responses 楊景行, 曾仁志, 李佳穎, 劉奕玲, 莊宗顯 Jing-Xing Yang, Jen-Chih Tseng, Chia-Yin Lee, Yi-Ling Liu, Tsung-Hsien Chuang
IM021	Toll-Like Receptor 9 Activation Induces Immune Responses and Phosphatidylserine Exposure in Tumor to Increase the Efficacy of Phosphatidylserine Targeting Antitumor Drug 曾仁志 ¹ , 楊景行 ¹ , 李佳穎 ¹ , 羅振夫 ² , 劉奕玲 ¹ , 張明姿 ³ , 黃麗蓉 ³ , 鄒倫 ² , 莊宗顯 ^{1*} Jen-Chih Tseng ¹ , Jing-Xing Yang ¹ , Chia-Yin Lee ¹ , Chen-Fu Lo ² , Yi-Ling Liu ¹ , Mingzi M. Zhang ³ , Li-Rung Huang ³ , Lun K.Tsou ^{2*} , Tsung-Hsien Chuang ^{1*}
IM022	Fungal sensing triggers ileal mucus secretion and modulates Candida albicans distribution in the gut 曾國堯, 陳瑋璘, 蔡雨寰 Kuo-Yao Tseng, Wei-Lin Chen, Yu-Huan Tsai
IM023	Regulatory T Cells in Inflamed Liver Are Dysfunctional in Murine Primary Biliary Cholangitis 林佳儀*, 劉芝宇*, 陳虹汶*, 王禹文*, 梁碧惠, 莊雅惠* Chia-I Lin*, Chih-Yu Liu*, Hung-Wen Chen*, Yu-Wen Wang*, Pi-Hui Liang, and Ya-Hui Chuang*
IM024	Investigating the Function of the High-Affinity Glutamate Transporter SLC1A3 in Resident Thymic Macrophages 蔡沛堯 ¹ , 蔡宗霖 ^{1,2} , 范琇涵 ¹ , 王如初 ¹ , 周庭安 ¹ , 葛一樊 ¹ , 徐嘉琳 ^{1,2*} Pei-Yuan Tsai ¹ , Tsung-Lin Tsai ^{1,2} , Hsiu-Han Fan ¹ , Ju-Chu Wang ¹ , Tyng-An Zhou ¹ , Ivan L. Dzhagalov ¹ , Chia-Lin Hsu ^{1,2*}



編號	論文題目
IM025	Investigate the Role of Microglial Equilibrative Nucleoside Transporter 3 (ENT3) in Huntington's Disease 呂瑩穗 ¹ , 謝毓庭 ¹ , 蔡沛芄 ¹ , 陳儀莊 ² , 徐嘉琳 ^{1*} Ying-Sui Lu ¹ , Yu-Ting Hsieh ¹ , Pei-Yuan Tsai ¹ , Yi-Juang Chern ² , Chia-Lin Hsu ^{1*}
IM026	Glutamine blockade potentiate CD8+ T-cell activation and anti-tumour responses 張軒嘉, 葛依青, 蔡忠穎, 楊皇煜 Hsuan-chia Hsuan, Yi-Ching Ko, Chung-Ying Tsai, Hung-Yu Yang
IM027	The efficacy and mechanisms of sBTLA in alleviating asthmatic responses and modulating T cell activity
IM028	Investigate the molecular mechanism of antigen cross-presentation modulated by the pattern recognition receptors and its application in anti-tumor immunity 趙之偉, 陳家華, 陳斯婷 Chih-Wei Chao, Chia-Hua Chen, Szu-Ting Chen
IM029	The potential effect of DON on alleviating SLE progression by inhibiting TFH activation and GCB/PC differentiation 楊立瑄, 蔡忠穎, 葛依青, 楊皇煜 Li-Syuan Yang, Chung-Ying Tsai, Yi-Ching Ko, Huang-Yu Yang
IM030	N-glycan branching shapes CD8 T cell pathogenicity through an Mgat5-dependent regulation on proinflammatory cytokine signaling 簡明偉, 司徒惠康 Ming-Wei Chien, Huey-Kang Sytwu
IM031	IL-21 signaling shapes CD4 T cell pathogenicity by modulating GM-CSF production to ameliorate experimental autoimmune encephalomyelitis 董佳鈴 ¹ , 簡明偉 ^{2,3} , 司徒惠康 ^{1,2,3} Jia-Ling Dong ¹ , Ming-Wei Chien ^{2,3} , Huey-Kang Sytwu ^{1,2,3}
IM032	IFN-stimulated Metabolite Transporter ENT3 Facilitates Viral Genome Release 謝毓庭 ¹ , 蔡宗霖 ^{1,2} , 黃深彥 ¹ , 王健文 ¹ , 黃昱嘉 ¹ , 蔡沛芄 ¹ , 趙苔伶 ³ , 蔡雅閔 ⁴ , 李建國 ⁵ , 張淑媛 ^{4,6} , 徐嘉琳 ^{1,2*} Yu-Ting Hsieh ¹ , Tsung-Lin Tsai ^{1,2} , Shen-Yan Huang ¹ , Jian-Wen Heng ¹ , Yu-Chia Huang ¹ , Pei-Yuan Tsai ¹ , Tai-Ling Chao ³ , Ya-Min Tsai ⁴ , Chien-Kuo Lee ⁵ , Sui-Yuan Chang ^{4,6} , Chia-Lin Hsu ^{1,2}
IM033	Development of Multi-functional Anti-Tumor E. coli for Cancer Therapy. 劉程豪, 潘鏡中, 牟昀 Cheng-Hao Liu, Yi-Chung Pan, Yun Mou
IM034	Establish a PD-1-Rewired and Low Immunogenic iPSC-Derived T Cell for Adoptive Cell Immunotherapy in Cancer with Abundant PD-L1 Expression 葉致宏 ¹ , 宋柏儀 ² , 程弘儒 ³ , 林岱霖 ² , 葉曉妮 ² , 尤韋傑 ¹ , 游舒涵 ¹ Chih-Hung Ye ¹ , Bo-Yi Sung ² , Hong-ru chang ³ , Tai-Lin Lin ² , Siao-Ni Ye ² , Wei-Chieh Yu ¹ , and Shu-Han Yu ¹



編號	論文題目
IM035	Probiotic membrane vesicle inhibits myopia development: a story of gut-retina axis 林其鋒, 萬磊 Chi-Fong Lin, Lei Wan
IM036	Sexual Dimorphism Analysis Demonstrates Chemokine C-C Motif Ligand 2 Involvement in Enterovirus A71 Infection Pathogenesis 劉冠廷, 黃鵬年, 吳冠宏, 施信如 Kuan-Ting Liu, Peng-Nien Huang, Guan-Hong Wu, Shin-Ru Shih
IM037	Mannose Receptor C-Type 2-Driven Cancer-Associated Fibroblasts Promote Malignancy of Gastric Cancer Cell via IL-6/STAT3 Signaling Pathway 邱馨瑩, 吳登強, 王俊偉*, 林明宏* Hsin-Ying Clair Chiou, Deng-Chyang Wu, Jiunn-Wei Wang* and Ming-Hong Lin*
IM038	DUSP22 Inhibits Lung Tumorigenesis by Suppression of EGFR Signaling 林筱涵, 張政暉, 廖郁婷, 林琇萍, 何慧敏, 林文傑 Hsiao-Han Lin, Cheng-Wei Chang, Yu-Ting Liao, Hsiu-Ping Lin, Hui-Min Ho, Wen-Jye Lin
IM039	Bacteria colonization in tumor microenvironment creates a favorable niche for immunogenic chemotherapy. 林世凱, 林文晴, 胡哲偉, 潘鏗中, 牟昀* See-Khai Lim, Wen-Ching Lin, Che-Wei Hu, Yi-Chung Pan and Kurt Yun Mou*
IM040	Glycine N-methyltransferase expression alters methotrexate drug responses in mitochondrial one carbon metabolism and citric cycle in vivo 蘇雅麗 ^{1,2} , 陳得源 ³ , 陳一銘 ⁴ , 陳宜民 ⁵ , 唐烽堯 ⁶ , 蔣恩沛 ^{1,2,7*} Nga-Lai Sou ^{1,2} , Der-Yuan Chen ³ , Yi-Ming Chen ⁴ , Yi-Ming Chen ⁵ , Feng-Yao Tang ⁶ , and En-Pei Isabel Chiang ^{1,2,7*}
IM041	Developing the DNA Vaccine Based on Sindbis Virus Replicon 邱敬翔, 王健文, 徐嘉琳, 葛一樊 Ching-Hsiang Chiu, Jian-Wen Heng, Chia-Lin Hsu, Ivan Dzhalgalov
IM042	The Maintenance of Thymic Macrophage at Steady State and after Injury 馬語謙, 葛一樊 Yu-Chien Ma, Ivan L. Dzhalgalov
IM043	To decipher the molecular mechanisms of Blimp-1 sumoylation in T cell function and its subsequent impact on experimental autoimmune encephalomyelitis 林守璿 ^{1*} , 董佳鈴 ² , 劉鈺文 ³ , 簡明偉 ³ , 傅馨慧 ³ , 林明宏 ⁴ , 司徒惠康 ³ Shou-Hsuan Lin ^{1*} , Jia-Ling Dong ² , Yu-Wen Liu ³ , Ming-Wei Chien ³ , Shin-Huei Fu ³ , Ming-Hong Lin ⁴ , Huey-Kang Sytwu ³
IM044	Measurement of lipid droplets in peripheral immune cells shows an immunomodulatory effect on monocytes in dyslipidemia 洪于蘋, 林秋烽 Yu-Ping Hung; Chiou-Feng Lin



編號	論文題目
IM045	Immunosuppressive Effect of Rhodiosin on Ovalbumin-induced Asthmatic Mice and CD4+ T-cells 黃靖婷, 郭敏玲 Jing-Ting Huang, Ming-Ling Kuo
IM046	Verify Anti-PEG Antibodies Impact on COVID-19 mRNA Vaccine and Anaphylaxis in Endogenous Anti-PEG Antibodies Mouse Model 留妍菱, 鄭添祿* Yen-Ling Liu, Tian-Lu Cheng
IM047	The Modulatory Role of c-Maf in Regulatory T Cells During Experimental Mouse Models of Colitis 許育愷, 董佳鈴, 簡明偉, 司徒惠康 Yu-Kai Shu, Jia-Ling Dong, Ming-Wei Chien, Huey-Kang Sytwu
IM048	The Therapeutic Effect of Luteolin on Indeno[1,2,3-cd] pyrene Enhancing Ovalbumin-induced Asthmatic Murine Model 郭敏玲 Ming-Ling Kuo
IM049	Rational development of live-attenuated influenza vaccine candidates with high interferon induction and cross-protection abilities 陳銘發 ¹ , 馬聖凱 ¹ , 張宏全 ¹ , 施孟岑 ² , 陳冠儒 ¹ , 凌斌 ^{1,2*} Ming-Fa Chen ¹ , Sheng-Kai Ma ¹ , Hung-Chuan Chang ¹ , Meng-Cen Shih ² , Kuan-Ru Chen ¹ , Pin Ling ^{1,2*}
IM050	Different Phenotypes and Functions of Tumor Antigen-specific and Non-tumor Antigen-specific CD8 T Cells in Hepatocellular Carcinoma 吳穎瑄, 林佳儀, 莊雅惠 Ying-Hsuan Wu, Chia-I Lin, Ya-Hui Chuang
IM051	To Investigate the Survival Effect and Regulation of Phosphoglycerate Dehydrogenase (PHGDH) after B Cells Activation 劉珈鎂 ¹ , 林岳賢 ¹ , 劉柏均 ¹ , 呂春敏 ^{1*} Jia-Mei Liu ¹ , Yue-Hsien Lin ¹ , Po-Chun Liu ¹ , Chuen-Miin Leu ^{1*}
IM052	The Role of Serine Synthesis Pathway and One Carbon Metabolism in Autoimmune T Cells 鍾葦璇 ¹ , 陳明翰 ² , 呂春敏 ^{1*} Wei-Hsuan Chung ¹ , Ming-Han Chen ² , Chuen-Miin Leu ^{1*}
IM053	The mechanism of how TAPE regulates RIG-I ubiquitination and polymerization 李冠葳 ¹ , 陳家寶 ¹ , 王立君 ¹ , 羅尹秋 ¹ , 陳冠儒 ^{1,2} , 凌斌 ^{1,2*} Kuan-Wei Lee ¹ , Jia-Bao Chen ¹ , Li-Jun Wang ¹ , Yin-Chiu Lo ¹ , Kuan-Ru Chen ^{1,2} , Pin Ling ^{1,2}
IM054	Molecular characterization of PAR2 activation mechanism induced by GPR97-promoted mPR3 activity in human neutrophils 朱岱瑩, 林錫賢 Tai-Ying Chu, Hsi-Hsien Lin



編號	論文題目
IM055	TAPE is an innate immune regulator defending against intracellular bacterial infection via regulating the NOD2 pathway and autophagy 謝宜庭 ¹ , 謝筑伊 ¹ , 高禎鞠 ¹ , 凌斌 ¹ Yi-Ting Hsieh ¹ , Chu-Yi Hsieh ¹ , Chen-Chu Kao ¹ , Pin Ling ¹
IM056	Decoding a common regulatory mechanism controlling activation of NLRP3 inflammasome and Caspase-11 inflammasome 顧哲旭 ¹ , 高禎鞠 ² , 李家芙 ² , 吳忠鴻 ² , 凌斌 ^{1,2*} Tse Hsu Ku ¹ , Chen Chu Kao ² , Ka Fu Lei ² , Jung Hung Wu ² , Pin Ling ^{1,2*}
IM057	Pab-EA20, from a Taiwan native Urticaceae plant, exhibits immunosuppressive bioactivity 簡于傑, 周珂名, 林麗純, 周秀慧 Yu-Chieh Chien ¹ , Ke-Mine Chou ¹ , Lie-Chwen Lin ² , Shiu-Huey Chou ^{1*}
IM058	Regulation of B-Cell Activation and Differentiation by Post-translational Modification of STAT1 李婕愉 Chieh Yu Lee
IM059	Functional Dissection of Immunoregulatory Roles between Dietary Fats and Intestinal Microbiota in the Progress of Peritoneal Metastases from Colorectal Cancer 吳齊恩, 賈郁雯, 劉侃勳, 林雅雯, 許詔淵 Chi-En Wu, Yu-Wen Mai, Kan-Hsun Liu, Ya-Wen Lin, Chao-Yuan Hsu
IM060	IL-21 Signaling Sustains RORγt+ Treg Suppressive Functions to Dampen Th17-driven Experimental Autoimmune Encephalomyelitis 張星瑩 ^{1*} , 許育愷 ² , 董佳鈴 ² , 簡明偉 ^{1,3} , 司徒惠康 ^{1,2,3} Sing-Ying Jhang ^{1*} , Yu-Kai Shu ² , Jia-Ling Dong ² , Ming-Wei Chien ^{1,3} , Huey-Kang Sytwu ^{1,2,3}
IM061	Pathogenic fungi lurk in the gut and can cause systemic infection when the immunity of the host is compromised 林冠廷, 顧子奇, 蔡雨寰 Kuan-Ting Lin, Zi-Qi Gu, Yu-Huan Tsai
IM062	IL-23 unleashes pathogenic immune responses in autoimmune arthritis 劉于瑄 ^{1*} , 蔡孟格 ² , 楊文吾 ³ , 董佳鈴 ⁴ , 簡明偉 ^{1,5} , 司徒惠康 ^{1,2,4,5} Yu-Hsuan Liu ^{1*} , Meng-Ko Tsai ² , Wen-Wu Yang ³ , Jia-Ling Dong ⁴ , Ming-Wei Chien ^{1,5} , Huey-Kang Sytwu ^{1,2,4,5}
IM063	Th17-associated tissue fibrosis underlie vasculitis in Kawasaki disease 陳婷暄, 楊鎧鍵, 蔡雨寰 Ting-Hsuan Chen, Kai-Chien Yang, Yu-Huan Tsai
IM064	Apoptotic Biliary Epithelial Cells and Gut Dysbiosis in the Induction of Murine Primary Biliary Cholangitis 王禹文, 林佳儀, 陳虹汶, 吳瑞菁, 莊雅惠 Yu-Wen Wang, Chia-I Lin, Hung-Wen Chen, Jui-Ching Wu, and Ya-Hui Chuang



編號	論文題目
IM065	The Expansion of Virtual Memory CD8+ T Cells by α -Galactosylceramide Is Associated with Non-Cognate Protection against Bacterial Infection 謝佳勳, 戴琪, 林志萱 Jia-Xun Xie, Chi Tai, Jr-Shiuan Lin
IM066	Alteration of Human Immunoglobulin Fc-Glycosylation among chronic dialysis patients after SARS-CoV-2 vaccination booster and/or infection with UHPLC/MS-MS analysis 周佳儀 ¹ , 鄭仲益 ^{2,3,4} , 李枝新 ^{5,6} , 蔡伊琳 ^{7*} Chia-Yi Chou ¹ , Chung-Yi Cheng ^{2,3,4} , Chih-Hsin Lee ^{4,5,6} , I-Lin Tsai ^{7*}
IM067	The Inflammatory Characteristics of PMA-Polarized THP-1 Cells after Co-Cultured with Glycosylated Immunoglobulin of Patients with Ankylosing Spondylitis 黃羽翎, 張庭璋, 吳庭儀, 江慧玲, 葉怡玲 Yu-Ling Huang, Ting-Wei Chang, Ting-Yi Wu, Hui-Ling Chiang, PhD ² , Yi-Ling Ye, PhD ¹
IM068	Biologics modulate carbon source allocation and homeostasis during inflammation 陳怡婷, 蘇雅麗, 林宜瑩, 陳一銘, 陳得源, 蔣恩沛 Yi-Ting Chen, Nga-Lai Sou, Yi-Ying Lin, Yi-Ming Chen, Der-Yuan Chen, En-Pei Isabel Chiang
IM069	To establish a system for reprogramming antigen-specific T cells into induced pluripotent stem cells (iPSCs) 林岱霖, 葉致宏, 程泓儒, 宋柏儀 Tai-Lin Lin, Chih-Hung Ye, Hong-ru chang, Bo-Yi Sung
IM070	Contribution of ACE2 Cross-reactive Anti-SARS-CoV-2 RBD Antibodies to NETosis in COVID-19 謝坤翰, 葉才明 [*] Kun-Han Hsieh, Trai-Ming Yeh [*]
IM071	Bispecific Antibody (PEG Fab \times CD20 scFv) One-Step Mixing with Oncaspar to Enhance Tumor Accumulation and Therapeutic Efficacy 薛智方, 留妍菱, 鄭添祿 Chih-Fang Hsueh, Yen-Ling Liu, Tian-Lu Cheng
IM072	Mannose Receptor C Type 2 Promotes Tumor Aggressiveness of Gastric Cancer via Soluble Factors to Affect Tumor Microenvironment Context 盧品君 ¹ , 邱馨瑩 ² , 王俊偉 ³ , 吳登強 ⁴ , 林明宏 ^{5,*} Pin-Chun Lu ¹ , Hsin-Ying Clair Chiou ² , Jiunn-Wei Wang ³ , Deng-Chyang Wu ⁴ , Ming-Hong Lin ^{5,*}



MI 台灣分子生物影像學會

編號	論文題目
MI001	Image Qualified Recognition for Chest X-Ray Using CNN Model 鄭誠, 張騰彬, 曾文昌, 林康平 Cheng Cheng, Teng-Bin Chang, Wen-Chang Zeng, Kang-Ping Lin
MI002	Reconstruction of CT Image Volumes from X-ray Images using a Novel CycleGAN 張學碩, 施政廷* Hsueh-Shuo Chang, Cheng-Ting Shih*
MI003	Quality assessment and analysis of visual radiation exposure distribution in clinical panoramic images of 3D self-made phantoms 江佳澧, 王惠璇, 蕭惠馨, 蕭文田 Chia-Yun Chiang, Hui-Xuan Wang, Hui-Hsin Hsiao, Wen-Tien Hsiao
MI004	Radiolabeling of [18F]AIF-NOTA-FAPI as a radiotracer for Fibroblast Activation Protein-targeted tumor imaging 張瑋岷, 陳傳霖 Wei-Min Zhang, Chuan-Lin Chen
MI005	Investigation of DNA damage response and senescence features in overexpression cofilin-1 transgenic mice 李芳瑜, 王子欣, 黃鉞涵, 林佑娟, 李易展 Fang-Yu Li, Tzu-Hsin Wang, Bo-Han Huang, Yu-Chuan Lin, Yi-Jang Lee
MI006	The therapeutic effects of olfactory ensheathing cells or extracellular matrix scaffolds in a traumatic brain injury rat model 馬國興 ¹ , 王心妤 ¹ , 楊承勳 ¹ , 陳元皓 ² , 鄭澄意 ^{3*} Kuo Hsing Ma ¹ , Hsin Yu Wang ¹ , Cheng Syun Yang ¹ , Yuan-Hao Chen ² , Cheng-Yi Cheng ^{3*}
MI007	2022 Evaluation of Human Biodosimetry 廖澤蓉 ¹ , 歐陽芳鈺 ¹ , 張穎熏 ¹ , 林佳慧 ¹ , 陳冠因 ¹ , 張志賢 ¹ , Ruth C. Wilkins ² Tse-Zung Liao ¹ , Fang-Yu Ou Yang ¹ , Ying-Hsun Chang ¹ , Chia-Hui Lin ¹ , Kuan-Yin Chen ¹ , Chih-Hsien Chang ¹ , Ruth C. Wilkins ²
MI008	Radiosynthesis and Evaluation of 89Zr-DFO-PDL1 Antibody in Colon Cancer Xenograft Model 翁茂琦, 羅瑋霖, 歐陽芳鈺, 陳明偉, 黃蜂運, 樊修秀 Mao-Chi Weng, Wei-Lin Lo, Fang-Yu Ou Yang, Ming-Wei Chen, Feng-Yun J. Huang, Shiou-Shiow Farn
MI009	Reconstruction and Computer-aided Diagnosis of Duchenne Muscular Dystrophy from Ultrasound Images Using Clustering Algorithm, Machine Learning, and Deep Learning 廖愛禾, 王崇宇, 崔博翔, 曾偉杰 Ai-Ho Liao, Chong-Yu Wang, Po-Hsiang Tsui, Woei-Jye Tseng



編號	論文題目
MI010	The use of radiomics to predict the suppression of physiologic myocardial glucose uptake in 18F-FDG PET/CT scan 張與庭 ¹ , 黃政凱 ² , 吳杰 ^{1*} YuTing Chang ¹ , Cheng-Kai Huang ² , Jay Wu ^{1,*}
MI011	Visualizing the curcumin-enhanced abscopal effect with Indium-111-labeled OX40 antibody in colorectal carcinoma-bearing mice 詹惠雯, 莊惠燕 Hui-Wen Chan, Hui-Yen Chuang
MI012	F-18 FDG PET metabolic phenotyping in neck lymphadenopathy with unknown primary 蔡季蓉, 楊舒雅, 陳玳汶, 劉仁賢, 黃文盛 Chi-Jung Tsai, Shu-Ya Yang, Tai-Wen Chen, Ren-Shyan Liu, Wen-Sheng Huang
MI013	Investigating the effect of securin regulation on mitotic progression in cofilin-1 overexpressed NLCLC lung cancer cell 曾觀, 呂志得, 李易展 [*] Guan Zeng, Jyh-Der Leu, Yi-Jang Lee [*]
MI014	Targeting Nanocarrier Combined with Photothermal Thrombolytic Therapy Tested from in vitro, and Thrombosis-Vessel-on-a-Chip Device, to in vivo 劉冠霆 ^{1,2} , 游佳欣 ^{1,2*} Kuan-Ting Liu ^{1,2} , Jiasheng Yu ^{1,2*}
MI015	Effects of metformin on 18F-Fluoro-deoxy-glucose uptake in type 2 diabetic patients 葉信顯 ^{1,2} , 邱創新 ³ , 古維凱 ⁴ , 陳玳汶 ⁴ , 楊舒雅 ⁴ , 劉仁賢 ⁴ , 黃文盛 ⁴ Skye Hsin-Hsien Yeh ^{1,2} , Chuang-Hsin Chiu ³ , Wei-Kai Ku ⁴ , Tai-Wen Chen ⁴ , Shu-Ya Yang ⁴ , Ren-Shyan Liu ⁴ , Wen-Sheng Huang ⁴
MI016	Use MRI Delayed Scanning Phase Increase Detection Rate Of Brain Tumors 徐郁欣 ^{1,2} , 蘇逸欣 ¹ , 郭葉璘 ¹ , 杜俊元 ² [*] Yu-Hsin Hsu ^{1,2} , Yi-Hsin Su ¹ , Yeh-Lin Kuo ¹ , Chun-Yuan Tu ^{2*}
MI017	Evaluation of Neurodegenerative PET Tracer 18F-THK5351 stability 辜敏慈, 陳世沛, 張文議, 洪鈞澤, 李庚穎, 吳駿一, 彭南靖 Min-Tzu Ku, Shih-Pei Chen, Wen-Yi Chang, Chun-Tse Hung, Geng-Ying Li, Chun-Yi Wu, Nan-Jing Peng
MI018	GMP compliant radiosynthesis of 18F-Choline radiopharmaceutical with a modular disposable cassette system on ORA Neptis Mosaic RS radiosynthesizer 辜敏慈, 李庚穎, 洪鈞澤, 張文議, 陳世沛, 吳駿一, 彭南靖 Min-Tzu Ku, Geng-Ying Li, Chun-Tse Hung, Wen-Yi Chang, Shih-Pei Chen, Chun-Yi Wu, Nan-Jing Peng
MI019	Effect of Different Interpolation on the Accuracy of the COVID-19 Detection Model 范惟誌, 姚宣丞, 楊礎帆, 林新凱, 杜俊元 Wei-Zhi Fan, Syuan-Cheng Yao, Chu-Fan Yang, Xin-Kai Lin, Chun-Yuan Tu



編號	論文題目
MI020	Compare the radiosensitization effects caused by gold nanospheres and gold nanostars on breast cancer 游雨璇, 莊惠燕* Yu-Xuan You, Hui-Yen Chuang*
MI021	Establishment the synthetic and radiolabeling method of 111In-FAPI-04 陳妤芸, 陳傳霖 Yu-Yun Chen, Chuan-Lin Chen
MI022	Estrogen receptor α inhibition enhances radiosensitization of breast cancer cells 蔡惠宇, 林柏玄, 張御展 Huei-Yu Cai, Bo-Syuan Lin, Yu-Chan Chang
MI023	Development of CHI3L1-targeting Radioimmunoconjugate for the Treatment of Ovarian Cancer 陳俊堂, 張明誠, 江秉芳, 郭育仁, 彭正良 Chun-Tang Chen, Ming-Cheng Chang, Ping-Fang Chiang, Yu-Jen Kuo, Cheng-Liang Peng
MI024	Radiosensitizing effect of flavokawain derivatives on oral cancer via inhibition of DNA damage response 蘇子芳, 王柏人, 柯建志, 曾志華, 謝雅茹 Zi Fang Su, Po Jen Wang, Chien Chih Ke, Chih-Hua Tseng, Ya Ju Hsieh
MI025	Regulation of epithelial-mesenchymal transition in prostate cancer by radiation-modulated cancer-derived extracellular vesicle 張禹晨, Chikondi Jassi, 謝雅茹, 李佳陽, 柯建志 Yu-Chen Zhang, Chikondi Jassi, Ya-Ju Hsieh, Chia-Yang Lee, Chien-Chih Ke
MI026	Prediction of KRAS Mutation from Computed Tomography Images using Multi-features with Machine Learning Classifiers 翁子菱, 黃智洋, 施政廷 Zih-Ling Wong, Chih-Yang Huang, Cheng-Ting Shih
MI027	Speech Signal Analysis Based on Support Vector Machine for Phlegm Dampness Pattern 李嘉紘, 許雅淳, 林汶志, 林汶正, 林康平 JIA-HONG Li, Ya-Chun Hsu, Wen-Chi Lin, Wen-Chen Lin, Kang-Ping Lin
MI028	The titrated mannitol improved central [99mTc] TRODAT-1 uptake in an animal model- A clinically feasible application 黃文盛 ^{1*} , 張剛璋 ² , 蔡季蓉 ^{3,4} , 古維凱 ¹ , 陳玳汶 ¹ , 楊舒雅 ¹ , 劉仁賢 ¹ Wen-Sheng Huang ^{1*} , Kang-Wei Chang ² , Chi-Jung Tsai ^{3,4} , Wei-Kai Ku ¹ , Tai-Wen Chen ¹ , Shu-Ya Yang ¹ , Ren-Shyan Liu ¹
MI029	Outcome Prediction of Patients with Brain Metastases After Radiosurgery Based on Peritumoral Vasculature Radiomics and Deep Learning 廖建一, 李政家, 楊懷哲, 鍾文裕, 吳秀美, 郭萬祐, 劉仁賢, 盧家鋒* Chien-Yi Liao ¹ , Cheng-Chia Lee ^{2,3,5} , Huai-Che Yang ^{2,3} , Wen-Yuh Chung ^{2,3} , Hsiu-Mei Wu ^{3,4} , Wan-Yuo Guo ^{3,4} , Ren-Shyan Liu ⁶ , Chia-Feng Lu ^{1*}



BC 台灣生物化學及分子生物學學會

編號	論文題目
BC001	Identification the Candidate of Antiviral SARS-CoV-2 Drugs Targeting to the Interaction of Viral Spike Protein with Cellular ACE2 by pseudovirus system 張賀如, 林承翰, 陳怡洳, 張家榮, 林志生 * Ho-Ju Chang, Cheng-Han Lin, Yi-Ju Chen, Chia-Jung Chang, Chih-Sheng Lin*
BC002	Effect of Biotin on MED28, Glycolysis, and Fatty Acid Biosynthesis in Human Colorectal Cancer Cells 李姿儀, 戴聖玉, 李明芬 Tzu-Yi Lee, Sheng-Yu Dai, and Ming-Fen Lee
BC003	Mitochondrial deficiency leads to synaptic deficits and impairs neuronal function in MERRF patients-derived cortical neurons 吳雨亭, 鄭惠憶, 魏耀揮 * Yu-Ting Wu, Hui-Yi Tay, Yau-Huei Wei*
BC004	Investigating the drug resistance of colon cancer stem cells by culturing spheroids in soft agar from cloned colon cancer cells 周奕成 ¹ , 高婷玉 ¹ , 徐治平 ^{1,2} Yi-Cheng Zhou ¹ , Ting-Yu Kao ¹ , Chih-Ping Hsu ^{1,2}
BC005	Effect of Repeated Hydrogen Peroxide Treatments on Pigments, Osmotic Adjustment and Antioxidant Activity of Mung Bean Seedlings under Drought 蘇子云, 李佳芸, 祝偉銓, 黃子禎, 洪淑嫻, 游志文 Zi-Yun Su, Jia-Yun Li, Wei-Quan Zhu, Zih-Jhen Huang, Shu-Hsien Hung, Chih-Wen Yu
BC006	High-throughput Identification of Uropathogenic Escherichia coli Interactome with Intestinal Epithelial Cells by Proteome Microarrays 楊善任, 陳柏睿, 陳健生 Shan-zen Yang, Bo-Ruei Chen, Chien-Sheng Chen
BC007	Development and Evaluation of a TaqMan Assay for Rapid Detection of pepper mild mottle virus 關政平 *, 劉雅婷, 蕭崇仁 Cheng-Ping Kuan *, Ya-Ting Liu, Chung-Jen Hsiao
BC008	GABARAP negatively regulates autophagy by suppressing LC3 lipidation 林怡璇, 呂昕穎, 高健涵, 王琬菁 Yi-Hsuan Lin, Xin-Ying Lu, Chien-Han Kao, Won-Jing Wang
BC009	Codon bias mediates gene expression through nuclear mRNA decay in human cells 傅佩雯, 陳晉安, 謝依庭, 余建泓 * Pei-Wen Fu ¹ , Jin-An Chen ² , Yi-Ting Hsieh ² , Chien-Hung Yu ^{*1,2}
BC010	Effects of Supt4h genetic knockout on the brain of adult mice 林芳羽, 顏裕庭, 薛一蘋, 黃怡萱, 鄭函若, 鄭子豪 Fang-Yu Lin, Yu-Ting Yan, Hsueh, Yi-Ping, Yi-Shuian Huang, Han-Juo Cheng, Tzu-Hao Cheng



編號	論文題目
BC011	Exploring the functional role of Nudc-WIPI interaction in autophagy 李佳蓉, 陳光超 Li Chia-Jung, Guang-Chao Chen
BC012	Roles of Downstream Target Genes of a FOX Transcription Factor in Cortical Development 鄭皓元, 劉臻, 粘巧玟, 黃惠勤, 趙紘均, 粘芳馨, 劉祐岑, 侯佩珊, 蔡金吾 Haw-Yuan Cheng, Chen Liu, Chiao-Wen Nian, Hui-Chin Huang, Hong-Jun Zhao, Fang-Shin Nian, Yo-Tsen Liu, Pei-Shan Hou, Jin-Wu Tsai
BC013	HUWE1-Dependent TTBK2 Degradation Controls Granule Neuron Progenitor Proliferation 林宜璇 ^{1,2*} , 李岳儒 ³ , 張家祥 ³ , 王又婷 ⁴ , 林佩誼 ⁴ , 高健涵 ² , 蘇亭語 ² , 鍾邦柱 ⁴ , 蔡金吾 ^{1,3#} , 王琬菁 ^{1,2#} I-Hsuan Lin ^{1,2*} , Yeh-Ru Li ³ , Chia-Hsiang Chang ³ , Yu-Ting Wang ⁴ , Pei-Yi Lin ⁴ , Chien-Han Kao ² , Ting-Yu Su ² , Bon-Chu Chung ⁴ , Jin-Wu Tsai ^{1,3#} , Won-Jing Wang ^{1,2#}
BC014	Efficient strategy to design protease inhibitors: application to enterovirus 71 2A protease 楊維仁, 陳婷, 陳怡萍, 林小喬*, 袁小玲* Wei-Zen Yang, Ting Chen, Yi-Ping Chen, Carmay Lim*, Hanna S. Yuan*
BC015	Application and Integration of Astaxanthin 王惠民* Hui-Min Wang*
BC016	Repeated Hydrogen Peroxide Treatment Induces Cold Tolerance of Mung Bean Seedlings by Elevating the Capacity to Scavenge Reactive Oxygen Species 祝偉銓, 黃子禎, 蘇子云, 李佳芸, 游志文, 洪淑嫻 Wei-Quan Zhu, Zih-Jhen Huang, Zi-Yun Su, Jia-Yun Li, Chih-Wen Yu, Shu-Hsien Hung
BC017	Rutin Attenuates NaCl-Induced Senescence and Enhances Stress Tolerance via Regulating Signal Generation, Antioxidant Capacity, and Changes of Senescence-Associated Markers in Sweet Potato Leaves 莊秉洵, 陳顯榮 Hsien-Jung Chen
BC018	The Effects of Angiotensin-converting enzyme type 2 (ACE2) in Acid-induced Acute Lung Injury 陳怡洳, 林承翰, 張賀如, 張家榮, 林志生* Yi-Ju Chen, Cheng-Han Lin, Ho-Ju Chang, Chia-Jung Chang, Chih-Sheng Lin*
BC019	Synergistic Effects of Bimetallic Copper and Zinc Biogenic ions Loaded Metal-Organic Frameworks Reinforced Bacterial Eradication and Wound Healing Enhancement in Diabetic Mice 塔瑞克, Tarik Abdelkareem Mostafa Amera, Sathyadevi Palanisamy, Priya Vijayaraghavanb, Shey-Cherng



編號	論文題目
BC020	Deciphering the Molecular Interaction between UroPathogenic Escherichia coli (UPEC) Proteomics and Urothelial cells 楊善任, 陳宥佐, 陳健生 Shan-Zen Yang, You-Zuo Chen, Chien-Sheng Chen
BC021	Targeting Triple Negative Breast Cancer Stem Cells by Heat Shock Protein 70 Inhibitors 黃芝淋, 蔡佳宏, 翁靖如, 林香汶, 呂夢恬, 劉育綺, 朱伯振 Jhih-Lin Huang, Chia-Hung Tsai, Jing-Ru Weng, Hsiang-Wen Lin, Meng-Tien Lu, Yu-Chi Liu, Po-Chen Chu
BC022	Development of high quality plasmid production process 闕銘宏, 張能賢, 陳力豪, 范主熙, 張荏韋 Ming-Hong Cyue, Neng-Hsien Chang, Li-Hao Chen, Chih-Hsi Fan, Jen-Wei Chang
BC023	S-Equol Protects Ovariectomized-rats against Osteoarthritis through the Decrease of Oxidative Stress and Matrix Degradation 黃姿菁 ¹ , 謝寶萱 ¹ , 黃莉文 ² , 鄭筱翎 ³ , 邱溥容 ¹ , 胡祐甄 ^{1*} , 張基隆 ^{1,4,5*} Tzu-Ching Huang ¹ , Bau-Shan Hsieh ¹ , Li-Wen Huang ² , Hsiao-Ling Cheng ³ , Pu-Rong Chiu ¹ , Yu-Chen Hu ^{1*} , Kee-Lung Chang ^{1,4,5*}
BC024	To investigate an alternative mechanism for EGFR-TKI Gefitinib resistance and lung cancer progression 蔡依倫, 施金元, 李明學 Yi-Lun Tsai, Jin-Yuan Shih, Ming-Shyue Lee
BC025	Exploring cell-type-specific neuronal toxicity by mutant HTT using an isogenic pair of HD iPSCs 廖婉竹, 曾雅嫻, 郭紘志, 鄭子豪 Ya Hseng Tseng ¹ , Hung Chih Kuo ² , Tzu Hao Cheng ^{1,3}
BC026	Preparations and therapeutic assessments of anti- α 9-nAChR RNA aptamers conjugated with miR-21 on triple negative breast cancers 廖佑承, 何元順 You-Cheng Liao ¹ , Yuan-Soon Ho ²
BC027	Investigating Therapeutic Effects of Coumarin-Chalcone Derivatives Targeting Inflammation and Oxidative Stress in MPP+-Induced Cell Models of Parkinson's Disease 林志信 ¹ , 邱雅貞 ² , 李桂楨 ^{2*} Chih-Hsin Lin ¹ , Ya-Jen Chiu ² , Guey-Jen Lee-Chen ^{2*}
BC028	Establish a Lenti-SARS-CoV-2 Pseudovirus System to Investigate Its Effect on Angiopoietin-2 陳思涵, 王貞仁 Si-Han Chen, Jen-Ren Wang
BC029	Functional Roles Of Novel PCDH19 Variants In Synaptogenesis During Brain Development 吳任絜, 林子崑, 陳倩, 梁昭鉉 Tzu Wei Lin, Chien Chen, Jao Shwann Liang



編號	論文題目
BC030	A Study of BDNF (Brain-Derived Neurotrophic Factor) rs6265 Genotype in CVA (Cerebrovascular Accident) Cases in Taiwan 俞亞辛, 簡位先 Ya-Hsin, Yue, Wei-Hsien, Chien
BC031	Phase separation of TTBK2 and CEP164 drives ciliogenesis 周柏君, 黃筠珈, 洪詩容, 林玉俊, 黃介嶸, 王琬菁 Po-chun Chou, Yun-chia, Huang, Shi-rong Hong, Yu-Chun Lin, Jie-rong Huang, Won-Jing Wang
BC032	The role of Nodal modulators (NOMOs) in cortical development and microcephaly 林意芯, 蔡孟翰, 林莞茜, 蔡金吾 I-Hsin Lin, Meng-Han Tsai, Wan-Cian Lin, Jin-Wu Tsai
BC033	Effect of Supercritical Extraction Conditions of Radish Seed Oil on Yield and Antioxidant Activity 林恩仕, 謝米濤, 蘇歆惠 * En-Shyh Lin, Mi-Jen Hsieh, Hsin-Hui Su *
BC034	Evaluation of Anti-Inflammatory and Anti-Oxidative Activities of Indole Derivatives in Neurotoxin-Based Cell and Mouse Models of Parkinson's Disease 邱雅貞, 林志信, 李桂楨 Ya-Jen Chiu, Chih-Hsin Lin, Guey-Jen Lee-Chen
BC035	Histamine N-methyltransferase as an auxiliary marker for precise identification of breast cancer responders to trastuzumab therapy 鄭自君, 杜世興, 陳莉菁, 何元順 Tzu-Chun Cheng, Shih-Hsin Tu, Li-Ching Chen, Yuan-Soon Ho
BC036	Progranulin A Promotes Compensatory Hepatocyte Proliferation via HGF/c-Met Signaling after Partial Hepatectomy in Zebrafish 江耕宇, 李雅雯, 吳金洌 Keng-Yu Chiang, Ya-Wen Li, Jen-LeihWu
BC037	Investigation of caffeine mechanisms in the central nervous system using an invertebrate model (Apis mellifera) 呂昀恆, 吳岳隆 Yun-Heng Lu, Yueh-Lung Wu
BC038	Analyze the Mechanisms of the Enolase 1 (ENO1) Involved in Enterovirus A71 Replication 高聖婷, 王貞仁 Sheng-Ting Kao, Jen-Ren Wang
BC039	Ortholog replacement reveals a novel function of the transcription factor TFIIIC complex in mitotic chromosome segregation Akshi Gupta, 呂俊毅 Akshi Gupta, Jun-Yi Leu



編號	論文題目
BC040	Design and Manufacture of the 3rd Generation Lentiviral Vectors for Cell Therapy 陳力豪, 吳盈潔, 張荏韋, 滕昭怡 Li-Hao Chen, Ying-Jie Wu, Jen-Wei Chang, Joyce Teng
BC041	Development of A Three-Step Purification Process and Determination of Impurities in DCBPR2201 Substance in CHO-C Cells 蘇宥樺*, 徐銘彥, 江禾隆, 滕昭怡 Yu-Hua Su*, Ming-Yen Hsu, Ho-Lung Jiang, Chao-Yi Teng
BC042	Biochemical characterization of a genetic modifier that modulates the disease onset of SCA3 張奕晴 ^{1*} , 蔡耀洲 ¹ , 張恩誠 ¹ , 徐語謙 ¹ , 黃依如 ¹ , 蔡毓舜 ³ , 李宜中 ^{2,4} , 廖翊筑 ⁴ , 蘇銘燦 ⁵ , 楊永正 ³ , 陳儀莊 ⁶ , 宋秉文 ^{7,8} , 鄭子豪 ^{1,2#} Yi-Ching Chang ^{1*} , Yao-Chou Tsai ¹ , En-Cheng Chang ¹ , Yu-Chien Hsu ¹ , Yi-Ru Huang ¹ , Yu-Shuen Tsai ³ , Yi-Chung Lee ^{2,4} , Yi-Chu Liao ⁴ , Ming-Tsan Su ⁵ , Ueng-Cheng Yang ³ , Yijuang Chern ⁶ , Bing-Wen Soong ^{7,8} , Tzu-Hao Cheng ^{1,2#}
BC043	Anti-melanogenic effect of fermented Curcuma longa L. by regulating microphthalmia associated transcription factor expression 邱駿紘, 吳妤葳, 蒙美津 Wendy Wu, Mei-Chin Mong
BC044	Application of glycosaminoglycan and nanogold particles as immune-regulatory therapeutic strategies in rat cystitis-induced model 連苙慈 ¹ , 褚兆軒 ² , 蔡欣達 ² , 鍾春芳 ^{2,3} , 范綱毅 ^{2,4} , 程君弘 ^{3,4} , 蒙恩 ^{1,5*} Yi-Tzu Lien ¹ , Chao-Hsuan Chu ² , Hsin-Da Tsai ² , Chung-Fang Chun ^{2,3} , Gang-Yi Fan ^{2,4} , Juin-Hong Cherng ^{3,4} , En Meng ^{1,5*}
BC045	Citrullination of USP15 by PADI4 suppresses its activity toward deubiquitination of K48- and K63-linked polyubiquitin chains 張嘉珉, 李思錦, 陳子筠, 施繼雲, 范芷維, 黃曾絃宇, 游惠君, 黃光永, 賴寧生, 黃憲斌 Jia-Min Chang, Sijin Li, Zi-Yun Chen, Chi-Yun Shih, Chih-Wei Fan, Hsien-Yu Huang Tseng, Hui-Chun Yu, Kuang-Yung Huang, Ning-Sheng Lai, Hsien-Bin Huang
BC046	Development of in situ One-Pot Biosynthetic Medicinal Chemistry System for Efficient Modifications of Drugs 林天慈, 苑哲維, 許書瀚, 胡博瑄, 賴靖蓉, 邱顯泰 Tien-Tzu Lin, Che-Wei Yuan, Shu-Han Xu, Bor-Shiuan Hu, Jing-Rong Lai, Hsien-Tai Chiu
BC047	Electric pulse stimulation attenuate lipotoxicity-induced lipid accumulation on C2C12 myotubes 李欣樺, 吳宗佳, 林志立, 洪暉 Hsin-Hua Li, Zong-Jia Wu, Chih-Li Lin, Wei Hung
BC048	Establishment of AI-Based Drug Prediction System for Diseases Treatments in Precision Medicine 許書瀚, 孫偉馨, 蔡侑達, 邱顯泰 Shu-Han Xu, Wei-Hsing Sun, You-Da Tsai, Hsien-Tai Chiu



編號	論文題目
BC049	Exploring the synergistic triple-negative breast cancer therapy by dual inhibition of HDAC and tyrosine kinase 陳沛蓮, 廖俊誠, 柯敏琪, 江建緯, 賴峻毅, 邱亦涵 Pei-Lian Chen, Jun-Cheng Liao, Min-Chi Ko, Chien-Wei Chiang, Jiun-I Lai, Yi-Han Chiu
BC050	A Comprehensive Review Traditional Medicine Herbs of Pharmacology Through Main Path Analysis: The Case of Raphani Semen 謝米溱, 林恩仕, 蘇歆惠 * Mi-Jen Hsieh, En-Shyh Lin, Hsin-Hui Su*
BC051	Lowering Mutant Huntingtin Gene Expression and HD-associated Phenotypes by Chemical Interference of SUPT4H/SUPT5H Complex Formation 吳昀芸 ^{1,2*} , 鄧甯 ³ , 封雅桐 ³ , 謝文傑 ¹ , 宋政勳 ⁴ , 林好軒 ¹ , 曾雅嫻 ¹ , 廖婉竹 ¹ , 朱逸凡 ⁵ , 劉育丞 ⁶ , 張恩誠 ¹ , 劉珈榮 ¹ , 許世宜 ⁵ , 蘇銘燦 ⁷ , 郭紘志 ⁸ , 史坦恩 ³ , 鄭子豪 ^{1,2,9#} Yun-Yun Wu ^{1,2} , Ning Deng ³ , Yanan Feng ³ , Wen-Chieh Hsieh ¹ , Jen-Shin Song ⁴ , Yu-Shiuan Lin ¹ , Ya-Hsien Tseng ¹ , Wan-Jhu Liao ¹ , Yi-Fan Chu ⁵ , Yu-Cheng Liu ⁶ , En-Cheng Chan ¹ , Chia-Rung Liu ¹ , Sheh-Yi Sheu ⁵ , Ming-Tsan Su ⁷ , Hung-Chih Kuo ⁸ , Stanley N Cohen ³ , Tzu-Hao Cheng ^{1,2,9}
BC052	Transcription-Replication Conflicts Cause a DNA Instability at Nucleotide Repeat Regions 黃昭維, 張舜延, 高承福, 鄭子豪 Zhao-Wei Huang, Shin-Yen Chong, Cheng-Fu Kao, Tzu-Hao Cheng
BC053	Study the Effects of Nano-bubble Ozone Water and Hydrogen Water on Immune Cells 廖月照 ^{1,2} , 謝天渝 ³ , 許心華 ⁴ , 張基隆 ^{3,5,6*} Yueh-Chao Liao ^{1,2} , Tien-Yu Shieh ³ , Hsin-Hua Hsu ⁴ , Kee-Lung Chang ^{3,5,6*}
BC054	The Antiproliferation Activity of Cinnamomum insulari-montanum Extracts on Cancer Cells 高久理, 郭加恩 Chiu-Li Kao, Cham-EnKuo
BC055	Supt4h is Specifically Required for the Neural Development of Respiratory Rhythm Generators from Dbx1-Lineage Cells 林芳羽 ^{1,2*} , 李佩寧 ² , 蘇俊魁 ³ , 顏裕庭 ³ , 周申如 ^{1,4} , 鄭子豪 ^{1,2#} Fang-Yu Lin ^{1,2*} , Pei-Ning Li ² , Chun-Kuei Su ³ , Yu-Ting Yan ³ , Shen-Ju Chou ^{1,4} , Tzu-Hao Cheng ^{1,2#}
BC056	The Prevention Effects of Antrodin B on D-Gal Induced Aging in HT-22 Cells 張雲菁, 許卉 Yun-Ching Chang, Hui-En Hsu
BC057	Development of in vitro Transcribed (IVT) mRNA Production Process 徐銘彥, 蔡雅芳, 蘇宥樺, 江禾隆, 劉怡棻, 楊靜仁 Yu-Hua Su, Ho-Lung Jiang, Yi-Fen Liou, Ching-Jen Yang



編號	論文題目
BC059	Development of A High-Density CHO-C System Enables Seamless Transition from Transient to Stable Clones 吳盈潔, 陳滢如, 滕昭怡 Ying-Jie Wu, Ying-Ju Chen, Joyce Teng
BC060	Regulation of GLUT1 Recycling and Retromer Assembly by protein tyrosine phosphatase in Cancer Metabolism 謝章亭, 陳光超 Chang-Ting Hsieh ^{1,2} , Guang-Chao Chen ^{1,2*}
BC061	Targeting Triple-Negative Breast Cancer with Mitochondrial Oxidative Phosphorylation Inhibitor, 9, 11 α OH-KA 蒲玉, 劉育綺, 吳坤璋, 朱伯振 Yu Pu, Yu-Chi Liu, Kun-Chang Wu, Po-Chen Chu
BC062	The Functional Roles of Lissencephaly Protein CEP85L in Cell Migration 蘇亭語, 吳美鳳, 楊坤銓, 蔡金吾, 王琬菁 Ting-yu Su, Mei-Feng Wu, Kun-Chuan Yang, Jin-Wu Tsai, Won-Jing Wang
BC063	Exploring New Delhi Beta-Lactamase through Bioinformatics Data-mining: An Integrated Structural and Functional Database Concerning Antibiotic Resistance Prediction 楊牧心, 吳瑞裕, 張語曲 Mu-Shin Yang, Jui-Yu Wu, Yu-Chu Chang
BC064	Hierarchical Ensembles of FeCo Metal-Organic Frameworks Reinforced Nickel Foam As an Impedimetric Sensor for Detection of IL-1RA in Human Samples 汪硯雲, 沙西亞, 李莉芸, 陳玉昆, 鄒協成, 袁行修, 王雲銘 Yen-Yun Wang, Sathyadevi Palanisamy, Li-Yun Lee, Yuk-Kwan Chen, Shey-Cherng Tzou, Shyng-Shiou F. Yuan, Yun-Ming Wang
BC065	The Cellular Metabolite Glycerol Selectively Regulates Golgins Localization for Facilitating its Localization and Function at the Golgi 邱婉筠 ^{1,2} , 王奕勛 ^{1,2} , 林明潔 ^{1,2} , 李芳仁 ^{1,2,3*} Wan-Yun Chiu ^{1,2} , Yi-Hsun Wang ^{1,2} , Ming-Chieh Lin ^{1,2} , and Fang-Jen S. Lee ^{1,2,3*}
BC066	Molecular Mechanisms Underlying Human Protein Primer GYG-Mediated Glycogen Metabolism in Glycogen Storage Disease XV 翁子涵, 陳靜柔, 卞毓中, 陳映辰, 李穎婷, 蔡素宜 Tzu-Han Weng, Ching-Jou Chen, Yu-Chung Pien, Ying-Chen Chen, Ying-Ting Lee, Su-Yi Tsai
BC067	Exposure to Lipid Mixtures Disrupts Lipid Homeostasis and Mitochondrial Function in Astrocytes 李宜臻, 黃暉庭, 曾淑芬 Yi-Chen Li, Hui-Ting Huang, Shun-Fen Tzeng
BC068	The study of how second messengers and protein kinases regulate neuronal polarize trafficking 鍾昭慶 Jhao Ching Jhong



編號	論文題目
BC069	Development of self-assembled fucoidan nanoparticle to perform photodynamic therapy on triple-negative breast cancer in a hypoxic environment 于飛涵, 李政怡 Fei-Han Yu, Cheng-I Lee
BC070	Exploring the molecular mechanism of propofol affecting the recurrence and metastasis of renal tumors 洪嘉隆, 黃世明 Chia-Long Hung, Shih-Ming Huang
BC071	Mutants of V185A、L224A、V185A/L224A and P239T on the Binding and Catalytic Function of 4-Hydroxyphenylpyruvate Dioxygenase 許詠筑, 李惠珍 Yung-Chu Hsu, Hwei-Jen Lee
BC072	Dynamics, Regulation and Inhibitor Binding of The African Swine Fever Virus Topoisomerase 張瓊文, 王舜璋, Allan H. Pang, 吳文晉, 蔡明道 Chiung-Wen (Mary) Chang, Shun-Chang Wang, Allan H. Pang, Wen-Jin Wu, Ming-Daw Tsai
BC073	Vapor construction of stem cell-laden multicomponent scaffolds for regenerative therapies 胡書嫻, 吳治宇, 姜昱至, 陳賢燁 Shu-Man Hu, Chih-Yu Wu, Yu-Chih Chiang, Hsien-Yeh Chen
BC074	ICAM2 initiates trans-Blood-CSF barrier migration and stemness properties in leptomeningeal metastasis of triple-negative breast cancer 潘致愷, 林文德, 郭耀隆, 陳玉佳, 羅竹君, 林逢嘉, 鄭惠娟, 蕭宏昇, 呂佩融 Jhih-Kai Pan ^{1#} , Wen-Der Lin ¹ , Yao-Lung Kuo ² , Yu-Chia Chen ³ , Zhu-Jun Loh ⁴ , Forn-Chia Lin ⁵ , Hui-Chuan Cheng ¹ , Michael Hsiao ^{6,7} and Pei-Jung Lu ^{1,*}
BC075	Lactate's Effect On Labile Iron Pool And Prostate Cancer Cell Invasion 陳玉瑄, 林心灃, 李明學 Yu-Hsuan Chen, Hsin-Ying Lin, Ming-Shyue Lee
BC076	Inhibition of Pfrx/pfkb-1.1 Improves Longevity via Reduced TOR Signaling in Drosophila and C. elegans 王誌毅 ¹ , 陳意淳 ¹ , 林彥宏 ¹ , 汪宏達 ^{1,2*} Chih-Yi Wang ¹ , Yi-Chun Chen ¹ , Yen-Hung Lin ¹ , Horng-Dar Wang ^{1,2*}
BC077	TAF2, a Subunit of General Transcription Factor IID, Controls Cell Growth Through Ribosomal Protein Genes 鄭宜欣, 畢文潔, 王剛, 陳威儀 I-Hsin Cheng, Wen-Chieh Pi, Gang Greg Wang, Wei-Yi Chen
BC078	Exploring the Potential Factors that Influence Induction Chemotherapy Responses in Head and Neck Squamous Cell Carcinoma 陳怡瑞, 陳欣琳, 林敬哲 * Hsin-Lynn Chen, Jing-Jer Lin*



編號	論文題目
BC079	Efficacious Inhibitor Discovery targeting the coronaviral papain-like protease 謝昀融, 黃暄友, David Hung, Chia-En A. Chang, 吳昆峯 Yun-Jung Hsieh, Hsuan-Yu Huang, David Hung, Chia-En A. Chang, Kuen-Phon Wu
BC080	High Salt Environment Exacerbate the Pruritus in Atopic Dermatitis via the induction of IL31RA 劉育廷, 張永龍 Yu-Ting Liu, Yung-Lung Chang
BC081	Roles Of FMR1-Dependent Mitophagy In The Pathogenesis Of Fragile X Syndrome 林怡辰、姜為中 Yi-Chen Lin, Wei-Chung Chiang
BC082	Structural And Mechanistic Insights of α -glucan Debranching Enzyme TreX from the Mycobacterium tuberculosis 李俊廷, 那丹拉 ¹ , 王妤甄 ¹ , 呂桐睿 ^{1,2} , 何孟樵 ^{*1,2} Nadendra Eswar Kumar ¹ , Yu-Jen Wang ¹ , Todd L Lowary ^{1,2} , and Meng-Chiao Ho ^{1,2}
BC083	Disruption of CEBPD/Sigma-1R/HDAC2 association contributes to Bipolar Disorder Progression 許允禎 ^{1,2*} , 王姿云 ^{4#} , 王紹銘 ^{2,3#} Yun-Chen Hsu ^{1,2*} , Tzu-Yun Wang ^{4#} , Shao-Ming Wang ^{2,3#}
BC084	Exploring the Protective Mechanism of Curcumin Derivatives on Human Endothelial Cells under Oxidative Stress 張玉欣, 黃世明, 蔡宗能 Yu-Xin Zhang, Shih-Ming Huang, Zong-Neng Cai
BC085	Short-Chain Fatty Acids slow down Alzheimer's Disease progression through inhibition of Toll-like receptor 4 李沛儒, 廖名宣, 鄧志堅, 沈芯仔 Ming-Hsuan Liao, Chee-Kin Then, Shing Chuan Shen
BC086	Dipeptidyl Peptidase-4 Inhibitors Down-regulate DPP4 gene and Up-regulate TAC1/ TAC3 in Monocytes and Articular Chondrocytes in Inflammatory State 林紫翎 ^{1*} , 彭奕仁 ² , 王誌謙 ³ Zi-Ling Lin ^{1*} , Yi-Jen Peng ² , Chih-Chien Wang ³
BC087	The dynamics RAD51 filament : From ATP to ADP 葉敏琪, 羅世奇, 冀宏源, 何孟樵 Min-Chi Yeh, Shih-Chi Luo, Peter Chi, Meng-Chiao Ho
BC088	Melanoma CD248 Promotes Vascular Mimicry and Metastasis 謝茹涵 ¹ , 吳雅芳 ¹ , 張碧英 ¹ , 郭承翔 ^{1,2*} , 吳華林 ^{1,2*} Ru-Han Sie ¹ , Ya-Fang Wu ¹ , Bi-Ing Chang ¹ , Cheng-Hsiang Kuo ^{1,2*} , Hua-Lin Wu ^{1,2*}
BC089	Systematically Measuring the Organelle Interactome by Chemically-Inducible Dimerization Assay 莊貽茜, 林玉俊 Yu-Chun Lin



編號	論文題目
BC090	Oncogenic E2A-HLF acts through Tetraspanin-6 to control the G1/S transition in pro-B acute lymphoblastic leukemia 張佩婷 [#] , 鄭宜欣 [#] , 畢文潔, 陳威儀 Pei-Ting Chang [#] , I-Hsin Cheng [#] , Wen-Chieh Pi, Wei-Yi Chen
BC091	Disease Related G50D, T131I and G140R Mutants on The Structure and Function of Human 4-Hydroxyphenylpyruvate Dioxygenase-like Protein 譚君愷, 李惠珍 Jun-Kai Tan, Hwei-Jen Lee
BC092	Drug-induced interorgan communication restores inflammatory homeostasis 游傑丞, 翁瑞霞 Chieh-Cheng Yu, Jui-Hsia Weng
BC093	The role of liquid-liquid phase separation of PQE-1 protein in the regulation of heterochromatin and neurodegeneration 黃浩儒, 羅御文, 歐展言 Hao-Ru Huang, Yu-Wen Luo, Chan-Yen Ou
BC094	Activity-Based Identification and Characterization of Senescence-Associated Kinases 黃怡嘉, 王星喬, 林敬哲 [*] I-Chia Huang, Hsin-Chiao Wang, Jing-Jer Lin [*]
BC095	To Investigate the Role of Matriptase and HAI-1 from HAI-1 Knockout Gastric Cancer Cells 宋宇涵, 詹德全, 張浩銘, 李定穎, 黃天祐, 王正康 Yu-Han Sung, De-Cyuan Jhan, Hao-Ming Chang, Ting-Ying Lee, Tien-Yu Huang, Jehng-Kang Wang
BC096	Disulfiram inhibits coronavirus main protease by targeting the substrate entrance 關瑩, 朱序峰, 許邦弘, 黃駿翔, 陳威儀 Ying Kuan, Hsu-Feng Chu, Pang-Hung Hsu, Chun-Hsiang Huang and Wei-Yi Chen
BC097	Colonization of Staphylococcus aureus on Diabetic Patients with Skin Dryness and Decreased Moisturizing Factor in Advanced Glycation End Products-Stimulated Human Keratinocyte 王子瑄, 蔡彥郁, 陳瑩容 Yen-Yu Tsai, Ying-Jung Chen
BC098	Engineering A Fly Mechanosensitive Ion Channel to Sense Ultrasonic Waves 林怡呈, 楊雯婷, 高竟琳, 陳巧耘, 吳秉寰, 李欣玫, 葉秩光, 林玉俊 Yi-Cheng Lin, Wen-Ting Yang, Ching-Lin Kao, Chiao-Yun Chen, Bing-Huan Wu, Hsin-Mei Lee, Chih-Kuang Yeh, Yu-Chun Lin
BC099	Deubiquitinase OTUB1 Promotes Influenza A Virus Production via Regulating NS2's Stability 李玉君, 陳紀元, 邱亞芳 Yu-Jyun Li, Chi-Yuan Chen, Ya-Fang Chiu



編號	論文題目
BC100	Investigation of Cdc13 loading mechanism by single-molecule fluorescence resonance energy transfer (smFRET) analysis 鄭羽辰, 林郁庭 Yu-Ting Lin
BC101	Proteomic Analysis of the SARS-CoV-2 NFP Protein Complex Involved in Acetylation, Ubiquitination, and the Production of Stress Granules 侯帛邑, 藍信企, 郭政佑, 王韋蓁, 姚雅莉, 賴建成, 楊文明 Bo-Yi Hou, Hsin-Chi Lan, Cheng-Yu Kuo, Wei-Chen Wang, Ya-Li Yao, Chien-Chen Lai, Wen-Ming Yang
BC102	Pregnenolone and its non-metabolized analog modulate stress-response and ethanol-induced behavior among different zebrafish populations. Viktoryia Kolas, 蔡惠滿, 鍾邦柱 Viktoryia Kolas, Huei-Man Tsai, Bon-Chu Chung
BC103	Development of novel compounds and delineation of their immunomodulatory effects on macrophages 黃相融, 張震東, 李明學 Geen-Dong Chang, Ming-Shyue Lee
BC104	Fabricate a Functional Porous Poly-p-xylylene Material for Copper-Free Click Reaction by Chemical Vapor Deposition 李沁芸, 陳諭萱, 胡書嫻, 蕭家麒, 張育銘, 草弼達也, 吳亭瑩, 黃晁偉, 陳賢燁 *Chin-Yun Lee, Yu-Hsuan Chen, Shu-Man Hu, Jia-Qi Xiao, Yu-Ming Chang, Tatsuya Kusanagi, Ting-Ying Wu, Chao-Wei Huang, Hsien-Yeh Chen*
BC105	Carboxyl-Terminal Modulator Protein Facilitates Tumor Metastasis in Triple-Negative Breast Cancer 林文德 ¹ , 林成翰 ¹ , 黃韻芹 ¹ , 陳玉佳 ² , 羅竹君 ³ , 葛魯蘋 ⁴ , 林逢嘉 ⁵ , 李豪嶧 ¹ , 鄭惠娟 ¹ , 李崑豪 ⁶ , 蕭宏昇 ⁷ , 呂佩融 ^{1,8*} Wen-Der Lin ¹ , Cheng-Han Lin ¹ , Yun-Chin Huang ¹ , Yu-Chia Chen ² , Zhu-Jun Loh ³ , Luo-Ping Ger ⁴ , Forn-Chia Lin ⁵ , Hao-Yi Li ¹ , Hui-Chuan Cheng ¹ , Kuen-Haur Lee ⁶ , Michael Hsiao ⁷ , Pei-Jung Lu ^{1,8*}
BC106	Association of Mitochondria with Immune Evasion Features in the Tumor Microenvironment 吳靖則, 陳咏惠, 許書堯, 張壯榮 Ching-Tse Wu, Yung-Hui Chen, Shu-Yao Hsu, Chuang-Rung Chang
BC107	The Loss of IGF1-Akt/mTOR-Sp1 Axis-mediated CD248 Regulation in Fibroblast Delays Diabetic Wound Healing 古雅竺, 李耀洲, 羅詠齡, 余建泓*, 吳華林* Ya-Chu Ku, Yao-Chou Lee, Yung-Ling Lo, Chien-Hung Yu* and Hua-Lin Wu*
BC108	Curcumin Alleviate Nonalcoholic Fatty Liver Disease by Modulating Gut Microbiota and Lipometabolism 柯敏琪, 廖俊誠, 邱亦涵* Min-Chi Ko, Jun-Cheng Liao, Yi-Han Chiu*



編號	論文題目
BC109	Autoantigen Ro52/TRIM21 in mitochondrial quality control 林瑀暘, 朱瑋華, 姜為中 Yu-Yang Lin, Wei Hua Chu, Wei-Chung Chiang
BC110	In Situ Imaging of the Membrane Disruption Action of Antimicrobial Peptides by Cryo-Electron Tomography 廖怡婷 ^{1*} , 陳信良 ¹ , 王俊雄 ¹ , 蔡明道 ^{1,3} , 賴龍昇 ² , 張毅偉 ² , 何孟樵 ^{1,3} , 陳佩燁 ^{1,3#} Yi-Ting Liao ^{1*} , Eric H.-L. Chen ¹ , Chun-Hsiung Wang ¹ , Ming-Daw Tsai ^{1,3} , Longsheng Lai ² , Yi-Wei Chang ² , Meng-Chiao Ho ^{1,3} , Rita P.-Y. Chen ^{1,3#}
BC111	Optical and Biofunctional Properties of a Liquid Intraocular Lens via Chemical Vapor Deposition 李沁芸, 魏婉瑩, 吳亭瑩, 蕭家麒, 陳賢燁 [*] Chin-Yun Lee, Jane Christy, Ting-Ying Wu, Jia-Qi Xiao, Hsien-Yeh Chen [*]
BC112	A Molecular Modeling Study of PINK1 G409V Mutation Associated with Early-onset Parkinson's Disease 羅宣煊, 楊佳寧 Hsuan-Hsuan Lo, Chai-Ning Yang
BC113	Using A β Folding Reporter Cells to Screen Synthetic Compounds Targeting AMPK/EEF2K as Novel Alzheimer's Disease Treatment Strategy 祁舜慈, 邱雅貞, 李桂楨 Shun-Tzu Chi, Ya-Jen Chiu, Guey-Jen Lee-Chen
BC114	Simvastatin Promotes Cell Migration through a Rac1-dependent Pathway 陳昱璇 ¹ , 陳鴻震 ^{1,2*} Yu-Hsuan Chen ¹ , Hong-Chen Chen ^{1,2*}
BC115	Antrodin B Suppresses Growth and Migration of Murine Melanoma Cells via Regulation of miR-101 李承煬, 張雲菁 Cheng Yang Li, Yun-Ching Chang
BC116	Unveiling a Novel Serpinb2-Tripeptidyl Peptidase II Signaling Axis during Senescence 廖嘉利 ¹ , 胡容綺 ¹ , 廖敏翔 ² , 陳誼如 ³ , 陳雅萍 ² , 謝錫賢 ⁴ , 戴志軒 ² , 周子超 ² , 朱啟元 ² , 陳玉如 ³ , 羅禮強 ² , 林敬哲 ^{1*} Chia-Li Liao ¹ , Rong-Chi Hu ¹ , Min-Shiang Liao ² , Yi-Ju Chen ³ , Ya-Ping Chen ² , Hsi-Hsien Hsieh ⁴ , Chih-Hsuan Tai ² , Tzyy-Chao Chou ² , Chi-Yuan Chu ² , Yu-Ju Chen ³ , Lee-Chiang Lo ² and Jing-Jer Lin ^{1*}
BC117	Investigation Of Molecular Pathway In Manz A-induced Cell Death In Ovarian Cancer Through Proteomics 林意軒 ¹ , 林俐均 ^{2,3} , 張心儀 ^{4,5} , 黃翠琴 ^{1,2,6,7*} I-Hsuan Lin ¹ , Li-Chun Lin ^{2,3} , Hsin-Yi Chang ^{4,5} , Tsui-Chin Huang ^{1,2,6,7*}
BC118	An integrative approach unveils a distal encounter site for rPTP ϵ and phospho-Src complex formation 楊承翰, Nadendla EswarKumar, Sunilkumar Tewary, 葉亦琪, 楊小青 [*] , 何孟樵 [*] Cheng-Han Yang, Nadendla EswarKumar, Sunilkumar Tewary, Yi-Qi Yeh, Hsiao-Ching Yang [*] , Meng-Chiao Ho [*]



編號	論文題目
BC119	Effects of Chlorogenic Acid on Lipopolysaccharide-induced Neuroinflammation in Mice 黃瑋琪 ¹ , 陳春榮 ² , 陳文英 ^{1*} Wei-Chi Huang ¹ , Chun-Jung Chen ² , Wen-Ying Chen ^{1*}
BC120	Effect of Hot Water Extracts of <i>Arthrospira maxima</i> (Spirulina) Against Respiratory Syncytial Virus 陳緯 ^{a,b,#} , 陳亦翔 ^{b,#} , 廖亞純 ^b , 黃炘雯 ^d , 呂廷璋 ^{d,*} , 施信如 ^{b,c,*} Wei Chen ^{a,b,#} , Yi-Hsiang Chen ^{b,#} , Ya-Chun Liao ^b , Xin-Wen Huang ^d , Ting-Jang Lu ^{d,*} , Shin-Ru Shih ^{b,c,*}
BC121	The Potential of Mulberry Leaf Extract Active Constituents Against Tau-Dependent Inflammation-Induced Mitochondrial Dysfunction in Tau-Expressing Cell Model 曾沛瑄 ¹ , 林德嫻 ¹ , 林中英 ² , 李明宗 ³ , 李桂楨 ^{1*} Pei-Hsuan Tseng ¹ , Te-Hsien Lin ¹ , Chung-Yin Lin ² , Ming-Chung Lee ³ , Guey-Jen Lee-Chen ^{1*}
BC122	A Serine Peptidase from <i>Burkholderia gladioli</i> with Hydrolytic Activity toward Celiac Disease- Eliciting Pro-immunogenic Peptides and Potency Enhancement through Modification of Its Active Site Pocket 劉禹佑 ^{1*} , 許峻豪 ² , 林宜臻 ² , 陳沛慈 ² , 李成正 ² , 孟孟孝 ² Yu-You Liu ^{1*} , Jun-Hao Hsu ² , I-Chen Lin ² , Pei-Cih Chen ² , Cheng-Cheng Lee ² , Menghsiao Meng ²
BC123	Investigating the Correlation between VPS13C and Parkinson's Disease: Focusing on Mitochondria 黃佩璇, 林志信, 吳逸如, 李桂楨 Pei-Syuan Huang, Chin-Hsin Lin, Yih-Ru Wu, Guey-Jen Lee-Chen
BC124	Study on the effect inhibitory of <i>Myrciaria cauliflora</i> extract the growth, inflammation and related mechanisms of human podocytes induced by high glucose 張心綿, 蔡書瑜, 黃惠珮 Shu-Yu Cai, Hui-Pei Huang
BC125	High Resolution Cryo-EM Structure of Mycobacteriophage Douge 吉藤佐, 王俊雄, 何孟樵 Jitendra Maharana ^{1,2,3} , Chun-Hsiung Wang ¹ , Meng-Chiao Ho ^{1,4}
BC126	The Role Of Fat Atypical Cadherin 3 (FAT 3) In Neuronal Development And Pathogenesis Of Cortical Malformation 高唯明 ¹ , Bruria Gidoni-Ben-Zeev ² , 蔡金吾 ^{1*} Wei-Ming Kao ¹ , Bruria Gidoni-Ben-Zeev ² , Jin-Wu Tsai ¹
BC127	Characterize the functional regions of IDR in LLPS and PQE-1 neuron degeneration 羅御文, 黃浩儒 Yu-Wen Luo, Hao-Ru Huang



編號	論文題目
BC128	Evaluation the combination effect of Withaferin A and ionizing radiation in cancer therapy 劉書語, 王裕仁, 賴金美 Shu-Yu Liu, Yu-Jen Wang, Jin-Mei Lai
BC129	Study of Small Molecules Inducing Autophagic Degradation of Expanded PolyQ Protein Through Interaction with Both Mutant ATXN3 and LC3 林德嫻, 許少凡, 陳婉玲, 陳瓊美, 李桂楨 Te-Hsien Lin, Shao-Fan Hsu, Wan-ling Chen, Chiung-Mei Chen*, Guey-Jen Lee-Chen*
BC130	Phase separation and zinc-induced transition modulate synaptic distribution and association of autism-linked CTTNBP2 and SHANK3 方聿綸 ^{1,2,6} , 施卜云 ^{1,4,6} , Sahana Shankar ^{1,3} , 李淑萍 ¹ , 胡曉棠 ¹ , 陳新 ^{1,5} , 王廷方 ^{1,3} , 夏國強 ^{1,3*} , 薛一蘋 ^{1,3*} Yu-Lun Fang ^{1,2,6} , Pu-Yun Shih ^{1,4,6} , Sahana Shankar ^{1,3} , Sue-Ping Lee ¹ , Hsiao-Tang Hu ¹ , Hsin Chen ^{1,5} , Ting-Fang Wang ^{1,3} , Kuo-Chiang Hsia ^{1,3*} & Yi-Ping Hsueh ^{1,3*}
BC131	The Monoclonal TDP-43 Antibody Against the Oligomeric TDP-43 Mitigates Behavior and Neuropathology in an ALS mouse model 賴煜升 Yuh Shen Lye
BC132	Targeting Cholesterol-Rich Lipid Rafts-Associated Endocytosis to Inhibit Dengue Virus 廖英傑, 張聰賢* Ying-Chieh Liao, Tsung-Hsien Chang*
BC133	Application and Integration of Astaxanthin 洪彙程, 王惠民* Hui-Cheng Hong, Hui-Min Wang*
BC134	Engineering Auditory Sensing Proteins for Sensing Ultrasound Stimulation 楊雯婷, 王嫻築, 陳姿涵, 許寧, 黃耀燊, 葉秩光, 林玉俊 Wen-Ting Yang, Hsien-Chu Wang, Tzu-Han Chen, Ning Hsu, Yao-Shen Huang, Chih-Kuang Yeh, Yu-Chun Lin
BC135	Nucleostemin Protects Nascent DNA from Degradation 蔡翔勝, 廖泓鈞 Siang-Sheng Tsai, Hungjiun Liaw
BC136	Involvement of Vimentin in Cancer Nuclear Dysmorphia 潘可維, 陳鴻震 Ke-Wei Pan, Hong-Chen Chen
BC137	Ciliary gene TTBK2 controls zebrafish cerebellar development 王又婷, 林佩宜, 王婉菁, 陳威儀, 鍾邦柱 Pei-yi Lin, Won-jing Wang, Wei-yi Chen, Bon-chu Chung
BC138	Role of hepcidin in cancer cell invasion and progression 駱子瑜, 林心滢 Tzu-Yu Lo, Hsin-Ying Lin



編號	論文題目
BC139	Study on the novel naphthoquinone-imidazole derivatives induce apoptosis and autophagy on epithelial ovarian cancer 蔡宜潔, 周孟蓉, 林俊茂, 李宇健 Yi-Chieh Tsai, Meng Jung Chou, Chun-Mao Lin, Yu-Chieh Lee
BC140	The Golgi-Associated Retrograde Protein (GARP) Complex Regulates the Small GTPase Arl1 Activity and Trans-Golgi Localization 金麟娟, 陳柏翰, 邱婉筠, 李芳仁 Lin-Chuan Chin, Bo-Han Chen, Wan-Yun Chiu, Fang-Jen S Lee
BC141	Characterization of N-cadherin in 3D-microenvironment during cancer metastasis 蔣宛諭, 王博文, 曾炳輝, 郭津岑 Wan Yu Chiang, Bo-Wen Wang, Ping-Hui Tseng, Jean Cheng Kuo
BC142	Rocaglamide A is a potential anticancer agent targeting mitosis in ovarian cancer 吳承庭, 郭子靈, 張心儀, 黃翠琴 Tzu-Ting Kuo, Hsin-Yi Chang, Tsui-Chin Huang
BC143	Identification of Potential Drugs to Overcome the Resistance of 5-fluorouracil and oxaliplatin in Colorectal Cancer 賴彥儒, 陳昱光, 黃世明 Yan-Ju Lai, Yu-Guang Chen, and Shih-Ming Huang
BC144	Bifunctional role of Hop2-Mnd1 in controlling the fidelity of meiosis recombination 彭若晴, 龔宏源 Jo-Ching Peng, Hung-Yuan (Peter) Chi
BC145	Investigating the Role of a Long Noncoding RNA in Cardiomyocyte Maturation 于喬, 翁子涵, 李康正, 蔡素宜 Chiao Yu, Tzu-Han Weng, Kang-Zheng Lee, Su-Yi Tsai
BC146	Role of Xylosyltransferase1 in Prostate Cancer Progression 王許安, 蒲永孝, 李明學 Hsu-An Wang, Yeuong-Hsiao Pu, Ming-Shyue Lee
BC147	The roles of specific protein 1 and p53 in carbonic anhydrase VIII regulation in colorectal cancer 余佳祐, 謝明麗 Mingli Hsieh
BC148	The Function of Galectin-3 in Mitochondrial Quality Control 劉沛函, 孫維澤, 姜為中 Wei-Tse Sun, Wei-Chung Chiang
BC149	Multicomponent Vapor-Deposited Porous Coating for Encapsulation of Biomolecules 李俐慧, 張育銘, 蕭家麒, 魏婉瑩, 吳亭瑩 Yu-Ming Chang, Jia-Qi Xiao, Jane Christy, Ting-Ying Wu



編號	論文題目
BC150	MicroRNA-146a Suppresses Pericellular Fibronectin Assembly and Targets Vimentin to Lower Tumor Malignancy in Esophageal Squamous Cell Carcinoma 李怡萱, 張鴻議, 李季樺, 王怡方, 劉校生, 鄭宏祺 Yi-Syuan Li, Hong-Yi Chang, Chi-Hua Lee, Yi-Fang Wang, Hsiao-Sheng Liu & Hung-Chi Cheng
BC151	Role of Matriptase and Prostasin and Their Endogenous Inhibitor HAI-1 in the Pathogenesis of Psoriasis 林建宏, 江建平 Jian-Hong Lin, Chien-Ping Chiang
BC152	Characterizing the effect of anorectic gut hormones on myogenesis and their potential to act as biomarkers of sarcopenia 王昀傑, 黃譚蔓, 黃獻皞, 郭津岑 Yun-Jie Wang, Yi-Man Huang, Hsien-Hao Huang, Jean-Cheng Kuo
BC153	The Application of Micelle-Coated Radioisotope-Labeled Antibody as Diagnostic Radionuclide Platform for Hepatocellular Carcinoma 鄭婷駿, 楊明慧, 何慈娟, 陳巧寧, 詹宏彬, 鍾次文, 田育彰 Ting-Chun Cheng ¹ , Ming-Hui Yang ² , Tzu-Chuan Ho ¹ , Ciao-Ning Chen ¹ , Hung-Pin Chan ³ , Tze-Wen Chung ⁴ , Yu-Chang Tyan ¹
BC154	To Study the Microenvironment of Diabetic Foot Ulcer During Wound Healing 汪序, 張舜程, 王正康 Hsu Wang, Shun-Cheng Chang, Jehng-Kang Wang
BC155	Drug Repositioning For Neuroblastoma Therapy Via Targeting Dihydroorotate Dehydrogenase In Mitochondrial Dynamics 郭泉浩, 張怡雯, 黃宣誠, 阮雪芬 Chuan-Hao Kuo, Yi-Wen Chang, Hsuan-Cheng Huang, Hsueh-Fen Juan
BC156	Structure-Functional Studies on Escherichia coli Genome Maintenance Complexes Associated with Single-Stranded DNA-Binding Protein 陳孟暄 ¹ , 繩守益 ¹ , 鄧景浩 ² 和 王淑鶯 ^{1,*} Meng-Hsuan Chen ¹ , Shou-Yi Sheng ¹ , Ching-Hao Teng ² and Shu-Ying Wang ^{1,*}
BC157	Snellenius manilae Bracovirus Encodes MicroRNAs As Regulators In Spodoptera litura Lipid Metabolism 林鈺淳, 吳岳隆 Yu-Chun Lin, Yueh-Lung Wu
BC158	To Investigate the Positive role of KPNA2 and PLSCR1 in extracellular vesicle-mediated chemotherapy resistance in lung cancer 林修渝, 劉羽苓, 游佳融 Hsiu-Yu Lin ¹ , Yu-Chin Liu ² , Chia-Jung Yu ^{1,2,3,4}
BC159	Robust Design Of Effective Allosteric Activators For Rsp5 E3 Ligase Using The Machine-learning Tool ProteinMPNN 盧韋霖, 吳昆峯 Wei-Lin Lu, Kuen-Phon Wu



編號	論文題目
BC160	Disruption of OXPHOS Complex II Affects Mitochondria Dynamics during Metabolic Adaption in Yeast Cells 黃薇玲, 張壯榮 Wei-Ling Huang, Chuang-Rung Chang
BC161	Characterize the Stability of 3 α -Hydroxysteroid Dehydrogenase/Carbonyl Reductase from <i>Comamonas testosteroni</i> 周運浩, 黃啟清 Yun-Hao Chou, Chi-Ching Hwang
BC162	The Molecular Basis of the Anti-phage Activity of SSY Complex as a Potential Agent against Enterohemorrhagic <i>Escherichia coli</i> Infection 繩守益, 陳孟暄, 王淑鶯, 橋本昌征 Shou-Yi Sheng, Meng-Hsuan Chen, Shu-Ying Wang, Masayuki Hashimoto
BC163	Deciphering Mechanistic Action of Mei5-Sae3 in Stimulating Dmc1-mediated Recombination 張皓衍, 魏嶽典, 彭若晴, 李弘文, 龔宏源 Hao-Yen Chang, Chin-Dian Wei, Jo-Ching Peng, Hung-Wen Li, Peter Chi
BC164	A Molecular Modeling Study on Lipid Transporter MFSD2A to Understand the Role Played by Sodium Ion 黃文潔, 陳雅君, 楊佳寧 Wen-Chieh Huang, Ya-Jyun Chen, Chia-Ning Yang
BC165	Investigating The Regulatory Mechanism of Protein Expression Noise by Experimental Evolution in <i>Saccharomyces cerevisiae</i> 林暉瀚, 芙瑞卡 Florica J.G. Opoc
BC166	A Novel ARHGAP29-CDK4 Axis Controls the Cell Propagation of Thyroid Cancer 許忠豪, 畢文潔, 鄭宜欣, 林樹福, 陳威儀 Chung-Hao Hsu, Wen-Chieh Pi, I-Hsin Cheng, Shu-Fu Lin, Wei-Yi Chen
BC167	The role of chitinase 3-like 1 in promoting fibrosis and its therapeutic potential to inhibit cancer progression 陳鏡宇 [#] , 蘇珮嘉, 王憶卿 [*] Ching-Yu Chen [#] , Pei-Chia Su, Yi-Ching Wang [*]
BC168	Analysis of Cdc13-telomere binding dynamics by Colocalization Single-Molecule Spectroscopy (CoSMoS) 邱柏維 ¹ , 林郁庭 ¹ , 李弘文 ^{2*} , 林敬哲 ^{1*} Po-Wei Chiu ¹ , Yu-Ting Lin ¹ , Hung-Wen Li ² , Jing-Jer Lin ¹
BC169	A Biosensor Assisted by RNase H to Discriminate <i>Mycobacterium Tuberculosis</i> 's rpoB Gene Variants 洪樹薇, 楊佳寧 Hung-Hsieh Wei, Chai-Ning Yang



編號	論文題目
BC170	How Manganese Ion Induces Mutagenic Effect to The High-fidelity DNA Polymerase β 張堯凱, 黃雅萍, 羅綉瑩, 吳文晉, 蔡明道 Yao-Kai Chang, Ya-Ping Huang, Siou-Ying-Luo, Wen-Jin Wu, and Ming-Daw Tsai
BC171	The Molecular Mechanism of CTP Synthase Compartmentalization 鐘建豐, 高笙祐, 白麗美 Sheng-Yu Kao, Li-Mei Pai
BC172	Insight into the Switch-off Mechanism of Disulfide Bonded UBA7-UBE2L6 in the ISG15-Regulated Pathway 陳沛慈, 吳昆峯 Pei-Cih Chen, Kuen-Phon Wu
BC173	STARD3 is a potential biomarker in HER2-positive breast cancer Doan Huu Nhat Binh, 鄭自君, 陳利菁, 楊沂淵, 何元順 Doan Huu Nhat Binh, Tzu-Chun Cheng, Li-Ching Chen, Yi-Yuan Yang, Yuan-Soon Ho
BC174	Golgi tethering factor golgin-97 depletion promotes cancer invasiveness by modulating extracellular vesicle formation and cargo secretion 郭昀芳, 游佳融 Yun-Fang Kuo, Chia-Jung Yu
BC175	The Chromatin Remodeling Protein SMARCA5 Maintains Replication Forks Stability during Replication Stress 洪加泰, 蔡翔勝, 廖泓鈞 Chia-Tai Huang, Siang-Sheng Tsai, Hungjiun Liaw
BC176	Family Members Additively Repress the Ectopic Expression of BASIC PENTACYSTEINE3 to Prevent Disorders in Arabidopsis Circadian Vegetative Development 李宜臻, 蔡佩庭, 黃薰仙, 蔡皇龍 Yi-Chen Lee, Pei-Ting Tsai, Xun-Xian Huang, Huang-Lung Tsai
BC177	Drug Discovery for High-Risk Neuroblastoma via Targeting Tumor Heterogeneity at Single-Cell Level 陳奕璇 ¹ , 李律 ² , 謝巧慧 ¹ , 張怡雯 ¹ , 黃宣誠 ^{3*} , 阮雪芬 ^{1,2,4*} Yi-Xuan Chen ¹ , Albert Li ² , Chiao-Hui Hsieh ¹ , Yi-Wen Chang ¹ , Hsuan-Cheng Huang ^{3*} , Hsueh-Fen Juan ^{1,2,4*}
BC178	The role of HMGA2 in the aggressive tumor architecture and metastatic mechanism of urothelial carcinoma, with the goal of finding potential clinical applications 林新傑 ¹ , 羅浩倫 ¹ , 張殷綸 ¹ , 高建璋 ² , 劉惠瑛 ^{1*} Xin-Jie Lin ¹ , Hao-Lun Luo ¹ , Yin-Lun Chang ¹ , Chien-Chang Kao ² , Hui-Ying Liu ^{1*}
BC179	The role of ANKRD13A in lysophagy 吳佳諺, 姜為中 Chia-Yen Wu, Wei-Chung Chiang



編號	論文題目
BC180	Loss of centrosome affects cytoskeletal dynamics and mesenchymal stem cells fate decision 尤文心, 蔡毓舜, 陳胤全, 楊永正, 郭津岑 Helen Wenshin Yu, Yu-Shuen Tsai, Yin-Quan Chen, Ueng-Cheng Yang, Jean-Cheng Kuo
BC181	Characterizing Dynamical Regulation of Rho GTPases in Human Mesenchymal Stromal Cell Fate Decision 黃冠霖, 陳胤全, 郭津岑 Guna-Lin Huang, Yin-Quan Chen, Jean-Cheng Kuo
BC182	Mechanisms of the Anti-Cancer and Anti-Inflammatory Actions of Bifidobacterium lactis Probiotic and Postbiotic in Inflammation-Associated Colon Carcinogenesis 廖俊誠, 吳彰哲, 柯敏琪, 邱亦涵 Jun-Cheng Liao, Chang-Jer Wu, Min-Chi Ko, Yi-Han Chiu
BC183	Exploring the Catalytic Activity of Multivalent Nucleapzymes by the Geometric Arrangement 薛子鈺, 廖章晴 Tzu-Yu Hsueh, Wei-Ching Liao
BC184	Study The CTPS Filament Formation-associated Extracellular Vesicles and Tumor Growth 王雋諺 ¹ , 白麗美 ^{1,2,3,4*} Chun-Yen Wang ¹ , Li-Mei Pai ^{1,2,3,4*}
BC185	Hsp27-mediated Proteasome Activity in Focal Adhesion Negatively Regulates Osteogenic Differentiation of Mesenchymal Stem Cell 吳旻璉 ¹ , 陳胤全 ² , 黃冠霖 ¹ , 郭津岑 ^{1,2*} Ming-Chung Wu ¹ , Yin-Quan Chen ² , Guan-Lin Huang ¹ , Jean-Cheng Kuo ^{1,2*}
BC186	Protective Effects of Melatonin on Hippocampal Neurogenesis in Neurogenesis Impairment 周怡庭 ¹ , 王朝鍾 ² , 黃惠珮 ³ Ai-Ting Jou ¹ , Chau-Jong Wang ² , Hui-Pei Huang ³
BC187	Small GTPase Arl4A Regulates Exosome Biogenesis via Interaction with Syntenin 陳迦燈, 林明潔, 李芳仁 [*] Chia-Tang Chen, Ming-Chieh Lin, Fang-Jen Lee [*]
BC188	The Effects of Fatty Acids on Exercise-induced Muscle Injury 闕聖明 ¹ , 黃翠琴 ^{2,3} , 夏詩閔 ^{1,4} , 張心儀 ^{5,6*} Sheng-Ming Chueh ¹ , Tsui-Chin Huang ^{2,3} , Shih-Min Hsia ^{1,4} , Hsin-Yi Chang ^{5,6*}
BC189	Interaction between neural and immune systems in zebrafish brain 吳家誠, 湯淑敬, 周銘翊, 翁瑞霞 Jia-Cheng Wu, Sok-Keng Tong, Ming-Yi Chou, Jui-Hsia Weng



編號	論文題目
BC190	Molecular Mechanism Underlying RBCK1 Deficiency Mediated Polyglucosan Body Myopathy 1 Using hESC-derived Cardiomyocytes 蘇亮瑜 ¹ , 陳映辰 ¹ , 蔡素宜 ^{1*} Liang-Yu Su ¹ , Ying-Chen Chen ¹ , Su-Yi Tsai ^{1*}

CM 中華民國細胞及分子生物學學會

編號	論文題目
CM001	Deciphering the molecular mechanism underlying cancer cell adaptation to paclitaxel 王慧菁 Lily Hui-Ching Wang
CM002	PARP1 Recruits DNA Translocases to Restrain DNA Replication and Facilitate DNA Repair 何彥志 ^{1*} , 顧晨薰 ¹ , 蔡翔勝 ¹ , 許嘉麟 ¹ , 江宜蓁 ⁶ , 曾慧燕 ¹ , 張瀚文 ¹ , 陳彥孜 ² , 邱文泰 ³ , 張松彬 ¹ , 沈哲宏 ⁴ , Kyungjae Myung ⁵ , 冀宏源 ^{6,7} , 廖泓鈞 ^{1#} Yen-Chih Ho ^{1*} , Chen-Syun Ku ¹ , Siang-Sheng Tsai ¹ , Jia-Lin Shiu ¹ , Yi-Zhen Jiang ⁶ , Hui Emmanuela Miriam ¹ , Han-Wen Zhang ¹ , Yen-Tzu Chen ² , Wen-Tai Chiu ³ , Song-Bin Chang ¹ , Che-Hung Shen ⁴ , Kyungjae Myung ⁵ , Peter Chi ^{6,7} , Hungjiun Liaw ^{1#}
CM003	YWHAZ Overexpression Promotes Aggressive Phenotypes and Immune Editing in Bladder Cancer 呂慶峰 ¹ , 林彥廷 ² , 陳逸軒 ^{2*} , 許晉銓 ^{1*} Cing-Fong Lu ¹ , Leo Yen-Ting Lin ² , I-Hsuan Chen ^{2*} , Jim Jinn-Chyuan Sheu ^{1*}
CM004	Discovery of the Novel Periodontal Pathogen Scardovia Wiggisiae Using Third-generation Sequencing 林倚綺, 吳冠樺, 陳漪紋, 侯欣翰 Yi-Chi Lin, Guan-Hua Wu, Yi-Wen Chen and Hsin-Han Hou
CM005	Overexpression of nudix hydrolase 16 like 1 Causes Ferroptosis Insensitivity in Colon Cancer 林逸宣 ¹ , 蔡亞娟 ¹ , 李佳榮 ² , 魏子堂 ³ , 吳亞娜 ⁴ , 吳尚蓉 ⁴ , 林新智 ¹ , 蔡少正 ^{1,5} , 林世杰 ^{1,5,6*} Yi-Syuan Lin ¹ , Ya-Chuan Tsai ¹ , Chia-Jung Li ² , Tzu-Tang Wei ³ , Ya-Na Wu ⁴ , Shang-Rung Wu ⁴ , Shin-Chin Lin ¹ , Shaw-Jenq Tsai ^{1,5} , Shih-Chieh Lin ^{1,5,6*}
CM006	AKT2-mediated Nuclear Deformation Leads to Genomic Instability during Epithelial-mesenchymal Transition 范嘉榕, 張崧年, 褚璟彤, 陳鴻震 Jia-Rong Fan, Sung-Nian Chang, Ching-Tung Chu, Hong-Chen Chen



編號	論文題目
CM007	TRABID Inhibition Activates cGAS/STING-mediated Anti-tumor Immunity through Mitosis and Autophagy Dysregulation 陳漢勳 ^{1,6} , 陳鈺軒 ^{1,6} , 王琬菁 ² , 黃韋勳 ² , 陳忻怡 ³ , 葉乃陽 ^{1,4,5} , 顏睿良 ¹ , and 陳瑞華 ^{1*} Han-Hsiun Chen ^{1,6} , Yu-Hsuan Chen ^{1,6} , Won-Jing Wang ² , Wei-Syun Huang ² , Hsin-Yi Chen ³ , Nai Yang Yeat ^{1,4,5} , Ruei-Liang Yan ¹ , and Ruey-Hwa Chen ^{1*}
CM008	Investigating the role of mitochondrial elongation in CDK4/6 inhibitor-resistant breast cancer 曾培雅, 楊繼勳, 陳百昇 Pei-Ya Tseng, Chi-Hsun Yang, Pai-Sheng Chen
CM009	Exosome Secreted by Canine Adipose Tissue-Derived Mesenchymal Stem Cells Ameliorate Caerulein-Induced Acute Pancreatitis in Mice 曾梓煊, 吳青芬 Tzu-Hsuan Tseng, Ching-Fen Wu
CM010	Histone H3K4 methyltransferase KMT2D/MLL4 controls leukemia cell survival through regulation of mitochondria and cellular redox homeostasis 劉大猷, 洪曉琴, 陳譽文, 王嵐欣, 張耀明, 陳俊璋, 王書品 Ta-Yu Liu ^{1,2} , Hsiao-Chin Hong ² , Yu-Wen Chen ² , Lan-Hsin Wang ³ , Yao-Ming Chang ² , Chun-Wei (David) Chen ⁴ , and Shu-Ping Wang ²
CM011	Arf-GAP Gcs1 phosphorylation modulates SNARE Snc1 recycling transport in response to ER stress 蔡佩娟, 吳雨潔, 邱婉筠, 游佳融, 李芳仁 Pei-Juan Cai, Yu-Chieh Wu, Wan-Yun Chiu, Chia-Jung Yu, and Fang-Jen S. Lee
CM012	Targeting influenza A virus by splicing inhibitor herboxidiene reveals the importance of subtype-specific signatures around splice sites 韓憶茹, 李國銘, 吳冠宏, 龔于農, Avijit Dutta, 施信如 Yi-Ju Han, Kuo-Ming Lee, Guan-Hong Wu, Yu-Nong Gong, Avijit Dutta, Shin-Ru Shih
CM013	Novel Nanomaterials in Radioprotection 周沛涵, 王馥嘉, 劉澤英 Pei-Han Chou, Fu-Jia Wang, Tse-Ying Liu
CM014	Magnetic nanoparticles for osteoporosis treatment 吳佩霖, 蔡孟庭, 劉澤英 Pui-Lam Ng, Meng-Ting Tasi, Tse-Ying Liu
CM015	Cancer-Associated Fibroblasts Induced Oral Cancer Cell Radioresistant by IL-33 Expression 陳壁亮, 林佑俊, 黃文彥 Bi-Liang Chen, Yu-Chun Lin, Wen-Yen Huang.
CM016	Transcription factor SPZ1 promotes BRAF-mediated oncogenesis in liver cancer 林佳霓, 王麗婷 Jia-Ni Lin, Li-Ting Wang



編號	論文題目
CM017	Diphenyl disulfide (DPDS) inhibits the PI3K/mTOR axis and involves autophagy overexpression and ferroptosis in melanoma 舒恩德 ¹ , 陳昇遠, 溫志宏, 吳長益, 邱建智 [*] En-De Shu, Sheng-Yuan Chen, Zhi-Hong Wen, Chang-Yi Wu, Chien-Chih Chiu [*]
CM018	Cancer-Associated Fibroblast (CAF) Promotes Colon Cancer Progression via Lactate-GPR81/PI3K-AKT Signaling Pathway. 董毓萱 ¹ , 林佑俊 ^{1,2,3*} , 黃文彥 ^{3,4*} Yu-Shuan Dong ¹ , Yu-Chun Lin ^{1,2,3*} , Wen-Yen Huang ^{3,4*}
CM019	Characterization of mRNA Expression Levels of Megakaryopoiesis Related Genes after shRNA-Mediated Knockdown of DACH1 Gene 林暉庭, 劉羽珊, 林冠伶, 張新侯, 譚伯綱, 高治華, 黃信憲, 許蕙玲, 孫德珊 Wei-Ting Lin, Yu-Shan Liou, Guan-Ling Lin, Hsin-Hou Chang, Po-Kong Chen, Jyh-Hwa Kau, Hsin-Hsien Huang, Hui-Ling Hsu, Der-Shan Sun
CM020	Investigation of the expression profiles and functional roles of early stages pancreatic cancer-associated genes in regulating pancreatic cancer tumorigenesis 余可欣, 李崑豪 Ke Xin Yee, Kuen-Haur Lee
CM021	Developmental Regulation of Retinal Waves 陳詩函, 王致恬 Shih-Han Chen, Chih-Tien Wang
CM022	Gemcitabine Synergizes Proteasome Inhibitors-Induced Cell Toxicity through Blocking Myc-HDAC6 Axis-Dependent Aggresome Formation in A549 Cells 楊韻昀, 余長澤 Chieh-Yun Oprah Yang, Chang-Tze Ricky Yu
CM023	PTPN23 Degradation Mediated by WDR4 Controls Exosome Formation by Enhancing the ALIX-syntenin Complex 葉乃陽, 劉力衡, 陳瑞華 Nai-Yang Yeat, Li-Heng Liu, Ruey-Hwa Chen
CM024	Arl4A/D small GTPases modulate phosphoinositide composition via a novel effector INPP5E 賴怡瑄, 林明潔, 李芳仁 Yi-Hsuan Lai, Ming-Chieh Lin, and Fang-Jen S. Lee
CM025	Functional insights of crosstalk between centrosome regulatory proteins and Drp1 phosphorylation-mediated mitochondrial fission drives mitophagy involved in the bipolar spindle assembly during mitosis 柯慧君 ^{1,2} , 吳念修 ^{1,2} , 蔡易達 ^{1,2} , 蔡博羽 ^{1,2} , 蔡政宇 ³ , 羅永欽 ³ , 洪義人 ^{1,2*} Huey-Jiun Ko ^{1,2} , Nian-Siou Wu ^{1,2} , Yi-Ta Tsai ^{1,2} , Po-Yu Tsai ^{1,2} , Cheng-Yu Tsai ³ , Joon-Khim Loh ³ , Yi-Ren Hong ^{1,2*}
CM026	Investigation the expression profile and functional role of CEMIP in early-onset colorectal cancer 潘胥睿, 阮德孝, 李崑豪 Syu-Ruei Pan, Duc Hieu Nguyen, Kuen-Haur Lee



編號	論文題目
CM027	Investigation of functional roles of novel 5-FU drug resistance genes of colorectal cancer through combination with data mining and in vitro experiment approach 倪宜君, 郭子靈, 黃翠琴, 李崑豪 Yi-chun Ni, Tzu-Ting Kuo, Tsui-Chin Huang, Kuen-Haur Lee
CM028	The Control of Enterovirus Infection by WW Domain-Containing Oxidoreductase 蔣維, 陳佩璇, 張琮浩, 徐麗君 Wei Chiang, Pei-Shiuan Chen, Tsung-Hao Chang, Li-Jin Hsu
CM029	Mitochondrial Lon-induced mitophagy benefits hypoxic resistance via Ca ²⁺ -dependent FUNDC1 phosphorylation at the ER-mitochondria interface 郭政良 ² , 周含諭 ³ , 譚麗雅 ^{1,2,3} , 范紀鎮 ⁴ , 陳中興 ³ , 高永旭 ² , 李岳倫 ³ Cheng-Liang Kuo ² , Han-Yu Chou ² , Vidhya Tangeda ^{1,2,3} , Chi-Chen Fan ^{4,5} , Chung-Hsing Chen ¹ , Yung-Hsi Kao ^{1,3} , and Alan Yueh-Luen Lee ^{1,2,3,6,7*}
CM030	Interferon- γ is Required for Heart Regeneration in Zebrafish 高希, 賴時磊 Kaushik Chowdhury, Shih-Lei Lai
CM031	Ugonin L Ameliorates Lipid Accumulation through AMPK-mediated Regulation of Hepatic Lipid Metabolism and Inhibition of Adipocyte Differentiation 黃詩蘋, 邱韋中, 黃瑋 Shih-Pin Huang, Wei-Chung Chiou, and Cheng Huang
CM032	To explore the mechanisms of high fat diet affecting hepatic metabolism and progression of hepatocellular carcinoma in Hepatitis B virus transgenic mice 林伯軒, 吳肇卿, 李方瑋, 林潔, 楊凱卉, 陳至理 Bo Shen Lin, Jaw Ching Wu, Fang Wei Lee, Chieh Lin, Kai Hui Yang, Chih LI Chen
CM033	Effects of a Phosphatidylserine-Strontium citrate Composite on Osteoarthritis Caused by Meniscal/Anterior Cruciate Ligament Injury in Obese Rats 盧亭宇, 高鈺萱, 高翊峰, 龔瑞林 Ting-Yu Lu, Yu-Hsuan Kao, Yi-Feng Kao, Zwe-Ling Kong
CM034	To Study Synthesis Rate and Effects of Cell Specificity and Toxicity of ¹³¹ I-IMPY 俞長青 ¹ , 陳巧寧 ² , 何慈娟 ² , 吳怡伶 ² , 詹宏彬 ¹ , 田育彰 ² , 鄭婷駿 ² , 林怡瑄 ² , 楊明慧 ^{3*} Chang-Ching Yu ¹ , Ciao-Ning Chen ² , Tzu-Chuan Ho ² , Yi-Ling Wu ² , Hung-Pin Chan ¹ , Yu-Chang Tyan ² , Ting-Chun Cheng ² , Yi-Hsuan Lin ² , Ming-Hui Yang ^{3*}
CM035	A New Chitosan-Silica Nanoparticle Formula Encapsulated with Echinacea Extracts Modulating Macrophages to Treat Periodontal Disease 曾吉祥, 毛乾豐, 陳群楷, 龔瑞林 Chi-Shung Tseng, Chien-Feng Mao, Chun-Kai Chen, Zwe-Ling Kong
CM036	Impaired nucleocytoplasmic transport of ATF3 induced by poly-Proline-Arginine correlates with motoneuronal Pom121 in C9orf72/ALS 林俊宇 ^{1,2} , 蘇宗平 ⁴ , 傅如輝 ⁵ , 王紹銘 ^{2,3*} Chun-Yu Lin ^{1,2} , Tsung-Ping Su ⁴ , Ru-Huei Fu ⁵ , Shao-Ming Wang ^{2,3*}



編號	論文題目
CM037	The effect of aspirin in Neuro-2a cells with oxidative stress and inflammation of amyloid β -protein 王婕儒, 王靖詠, 江明璋 WANG CHIEH JU, WANG CHING YUNG, MING CHANG CHIANG
CM038	Effects of Exosomes Derived from Human Umbilical Cord Mesenchymal Stem Cells on Spinal Cord Injury-Induced Neuropathic Pain and Pain-Related Mediators 楊道翔, 彭葛蒂, 朱翠玉, 陳弘照, 黃雅嫻, 鄭仁坤 Tao-Hsiang Yang, Raju Poongodi, Tsuei-Yu Chu, Hong-Zhao Chen, Ya-Hsien Huang, Jen-Kun Cheng
CM039	The role of Rab GTPase in TIAM-1 trafficking and neuronal development 賴培元 PEI-YUAN LAI
CM040	The Role of KRT Network in Regulating YAP through It's Associated Protein, Periplakin 馬崑庭, 白麗美 Kung-Ting Ma, Li-Mei Pai
CM041	Lineage tracing and organoid culture technologies for investigating the roles of Dph1 in cholangiocytes and hybrid periportal hepatocytes 黃帷綸, 陳俊銘 Wei-Lun Huang and Chun-Ming Chen
CM042	Stemness BMP Signaling controls mitochondrial shape and mass in the Ovarian Germline Stem Cell 許惠真 Hwei-Jan Hsu
CM043	Investigating the Role of Endonuclease G in hESC-Derived Cardiomyocytes 王心妤, 吳奕萱, 蔡素宜 Hsin-Yu Wang, Yi-Hsuan Wu, Su-Yi Tsai
CM044	Switching On/Off the Hh signaling Pathway Determines Drosophila Ovarian Germline Stem Cell Niche Fates 王妤庭, 賴俊銘, 許惠真 Yu-Ting Wang ^{1,2,3} , Chun-Ming Lai ^{3,*} , and Hwei-Jan Hsu ^{1,2,3}
CM045	Development of Single-cell ROS Regulome Profiles of CD8+ T cell 王蕙荃, 楊明翰, 呂雅婷, 張耀明, 陳世清 Yi-Chuan Wang, Ming-Han Yang, Ya-Ting Lu, Yao-Ming Chang, Shih-Yu, Chen
CM046	Cardiac Myofibrillogenesis is Spatiotemporally Modulated by the Molecular Chaperone UNC45B 許子庭, 盧薈安, 蘇亮瑜, 蔡素宜 Zi-Ting Hsu, Serena Huei-An Lu, Liang-Yu Su, Su-Yi Tsai



編號	論文題目
CM047	Functional Analysis of Extracellular Vesicles Derived from Radioresistant Triple Negative Breast Cancer Cells 張毓庭, 張文璋 Yu-Ting Chang, Wen-Wei Chang
CM048	Deciphering the Rocaglamide A-mediated Molecular Mechanism in Triple-negative Breast Cancer 張心儀, 劉彧廷, 黃翠琴 Hsin-Yi Chang, Yu-Ting Liou, Tsui-Chin Huang
CM049	Rab37 Mediates Trafficking and Membrane Presentation of PD-1 in T cells to Foster an Immunosuppressive Microenvironment in Lung Cancer 郭琬婷, 郭懿瑩, 吳思亭, 蘇五洲, 王憶卿 Wan-Ting Kuo, I-Ying Kuo, Ssu-Ting Wu, Wu-Chou Su, Yi-Ching Wang
CM050	EXOSC5 Maintains Cancer Stem Cell Activity Of Endometrial Cancer Through Regulating NTN4/integrin β 1 Signaling Axis 黃俞皓, 李學德, 張文璋 Yu-Hao Huang, Hsueh-Te Lee, Wen-Wei Chang
CM051	Transcription Factor Spermatogenic Leucine Zipper 1 Regulates Macrophage Polarization in Tumor Microenvironment. 黃昱勛, 王麗婷 Yu-Hsun Huang, Li-Ting Wang
CM052	FJX1 is a biomarker associated with tumor proliferation, and migration impacts the prognosis and microenvironments in glioma. 黃祈恩, 李耀豐 Chi-En Huang, Yao-Feng Li
CM053	NRF2 Promotes Expression and Autophagic Secretion of IL-33, a Danger Signal Cytokine, upon Stress Stimulation 劉薰 ^{1#} , 謝智雄 ¹ , 王憶卿 ^{1,2*} Hsun Liu ^{1#} , Chih-Hsiung Hsieh ¹ , and Yi-Ching Wang ^{1,2*}
CM054	Comparative Single-Cell Profiling Reveals Distinct Cardiac Resident Macrophages Essential for Zebrafish Heart Regeneration 魏可軒 ^{1,2} , 林奕廷 ¹ , 高希 ^{1,3} , 柳冠廷 ⁴ , 柯泰銘 ^{1,4} , 張耀明 ¹ , 楊鎧鍵 ^{1,5} , 賴時磊 ^{1,2,3*} Ke-Hsuan Wei ^{1,2} , I-Ting Lin ¹ , Kaushik Chowdhury ^{1,3} , Kuan-Ting Liu ⁴ , Tai-Ming Ko ^{1,4} , Yao-Ming Chang ¹ , Kai-Chien Yang ^{1,5} , Shih-Lei Lai ^{1,2,3*}
CM055	Wdr4 Limits Intestinal Stem Cell Division and has conserved function for Gut Homeostasis 喬柯媿, 吉亞, 林佩蓉, 陳瑞華, 黃雯華, 許惠真 Kreeti Kajal Rastegari ³ , Pei-Rong Lin ⁴ , Ruey-Hwa Chen ⁴ , Wendy W Hwang-Verslues ⁵ and Hwei-Jan Hsu ^{1,2,3*}
CM056	Fatty Acid Metabolism regulates intracellular trafficking for germline homeostasis via TOR signaling 林祺洪, 柯懿庭 Chi-Hung Lin, Yi-Ting Ko



編號	論文題目
CM057	Aspirin Modulates N6 methyladenosine RNA Modification in Primary Effusion Lymphoma Cells 蔡品儀 ¹ , 戴明泓 ¹ , 金一如 ² , 徐慧雯 ³ , 王怡棻 ^{3*} Pin-Yi Tsai ¹ , Ming-Hong Tai ¹ , Yi-Ru Jin ² , Huey-Wen Shyu ³ , & Yi-Fen Wang ^{3*}
CM058	Identifying evolutionarily conserved microbiome regulators by utilizing the nematode model 翁沂秀 ¹ , 阮振維 ^{1*} Yi-Hsiu Weng ¹ , Jhen-Wei Ruan ^{1*}
CM059	Role of Hsa-miR-X-3p-Mediated Downregulation of K ⁺ Channels in Enterovirus D68 Infection 龔俞安, 龔于農 Yu-An Kung, Yu-Nong Gong
CM060	Morusin inhibits the growth and migration of prostate cancer through inactivation of Akt/mTOR signaling pathway 吳欣恩, 陳垣汝, 李佳陽 Hsin-En Wu, Yuan-Ru Chen, Chia-Yang Li
CM061	Callicarpa Extract Impairs E2F1 expression and autophagy-related proteins and DNA repair in cisplatin-resistant lung cancer cells 周士傑 ¹ , 李家宜 ² , 王怡棻 ¹ , 張冠姿 ³ , 徐慧雯 ¹ Shi-Jie Zhou ¹ , Chia-Yi Lee ² , Yi-Fen Wang ¹ , Kuan-Tzu Chang ³ , Huey-Wen Shyu ^{1*}
CM062	ACTN4 promotes metastasis by enhancing the focal adhesion dynamic and increase chemoresistance in pancreatic ductal adenocarcinoma 洪沁伶 Qin-Ling Hong, Ching-Chieh Weng
CM063	Role of STK26-Mediated chemoresistance through anti-Ferroptosis pathway of pancreatic cancer to Gemcitabine. 王筱菁, 翁靖傑 Xiao-Jing Wang, Ching-Chieh Weng
CM064	The Prognostic Value of NTRK3 Expression in Upper Tract Urothelial Carcinoma 林庭葳 ¹ , 洪子軒 ¹ , 徐偉齊 ² , 余智娟 ³ , 黃阿梅 ^{1,4} , 郭弘典 ^{5,6} , 林麗玫 ^{1,5,6*} Ting-Wei Lin ¹ , Zi-Xuan Hong ¹ , Wei-Chi Hsu ² , Chih-Chuan Yu ³ , A-Mei Huang ^{1,4} , Hung-Tien Kuo ^{5,6} , Lee-Moay Lim ^{1,5,6*}
CM065	Active DNA demethylase, TET1, increases oxidative phosphorylation and sensitizes ovarian cancer stem cells to mitochondrial complex I inhibitor 陳林鈺, 劉蓓麗, 沈耀安, 蘇博玄, 賴鴻政 Lin-Yu Chen ¹ , Phui-Ly Liew ^{2,3} , Yao-An Shen ³ , Po-Hsuan Su ⁴ , Hung-Cheng Lai ^{1,4,5,*}
CM066	Increases of anchorage independency and tumorigenicity in immortalized oral keratinocytes by chronic arecoline exposures 賴亭羽 ^{1,2} , 劉奕宏 ² , 柯英潔 ² , 陳玉蓮 ² , 江士昇 ² , 劉柯俊 ² , 劉滄梧 ² , 夏興國 ² , 莊永仁 ¹ , 林素芳 ² Ting-Yu Lai ^{1,2} , Yi-Hong Liu ² , Ying-Chieh Ko ² , Yu-Lian Chen ² , Shih-Sheng Jiang ² , Ko-Jiunn Liu ² , Tsang-Wu Liu ² , Shine-Gwo Shiah ² , Yung-Jen Chuang ¹ , and Su-Fang Lin ²



編號	論文題目
CM068	MiR-a/CPT1A-mediate fatty acid oxidation regulates tumor progression in Oral Cancer 方慈媛 ^{1,2,3} , 趙婉如 ² , 蕭振仁 ⁴ , 汪宏達 ^{3*} , 夏興國 ^{2,3*} Cih-Yuang Fang ^{1,2,3} , Wan-Ju Chao ² , Jenn-Ren Hsiao ⁴ , Horng-Dar Wang ^{3*} , Shine-Gwo Shiah ^{2,3*}
CM069	Investigating the Role of INHBA in Regulating Cancer-associated Fibroblasts within the Tumor Microenvironment of Upper Tract Urothelial Carcinoma 林新傑 ¹ , 羅浩倫 ¹ , 高建璋 ^{2*} Xin-Jie Lin ¹ , Hao-Lun Luo ¹ , Chien-Chang Kao ^{2*}
CM070	Leukemia Inhibitory Factor Enhances Antitumor Polarization and Oral Squamous Cell Carcinoma Progression in Tumor-Associated Macrophages 隋昀華, 劉子彤, 劉淑貞 Yun-Hua Sui, Tzu-Tung Liu, and Shu-Chen Liu
CM071	Determine the Genetic Similarity of Synchronous Endometrial and Ovarian Cancers with Variants in Polyguanine Sequences 黃裕逸 ¹ , 鄭珮淇 ² , 徐靖 ⁴ , 鄭永銘 ³ , 魏凌鴻 ^{4,5} , 洪維廷 ^{1*} Yu-Yi Huang ¹ , Pei-Chi Cheng ² , Ching Hsu ⁴ , Yung-Ming Jeng ³ , Lin-Hung Wei ^{4,5} , Wei-Ting Hung ¹
CM072	Role of SQSTM1/p62 in bortezomib-induced apoptosis of human colorectal cancer cells 陳廷翰, 吳孟修, 趙瑞益 Ting-Han Chen, Meng-Hsiu Wu, Jui-I Chao
CM073	CHRM4 Upregulates Interferon Alpha 17 in The Tumor Microenvironment to Promote Neuroendocrine Differentiation of Prostate Cancer 姜國卿 ² , 陳威豪 ² , 李函如 ² , Phan Vu Thuy Dung ² , 葉秀蓮 ² , 蕭宏昇 ³ , 劉晏年 ^{2*} Kuo-Ching Jiang ² , Wei-Hao Chen ² , Han-Ru Li ² , Phan Vu Thuy Dung ² , Hsiu-Lien Yeh ² , Michael Hsiao ³ , Yen-Nien Liu ^{2*}
CM074	The molecular mechanisms of Dysbindin in regulating retinal waves. 丁尹宣 ¹ , 鄭子霖 ¹ , 王致恬 ^{1,2,3,4*} Yin-Hsuan Ting ¹ , Tzu-Lin Cheng ¹ , and Chih-Tien Wang ^{1,2,3,4*}
CM075	MAPK Slt2/ERK2 dictates trans-Golgi trafficking under ER stress via Golgin Imh1 phosphorylation 王奕勛, 邱婉筠, 陳彥廷, 蔡佩娟, 吳雨潔, 巫佳儒, 陳柏翰, 劉雅雯, 游佳融, 李芳仁 Yi-Hsun Wang, Wan-Yun Chiu, Yan-Ting Chen, Pei-Juan Cai, Yu-Chieh Wu, Jia-Lu Wu, Bo-Han Chen, Ya-Wen Liu, Chia-Jung Yu, and Fang-Jen S. Lee
CM076	Keloid fibroblasts exert higher cell contractility and enhance the rigidity of collagen fibers than normal fibroblasts in 3-dimensional collagen culture 吳欣霏 ¹ , 李耕璋 ² , 湯銘哲 ^{1,2*} Hsin-Pei Wu ¹ , Gang-Hui Lee ² and Ming-Jer Tang ^{1,2*}



編號	論文題目
CM077	The Role of Snail-Regulated CD73 in Head and Neck Cancer 李子瑜, 賴冠甄, 周明瑜, 楊慕華 ZIH-YU LI, Kuan-Chen Lai, Ming-Yu Chou, Muh-Hwa Yang
CM078	EpsteinBarr viral productcontaining exosomes promote fibrosis and nasopharyngeal carcinoma progression through activation of YAP1/FAP α signaling in fibroblasts 李柏儒, 隋昀華, 劉子彤, 曾雁明, 黃貞翰, 林庭伊, 張凱評, 劉淑貞 PoJu Lee, YunHua Sui, TzuTung Liu, NganMing Tsang, ChenHan Huang, TingYi Lin, KaiPing Chang, ShuChen Liu
CM079	Phosphatidylinositol Transfer Protein-1 Regulates Lifespan By Modulating TOR Signaling In C. elegans 林彥宏 ^{1*} , 柯唯中 ¹ , 慕尼許 ² , 喻秋華 ⁴ , 許佩嘉 ³ , 張斌 ¹ , 金翠庭 ⁵ , 汪宏達 ^{1,3} Yen-Hung Lin ^{1*} , Wei-Chun Ke ¹ , Muniesh Muthaiyan Shanmugam ² , Chiou-Hwa Yuh ⁴ , Pei-Jia Hsu ³ , Bin Chang ¹ , Tsiu-Ting Ching ⁵ , Horng-Dar Wang ^{1,3}
CM080	Glycolytic Enzymes Regulate Endocytic Protein Transport upon Glucose Starvation 姚舒云, 許家維 Shu-Yun Yao, Jia-Wei Hsu
CM081	Decoding the Functional Crosstalk Between Myca and MYC Ubiquitination in Tumorigenesis 陳啟宜 ¹ , Jonathan D. Lee ² , 李思碩 ¹ , 姚秉瑜 ¹ , 黃耀燦 ¹ , 王瑟武 ¹ , 徐采藝 ¹ , 阮玄妝 ¹ , 邱俊能 ¹ , 紀欣慧 ¹ , 林采鏐 ¹ , 胡哲銘 ¹ , 袁維謙 ³ , Assaf C. Bester ⁴ , 李育儒 ^{1*} Hsin-Yi Chen ¹ , Jonathan D. Lee ² , Szu-Shuo Lee ¹ , Bing-Yu Yao ¹ , Yao-Shen Huang ¹ , Thu-Thuy Vu ¹ , Tsai-Fan Hsu ¹ , Trang Thi Huyen Nguyen ¹ , Chun-Nen Chiu ¹ , Hsin-Hui Chi ¹ , Chai-Ling Lim ¹ , Che-Ming (Jack) Hu ¹ , Wei-Chien Yuan ³ , Assaf C. Bester ⁴ , Yu-Ru Lee ^{1*}
CM082	NPC-Derived Exosomal LMP1 Promotes Macrophage M2 Polarization Via Activating MST1R Signaling 劉子彤, 隋昀華, 張凱評, 黃貞翰*, 劉淑貞* Tzu-Tung Liu, Yun-Hua Sui, Kai-Ping Chang, Chen-Han Huang*, Shu-Chen Liu*
CM083	Inhibition of golgin-97 promotes the malignant development of breast cancer cells through MAPK pathway and inflammatory cytokines 劉羽苓, 林藝芸, 林琮玘, 張嘉瑋, 施宥辰, 王智亮, 游佳融 Yu-Chin Liu, Yi-Yun Lin, Tsung-Jen, Lin, Chia-Wei Chang, Yo-Chen Shih, Chih-Liang Wang, Chia-Jung Yu
CM084	Ferroptosis induced EMT signature and immune activating feature in head and neck squamous cell carcinoma 鍾志宏 ¹ , 陳姿妤 ¹ , 楊慕華 ^{1,2*} Chih-Hung Chung, Chih-Yu Chen and Muh-Hwa Yang
CM085	Chemical-induced Degradation of PreS2 Mutant Large Surface Antigen via The Induction of Microautophagy 楊奕, 吳苡萱, 邱鈺庭, 潘昱辰, 李冠林, 李天能, 王慧菁 [#] Joey Yi Yang, Yi-Hsuan Wu, Yu-Ting Chiou, Max Yu-Chen Pan, Richard Kuan-Lin Lee, Tian-Neng Li, Lily Hui-Ching Wang [#]



編號	論文題目
CM086	Investigation of the role of long intergenic non-protein coding RNA 514 (LINC00514) in tumorigenesis under hypoxia/HIF-1 α signaling 林莉婕 ¹² , 許嘉凌 ² , 彭佩華 ³ , 顏兌霖 ⁴ , 吳孟芷 ⁵ , 許凱文 ¹²⁶ Li-Jie Lin ¹² , Jia-Ling Syu ² , Pei-Hua Peng ³ , Tui-Lin Yen ⁴ , Meng-Chih Wu ⁵ , Kai-Wen Hsu ¹²⁶
CM087	CDCP1 May Downregulate AKR1B10 Expression to Promote Hepatocellular Carcinoma Metastasis 林星妤, 楊文豪 Shing-Yu Lin, Wen-Hao Yang
CM088	Investigating the Impact of P-body Component Protein EDC3 in Hepatocellular Carcinoma 許祐婕, 楊文豪 Yu-Chieh Hsu, Wen-Hao Yang
CM089	The internal ribosome entry site determines the neurotropic potential of enterovirus A71 吳冠宏, 李國銘, 高佳煜, 施信如 Guan-Hong Wu, Kuo-Ming Lee, Chia-Yu Kao, Shin-Ru Shih
CM090	The Role of Oral Squamous Cell Carcinoma-Derived Exosomal miR-421 in Angiogenesis via Targeting HS2ST1 in Vascular Endothelial Cells 吳冠勳, 周松濤, 汪宏達, 夏興國 Chia-Yun Huang, Guan-Hsun Wu, Sung-Tau, Chou, Horng-Dar Wang, Shine-Gwo Shiah ¹
CM091	DNA Double Strand Breaks Enhances HBV Integration into the Host Genome 林莉純, 黃溫雅 Li-Chun, Lin, Wenya Huang
CM092	Molecular Characterization of Synthesized Oroxylin A on Fibroblast Cells 劉坤湘, 洪俊傑, 何文岳 Kun-Hsiang Liu, Chun Keat Ang, Wen-Yue Ho
CM093	Anti-tumor Effect and Mechanism of Undaria Pinnatifida Fucoidan on Lung Cancer In Vitro 陳怡如, 李欣潔, 陳銘發, 羅梓游, 劉銘* Yi-Ru Chen, Xin-Jie Li, Ming-Fa Chen, Zi-You Luo, Min Liu*
CM094	Isoflavone glycoside A and Monoterperene A alleviate long-term high glucose ARPE-19 cellular pattern by enhancing antioxidant proteins and modulating microenvironment-related proteins 林京諭, 許淑娟, 陳俊霖, 邱建智 Ching-Yu Lin ^{1*} , Shwu-Jiuan She ¹ , Chun-Lin chen ² , Chien-Chih Chiu ²
CM095	The Nucleolar rRNA IGS LncRNAs Modulates Survival Transcriptome in Response to Cellular Stresses 薛秋男, Amisha Murugesan Angel, 蘇淑惠 Chiou-Nan Shiue, Amisha Murugesan Angel, Shu-Hui Su



編號	論文題目
CM096	The Critical Role of YAP in Cisplatin Resistance of Ovarian Cancer Cells 謝孟儒, 張恆愛, 賴怡旬, 阮氏美姮, 林孜謙, 邱文泰 Meng-Ru Hsieh, Heng-Ai Chang, Yi-Shyun Lai, Thi My Hang Nguyen, Tzu-Chien Lin, Wen-Tai Chiu
CM097	Evaluation of the effect of fermented soy products in Alzheimer's disease models 劉于瑄, 林達鈞, 杜紫瑄, 謝秀梅 Yu-Hsuan Liu, Ta-Chun Lin, Zhi Xuen Tor, Hsiu Mei Hsieh
CM098	Effects of alpha-Melanocyte-Stimulating Hormone (alpha-MSH) on the Morphology and Bioactivity of Melanocytes in Male and Female Zebrafish Fins after Electrical Stimulation 杜丞偉 ¹ , 葉威良 ¹ , 楊承憲 ¹ , 王星惠 ¹ , 何穎宸 ¹ , 莊弘 ² , 黃尉東 ^{1*} Cheng-Wei Du ¹ , Wei-Liang Yeh ¹ , Cheng-Hsien Yang ¹ , Hsing-Hui Wang ¹ , Ying-Chen Ho ¹ , Hung Chuang ² and Wei-Tung Huang ^{1*}
CM099	The Effects of Beta-Estradiol or Testosterone and Electrical Stimulation on the Morphology and Expression of Coloration Related Genes of Male Zebrafish Melanophores 楊承憲 ¹ , 葉威良 ¹ , 杜丞偉 ¹ , 王星惠 ¹ , 何穎宸 ¹ , 莊弘 ² , 黃尉東 ^{1*} Cheng-Hsien Yang ¹ , Wei-Liang Yeh ¹ , Cheng-Wei Du ¹ , Hsing-Hui Wang ¹ , Ying-Chen Ho ¹ , Hung Chuang ² and Wei-Tung Huang ^{1*}
CM100	The Effects of beta-Estradiol or Testosterone and Electrical Stimulation on the Morphology and Expression of Coloration Related Genes of Female Zebrafish Melanocytes 葉威良 ¹ , 杜丞偉 ¹ , 王星惠 ¹ , 楊承憲 ¹ , 何穎宸 ¹ , 莊弘 ² , 黃尉東 ^{1*} Wei-Liang Yeh ¹ , Cheng-Wei Du ¹ , Hsing-Hui Wang ¹ , Cheng-Hsien Yang ¹ , Ying-Chen Ho ¹ , Hung Chuang ² and Wei-Tung Huang ^{1*}
CM101	PHF8 Serves As An Oncogenic Demethylase In Gastric Cancer 黃鼎鈞, 曾琳蘆, 陳粲然, 王雯靜 Ding-Jun Huang, Lin-Lu Tseng, Tsan-Jan Chen, Wen-Ching Wang
CM102	The role of deubiquitinase USP2a in urothelial carcinoma. 賴俊昇 ¹ , 李祐安 ² , 林庭葳 ³ , 黃阿梅 ^{1,2,3*} Chun-Sheng Lai ¹ , Yu-An Lee ² , Ting-Wei Lin ³ , A-Mei Huang ^{1,2,3,*}
CM103	Hepatoma-derived growth factor induces fibroblast growth factor 11 expression in human retinal pigment epithelial ARPE-19 cells 高英賢 ¹ , 陳柏翰 ¹ , 張祐誠 ² Ying-Hsien Kao ¹ , Po-Han Chen ¹ , Yo-Chen Chang ²
CM104	Evaluation of Therapeutic Efficacy of Cholinesterase Inhibitor Analogs in Alzheimer's Disease 林達鈞, 邱苡甄, 劉于瑄, Shaik Anwar, 謝秀梅 Ta-Chun Lin, Yi-Chen Chiu, Yu-Hsuan Liu, Shaik Anwar, Hsiu-Mei Hsieh



編號	論文題目
CM105	Effects of secretion and post-translational modification of Ngal protein on Autosomal Dominant Polycystic kidney disease (ADPKD) cells and cysts 羅姝雯, 林靖博, 鄧羽涵, 謝秀梅 Shu-Wen Lo, Ching-Po Lin, Yu-Han Teng, and Hsiu Mei Hsieh
CM106	Investigation the Impact of Ribosome DNA Profile by Epstein-Barr Virus EBNA1 Protein on Human Ovarian Cancer SKOV3 Cells 蔡宗杰* Tzung-Chieh Tsai*
CM107	Potential role of Aquaporin 0 (AQP0) gene in erythrocytic differentiation 陳珈諺, 王佐輔, 林冠伶, 孫德珊 Chia-Yen Chen, Tso-Fu Wang, Guan-Ling Lin, Der-Shan Sun
CM108	Study on The Senescence-Associated Secretory Phenotypes of Cellular Senescence Induced By Cholesterol Imbalance In Human Primary Hepatocytes 邱逸文, 陳韋嘉, 王信泐, 黃偉倫, 楊孔嘉 Yi-Wen Chiu, Wei-Chia Chen, Sin-Tian Wang, Wei-Lun Huang, Kung-Chia Young
CM109	Transcriptomic Study Associated with Lipid Remodeling in Senescent Primary Human Hepatocytes 陳冠潔, 王信泐, 陳韋嘉, 楊孔嘉 Kuan-Chieh Chen, Sin-Tian Wang, Wei-Chia Chen, Kung-Chia Young
CM110	Study on the Protein Degradation of Sterol O-Acyltransferases 1 and 2 in Hepatic Senescence and Lipid Homeostasis 蔡宜璇, 王信泐, 陳韋嘉, 陳冠潔, 楊孔嘉 Yi-Hsuan Tsai, Sin-Tian Wang, Wei-Chia Chen, Kuan-Chieh Chen, Kung-Chia Young
CM111	Role of CD81 in irisin-modulated lipid metabolism in cultured rat hepatocytes 陳柏翰, 戴明泓, 高英賢 Po-Han Chen, Ming-Hong Tai, Ying-Hsien Kao
CM112	Ecdysone-induced microRNA let-7 modulated the electrical synaptic transmission in Drosophila insulin-producing cells 沈秉賢, 池羽淇, 謝嘉宏, 墨憶薰, 鄭杰森, 傅在峰 Bing-Xian Shen, Yu-Chi Chih, Hsieh-Jia Hong, Yi-Shun MO, Chieh-Sen Cheng, Tsai-Feng Fu
CM113	In vitro Cell-Based Assays to Screen for Immunomodulatory Activity of Microbial Metabolites 劉大維, 謝松源 Ta-Wei D. Liu, Sung-Yuan Hsieh
CM114	Expression and purification of proteins that enhance the CAR-T construct transduction and proliferation 鄭榮文, 黃溫雅, 莊偉哲 Kai-Man Cheang, Wenya Huang, Woei-Jer Chuang



編號	論文題目
CM115	Analysis of Micromotion and Wound Healing of MDCK Cells Regulated by Cisplatin and CCCP 陳其田, 楊友瑄, 羅俊民 * Chi-Tien Chen, Yu-Hsuan Yang, Chun-Min Lo*
CM116	Inonotus Taiwanensis Polysaccharide Induces DNA Damage and Apoptosis in Human Acute Monocytic Leukemia Cells 張倩毓 ¹ , 鄭少綺 ² , 黃星晞 ² , 黃品瑄 ² , 尹順君 ³ , 陳志良 ^{2,*} Chien-Yu Chang ¹ , Shao-Ci Zheng ² , Xing-Xi Huang ² , Pin-Xuan Huang ² , Shuenn-Jium Yiin ³ , Chi-Liang Chern ^{2,*}
CM117	The use of a novel Saccharide-based fluorescent probe on high-throughput cell line tumoroids cytotoxicity assay for immunotherapeutic studies. 劉麗芬 Li-Feng Liu
CM118	Leukemia Inhibitory Factor-Mediated Modulation of Mast Cell Immune Response 隋昀華, 劉子彤, 劉淑貞 Yun-Hua, Sui, Tsu-Tung, Liu, Shu-Chen, Liu
CM119	Cicer arietinum extract inhibits oleic acid-induced lipid accumulation in HepG2 cells 許正穎, 魏宗德 Zheng-Ying XU, Tzong-Der Way
CM120	Exploration For The Mechanism Of Decabromodiphenyl Ether (BDE-209) On The Human Locomotor Activity By Network-Based Analysis 劉容瑄 Rong-Xuan Liu
CM121	Method Development for Detection of Vector Copy Number and Replication-Competent Lentivirus in Chimeric Antigen Receptor T cells by Real-Time Quantitative Polymerase Chain Reaction 蔡宜珪, 賴佳岑, 蔡馨儀, 駱育堦, 艾麗霜 Yi-Jiue Tsai, Chia-Tsen Lai, Hsin-Yi Tsai, Yu-Hsun Lo and Li-Shuang Ai
CM122	Change of Gene Expression in Mouse Somatostatin+ and Parvalbumin+ Interneurons After Fear Condition 江芊妤 ¹ , 蕭巧琬 ^{1,2} , 黃子瑄 ¹ , 陳卓逸 ^{3,4} , 連正章 ^{2,4,5} , 鄭函若 Chien-Yu Chiang ¹ , Chiao-Wan Hsiao ^{1,2} , Tzu-Hsuan Huang ¹ , Cho-Yi Chen ^{3,4} , Cheng-Chang Lien ^{2,4,5} , Irene Han-Juo Cheng ^{1,2,4*}
CM123	Using an AMPK Agonist X to Alleviate Neurodegeneration in a Mouse Model of Alzheimer' s Disease 高鈺修, 鄭函若 Yu-Hsiu Kao, Irene Han-Juo Cheng
CM124	The Effect of FGFR1 Agonist FGL In Alzheimer' s Disease Mouse Model 孫璋駿, 李宜蓉, 鄭函若 Wei-Chun Sun, Yi-Jung Lee, Irene Han-Juo Chang



編號	論文題目
CM125	Use Gene Therapy of Irisin for Treatment of Neuropathy in Type 1 Diabetes Mellitus Mice 蔡弦諺, 戴明泓 Hsien-Yen Tsai, Ming-Hong Tai
CM126	The Role of a Novel CREB Family Member in Neuronal Cytotoxicity and Neurite Outgrowth 陳羽軒 ¹ , 田孝威 ^{2,3} Yu-Xuan Chen ¹ , Shiao-Wei Tyan ^{2,3*}
CM127	Evaluation of curcumin extract against rectal cancer and study of nuclear transcription factor EB (TFEB) 江若華, 楊家欣 Jo-Hua Chiang, Jai-Sing Yang
CM128	Downregulating of thymidine phosphorylase expression and ERK1/2 activation enhances heat shock protein 90 inhibitor-induced cytotoxicity and growth inhibition in human lung squamous H520 cells 穆柏丞 Bo-Cheng Mu
CM129	The Interaction Effect of Endothelin-1 with Insulin-like Growth Factor-I to Stimulate 3T3-L1 Preadipocyte Growth 蕭安淇 ¹ , 崔以威 ² , 郭佑啟 ³ , 高永旭 ¹ An-Ci Siao ¹ , Yi-Wei Tsuei ² , Yow-Chi Kuo ³ , and Yung-Hsi Kao ¹
CM130	The mechanisms of melanogenic regulations under hypoxia 鄧卉倫, 廖崇斌 Hui-Lun Teng, Chung-Ping Liao
CM131	Effects of Zinc-chelating Sturgeon Collagen Peptide on Osteoarthritis Induced by Anterior Cruciate Ligament Transection and Medial Meniscectomy Obese Male Rats 王培瑜, 林猶權, 龔瑞林 Pei-Yu Wang, Jerrell Felim, Zue-Ling Kong
CM132	Erdosteine attenuates inflammation induced by monosodium urate crystals. 郭怡孜, 彭奕仁, 王誌謙 Yi-Tzu Kuo, Yi-Jen Peng, Chih-Chien Wang
CM133	Effect of nitro-oleic acid on inflammasome activation in human retinal pigment epithelial ARPE-19 cells 張祐誠 ¹ , 陳柏翰 ² , 林嘉偉 ¹ , 高英賢 ^{2*} Yo-Chen Chang ¹ , Po-Han Chen ² , Chia-Wei Lin ¹ , Ying-Hsien Kao ^{2*}
CM134	Characterization and improvement of IPEC-J2 cells cultured in porcine serum-based medium 江信毅 ¹ , 朱志成 ^{1,2,3,4} Hsin-I Chiang ¹ , Jyh-Cherng JU ^{1,2,3,4*}



編號	論文題目
CM135	Inhibitory effects of Litchi flowers extracts in Staphylococcus proliferation 翁麗秋, 楊宏基, 江明憲, 陳俊翰 * Li-Chiu Weng, Hung-Chi Yang, Ming-Hsien Chiang, Jiun-Han Chen*
CM136	The effect of dextranase from Aspergillus niger on Streptococcus sobrinus biofilm. 陳忠謀, 蔡同璋, 姚凱程, 張家睿, 薛昕琦, 郭玫君 Zhong Mou Chen, Tong Wei Cai, Kai Cheng Yao, Jia Rui Zhang, Xin Qi Xue, Mei-Chun Kuo
CM137	Investigation of ER stress-mediated responses induced by SARS-CoV-2 spike protein 葉才明, 黃溫雅 Trai-Ming Yeh, Wenya Huang
CM138	The Investigation Of Salvianolic Acid's Effects And Underlying Mechanisms On Human Gastritis. 陳逸芮, 賴永程, 邱群惠, 鄭靜宜 Yi-Rui Cnen, Yong-Cheng Lai, Chun-Hui Chiu, Ching-Yi Cheng
CM139	Evaluation Of The Anti-Inflammatory Effects Of Momordica Charantia L. Triterpenoids On Rat Renal Mesenchymal Cells 曾意晴, 賴永程, 邱群惠, 鄭靜宜 I-Ching Tseng, Yung-Cheng Lai, Chun-Hui Chiu, Ching-Yi Cheng
CM140	Assessing The Biological Activity Of Quercetin Derivatives On Human Keratinocytes Cells And Preventing Inflammatory Responses By Inhibiting The Nf κ b Signaling Pathway 王湘婷, 賴永程, 鄭靜宜 Hsiang-Ting Wang, Yung-Cheng Lai, Ching-Yi Cheng
CM141	Momordica charantia Sensitizes Cisplatin-Resistance and Suppresses the Migration of Breast Cancer Cells 郭威宗 ¹ , 張哲睿 ² , 徐雪瑩 ^{1,3*} Wei-Zong Kuo ¹ , Che-Jui Chang ² , Hsue-Yin Hsu ^{1,3*}
CM142	Hyaluronic acid nanoparticles for prevention of breast cancer. 林彥廷, 胡旃鈺, 劉澤英 Yan-Ting Lin, Chan-Yu Hu, Tse-Ying Liu
CM143	Anticancer Effects of Momordica charantia through Cell Cycle Arrest, Apoptosis Induction and Autophagy Modulation in breast cancer cells. 徐雪瑩 Hsue-Yin Hsu
CM144	The Effects of Water-soluble Danshen Extract on Cell Proliferation and Mitochondrial Activity in B16 Melanoma Cell 陳品勳 ¹ , 奚明德 ^{1,2} , 柯俊宏 ³ , 謝珮坊 ¹ , 楊堉麟 ¹ Ping-shin Chen ¹ , Ming-Der Shi ^{1,2} , Chun-Hung Ko ³ , Pei-Fang Hsieh ¹ , Yu-Lin Yang ¹



編號	論文題目
CM145	A baicalein derivative inhibits A β -induced depolarization and NMDA-induced calcium influx in cortical glutamatergic neurons. 吳嘉旋, 林炎壽 Chia-Hsuan Wu, Yen-shou Lin
CM146	A Novel Anthraquinone Derivative Inhibited the Proliferation and Metastasis of Prostate Cancer Cells Through the Mitochondria-Dependent Apoptosis 鄭筱蓉, 徐雪瑩 Siao-Rong Jheng, Hsue-Yin Hsu
CM147	Effect of Salvia miltiorrhiza on Mitochondrial Activity in B16 Melanoma Cells 林銘炫 ¹ , 奚明德 ^{1,2} , 柯俊宏 ³ , 謝珮坊 ¹ , 楊培麟 ^{1*} Ming-Hsuan Lin ¹ , Ming-Der Shi ^{1,2} , Chun-Hung Ko ³ , Pei-Fang Hsieh ¹ , Yu-Lin Yang ^{1*}
CM148	RP11-367G18.1 V2 enhances clear cell renal cell carcinoma progression via induction of epithelial-mesenchymal transition 彭佩華, 邵翊紘, 吳恆祥, 賴玠羽, 吳國瑞, 馮思中, 許凱文 Pei-Hua Peng ¹ , I-Hung Shao ^{1,2} , Heng-Hsiung Wu ^{3,4,5} , Joseph Chieh-Yu Lai ⁶ , Kou-Juey Wu ¹ , See-Tong Pang ^{1,2} , Kai-Wen Hsu ^{3,5,7}
CM149	Effect of Small Molecule Rigosertib on Proliferation and Apoptosis in Cisplatin-resistant and Paclitaxel-resistant Ovarian Cancer Cells 葛千榕, 黃惠美 Cian-Rong Ge, Huei-Mei Huang
CM150	EpCAM Inhibits PD-L1 Ubiquitylation through MAPK/ERK Signaling in Oral Cancers 李秉勳 ¹ , 王博奕 ² , 吳漢忠 ³ , 李志昭 ³ , 莊淨媛 ⁴ Bing-Syun Li ¹ , Bo-Yi Wang ² , Han-Chung Wu ³ , Chi-Chiu Lee ³ , Jing-Yuan Jhuang ⁴
CM151	LCC604, A Sesquiterpenoid Quinone Isolated from Marine Sponge Exerts Cytostatic and Anti-Angiogenesis Activity In Vitro and In Vivo 陳沛璇, 梁瑞庭, Mo Aqib Raza Khan, 廖志中, 蔡婉琪 Pei-Hsuan Chen, Rui-Ting Liang, Mo Aqib Raza Khan, Chih-Chuang Liaw, Wan-Chi Tsai
CM152	Establishment of 3D cancer tumor culture model with hyaluronic acid hydrogel 蘇吉歐, 安倫斯, 楊笙雅, 葉星彤, 余仲薇, 涂孟韓, 林秉賢, 劉麗芬 Joseph Sergio Kyler, Kamal Lawrence Andrew, Cyuan-Ya Yang, Hsing-Tung Yeh, Chung-Wei Yu, Meng-Han Tu, Bing-Sian Lin, Li-Feng Liu
CM153	Heat Shock Protein 90 Inhibitor 17-AAG Potentiate the Cytotoxic Effect of Erlotinib via Downregulation of Thymidine Phosphorylation Expression in Human Lung Squamous Carcinoma Cells. 張喬貞 Qiao-Zhen Chang
CM154	Mitochondrial Lon-PYCR1 axis promotes tumor fibrosis and metastasis via proline metabolic reprogramming in the extracellular matrix of tumor microenvironment 呂昱志 Yu-Zhi Lu



編號	論文題目
CM155	Synergistic effects of c-Met inhibitor in combination with MT-II against melanoma 吳其芳 ¹ , 戴明泓 ¹ Chi-Fang Wu ¹ , Ming-Hong Tai ¹
CM156	Development of Novel Lanthanide Therapeutics for Multimodal Imaging 許芝綺, 李柏昊, 劉澤英 [*] Chih-Chi Hsu, Bo-Hao Lee, Tse-Ying Liu [*]
CM157	Development of targeted therapy for urothelial carcinoma with trophoblastic differentiation 葉于瑄, 周楠華 Yu-Hsuan Yeh, Nan-Haw Chow
CM158	The role of EFS in the pathogenesis of colorectal cancer 周楠華, 李忠達, 朱建安 Nan-Haw Chow, Chung-Ta Lee
CM159	BRCA1 Gene Knockdown Affected the Migratory Ability of Human Ovarian Cancer SK-OV-3 Cells and Survival of Zebrafish Larvae after Xenotransplantation 王星惠 ¹ , 蔡雨潔 ¹ , 楊明泓 ¹ , 程媵雅 ¹ , 何穎宸 ¹ , 莊弘 ² , 黃尉東 ^{1*} Hsing-Hui Wang ¹ , Yu-Chieh Tsai ¹ , Ming-Hung Yang ¹ , Ying-Ya Cheng ¹ , Ying-Chen Ho ¹ , Hung Chuang ² and Wei-Tung Huang ^{1*}
CM160	Studies on the Viability of Human Ovarian Cancer SK-OV-3 and ES-2 Cells with BARD1 Gene Knockdown after Xenotransplantation into Zebrafish Larvae 楊明泓 ¹ , 王星惠 ¹ , 楊承憲 ¹ , 何穎宸 ¹ , 陳明 ^{2*} , 莊弘 ^{3*} , 黃尉東 ^{1*} Ming-Hung Yang ¹ , Hsing-Hui Wang ¹ , Cheng-Hsien Yang ¹ , Ying-Chen Ho ¹ , Ming Chen ² , Hung Chuang ^{3*} , Wei-Tung Huang ^{1*}
CM161	Analyses of Migratory Ability of BRCA1 Gene Inactivation of Human Ovarian Cancer ES-2 Cells and Survival of Zebrafish Larvae after Xenotransplantation 蔡雨潔 ¹ , 楊明泓 ¹ , 程媵雅 ¹ , 楊承憲 ¹ , 王星惠 ¹ , 莊弘 ² , 黃尉東 ^{1*} Yu-Chieh Tsai ¹ , Ming-Hung Yang ¹ , Ying-Ya Cheng ¹ , Cheng-Hsien Yang ¹ , Hsing-Hui Wang ¹ , Hung Chuang ² and Wei-Tung Huang ^{1*}
CM162	Effect of BRCA2 Gene Knockdown on the Metastasis of Human Ovarian Cancer ES-2 Cells and Subsequent Survival of Zebrafish Larvae after Xenotransplantation 程媵雅 ¹ , 何穎宸 ¹ , 王星惠 ¹ , 楊承憲 ¹ , 陳明 ^{2*} , 莊弘 ^{3*} , 黃尉東 ^{1*} Ying-Ya Cheng ¹ , Ying-Chen Ho ¹ , Hsing-Hui Wang ¹ , Cheng-Hsien Yang ¹ , Ming Chen ² , Hung Chuang ^{3*} , Wei-Tung Huang ^{1*}
CM163	The Role of EZH2 Mediates Chemokine CCL22/MDC Production in Head and Neck Squamous Cell Carcinomas 吳宣蓉, 余永倫 [*] Hsuan-Jung Wu, Yung-Luen Yu [*]
CM164	The Role of IFIT5 in the progression of Glioblastoma Multiforme 洪譽瑄, 賴韻如 Yu-Hsuan Hung, Yun-ju Lai



CB 中華民國臨床生化學會

編號	論文題目
CB001	Chronic insulin treatment promotes resistance to ionizing radiation by protecting breast cancer cells from DNA damage 薛涵禧, 蘇詠涵, 郭靜穎 Han-Xi Xue, Yong-Han Su, Ching-Ying Kuo
CB002	Early Growth Response 1 (EGR1) promotes metabolic adaptation in breast cancer cells under metabolic stress 雷善婷 ¹ , 吳宜臻 ¹ , 劉格均 ¹ , 郭靜穎 ^{1,2} Shan-Ting Lei ¹ , Yi-Zhen Wu ¹ , Ge-Jyun Liu ¹ , Ching-Ying Kuo ^{1,2}
CB003	Measurement of Escherichia coli DNA polymerase I Proofreading activity by in vivo assay 方羿凱, 張惠嵐, 莊詠筑, 方偉宏* Yi-Kai Fang, Hui-Lan Chang, Yung-Chu Chuang, Woei-Horng Fang*
CB004	Analysis of Insertion/deletion Error and Proofreading in Mononucleotide Repeats DNA Synthesis by MALDI-TOF Mass Spectrometry 徐岫珏, 張惠嵐, 周能安, 蘇剛毅, 方偉宏 Shen-Jyue Xu, Hui-Lan Chang, Neng-An Chou, Kang-Yi Su, Woei-horng Fang
CB005	Activation of TRPM8 Ameliorates Progression of Autosomal dominant Polycystic Kidney Disease Through Suppression of Tubular Apoptosis and Cyst Growth in Mice 蔡嘉慧, 方華章, 周康茹, 胡亮萱, 吳春靜, 黃阮芳草, 張瑋哲, 饒梓明 Chia-Hui Tsai, Hua-Chang Fang, Kang-Ju Chou, Liang-Shuan Hu, Chun-Ching Wu, Hoang Nguyen Phuong Thao, Wei-Zhe Zhang, Tzu-Ming Jao
CB006	Study of endonuclease V repair pathway by using MALDI-TOF mass spectrometry analysis 張惠嵐, 蘇剛毅, 林亮音, 方偉宏 Hui-Lan Chang, Kang-Yi Su, Liang-In Lin, Woei-horng Fang
CB007	The Investigation of the Tissue Metabolome of Renal Cell Carcinoma by Differential 12C-/13C-Isotope Dansylation Labeling and Liquid Chromatography/Mass Spectrometry 杜祥誠 ¹ , 謝雅如 ² , 陳建綸 ³ , 張英勛 ⁴ , 陳怡婷 ^{1,*} Hsiang-Cheng Tu ¹ , Ya-Ju Hsieh ² , Chien Lun Chen ³ , Ying Hsu Chang ⁴ , Yi-Ting Chen ^{1*}
CB008	The effect of fermented peel extracts of Citrus depressa in Alzheimer's disease model cells 鄭宇彤, 劉大維, 李慶國, 林詠峯 Yu-Tung Cheng, Ta-Wei Liu, Ching-Kuo Lee, Yung-Feng Lin
CB009	Pemetrexed induces resistance to erlotinib and gefitinib and promotes metastatic propensity via the SLUG-NF-kappa B-regulated loop 何俊德, 劉燦榮, 劉俊仁 Chun-Te Ho, Tsan-Zon Liu, Jun-Jen Liu



編號	論文題目
CB010	Impaired Immune Response and Barrier Function in GSPD-1-deficient <i>C. elegans</i> Infected with <i>Klebsiella pneumoniae</i> 張紘馨, 郭康巒, 蘇伯琦, 陳俊翰, 楊宏基 Hung-Hsin Chang, Hong Luen Kwok, Po-Chi Soo, Jiun-Han Chen, Hung-Chi Yang
CB011	Chemosensitization Effect of Seabuckthorn (<i>Hippophae rhamnoides</i> L.) Pulp Oil via Autophagy and Senescence in NSCLC Cells 劉俊仁 Jun-Jen Liu
CB012	Inhibition effect of Litchi seed extract on the tumor growth of colorectal cancer HT-29 cell xenograft 鄭啟軒, 陳斯榮, 鍾元強, 戴順泰, 賴銘淙, 陳瓏, 楊為舜, 黃久珍, 徐治平 Chi-Hsuan Cheng ¹ , Szu-Jung Chen ² , Yuan-Chiang Chung ³ , Shun-Tai Dai ⁴ , Ming-Tsung Lai ⁵ , Long Chen ⁴ , Wei-Shun Yang ⁶ , Chiu-Chen Huang ⁷ , Chih-Ping Hsu ^{4,8}
CB013	Establishment of Pediatric Reference Intervals for Urinary Creatine and Guanidinoacetate by Liquid Chromatography-Tandem Mass Spectrometry 林韋伶 ^{1,3} , 陳唯儀 ¹ , 陳俐文 ² , 吳靜玟 ³ , 謝淑珠 ^{1,3*} Wei-Ling Lin ^{1,3} , Wei-Yi Chen ¹ , Li-Wen Chen ² , Ching-Wen Wu ³ , Shu-Chu Shiesh ^{1,3*}
CB014	Evaluation of falsely but shortly low estradiol concentrations in heparinized plasma of women under ovulation induction when measured by a sensitive immunoassay on a stat basis 蕭玉鑫, 李德容, 吳妮蓁, 林正修 Yu-Hsin Hsiao, De-Rong Li, Wu Ni-Chen, Jen-Shiou Lin
CB015	Reducing the non-compliance rate of reagent registration by using a QCC method 邱昱安, 賴南彰, 郭安靜 Yu-An Chiu, Nan-Chang Lai, An-Jing Kuo
CB016	Study on Healthcare-Associated Infections of <i>Klebsiella pneumoniae</i> in the Intensive Care Units of Medical Centers from 2016 to 2020 游璧菁, 楊松昇, 辛和宗, 余嘉鵬 Pi-Ching Yu, Sung-Sen Yang, Ho-Tsung Hsin, Chia-Peng Yu
CB017	Study on Healthcare-Associated Infections of <i>Acinetobacter baumannii</i> in the Intensive Care units of Medical Centers from 2016 to 2020 游璧菁, 楊松昇, 辛和宗, 余嘉鵬 Pi-Ching Yu, Sung-Sen Yang, Ho-Tsung Hsin, Chia-Peng Yu
CB018	Epidemiological Characteristics of Zika Virus Infections Imported to Taiwan during the period 2016 and 2022 游璧菁, 楊松昇, 辛和宗, 余嘉鵬 Pi-Ching Yu, Sung-Sen Yang, Ho-Tsung Hsin, Chia-Peng Yu
CB019	Epidemiological features of <i>Mycobacterium leprae</i> Infections in Taiwan during the period 2017 and 2022 游璧菁, 楊松昇, 辛和宗, 余嘉鵬 Pi-Ching Yu, Sung-Sen Yang, Ho-Tsung Hsin, Chia-Peng Yu



編號	論文題目
CB020	Epidemiology of Invasive Haemophilus influenzae Type b Infection in Taiwan from 2017 to 2022 游璧菁, 楊松昇, 辛和宗, 余嘉鵬 Pi-Ching Yu, Sung-Sen Yang, Ho-Tsung Hsin, Chia-Peng Yu
CB021	The Necessary of Using Abbott Alinity m System to Detect Four Sexually Transmitted Pathogens in One Time 黃士容, 陳之葉, 賴明龍 Shih-Rong Huang, Chih-Yeh Chen, Ming-Long Lai
CB022	Comparison of the effects of four eGFR formulas on chronic kidney disease staging 楊晴媛*, 王碧娥, 林佳霓 Ching-Yuan Yang*, Pi-O Wang, Chia-Ni Lin
CB023	Application of Smart Healthcare and Push Notifications to Promote Efficacy and Satisfaction of Health Education 詹嘉榮 ¹ , 簡慈儀 ¹ , 陳瑞川 ² , 綦品婕 ¹ , 張嘉昇 ¹ , 王守安 ³ , 吳寶源 ³ , 鐘明義 ² , 顏小妮 ^{2,*} , 鄭祖耀 ^{1,2} Jia-Rong Jhan ¹ , Tzu-I Chien ¹ , Ruen-Chuan Chen ² , Pin-Chieh Chi ¹ , Chia-Sheng Chang ¹ , Shou-An Wang ³ , Pao-Yuan Wu ³ , Ming-Yi Chung ² , Shiao-Ni Yan ^{2,*} , Tsu-Yao Cheng ^{1,2}
CB024	Targeted Sequencing Reveals Somatic Mutations in Cancers 邱延慧, 余姿穎, 賴明龍 Yen-Hui Chiu, Chih-Ying Yu, Min-Long Lai
CB025	Using the Alinity m automatic intelligent molecular testing platform to improve the ability and molecular diagnosis of sexual transmitted infections 陳之葉, 黃士容, 李馨宇, 高竹鋒, 張家瑜, 賴明龍 Chih-Yeh Chen, Shih-Rong Huang, Hsin-Yu Li, Chu-Feng Kao, Chia-Yu Chang, Ming-Long Lai
CB026	Improve Emergency Turnaround Time by Building an Intelligent Laboratory System 王碧娥, 陳俊瑋, 藍珮綺, 楊晴媛, 張甯睿, 施美娟, 林佳霓 Pi-O Wang, Chun-Wei Chen, Pei-Qi Lan, Ching-Yuan Yang, Ching-Yuan Yang, Shu-Yu Peng, Mei-Chuan Shih, Chia-Ni Lin
CB027	To Evaluate the Difference between the g-FOBT and i-FOBT 黃奕齊, 賴南彰, 郭安靜, 溫澄皓 Yi-Chi Huang, Nan-Chang Lai, An-Jing Kuo, Ying-HaoWen
CB028	Establishment of Novel Recombinant SARS-CoV-2 Nucleocapsid Protein Expression Platform for Potential COVID-19 Serological Analyses 陳婉瑄 ¹ , 林碧珊 ² , 徐晟淳 ¹ , 宋榮松 ³ , 呂世正 ^{1,2,4,*} Wan-Syuan Chen ¹ , Bi-Shan Lin ² , Sheng-Chun Hsu ¹ , Jung-Sung Sung ³ , Shr-Jeng Jim Leu ^{1,2,4,*}
CB029	Establishment of Non-Invasive Saliva Specimens for Universal Newborn Screening for Congenital Cytomegalovirus Infection in Taiwan 黃司權, 曹珮真, 黃偉垣, 蕭廣仁, 賴明龍 Szu-Chuan Huang, Pei-Chen Tsao, Wei-Yuan Huang, Kwang-Jen Hsiao, Min-Long Lai



編號	論文題目
CB030	Quantitative Analysis of 25-OH Vitamin D2/D3 in Human Serum by utilizing Waters UPLC I-Class & Xevo TQ-XS MS/MS 蘇柏安, 楊景翔, 黃司權, 賴明龍 * Po-An Su, Ching-Hsiang Yang, Szu-Chuan Huang, Min-Long Lai*
CB031	Assessment of Bilirubin Interference in Serum Creatinine Measurement 陳姿諭, 林韋伶, 吳靜玟, 謝淑珠 Tzu-Yu Chen, Wei-Ling Lin, Ching-Wen Wu, Shu-Chu Shiesh
CB032	NON-ENZYMATIC AND ELECTRODELESS DETECTION OF DIRECT BILIRUBIN USING METAL ENHANCED FLUORESCENCE EFFECT 徐慧貞 ^{1,2*} , 李承益 ³ , 張健忠 ^{4*} , 王國禎 ^{5*} Sandy Huey-Jen Hsu ^{1,2*} , Cheng-Yi Li ³ , Cheng-Chung Chang ^{4*} , Gou-Jen Wang ^{5*}

TX 台灣毒物學學會

編號	論文題目
TX001	A Novel Angelicin Derivative BPR2P0001S0 Inhibits Human Squamous Cell Carcinoma by Reprogramming Cancer Metabolism 李立璿 ¹ , 吳承祐 ¹ , 莊永仁 ² , 江士昇 ³ , 葉燈光 ¹ , 黃致翔 ¹ , 湯雅筑 ¹ , 張俊彥 ⁴ , 謝興邦 ¹ , 張壯榮 ⁵ , 郭靜娟 ^{*1} Li-Hsuan Li ¹ , Cheng-Yu Wu ¹ , Yung-Jen Chuang ² , Shih-Sheng Jiang ³ , Teng-Kuang Yeh ¹ , Chih-Hsiang Huang ¹ , Ya-Chu Tang ¹ , Jang-Yang Chang ³ , Hsing-Pang Hsieh ¹ , Chuang-Rung Chang ⁴ , Ching-Chuan Kuo ^{*1}
TX002	A Screening Method for Pesticide Activating Metabolism Genes in Human Reconstructed Epidermis by Transcriptomic Analysis 李悅怡, 楊予霏, 林良怡 Yueh-Yi Lee, Yu-Pei Yang, Liang-Yi Lin
TX003	Naringin Improve Cutaneous Wound Healing via Regulating CMPK2 Expression 連映璇, 李宥萱 Ying-Hsuan Lien, Yu-Hsuan Lee
TX004	A Novel Urinary Biomarker from Synthesis of Illicit Heroin to Confirm Its Use 陳威如, 陳珮珊 Wei-Ru Chen, Pai-Shan Chen
TX005	Cypermethrin Might Induced Epilepsy in Multi-Generation Reproductive Toxicity in Rats 呂水淵 ^{1*} , 廖靖淳 ¹ , 陳敏貞 ¹ , 陳婉心 ¹ , 謝玉貞 ¹ , 蔡躉任 ¹ , 王建彬 ¹ Shui-Yuan Lu ^{1*} , Jing-Chun Liao ¹ , Min-Chen Chen ¹ , Wan-Hsin Chen ¹ , Yu-Chen Hsieh ¹ , Wei-Ren Tsai ¹ , Jen-Bin Wang ¹



編號	論文題目
TX006	Carbendazim Induced Epilepsy in Multi-Generation Reproductive Toxicity in Rats 呂水淵 ^{1*} , 廖婧淳 ¹ , 陳敏貞 ¹ , 陳婉心 ¹ , 謝玉貞 ¹ , 蔡韙任 ¹ , 王建彬 ¹ Shui-Yuan Lu ^{1*} , Jing-Chun Liao ¹ , Min-Chen Chen ¹ , Wan-Hsin Chen ¹ , Yu-Chen Hsieh ¹ , Wei-Ren Tsai ¹ , Jen-Bin Wang ¹
TX007	Androgen Receptor Plays a Vital Role in Carbendazim-Induced Epilepsy Incidence in Multi-Generation Reproductive Toxicity in Rats 呂水淵 ^{1*} , 廖婧淳 ¹ , 陳敏貞 ¹ , 陳婉心 ¹ , 謝玉貞 ¹ , 蔡韙任 ¹ , 王建彬 ¹ Shui-Yuan Lu ^{1*} , Jing-Chun Liao ¹ , Min-Chen Chen ¹ , Wan-Hsin Chen ¹ , Yu-Chen Hsieh ¹ , Wei-Ren Tsai ¹ , Jen-Bin Wang ¹
TX008	Flutamide Block the Epilepsy Incidence Induced by Carbendazim in Multi-Generation Reproductive Toxicity in Rats 呂水淵 ^{1*} , 廖婧淳 ¹ , 陳敏貞 ¹ , 陳婉心 ¹ , 謝玉貞 ¹ , 蔡韙任 ¹ , 王建彬 ¹ Shui-Yuan Lu ^{1*} , Jing-Chun Liao ¹ , Min-Chen Chen ¹ , Wan-Hsin Chen ¹ , Yu-Chen Hsieh ¹ , Wei-Ren Tsai ¹ , Jen-Bin Wang ¹
TX009	Implementation of OECD-Validated Defined Approaches (DAs) and Related Non-Animal Methods for Skin Sensitisation Assessment (OECD Guideline 497) 鄭獻仁 ^{1*} , 徐如欣 ¹ , 許菁芳 ¹ , 高增婷 ² , 王家琪 ³ , 林嬪嬪 ^{1*} Hsien-Jen Cheng ^{1*} , Ju-Hsin Hsu ¹ , Jin-Fang Hsu ¹ , Tseng-Ting Kao ² , Chia-Chi Wang ³ , and Pinpin Lin ^{1*}
TX010	Glyphosate Might Induced Epilepsy in Multi-Generation Reproductive Toxicity in Rats 呂水淵 ^{1*} , 廖婧淳 ¹ , 陳敏貞 ¹ , 陳婉心 ¹ , 謝玉貞 ¹ , 蔡韙任 ¹ , 王建彬 ¹ Shui-Yuan Lu ^{1*} , Jing-Chun Liao ¹ , Min-Chen Chen ¹ , Wan-Hsin Chen ¹ , Yu-Chen Hsieh ¹ , Wei-Ren Tsai ¹ , Jen-Bin Wang ¹
TX011	Triazole Penconazole, Propiconazole, Tebuconazole and Triadimefon Might Induced Epilepsy in Multi-Generation Reproductive Toxicity in Rats 呂水淵 ^{1*} , 廖婧淳 ¹ , 陳敏貞 ¹ , 陳婉心 ¹ , 謝玉貞 ¹ , 蔡韙任 ¹ , 王建彬 ¹ Shui-Yuan Lu ^{1*} , Jing-Chun Liao ¹ , Min-Chen Chen ¹ , Wan-Hsin Chen ¹ , Yu-Chen Hsieh ¹ , Wei-Ren Tsai ¹ , Jen-Bin Wang ¹
TX012	Establish an Alternative Test Method Platform for Pesticides Eye Irritation with OECD Test Guideline 491 陳筱青, 洪佳雯, 林惠如, 呂水淵 Hsiao-Ching Chen, Chia -Wen Hung, Hui-Ju Lin, Shui-Yuan Lu
TX013	Dermal Absorption Constants Investigation of Taiwan Pesticide Hexaconazole Products 李悅怡, 林良怡, 王凱平, 洪舒宜 Yueh-Yi Lee, Liang-Yi Lin, Kai-Ping Wang, Shu-Yi Hung
TX014	The role of acrolein in insulin resistance using the cellular models 卓嘉瑜, 郭晉璋, 王湘翠 Jia-Yu Jhuo, Chin-Wei Kuo, Hsiang-Tsui Wang



編號	論文題目
TX015	Phototoxicity of Emodin: DNA Damage and Mitochondrial Dysfunction as a Consequence of ROS Production 曾子瑜, 鄭沛清, 呂佳陵, 簡文琪, 江秀梅 Tzy-Yu Tseng, Pei-Ching Cheng, Jia-Ling Lyu, Wen-Chi Chien, Hsiu-Mei Chiang
TX016	Using the GHS additivity formula of data bridging method for predicting acute systemic toxicity of pesticide formulations 廖俊麟 ^{1*} , 張敬宜 ¹ , 陳筱青 ¹ , 賴彥明 ¹ , 簡肇均 ¹ , 羅彥鈞 ¹ , 李懿庭 ¹ Chun-Lin Liao ^{1*} , Jin-Yi Chang ¹ , Hsiao-Ching Chen ¹ , Yen-Ming Lai ¹ , Chao-Chun Chien ¹ , Yen-Chun Lo ¹ , Yi-Ting Li ¹
TX017	Assessment of predictivity between the in vitro reconstructed human epidermis (RhE) testing and in vivo studies for assessing skin irritation associated with pesticide formulations 廖俊麟 ^{1*} , 羅彥鈞 ¹ , 李懿庭 ¹ Chun-Lin Liao ^{1*} , Yen-Chun Lo ¹ , Yi-Ting Li ¹
TX018	Potential Anti-cancer Therapy in Non-Small Cell Lung Cancer with Traditional Chinese Medicines Morusin and Cisplatin 林欽鴻, 曾嘉儀, 王志軒, 吳龍源, 招名威 Chin-Hung Lin, Chia-Yi Tseng, Jih-Syuan Wang, Long-Yuan Wu, Ming-Wei Chao
TX019	Forthputting Chlorella Peptide and Polysaccharide to Develop a Novel High-nutrition and Functional Healthcare Raw Materials for Diabetic Nephropathy 劉一謙 ¹ , 江承諺 ¹ , 褚俊傑 ^{1*} Yi-Chien Liu ¹ , Cheng-Yan Jiang ¹ , Jiunn-Jye Chuu ^{1*}
TX020	Cisplatin-Loaded Nanomedicine Enhances Radiosensitivity by Inducing Ferroptosis And Autophagy Dysfunction via Impairment of Lysosomes in Triple-Negative Breast Cancer 陳家怡, 葉雅玲, 王應然 Chia-Yi Chen, Ya-Ling Yeh, Ying-Jan Wang
TX021	The Role of ATM Inhibition in the Expressions of Interferon-Stimulated Genes: Implications for Immune Checkpoint Blockade Therapy 林常申, 黃麒涵, 許俊凱, 黃昭菱 Chang-Shen Lin, Chi-Han Huang, Jun-Kai Xu, Jau-Ling Huang
TX022	The Role and Regulatory Mechanisms of Mast Cells in Head and Neck Cancer Cells 許洛慈 ^{1*} , 姚肇盈 ¹ , 江士昇 ² , 張書銘 ² , 黃嘯谷 ³ , 劉柯俊 ² , 張俊彥 ⁴ , 周裕珽 ⁵ , 郭靜娟 ^{1*} Luo-Cih Syu ^{1*} , Jau-Ying Yao ¹ , Shih-Sheng Jiang ² , Jeffrey Shu-Ming Chang ² , Shau-Ku Huang ³ , Ko-Jiunn Liu ² , Jang-Yang Chang ⁴ , Yu-Ting Chou ⁵ , Ching-Chuan Kuo ^{1*}
TX023	Analysis of the Abasic Sites in Leukocytes Derived from Breast Cancer Patients with Five Year Postoperative Treatment without Recurrence (5-year survivors) in Taiwan 蔡家鈴, 吳睿芳, 林喆, 馮啓彥, 蔡裕君, 黃聖閔, 章程皓, 徐麒, 丁誠達, 陳達人, 林伯雄 Jia-Lin Tsai, Jui Fang Wu, Che Lin, Chi-Yen Feng, Gilang Putra Bahari, Sheng-Min Huang, Cheng-Hao Wei, Qi Xu, Thanh Dat Dinh, Dar-Ren Chen, Po-Hsiung Lin



編號	論文題目
TX024	Analysis of estrogen quinone-derived hemoglobin adducts and Abasic Sites in Breast Cancer Patients 李安妮, 楊建澤, 蔡裕君, 宋智翔, 陳達人, 林喆, 謝為忠, 林伯雄 An-Ni Li, Chien-Tse Yang, Gilang Putra Bahari, Zhi-Xiang Song, Dar-Ren Chen, Che Lin, Wei-Chung Hsieh, Po-Hsiung Lin
TX025	HMGB1 involved in DCLK1-regulated Hippo signaling pathway on the senescence of type 2 alveolar epithelial cells in acute respiratory distress syndrome 徐子, 莊校奇 Tzu-Chun Hsu, Hsiao-Chi Chuang
TX026	Determination of Urinary Organic Acid for Rare Inherited Metabolic Disease Patient Using Solid Phase Extraction and Gas Chromatography-Mass Spectrometry 翟永誠 ¹ , 李妮鍾 ² , 劉沂欣 ³ , 陳珮珊 ^{1*} Yung-Cheng Jair ¹ , Ni-Chung Lee ² , Yi-Hsin Liu ³ , Pai-Shan Chen ¹
TX027	The involvement of mitophagy under high glucose reduced keratinocyte migration and delay wound healing 戴珮妤, 黃襄川, 黃志揚, 郭薇雯 Pei-Yu Tai, Shang-Chuan Ng, Chih-Yang Huang, Wei-Wan Kuo
TX028	The Effect of Advanced Glycation End-Products (AGEs) on Gut Tract 洪偉倫, 廖伯霖, 康照洲 Wei-Lun Hung, Po-Lin Liao, Jaw-Jou Kang
TX029	Utilization of integrated approaches to testing and assessment (IATA): the endocrine-disrupting activity and reproductive toxicity of the food processing contaminants 3-MCPD and glycidol 陳容甄 Rong-Jane Chen
TX030	Polystyrene microplastics caused liver cell toxicity through pannexin 1 cell membrane channel protein-mediated NLRP3 inflammasome activation 徐瑋擎, 李宥萱 Wei-Ching Hsu, Yu-Hsuan Lee
TX031	Indoxyl sulfate induces renal tubular cell senescence by impairing autophagy though the production of reactive oxygen species 蔡瓊葶, 劉興華 Li-Ting Tsai, Shing-Hwa Liu
TX032	Using New Approach Methodologies (NAMs) to Establish Nonpolar Narcosis Substance in Integrated Testing strategy (ITS) for Ecotoxicity 郭芮均, 王應然 Jui-Chun Kuo, Ying-Jan Wang
TX033	Establishment of a high-throughput nanotoxicity testing model using autophagy in zebrafish 盧靜瑜, 王應然 Jing-Yu Lu, Ying-Jan Wang



編號	論文題目
TX034	Deletion of KLF10 Gene Aggravates Nonalcoholic Fatty Liver Disease in High Sucrose and High Cholesterol Diet and Liver Fibrosis is Reversed by the Natural Products 陳容甄 Rong-Jane Chen
TX035	Assessment of Potential Liver and Renal Toxicity of Nanoparticles as Food Substances using Alternative Test Methods 陳容甄 Rong-Jane Chen
TX036	Studies on Genetic Identification and Toxicity for Xanthid Crabs in Northern Taiwan 巫胤承 ¹ , 陳柏璋 ² , 何平合 ³ , 陳泰源 ¹ , 黃登福 ^{1*} Yin-Cheng Wu ¹ , Po-Wei Chen ^{1,2} , Ping-Ho Ho ³ , Tai-Yuan Chen ¹ , Deng-Fwu Hwang ^{1*}
TX037	ZnONPs combined with UVR-induced cellular senescence through the interplay among mitochondria, genotoxicity and exosome-autophagy axis 王應然 [*] Ying-Jan Wang [*]
TX038	Comparing the abuse potential of cathinones by conditioned place preference in zebrafish 郭崇涵, 詹銘煥, 陳慧誠 Tsung-Han Kuo, Ming-Huan Chan, Hwei-Hsien Chen
TX039	In Vitro and in Vivo Lung-Protective Potential of Quercetin-3-Glucuronide Through Dual Activation of Nuclear Factor-Erythroid 2 Related Factor 2 and Autophagy 余佩蓉 ¹ , 康家維 ² , 林映汾 ² , 陳湘榕 ² , 陳璟賢 ^{1*} , 林慧萱 ^{2*} Pei-Rong Yu ¹ , Chia-Wei Kang ² , Ying-Fen Lin ² , Hsiang-Jung Chen ² , Jing-Hsien Chen ^{1*} , Hui-Hsuan Lin ^{2*}
TX040	Isovitexin Attenuates Ferroptosis and Apoptosis Against Lipopolysaccharide-Induced Heart Injury in C57BL/6 Mice by Regulating the Nrf2/HO-1 Signaling Pathway 楊靜宜, 曾巧云, 徐成金, 孫沛翎, 林慧萱, 陳璟賢 Jing-Yi Yang, Chiao-Yun Tseng, Cheng-Chin Hsu, Pei-Ling Sun, Hui-Hsuan Lin, Jing-Hsien Chen
TX041	BPR1J481, a novel multi-targeted kinase inhibitor, exerts potent antitumor effects in patient-derived xenograft models of colorectal cancer by targeting SRC, VEGFR2, and PDGFR β 湯雅筑 ¹ , 黃致翔 ¹ , 林麗梅 ¹ , 王意心 ¹ , 黃紫婷 ¹ , 洪怡玫 ² , 劉柯俊 ² , 張俊彥 ³ , 蔣維棠 ¹ , 歐金俊 ⁴ , 郭靜娟 ^{1*} Ya-Chu Tang ¹ , Chih-Hsiang Huang ¹ , Li-Mei Lin ¹ , Yi-Hsin Wang ¹ , Zih-Ting Huang ¹ , Yi-Mei Hung ² , Ko-Jiunn Liu ² , Jang-Yang Chang ³ , Weir-Torn Jiaang ¹ , Jing-Jim Ou ⁴ , Ching-Chuan Kuo ^{1*}
TX042	Zero-valent iron nanoparticles suppresses angiogenesis via promoting the secretion of thrombospondin-1 in tumor microenvironment 石馥瑄 ^{1,3} , 謝達斌 ^{1,3,4,5,6} , 王憶卿 ^{1,2,*} Fu-Hsuan Shih ^{1,3} , Dar-Bin Shieh ^{1,3,4,5,6} , and Yi-Ching Wang ^{1,2*}



編號	論文題目
TX043	The Effect of Desmodium Caudatum Extract on Uric Acid-Induced Renal Fibrosis in NRK-52E Cells 張峻銓, 蔡佳霖, 徐成金, 曾湘婷, 林慧萱, 陳璟賢 Jun-Quan Zhang, Chia-Lin Tsai, Cheng-Chin Hsu, Siang-Ting Zeng, Hui-Hsuan Lin, Jing-Hsien Chen
TX044	Photocytotoxic Effects of Synthetic Cycloberberine Derivatives on Human Colorectal Cancer Cells 蘇敬茹, 許雅嵐, 黃丞佑, 吳進益* Jing-Ru Su, Ya-Lan Syu, Cheng-You Haung and Jin-Yi Wu*
TX045	Exploiting Honokiol-induced Retinoid X receptor beta (RXRB) activation inhibits the growth and metastasis of gastric cancer by suppressing the ZEB1 and E-cadherin pathways 黃振庭 ¹ , 許美鈴 ^{1*} Zhen-Ting Huang ¹ , Meei-Ling Sheu ^{1*}
TX046	Role of Cytoskeleton in Regulating the Organoid Formation of Human Colorectal Cancer 黃郁晴 ¹ , 李依庭 ¹ , 趙瑞益 ^{1,2,3} Yu-Ching Huang ¹ , Yi-Ting Lee ¹ , Jui-I Chao ^{1,2,3}
TX047	Targeting B-cell Lymphoma 6 Blocked Epithelial Mesenchymal Plasticity and Metastatic Dissemination in Gastric Cancer 周健朗, 許美鈴 Kin-Long Chou, Meei-Ling Sheu
TX048	Paeoniflorin from The Traditional Chinese Medicine Paeoniae Alba, Induces Endoplasmic Reticulum Stress and Senescence in Melanoma via Calpain1/ ERK5/ P21 許美玲, 賴德偉 Meei-Ling Sheu, DeWei Lai
TX049	Hippo signaling pathway regulated branching morphogenesis of fetal lung under hypoxia 廖紫安 ¹ , 莊校奇 ^{1*} Zih-An Liao ¹ , Hsiao-Chi Chuang ^{1*}
TX050	ITIH4 involved in Hippo signalling pathway-regulated apoptosis on type 2 alveolar epithelial cells of acute respiratory distress syndrome 施育暄 ¹ , 莊校奇 ^{1*} Yu-Xuan Shih ¹ , Hsiao-Chi Chuang ^{1*}



PY 中國生理學會

編號	論文題目
PY001	Bacteriophage treatment targeting gut microbiome to modulate colon cancer development in mice 胡文絜, 李憶萱, 魏淑鈺, 倪衍玄, 王錦堂, 余佳慧 Wen-Jie Hu, Yi-Hsuan Li, Su-Chen Wei, Yen-Hsuan Ni, Jing-Town Wang and Linda Chia-Hui Yu
PY002	Neuronal inputs to the suprachiasmatic nucleus that regulate circadian behavioral rhythms in mice 蔡長廷, 洪啟榮, 小野大輔 Chang-Ting Tsai, Chi-Jung Hung, Daisuke Ono
PY003	Palmitoylation of COUP-TFII Promotes the Development of Enzalutamide Resistance in Prostate Cancer 張子凡, 林世杰 Tzu-Fan Chang ¹ , Shih-Chieh Lin ^{1,2*}
PY004	Overexpression of NPFFR2 in Hypothalamic ARC Augments the High-Fat High-Sucrose Diet-Triggered Metabolic Symptoms. 糠宛軒 ¹ , 吳冠宣 ² , 陳景宗 ³ , 林雅婷 ^{4*} Wan-Syuan Kang ¹ , Kuan-Hsuan Wu ² , Jin-Chung Chen ³ , Ya-Tin Lin ^{4*}
PY005	Importance of Brown adipose tissue C-C chemokine receptor type 5(CCR5)-mediated signaling in UCP-1-independent adaptive thermogenesis mice under cold acclimation 黃向陽, 詹沛祺, 農君怡, 謝博軒 Hsiang-Yang Huang, Pei-Chi Chan, Jiun-Yi Nong, Po-Shiuan Hsieh
PY006	Fructose protects against hypoxia-induced necroptosis in human colorectal cancer cells 黃湘涵, 黃菁英 Xiang-Han Huang, Ching-Ying Huang
PY007	Higher Myeloid-Derived Suppressor Cell Counts and Lower CCR5 Expression Seem to Boost the Development of Acute Graft-Versus-Host Disease 楊博元, 黃蓓文, 林庭安, 張原翊 Bo-Yuan Yang, Huang Qian-Wen, Ting-An Lin, Yuan-I Chang
PY008	Skin-Derived Mesenchymal Stem Cells for Treating Parkinson's Disease 張育緝 ¹ , 李佩芬 ² , 顏育達 ^{3*} , 許晉銓 ^{2*} Yu-Chi Chang ¹ , Pei-Fen Lee ² , Yu-Ta Yen ^{3*} , Jim Jinn-Chyuan Sheu ^{2*}
PY009	The Tight Junction Protein ZO-1 Coordinates Cytoskeletal Binding Proteins and YBX3 to Enable Efficient Mitotic Spindle Orientation 張映捷 ¹ , 黃柏雅 ¹ , 郭瑋庭 ^{1,2} Ying-Chieh Chang ¹ , Po-Ya Huang ¹ , Wei-Ting Kuo ^{1,2}



編號	論文題目
PY010	Astrocytic FKBP5 deletion Attenuates Kainic acid -Induced Seizure and Astrogliosis in Mice 康毓蘋 ¹ , 周家甄 ¹ , 甘育菱 ¹ , 黃昱傑 ¹ , 洪家琪 ¹ , 許珮蓓 ¹ , 李怡萱 ^{1,2*} Yu-Ping Kang ¹ , Jia-Zhen Zhou ¹ , Yu-Ling Gan ¹ , Yu-Jie Huang ¹ , Chia-Chi Hung ¹ , Pei-Chien Hsu ¹ , Yi-Hsuan Lee ^{1,2*}
PY011	A dual ligand binding site model of the aryl hydrocarbon receptor in the lipopolysaccharide-stimulated astrocytes 李協庭 ¹ , 黃昱傑 ¹ , 洪家琪 ¹ , 林君樺 ³ , 周家丞 ⁴ , 李怡萱 ^{1,2*} Xie-Ting Lee ¹ , Yu-Jie Huang ¹ , Chia-Chi Hung ^{1,2} , Chun-Hua Lin ² , Chia-Cheng Chou ³ , Yi-Hsuan Lee ^{1*}
PY012	Investigating the therapeutic effects of minocycline on the post-traumatic stress disorder-related fear memory abnormalities 陳冠妤, 林真誠, 劉正哲, 劉亞平 Kuan-Yu Chen, Chen-Cheng Lin, Cheng-Che Liu, Yia-Ping Liu
PY013	Betaine attenuated CDAHFD Diet-induced MAFLD by enhancing gut barrier function and modulating intrahepatic inflammation and immunity via NLRP3/mTOR signaling pathway. 王芷琳, 古杰倫, 郭賀喻, 朱宸韻, 林咏霓, 許家柔, 吳莉玲 Chih-Lin Wang, Jie-Lun Ku, He-Yu Kuo, Chen-Jie Zhu, Yung-Ni Lin, Jia-Rou Hsu and Li-Ling Wu
PY014	A Role of Serotonin Receptor Subtype 7 for Brain-derived Neurotrophic Factor Upregulation and Intestine Hyperalgesia 林雨萱, 李姿儀, 林俐妤, 余佳慧 Yu-Hsuan Lin, Tzu-Yi Lee, Li-Yu Lin, and Linda Chia-Hui Yu
PY015	The Role of Infralimbic Cortex to Lateral Habenula Glutamatergic Projection During METH Extinction of a Conditioned Place Preference Mice Model 張旭昇, 陳景宗 Hsu-Sheng Chang, Jin-Chung Chen
PY016	Commensal Gut Microbe Modulates Stress-Induced Gut Motility and Colonic Tryptophan Metabolism 蔡于宣 ¹ , 吳偉立 ^{1,2*} Yu-Hsuan Tsai ¹ , Wei-Li Wu ^{1,2*}
PY017	Acupoint Catgut Embedding Reduces Mice Chronic Pain through Diminution of TRPV1 and Related Molecules in the Mice Brain 賴柏志, 林以文 Po-Chih Lai, Yi-Wen Lin
PY018	Characterization of Intracellular Organelle Calcium Signaling in C1GALT1 Knock-down Breast Cancer Cells 林昱辰 ¹ , 林倩如 ¹ , 柏慶玟 ¹ , 林能裕 ² , 陳政彰 ^{1,3*} Jackson Lin ¹ , Alice Lin ¹ , Ching-Wen Po ¹ , Neng-Yu Lin ² , Cheng-Chang Chen ^{1,3*}



編號	論文題目
PY019	Blue light exposure collapses the inner blood-retinal barrier by accelerating endothelial claudin-5 degradation through the disturbance of Gz protein and the activation of ADAM17. 溫宏諾 ¹ , 詹燕茹 ^{1,2} , 楊宗珉 ^{1,2} , 蔡季濠 ³ , 康熙洲 ⁴ , 蕭哲志 ^{5,6} , 鄭幼文 ^{2*} , 李青濤 ^{1,6*} Wang-Nok Wan ¹ , Yen-Ju Chan ^{1,2} , Tsung-Min Yang ^{1,2} , Chi-Hao Tsai ³ , Jaw-Jou Kang ⁴ , George Hsiao ^{5,6} , Yu-Wen Cheng ^{2*} , Ching-Hao Li ^{1,6*}
PY020	Impairment of Zn ²⁺ Modulation in Glycine Receptors Associated with Synaptic Expression of Glycine Receptors and GABAA Receptors Triggers Hyperekplexia-like Mice 陳莞茜, 許芯瑜, 鄧蕙賢, 陳怡如, 吳東川 Wan-Cian Chen, Hsin-Yu Hsu, Yi-Hsien Deng, Yi-Ru Chen, Dong-Chuan Wu
PY021	Bisphenol A Impairs Microglial Neuroimmune Activity by Activating the NRF2/Keap1/HO-1 Axis 黃郁臻, 王志煜 Yu-Zhen Huang and Jiz-Yuh Wang
PY022	Ketamine metabolite (2R,6R)-hydroxynorketamine regulates fear memory through targeting the basolateral amygdala 徐媛媛 ¹ , 於振飛 ¹ , 陳思 ² , 李振龍 ³ , 龍錫婷 ¹ , 陳孟旭 ¹ , 李朝雄 ^{4,5} , 彭賢祐 ⁴ , 林則彬 ^{6,7,8} , 謝明君 ⁴ , 賴政遠 ⁹ , 周迪倫 ^{4,10*} Yuanyuan Xu ¹ , Zhenfei Yu ¹ , Si Chen ² , Zhenlong Li ³ , Xiting Long ¹ , Mengxu Chen ¹ , Chau-Shoun Lee ^{4,5} , Hsien-Yu Peng ⁴ , Tzer-Bin Lin ^{6,7,8} , Ming-Chun Hsieh ⁴ , Cheng-Yuan Lai ⁹ , Dylan Chou ^{4,10*}
PY023	Does D2 receptor antagonist haloperidol affect morphine's paradoxical effect in conditioned taste aversion and conditioned place preference learning ? 劉人瑄, 蔡羽柔, 黃智偉 Jen-Shiuan Liu, Yu Rou Cai, and Andrew Chih Wei Huang*
PY024	Investigations on the possible modification of mirogabalin and GV58, two known regulators of Cav channels, on voltage-gated sodium current 余孟晟, 吳勝男 Meng-Cheng Yu, Sheng-Nan Wu
PY025	Proteasome Activation Increases Mitochondrial Functions in the HD Model Cells 李芯儀, 黃梓甯, 周翊淳, 何盧勳* Sin-Yi Lee, Zih-Ning Huang, Yi-Chun Chou, and Lu-Shiun Her*
PY026	AntiEpileptic Effect of SUL through Modulation of GABAergic Activity in Behavioral Neural Function in an Epilepsy Rat Model 潘祥昕 ¹ , 謝昀儒 ² , 曾昱璇 ² , 姚景宜 ² , 楊善鈞 ² , 黃柔熏 ² , 謝詩詩 ² , 龔映慈 ¹ , 何應瑞 ² Hsiang-Hsin Pan ¹ , Yun-Ju Hsieh ² , Yu-Shiuan Tzeng ² , Jing-Yi Yao ² , Jou-Hsun Huang ² , Kelly Claudia Suhaili ² , Ying-Tzu Kung ¹ , Ying-Jui Ho ²
PY027	Medial Orbitofrontal Cortex Differentially Modulate the Information Flows between Two Subareas of Medial Prefrontal Cortex and Amygdala 呂懿庭, 郭昶志 Yi-Ting Lu, Chang-Chih Kuo



編號	論文題目
PY028	Spectral analysis of the hemodynamic perturbations and sympathetic activities of thermoception transient receptor potential cation channels on cold stimulation in rats 林鈺傑 ¹ , 林真誠 ² , 劉亞平 ² , 童吉士 ^{1*} Yu-Chieh Lin, M.S. ¹ , Chen-Cheng Lin, Ph.D. ² , Ya-Ping Liu, M.D., Ph.D. ² , Che-Se Tung, M.D., Ph.D. ^{1*}
PY029	The Long-Lasting Post-Traumatic Stress Disorder-Like Effects in Modified Single-Prolonged Stress Rodent Model 羅勻, 尹珮璐, 蕭逸澤, 李東晏, 張芳嘉 [*] Yun Lo ¹ , Pei-Lu Yi ² , Yi-Tse Hsiao ¹ , Tung-Yen Lee ³ , Fang-Chia Chang ^{1,3,4,5*}
PY030	CRF neurons in the amygdala and IPACL promote wakefulness in mice 洪啟榮 ^{1,2,7} , Sheikh Mizanur Rahaman ^{1,2} , 深津紀曉 ³ , 山中章弘 ^{4,5,6} , 小野大輔 ^{1,2*} Chi Jung Hung ^{1,2,7} , Sheikh Mizanur Rahaman ^{1,2} , Noriaki Fukatsu ³ , Akihiro Yamanaka ^{4,5,6} , and Daisuke Ono ^{1,2}
PY031	Effect of probiotics treatment on depression-like behavior of depressed rats 馬琬琚, 黃智偉 Wan-Jiun Ma, Andrew Chih Wei Huang
PY032	Gold nanoparticle might be a novel treatment for treating posttraumatic stress disorders symptoms 潘靖怡, 徐敏萱, 余英豪, 歐貞吟, 黃智偉 Jing Yi Pan, Min-Hsuan Hsu, Ying Hao Yu, Chen Yin Ou, Andrew Chih Wei Huang
PY033	D2 receptor antagonist haloperidol changes conditioned taste aversion and conditioned place preference induced by morphine in retention phase 蔡羽柔, 劉人瑄, 黃智偉 Yu Rou Cai, Jen-Shiuan Liu, and Andrew Chih Wei Huang
PY034	Investigating the Regulatory Role of miR-196a on Rad23b in Huntington's Disease 楊尚訓 Shang-Hsun Yang
PY035	Does plukenetia volubilis L. oil reduce depression and comorbid anxiety behaviors? 洪藝璋, 黃智偉 Yi-Wei Hung and Andrew Chih Wei Huang*
PY036	Effects of Patterned Stimulation of Mossy Cells during Fear Conditioning on Memory Retrieval and Granule Cell Excitability 許璨庭, 連正章 Tsan-Ting Tsu ² and Cheng-Chang Lien ^{1,3}
PY037	Stimulatory Effect of Methylglyoxal on Lung Vagal C Fibers in Rats: Role of TRPA1 紀雙雙 ¹ , 蕭培俞 ² , 賴靜蓉 ^{2,3} Shuang- Shuang Chi ¹ , Pei-Yu Xiao ² , Ching Jung Lai ^{2,3}



編號	論文題目
PY038	D2 receptor antagonist haloperidol affects PTSD behavior and IL-1b expression in medial prefrontal cortex, nucleus accumbens, amygdala, and hippocampus in the animal model 洪沛濬, 劉人瑄, 黃智偉 Pei-Jui Hung, Jen-Shiuan Liu, and Andrew Chih Wei Huang
PY039	A Novel Pulsed-Ultrahigh-Frequency Spinal Cord Stimulation Locally Inhibits Ascending Nociceptive Transmission 楊金倉 ¹ , 施希建 ¹ , 陳志成 ^{1,2,3*} , 徐百川 ^{1*} , 溫永銳 ^{4*} Chin-Tsang Yang ¹ , Hsi-Chien Shih ¹ , Chih-Cheng Chen ^{2,3*} , Bai-Chuang Shyu ^{1*} , Yeong-Ray Wen ^{4*}
PY040	SUL Suppresses Neuronal and Behavioral Deficits in a Rat Model of Epilepsy 何應瑞, 曾昱璇, 謝昀儒, 劉汶沅, 姚景宜 Ying-Jui Ho*, Yu-Shiuan Tzeng, Yun-Ju Hsieh, Wen-Yuan Liu, Jin-Yi Yao
PY041	Spinal pUPF1-dependent nonsense-mediated u-opioid receptor mRNA decay contributes to neuropathic allodynia-like development in rat 謝明君 ¹ , 賴政遠 ² , 葉周明 ^{3,4} , 楊博勝 ^{1,5} , 鄭仁坤 ^{1,6} , 王學孝 ¹ , 林冠宏 ^{2,7,8} , 倪曉彤 ¹ , 林則彬 ^{9,10,11} , 彭賢祐 ^{1,2*} Ming-Chun Hsieh ¹ , Cheng-Yuan Lai ² , Chou-Ming Yeh ^{3,4} , Po-Sheng Yang ^{1,5} , Jen-Kun Cheng ^{1,6} , Hsueh-Hsiao Wang ¹ , Kuan-Hung Lin ^{2,7,8} , Siao-Tong Nie ¹ , Tzer-Bin Lin ^{9,10,11} , Hsien-Yu Peng ^{1,2*}
PY042	PRMT5 contributes to paclitaxel-induced neuropathic pain by activating TRPV1 epigenetic modification in the DRG 葉周明 ^{1,2} , 賴政遠 ^{3#} , 彭賢祐 ^{3,4#} , 林則彬 ^{5,6,7} , 周迪倫 ⁴ , 王學孝 ⁴ , 彭韻致 ⁴ , 李采緹 ⁴ , 倪曉彤 ⁴ , 謝明君 ^{4*} Chou-Ming Yeh ^{1,2} , Cheng-Yuan Lai ^{3#} , Hsien-Yu Peng ^{3,4#} , Tzer-Bin Lin ^{5,6,7} , Dylan Chou ⁴ , Hsueh-Hsiao Wang ⁴ , Yun-Chih Peng ⁴ , Cai-Ti Li ⁴ , Siao-Tong Nie ⁴ , Ming-Chun Hsieh ^{4*}
PY043	Effects of SUL on Electroencephalogram in Pentylentetrazol-Kindling Rat Model 謝昀儒 ^{1*} , 李東晏 ² , 洪菁穗 ³ , 張芳嘉 ⁴ , 何應瑞 ¹ Yun-Ju Hsieh ^{1*} , Tung-Yen Lee ² , Ching-Sui Hung ³ , Fang-Chia Chang ⁴ , Ying-Jui Ho ¹
PY044	The Role of Spinal MLL-1/H3K4me3/GRM5 in the Endometriosis-Sensitized Pelvic-Urethra Reflex in Rats 陳安旂 ¹ , 陳柏叡 ² , 吳忠信 ² , 陳玟蓉 ³ , 吳慧中 ⁴ , 潘淑芬 ⁴ , 賴政遠 ⁵ , 謝明君 ⁶ , 彭賢祐 ⁶ , 周迪倫 ⁶ , 林則彬 ^{1*} An-Chi Chen ¹ , Po-Jui Chen ² , Chung-Hsin Wu ² , Mei-Jung Chen ³ , Hui-Chung Wu ⁴ , Shwu-Fen Pan ⁴ , Cheng-Yuan Lai ⁵ , Ming-Chun Hsieh ⁶ , Hsien-Yu Peng ⁶ , Dylan Chou ⁶ , Tzer-Bin Lin, PhD ^{1*}
PY045	Responses of Light/Dark Choice Test in Taiwanese Field Mice 楊淑娟 ¹ , 謝坤叡 ^{2*} Shu-Chuan Yang ¹ , Kun-Ruey Shieh ^{2*}
PY046	The inflammatory reaction between dopamine neuron cells and microglia cells 高大可, 黃予庭, 郭雅琦, 陳景宗 Da-Ke Kao, Yu-Ting Huang, Ya-Chi Kuo, Jin-Chung Chen



編號	論文題目
PY047	Melatonin and Receptor MT1 Regulate the Dopaminergic Neuron Differentiation from Human LUHMES Cells 陳宥如 Yu-Ju Chen
PY048	The medial prefrontal cortex, nucleus accumbens, basolateral amygdala, and the hippocampus regulate the amelioration of environmental enrichment and cue in fear behavior in animal model of PTSD 張方誌, 余英豪, 林有上, 歐貞吟, 張凱傑, 蔡志鑫, 黃智偉 Fang Chih Chang, Ying Hao Yu, Yeou San Lim, Chen Yin Ou, Kai Chieh Chang, Arthur C.Tsai, and Andrew Chih Wei Huang
PY049	Individual differences of time-based operant behaviors associated with dopamine reuptake transporters expressed in the medial prefrontal cortex of rats 陳碩甫, 趙蕾潔, 岑芯瑜, 黃靖涵, 吳舒婷, 許維中, 趙知章, 廖瑞銘 Shuo-Fu Chen ^{1,2,3} , Lei-Chieh Chao ² , Hsin-Yu Tsern ⁴ , Jing-Han Huang ⁴ , Shu-Ting Wu ² , Wei-Chung Hsu ² , and Chih-Chang Chao ^{3,5} , and Ruey-Ming Liao ^{1,2,3,5}
PY050	Metabolic Interaction between Astrocytes and Neurons via the Glutamine-Glutamate Cycle Contributes to Behavioral Feminization of Female Rats 梁淑鈴 ^{1,3*} , 陳柔賢 ^{2,3} Shu-Ling Liang ^{1,3*} , Rou-Shayn Chen ^{2,3}
PY051	Differential modulation of central amygdala neurons to nociception 黃卉玟, 王凱誼, 連正章 Hui-Wen Huang, Kai-Yi Wang, Cheng-Chang Lien
PY052	Cannabinoid type 1 receptor-expressing cholecystokinin interneurons facilitate GC recruitment by cortical input 李育叡, 葉家維, 連正章 Yu-Jui Li, Chia-Wei Yeh, and Cheng-Chang Lien
PY053	Morpho-physiological Diversity of Cholecystokinin-Expressing Interneurons in the Dentate Gyrus 李育叡, 威漢, 葉家維, 林昱伶, 連正章 Yu-Jui Li, WahabImamAbdulmajeed, Chia-Wei Yeh, Musalyiola Ajibola, Yu-Ling Lin and Cheng-Chang Lien
PY054	Impairment of the Basolateral Amygdala-Dependent Observational Fear Learning in Mice with Early Life Stress and Chronic Unpredictable Stress 廖昱雅, 劉澤峴, 李承豪, 于皓, 蕭汎書, 黃佳瑜 Yu-Ya Liao, Tze-Shiun Liu, Cheng-Hao Lee, Hao Yu, Fan-Shu Hsiao, Chia-Yu Huang
PY055	Neonatal Dexamethasone Treatment Has a Long-term Adverse Impact on the Hippocampal BDNF-mTOR Signaling Pathway. 吳宗訓 ¹ , 吳奕昉 ¹ , 林維星 ¹ , 楊奕玲 ^{2*} , 呂國棟 ^{1*} Zong-Syun Wu ¹ , Ying-Fang Wu ¹ , Wei-Hsing Lin ¹ , Yi-Ling Yang ^{2*} , Kwok-Tung Lu ^{1*}



編號	論文題目
PY056	Mice exposure to polystyrene microplastics impair social behavior and the prefrontal cortex through intratracheal administration 譚崇倫, 黃佳瑜 Chong-Lun Tan, Cathy Chia-Yu Huang
PY057	Application of Panax Ginseng Extract, Ginkgo Biloba Extract, and Far-infrared Light in the Treatment of Depression and Its Mechanism 李頤 ¹ , 吳庭萱 ¹ , 張孝玥 ¹ , 楊凱甯 ² , 招名威 ^{3,4} , 曾嘉儀 ^{1,4*} I Lee ¹ , Ting-Hsuan Wu ¹ , Hau-Yuet Cheung ¹ , Kai-Ning Yang ² , Ming-Wei Chao ^{3,4} , Chia-Yi Tseng ^{1,4*}
PY058	Effect of Modulation in Medial Orbitofrontal Cortex on Flexible Regulation of Fear Discrimination 石佳臻, 郭昶志 Jia-Zhen Shih, Chang-Chih Kuo
PY059	Investigating the Role of Ras protein specific guanine nucleotide releasing factor 1 (RasGRF1) in a Neuroscientific View 蘇晴, 黃國正 Nicole Ching Su, Guo-Jen Huang
PY060	Membrane Potential Dynamics of CA1 Pyramidal Neurons during Hippocampal Sharp-Wave Ripples in Novel and Familiar Environments 戴伯任, 林貝容 Bo-Ren Dai, Bei-Jung Lin
PY061	Regulation of astrocytic function in intercellular communication by interleukin-33 鄭宇辰, 黃暉庭, 曾淑芬 Yu-Chen Zheng, Hui-Ting Huang, Shun-Fen Tzeng
PY062	Hippocampal Alpha-Synuclein Induced Cognitive Deficits and Molecular Alterations 黃予庭, 陳景宗 Yu-Ting Huang, Jin-Chung Chen
PY063	To investigate the therapeutic effects of mifepristone on the different intensities of traumatic stress-induced the fear memory dysregulations 許芳瑜, 林真誠, 陳宗華, 劉亞平 Fang-Yu Hsu, Chen-Cheng Lin, Tsung -Hua Chen, Yia-Ping Liu
PY064	Mechanistic Investigation of Sphingomyelinases in Brain Development and Microcephaly 葉馨淳, 鄒飛洋, 洪呈瀝, 詹智強 Hsin-Chun Yeh, Fei-Yang Tzou, Cheng-Li Hong, Chih-Chiang Chan
PY065	Aryl Hydrocarbon Receptor Defect Impairs the Physiological Function of Retinal Pigment Epithelial Cell Involving an Induction of Integrin Beta 3 and Intercellular Adhesion Molecule 1. 楊宗珉 ^{1,2} , 詹燕茹 ^{1,2} , 溫宏諾 ¹ , 康照洲 ³ , 蕭哲志 ^{4,6} , 鄭幼文 ^{2,6*} , 李青濤 ^{1,5,6*} Tsung-Min Yang ^{1,2} , Yen-Ju Chan ^{1,2} , Wang-Nok Wan ¹ , Jaw-Jou Kang ³ , George Hsiao ^{4,6} , Yu-Wen Cheng ^{2,6*} , Ching-Hao Li ^{1,5,6*}



編號	論文題目
PY066	Comorbidity of Cardiorespiratory and Locomotor Dysfunction Following Cervical Spinal Cord Injury 陳叡怡, 張孝森, 黃獻漳, 薛宇桓, 杜元坤, 李昆澤 Rui-Yi Chen, Hsiao-Sen Chang, Hsien-Chang Huang, Yu-Huan Hsueh, Yuan-Kun Tu, Kun-Ze Lee
PY067	Investigation if FGF21-mediated FGFR1/ β -Klotho signaling pathways affect dendritic spines of dopaminergic neurons 蔡昊曄, 郭宜盈, 陳珮君 Hao-Yeh Tsai, Yi-Ying Kou, Pei-Chun Chen
PY068	Effect of normobaric hyperoxia on metabolic and respiratory function following cervical spinal cord injury 陳孟云, 李昆澤 Meng-Yun Chen, Kun-Ze Lee
PY069	Effects of focused ultrasound stimulation on gut microbiome and behaviors 薛家榮, 吳偉立, 侯宇恬, 范景翔 Jia-Ying Xue, Wei-Li Wu, Yu-Tain Hou, Ching-Hsiang Fan
PY070	Administration of NCKK1 Inhibitor Lessens Juvenile Immobilization Treatment-Induced Impairment on the Extinction of Inhibitory Avoidance and Over-Excited Neuron 林維星 ¹ , 董佑萱 ¹ , 仇鵬愷 ¹ , 吳宗訓 ¹ , 呂睿傑 ¹ , 吳奕昉 ¹ , 楊奕玲 ² , 呂國棟 ^{1*} Wei-Hsing Lin ¹ , Yu-Hsuen Tung ¹ , Peng-Kai Chang ¹ , Zong-Syun Wu ¹ , Ruei-Chieh Lu ¹ , Ying-Fang Wu ¹ , Yi-Ling Yang ² , Kwok-Tung Lu ^{1*}
PY071	Coactivation of the Diaphragm, Bicep, and Intercostal Muscles in Response to Trans-spinal Magnetic Stimulation in Healthy Humans 任明月, 李昆澤 Ming-Yue Ren*, Kun-Ze Lee
PY072	Ergothioneine via Attenuating IL-1 β Ameliorates Ischemic Brain Damage 林天南 Teng-nan Lin
PY073	Inhibition of Caveolin-1 Reduces Brain Damage and Suppresses Microglial Activation after Experimental Traumatic Brain Injury 陳宥彤 ^{1#} , 吳軍滬 ² , 李俊彥 ³ , 柯嘉華 ³ , 蔡旻倩 ¹ , 陳思甫 ^{1,3*} Yu-Tung Chen ^{1#} , Chia-Hua Ke ² , Chun-Yen Lee ³ , Chun-Hu Wu ³ , Min-Chien Tsai ¹ , Szu-Fu Chen ^{1,3*}
PY074	Shockwave Therapy Combined with Autologous Adipose-Derived Mesenchymal Stem Cells Is Better than with Human Umbilical Cord Wharton's Jelly-Derived Mesenchymal Stem Cells on Knee Osteoarthritis 鄭再宏, 許傑程, 王清貞, 郭繼陽, 許彩金, 徐山琳 Jai-Hong Cheng, Chieh-Cheng Hsu, Ching-Jen Wang, Jih-Yang Ko, Tsai-Chin Hsu and Shan-Ling Hsu



編號	論文題目
PY075	Cytoskeleton Remodeling Decreased NK Cell-Mediated Immunosuppression in UTUC 彭瑞銘, 羅佳紋, 王貝嘉 Jei-Ming Peng, Jia-Wun Luo, Pei-Chia Wang
PY076	Suppressed butyrate signaling contributed to the HDAC4-associated metabolic reprogramming in the hippocampal astrocytes by maternal high fructose diet 吳芎歷, 洪純瑛, 吳志偉, 陳怡君, 李育綺 Kay LH Wu, Chun-Ying Hung, Chih-Wei Wu, I-Chun Chen, Yu-Chi Lee
PY077	Targeting proteasome-mediated degradation of polyglutamine androgen receptor reduces spinal bulbar muscular atrophy phenotype in mice 魏國鼎 ^{1,8} , 劉雅棻 ^{1,8} , 吳清源 ^{2,3} , Gen Sobue ⁴ , Hiroaki Adachi ⁵ , 楊政霖 ⁶ , 張傳祥 ⁷ , 康宏佑 ^{1,8*} Kuo-Ting Wei ^{1,8} , Ya-Fen Liu ^{1,8} , Ching-Yuan Wu ^{2,3} , Gen Sobue ⁴ , Hiroaki Adachi ⁵ , Jeng-Lin Yang ⁶ , Chawnshang Chang ⁷ , Hong-Yo Kang ^{1,8*}
PY078	Dysfunction of RNF8 Impairs DNA Damage Repair in Spinal and Bulbar Muscular Atrophy 劉雅棻 ^{1,7} , 魏國鼎 ^{1,7} , 吳清源 ^{2,3} , Gen Sobue ⁴ , Hiroaki Adachi ⁵ , 楊政霖 ⁶ , 康宏佑 ^{1,7*} Ya-Fen Liu ^{1,7} , Kuo-Ting Wei ^{1,7} , Ching-Yuan Wu ^{2,3} , Gen Sobue ⁴ , Hiroaki Adachi ⁵ , Jeng-Lin Yang ⁶ , Hong-Yo Kang ^{1,7*}
PY079	Cardiomyocyte-specific overexpression of GPR22 ameliorates cardiac injury in mice with acute myocardial infarction 陳俐璇, 邱妤均, 徐淑媛, 呂史提 Li-Hsuan Chen, Yu-Chun Chiu, Shu-Yuan Hsu, Steve Leu ¹
PY080	Dysregulated Cerebral-Endothelial Integrity and Permeability Lead to Indoxyl Sulfate Induced Cognitive Impairment 蕭柔, 李姝瑩, 楊政霖 Jou Hsiao, Su-Ying Lee, Jenq-Lin Yang
PY081	Decreased Klotho expression causes accelerated decline of male fecundity through oxidative injury in murine testis 汪雅雲 ¹ , 林盈宏 ¹ , 孫樵隱 ^{2,3} Ya-Yun Wang ¹ , Ying-Hung Lin ¹ , and Chiao-Yin Sun ^{2,3}
PY082	Autophagy-Urea Cycle Pathway is Essential for the Statin-Mediated Nitric Oxide Bioavailability in Endothelial Cells 陳玟樺 Wen-Hua Chen
PY083	Dunaliella Salina Attenuates Myocardial Ischemia/Reperfusion Injury by Inhibiting TLR4 Signaling 王羿忻 ^{1,2} , 黃相碩 ^{3,4,5} , 廖娟妙 ^{1,2*} Yi-Hsin Wang ^{1,2} , Shiang-Suo Huang ^{3,4,5} , Juan-Miaw Liao ^{1,2*}
PY084	Arachidonic Acid-Induced ferroptosis Regulates Apoptosis in Cardiomyocytes 王奕舜, 楊昆達 Yi-Shun Wang, Kun-Ta Yang



編號	論文題目
PY085	探討 NMN 對於 PTZ 誘發癲癇斑馬魚大腦異常的影響及其機轉 The Effect of NMN on PTZ-induced brain abnormalities and its mechanism in zebrafish 韋玟旭, 李貫綸, 林美慈, 李哲沛, 林彥昌 Wen-Xu Wei, Kuan-Lun Li, Mei-Tzu Lin, Chun-Pei Li, Yen-Chang Lin
PY086	The Role of Batokine from BAT in Regulating Hepatic Metabolism 邱威誠 ¹ , 林建言 ² , 郁兆蘭 ^{1,2,3*} Wei-Cheng Chiu ¹ , Chien-Yen Lin ² , Chao-Lan Yu ^{1,2,3*}
PY087	The protective effect of Ginsenoside Rb2 on the electrical remodeling of HL-1 cardiomyocytes via the adipocyte secretome 周芊汝, 溫柏堯, 楊翔宇, 鄭寶雲 Chien-Ju Chou, Bo-Yao Wen, Hsiang-Yu Yang, Pao-Yun Cheng
PY088	Potential effects on retinal pigment epithelial cells caused by hyperuricemia 莊瑜晴 ¹ , 蔡淑閔 ¹ , 嚴介宏 ^{2,3} , 白鴻亮 ⁴ , 張菡馨 ⁵ , 林培正 ^{1,6*} Yu-Ching Chuang ¹ , Su-min Tsai ¹ , Chieh-Hung Yen ^{2,3} , Hung-Liang Pai ⁴ , Han-Hsin Chang ⁵ , David Pei-Cheng Lin ^{1,6*}
PY089	The Anti-hyperglycemic Effects of Extracts from Brown Algae 魏詩昀 ¹ , 莊瑜晴 ¹ , 蔡淑閔 ¹ , 呂宗漢 ¹ , 張菡馨 ² , 林培正 ^{1*} Shih-Yun Wei ¹ , Yu-Ching Chuang ¹ , Su-Min Tsai ¹ , Tsung-Han Lu ¹ , Han-Hsin Chang ² , David Pei-Cheng Lin ¹
PY090	Cholestyramine ameliorated High-Fat Diet-Induced MAFLD by Regulating Metabolic Reprogramming of the Gut Microbiota and Alterations in Bile Acid Profile and Hepatic Immunity. 許家柔, 古杰倫, 王芷琳, 林咏霓, 黃怡禎, 吳莉玲 Jia-Rou Hsu, Jie-Lun Ku, Chih-Lin Wang, Yung-Ni Lin, Yi-Chen Huang, Wu, Li-Ling
PY091	Pharmacological Activation of Pyruvate Dehydrogenase Ameliorates Palmitate-induced Skeletal Muscle Atrophy through Mediating AKT/FOXO1 Pathway in C2C12 Myotubes 韓宜珊, 簡宏哲* I-Shan Han, Hung-Che Chien*
PY092	The Impacts of NPFFR2 on Obesity-Induced Insulin Resistance and Metabolic Symptoms 徐湘婷, 陳景宗, 林雅婷 Hsiang-Ting Hsu, Jin-Chung Chen, Ya-Ting Lin
PY093	A maturity-onset-diabetes-of-the-young associated TALK1 mutant suppresses insulin secretion by dampening beta-cell excitability 蔡文豪, 楊世斌 Wen-Hao Tsai, Shi-Bing Yang
PY094	To decipher the effects of Grail in the regulating PPAR α -FGF21 axis signaling in the liver during fasting 王詩芸, 呂佩瑤, 陳英傳 Shih-Yun Wang, Pei-Yao Liu, Ying-Chuan Chen



編號	論文題目
PY095	NUCLEAR FACTOR, INTERLEUKIN 3 DETERMINES SEX-SPECIFIC DIFFERENCES IN GUT MICROBIOTA REGULATION-MEDIATED BILE ACID METABOLISM DURING VSL#3-MEDIATED AMELIORATIO OF HIGH-FAT DIET-ASSOCIATED MAFLD 林咏霓, 王芷琳, 許家柔, 吳莉玲 Lin, Yung-Ni; Wang, Chih Lin; Hsu, Jia-Rou; Wu, Li-Ling
PY096	Effect of Chrysene on Colorectal Cancer Cells: The Role of Aryl Hydrocarbon Receptor 鄭育宏 ¹ , 康熙洲 ^{1*} , 廖伯霖 ^{1*} Yu-Hung Cheng, Jaw-Jou Kang and Po-Lin Liao
PY097	Lotusine exhibits inflammatory effects through attenuating the MAPK signal pathway by LPS-activated macrophages 陳琬儒, 李聖怡, 李佳陽 Wan-Ru Chen, Sheng-I Lee, Chia-Yang Li
PY098	To Study the Protective Effects of Plant Extracts on Hypoxia-Induced Neuroinflammation 魏筱真, 張凱復, 謝汶錡, 黃雅芝, 陳依依, 李孟樵, 蔡女滿 Shiau-Jen Wei, Kai-Fu Chang, Wen-Chi Hsieh, Ya-Chih Huang, Yi-Yi Chen, Meng-Chiao Lee, Nu-Man Tsai
PY099	Bacterial Internalization Induced Microbiota Dysbiosis and Circadian Disruption to Trigger Proinflammatory responses in Intestinal Epithelial Cells 白宇辰, 李憶萱, 余佳慧 Yu-Chen Pai, Yi-Hsuan Li and Linda Chia-Hui Yu
PY100	Dopamine Activates the D1R-Zn ²⁺ Signaling Pathway to Trigger Inflammatory Response in Primary-cultured Rat Embryonic Cortical Neurons 曾惠群, 潘建源 Hui-Chiun Tseng, Chien-Yuan Pan
PY101	Nordalbergin exhibits anti-inflammatory effects via suppressing MAPKs/NF-κB/ NLRP3 signaling pathways and attenuates ROS production by LPS-activated macrophages. 陳品蓉, 李佳陽 Pin-Rong Chen, Chia-Yang Li
PY102	Epicatechin Exhibits a Novel Role in Innate and Adaptive Immune System Through Modulating the Production of Myeloid-Derived Suppressor Cells and T Cells 吳家滢 ¹ , 蘇語翎 ¹ , 陳碩文 ¹ , 吳豫宣 ¹ , 簡采汝 ² , 張原翊 ^{1*} Chia-Ying Wu ¹ , Yu-Ling Su ¹ , Shuoh-Wen Chen ¹ , Yu-Xuan Wu ¹ , Tsai-Ju Chien ² , Yuan-I Chang ^{1*}
PY103	Osmundacetone alleviates LPS-induced Neuroinflammatory Response and Oxidative Stress in Microglia Cell 李聖怡 ¹ , 李佳陽 ^{1*} Sheng-I Lee ¹ , Chia-Yang Li ¹



編號	論文題目
PY104	Obtusifolin Attenuates LPS-Induced Inflammation and NLRP3 Inflammasome Activation by Suppressing the MAPK/NF- κ B Signaling Pathway and ROS Production in BV2 Cells 林昕儀 ^{1,2} , 李哲欣 ^{1*} , 李佳陽 ^{2*} Xin-Yi Lin ^{1,2} , Che-Hsin Lee ^{1*} , Chia-Yang Li ^{2*}
PY105	Karanjin Attenuates LPS-Induced Inflammation in Microglia by Inhibiting the MAPK Signaling Pathway and NLRP3 Inflammasome Activation 蘇宥錡, 李佳陽 Yu-Chi Su, Chia-Yang Li
PY106	Mechanism of Ocimum basilicum extract inhibiting lipopolysaccharide-induced inflammation 王力緯, 陳敏慧, 吳賜猛 Li-Wei Wang, Min-Hui Chen, Semon Wu
PY107	Calcium channel gamma6 subunit provides a basis for developing T-type calcium channel blockers 曾鈺竣, 貝佳妮, 林怡君, 陳仁祥 Yu-Jiun Tseng, Jiani Bei, Yi-Jyun Lin, Ren-Shiang Chen
PY108	Quercetin exerts anti-inflammatory effects via inhibiting tumor necrosis factor- α -induced matrix metalloproteinase-9 expression in normal human gastric epithelial cells 陳思語, 蔡明明, 謝喜龍 Ssu-Yu Chan, Ming-Ming Tsai, Hsi-Lung Hsieh
PY109	Effects of Mitochondrial Transplantation on H ₂ O ₂ -induced Mitochondrial Dysfunction via Regulation of Mitochondrial Quality Control in MDCK cells 曾惠卿, 鄭麗菁, 許智凱, 謝喜龍 Hui-Ching Tseng, Li-Ching Cheng, Chih-Kai Hsu, Hsi-Lung Hsieh
PY110	SUL reverses behavioral and neuronal deficits in an MPTP-induced rat model of Parkinson's disease dementia 楊善鈞, 黃柔薰, 謝詩詩, 潘祥昕, 龔映慈, 姚景宜, 何應瑞 Shan-Chun Yang, Jou-Hsun Huang, Kelly Claudia Suhaili, Hsiang Hsin Pan, Ying Tzu Kung, Jin-Yi Yao, Ying-Jui Ho
PY111	To Investigate the Role of CXCL11 in Mediating the Anti-Cancer Effect of Vitamin D in Prostate Cancer 陳嘉緹, 顏賢章, 丁慧如 Jia-Ti Chen/ Shian-Jang Yan, Ph. D./ Huei-Ju Ting, Ph.D.
PY112	Study of anti-microbiotic effects of the plant extracts on foods 盧惠萍 Hui-Pin Lu
PY113	Functional regulation of transcription factors in integrin-associated protein gene expression 盧惠萍 Hui-Pin Lu



編號	論文題目
PY114	Engineering a GSH-Responsive Nanoparticle That Can Precisely Deliver Capsaicin and PD-L1/PD-1 Inhibitor to Enhance Cancer Immunotherapy 王冠麟 ^{1,2} , 吳氏蘭香 ² , 阮婷 ^{3*} , 林鈺容 ^{2*} Kuan-Lin Wang ^{1,2} , Ngo Huong ² , Ting Ruan ^{3*} , Yu-Jung ^{2*}
PY115	Resistance Training-induced Neuregulin Is Associated with Muscle Damage 王錠釧 Dean-Chuan Wang
PY116	Enteral antioxidant modulation of small intestinal reactive oxygen species production 蔡依璇, 黃菁英 Yi-Syuan Tsai, Ching-Ying Huang
PY117	Study with the Aldo-keto reductase family 1 member A1-dependent metabolic profiles in regulating mesenchymal stem cell fate decision to adipogenesis and osteogenesis. 高郁捷, 林宜慧, 江振豪, 劉英明 Yu-Chieh Kao, Yi-Hui Lin, Chen Hao Chiang, Ying-Ming Liou
PY118	Transplantation of mesenchymal stem cell ameliorates cardiac aging through inhibiting inflammasome activation 陳冬生, 陳靜儀, 胡樟勛 Chen, Tung-Sheng, Chen, Jing-Yi, Hu, Wei-Syun
PY119	Inflammatory microenvironment increases stem cell regenerative capability in the treatment of diabetic cardiomyopathy through regulation of mitochondrial dynamics 廖唯宇, 陳靜儀, 陳冬生 Liao, Wei-Yu, Chen, Jing-Yi, Chen, Tung-Sheng
PY120	Macrophages Exacerbate Pancreatic Cancer Malignancy via Modulation of ERK-DUSP2 Axis in Pancreatic Cancer Cells 戴昱菁, 王竹安, 蔡少正 Yu-Jing Tai, Chu-An Wang, Shaw-Jenq Tsai
PY121	The Role of circSDHAF2-encoded Protein in Breast Cancer 黃以任, 蕭貴陽 Yi-Ren Huang, Kuei-Yang Hsiao
PY122	Lipid Scavenging Deficit and Overindulgence Promote Hepatocellular Carcinoma Progression 林文仁, 楊顯呈, 沈培鈞, 楊茜如, 余盈君, 蘇鈺婷, 張維君, 葉俊杰, 鄭隆賓, 賴學洲, 吳永昌, 金珮如, 吳欣舫, 陳韻晶, 鄭維中, 馬文隆 Wen-Jen Lin, Juan-Cherng Yang, Pei-Chun Shen, Cian-Ru Yang, Ying-Chun Yu, Yu-Ting Su, Wei-Chun Chang, Chun-Chieh Yeh, Long-Bin Jeng, Hsieh-Chou Lai, Yang-Chang Wu, Pei-Ru Jin, Hsin-Fang Wu, Yunching Chen, Wei-Chung Cheng, Wen-Lung Ma



編號	論文題目
PY123	N6-methyladenosine Methyltransferase RBM15 Promotes Tumor Progression in Breast Cancer 陳逸安, 賴亮全 Yi-An Chen, Liang-Chuan Lai
PY124	Evaluation of ATG4B as a diagnostic and prognostic marker of colorectal cancer 謝昂岑, 胡萬祥, 劉佩芬, 邱奕瑞, 徐志文 Ang-Tsen Hsieh, Wan-Hsiang Hu, Pei-Feng Liu, Yi-Jui Chiu and Chih-Wen Shu
PY125	miR-148a-3p Enhances Radiosensitivity through ITGA5 and Prevents RIBEs Activity in Head and Neck Cancer Cells. 范皇添 ¹ , 李安倫 ¹ , 阮氏梅香 ¹ , 賴易成 ³ , 葉子維 ¹ , 鍾道生 ² , 陳建隆 ⁴ , 王明華 ³ , 林書夷 ¹ , 馬念涵 ¹ Hoang-Thien Pham ¹ , An-Lun Li ¹ , Mai-Huong Thi Nguyen ¹ , Yi-Cheng Lai ³ , Tzu-Wei Yeh ¹ , Tao-Sang Chung ² , Chien-Lung Chen ⁴ , Ming-Hua Wang ³ , Shu-Yi Lin ¹ , Nianhan Ma ^{1*}
PY126	High-fat diet drives a novel sleeping beauty transposon-mediated Nras knock-in develops fatty liver associated liver cancer exhibits gut microbiota-dependent alterations in NLRP3 signaling. 鄭祺臻, 陳筱萍, 古杰倫, 許家柔, 林咏霓, 吳俊穎和吳莉玲 Chi-Chen Cheng, Hsiao-Ping Chen, Jie-Lun Ku, Jia-Rou Hsu, Yung-Ni Lin, Chun-Ying Wu and Li-Ling Wu ¹
PY127	miR-493-3p, miR-155-5p and miR-636 Suppress the Urothelial Carcinoma Stem Cell Abilities 馮于甄 ¹ , 阮氏梅香 ¹ , 吳政勳 ² , 鍾佩容 ¹ , 馬念涵 ^{1*} Yu-Chen Fung ¹ , Mai-Huong Thi Nguyen ¹ , Chih-Hsun Wu ² , Pei-Jung Chung ¹ , Nianhan Ma ^{1*}
PY128	Melanoma Cells Treated with BRAF Inhibitor Promote Tumorigenesis of Keratinocytes 陳璟宜, 阮氏梅香, 鍾佩容, 林哲宇, 馬念涵 Ching-Yi Chen, Mai-Huong Thi Nguyen, Pei-Jung Chung, Che-Yu Lin, Nianhan Ma
PY129	Deubiquitinase USP24 suppresses T cell antitumor activity via enhancement of PD-1 protein stability 謝宏嘉 ^{1#} , 洪建中 ² , 王憶卿 ^{1*} Hung-Chia Hsieh ^{1#} , Jan-Jong Hung ² , Yi-Ching Wang ^{1*}
PY130	Lipidomic Analysis of Triglycerides in Hepatocellular Carcinoma and Synthesis of TAG-Drug Conjugates for Liver Cancer Therapeutics 王可, 馬文隆 Ke Wang, Wen-Lung Ma
PY131	miR-567 Suppresses the Growth of Melanoma Cells Induced by M2 Macrophages 馬念涵 Nianhan Ma



編號	論文題目
PY132	Cisplatin induces interleukin-33 production to promote M2-like macrophages polarization and ST2L expression and membrane presentation via IL-33/ST2L/NF- κ B/Rab37 signaling and trafficking loops 楊侑恩 ^{1#} , 胡孟璇 ² , 曾彥誠 ³ , 張志鵬 ^{1,3*} , 王憶卿 ^{1,2*} You-En Yang ¹ , Meng-Hsuan Hu ² , Yen-Cheng Zeng ³ , Chih-Peng Chang ^{1,3*} , Yi-Ching Wang ^{1,2*}
PY133	The Modulatory Role of CCL5 in Monocyte-Associated Cytokines in Transfusion-Related Acute Lung Injury (TRALI) 張智鈞 ^{1,2*} , 蔡威廷 ¹ , 黃君邦 ³ , 洪麗滿 ³ Chih-Chun Chang ^{1,2*} , Wei-Ting Tsai ¹ , Jiung-Pang Huang ³ , Li-Man Hung ³
PY134	The MAEL Expression in Mitochondria of Human Spermatozoa and the Association with Asthenozoospermia 李沂臻, 陳幸儀, 鄭裕生, 林世杰 Yi-Jhen Li, Hsing-Yi Chen, Yu-Sheng Cheng, Shih-Chieh Lin
PY135	The Effects of Cerebral Dopamine Neurotrophic Factor Against Cerebral Ischemic Injury: Suppression of Platelets Activation, Aggregation and Inflammation in Vitro and in Vivo 吳瑞昇 ¹ , 施志勤 ² , 高士堯 ² , 曾冠穎 ^{2,3*} Jui-Sheng Wu ¹ , Chih-Chin Shih ² , Shih-Yao Kao ² , Kuan-Yin Tseng ^{2,3*}
PY136	Verification of EPS-related miRNAs in Exosome from Human Mesothelial Cells 葉子維 ¹ , 鍾沛容 ¹ , 蔡仁傑 ^{1,2,3} , 馬念涵 ¹ Tzu-Wei Yeh ¹ , Pei-Jung Chung ¹ , Jen-Chieh Tsai ^{1,2,3} , Nian-Han Ma ¹
PY137	Galectin-1 Regulated Gene Expression and Molecular Pathways Involved in COVID-19 Inflammation Ade Saputri ^{1,2} , 張資昊 ¹ , 吳明恆 ^{1,2} Ade Saputri ^{1,2} , Tzu-Hao Chang ¹ , Ming-Heng Wu ^{1,2}
PY138	FAT1 regulates p53 via Hippo/YAP1 pathway in Oral Squamous cell carcinoma 丁青孝 ^{1,2} , 吳明恆 ^{1,2} Dinh Thanh Thao ^{1,2} , Ming-Heng Wu ^{1,2}
PY139	CEACAM6 promotes epithelial growth factor receptor (EGFR) signaling of colorectal cancer progression through increasing EGFR protein stability 葉志文, 蔡耀宗, 吳明恆 Yap Chee Voon ^{1,2} , Yao-Tsung Tsai ^{1,2} , Ming-Heng Wu ^{1,2*}
PY140	Online Monitoring Creatine, BUN and β 2-microglobulin in Hemodialysis Treatment Using an Optoelectronic System with Machine Learning 王耀德, 陳怡婷, 周鈺翔, 黃鳳雄, 林水龍, 盧彥文 Yao-Te Wang, Yi-Ting Chen, Yu-Siang Chou, Fong-Shung Huang, Shuei-Liong Lin, Yen-Wen Lu
PY141	Effects of Plastic Particles on Intestinal Epithelial Cells and Vascular Endothelial Cells 蕭伊倫, 李青濤, 廖伯霖, 康熙洲 I-Lun Hsiao, Ching-Hao Li, Po-Lin Liao, Jaw-Jou Kang



編號	論文題目
PY142	The DNA Methyltransferase 3-Like (DNMT3L) Regulates the Switch of Megakaryocytic and Erythrocytic Differentiation via Modulating Mitochondrial Energy Metabolism 陳碩文 ¹ , 初昭瑄 ¹ , 陳筱雯 ¹ , 許溥昇 ² , 林劭品 ² , 張原翊 ^{1*} Shuoh-Wen Chen ¹ , Chao-Hsuan Chu ¹ , Hsiao-Wen Chen ¹ , Pu-Sheng Hsu ² , Shau-Ping Lin ² , Yuan-I Chang ^{1*}
PY143	Roles of IFI6 in anti-apoptosis and antioxidant of oral squamous cell carcinoma 盧緯騰 ¹ , 李政昕 ¹ , 王興翔 ¹ , 譚筠樹 ¹ , 劉佩芬 ^{1*} Wei-Teng Lu, Cheng-Hsin Lee, Hsing-Hsang Wang, Yun-Shu Tan, Pei-Feng Liu
PY144	Lubiprostone Effects on Mouse Sertoli Barrier 謝函靜 ¹ , 胡孟君 ^{1*} Han-Ching Hsieh ¹ , Meng-Chun Hu ^{1*}
PY145	HDAC6 inhibition mediates neuroprotection after traumatic brain injury through upregulation of Mn-SOD (SOD2) expression 杜明春 ^{1,2} , 王智揚 ^{1,2*} , 莊建盈 ^{3,4*} Thi Minh Xuan Do ^{1,2} , Chih-Yang Wang ^{1,2*} , Jian-Ying Chuang ^{3,4*}
PY146	Circularization mechanism and function of exosomal circSFMBT2 in hypoxic breast cancer cells 劉家銘, 賴亮全 Chia-Ming Liu, Liang-Chuan Lai
PY147	TMEM211 promotes cancer progression and metastasis in colon cancer 王興翔 ¹ , 李政昕 ¹ , 譚筠樹 ¹ , 盧緯騰 ¹ , 劉佩芬 ^{1*} Hsing-Hsang Wang ¹ , Cheng-Hsin Lee ¹ , Yun-Shu Tan ¹ , Wei-Teng Lu ¹ , Pei-Feng Liu ^{1*}
PY148	Tektin1 protein is involved in loss of Tbc1d21 caused sperm-defects 潘佩儀, 柯智群, 汪雅雲, 林盈宏 Pei-Yi Pan, Chih-Chun Ke, Ya-Yun Wang, Ying-Hung Lin
PY149	To investigate the role of NUDT21 post translational modification (PTM) during the development of enzalutamide resistance in prostate cancer 林新智 Shin-Chih Lin
PY150	The Study of the Roles of Very Low-Density Lipoprotein and its Receptor (VLDL/R) in Development of epithelial ovarian cancer (EOC) 蘇鈺婷, 張維君, 洪耀欽, 馬文隆 Yu-Ting Su, Wei-Chun Chang, Yao-Ching Hung, Wen-Lung Ma
PY151	Involvement of GPR172A in metastasis of triple-negative breast cancer 譚筠樹, 李政昕, 王興翔, 盧緯騰, 劉佩芬 Yun-Shu Tan, Cheng-Hsin Lee, Hsing-Hsang Wang, Wei-Teng Lu, Pei-Feng Liu
PY152	The role of mitogen-activated protein kinase inhibitor SL-327 in conditioned taste aversion induced by morphine 尤奕竣 ¹ , 李彊 ¹ , 吳季文 ^{1,2} , 黃智偉 ^{1*} Yi Chun Yu ¹ , Chiang Lee ¹ , Chi-Wen Wu ² , and Andrew Chih Wei Huang ^{1*}



編號	論文題目
PY153	Different styles of environmental enrichment and behavioral sensitization induced by methamphetamine in the animal model 鄭凱恩 ^{a,b} , 吳少傑 ^a , 黃智偉 ^{b*} Cai-N Cheng ^{a,b} , Shaw-Jye Wu ^a , and Andrew Chih Wei Huang ^{b*}
PY154	Developing a Simultaneous Analysis of Nucleic Acid and Protein Applying Magnetic Immunoassay and Isothermal Amplification for Helicobacter pylori Detection 黃慈崑 ¹ , 許書禎 ³ , 張天耀 ³ , 林文智 ^{2,3} , 余冠毅 ⁴ , 程君弘 ⁴ , 程雲詳 ^{1,3*} , 孫俊仁 ^{1,3*} , 劉正哲 ^{1,2,3*} Tzu-Wei Huang ¹ , Shu-Chen Hsu ³ , Tien-Yao Chang ³ , Wen-Zhi Lin ^{2,3} , Kuan-Yi Yu ⁴ , Juin-Hong Cherng ⁴ , Yun-Hsiang Cherng ^{1,3*} , Jun-Ren Sun ^{1,3*} , Cheng-Che Liu ^{1,2,3*}
PY155	Probiotics improve cognitive memory and emotional anxiety in mice fed a high-fat diet 楊旻諺, 葉宗明, 施玟玲 Min-Yen Yang, Tsung -Ming Yeh, Wen-Ling Shih
PY156	The Screening Role and Diagnostic Performance of S100B in Patients with Mild Traumatic Brain Injury in The Emergency Department 張智鈞 ^{1*} , 孫仁堂 ² , 黃俊諺 ² , 蘇昱嘉 ² Chih-Chun Chang ^{1*} , Jen-Tang Sun ² , Chun-Yen Huang ² , Yu-Chia Su ²
PY157	Photokeratitis Diagnosis by Tear Ferning Based on A Novel Set of SK Grading Criteria in An UVB-induced Mouse Model 陳楷文 ¹ , 謝孟恬 ¹ , 張菡馨 ² , 林培正 ^{1*} Kevin Kai-Wen Chen ¹ , Sophie Meng-Tien Hsieh ¹ , Han-Hsin Chang ² , David Pei-Cheng Lin ^{1*}
PY158	IL-17A facilitates DIE lesion progression and increases pain sensation through Notch1 signaling activation and NGF up-regulation 唐筱茜 ¹ , 孫仲賢 ² , 吳孟興 ³ , 蔡少正 ^{1*} Hsiao-Chien Tang ¹ , Chung-Hsien Sun ² , Meng-Hsing Wu ³ , Shaw-Jenq Tsai ^{1*}
PY159	Polyploidization and polyploidy reversal control the preneoplastic lesions initiation 林恆, 黃彥淞, Jean-Michel Fustin, 土居雅夫, 陳華濤, 林淑惠, 李延樂, 賴輝寰, 金珮池, 趙于雯, 黃怡萱, 趙需文 Heng Lin, Yen-Sung Huang, Jean-Michel Fustin, Masao Doi, Huatao Chen, Shu-Hui Lin, Yen-Lurk Lee, Hui-Huang Lai, Pei-Chih King, Yu-Wen Chao, Yi-Shuian Huang, Hsu-Wen Chao
PY160	A Survey Study of the Current Situation and Internship Satisfaction of Pharmacy Students in the Chain and Personal Self-operated Pharmacies 張裕昊, 施承典 Yu-Hao Chang, Cheng-Dean Shih

37



生物醫學聯合學術年會

2023 The 37th Joint Annual Conference of Biomedical Science

贊助廠商
Sponsor



JACOBS



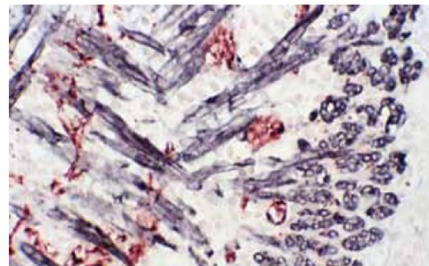
贊助廠商

- | | |
|-----------------|-------------------|
| 力明儀器有限公司 | 基龍米克斯生物科技股份有限公司 |
| 三典科技股份有限公司 | 深圳市瑞沃德生命科技有限公司 |
| 中央研究院 | 鈺泰研究創新股份有限公司 |
| 中央研究院生醫轉譯研究中心 | 凱杰生物科技股份有限公司 |
| 仁憶儀器有限公司 | 博士科儀股份有限公司 |
| 友和貿易股份有限公司 | 惠晶生物科技股份有限公司 |
| 世盟生物科技股份有限公司 | 萊富生命科技股份有限公司 |
| 台灣活性脂質股份有限公司 | 進階生物科技股份有限公司 |
| 弘晉有限公司 | 新加坡商必帝股份有限公司台灣分公司 |
| 永達儀器有限公司 | 瑞基海洋生物科技股份有限公司 |
| 生技醫藥核心設施平台 | 聖川實業有限公司 |
| 旭焯有限公司 | 路明思生技股份有限公司 |
| 伯森生物科技股份有限公司 | 雷文虎克生物技術股份有限公司 |
| 岑祥股份有限公司 | 嘉旺股份有限公司 |
| 每得科技有限公司 | 圖爾思生物科技股份有限公司 |
| 亞諾法生技股份有限公司 | 億康生物科技股份有限公司 |
| 佳展科技股份有限公司 | 億觀生物科技股份有限公司 |
| 昊青股份有限公司 | 蔚星股份有限公司 |
| 波仕特生物科技股份有限公司 | 澳商沃特庫爾股份有限公司台灣分公司 |
| 保吉生化學股份有限公司 | 諾貝爾生物有限公司 |
| 勁因科技有限公司 | 諾倫科技股份有限公司 |
| 威健股份有限公司 | 錫昌科技股份有限公司 |
| 昶安科技有限公司 | 勵眾生活科技股份有限公司 |
| 美商伯瑞股份有限公司台灣分公司 | 鴻洛科技有限公司 |
| 飛資得醫學資訊股份有限公司 | 雙鷹企業有限公司 |
| 財團法人國家同步輻射研究中心 | GlyTech, Inc. |
| 財團法人健康科學文教基金會 | |

創新、先進的組織細胞染色及病理診斷試劑

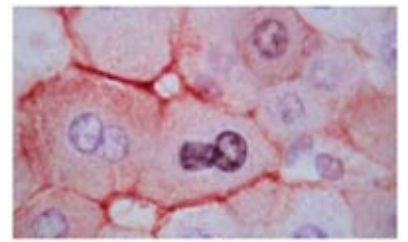


**專利的 VECTASTAIN® ABC Kits
(ABC Systems)**



Mouse Newborn Tongue: • Synapsin (m), M.O.M.™ Peroxidase Kit, Vector® NovaRED™ (red) • Desmin (m), M.O.M.™ Peroxidase Kit, Vector® DAB-Ni (black).

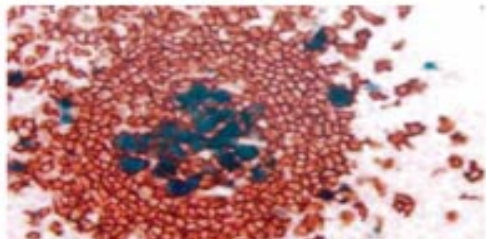
**小鼠對小鼠免疫偵測套組
Mouse on Mouse (M.O.M.)
Immunodetection Kits**



Hepatitis B virus infected liver: • HBV core antigen (p), ImmPRESS™ Reagent (HRP) Anti-Rabbit Ig, ImmPACT™ DAB-Ni (gray-black), • HBV surface antigen (m), ImmPRESS™ Reagent (HRP) Anti-Mouse Ig, ImmPACT™ NovaRED™ (red), Hematoxylin QS (blue). (Image courtesy of Dr. GM Reynolds, Centre for Liver Research, University of Birmingham, U.K.)

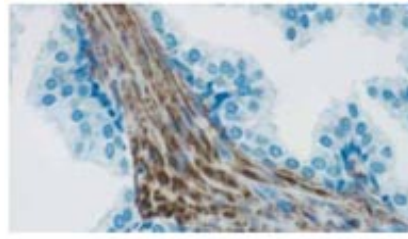
**快速的多抗原檢測系統
ImmPRESS Polymer Kits
(Peroxidase)**

Multiple Label Slides



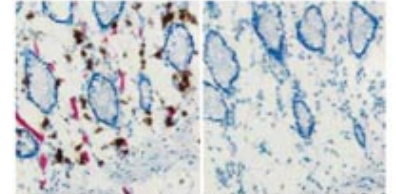
Tonsil: • Cytochrome A (m), VECTASTAIN® ABC-AP Kit (Universal), Vector® Blue (blue) • CD20 (m), VECTASTAIN® Elite ABC Kit (Universal), Vector® NovaRED™ (red).

**多重抗原標記
Multiple Antigen Labeling**



Tumor tissue section showing specific cytoplasmic cell staining (brown, Vector® DAB) with Vector® Hematoxylin QS (blue) counterstain.

**對比染色
Counterstains**



Endogenous alkaline phosphatase (AP) and peroxidase (HRP) activities in frozen, acetone-fixed intestine revealed with Vector® Red AP Substrate (magenta) and ImmPACT™ DAB HRP Substrate (brown), (left). Some substrates used on BLOXALL™ Solution-treated tissue (right). BLOXALL™ Blocking Solution completely eliminates both endogenous enzyme activities.

**抗體阻斷劑
Blocking Reagents**

純化的植物凝集蛋白試劑(Lectin Reagents)

生物素蛋白組織染色試劑(Biotin-Avidin Detection Method)

抑制螢光體脫色的Vectashield Mounting Media

單株抗體(Primary Antibodies)

核酸及蛋白質標定(Nucleic Acids or Protein Labeling)

蛋白質純化(Fusion Protein Purification)

神經細胞追蹤劑(Neuronal Tracers)

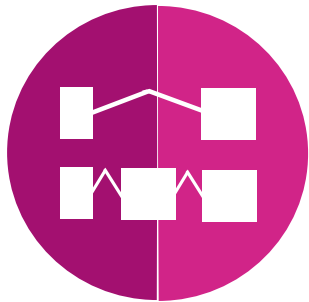
碳水化合物(Lectins and Lectin Conjugates)

提供持續、可靠、高靈敏及低背景值的免疫組織化學染色及其多樣化的應用。乃病理檢驗醫師做病理診斷及臨床醫師於腫瘤分類、分期及治療的重要輔助應用試劑。

2023 威健雙平台 重磅升級!!

-生醫年會特惠中-

WELGENE 威健股份有限公司

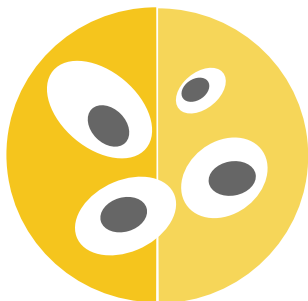
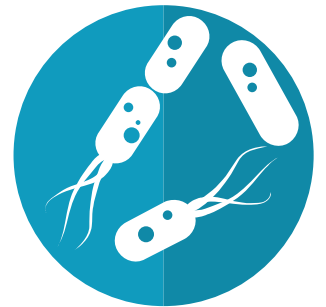


PacBio

RNA IsoSeq - Isoform and Fusion Expression

MAS-seq - Single Cell IsoSeq

16S Full Length
Whole Meta Shotgun
Microbial Genome



scRNA-seq

scATAC-seq

Visium Spatial Expression



Chromium 



HiFi
PacBio

“99.9%精準三代” + “新世代單細胞” 定序

SureSelect V8

第八代自動化外顯子平台

V8 標準外顯子
V8 + NCV 臨床外顯子

For Research Use Only. Not for use in diagnostic procedures.

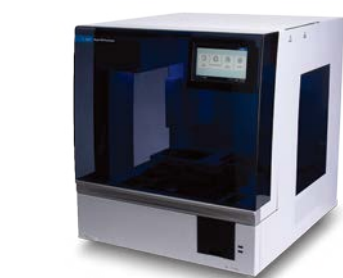


TapeStation 4150 / 4200



日本病理學會建議

臨床 QC 指標：DIN、DV200、cfDNA%
研究 QC 應用：RINe、NGS Library、IVT RNA



Magnis NGS Prep System

高效電晶體感測儀

High efficiency FET sensing system

⊕ 多重感測器陣列 (8通道晶片)

攤位

3F C14



ONE

FOR ALL

跨領域感測器

25 Sensitivity
Specificity



STARX Inc.
www.starx.com.tw
03-5715131 ext.33979
service@starx.com.tw

檢測標的物：

蛋白質、DNA/RNA (如核酸檢測)、藥物篩選、血液、血清、血漿、唾液、尿液、眼淚、細胞極化 / 去極化、循環腫瘤細胞、離子、酸鹼度、氣體及壓電

應用原理 | FET

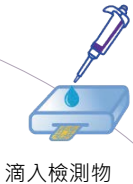
檢測物電位差改變，立即獲得檢測結果

實測 | 軟體介面

Real-time 即時監測待測物電位變化



開機
並插入晶片



滴入檢測物

One-click Start



產品影片



軟體參數設定

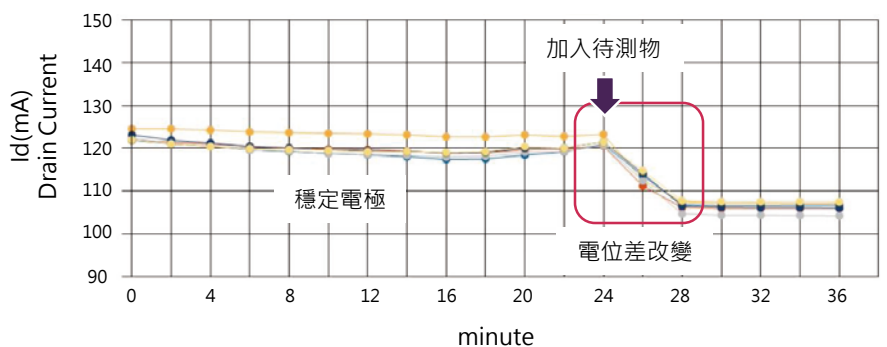
電位差改變
立即顯示結果



Raw data 呈現

量輕可攜 < 0.5Kg

Real-time



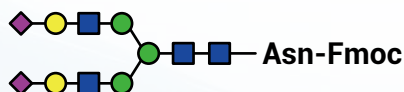


N-Glycan reagents

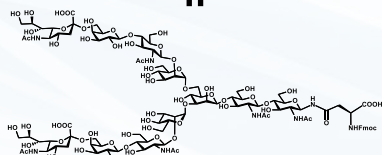
For research

Our catalog of over 50 homogeneous and well-characterized human type N-linked glycans are tailored from highly pure A2G2S2 N-glycan using a combination of chemical and enzymatic processes. Our established bulk production capabilities enable us to provide larger amounts of glycan at a lower cost, making them accessible for use as reagents for applications ranging from basic R&D to biotherapeutics development and

100 mg
100,000 JPY

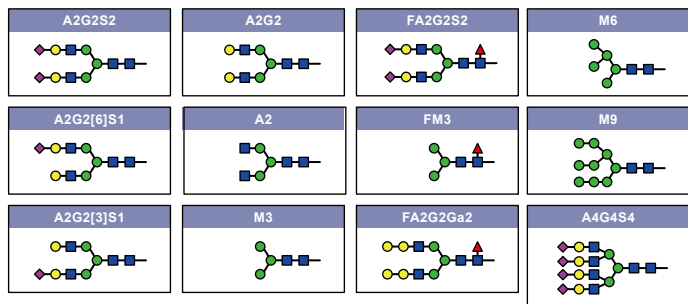


II



Asn-Fmoc A2G2S2 glycan

Selected products:

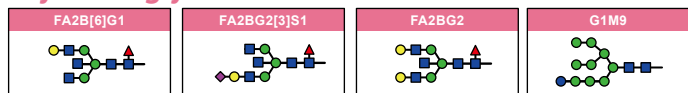


- All structures can be made triantennary
- Terminal sialic acids can be α (2, 6) NeuAc, α (2, 3) NeuAc, α (2, 6) NeuGc, or α (2, 3) NeuGc



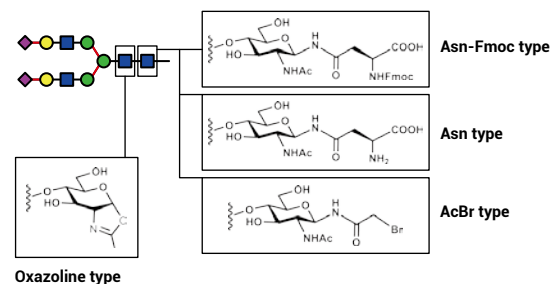
GlyTech's catalog

GlyMuch glycans



GlyMuch is a brand name of KH Neochem Co., Ltd.

Standard modifications:



Looking for other glycan structures or derivatives? Contact us to discuss your requirements.

Well-defined glycan structures

All our glycan reagents are homogeneous in structure and manufactured by multidimensional NMR-validated processes.

Practical amounts for any application

- Available at milligram to gram scale for research
- Bulk glycan production (gram to kilogram) to order for API manufacturing

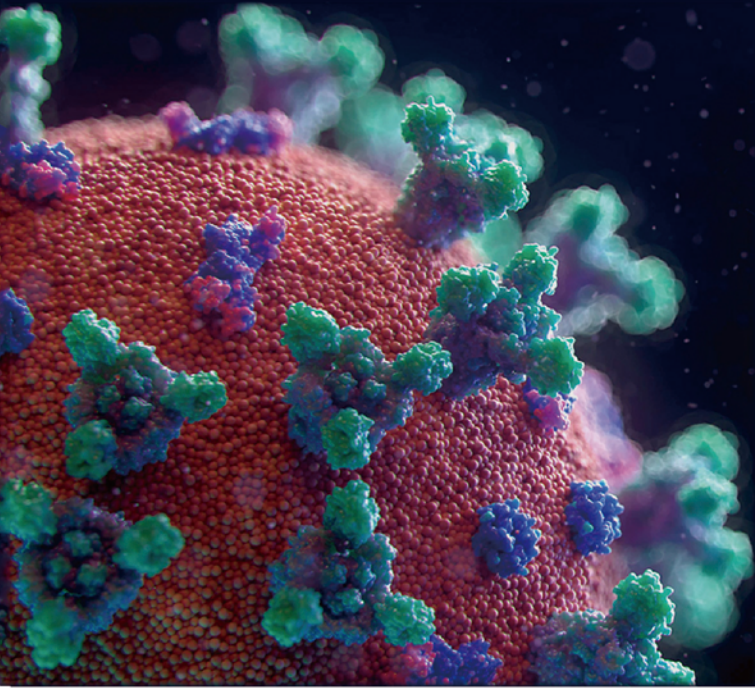
Ready to meet your needs

- Comprehensive product range including:
 - Over 50 different N-glycan structures
 - Special structures (e.g. bisecting GlcNAc)
 - Various functional and activating groups (maleimide, succinimide, haloacetamide, etc.)
 - Various labels for analytical use (2-AB, RapiFluor-MS, etc.)
- Custom synthesis of glycan reagents and analytical standards to meet specific research purposes

Manufacturing alliance between



Glycoscience for Better Health



Lipidomics Analysis Service For Your Research



Kai Simons
Honorary Professor
Institute of Biochemistry
and Molecular Biology,
Max Plank Institute

Lecture Topic

Lipidomics for Metabolic Syndrome
and Obesity Pandemics Researches

時間: 11/23/18 (Sat.) 12:00

演講教室: 31教室-臨床生化學會



Chih-Hao Wang
Assistant Professor
Graduate Institute of BioMedical
Sciences, China Medical University

Lecture Topic

Brown adipose tissue-derived signal lipids
ameliorate metabolic dysfunction and inflam-
mation in diet-induced obesity

時間: 11/23/18 (Sat.) 12:00

演講教室: 2教室-生理學會

Applications of Lipids



Biotech and pharma industry,
clinical research



Food industry



Cosmetics
and dermatology



Academic research



台灣活性脂質股份有限公司
Taiwan-BioActive Lipid



LINE@官方帳號



官方臉書



官方網站



生技醫藥核心設施平台
National Core Facility for Biopharmaceuticals



高階技術服務
免費專業諮詢



動物模式 Animal Models

Transgenic Mice, CRISPR, Mouse Clinic, PDX, Disease Models, Phenotyping, Drug Testing, Zebrafish



基因轉殖鼠核心設施

▶ 台大 林淑華教授/游益興助理研究員



台灣斑馬魚技術與資源中心

▶ 國衛院 江運金副研究員



**台灣小鼠診所與動物設施聯盟—
國家綜合小鼠表現型暨藥物測試中心**

▶ 中研院 陳志成研究員

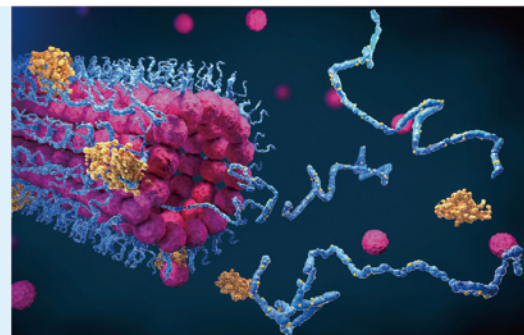
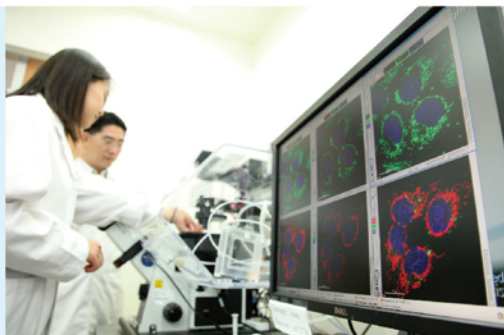


NCFB

生技醫藥核心設施平台
National Core Facility for Biopharmaceuticals

NSTC 國家科學及技術委員會
National Science and Technology Council

高階技術服務
免費專業諮詢



影像結構

Image and Structure Analysis

Biological Crystallography, Laser Scanning Confocal,
Tunable Multiphoton, High-Throughput Screening,
Super-Resolution, Functional Imaging, Cryo-EM

BioNSRRC



同步輻射蛋白質結晶學核心設施

▶ 國輻 黃駿翔博士 / 徐嘉鴻主任



生醫光學影像核心平台

▶ 成大 邱文泰教授



生醫轉譯影像分析平台

▶ 國家生技研園區 沈家寧副研究員



國際巨分子與奈米醫學創新
研發實驗室

▶ 成大 吳尚蓉副教授



生技醫藥核心設施平台
National Core Facility for Biopharmaceuticals



高階技術服務
免費專業諮詢



生物資源 Bioresources

Biobank, Hepatocellular carcinoma, Lung Cancer, iPSC bank, Flies, C.elegans, Yeasts, Strains, Vectors, Antibodies, Libraries, Natural Product libraries, High-throughput screening



人類疾病誘導型多潛能幹細胞服務聯盟

▶ 中研院 謝清河研究員



台灣地區肝細胞癌研究網及資料庫之建立
和台灣肺癌組織樣品資源中心

▶ 長庚 廖運範院士



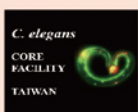
天然物藥庫暨高通量篩選核心平台

▶ 高醫 顏嘉宏副教授



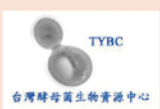
生技醫藥果蠅模式資源中心

▶ 台大 丁照棣教授



台灣線蟲核心設施

▶ 台大 吳益群特聘教授



台灣酵母菌生物資源中心

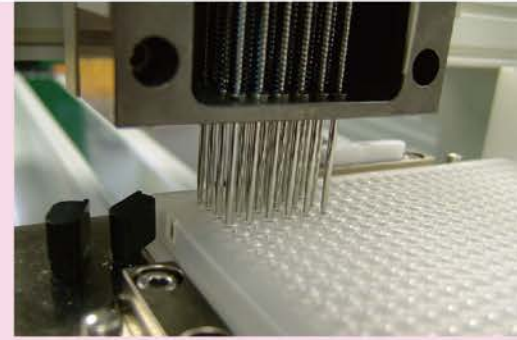
▶ 台大 李芳仁教授



生技醫藥核心設施平台
National Core Facility for Biopharmaceuticals



高階技術服務
免費專業諮詢



基因平台 Gene Platforms

NGS, Microarray, Ultra-Low Input, SNP, STRP, Single Cell, cfDNA, Bioinformatics, GWASs, RNAi, miRNA, AAV, CRISPR, Gene Manipulation



RNA技術平台與基因操控核心設施

▶ 中研院 林淑端特聘研究員



基因體學臨床及產業應用發展中心

▶ 陽明交通大學 楊慕華教授



國家基因體醫學研究中心

▶ 中研院 鄔哲源研究員



藥物基因體實驗室

▶ 台大 俞松良教授

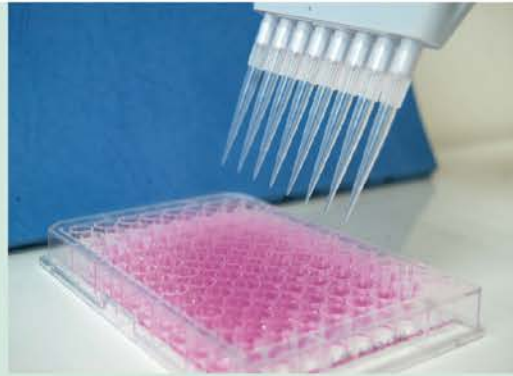


NCFB

生技醫藥核心設施平台
National Core Facility for Biopharmaceuticals

NSTC 國家科學及技術委員會
National Science and Technology Council

高階技術服務
免費專業諮詢



P3實驗室 BSL-3 Laboratories

P3 Laboratory, Plaque Assay, Yield Reduction Assay, Cytokine Profiling, Pathogen Detection and Monitoring, High-Protection Laboratory Personnel Training



P3-2實驗室：
新興傳染病研究核心設施平台
▶ 國防 高治華研究員



P3-1實驗室核心設施
▶ 成大 柯文謙教授



P3-3研究與檢驗實驗室
▶ 台大 張淑媛教授

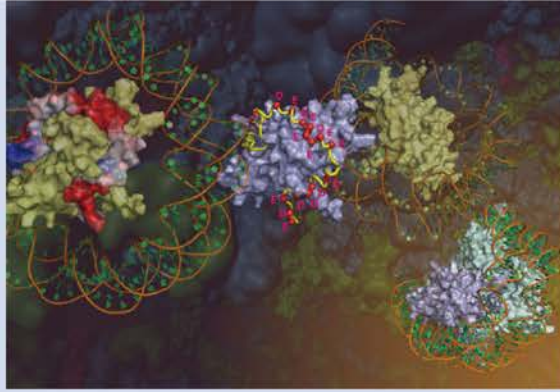
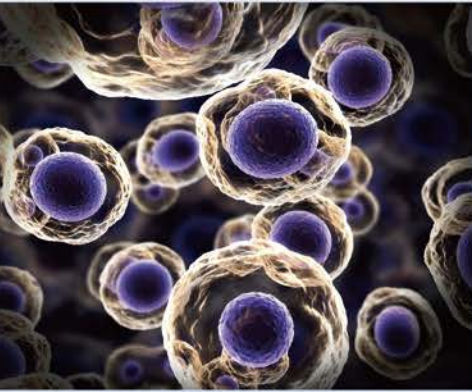


NCFB

生技醫藥核心設施平台
National Core Facility for Biopharmaceuticals

NSTC 國家科學及技術委員會
National Science and Technology Council

高階技術服務
免費專業諮詢



生物資訊 Bioinformatics

Customized Bioinformatics, Big Data, AI, MiRTarBase,
Cloud Storage & Computing, Image Service Architecture



國家生醫數位資料與
分析運算雲端服務平台

▶ 國網 王聿泰組長



生技醫藥生物資訊核心設施

▶ 國衛院 熊昭名譽研究員

We Strive from Science to Social Value!

1 Translational Medicine Division (TMeD)

- Projects that aim for technology transfer and collaboration with industries.
- Projects that aim for commercialization within 3 years via technology transfer or startup establishment.
- Support budget for candidate validation and preclinical development.

Research Areas

Infectious Disease

Innovative Detection Technology

Metabolic Diseases

Precision Medicine / Cancer Therapy

Neuro-degenerative Disease

Innovative Medical Applications

Biomedical Translation Research Center (BioTRec), Academia Sinica

2 Innovation Incubation Center (BioHub Taiwan)

- We incubate companies covering from the development of Biologics, Nucleic Acid Drugs & Regenerative Medicine, Smart Healthcare & Precision Medicine, as well as Botanical Drugs & Small Molecule Drugs.
- We consolidate resources among different ministries, academics, and industries to provides one-stop service to support resident companies during R&D stage and subsequent product commercialization.
- We establish NBRP Academy to cultivate business talents by constructing the training program on scientific innovation and entrepreneurship.



3 Emerging Infectious Disease Division (EIDD)

- Provide (A)BSL-2/(A)BSL-3
- Rapidly develop identification/testing reagents and tools, anti-viral drugs, therapeutic antibodies and vaccines.
- Establish libraries of biomaterials critical for infectious disease research.
- Cultivate talents for the prevention and control of infectious diseases.



4 Intelligence Medicine Division

- Create data analytics center for curation and processing of high-resolution medical images, massive and continuous output from biosensors of physiologic metrics, genome sequences, and electronic medical records.
- Facilitate the further development of precision medicine by forging the bioinformatics databanks and analytics for discovery of novel biomarkers, new therapeutic targets, and new drugs.
- Create an ecosystem of academic and industrial partners for intelligence medicine-derived health care systems.



National Biotechnology Research Park



World-Class Core Facilities

The core facilities at the National Biotechnology Research Park (NBRP) provide researchers at NBRP and nationwide with cutting-edge instrumentation and specialized technical services, which help to accelerate the pace of R&D for innovative new drugs (small molecules, biologics, antibodies, botanicals, etc.), precision medicines, and medical devices. Our goal is to facilitate successful progression of IND-enabling studies, in order to enhance the output and international competitiveness of the biotech industry in Taiwan.



Mission

- Provide resident companies and researchers with advanced instruments, high-priced equipment, and technical services for translational research on disease prevention, detection, diagnosis and treatment.
- Accelerate the timeline for translational research and pre-clinical verification of innovative precision

Core Facilities	Service
Medicinal Chemistry and Analytical Core Facility	<ol style="list-style-type: none"> 1. Customized Chemical and Drug Synthesis 2. Mass Spectrometry, Biophysical Analysis 3. Nuclear Magnetic Resonance (NMR)
Human Therapeutic Antibody Development Platform	<ol style="list-style-type: none"> 1. Phage-Displayed Human Naive Antibody Library 2. Single B Cell Platform 3. High-throughput Synthetic Human Antibody Engineering Platform
RNA Technology Platform and Gene Manipulation Core	Development of RNAi drugs and CAR-T cell therapy, Customized CRISPR/Cas related service
Nucleic Acid Vaccine & Drug Technology Platform	mRNA vaccine and drug design, IVT scale-up, LNP encapsulation, GMP-compliant manufacturing & quality control
Taiwan Mouse Clinic	<ol style="list-style-type: none"> 1. Phenotyping and Drug Efficacy Analysis 2. Small Animal Facilities 3. Animal Imaging Facility
Animal imaging facility	MRI/micro-CT
Core Facilities for Translational Medicine	<ol style="list-style-type: none"> 1. Cell Sorting and Analysis Core Facility 2. Circulating Tumor Cell Capture and Single Cell Analysis Core Facility 3. Molecular Imaging Core Facility 4. Cell-based Assay Core Facility 5. Pathology Core Facility 6. Common Equipment
Infectious Disease Core Facility (ID Core)	<ol style="list-style-type: none"> 1. RG2/RG3 pathogen detection and analysis platform 2. Animal model development and preclinical testing of infectious diseases 3. BSL-2 Laboratory units rental
Taiwan Biobank	Establish and release databases of biological samples collected from the normal and diseased populations

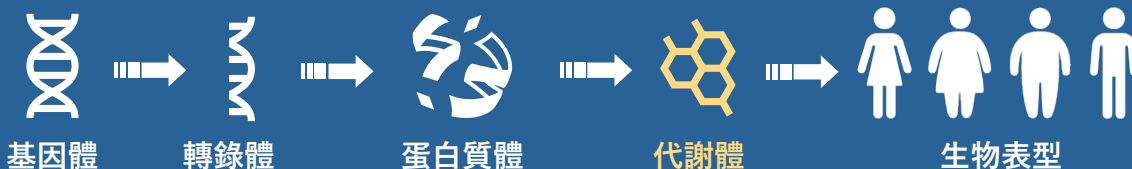




Leeuwenhoek Laboratories
雷文虎克生物技術股份有限公司

小分子，大發現

雷文虎克專精於解析生物體的代謝物組成，量化由疾病、營養、微生物、醫療行為等內外因子對生物所造成的影響，協助客戶解答健康或疾病研究上的重要問題。



找尋生物標誌物



研究腸道微生物



解析疾病代謝機制



探討功能基因組



開發保健營養品



加速精準醫療發展

代謝體分析服務

讓我們幫助您取得 > 1,000 種小分子代謝物的組成及半定量或定量資訊！



分析諮詢



樣品製備



代謝體分析



結果報告

- 具備多年的代謝物分析經驗，為您挑選最適合的分析方法
- 使用液相層析三段四極柱質譜儀來精準定量樣品中代謝物濃度
- 配備高解析質譜，探索樣品中代謝物組成，提供精準至小數點下第四位的精確質量
- 擁有數百種人體及腸道菌中常見的代謝物標準品及 > 10,000 個化合物的 MS/MS 指紋線上資料庫

掃描 QR code
預約技術諮詢



聯絡我們

雷文虎克生物技術股份有限公司 代謝體與精準健康研究室
網址: <https://lwhklab.com.tw/>
信箱: tech@lwhklab.com.tw
電話: (02) 2377-2318 #103
地址: 10617 台北市大安區芳蘭路 71 號 3樓 301 室



Leeuwenhoek Laboratories
雷文虎克生物技術股份有限公司



無菌小鼠

探討微生物與宿主交互作用之黃金標準!

雷文虎克致力於 C57BL/6 無菌小鼠飼養及特定菌株(群)定植技術，協助客戶建立特定菌小鼠模型，探討特定菌株(群)對宿主生理、健康與疾病表型的影響，及瞭解特定菌株(群)調控宿主表型的分子機制，也是開發活菌生醫產品及探討腸道菌活性分子藥物的利器。

- 🐭 提供 C57BL/6 無菌鼠
- 🐭 無菌鼠技術委託操作
- 🐭 植入特定菌(群)服務
- 🐭 客製化技術服務



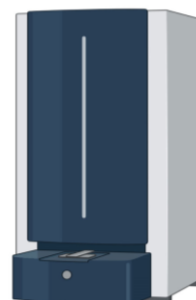
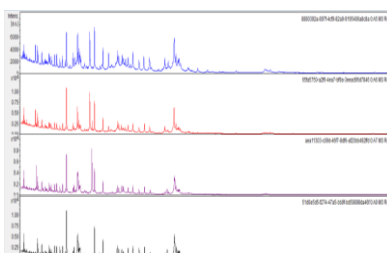
微菌功效研究室 | 電話: (02)2377-2318 #302

腸道厭氧菌培養與鑑定

重新發現微生物!

雷文虎克具備絕對厭氧菌培養之實務經驗，包括人體腸道菌的培養、分離、純化、鑑定及保存。協助客戶培養腸道厭氧菌、製備活體功效驗證所需之生物材料。

- 🦠 菌種鑑定/ 鑑別 (純菌株)
- 🦠 菌種委託培養 (腸道厭氧菌)
- 🦠 活體功效驗證之樣品製備



次世代益生菌研究室 | 電話: (02)2377-2318 #202

STATA® 17



提供所有資料科學的需求 —
資料處理、視覺化、統計與自動化的報表

Stata 是一套具整合性的統計套裝軟體，不需要購買任何附加的模組，即可透過直覺簡易的指令操作與完整的下拉式選單，快速地完成資料管理、統計分析與圖形呈現，眾多領域皆廣泛應用。

提供數百種統計工具，從基本標準方法，例如：基本的列表與概要的統計量、線性迴歸、ANOVA/MANOVA、ARIMA...等，到高階模型，例如：多階層模型、存活模型、SEM、貝氏分析...等。

高階數學及符號運算軟體



Mathematica 30 年的開發歷程中已經擁有數百萬用戶，在科學計算領域確立了最先進的技術，為全球技術創新人員、教育工作者、學生和其他人士提供了最主要的計算環境，並成為許多機構數學運算的標準工具。Mathematica 以卓越的技術和簡便的使用方法享譽全球，它提供了單個集成並且持續擴展的系統，不僅用於計算，也能用於建模、模擬、視覺化、軟體開發、建立文件或是輸出成果，涵蓋了最廣最深的科學計算功能。



圖：Mathematica 可在桌面、雲端、行動裝置中使用



最適合用於統計教學資料分析的軟體

時至今日資料隨處可見，但你有確切的運用數據？

Minitab 統計軟體根據既有和歷史資料，找出趨勢、發現數據間隱藏關係、利用模式進行預測，視覺化呈現和辨別重要因子，幫助您回答極具挑戰的問題。資料視覺化是有效方式，但結合分析，將使其發揮更強大力量。藉由統計與資料分析的強大威力，將有無限可能！



*掃QR CODE進官網

Fax: (02)2503-1680 Tel: (02)2505-0525

www.sciformosa.com.tw
104 台北市中山區復興北路354號11樓



THE DIFFERENCE OF **ONE** TRANSCRIPT



WITH GREATER DETAIL AND FEWER SEQUENCING READS. At BD, we're transforming how cells are understood and enabling you to tackle your most demanding research needs with powerful single-cell RNA-seq tools. The new high-throughput BD Rhapsody™ Single-Cell Analysis System with customizable, targeted assays is designed to increase sampling sensitivity, resulting in drastically reduced sequencing costs. Now you can analyze large single-cell data sets and multiplex up to 12 samples in parallel—up to 20,000 cells with one BD Rhapsody cartridge—in a streamlined workflow. This groundbreaking tool empowers you to detect rare transcripts and focus on the genes that really matter. Discover the difference of a new vision in cellular research. **Discover the new BD.**

台北市信義區忠孝東路四段560號3樓
0800-211-528

Learn about the difference of one transcript at bd.com/RhapsodyTranscript





THE DIFFERENCE OF STANDARDIZATION



The BD FACSLyric™ system's focus on standardization helps maximize compatibility, interoperability, repeatability and quality. Through the unique features of the BD FACSLyric flow cytometer, data is reproducible over time and across instruments, assays are easily portable between instruments and the workflow is simplified. Standardize your assay results with the BD FACSLyric system now. Learn more at bdbiosciences.com/go/facsl lyric

bdbiosciences.com

新加坡商必帝股份有限公司台灣分公司
台北市信義區忠孝東路四段560號3樓

23-20338-00-A BD-28648 08/2022 衛部醫器輸字第030534號
北市衛器廣字第111080224號

© 2022 BD. BD, the BD Logo and BD FACSLyric are trademarks of Becton, Dickinson and Company.





Amplify your flow cytometry data with spatial and morphological insights

Do you have the right parameters to identify populations of interest? When you select target cells without using imaging parameters, you could miss targets or undiscovered populations. Real-time image analysis provides data plots of size, shape and fluorescence localization. With BD FACSDiscover™ S8 Cell Sorter with BD CellView™ Image Technology, you can create an image of each cell in real time, which enables novel image-based gating and cell sorting. Plus, gain confidence in your data through live visual confirmation of cell morphology, doublets, clumps and debris. Our latest breakthrough could lead to your next breakthrough.

Visualize the difference at bdbiosciences.com/S8



For Research Use Only. Not for use in diagnostic or therapeutic procedures. The BD FACSDiscover™ S8 Cell Sorter has not yet been CE marked and cannot be made available in the European Union until CE marking has been completed.

BD, the BD Logo and CellView are trademarks of Becton, Dickinson and Company or its affiliates.
© 2022 BD. All rights reserved. BD-70842 09/2022

THE FUTURE LAB

進階與您一同邁入新未來



進階生物科技
Level Biotechnology Inc.

獲授權代理

Agilent

Channel
Partner

Cell Analysis Division (CLSD) 系列產品



Seahorse

Synergy Cytation

NovoCyte

RTCA



進階生物科技

台北總公司 02-26959935 傳真 02-26958373
免付費專線 0800-251302 www.level.com.tw



進階官網



FB粉絲團