出國報告（出國類別：研究）

參加食品安全與食因性病原微生物分析研討會及技術研習報告

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報告日期：中華民國九十九年十月二十二日

摘 要

本年度國際食品保護協會（IAFP）年會於美國加州安納海姆之國際會議中心舉行，會期由 8 月 1 日起至 4 日止共計 4 天。內容包括研習會、座談會、專題研討會、論文發表、獲獎人演講、展覽會、壁報論文發表及贊助廠商年度大型專題研討會等。由年會各活動所蒐集到之資訊，掌握最新國際間確保食品安全之管理及檢驗訊息，其間與美國官方、學界及業界之專家學者互動，及就近參訪食因性病原微生物實驗室交換研究心得，保持本局檢驗技術與國際接軌並提升專業素質及能力。第 100 屆國際食品保護協會年會將於 2011 年 7 月 31 日至 8 月 3 日，在國際食品保護協會會總部，美國威斯康辛州密爾沃基市舉行。

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壹、目的

食因性病原微生物危害食品衛生安全的嚴重性無庸置疑，其依生物安全等級危險性爲基礎之分類大部分歸屬第二級危險群（Risk group 2 , RG2）微生物，部分如霍亂弧菌 (*Vibrio cholerae*)、出血性大腸桿菌O157 (Hemorrhagic *Escherichia coli* O157)、肉毒桿菌 (*Clostridium botulinum*)、沙門氏桿菌 (*Salmonella*)、李斯特菌 (*Listeria monocytogenes*)等，同時也列入我國法定傳染病之病原微生物，在美國生物恐怖攻擊管制物質分級中將食安威脅病原 (Food safety threats)如沙門氏桿菌、出血性大腸桿菌O157:H7、志賀氏桿菌 (*Shigella*)等列爲B級管制製劑，其中肉毒桿菌毒素更列入危害最嚴重之A級。顯見食因性病原微生物之管控監測爲世界各國重要議題，本局乃負責食因性病原微生物檢驗研究之國家參考實驗室，需隨時掌握最新食品安全相關訊息及精進檢驗專業技術，擬藉由此次赴美參加國際食品保護協會（IAFP）年會及參訪食因性病原微生物相關實驗室，研習食因性病原微生物研究檢驗技術，建立本局與國際相關實驗室之聯絡管道、擷取參訪研究室之經驗與優點。學習成果可實際應用於本局相關檢驗業務，保持本局檢驗技術與國際接軌。

貳、行程紀要

一、參加國際食品保護協會2010年年會印象

國際食品保護協會2010年年會於美國加州安納海姆之國際會議中心舉行，正式會期由8月1日起至4日共計4 天，議程總覽如表1，內容包括會前2天各類活動，如7月30日及7月31日的研習會，7月31日起開始辦理現場報名及報到相關事宜、IAFP基金會聯誼(限定參加成員)、晚上歡迎茶會，各委員會會議 (部份可以旁聽)分配在7月31日及8月1日，8月1日晚上大會開幕，由任職於Kraft食品公司的IAFP會長Vickie Lewandowski主持儀式，介紹與會新鮮人及資深會員，其中不乏長達30年以上者，甚至有入會60年者，基金會董事會報告會務運作及經費運用情形，頒發多項會員各領域傑出、專業、貢獻及獎學金等榮譽獎項，北美華人IAFP分會成立也於本會期中獲授證等，今年補助學生出席獎金的員額最多且來自全球，除烏干達學生因故缺席外，有來自葡萄牙、匈牙利、澳洲、土耳其等國的學生。另，特別邀請美國FDA今年1月新上任之食品副處長Michael R. Taylor發表專題演說(The Ivan Parkin Lecture)，題目爲「由農場到餐桌提升食品安全」 (Improving Food Safety from Farm to Table: Fostering Prevention and Building Partnerships)。開幕儀式後即揭開展覽會序幕，展覽會場同時舉行由Kraft食品公司贊助的「美酒與乾酪」盛會，與會者也藉此機會互相熟悉，共同迎接未來3天豐富之旅。8月2日開始密集進行座談會、專題研討會、論文發表、獲獎人演講、壁報論文發表及重要贊助廠商專題研討會等，議程內容如附件1，8月4日畢幕壓軸專題演講 (John H. Sillker Lecture)邀請資深會員Robert, L. Buchanan就對食因性微生物的瞭解提

出個人獨特的觀點(Understanding Foodborne Microorganisms, A Matter of Perspective)，今年廠商專題研討會有2場，均在夜間舉行，規模較白天大會議程中的任一場次大型，有8月2日3M公司的- 21世紀食品安全重要趨勢 (Key Trends in 21st Century Food Safety)，及bioMerieux公司的-第9屆年度科學研討會(bioMerieux's 9th Annual Scientific Symposium)，筆者首次參加國際食品保護協會年會印象整體而言白天專業議題聚焦在食品安全相關的講座非常密集，壁報論文發表與且展欄會場比鄰，以及自大會開幕、夜間大型專題研討會、畢幕頒獎晚會等會前會後均安排茶會及餐敘，因此每天的交誼活動機會非常多。

二、年會專題討論(Symposia)及圓桌會議(Roundatble)

食品保護協會2010年年會議程的重頭戲包括分配在8月2日至8月4日三天，共37個主題式的專題討論如表2，摘要如附件2 (symposium abstract），每一主題由3至6個子題組成，如8月2日第一場專題「微生物的環境測試及評估-低水含量食品重要先驅的議題」(S1 Microbiological Environmental Testing and Validation: Leading-edge Issues for Low-moisture Foods) 。每年約有4萬個沙門氏菌感染病例，其中約 600屬於致命。2008年春天爆發的中毒案，造成1千3百人生病與墨西哥塞拉諾辣椒有關。而過去的15年裡，只有兩個疫情被證實與花生醬有關。2006年超過 620人因彼得潘花生醬和超值花生醬中的沙門氏菌生病，疫情擴及47個州，但無死亡案例發生。1996年沙門氏菌襲擊超過 500個澳大利亞花生醬愛好者。沙門氏桿菌進入花生醬途徑很可能從一些動物的糞便。例如，引起一早期的暴發案件發生在屋頂洩漏。至於沙門氏桿菌如何進入屋頂上的水中，沒有人知道

確切原因。也許是經由聚集在花生醬加工廠周圍的鳥類。花生烘焙過程是唯一殺死沙門氏桿菌的加工步驟。如果污染是發生在烘烤過後，沙門氏桿菌便可存活下去。研究證明，沙門氏桿菌一旦污染花生醬便可以存活數月。脂肪食物對沙門氏桿菌較具保護性，所以當沙門氏桿菌進入人體第一道防線-含酸性胃液的胃中可能無法完全被摧毀。而存在一個含高度脂肪的食物-花生醬中沙門氏桿菌的存活率更好。近來爆發多起低水含量食品（如花生，花生醬，餅乾麵團等）中毒案，逐漸喚起民眾注意此類傳統的衛生操作方案可能不適用或不實用加工食品涉案的複雜性。因此，食品業和FDA已經聚集在一起，共同研商使用現有的最佳思維和做法，確保在加工過程控制食因性的危害。然而此領域仍待提供改善機會的課題是如何透過微生物測試驗證環境控制措施。有關食品加工和食品監管機構在低水分食品連續加工過程環境的監測，本次研討會藉此主題由5位專家學者就環境監控策略、食品接觸面積的環境採樣點及時間、清洗與消毒、環境監測與最終產品品管結果之符合度提出研究報告並和與會的專家及聽眾們共同討論以探討“零”的挑戰。

圓桌會議是食品保護協會2010年年會議程的特色之一，零售食品安全協會成員是由五個大學、專業社團（包括IAFP）和政府機構的食品安全專家組成。其主要目標是促進各個層面食品安全專業人員之間的交流。該財團最近由美國農業部資助了五十多萬美元，實現四項零售和餐飲食品安全相關的具體目標。此圓桌會議將協助完成最後這些目標（確定並排定零售食品安全優先的需要）。圓桌會議的目的是讓各選區提出的相關議題，經由小組討論對於需要解決的問題的重要研究達成共識。

三、技術相關報告 (Technical Sessions)

專題討論外技術交流相關論文之發表分 2 天 7 群組 (T1 至 T7)進行，每一群組接受 12 篇報告，探討題目如表 3，摘要如附件 3 (technical abstract)，其中分布 7 場次 (群組)共有 24 篇參加大會比賽評比，在 8 月 2 日 T1 報告實驗室應用方法及新穎方法 (applied laboratory methods and novel laboratory methods technical session)；T2 主題是病原菌、衛生安全及水產品 (pathogens, sanitation, and seafood technical session)，參賽報告共 8 篇篇數爲 7 群組中最多者；T3 討論抗菌及防止腐敗的技術(antimicrobial and microbial food spoilage technical session)。於 8 月 3 日有 4 群組，T4 製程技術（produce technical session），主要探討 *Listeria* spp., *Salmonella, Escherichia coli* O157:H7、Enteric Viruses、Norovirus-1 等食因性病原微生物對生鮮蔬果的污染及去污染問題，如瓜果之田間調查至清洗水的 *Salmonella* Typhimurium 污染管控、逐批追蹤綠色葉菜類產銷過程之 *Escherichia coli* O157:H7、國際化水耕青蔥和菠菜中腸道病毒等；T5 禽畜產品（meat and poultry technical session），有多篇探討即食禽畜產品中 *Listeria* spp., *Salmonella, Escherichia coli* O157:H7 及 *Campylobacter jejuni* 污染情形及快速檢測方法，另有 1 篇關於艱難梭狀桿菌 (*Clostridium difficile*)在禽畜絞肉中的檢出率；T6 溝通宣導教育（produce and communication outreach and education technical session），如幼兒家長的知識和行爲關係家庭食物的安全、修改食品業員工行爲設計口語文化學習的教材和方法、調查消費者對奈米技術食品安全的觀感等；T7 風險評估與流行病學（risk assessment and epidemiology technical session）如以數學模型探討 *Escherichia coli* O157：H7 和 *Staphylococcus aureus* 在不銹鋼

表面的存活、 數學模式定量風險評估沙拉吧微生物、應用動力學模式描述紐西蘭分離株 *Campylobacter jejuni* 的熱去活情形等。

四、壁報論文展示(Posters)

壁報論文展示分 3 個群組 5 個時段發表，第一群組 154 篇分兩組分別於 8 月 2 日上午及下午時段展示，內容含蓋抗藥性(antimicrobials)、公共衛生(Sanitation)、水產品 (Seafood)、流行病學 (Epidemiology)、風險評估 (Risk assessment)、溝通宣導教育(communication outreach and education)、實驗室的新穎方法(novel laboratory method)、水及飲品(beverages and water)、乳品及其他食品(dairy and other food commodities)等範圍；第二群組 159 篇分兩組分別於 8 月 3 日上午及下午時段，內容包括實驗室應用方法(applied laboratory methods)、一般及腐敗性微生物(general microbiology microbial food spoilage)、病原微生物(pathogens)、毒素型及非微生物性 (toxicology and non-microbial food safety poster session)等食品衛生安全問題；第三群組 83 篇時段於 8 月 4 日上午，內容爲製程及禽畜肉 (produce and meat and poultry poster session)，共約 400 篇最新的實務及學術性論文發表題目如表 4，摘要如附件 4，其中 86 篇報名參加比賽。並可在展示會場直接與各國專家學者交流，以獲取最新資訊。

五、參訪食因性病原微生物實驗室

今年 3 月發生 99 年度首起肉毒桿菌中毒事件，至 6 月間亦陸續發生多起肉毒桿菌中毒案例，不幸在 8 案肉毒桿菌中毒事件中有 1 位患者甚至於死亡。本局負責

相關檢體之檢驗工作背負各界期待重任，鑑於傳統微生物的培養方法檢驗肉毒桿菌耗時費力，且操作不容易，無法快速有效追蹤食品中毒源頭。本局先前的研究已建立肉毒桿菌毒素基因之聚合酶鏈反應 (PCR) 檢測方法，研發並構築專利參考質體提供檢驗對照物質，解決標準菌株取得不易及保障實驗室的生物安全，另考量靈敏度、特異性、檢驗時間與實驗操作之方便性，也參考 Fach 等人 (Journal of Applied Microbiology. 2009. 107:465–473.) 與 Satterfield 等人 (Journal of Medical Microbiology. 2010. 59:55–64.) 發表的文獻，同時於 Real-time PCR 儀器 ABI7900 與 Roche LightCycler 兩機型建立肉毒桿菌 A、B、E、F 四型毒素基因的檢驗方法，初步評估結果可正確辨識肉毒桿菌 A 型、B 型、E 型與 F 型毒素基因，也應用於此連續重大食安事件後期，輔助快速篩選送驗檢體，期望能縮短檢驗時程，快速追溯致病原。

鑑於目前全球對於微生物檢驗之黃金標準仍然以傳統微生物培養結果作爲法定呈判依據，本局歷年檢出肉毒桿菌之檢體僅蔭花生 (75 年)、醃製山豬肉(89 年)、自製肉醬罐頭 (90 年)、醃漬山羊肉 (95 年)等食餘檢體。多年來此菌發生率不高、送驗檢體不多、且多未檢出，對於此菌之經驗不如其他病原菌，但本年度連續 8 起肉毒桿菌中毒案例，不但直接衝擊涉嫌之國產真空包裝低酸性食品產業，更造成民眾食安的疑慮及社會人心不安。加上目前生物恐怖主義瀰漫，除了食品中毒案方面的考量外更需防範生物性的恐怖攻擊，對於此類厭氧菌之檢驗技術應成立專責單位。此行與會期間特別洽詢從事肉毒桿菌及其毒素研究多年的旅美學者林維真博士參訪事宜，林博士研究室 2003 年通過 CDC 之認證，因肉毒桿菌列入 A 類生物戰劑最可能應用之材料，各研究單位均採保守方式秘密進行研

究，官方也嚴加管制，此行很幸運的得到她的同意，參觀其任教之加州科技大學 POMONA 分校研究室，並熱心提供多種培養厭氧菌的設備及材料，及購買肉毒桿菌毒素、抗毒素、檢測抗體等相關規定及管道，並推薦此領域之專家研討會 IBRCC (Interagency Botulism Research Coordinating Committee)，今年 11 月將於亞特蘭大舉行。

參、心得與建議

一、參加國際會議應熟悉並選定特定會議長期經營

出席國際會議前充分的準備工作是需要、必要而且十分重要，熟悉國際會議並選定特定會議長期經營，才能發揮參與的最大效益並建立人脈。首先要瞭解會議掌握年會投稿報名期限及相關之規定，國際食品保護協會年會舉辦的時間歷年約在七、八月間；地點則以美國各大城市輪流，例如 2009 年在德州 Grapevine 市，2011 年未來 3 年分別將在威斯康辛州密爾沃基市（Milwaukee）、羅得島普羅維登斯市 (Providence)及北卡羅來納州 (North Carolina)夏洛特市(Charlotte)會議中心；本會投稿期限在去年底，目前一律採行網路線上投稿，且逾期不受理，今年截稿日 1 月 20 日，投稿之作者中至少有一名需爲現任會員或將會完成報名手續並出席大會；出席大會之線上報名在早期報名（early registration）出席費用上有很大的優惠，但因故無法參加則有退費的問題，現場報名（on-site registration）則比照 late registration 費用高；研習會一律採預約方式，均需事先報名且繳交費用，熱門的主題要儘早報名以免額滿。

二、培養具專業素養及語言能力之重要性

參加國際會議事前的準備工作還需大力仰賴專業素養及語言能力，而兩者的養成均需日積月累，尤其國際共通語言-英語，精通外語不僅在專業知識的吸收方面有所助益，在規劃出國行程時更突顯其重要性：1.便於事前資訊蒐集，尤其網際網路資訊發達，舉凡交通航線選擇、當地旅館之地點、價位及設備、服務項目，參訪機關及其任務，或機票附帶之各種套裝旅遊…等琳瑯滿目，若用心搜索

可以規劃出更圓滿的行程；2.便於個人於非母語國家從事除食衣住行外之各項活動，如旅遊、購物、參觀博物館等；3.與國際組織或國外友人之通訊，主要仍依賴英語的溝通，尤其此行充分發揮 E-mail 便利迅速的優點。

三、食品微生物定性及定量分析之方法建立需投入專業及專任的人才

官方的食品微生物定性及定量分析之確效方法一般可參考 2002 年的 AOAC 微生物指引 (Journal of AOAC INTERNATIONAL Vol. 85, No. 5, 2002, page 1187-1199) ，透過美國 FDA 鄭崇明博士在 2009 年發表於食品保護期刊 (Journal of Food Protection, Vol. 72, No. 5, 2009, Page 945-951) 的「實驗室間驗證即時定量聚合酶鏈反應 (real-time PCR) 24 小時快速方法檢測食品中沙門氏菌」實際案例，可以更詳細的瞭解確效方法的評估方式，該報告內容摘要涉及由 8 個聯邦及州政府實驗室的共同努力(collaborative effort)，測試 11 種食品，包括馬鈴薯泥、軟奶酪、辣椒粉、巧克力、蛋、芽菜、蘋果汁、魚、蝦、絞牛肉和絞雞肉。每種食物製備 7 份盲樣品分發給每個參與者進行測試。其中包括 6 份樣品等量接種 1 至 5 CFU/25 克的不同種血清型沙門氏菌 (Gaminara, Weltevreden, Heidelberg, Senftenberg, Enteritidis, Newport, Typhimurium, and Kentucky) 及 10 倍菌量的非標的競爭菌 E. cloacae (the competitor, 10- 50 CFU/25 g)。第 7 份樣品只接種競爭菌 E. cloacae (10 至 50 CFU/25 g)。所有樣品並行進行四種沙門氏菌方法：（一）即時定量 PCR 方法 (24-h qPCR method)，檢測修飾緩衝蛋白腺水 (modified buffered peptone water) 24 小時增菌培養液中沙門氏桿菌；（二）即時定量 PCR 方法(48-h qPCR method)，檢測 48 小時輔助選擇性增菌液中沙門氏桿菌；（三）美國 FDA 細菌分析方法手冊 (modified Bacteriological Analytical Manual method,

m-BAM)；及（四）免疫方法的分析儀器 (VIDAS, an immunoassay system)。測試結果經統計分析顯示，在 11 種測試食品中僅芽菜例外，定量 PCR 檢測需要 48 小時，而其他 10 種食品檢測結果即時定量 PCR 方法與 m-BAM 均無顯著性差異 (P > or = 0.05)。兩種即時定量 PCR 方法之檢出限爲 0.08 至 0.2 CFU /克，評估結果提供 24-h qPCR 快速篩選方法檢測食品中沙門氏桿菌堅實的基礎。

鄭崇明博士曾任職本局食品微生物組，十分熱心也很關心本局同仁及業務，透過電郵、電話或面對面，對於我們遭遇的種種疑難不遺餘力的給予協助，多年來本局同仁曾多次經由鄭博士安排拜訪美國 FDA 太平洋區域西南實驗室（Pacific Regional Laboratory Southwest, PRL-SW），筆者在 2004 年也曾順道參訪。當時鄭博士在 FDA 擔任食因性病原專家（Food Pathogen Specialist），負責業務即與本局關係密切，便藉機請教美國國內食品安全管理機制，及對於內銷及進口產品的管制措施及病原菌檢驗情形，同時針對其發表之沙門氏桿菌檢測方法及檢出率交換心得，並安排參觀剛搬遷至爾灣（Irvine）的辦公室。今年礙於 FDA 新規定必須事先提出申請，因此 IAFP 大會場地雖然距離 FDA 辦公室很近卻無緣參訪。幸好有多位 FDA 的專家參與了此年度盛會，與會期間也利用了極少的休息時間藉機互動。

由 2004 年參訪得知鄭博士當時已評估 RT-PCR 在檢測病原性微生物之應用及利用 PCR 方法取代 BAM 上建議之沙門氏桿菌傳統檢測方法，期間雖歷經多次 BAM 的方法修定，鄭博士著手此 RT-PCR 快速篩選方法的精神契而不捨，內部評估即進行沙門氏桿菌 328 種血清型及非沙門氏桿菌 56 種菌的檢測。食品測試共 420 件包括乾燥食品(dry food)、海鮮活(sea food) 及製備的樣品 (produce

samples)。於 2009 年在食品保護期刊發表報告，今年更巡迴 FDA 各區域實驗室傳授實驗技術及心得，將此 RT-PCR 方法落實於業務之應用上，相信將很快被列入 BAM 的沙門氏桿菌更新方法中。

由於科技及分子生物學發展日新月異，並持續地應用於食品及其他基質中的微生物檢測及計數。因此，過去爲傳統方法所建立的方法確效及統計分析的準則可能不足以用於新方法的效能評估。AOAC 的微生物指引未解決的問題包括如何將已針對某一種基質做過確效評估的方法延伸應用至另一種基質。而且舊有的指引非常依賴參考方法 (reference method)，在進行新方法的建立及確效評估時，必須要與參考方法互相比較。因此，在沒有參考方法可比較時，實驗室確實需要新的指引用來評估新建立之方法。這種情況可能發生在已知的病原菌污染新的食品種類或食品基質時，或是發現新的病原菌時，例如嬰兒配方奶粉中的阪崎腸桿菌 (E. sakazakii)。微生物方法最佳方案 (Best Practices for Microbiology Methods，簡稱 BPMM) 任務小組重新評估 AOAC 微生物指引，在 2006 年 8 月提出針對此議題之最終報告發表於 FDA 網站。BPMM 的最重要議題包括：所有層次的確效【由單一實驗室確效 (single laboratory validation, SLV) 到完整的共同試驗 (full collaborative study)】、試驗數據的統計處理、如何確定方法的靈敏度 (sensitivity)、如何將現有的方法延伸應用至其他基質，以及如何在缺乏參考標準時做方法的確效評估。許多重點放在方法確效評估的設計以符合預期的使用目的、實際的量測狀況以及與實驗室人員清楚溝通檢驗方法上。此報告指出未來 AOAC 在微生物領域的方向。由 AOAC 的指引、FDA 方法的評估及 BPMM 的建議，可推欲在此領域與國際接軌，同步更新，甚至超越同儕，必需投入專業及

專任的人才。

四、成立國際食品保護協會台灣分會加入與提升全球安全適用食品供應國際接軌

國際食品保護協會 (International Association of Food Protection, IAFP)乃1911 年 10 月在美國威斯康辛州密爾沃基市 (Milwaukee, Wisconsin, USA)，由 35 位來自澳大利亞、加拿大和美國的成員，致力於提高乳品品質，組織乳製品及乳品督察國際交流協會 (the International Association of Dairy and Milk Inspectors)。1936 年，該協會轉成國際乳品衛生協會 (the International Association of Milk Sanitarians)。1947 年，改名國際乳品及食品衛生協會 (the International Association of Milk and Food Sanitarians)。1966 年，再擴充爲國際乳品、食品及環境衛生協會 (the International Association of Milk, Food and Environmental Sanitarians)。1999 年 10 月，經會員投票正名爲目前的名稱。成立宗旨爲提供該會會員食品保護最新相關資訊、先進的科學技術、提升全球安全適用食品供應的方法及有效措施。成員領域廣泛，包括教育工作者、政府官員、微生物學家及食品業界涉及生產、儲存、運輸、加工及製造各類食品之品管人員及專業人士。目前會員遍佈全球超過 50 個國家，美國之外的國際會員約佔四分之一，透過網路平台、教學計畫、期刊雜誌、就業機會及其他多元化資源之運作達成協會成立宗旨。國際食品保護協會出版期刊 Journal of food protection 及 Food trend 在全球食品安全領域佔有領導地位。民國 100 年也是國際食品保護協會成立 100 年，IAFP 協會年會將在美國威斯康辛州密爾沃基協會總部擴大舉辦，若能及時成立分會，組團參加、擺設攤位參加展覽及發表相關領域之研發成果，可提高我國國際能見度及本局專

業形象。目前台灣 IAFP 的會員 (IAFP members in Taiwan) 共 11 位名單如表 5，成立分會最低成員僅需 5 位，首先要提交相關文件 (自薦信、創會幹部名單、組織章程影本) 給 **IAFP** 現任執行長 David Tharp，成立分會之申請獲得執行理事會之多數通過後便正式授予分會認可證件。持續 IAFP 分會身份條件包括：維持最低固定 5 位 IAFP 會員；每年最少開一次大會；呈報分會活動給 IAFP；參與年度分會委員會。分會與 IAFP 間財務獨立分開運作。另外，現職美國農業部黃慶安博士十分熟悉 IAFP 運作，同時擔任多項 IAFP 委員會及編輯委員成員，加上黃博士熱心的協助更可促進國際食品保護協會台灣分會成立的好時機。

五、參與瞭解 CIFSQ 大會內容有助於海峽兩岸食品安全之交流

大陸、日本、韓國的 IAFP 分會近年來均陸續舉辦食品保護相關國際研討會，「2010 年中國國際食品安全與質量控制會議暨檢測儀器設備展覽會」 (China International Food Safety & Quality （CIFSQ）Conference+Expo 2010)即將於 11 月 10 日至 11 日在中國大陸上海市舉辦，目前兩岸經貿交流頻繁，各種食品貿易漸趨密切，如何確保兩岸貿易食品的品質及衛生安全，以保障雙方民眾飲食安全更是兩岸共同關心的議題。另，隨著科學與儀器的日新月異，精準且快速的檢驗技術不斷推陳出新，兩岸也都致力於研發更為精良的檢驗技術，以利取締各種違規食品。本局食品檢驗技術小組及食品行政管理權責單位參與瞭解大會內容將有助於海峽兩岸之交流。

肆、謝誌

感謝局裡同仁在辦理出國計畫各方面行政需要的配合。感謝局長、羅組長吉方及林科長旭陽的全力支持，尤其本科同仁王叔菀技士出國期間辛勞代理職務。感謝美國農業部黃慶安博士、美國食品藥物管理局鄭崇明博士、加州科技大學林維真博士於行前、會後提供相關之資訊，以及訪美期間之帶領參訪實驗室及熱心款待與細心照顧。感謝與會其間美國農業部沈秀樹博士、美國食品藥物管理局陳開舜博士、北美華人食品保護協會主席嚴志農博士、馬來西亞 All EIGHTS 公司 M.Y. CHAH、biomerieux 公司法國 R&D 組長 Christine Rozand 及亞太總監 Marco Y.L. Mou 在會期中專業經驗的分享與熱情的招呼，本局科技顧問任職美國食品藥物管理局的馮寄新博士、美國微生物協會 Y 組通訊負責人 Brian D. Sauders 雖未出席今年大會，感謝他們透過網路訊息給予精神上的鼓舞。另外也謝謝許多會期中有緣結識的專家學者，茲將通訊相關資料整理於表 6，期待成爲未來持續溝通的管道。

伍、 參考資料

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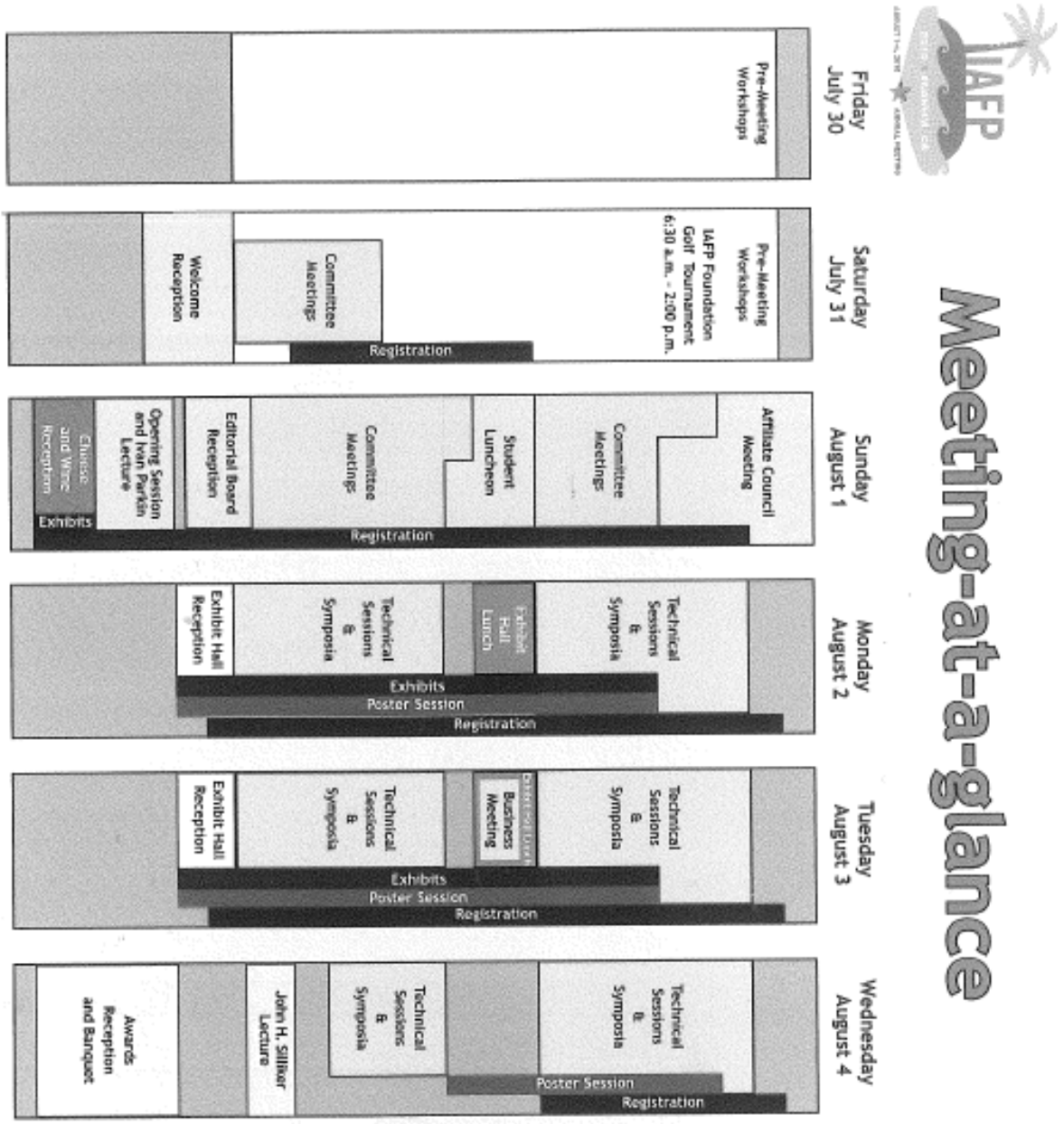
陸、表及附件

表一、IAFP 2010 年會議程總覽

Table 1. Meeting- at- a- Glance



表二、IAFP 2010 年會專題討論主題

Table 2. List of IAFP 2010 Symposium

S1 Microbiological Environmental Testing and Validation: Leading-edge Issues for Low-moisture Foods
S2 Data Deluge, Interacting Players and Complex Networks in Food Sciences – Computational Tools to Tackle Food-related Complexities
S3 Converging Industry Initiatives on Traceability
S4 Human Pathogens Associated with Edible Plants
S5 Global Water Shortages – Their Impact on Water Safety and Quality
S6 Ripple or Tsunami? Riding the Regulatory Wave to Safer Bottled Water and Water Beverages
S7 Government, Academic and Industry Collaborations to Advance the Development and Use of Microbiological Risk Assessments
S8 Less Recognized and Presumptive Pathogens: What Now, What Next?
S9 Buy Local? Addressing the Safety Issues Behind Green Food Trends
S10 Good Agricultural Practices and the Small Scale Producer: What's Really Going on out There?
S11 What's Been Keeping You up at Night – Selected Unanswered Food Safety Questions
S12 Flour Food Safety: The Changing Landscape – *Escherichia coli* O157:H7
S13 "Ingredient" is a Ten-letter Word for Financial Disaster
S14 National Institute of Food and Agriculture Showcase
S15 Risk-based Design of Microbiologically Safe Foods
S16 Significance and Detection of STEC or Non-O157 *Escherichia coli*
S17 The *Salmonella* Smorgasbord: The Problem with Too Many Choices
S18 European Concept on Hygiene Monitoring in the Food Supply Chain – 'Farm to Fork' Concept in Practice
S19 International Food Safety Policies
S20 Food Packaging Technology: Opportunities and Challenges That Enhance Food Safety
S21 The Emergence of Non-culture Diagnostics and Their Impact on Global Foodborne Disease Surveillance
S22 Food and Food Environment Test Considerations in View of Changing Regulations
S23 Way before the Fork: Impact of Pre-harvest Management Programs and

Supply Chain Influences on the Control of Shiga Toxin-producing *Escherichia coli* Contamination in Beef
S24 Advances in Detection Technologies to Address Food Safety and Food Defense Needs
S25 Human Noroviruses: Attribution, Transmission and Control
S26 Global Issues and Impact of Gluten Allergy and Celiac Disease
S27 Food Safety in Developing Countries
S28 Foodborne Disease Outbreak Update
S29 Maintaining Consumer Market Continuity during Animal Disease Outbreaks
S30 A Practical Approach to Risk Communication: Engaging Stakeholders and the Public
S31 Setting the Science-based Agenda for Co-management of Watershed Quality and Produce Safety
S32 Bacterial Toxins: A Past or an Emerging Issue for Food and Beverage Safety?
S33 Tools for Predictive Microbiology and Microbial Risk Assessment
S34 WHO's Epidemiological Approach to Estimating Foodborne Diseases – WHO FERG
S35 New Definitions in Imported Seafood Safety
S36 Risk Benefit Analysis of Food Production and Consumption
S37 Issues in the Production and Manufacture of Nuts and Nut-containing Products: Nuts to You

表三、IAFP 2010 年會技術論文題目

Table 3. List of IAFP 2010 Technical Session

T1：Applied laboratory methods and novel laboratory methods technical session
T1-01 Aspects of Systems Theory in the Analysis of Molecular-biological Based Detection Methods
T1-02 Utilization of Evolutionary Model, Bioinformatics and Heuristics for Development of a Multiplex
Escherichia coli O157:H7 PCR Assay
T1-03 A Novel Colorimetric Screening Assay for *Escherichia coli* O157:H7 In Raw Ground Beef and Trim Utilizing Simultaneous Capture and *In Situ* Labeling during Automated Re-circulating IMS
T1-04 Sensitive and Rapid Detection of *Escherichia coli* O157:H7 in Food and Water
T1-05 Identification of Shiga Toxin-producing *Escherichia coli* on DNA Microarrays by Using a Novel Photoinduced
Signal Amplification Method
T1-06 Rapid Identification of *Listeria* Species: Comparison of a Real-time PCR Assay Versus Biochemical Galleries
T1-07 Detection of *Listeria* spp. from Pooled Environmental Swab and Food Samples within 24 Hours Using Pathatrix Automated Re-circulating IMS Linked to Real-time PCR
T1-08 Combined Thin Agar Layer and Centrifugation-plating Method for Enumeration of Injured *Salmonella*
T1-09 Comparison of Vegetable and Animal Peptone-based Culture Media for Detection of *Salmonella* in Poultry
T1-10 Development of Multi-parametric Tools for the Detection and Identification of Sporeforming Bacteria in the Food Chain
T1-11 Differentiation and Speciation of Vibrios by PCR of 16S-23S rRNA Intergenic Spacer Region
T1-12 Detection of Low Numbers of Only Viable *Enterobacteriaceae* in Inoculated Pasteurized Milk Using Direct PCR after Ethidium Bromide Monoazide Treatment

T2: pathogens, sanitation, and seafood technical session
T2-01 Variation in Desiccation Tolerance among *Salmonella* Strains
T2-02 Effect of Crust Freezing on the Survival of *Escherichia coli* and *Salmonella* Typhimurium in Raw Poultry Products
T2-03 Characterization of the *Listeria monocytogenes* Transcriptional Response to Synergistic Growth Inhibition by Potassium Lactate and Sodium Diacetate
T2-04 High Pressure Inactivation of Noroviruses in Vegetables and Fruits
T2-05 Phenotypic and Genotypic Characterization of Antimicrobial Resistance in *Salmonella* Serotypes Isolated from Retail Meats in Canada
T2-06 Comparison of the rfb Cluster in 16 Rare *Salmonella* Serotypes
T2-07 Sequences in the *comK* Prophage Junction Fragments Cluster *Listeria monocytogenes* Isolates of Epidemic Clones II, III and the 2008 Canadian Outbreak into Subclones That are Unique to Individual Meat and Poultry Processing Plants
T2-08 An ABC Transporter Regulates Biofilm Formation by Controlling the Expression and Modification of Cell Surface Proteins in *Listeria monocytogenes*
T2-09 Maximizing Personnel Hygiene, Minimizing Washroom Contamination
T2-10 Developing a Fish Starter Culture Fermentation with a Local Nisin-producing Bacterium for Application in Small-scale Artisan Fishery Production in Senegal
T2-11 Characterization of a Fish-specific Monoclonal Antibody
T2-12 Characterization of Food and Clinical *Listeria monocytogenes* Isolates Collected in Portugal
T3: antimicrobial and microbial food spoilage technical session
T3-01 Prevalence and Distribution of *Salmonella* in Organic and Conventional Broiler Poultry Farms
T3-02 Molecular Surveillance of Multi-antibiotic Resistant *Staphylococcus aureus* and *Salmonella* Isolated from Co-op Rabbit and Poultry Processing Plants in Southeastern United States
T3-03 Prevalence and Antimicrobial Resistance of *Campylobacter* Isolated from the National Antimicrobial Resistance Monitoring System Retail Meat: 2002—2007

T3-04 The Effect of Heat on the Antimicrobial Efficacy of Cinnamic Aldehyde, Carvacrol and Eugenol
T3-05 Cinnamaldehyde Induces Cell Elongation in *Escherichia coli* O157:H7
T3-06 Can Hand Hygiene Regimens Offer Reduced Risk in Food Service Environments?
T3-07 SaniTwice™: A Hand Hygiene Solution for Reducing Contamination on Heavily Soiled Hands When Water is Unavailable
T3-08 Analysis of Plasmids and Mobile Elements Carrying Antimicrobial Resistance Genes in *Salmonella* Isolates by Whole Genome Sequencing
T3-09 Considering the Design and Analysis of Efficacy Trials for Antimicrobial Treatments of Raw Meat and Poultry
T3-10 Evaluation of a Predictive Model for Total Viable and Lactic Acid Bacteria on Refrigerated Vacuum-packed Beef Primals
T3-11 Inactivation of *Bacillus coagulans* Spores in Tomato Juice by Pressure-assisted Thermal Processing
T3-12 Non-thermal Pasteurization of Almonds and Pistachios with Organic Citrus Bioflavonoid Extracts
T4: produce technical session
T4-01 Field Assessment of Surface Contamination and Systemic Transference of an Attenuated *Salmonella* Typhimurium to Melon Fruit from Controlled Contamination of Irrigation Water
T4-02 Tracking an *Escherichia coli* O157:H7 Contaminated Batch of Leafy Greens through a Commercial Processing Line
T4-03 Recovery of *Escherichia coli* O157:H7 from Inoculated Spinach Fields as Affected by Inoculum Dose, Plant Material and Environmental Conditions
T4-04 Molecular Ecology of *Listeria* spp., *Salmonella, Escherichia coli* O157:H7, and Non-O157 Shiga Toxin-producing *E. coli* in Northern Colorado Wilderness Areas Beef Trimmings in Commercial Settings
T4-05 Development of a Simple Method to Detect Coliphages in Fresh Produce as Evidence of Fecal Contamination
T4-06 Internalization of Murine Norovirus-1 to Romaine Lettuce
T4-07 Hydroponic Internalization of Enteric Viruses into Green Onions and Spinach
T4-08 Controlled Environment Assessment of Preharvest Internalization and

Transference of *Salmonella* into Melon Vines from Irrigation Water Using a Tube Nucleation Assay
T4-09 The Effect of Total Organic Carbon Content and Repeated Irrigation on the Persistence of *Escherichia coli* O157:H7 on Baby Spinach
T4-10 Effect of Modified Atmosphere on Persistence and Virulence Expression of *Escherichia coli* O157:H7 on Shredded Lettuce
T4-11 Inactivation of *Escherichia coli* O157:H7 on Spinach and Parsley Using Low-energy X-ray Irradiation
T4-12 Inactivation of *Salmonella* on Tomato Surfaces Using Gaseous Chlorine Dioxide Treatment
T5: meat and poultry technical session
T5-01 Time-temperature Dependent Growth Patterns of *Salmonella* spp. in a Model Food System with Natural Microflora
T5-02 Analysis of ALLRTE and RTE001 Sampling Results for *Salmonella* Species, Calendar Years 2005—2008
T5-03 Molecular Characterization and Serotyping of *Salmonella* Isolated from the Shell Egg Processing Environment
T5-04 Persistent and Sporadic *Listeria monocytogenes* Strains in Fermented Meat Sausage Processors
T5-05 Impact of Chlorine and Temperature on *Listeria monocytogenes* Survival Growth Behavior on Ready-to-Eat Meats
T5-06 Comparison of Data from FSIS Routine and Intensified Sampling Programs for *Listeria monocytogenes* from Ready-to-Eat Establishments
T5-07 Comparison of a Novel Sample Collection Device and Cellulose Sponge for the Collection of *Escherichia coli* from Beef Carcasses
T5-08 Three Sampling Methods to Recover Bacterial Populations on
T5-09 Prevalence of *Clostridium difficile* in Various Types of Ground Meat and Poultry Products
T5-10 The Control of *Salmonella* Typhimurium in Poultry: From Vaccination to Specific Immunotherapy
T5-11 Enhanced Recovery of *Campylobacter jejuni* from Chick Paper under Hatchery Incubation Conditions
T5-12 Validation of a High Throughput DNA Extraction and Real-time PCR Detection of *Escherichia coli* O157:H7, *Salmonella* spp., *Listeria*

monocytogenes and *Listeria* spp.
T6: produce and communication outreach and education technical session
T6-01 Pathogen Presence and Indicator Organism Levels during Turned Pile Composting of Broiler Litter and Aerated, Static Pile Composting of Mixed Feedstocks
T6-02 Produce Microbial Quality is Associated with Surface Microbial Contamination in Packing Sheds:
An Assessment of Risk Factors for Produce Contamination
T6-03 Attachment, Persistence and Infectivity of *Cryptosporidium parvum* Oocysts in Fresh Produce
T6-04 Efficacy of Commercial Produce Sanitizers against *Escherichia coli* O157:H7 in a Pilot-scale Leafy Green Processing Line
T6-05 Enhanced Removal of Noroviruses from Fresh Fruits and Vegetables by Combination of Surfactants and Sanitizer
T6-06 Columbus Public Health: 2009 Samuel J. Crumbine Consumer Protection Award Recipient
T6-07 Modifying the Behavior of Food Employees Using Educational Materials and Methods Designed for Oral Culture Learners
T6-08 Applying GFSI Recognized Management Systems to the Peanut Industry — A Case Study
T6-09 The Economic Cost of Foodborne Illness from Contaminated Produce in the United State
T6-10 Assessing Vegetable Producers' Beliefs Regarding Food Safety Issues
T6-11 The Knowledge and Behavior of Parents of Young Children Concerning Domestic Food Safety
T6-12 Examining Consumers' Perceptions of Nanotechnology for Food Safety: A Baseline Study
T7: risk assessment and epidemiology technical session
T7-01 Application of Kinetic Models to Describe Heat Inactivation of Selected New Zealand Isolates of *Campylobacter jejuni*
T7-02 Modeling the Survival and Growth of *Salmonella* on Chicken Skin Stored at 4 to 12°C
T7-03 FSIS *Escherichia coli* O157:H7 Beef Establishment Risk-assessment

Project
T7-04 Predictive Modeling for *Listeria monocytogenes* Transfer during Slicing of Delicatessen Meats
T7-05 Evaluating the Factors Important in Norovirus Transmission in Foodservice Systems
T7-06 Network Science Methods to Analyze Food Import-Export Networks
T7-07 Sources and Settings: Contaminated Food Vehicles and the Settings of Foodborne Disease Outbreaks
T7-08 The Potential for Cross-contamination of Foods through Improper Storage in Home Refrigerators
T7-09 A Mathematical Survival Model for *Escherichia coli* O157:H7 and *Staphylococcus aureus* on Stainless Steel Surfaces
T7-10 The Value and Challenges of Providing Sound, Effective and Timely Risk-based Scientific Advice for International Food Safety Standard Setting
T7-11 Modeling Logistics in Quantitative Microbial Risk Assessment for Salad Bars

表四、IAFP 2010 年會壁報論文題目

Table 4. List of IAFP 2010 Posters

P1: Antimicrobials, Sanitation, Seafood, Epidemiology, Risk assessment, communication outreach and education, novel laboratory method, beverages and water, dairy and other food commodities
P1-01 *Listeria monocytogenes* Survival and Growth on Ready-to-Eat Whole Hams Treated Post Lethality with a Natural Liquid Smoke Extract in Combination with Lauric Arginate under Normal and Deep-chilled Storage
P1-02 Antilisterial Activity of Natural Ingredients in a Model Poultry Product System
P1-03 Effect of Lactate and Diacetate-based Bacteriostatic Agents on *Listeria monocytogenes* in Ready-to-Eat Meat Products
P1-04 Surface Application of Bio- and Chemical Preservatives to Inhibit *Listeria* on Vacuum-packaged Wieners
P1-05 Viability of *Listeria monocytogenes* on Pork Scrapple Formulated with and without Antimicrobials during Extended Refrigerated Storage
P1-06 Antimicrobial Efficacy of Phosvitin Alone or Combined with Nisin against *Listeria monocytogenes* in a Laboratory Broth Medium at 35°C
P1-07 Influence of Nisin or Selective Meat Additives on the Antimicrobial Effectiveness of Ovotransferrin against *Listeria monocytogenes*
P1-08 Testing for Synergy Mixtures of Carvacrol, Eugenol, and Thymol as Antilisterial Agent
P1-09 Listericidal Activity of Bacteriophage P100 against Biofilms Cells of *Listeria monocytogenes* Serotypes
P1-10 Antimicrobial Activity of Edible Packaging Film Incorporated with Oleic Acid and Nisin against Nalidixic Acid-resistant *Salmonella*
P1-11 Use of Natural Antimicrobials to Increase Antibiotic Susceptibility of Drug-resistant Bacteria
P1-12 Molecular Characterization of Fluoroquinolone and Tetracycline-resistant *Salmonella enterica* Isolated from Imported Food Samples
P1-13 Antibiotic Resistance Profiles of Cattle-associated *Salmonella* Serotypes in Mexico
P1-14 Use of Antimicrobials as Ingredients to Reduce *Salmonella* Populations in Raw Non-intact Poultry Intended
for Use in the Manufacture of Frozen, Not Ready-to-Eat Entrees
P1-15 Efficacy of Fumaric Acid to Reduce *Salmonella* spp. at Various Stages of Poultry Processing
P1-16 Antibiotic Resistance Patterns in *Escherichia coli* and *Salmonella* Isolates Recovered from Commercially Available Compost
P1-17 High Throughput, Small Molecule Screening Reveals Diverse Compounds That Inhibit the Growth of *Escherichia coli* O157:H7
P1-18 Antimicrobial Effects of Commercial Spices and Plant Extracts against *Escherichia coli* O157:H7 in Uncooked and Grilled Ground Beef
P1-19 Effect of Marinade Ingredients with Antimicrobial Properties against *Escherichia coli* O157:H7 in a Beef Homogenate
P1-20 Surveillance of Antimicrobial Resistance in *Escherichia coli* Isolated

from Raw Meat in Korea
P1-21 Effect of Neutral Electrochemically Activated Water on the Viability and Biofilms of Foodborne Pathogens on Stainless Steel Surfaces
P1-22 Group- and Strain-specific Antimicrobial Activities of Select Plant Essential Oils
P1-23 Inhibitory Effect of Apple Phenolic Compounds on the Growth of Selected Bacterial, Yeast and Mold Cells
P1-24 Evaluation of Different Solvent Solutions for Extraction of Antibacterial Compounds in Jalapeno Peppers
P1-25 Inactivation of Foodborne Pathogens by Roselle (*Hibiscus sabdariffa*) *In Vitro* and on Romaine Lettuce and Alfalfa Sprouts
P1-26 Molecular Characterization of Antimicrobial Drug-resistant *Campylobacter* Isolated from Conventional and Antimicrobial-free Swine Production Systems and Their Environment
P1-27 Surveillance of Antimicrobial-resistant *Salmonella* in Antimicrobial-free and Conventional Pigs at Farm and Slaughter
P1-28 Grape Seed Extract and Malic Acid Effectively Inhibit the Growth of *Campylobacter jejuni* in Broth Culture
P1-29 Prevalence, Antibiotic Resistance and Pathogenicity of *Vibrio parahaemolyticus* Isolated from Raw Fish in Korea
P1-30 Antilisterial and Antiviral Properties of Bacteriocin Produced by *Pediococcus acidilactici* ST3Ha, a Strain Isolated from Norwegian Smoked Salmon
P1-31 Control of *Listeria monocytogenes* in Cheese by Bacteriocinogenic Strains of *Enterococcus mundtii* CRL35 and *Enterococcus faecium* ST88Ch
P1-32 Antimicrobial Effects of Cranberry Extract, Vanillin and Vanillic Acid against *Clostridium perfringens*
P1-33 Effect of *Mentha spicata* and *Mentha pulegium* Essential Oils on *Debaryomyces hansenii* in an Iranian Yogurt Drink (Doogh)
P1-34 Prevalence and Antibiotic Resistance of *Enterococcus faecalis* and *Enterococcus faecium* from Retail Meat and Seafood in Korea
P1-35 Production of Antifungal Compounds by *Lactobacillus plantarum*
P1-36 Prevalence and Antimicrobial Susceptibility of *Enterobacteriaceae* Isolates on Condiment Jars and Containers in Domestic Refrigerators
P1-37 Mechanisms of Antibacterial Action of Catechin against Bacterial Spores
P1-38 Study on the Adsorption of Catechins over the Surface of the Bacterial Cell
P1-39 Inhibitory Effect on *Aspergillus niger* and *Penicillium* spp. by Vapor Contact of Essential Oils Added to Edible Films
P1-40 Antifungal Activity by Gaseous Contact of Oregano (*Origanum vulgare*) Essential Oil on the Growth of *Aspergillus flavus*
P1-41 *In Situ* Control of Food Spoilage Fungus Using *Lactobacillus acidophilus* NCDC 291 and Its Ability to Survive Food-processing Conditions
P1-42 Microfiber Cloths − A Sanitation Lesson from the Clinical Sector?
P1-43 Pathogens in California Restaurant Kitchen Towels
P1-44 Handwashing Practices in California and Texas Quick-service and Full-service Restaurants
P1-45 Virucidal Activities of Detergents and Enzymes against Feline

Calicivirus, a Norovirus Surrogate
P1-46 Monitoring of Korean-style Raw Fish Restaurant for Developing Standard Sanitation Manual
P1-47 Efficacy of Different Dry-cleaning Methods for Removing Allergenic Foods from Food-contact Surfaces
P1-48 Comparison of Specific Immunoassay Techniques to ATP and General Protein Methods for Reliability in the Detection of Common Food Allergens
P1-49 Effects of Sanitizer Washing on Produce with Different Surface Morphologies
P1-50 Effects of Non-antimicrobial Excipients on Cationic Antimicrobials Used in the Food Industry
P1-51 Efficacy of Non-chlorine Biodegradable Sanitizers in Artificially-contaminated Poultry Water Lines
P1-52 Evaluation of the Sanitation Process by the Use of Swab PRO-Clean™ in Equipment/Utensil Surfaces Used in Food and Nutrition Units
P1-53 Ozone: A Novel Disinfectant for End-of-Production and Wholeroom Decontamination Applications
P1-54 Cleanabilty of a Newly-developed Hinged Conveyor Belt under Normal Cleaning and Sanitation Conditions
P1-55 Validation of Electrostatic Spray as a Low-volume Sanitization Method for Food-processing Surfaces
P1-56 Effectiveness of Ultrasound in Desoiling *Bacillus anthracis* Embedded in Complex Food Matrices Attached to Various Contact Surfaces
P1-57 Evaluation of an Alcohol-based Sanitizer Spray's Bactericidal Effects on *Salmonella* Inoculated onto Stainless Steel and Shell Egg Processing Equipment
P1-58 Method Comparison for Detection of *Salmonella* spp. from Stainless Steel Surfaces
P1-59 Effect of *Listeria monocytogenes* Acid-tolerance Response on Its Adherent Survival under Food Processing-related Stresses and on the Subsequent Disinfection of Attached Cells with Standard Acid and Natural Sanitizers
P1-60 Inactivation of *Listeria monocytogenes* within a Pork Biofilm Matrix Using Chlorine Dioxide Gas Treatment
P1-61 Effect of Sanitizer and Disinfectant Treatments for Reduction of *Arcobacter butzleri*
P1-62 Thermal Destruct and Z Values for Human Pathogens on Finfish
P1-63 Comparison of Gamma and Electron Beam Irradiation on the Survival of Natural Microflora in Seafood
P1-64 Concentration of Male-specific Bacteriophage MS2 from Marine Water Using Tangential Flow Filtration
P1-65 Low-temperature Treatment to Reduce the Risk of *Vibrio* Species in Shucked Oyster
P1-66 Boiling and Steaming Temperatures for Safe Consumption of *Callinectes sapidus*
P1-67 Use of γ-Irradiation to Inactivate *Listeria monocytogenes* in Fresh Blue Swimming Crab Meat *(Portunas pelagicus)*
P1-68 Inactivation of *Vibrio parahaemolyticus* in Hard Clams (*Mercanaria*

mercanaria) by High-pressure Processing
P1-69 Assessing the Shelf Life of Retail Shrimp Using Real-time Microrespirometer
P1-70 Microbial Risk of Raw Fish Consumption Determined by PCR-DGGE and Fingerprinting Approach
P1-71 Development of a Real-time PCR Assay with an Internal Amplification Control for Detecting Gram-negative Histamine-producing Bacteria in Fish
P1-72 Bacteriological Quality of Oysters Cultured in Sea Farms Located at the South Bay in Santa Catarina's Island − Brazil
P1-73 Preliminary Results of the Incidence of *Vibrio* spp. in Oysters Harvested in Florianópolis, Santa Catarina— Brazil
P1-74 Center for Food Safety and Applied Nutrition Outbreak Surveillance Database and Seafood Associated Outbreaks That Involve Food and Drug Administration, 2004–2009
P1-75 Isolation and Identification of the Causative Agent for a Salmonellosis Outbreak from White Pepper
P1-76 Nonviral Gastrointestinal Outbreaks in Alberta 2003 — 2009
P1-77 Reporting of Cases of Toxinfections That Have Occurred in the Last Five Years in the State of São Paulo, Brazil
P1-78 A Review of Enteric Outbreaks in Prisons: Effective Infection Control Interventions
P1-79 An Interval-accumulation Based Predictive Modeling Tool to Evaluate Multi-stage, Dynamic-temperature Profiles
P1-80 Development of Computer-assisted Quantitative Risk Assessment — Hazard Analysis Critical Control Point Program for Food Safety in Retail Food Establishments
P1-81 Developing the Predictive Growth Model of *Staphylococcus aureus* on Cooked Spinach in Commissary School Foodservice
P1-82 Development of Predictive Growth Models for *Bacillus cereus* on Various Food Matrices
P1-83 The Establishment of an Food Safety Objective and Microbiological Criteria Based on QMRA Modeling
P1-84 Risk Assessment of Arsenic in the Most Frequently Consumed Fish by Korean Elderly Population
P1-85 Wash Your Paws Handwashing Education Initiative for Youth Audiences
P1-86 Development of an Interactive Food Safety Curriculum for Secondary Science Education
P1-87 Development of a Capstone Food Protection and Defense Computer-based Simulation for Graduate Students and Working Professionals
P1-88 Impact of Educational Materials on Improving Consumer Food Safety during Extended Power Outages and Other Emergencies
P1-89 Assessing Consumers' Cleaning Practices and Microbiological Contamination in Their Home Kitchens
P1-90 Preliminary Results of a Food Safety Knowledge Survey of Suburban Chicago Restaurant Food Handlers
P1-91 Food Safety Knowledge among Chicago Food Handlers Differs between Spanish and English Speakers

P1-92 Evaluation of Food Safety Compliance for Hot/Cold Self-serve Bars
P1-93 Are Hot/Cold Self-serve Food Bar Employees Food Safety Savvy?
P1-94 Tool for Measuring Food Safety Climate
P1-95 Weight of Evidence in Foodborne Illness Investigations
P1-96 Exploring HACCP Teams across the Dubai Food Industry
P1-97 Preventative Decontamination of an Aseptic Bottling Room Using Gaseous Chlorine Dioxide
P1-98 Consumer Knowledge and Handling of Tree Nuts
P1-99 Multi-state Outbreak of *Escherichia coli* O157:H7 Infections Associated with Consumption of Mechanically-tenderized Steaks in Restaurants – United States, 2009
P1-100 Detection and Enumeration of *Escherichia coli* O157:H7 and *Salmonella* Species in Raw Commingled Silo Milk
P1-101 Cloning and Characterization of a Δ-*prfA Listeria monocytogenes* Strain Containing a Single Copy Genomic Artificial Internal Amplification Control for Use as Internal Sample Process Control
P1-102 Rapid and Specific Detection of the *invA* Gene in *Salmonella* spp. by iTPA
P1-103 Selection and Characterization of Biotinylated DNA Aptamers for Capture and Detection of *Salmonella* Typhimurium Using Quantitative Real-time PCR
P1-104 Novel Phage Immuno-concentration Assay for Isolation of *Escherichia coli* O26, O103, O111, O145 and O157
P1-105 Isolation and Detection of Verotoxin-producing *Escherichia coli* from Foods
P1-106 Detection of *Escherichia coli* O157:H7 from Lettuce Using Treated Activated Charcoal and Real-time PCR
P1-107 The Use of DNA Aptamers for Capture of *Campylobacter jejuni* Prior to the Application of qPCR for Detection
P1-108 A PCR Method for the Detection of *Listeria monocytogenes* Based on a Novel Target Sequence Identified by Comparative Genomic Analysis
P1-109 Mid-infrared Chemical Imaging for *Clostridium perfringens* Detection on DNA Microarray
P1-110 Development of a Scorpion™ Probe-based Real-time PCR Assay for *Cronobacter* spp. Detection
P1-111 Rapid and Sensitive Detection of *Vibrio parahaemolyticus* by a Loop-mediated Isothermal Amplification Assay
P1-112 Norovirus Recovery from Spiked Food Samples Using Histo-blood Group Antigens on Magnetic Beads
P1-113 Immunomagnetic Concentration and Real-time RT-PCR Detection of Norovirus
P1-114 Norovirus Recovery from Foods and Food Contact Surfaces is Improved with Alternative Elution Buffers and Cationically-charged Magnetic Beads
P1-115 Combined Concentration and Extraction Method for Bacteria and Viruses from Contaminated Water and Leafy Vegetables
P1-116 Coliphage in Produce Flume Water Detected in Less Than Eight Hours Provide Same Day Fecal Risk Indicator

P1-117 DNA P*ro*filing for Detection and Characterization of *Salmonella* in Peanut Butter
P1-118 Evaluation of the Discriminatory Abilities of Different Subtyping Methods for *Escherichia* Species
P1-119 PCR-based Method for Rapid Detection of Enterococci from Meat Products
P1-120 Development of a Rapid Method for Identification of Heat-resistant Fungi *Byssochlamys, Talaromyces, Neosartorya* and *Hamigera*
P1-121 Discrimination of Sound and Fusarium-infected Wheat Using an Electronic Nose
P1-122 Method to Concentrate and Detect Pathogens in Produce Wash: Automated Concentration System, Lateral Flow Immunoassays and MSD PR2 1500
P1-123 Performance Testing of Selective Enrichment Media for *Listeria monocytogenes* Using Single Bacterial Cell Manipulation
P1-124 Stability of Calibration Function (Standards) in Nucleic Acid-based Food-pathogen Detection
P1-125 *Micrococcus roseus* and *Serratia marcescens* as Colored Bacterial Indicators: A Simple Strategy during Design and Development of a New Method for Sample Pre-treatment
P1-126 Statistical Data Analysis of Real-time PCR Results Derived from Single Copy Amplification
P1-127 A Quantitative and Highly Sensitive Method for Detection of Ricin in Complex Food Matrices
P1-128 Validation of Fluorescence Polarization Immunoassay for Ochratoxin A
P1-129 Detection of Mustard Residue Contamination in Food Commodities by an Immunoassay-based Test
P1-130 Establishment of an HPLC Method for the Detection of Malachite Green and Leucomalachite Green in Aquaculture Food Products of Animal Origin
P1-131 Use of Flow Cytometry to Determine Minimum Inhibitory Concentration of Thymol
P1-132 Development of Immunochromatography for Rapid Detection of 6-Chloronicotinic Acid
P1-133 Utility of Microsatellite DNA Fingerprinting Analysis for Source Tracking in Beef Trim and Ground Beef Products
P1-134 Differentiation of Tuna and Bonito Species in Frozen and Canned Products by PCR Method
P1-135 Screening of Natural Antimicrobials for Inhibition of *Escherichia coli* O157:H7 in a Solidified Apple Juice Medium
P1-136 Withdrawn
P1-137 Effect of Pulsed Electric Field on Surface Charge and Membrane Damage to *Escherichia coli* O157:H7 Cells in Apple Juice
P1-138 Decontamination of Mycotoxin Patulin by Alkalization in Apple Cider Processing
P1-139 UV-light to Improve Toxicological Safety of Apple Products
P1-140 Comparison of Dehydratable Film and Various Conventional Methods for Evaluation of Drinking Water

P1-141 Characterization of Low-pH Tolerant *Bacillus* Species and Their Behaviors in Bottled Vegetable/Fruit Juice
P1-142 *Salmonella* spp. Survival on Lemon Slices and in Transfer to Beverages
P1-143 Effect of Milk Fat Content on the Efficacy of Pulsed Electric Fields for the Inactivation of Native Bacteria in Milk
P1-144 Effect of Pulsed Electric Field on Microbial Quality and Protein Profiles of Milk and Milk Concentrates
P1-145 Ultraviolet Light Inactivation of Microorganisms in Soy Milk Using Dean Flow Technology
P1-146 Development and Evaluation of a Novel Real-time PCR with Internal Amplification Control for the Detection of *Listeria monocytogenes* in Milk
P1-147 Impact of Disinfectants and Surface Materials on *Listeria monocytogenes* in Mixed Species Biofilms
P1-148 Inhibitory Effects of Exopolysaccharide Produced by *Lactobacillus fermentum* E432L on the Attachment and Invasion of *Listeria monocytogenes* on HT-29 Cell
P1-149 Bactericidal Activity of GRAS Lauric Arginate against *Listeria monocytogenes* in Milk and Queso Fresco Cheese
P1-150 Detection and Enumeration of *Listeria monocytogenes* and *Bacillus cereus* in Raw Commingled Silo Milk
P1-151 Characterization of *Staphylococcus aureus* Strains Isolated from Raw Milk Intended for Artisan Cheesemaking
P1-152 Behavior of *Escherichia coli* O157:H7 during the Manufacture and Aging of Raw Milk Gouda and Stirred-curd Cheddar Cheeses
P1-153 Food Safety and Quality Criteria of Dairy Farms: A Case Study of Turkey
P1-154 Comparison of Growth and Recovery of *Alicyclobacillus acidoterrestris* from Five Different Juices with a Four-day Procedure Utilizing a Method Based on CO2 Production, a Six-day Procedure Based on a Modified Plating Method, and a Traditional Ten-day Plating Method
P2: Aapplied laboratory methods, general microbiology microbial food spoilage, pathogens, toxicology and non-microbial food safety poster session
P2-01 Evaluation of an Automated Immunoassay for *Salmonella* Detection in Pet Foods and Environmental Surfaces
P2-02 Rapid Detection of *Salmonella* in Pet Food: Design and Evaluation of an Under 12-hour Workflow Using Real-time PCR
P2-03 Evaluation of a Real-time PCR Assay and Novel Sample Collection and Processing Protocol for Genus *Salmonella* Detection and Monitoring in Environmental Sampling Programs
P2-04 Development and Validation of a Rapid Lateral Flow Test Strip Method for Environmental Monitoring of *Salmonella* Enteritidis in Poultry Houses
P2-05 Evaluation of a Sampling Technique for Recovery of *Salmonella* spp. from Soil
P2-06 A *Salmonella* Test System for the Detection of the Pathogen in Food, Feed and Environmental Samples
P2-07 Preliminary Evaluation of a New Next-day Method for Detection of *Salmonella* in Food Products

P2-08 Single-step Enrichment Protocol for Use with a Lateral Flow Immunoassay for Detection of *Salmonella* spp. in Raw Meats, Raw Shrimp and Chicken Carcass Rinse
P2-09 Novel Automated Workflow Reducing Time to Result for Detection of *Salmonella* in Food Matrices
P2-10 Comparison of Different Sample Preparations for the Recovery of *Salmonella* from Internally-contaminated Whole Tomatoes
P2-11 Evaluation of Rapid Screening Techniques for Detection of *Salmonella* spp. from Artificially Contaminated Produce Samples after Pre-enrichment According to FDA BAM and a Short Secondary Enrichment
P2-12 Comparison of 3M™ Petrifilm™ Aerobic Count Plates with Pour Plates for Determination of Aerobic Plate Counts in Fermented Chile Mash
P2-13 Development of Methods for the Detection and Isolation of *Salmonella* from Cloves
P2-14 Comparison of Different Pre-enrichment Broth for the Recovery of *Shigella* Species in Fresh Produce
P2-15 Comparison of Two Chromogenic Agars with MacConkey and Xylose Lysine Deoxycholate Agars for Isolation and Detection of *Shigella* from Foods
P2-16 Validation of a Real-time PCR Assay for Screening *Escherichia coli* O157:H7 in Foods
P2-17 Evaluation of New Technology to Detect *Escherichia coli* O157:H7 in Ground Beef and Spinach Using a Novel Food Security System
P2-18 Development and Preliminary Validation of a New Lateral Flow Immunoassay for Detection of *Escherichia coli* O157:H7 and O157:NM Strains in Foods
P2-19 ATP-Bioluminescence Immunoassay Detection of *Escherichia coli* O157:H7 in Concentrated Produce Wash
P2-20 Limit of Detection Study for the Detection of *Escherichia coli* O157:H7 in Refrigerated Cookie Dough and Its Ingredients Using a Commercial PCR Detection System
P2-21 Comparison of *Escherichia coli* O157:H7 Recovery Using Standard and Experimental Enrichment Procedures
P2-22 Evaluation of Growth Media for Resuscitation of Stressed Enterohemorrhagic *Escherichia coli*
P2-23 Influence of Liquid or Solid Media Amended with Magnesium and Calcium Ions on Resuscitation of Pulsed Electric Field-injured *Escherichia coli* O157:H7 Cells
P2-24 Optimizing *Escherichia coli* O157:H7 Detection on Lateral Flow Immunoassays Using Concentration and Immunomagnetic Separation
P2-25 Design of a Real-time PCR Assay for Detection of *Listeria* Species in Food and Environmental Surfaces
P2-26 Evaluation of Quantitative Methods for *Listeria monocytogenes* Using Statistical Process Control Charting
P2-27 Evaluation of a *Listeria* Species Xpress Method for the Detection of *Listeria* Species in Foods: AOAC Official Method Collaborative Study
P2-28 Comparison of CASA®, a New Chromogenic Medium and mCCDA, for the Enumeration of *Campylobacter* spp. in Poultry
P2-29 ISO 16140 Validation of a New Method for Detection of *Campylobacter*

P2-30 Development of a Multiplex Real-time PCR Assay for the Detection of *Campylobacter* Species for Use on a Food Security System Platform
P2-31 Simultaneous Detection of *Cronobacter* (*Enterobacter sakazakii*) and *Salmonella* Using a Chromogenic Plating Medium
P2-32 Growth of *Cronobacter sakazakii* Monitored by Microplate Luminometer
P2-33 Efficient Isolation and Identification of Enterotoxigenic *Bacillus cereus* Group
P2-34 Evaluation of Various PCR Assays for the Detection of Emetic Toxin-producing *Bacillus cereus*
P2-35 Independent Evaluation and Validation of the TEMPO™ STA for Quantitation of *Staphylococcus aureus*
P2-36 ISO 16140 MicroVal Evaluation of a Chromogenic Medium for the Enumeration of Coagulase-positive Staphylococci
P2-37 ISO 16140 Validation Study of the *Listeria* Precis Method for *Listeria monocytogenes* Detection in Foodstuffs and Environmental Samples: Interlaboratory Study
P2-38 Non-selective Short-term Enrichment and Real-time PCR Methodologies to Detect Low Levels of *Salmonella* spp. and Shiga-toxigenic *Escherichia coli* on Leafy Greens
P2-39 Validation of PCR Assays for Screening *Salmonella* and *Listeria monocytogenes* in Breaded Stuffed Poultry Products
P2-40 Validation of PCR Assays for Screening *Salmonella* in Pet Chews
P2-41 Evaluation of a High Throughput DNA Extraction Protocol Followed by Real-time PCR Detection of *Salmonella* and *Listeria monocytogenes*
P2-42 Comparison of RNA Extraction Methods for the Detection of Noroviruses from Ready-to-Eat Foods
P2-43 Evaluation of the 3M™ Petrifilm™ High-sensitivity Coliform Count Plate for Enumerating Coliforms in Pasteurized Milk Products
P2-44 Rapid Enumeration Methods for Fungi in Fruit by the Most Probable Number Method
P2-45 Evaluation of the TEMPO® YM Automated MPN Method for the Enumeration of Yeasts and Molds in Foods
P2-46 Development of a Plate-pair Strategy for the Identification of Lactic Acid Bacteria from a Mixed Population of Kefir Bacteria and Yeasts
P2-47 Validation of New Sensitive ELISA Test Kits for Food Allergens
P2-48 Comparison of Different Magnetic Nanobeads for Simultaneous Immunoseparation of Multiple Foodborne Pathogens
P2-49 Impact of Sample Preparation and Analytical Method for *Escherichia coli* Recovery from Strawberry and Mangetout Pea
P2-50 Assessing the Performance of Modified Moore Swabs as a Low-cost Method of Large Volume Irrigation Source Surveys
P2-51 Microbial Testing of the Consumer Environment in Foodservice Establishments: A Pilot Study
P2-52 Further Validation of the Specificity of a Real-time PCR MPN Enumeration Method for Foodborne *Listeria monocytogenes*
P2-53 Factors Affecting the Determinacy of Reproducibility Assessments of Qualitative Foodborne Pathogen Detection Methods
P2-54 Removal of Biofilms Formed by the Cells of Shiga Toxin-producing

Escherichia coli Using Treatments with Organic Acids and Commercial Detergents
P2-55 The Influence of Non-lethal Temperature on the Rate of Inactivation of Vegetable Bacteria in Inimical Environments May be Independent of Bacterial Species
P2-56 Reduced-temperature Growth Studies of *Bacillus cereus* and *Bacillus weihenstephanensis*
P2-57 Comparison of the Microbial Contamination Associated with Fresh Herbs and Edible Flowers Using DNA Sequencing Analysis
P2-58 Pathogen Inactivation in Animal Manure-based Compost Systems Containing Different Carbon Amendments
P2-59 A Numerical Approach for Predicting Volumetric Inactivation of Foodborne Pathogens by Pulsed Light
P2-60 Survival of *Salmonella* Newport, *Escherichia coli* O157:H7 and *Escherichia coli* K12 in Irrigation Water Samples from the Lower Colorado River Basin
P2-61 The Regrowth Potential of *Salmonella* spp. in Super-heated Chicken Litter Pellets
P2-62 *In vivo* Passage Modulates Acid Tolerance Response in *Listeria monocytogenes*
P2-63 Comparison of Gene Expression of *Listeria monocytogenes* 10403s following Exposure to Pulsed Light and Ultraviolet Light
P2-64 Laboratory Proficiency Testing as a Measure of National Food Safety and Biosecurity Preparedness
P2-65 Application of Weibull Type Distribution to Model Inactivation of *Listeria innocua* by Thermo-sonication at Selected Vanillin Concentrations
P2-66 Quantitative Analysis on the Growth and Contamination of *Penicillium nalgiovense* on Licorice Extract and Its Derivatives
P2-67 PCR Detection and Identification of Tyramine-producing Bacteria and Partial Cloning of Tyrosine Decarboxylase Gene
P2-68 Melamine Contamination of Milk Powder and Infant Formula on the African Market — A Significant Global Issue with Public Health and International Trade Implications
P2-69 The Influence of Sample Preparation Chemistry on Bacterial Target Cells Analyzed by Transmission Electron Microscopy of *Listeria monocytogenes* and *Salmonella* Typhimurium
P2-70 Antibiotic-resistance Class 1 Integrons in Commensal Bacteria from Various Environments and Their Transferability to Foodborne Pathogens
P2-71 Behavioral Influences and Temperature Profiling of Reconstituted Powdered Infant Formula Feeds Stored in Day Nurseries
P2-72 Natural Occurrence of Type B Trichothecenes in Cereals and Cereal Product in South Korea
P2-73 Thermal Inactivation of Shiga Toxins in Orange Juice
P2-74 Validation of Immunodetection of Ricin Using a Biological Activity Assay
P2-75 Assessment of the Transfer Rate of Ochratoxin A Into Decoction of Herbal Medicines
P2-76 Heavy Metal Contamination of Use Water and Street-vended Foods in Uganda

P2-77 Modeling Effect of Gamma Irradiation on Production of a Sterile Korean Space Food (Kochujang) under Accelerated Storage Condition
P2-78 Effect of Gamma Irradiation on Shelf-life Extension and Sensory Characteristics of Dak-galbi (Marinated Diced Chicken)
P2-79 Effects of Heating, Autoclave, Gamma and Electron-beam Irradiation on Reducing Spoilage Bacteria, and Sensory Properties of Ready-to-Eat Bulgogi
P2-80 Quantifying the Efficacy of X-ray for Reducing Initial Microbial Population on Dates
P2-81 Surface Pasteurization and Sterilization of Low−moisture Food Crops by the Controlled Condensation Process CCP
P2-82 Genetic Diversity of Strains of *Leuconostoc* Isolated from Sausage Processing Environment
P2-83 Isolation and Characterization of Causative Organisms of “Blown-pack” Phenomenon in Ground Beef Chubs
P2-84 Mathematical Indices for Microbial and Physico-chemical Characteristics of Biltong Product during Storage
P2-85 Evaluation of the Antibacterial and Antioxidant Properties of *Coptis chinensis* and *Glycyrrhiza uralensis* among 35 Medicinal Plants
P2-86 A Study to Determine the Thinning of Soups by *Bacillus* spp. (*B. subtilis*, *B. licheniformis*, *B. megaterium* and *B. pumilus*) and Amylases Produced by *Bacillus licheniformis*
P2-87 ADIAFOOD® *Listeria* spp. Environment Detection Kit, a Complete Solution Adapted to Laboratory Workflow
P2-88 Behavior of Shiga Toxin-producing *Escherichia coli* in Acid Media and in Acerola and Tamarind Pulps
P2-89 Genetic Characterization of Atypical *Vibrio parahaemolyticus* Isolates from Imported Raw Shrimp Detected with a Real-time PCR Assay for *Vibrio cholerae*/*parahaemolyticus*/*vulnificus*
P2-90 Diversity and Distribution of *Salmonella* Shed by Asymptomatic Dairy Cattle and in Dairy Farm Environments
P2-91 Non-O157 Enterohemorrhagic *Escherichia coli* with AB5 Subtilase Cytotoxin Found in Commercial Ground Beef and Spinach Products
P2-92 Phenotypic and Genotypic Diversity of Emetic Toxin-producing *Bacillus cereus* Korean Isolates
P2-93 Genotyping Environmental, Fresh Produce, Meat and Clinical Isolates of *Salmonella* Saintpaul
P2-94 Co-occurrence of *Escherichia coli* Shiga Toxin 2dactivatable Variant and AB5 Subtilase in STEC in Commercial Ground Beef Products
P2-95 Virulence Gene and CRISPR Sequence Typing Method for Subtyping the Three Most Common Serovars of *Salmonella enterica* Subspecies *enterica*
P2-96 Development of Rapid Enzyme-linked Immunosorbant Assay for the Detection of *Cronobacter* sp. (*Enterobacter sakazakii*) in Infant Formula
P2-97 Virulence Factors of *Salmonella* Recovered from Pre- and Post-chill Whole Broiler Carcasses
P2-98 Effects of Titanium Dioxide-UV Photocatalytic Reaction on DNA Damage and Disinfection of Foodborne Pathogenic Bacteria

P2-99 Phylogenetic Analysis of *Arcobacter* Species by Sequencing of the Gyrase B Gene
P2-100 Expression of Curli by Enterohemorrhagic *Escherichia coli* as Influenced by Environmental Conditions
P2-101 Comparison of Four Molecular Typing Methods for *Vibrio parahaemolyticus* Isolated from the Middle-East Coastline of China
P2-102 Development of a Real-time PCR Assay with an Internal Amplification Control for the Rapid Detection of *Vibrio parahaemolyticus*
P2-103 Correlations between Serotype and Genotype among *Salmonella* Serogroups Based on Comparative Genomic Analysis
P2-104 Evaluation of *Salmonella* Isolates from Various Regions and Reservoirs Using Multilocus Sequence Typing
P2-105 Identification and Characterization of a Small Molecule That Inhibits the Quorum Sensing of *Vibrio vulnificus*
P2-106 PCR Screening for Shigatoxin- and Intimin-encoding Genes of *Escherichia coli* and for *Salmonella* in Beef Products in Processing Establishments
P2-107 Isolation and Detection of *Listeria* spp., *Salmonella*, *Escherichia coli* O157:H7, and Non-O157 Shiga Toxin-producing *Escherichia coli* from Agricultural Environments in Northern Colorado
P2-108 Evaluation and Performance of a *Salmonella* Serotyping System on Pork and Poultry Isolates from Commercial Sources
P2-109 Validation of an *Escherichia coli* O157 Test System for the Detection of *Escherichia coli* O157 in Composite Meat Samples
P2-110 Stability of Multidrug Resistance among *Campylobacter coli* from Turkeys
P2-111 Surveillance of *Campylobacter* spp., *Escherichia coli* O157, *Listeria monocytogenes*, *Salmonella* spp., *Shigella* spp. and Methicillin-resistant *Staphylococcus aureus* in Poultry
P2-112 Is Imported Raw Chicken a Source of Antimicrobial-resistant Strains of *Escherichia coli*, *Campylobacter* Species and *Salmonella* Species in the UK?
P2-113 Prevalence of *Listeria* spp. and *Listeria monocytogenes* of On-farm Dairies Manufacturing Cheese Made of Raw Ovine and Caprine Milk
P2-114 *Salmonella* Survival and Migration in Soil with Presence of Poultry Litter
P2-115 Role of Cellulose Production by *Salmonella* on Hydrophobicity and Attachment to Abiotic Surfaces
P2-116 Low Concentration of Ethylenediaminetetraacetic Acid Affects *Listeria monocytogenes* Biofilm Formation by Inhibiting Its Initial Attachment
P2-117 Prevalence and Characteristics of Methicillin-resistant *Staphylococcus aureus* in Livestock, Humans in Contact with Farm Animals, and Foods of Animal Origin, Switzerland
P2-118 Effect of Sample Preparation in the Detection and Isolation of *Escherichia coli* O157:H7 from Artificially Contaminated Produce
P2-119 Effect of Organic Acids and Quaternary Ammonium Compounds on Survival of *Salmonella* Serovars with SGI1-Mediated Multi-antibiotic Resistance
P2-120 Effect of Planktonic and Immobilized Growth on the Adaptive Acid

Tolerance Response of *Listeria monocytogenes* Strains
P2-121 Effect of Strain Competition, Meat Microflora, Limited Nutrients and Sequence of Strain Attachment on Biofilm Formation by Two *Escherichia coli* O157:H7 Strains and Subsequent Resistance to a Quaternary Ammonium Compound
P2-122 Influence of Irrigation Method on Persistence of Attenuated *Escherichia coli* O157:H7 in Field-inoculated Lettuce
P2-123 Antimicrobial Effect of Gamma Irradiation on *Burkholderia thailandensis* (*Burkholderia pseudomallei* Surrogate) under Combinations of pH and NaCl
P2-124 Growth of *Escherichia coli* O157:H7 and *Salmonella* spp. in Avocado Pulp and Guacamole at Different Temperatures
P2-125 Germination and Outgrowth of *Clostridium perfringens* and *Bacillus cereus* Spores during the Manufacture of Egg White Hydrolysates
P2-126 Development and Validation of a Dynamic Predictive Model for the Growth of *Salmonella* spp. in Liquid Whole Egg
P2-127 Effect of Temperature and pH on the Emetic Toxin Production of *Bacillus cereus*
P2-128 Impact of Relative Humidity on the Survival of Desiccated *Salmonella* Cells on Surfaces with Peanut Butter
P2-129 Evaluation of Attachment Capacity of *Listeria monocytogenes* Isolates in Response to Different Growth Conditions Using Multivariate Analysis
P2-130 Growth and Survival Characteristics of *Arcobacter butzleri* in Broth as a Function of Temperature, pH and NaCl
P2-131 Growth Characteristics and Development of a Predictive Model for *Bacillus cereus* in Fresh Wet Noodles with Addition of Preservatives
P2-132 Survival and Growth of *Clostridium perfringens* on No-Nitrate-or-Nitrite Added (Natural and Organic) Frankfurters, Bacons and Hams
P2-133 Prevalence and Characterization of *Cronobacter* Recovered from Desiccated Ready-to-Eat Products in Korea
P2-134 Filamentous *Salmonella*: Formation, Survival, and Virulence
P2-135 Genotyping of Methicillin-resistant *Staphylococcus aureus* Strains Isolated from Swiss Livestock and Veterinarians
P2-136 Methicillin-resistant Coagulase-negative Staphylococci Isolated from Livestock, Humans in Contact with Farm Animals, and Foods of Animal Origin, Switzerland
P2-137 Dissemination of *Escherichia coli* O157:H7 to the Spinach Phylloplane Via Regurgitation of House Flies (*Musca domestica*)
P2-138 Effect of Storage Temperature on the Growth and Survival of Total and Pathogenic *Vibrio parahaemolyticus* in Chesapeake Bay Oysters
P2-139 Development of Optimal Methods for Recovery of Murine Norovirus from Surfaces Common in the Preparation of Fresh Produce
P2-140 Effect of Brine Ingredients on *Escherichia coli* O157:H7 during Storage and Cooking of Moisture-enhanced Vacuum-packaged Beef
P2-141 Fate of *Escherichia coli* O157:H7 in Beef Slaughter Runoff Fluids during Carcass Chilling and Subsequent Decontamination
P2-142 *Pediococcus* spp. NRRL B-2354 (*Enterococcus faecium*) as a Non-pathogenic Surrogate for *Salmonella* Enteritidis PT30 during Moist-air

Convection Heating of Almonds
P2-143 Human Norovirus Transfer to Small Fruits during Handling and Sanitation with a Levulinic Acid Plus Sodium Dodecyl Sulfate
P2-144 Research on the Contamination Levels of Norovirus in the Water Used at Food Catering Facilities
P2-145 High-pressure Processing of Minimally Processed Peanut Butter and Peanut Sauce Inoculated with *Salmonella*
P2-146 Development of Concentration Methods for Noroviruses in Food Samples Using Histo-bood Group Antigens as Ligands
P2-147 Thermal Resistance of *Yersinia pseudotuberculosis* and *Yersinia pestis* in Bovine Milk with Different Fat Levels
P2-148 Pulsed-light Inactivation of Foodborne Viruses
P2-149 Fresh Vegetables Contaminated Directly in the Field by Pathogenic Human and Zoonotic Foodborne Viruses
P2-150 Lack of N-acyl Homoserine Lactone Recognition by *Salmonella* sdiA in the Plant Environment
P2-151 Impact of Sample Weight and Enrichment Ratio on the Isolation of *Campylobacter* spp. from Commercial Retail Broiler Meat
P2-152 Determining If the Consumer Method for Boiling Shrimp until Floating Effectively Reduces *Listeria* and *Salmonella* Species
P2-153 Evaluation of the MicroSEQ® *Escherichia coli* O157:H7 Assay: Real-time PCR Detection Method
P2-154 Comparison of ISO Method 16140 with USDA and DuPont Qualicon BAX Methods for the Detection of *Listeria monocytogenes* from Naturally Contaminated Environmental Samples
P2-155 RAPD-PCR Determination of *Bacillus cereus* Spore Population Dynamics in Inoculated Pack Studies
P2-156 Infectious Dose in Neonatal Jersey Calves of an *Escherichia coli* O157:H7 Strain from the 2006 Spinach Outbreak
P2-157 Comparison of an Automated Most Probable Number Technique to Traditional Plating Methods for Estimating Populations of Total Aerobes, Coliforms and *Escherichia coli* Associated with Freshly Processed Broiler Chickens
P2-158 Survival of *Salmonella* in Organic and Conventional Broiler Feed at Different Temperatures and Water Activities
P2-159 Dispersal of *Escherichia coli* and *Salmonella* from Poultry House Fan Ventilation Systems and Deposition onto Nearby Leafy Greens
P3: Produce and meat and poultry poster session
P3-01 Transfer of Internalized *Escherichia coli* O157:H7 from Cut Lettuce during Simulated Dewatering Process and Effect of Sanitizer Use in Preventing Cross-contamination
P3-02 Factors Affecting *Salmonella* Cross-contamination during Postharvest Washing of Tomatoes
P3-03 Behavior of Internalized *Escherichia coli* O157:H7 in Packaged Fresh Spinach during Postharvest Storage and Distribution Conditions
P3-04 Threshold Concentrations of *Escherichia coli* O157:H7 in Soil Required for Internalization into Leafy Greens
P3-05 Prevalence and Molecular Epidemiology of *Salmonella* in Meat Products

P3-06 Food Safety Concerns from Fresh Produce in Local Farmers' Markets and Grocery Stores
P3-07 Investigation and Evaluation of Current Food Safety Traceability Strategies Employed by the Produce Industry
P3-08 Fate of *Escherichia coli* O157:H7 and *Salmonella* spp. on Fresh-cut Carrots and Romaine Lettuce Stored at 4 and 23°C
P3-09 Microbial Quality of Bagged Baby Spinach and Romaine Lettuce – Effects of Top Versus Bottom Sampling
P3-10 Survival and Growth of *Salmonella* Saintpaul in Fresh Mexican Salsa Stored at Room Temperature
P3-11 The Safety and Quality of Washed and Peeled Potatoes of Various Shapes during Storage
P3-12 Recovery and Fate of *Campylobacter jejuni* in Fresh Spinach Stored at Ideal and Abusive Temperatures
P3-13 Impact of Post-inoculation Holding Time and Shred Size on *Escherichia coli* O157:H7 Transfer during Leafy Green Processing
P3-14 Microflora of Fresh Produce
P3-15 Microbiological Profile of Bell Peppers Produced by Hydroponics in Greenhouses in Mexico
P3-16 Analysis of the Microbiological Quality of Fruits and Vegetables Expended in Monterrey Mexico by Rapid Technologies
P3-17 Evaluation of Factors Affecting the Recovery of *Listeria monocytogenes*, *Salmonella* spp. and *Escherichia coli* O157:H7 from Inoculated Avocado Hass
P3-18 Recovery and Survival of Murine Norovirus on Inoculated Lettuce and Tomato Salad Mix
P3-19 Isolation and Detection of *Listeria monocytogenes*, *Escherichia coli* O157:H7, Non-O157 Shiga Toxin-producing *E. coli* and *Salmonella* from Produce Fields
P3-20 Isolation of *Listeria monocytogenes*, *Salmonella*, *Escherichia coli* O157:H7 and STEC from Pristine Environments in New York State
P3-21 Microbiological Analysis for Application of GAP System to APC of Hydroponics Paprika
P3-22 Microbiological Safety Assessment of the Soybean Postharvest Facility for the Application of GAP System
P3-23 Influence of Constituents of Water, Soil or Manure on Adherence of *Escherichia coli* O157:H7 to Plant Tissue
P3-24 The Effect of Varying Carbon-to-Nitrogen (C:N) Ratios on Pathogen Elimination in Unturned Dairy Manure-based Compost Heaps
P3-25 Persistence of *Escherichia coli* on Strawberries after Irrigation: Field Experiment
P3-26 Assessment of Irrigation Water Quality and Vegetative Filter Strip Soil Quality Using Indicator Organisms
P3-27 Bacterial Water Quality Assessment of an Irrigation Water Delivery and Drainage System in the Lower Yakima Valley of Washington
P3-28 Agronomic Practices That Alter Spinach Leaf Morphology, Surface Topography and Exudates, Increase *Escherichia coli* O157:H7 Associated Risks

P3-29 Survival of *Salmonella* on Spinach Leaves Treated with Contaminated Irrigation Water
P3-30 Examination of Pathogen Presence and Indicator Organism Levels in Soil and Lettuce in an Organic Farming System Field Experiment
P3-31 *Salmonella* Enteritidis Cross-contamination onto Mango by Means of Contaminated Knives
P3-32 *Salmonella* Transfer Potential during Hand Harvesting of Tomatoes
P3-33 Effect of Laser Labeling and *Pectobacterium carotovorum* Subsp. *carotovorum* on the Survival of *Salmonella* spp. on Tomato Surfaces
P3-34 Disinfection of *Salmonella* spp. on Tomato Surface by Pulsed Ultraviolet Light and Selected Sanitizers
P3-35 Thermal Inactivation of *Escherichia coli* O157 in Fresh Compost by Simulating Field Composting Process
P3-36 The Effect of Wash Water Quality on the Decontamination Efficacy of Spinach under Commercial Processing Conditions
P3-37 Improving Pathogen Reduction by Chlorine Wash Prior to Cutting in Fresh-cut Processing
P3-38 Use of Caprylic Acid and Monocaprylin as Novel Antimicrobials for Reducing *Escherichia coli* O157:H7 and *Salmonella* spp. on Alfalfa Seed
P3-39 Inactivation of Peroxyacetic Acid-injured *Escherichia coli* O157:H7 Cells on Baby Spinach Using Low-energy X-ray Irradiation
P3-40 Plant Extracts as an Alternative for *Salmonella* Decontamination of Cilantro
P3-41 Inactivation of *Salmonella* on Roma Tomatoes by High-concentration-short-time Chlorine Dioxide Gas Treatments
P3-42 Inhibition of *Escherichia coli* O157:H7 and *Clostridium sporogenes* in Spinach Packaged in Modified Atmospheres after Treatment with Chlorine and Lactic Acid Bacteria
P3-43 Naturally Occurring Bacteriocinogenic Lactic Acid Bacteria as Bioprotective Cultures to Enhance the Safety of Sprouts
P3-44 Use of High Hydrostatic Pressure to Eliminate *Escherichia coli* O157:H7 and *Salmonella* on Scallions (Green Onions)
P3-45 Comparative Effectiveness of Common Commercial Levels of Chlorine and Chlorine Dioxide to Prevent *Salmonella* spp. Cross-contamination on Inoculated Fresh Cut Red Chard
P3-46 Electrostatically Sprayed Lactic Acid Bacteria as a Pre-harvest Intervention Strategy for Reduction of *Escherichia coli* O157:H7 on Spinach
P3-47 The Impact of Almond Moisture on the Survival of *Salmonella* Enteritidis PT30 after Exposure to Hot Oil
P3-48 The Impact of Dehydration on Microbial Levels of In-shell Walnuts
P3-49 Behavior of *Salmonella* in High-water Activity Pecan Nutmeats, Inedible Nut Components, and Orchard Soil
P3-50 Comparing Multiple Methods for Validating Dry Air Pasteurization of Almonds
P3-51 Assessment of Risk of Salmonellosis from Consumption of Pistachios
P3-52 *Campylobacter* Prevalence Estimates for Swabs and Neck Flaps of Commercial Turkey Carcasses
P3-53 Survivability of *Campylobacter* spp. in Chicken Juice on Surfaces,

Determined Using a Range of Sampling and Enrichment Techniques
P3-54 Distribution of *Salmonella* in Young Chicken Carcass Rinse Samples at Post-chill and Re-hang Locations in the Nationwide Microbiological Baseline Survey
P3-55 Examination of Chlorine, Peroxyacetic Acid, and Lactic Acid Antimicrobial Rinses in Small-scale Poultry Slaughter Operations
P3-56 Mapping the Distribution of *Salmonella* on the Chicken Carcass
P3-57 Thermal Inactivation Kinetics of a Three-strain Composite of *Salmonella* Enteritidis and Oranienberg in Commercially-acquired Liquid Whole Egg and 10% Salted Liquid Egg Yolk
P3-58 Propyl Paraben Sensitizes Heat-resistant *Salmonella* Enteritidis and Oranienburg to Thermal Pasteurization in Liquid Egg Albumen
P3-59 Thermal, Biochemical, Serological and Fatty Acid Methyl Ester Analysis of *Salmonella* spp. Isolated from Pasteurized Egg Products
P3-60 Thermal Destruction of *Listeria monocytogenes* in Liquid Egg
P3-61 Frequency of *Listeria monocytogenes* on the Eggshell of Commercial Chicken Eggs Using a Combined Method of Enrichment and Nested-PCR
P3-62 Effect of a Native Microflora on the Growth of *Listeria monocytogenes* in Cooked Ham
P3-63 Survival and Death of *Listeria monocytogenes* on Cooked Bacon at Three Storage Temperatures
P3-64 Effect of Different Marination Application Systems on the Growth of *Listeria monocytogenes* in Ready-to-Eat Pork Loin
P3-65 *Salmonella* and Pathogenic *Escherichia coli* Prevalence and Generic *Escherichia coli* Quantitative Baselines in Raw Pork and Beef at Retail Outlets in Mexico
P3-66 Effect of Phosphate and Meat (Pork) Types on the Germination and Outgrowth of *Clostridium perfringens* Spores during Abusive Chilling
P3-67 Analysis of ALLRTE and RTE001 Sampling Results for *Listeria monocytogenes*, Calendar Years 2005–2008
P3-68 Prevalence of *Salmonella* Fecal Shedding and Environmental Contamination in Dual Purpose Cattle Farms under Tropical Conditions
P3-69 *Salmonella* and *Escherichia coli* O157:H7 Prevalence in Cattle and on Carcasses in a Vertically Integrated Feedlot and Harvest Plant in Mexico
P3-70 Advances in the Implementation of Quality Systems in Mexican Beef Packers
P3-71 Validation of Pepperoni Process for Control of Shiga-toxin Producing *Escherichia coli*
P3-72 Wine-based Marinades Prevent the Growth of *Salmonella* Typhimurium and Background Flora in Beef Fillets
P3-73 Efficacy of Brine Spray Chilling on the Reduction of *Escherichia coli* O157:H7 and *Salmonella* on Hot Beef Carcass Surfaces
P3-74 Efficacy of High Intensity UV/Photohydroionization Cell for the Surface Decontamination of Beef Subprimals Inoculated with *Escherichia coli* O157:H7 and *Salmonella* spp.
P3-75 Thermal Inactivation of Shiga-toxin Producing Cells of *Escherichia coli* in Chemically-injected Beef Steaks Cooked on a Commercial Open-flame Gas Grill

P3-76 Translocation of Shiga Toxin-producing Cells of *Escherichia coli* in Chemically-injected Beef Subprimals
P3-77 Frequency and Antimicrobial Resistance of *Salmonella* spp. in Beef Carcasses at Slaughterhouses in Jalisco, México
P3-78 Sensitive Detection of Bovine Plasma-derived Proteins in Ground Beef
P3-79 Inhibition of *Listeria monocytogenes* Growth on Kielbasa and Ham by Buffered Vinegar
P3-80 Inhibition of *Listeria monocytogenes* Growth on Ready-to-Eat Turkey Products by Buffered Lemon Juice Concentrate and Vinegar Mixtures
P3-81 Inhibition of *Clostridium perfringens* Spore Germination and Outgrowth by Buffered Sodium Citrate and Buffered Vinegar in Corned Beef
P3-82 Thermal Inactivation of Acid, Cold, Heat, Starvation and Desiccation Stress-adapted *Escherichia coli* O157:H7 in Nonintact Beef Moisture-enhanced with Various Brine Ingredients
P3-83 Survival of *Arcobacter butzleri* on Vacuum-packaged Beef Stored under Refrigerated Temperatures

表五、目前台灣 IAFP 會員名單

Table 5. IAFP 2010 active members in Taiwan

Name	Company	Email
Chia-Yang Chen	National Taiwan University	dbms@ntu.edu.tw
Tsui-Ping Huang	Food and Drug Administration	tphuang@fda.gov.tw
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Tzu-Yen Liao	National Peng-Hu University	vanco@mail2000.com.tw
Chorng-Liang Pan	Natl Taiwan Ocean Univ, Dept of Food Sci	b0037@mail.ntou.edu.tw
Lin Kia Sheng		winter637@yahoo.com.tw
Christie Sun		eth4712@ms65.hinet.net
Tsung-Yu Tsai	Fu Jen Catholic University	071608@mail.fju.edu.tw
Yung-Hsiang Tsai	National Kaohsiung Marine University	yhtsai01@seed.net.tw
Hin-chung Wong	Soochow University	wonghc@scu.edu.tw

表六、IAFP 專家資料

Table 6. List of IAFP professions

Name	e-mail	Profession	Company
Andy Hwang 黃慶安	Andy.Hwang @ars.usda.gov	Research Food Technologist	USDA/ Agricultural Research Service /Microbial Food Safety Research Unit www.ars.usda.gov/naa/errc 費城
Shiow Shuh Sheen 沈秀樹	Shiowshuh.sheen@ars.usda.gov	Research Food Technologist	USDA/ Agricultural Research Service /Food Safety and Intervention Technologies Research Unit www.ars.usda.gov/naa/errcAgricultural Research Service 費城
Chorn-Ming Cheng 鄭崇明	Chorn-Ming.Cheng @fda.hhs.gov	Microbiologist/molecular biologist	U.S. Department of Health and Human Services FDA/Pacific Regional Lab Southwest 19701 Fairchild Irvine, CA 92612-2506 洛杉磯
Kai-Shun Chen 陳開舜	Kai-shun.chen @fda.hhs.gov	Microbiologist/molecular biologist	FDA/Pacific Regional Lab Southwest 洛杉磯

Kyson Chou	Kyson Chou @fda.hhs.gov	Microbiologist/molecular biologist	FDA/Pacific Regional Lab Southwest 洛杉磯
Donna Williams-Hill	DonnaWH@fda.hhs.gov	Supervisor	FDA/Pacific Regional Lab Southwest 洛杉磯
Tong-Jen Fu 浮同貞 （TJ Fu）	tongjen.fu@fda.hhs.gov	Research Chemical Engineer	FDA/CFSAN Summit-Argo, IL 芝加哥
Zhinong Yan 嚴志農	zhinong.yan@intralox.com	Food Safety Food Microbiology Director, Food Safety R&D; Manager, President of CAFPNA	China Business Development at Mol Belting Systems CAFPNA 北美華人食品保護協會
Yin Ging Ma 馬寅青	yinging.ma@fda.hhs.gov	Research Microbiologist	FDA/CFSAN U.S. FDA, HFS-711 5100 Paint Branch Parkway College Park, MD 20740-3835 馬里蘭
Diana Y-Y Hao 郝芸芸	Diana.Hao@cfsan.fda.gov (301) 436-1579	Complier, Moderator	FDA/CFSAN U.S. FDA, HFS-711 馬里蘭
Zuoxing zheng 鄭佐興	zzheng@kraft.com	Research Microbiologist	Kraft
Brian D. Sauders,	brian.sauders@agmkt.state.ny.us bds26@cornell.edu		New York State Department of Agriculture & Markets Food Laboratory

	Phone: (518) 485-8774 office (518) 457-3358 lab (518) 727-8124 cell		Division NY State Office Campus, Bldg 7 1220 Washington Ave Albany, NY 12235 紐約 http://www.agmkt.state.ny.us
CHAH MEOW YONG	chahmy@alleights.com.my chahmy@gmail.com.my	Market Development Manager	All EIGHTS(MALAYSIA)SDN BHD www.alleights.com.my
Christine Rozand	christine.rozand@biomerieux.com	Global R&D Director	www.biomerieux.com-www.biomerieux-industry.com
Marco Y.L. Mou	marco.mou@as.biomerieux.com	Regional Business Director Asia Pacific	biomerieux (Shanghai) Co., Ltd. www.biomerieux.com
Nuno REIS	Nuno.reis@as.biomerieux.com	Regional Business Manager Food Director Asia Pacific	Biomerieux (Shanghai) Co., Ltd. www.biomerieux.com
Alexander biomerieux	Alexander.biomerieux@biomerieux.com	Global R&D Director	www.biomerieux.com-www.biomerieux-industry.com
北美華人食品保護協會會議通知名單	詳如備註	Food Safety Food Microbiology	-

備註：北美華人食品保護協會會議通知如下：

----- Original Message -----

From: Zhinong.Yan@Intralox.com

To: Zhinong.Yan@Intralox.com ; shencangliang@hotmail.com ; yixin.li@lifetech.com ; fwang7@lsu.edu ; spu@lsu.edu ; xiangwu.nou@ars.usda.gov ; lwang@iit.edu ; wangnakie@gmail.com ; tongjen.fu@fda.hhs.gov ; fhan1@lsu.edu ; Ting.zhou@agr.gc.ca ; lima@uga.edu ; csiyi1@lsu.edu ; xliu54@iit.edu ; florence@aemtek.com ; atian@cspinet.org ; xiuping@clemson.edu ; bge@lsu.ed ; jipingli@uoguelph.ca ; schen@uoguelph.ca ; haiqiang@udel.edu ; agao@uoguelph.ca ; jwei@udel.edu ; jchen@uga.edu ; kaipingdeng@fda.hhs.gov ; lihong.l.wu@usa.dupont.com ; huay711@hotmail.com ; yuewei.hu@genmills.com ; ghuang@almondboard.com ; yanbinli@uark.edu ; Siqun.Wang@usa.dupont.com ; cindy.jiang@us.mcd.com ; Jingkun.Li@siemens.com ; rachel.teoh@lkkusa.com ; zzheng@Kraft.com ; lxwang@ucdavis.edu ; 黃翠萍 ; lisa_wang@harmonigp.com ; fchen1@tnstate.edu ; ptian@pw.usda.edu ; xiaohua@pw.usda.gov ; sxu@landolakes.com
Cc: cary.sun@infoexws.com
Sent: Tuesday, August 03, 2010 1:27 PM
Subject: Meeting for CAFPNA

Hello, All,

We will have the CAFPNA meeting:

Time: 6:00-7:00 pm, Tuesday, Aug. 3

Place: Room 204C, Convention center

Look forward to seeing you all there,

Best regards,

Zhinong

Cell: 504-493-7989

****

Agenda:

1. Announcement of CAFPNA as an official affiliate of IAFP
2. Discussion about CAFPNA bylaws
3. Voting for officers for 2010-2011
4. Report of the work accomplished
    a. Preparation of Chinese Association for Food Safety.
    b. Initiation of communication between IAFP and Chinese food safety professionals
    c. Establishment of relationship with Chinese food safety professional groups
    d. Assistance of Chinese research institute for China national grant application with the help from US companies.
5. Plan for next year
    a. Co-hosting a workshop with Dr. Fung on rapid detection of foodborne pathogens held in Hangzhou, May, 2011.
    b. Follow-up on Chinese Association for Food Safety
6. Open discussion

Zhinong Yan, Ph.D.
Senior Food Safety Scientist
Global Food Safety Group
Intralox LLC
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