2017 年 06 月 10 日 中華醫學會 106 年度會員大會

暨聯合學術研討會

2017 年 06 月 10 日 中華醫學會 106 年度會員大會暨聯合學術研討會於台北國際會議中心舉辦，口腔醫學部於當日主辦上下午兩場專題學術討論會，上午為創新口腔診療介紹，下午為口腔頭頸癌卓越研究。參與者踴躍，照片、講題及簡介如下：

「中華醫學會 106 年度會員大會暨聯合學術研討會」謹訂於 106 年 6 月 10 日（星期六）假台北國際會議中心舉行

（台北市信義路五段 1 號），節目內容精彩豐富，竭誠歡迎您踴躍參與、共襄盛舉

中華醫學會 106 年度會員大會暨聯合學術研討會會場安排

時間：106 年 6 月 10 日（星期六）　　地點：台北國際會議中心

會議室	一樓							二樓				
	101 A 容納 120 人	101 B 容納 150 人	101 C 容納 150 人	101 D 容納 120 人	102 容納 200 人	103 容納 120 人	105 容納 100 人	201 A 容納 112 人	201 B 容納 88 人	201 C 容納 88 人	201 DE 容納 200 人	201 F 容納 112 人
上午 08:30 ｜ 12:00	**醫研部**	**腸胃科**	**醫研部**	**腫瘤醫學部**	**內視鏡中心**	**醫研部兒醫部**	**麻醉部**					**口腔醫學部**
	榮總台灣聯合大學系統合作研究成果發表會	腸內菌與人類疾病	智慧醫院 2020‥自然、友善、高效	含硼分子在硼中子捕獲腫瘤療法上的應用	消化系領域之新影像技術	精準醫療研討會	兒童脊椎畸形矯正手術麻醉新時代研討會					創新口腔診療簡介
下午 13:30 ｜ 17:30	**泌尿部**	**大腸直腸外科**	**教學部**	**醫研部**	**醫研部**	**醫研部兒醫部**	**整形外科**	**眼科部**	**家醫部**	**耳鼻喉部**	**腎臟科**	**口腔醫學部**
	攝護腺癌診斷與治療之新進展	發炎性腸道疾病的跨科整合與治療新趨勢	虛擬實境與模擬醫學國際新趨勢	大數據與生物資料庫研討會	慢性 B 型與慢性 C 型肝炎健保給付抗病毒治療政策的演進與對健康的重大影響	精準醫療研討會	三維列印技術與導航系統於外科手術的應用	眼科專家與跨領域專家對談	提升重病者生命品質並提供其高價值的緩和醫療	鼻腔鼻竇惡性腫瘤的治療趨勢	醫病共同決策在慢性腎臟病人全人照顧的應用	口腔頭頸癌卓越研究

中華醫學會會員大會【102 會議室】12:30~13:00

創新口腔診療簡介

Introduction to innovative oral diagnosis and treatment

時 間：6 月 10 日(星期六) 08:30~12:00
地 點：台北國際會議中心 201F 會議室

08:30-08:40	***Opening Remarks***	雷文天部長 Man Tin Lui
	座長：賴玉玲主任 (Yu-lin Lai)	
08:40-09:10	用光看穿高齡疾病 Biophotonic Technology for Elderly Diseases Diagnosis	孫家偉副教授 Chia-Wei Sun
09:10-09:40	應用光學同調斷層掃描於牙科數位建模 Application of Optical Coherence Tomography (OCT) in Digital Impression in Dentistry	李士元教授 Shyh-Yuan Lee
09:40-10:10	3D 列印在牙科領域上之前瞻應用及未來發展 The Cutting Edge and Forward Path of 3D Printing in Dentistry	林怡文副主任 YiWen Evin Lin
10:10-10:30	***Coffee Break***	
	座長：葉聖威主任(Shing-Wai Yip)	
10:30-11:00	金屬積層製造於醫材應用 Metal Additive Manufacturing for Medical Applications	林得耀副理 De-Yao Lin
11:00-11:30	陶瓷義齒數位製造：CAD/CAM 與三維列印 Digital Manufacturing of Ceramic Dental Restoration by CAD/CAM and Three Dimensional Printing	江卓培教授 Cho-Pei Jiang
11:30-12:00	牙科三維列印的材料與應用 Materials and Applications of 3D Printing in Dentistry	林元敏助理教授 Yun-Min Lin

口腔頭頸癌卓越研究

時 間：6 月 10 日(星期六) 13:30~17:30
地 點：台北國際會議中心 201F 會議室

13:30-13:40	***Opening Remarks***	高壽延副院長 Anthony Shou-Yen Kao
	座長: 羅文良 醫師 (Wen-Liang Lo)	
13:40-14:20	ASB6 在頭頸癌起始幹細胞所扮演的角色 ASB6 promotes the formation or enrichment of head and neck cancer-initiating cells	洪凱風醫師 Kai-Feng Hung
14:20-15:00	頭頸腫瘤生成之代謝調節 Metabolic Regulations during Head and Neck Tumorigenesis	黎萬君副教授 Wan-Chun Li
15:00-15:30	***Coffee Break***	
	座長: 陳元武 醫師(Yuan-Wu Chen)	
15:30-16:10	口腔癌對順鉑產生抗藥性的機轉 Potential mechanisms of drug resistance of OSCC to cisplatin	楊政杰醫師 Cheng-Chieh Yang
16:10-16:50	復發頭頸癌疾病的新式放射治療選擇—硼中子捕獲治療 New Treatment Option for Recurrent Head and Neck Cancer---Boron Neutron Capture Therapy	陳一瑋醫師 Yi-Wei Chen
16:50-17:30	cetuximab 在口腔癌治療之角色和抗藥機轉 The role and mechanism of drug resistance of cetuximab in The treatment of oral cancers	楊慕華教授 Muh-Hwa Yang

創新口腔診療簡介

Introduction to innovative oral diagnosis and treatment

時 間：6 月 10 日(星期六) 08:30~12:00
地 點：台北國際會議中心 201F 會議室

孫家偉副教授

演講時間：09:10-09:40

講題：用光看穿高齡疾病

Biophotonic Technology for Elderly Diseases Diagnosis

最高學歷：博士
現職：國立交通大學光電工程學系 副教授

摘要：Official statistics showing an increase in Taiwan's 65-and-over population indicate that the nation is on course to go from being an "aging society" to an "aged society." With an increase in the population of elderly citizens and a rising life expectancy, it was inevitable that Taiwan will be defined as aged. Recently, biophotonic techniques have been proposed as real-time, noninvasive and nonradiative systems for biomedical applications. These optical systems are used by scientists for research and by clinicians for disease diagnosis and treatment. Not only the structural information but also the functional changes of human tissues can be measured based on the optical detection. The topics of biophotonic research include optical diagnostics and therapeutics, biomedical imaging modalities, near-infrared spectroscopy, optical coherence tomography, neurophotonics, optogenetics, tissue optics, and nano-photonics for biomedical applications. Recently, translational medicine and precision medicine are two emerging approach for clinical researches. Biophotonic instruments and devices can provide the different solutions for the issues because their own advantages. Therefore, the bench-to-bedside optical systems interest the interdisciplinary research from optical engineering to medical diagnosis and therapy. Because of

the compact design and cost-effective products of optical devices, the biophotonic instruments are quite attractive for clinician. Currently, the goal of biomedical optical imaging lab (BOIL) is to develop the biomedical optical imaging methods for clinical diagnosis and home-care purpose. In this presentation, the recent works of BOIL will be demonstrated with several projects that include optical neuroimaging, wearable devices, skin characterization, ICU applications, surgery navigation system, and the several topics of aging-associated diseases diagnosis.

創新口腔診療簡介

Introduction to innovative oral diagnosis and treatment

時 間：6 月 10 日(星期六) 08:30~12:00
地 點：台北國際會議中心 201F 會議室

李士元教授教授

演講時間：09:10-09:40

講題：應用光學同調斷層掃描於牙科數位建模

Application of Optical Coherence Tomography (OCT) in Digital Impression in Dentistry

最高學歷：美國波士頓大學牙醫科學(生物材料學)博士

現職：*國立陽明大學 牙醫學院; 臺北榮民總醫院 口腔醫學部*

摘要：

Dental impression is an irreplaceable step for making precise dental prostheses, especially for fixed prosthodontics. In modern dentistry, digital impression technique has drawn much more attention than traditional one. Several commercial digital impression systems were launched and demonstrated pretty good results in making impression for crown and bridge. However, digital impression technique, just like traditional method, still have to do gingival retraction for subgingival margins before dentist can make a qualified impression. Gingiva retraction is considered a time consuming and undesirable step both for dentist and patient, since it may cause patient discomfort, gum laceration, bleeding, inflammation or even gingival recession and possibly jeopardize esthetics. Thus, exemption of gingival retraction is an important issue in improving clinical dental practice.

Unlike current dental digital impression techniques which using visible light source to scan tissue, the Optical Coherence Tomography (OCT) uses infrared light as light source, which has the ability to penetrate certain depths of tissues and provide 3D images of gingiva and underneath hard tissue or calculus. Previously we have shown that OCT could be used as an adjunctive tool to exam initial tooth

demineralization, secondary caries, and tooth crack, and to locate subgingival calculus by separating gingiva from tooth in the captured images. Since low dosage, transient infrared light radiation is harmless to human body, OCT certainly shall benefit the pregnant women and children by reducing the risk of x-rays radiation exposure during routine dental checkup.

However, the scan images from OCT are usually distorted due to the disparity of refractive index from different tissues. By system calibration and data processing through certain algorithms, now we are able to transfer OCT images to reconstruct 3D models for dental applications. Comparing to the commercial impression system (Carestream), the OCT prototype that we built demonstrated a comparable result with a precision from 28 to 34 μm, which denoted that OCT has a great potential to replace traditional and digital impression techniques in the future.

創新口腔診療簡介

Introduction to innovative oral diagnosis and treatment

時 間：6 月 10 日(星期六) 08:30~12:00
地 點：台北國際會議中心 201F 會議室

陳怡文副主任

演講時間：09:40-10:10

講題：3D 列印在牙科領域上之前瞻應用及未來發展

The Cutting Edge and Forward Path of 3D Printing in Dentistry

最高學歷：佛羅里達州立大學工業與製造工程學系博士
現職：中國醫藥大學附設醫院 3D 列印醫療研發中心副主任
中國醫藥大學生物醫學研究所 助理教授

摘要：
在所有醫學相關領域中，牙科應用被認為是最適用且最快速接受 3D 列印(或稱為積層製造)來提升醫療品質的專科領域，3D 列印技術因具有產品設計與製造上的高度自由，在骨科、植入物和牙科技術的應用中能夠快速且精準地使個別患者的數位客製醫療器材得以實現。近年來牙科領域中， 3D 成像和建模技術的快速進步，例如斷層掃描（CT），錐束斷層掃描（CBCT）和口腔掃描，及輔助設計/製造（CAD / CAM）技術的歷史發展，更是提升了 3D 列印的應用優勢，而在各國牙科應用 3D 列印的彙整中，可預期之廣泛應用包括客製牙科植入物的導引器，矯正和手術需要的實體模型，顱頜面和矯正之客製植入物，及用於植入物和牙齒修復物牙套或牙橋的製作等。為了提供前瞻且平價的 3D 列印醫療，這個專題演講將討論許多議題包括生物醫學設備，醫療植入物和精準治療，甚至說明實際臨床應用案例，醫學圖像，再生醫學，3D 打印製造過程和法規等主題。

創新口腔診療簡介

Introduction to innovative oral diagnosis and treatment

時 間：6 月 10 日(星期六) 08:30~12:00
地 點：台北國際會議中心 201F 會議室

林得耀副理

演講時間：10:30-11:00

講題：金屬積層製造於醫材應用
Metal Additive Manufacturing for Medical Applications

最高學歷：國立彰化師範大學 機電系 碩士
現職：工業技術研究院 雷射與積層製造科技中心 積層創新部 副經理

摘要：

積層製造(AM，Additive Manufacturing)技術近年來倍受矚目，即一般民眾俗稱的 3D 列印(3D Printing)；其中金屬積層製造技術更是備受矚目，作用機制為先將欲加工物件三維切層，鋪一層金屬粉末再利用雷射燒熔該層，鋪一層燒一層堆疊成型，容易建構複雜形貌及內部特殊流道與結構，近年來由於積層製造技術的發展與雷射的精進，使金屬成品已接近甚至超越一般塊材之機械性質，突破過去僅原型展示之用途。金屬 3D 列印醫材為近年來國際間快速成長的研究議題，多樣少量之製作特性實踐客製化醫材商品，包括顱顏彌補物、骨板與導引板，其內部結構之製作能力更實踐仿生醫材商品，如關節植體、椎體植入物、牙根與骨釘等，促使醫材產品更符合人體需求，創造新一代高品質醫療器材。

創新口腔診療簡介

Introduction to innovative oral diagnosis and treatment

時 間：6 月 10 日(星期六) 08:30~12:00
地 點：台北國際會議中心 201F 會議室

江卓培教授

演講時間：11:00-11:30

講題：陶瓷義齒數位製造：CAD/CAM 與三維列印
Digital Manufacturing of Ceramic Dental Restoration by CAD/CAM and Three Dimensional Printing

最高學歷：博士
現職：國立虎尾科技大學動力機械系 教授

摘要：
陶瓷義齒因為美觀與良好的機械強度而逐漸獲得重視，製作的方式也因為數位取模與數位設計的技術提升而走向數位製造。早期的數位製造僅以 CAD/CAM 為主，但設備昂貴、 每次只能加工一件贋復元件、拋棄不能再加工的陶瓷塊與切削下來的切屑 形同浪費等因素，期待被解決。 陶瓷類的三維列印技術因其可以一次加工 數件的贋復元件且屬於加工加工、較不浪費材料而受到重視，被認為能有機會取代 CAD/CAM 系統，但三維列印所製作出來的贋復元件的尺寸精度、密合度與可染 色能力是考量因素。 本研究將說明 CAD/CAM 與陶瓷類的三維列印的原理與加工程序的差異性，再討論兩者方法進行同一贋復模型加工後的元件與原模型的誤差比 較、密合度與機械性質是否符合需求等。

創新口腔診療簡介

Introduction to innovative oral diagnosis and treatment

時 間：6 月 10 日(星期六) 08:30~12:00
地 點：台北國際會議中心 201F 會議室

林元敏助理教授

演講時間：11:30-12:00

講題：牙科三維列印的材料與應用
Materials and Applications of 3D Printing in Dentistry

最高學歷：博士
現職：陽明大學牙醫系助理教授

摘要：
In recent years, 3D printing kept drawing more and more attentions. In IDS (International Dental Show) 2017, the 3D printing products for dental applications became the one of the largest sectors in the exhibition. For different dental applications, the accuracy requirements of the 3D-printed products can vary a lot. For example, a 3D-printed dental model for prosthodontics requires very high accuracy, while a dental model for aligner orthodontics can be more tolerate in accuracy. Therefore, not every 3D printers can meet the requirements of dental applications. The accuracy of a 3D- printed product can be affected by many factors. A good example is that a 3D printer based on DLP or SLA technology has generally better accuracy and resolution than a FDM 3D printer. In this talk, factors that affect the accuracy of a 3D-printed product from a DLP 3D printer will be reviewed. In addition, our spin-off company, Enlighten Digital Dental Materials, which specialized in dental 3D printing materials, will also be introduced.

口腔頭頸癌卓越研究

時 間：6 月 10 日(星期六) 13:30~17:30
地 點：台北國際會議中心 201F 會議室

洪凱風醫師

演講時間：13:40-14:20

講題：ASB6 在頭頸癌起始幹細胞所扮演的角色
ASB6 promotes the formation or enrichment of head and neck cancer-initiating cells

最高學歷：美國華盛頓大學口腔生物醫學博士
現職：台北榮總醫學研究部轉譯醫學科主治醫師

摘要：
Background: Despite the proceeding in cancer management, recurrence or relapse nonetheless occurs, resulting in disease progress and reduced prognosis. Poor survival is closely associated with the subpopulation, termed cancer-initiating cells (CICs), that are responsible for initiation or expansion of tumor, resembling stem cell population. CICs are identified in a variety of cancers, and studies have shown that the mechanism exploited for CIC development are cancer type-specific. In head and neck (HN) cancers, we previously performed a systemic analysis and discovered that the E3 ubiquitin ligase ASB6 is increased in normal human oral keratinocytes treated with the major component of betel nut, and is significantly up-regulated in HN cancer cell lines. We also found that HN cancer patients with high ASB6 expression in their cancer tissue are relatively poor in overall survival. Since both cancer formation and poor prognosis are associated with CICs, in this study we aim to determine whether ASB6 indeed has a role in promoting HN CICs development.

Methods: To determine whether ASB6 promotes the stemness of HN cancer cells, we established HN cancer cell lines either with knockdown of ASB6 or stably overexpressing human ASB6. The stem cell phenotypes, including the expression of stem cell markers (such as CD44, ^{mem}Grp78, Oct-4, or Nanog) and the ability of tumor sphere formation, of these cells were then examined by using multicolor flow cytometry, western blot, and colony formation assay.

Results: We showed that several stemness-associated markers were preferentially up-regulated in cells overexpressing ASB6. The potential to form tumor sphere was greatly improved following ASB6 overexpression. In contrast, knockdown of ASB6 significantly down-regulates these stem cell phenotypes. Importantly, mice with tail vein-injected ASB6-overexpressing cells were found with more tumor nodules in lung, indicating that these cells exhibit a superior ability to metastasize.

Conclusion: ASB6 is likely to have a role in the development of HN CICs and thereby contribute to poor overall survival of HN cancer patients. Further investigation of the mechanism by which ASB6 promote CIC phenotype may provide insights into how HN CICs can be more effectively targeted, ultimately leading to the development of better cancer therapies.

口腔頭頸癌卓越研究

時 間：6 月 10 日(星期六) 13:30~17:30
地 點：台北國際會議中心 201F 會議室

黎萬君副教授

演講時間：14:20-15:00

講題：頭頸腫瘤生成之代謝調節

Metabolic Regulations during Head and Neck Tumorigenesis

最高學歷：博士
現職：國立陽明大學口腔生物研究所副教授

摘要：

Background: Head and neck squamous cell carcinoma (HNSCC) is one of the most prevalent neoplasms worldwide. Potent dietary carcinogens including areca nut chewing, tobacco smoking and alcohol consumption are considered as key contributors for neoplastic transformation of HNSCCs. The importance of environmental challenges including oncogenic viral infection and systemic metabolism imbalance linking to development of various cancers have also been emphasized based on numerous preclinical and epidemiological studies. In addition to external metabolic inputs, owing to their great demand of energy and biomolecules for cell growth, cancer cells exhibited unique internal metabolic signature with increased glucose uptake, upregulated glycolytic and *de novo* lipogenic activity in accompany with impaired oxidative phosphorylation (OxPhos) compared to their normal counterparts.

Methods: Recent findings have demonstrated that manipulations of either intrinsic or extrinsic cancer specific metabolism could module cellular malignancy in various cancers implying a possibility to develop anti-cancer schemes by targeting cancer metabolism. Multifaceted phenotypic and molecular analysis was performed to

examine the changes of cellular malignancy of HNSCC cells in response to metabolic alterations, both *in vitro* and *in vivo*.

Results: We successfully demonstrated that external challenge (e.g. diabetic environment) as well as intrinsic metabolic gene manipulations (e.g. alteration of glycolytic and lipogenic enzymes) led to changes of cell growth, cellular motility, cell differentiation, stemness and sensitivity to chemotherapeutic agents and photodynamic therapy (PDT) in HNSCC cells via the regulations of nutrient-sensing Akt/AMPK-mTORC1 pathway. Interestingly, manipulation of individual metabolic pathway in HNSCC cells could potentially induce a gross metabolic reprogramming by targeting other metabolic cues suggesting a “cross-talks” between different metabolic machinery. Moreover, *in vivo* analysis demonstrated that hyperglycemic physiology facilitated chemical induced tongue tumor progression whereas expression of glycolytic/lipogenic/OxPhos enzymes regulates xenografic tumor growth. In clinic, diabetic pathophysiology positively correlated with worsen prognosis further implying the significance of imbalanced metabolism in controlling HNSCC malignancy.

Conclusion: Taken together, our findings indicated that external and intrinsic metabolic modulations controls cellular malignancy and therapeutic responses of HNSCC cells and could be of great potential for development of better metabolism based anti-cancer strategies in treating HNSCCs.

口腔頭頸癌卓越研究

時 間：6 月 10 日(星期六) 13:30~17:30
地 點：台北國際會議中心 201F 會議室

楊政杰醫師

演講時間：15:30-16:10

講題：口腔癌對順鉑產生抗藥性的機轉
Potential mechanisms of drug resistance of OSCC to cisplatin

最高學歷：Ph.D, University of Texas, MD Anderson Cancer Center
DDS, National Yang-Ming University

現職：台北榮民總醫院 口腔顎面外科，主治醫師
國立陽明大學牙醫學系，助理教授

摘要：Oral squamous cell carcinoma (OSCC) accounts for almost two-thirds of head and neck squamous cell carcinoma (HNSCC) in the male population of our country. Despite the recent advancement of treatment modalities, the overall survival for OSCC remains unsatisfactory for the past decades. The therapeutic failure mainly comes from poor loco-regional control and the development of distant metastasis. Cisplatin-based chemotherapeutic regimen provides a significant survival benefit for HNSCC patients in post-op adjuvant concurrent chemoradiotherapy (CCRT) and disease control for advanced relapse diseases. However, this approach is greatly limited if tumors develop either endogenous or acquired chemoresistance to cisplatin. For HNSCC, upregulated EGFR related signaling is one of the most important pathways in the cancer formation and disease progression.. We found upon cisplatin treatment, HNSCC cell would upregulated the critical mediator of mTORC1, p62, in EGFR dependent manner to enhance its activity. The upregulated mTOR activity not only maintained the cell proliferation capacity under cisplatin treatment but enhanced properties and expanded the subpopulation of cancer stem cells (CSC) of OSCC. The

CSC populations were notorious for their intrinsic resistance to conventional chemoradio therapies. When cisplatin–resistant subclones generated by gradual and long-term escalating doses of cisplatin, mTOR activity and its activator p62 were up-regulated. However, the sensitivity to cisplatin of these resistant cells was resumed by p62 knock-down or rapamycin and metformin treatment. In a cohort of advanced HNSCC patients, higher mTOR activity correlated with a poor prognosis in OSCC patients, which can be attributed to a higher local recurrence rate even after received post-operative cisplatin-base adjuvant therapy. We also found when treated with cisplatin, OSCC cells would automatically increased HB-EGF expression in a Akt/COX2 dependent manner. This signaling axis constituting a self-augmented feed forward loop was able to increase the expression of DNA repaired protein, ERCC1. This pathway may contribute to cisplatin-resistance in HNSCC patients. For the data we have, EGFR related signals play a critical role in the resistance to cisplatin-based regimes. Therefore, the combinational use of anti-EGFR drugs, like cetuximab or the under-developing Raplogs are good alternatives to overcome the induced cisplatin resistance in HNSCC. To explore other potential mechanisms may greatly benefit HNSCC patients in preventing tumor recurrence and ultimately improve the treatment outcome.

口腔頭頸癌卓越研究

時 間：6 月 10 日(星期六) 13:30~17:30
地 點：台北國際會議中心 201F 會議室

陳一瑋醫師

演講時間：16:10-16:50

講題：復發頭頸癌疾病的新式放射治療選擇—硼中子捕獲治療
New Treatment Option for Recurrent Head and Neck Cancer--- Boron Neutron Capture Therapy

最高學歷： 陽明大學臨床研究所 博士
現職： 台北榮總 腫瘤醫學部 主治醫師

摘要:復發頭頸癌一直是國人腫瘤疾病處置之一大困境, 歷經傳統手術, 放化學治療等標準治療後又再復發之患者,能採用的治療則相對有限,甚至在極短的時間患者就因為疾病快速變化而導致亡歿。
硼中子捕獲治療(Boron Neutron Capture Therapy; BNCT) 是一種標靶性粒子放射治療的方式,主要是投與患者腫瘤一特殊含硼-10 的藥物,後再施予熱中子之照射,經照射後,此硼元素會裂解成為兩個高腫瘤破壞的粒子(α粒子以及鋰核),這些粒子不但對於腫瘤破壞性極佳,最重要的是其影響範圍極短,僅侷限在一個腫瘤細胞內之長徑範圍,因此此其概念極為符合優等放射治療之概念。此等治療近年來在台灣的發展已經逐漸嶄露曙光,在台北榮總與清華大學團隊的合作下,已經有相當的成果呈現,希望在此等技術能力不斷精進改善下,在不久的未來能協助更多的頭頸癌患者,獲得更好之治療及照護品質 。

口腔頭頸癌卓越研究

時 間：6 月 10 日(星期六) 13:30~17:30
地 點：台北國際會議中心 201F 會議室

楊慕華教授

演講時間：**16:50-17:30**

講題：cetuximab 在口腔癌治療之角色和抗藥機轉
The role and mechanism of drug resistance of cetuximab in The treatment of oral cancers

最高學歷：國立陽明大學臨床醫學研究所 博士 (2003.9 ~ 2006.7)

現職：國立陽明大學臨床醫學研究所 特聘教授 (2016 年 08 月迄今)
臺北榮民總醫院腫瘤醫學部藥物治療科 主任 (2015 年 11 月迄今)
國立陽明大學基因體研究中心 主任 (2014 年 08 月迄今)
中央研究院基因體中心 合聘研究員 (2014 年 08 月迄今)

摘要：

Advanced oral cancer is a highly invasive disease associated with extensive destruction of local-regional tissues and a dismal prognosis. However, management strategies for these patients are limited. In recent years, the humanized anti-EGFR antibody cetuximab is a major treatment for locally advanced or recurrent/metastatic oral cancer. In locally advanced disease, cetuximab has been demonstrated for its efficacy when combining with radiotherapy. In recurrent/metastatic disease, combination of cetuximab with standard cisplatin/5-FU chemotherapy improves the patient outcome. Regarding the mechanism of cetuximab resistance, *RAS* mutation has been considered as a major cause of de novo resistance to cetuximab in colon cancer patients. However, the incidence of *RAS* mutation is relatively rare in oral cancer patients, and the mechanism mediating acquired resistance to cetuximab in oral cancer is unclear. In this presentation, we will firstly present the result of a phase II trial which evaluates the effectiveness of incorporating cetuximab into both induction chemotherapy and chemoradiotherapy in inoperable oral cancer patients from Taipei Veterans General Hospital. A total of 43 patients were enrolled in this study. The

overall response rate of induction therapy was 88.4%. One-year progression-free survival and overall survival were 43% and 68%, respectively. The result suggests that combination of cetuximab with TPF chemotherapy as an induction chemotherapy is an effective and tolerable regimen for inoperable oral cancer patients. In addition, we will also present the result of a study which demonstrates the mechanism of acquired resistance to cetuximab in oral cancer.