



SPECIAL TOPICS

EPIDEMIC PREVENTION

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2020年「台灣國際醫療暨健康照護展 (Medical Taiwan)」已於昨(15)日隆重展開, 本年聚焦「防疫產業生態系」及「智慧醫療」, 強化「Taiwan Can Help」的精神。共計 202 家廠商參展, 因應疫情影響, 除了實體展覽, 外貿協會更增設線上虛擬展 (Medical Taiwan Virtual), 虛實整合, 雙展共進, 協助業者搶先布局後疫情時代的醫療產業商機。

外貿協會黃志芳董事長表示生醫為政府全力發展及扶植的產業之一, 更是跨領域鏈結、整合的重要代表, 並強調生醫如何在台灣 ICT 產業基礎上整合, 及新興科技 AI 及物聯網, 能夠讓我們生醫產業翻轉升級, 亦是國內業者搶進市場的重要契機。

黃董事長表示台灣防疫措施能成為國際楷模, 是透過產業、政府及人民同心協力下達成。至今, 台灣仍是少數能持續舉辦大型展覽活動的國家。除了個人防護裝備, 口罩供應鏈及智慧醫療解決方案也是醫療展的亮點之一, 證明台灣快速整合資源, 產業及系統的能力。

在這充滿挑戰的一年, 疫情擴散加速全球數位化工程, 帶動行動醫療及遠距醫療發展, 更提升商貿數位化, 為使臺灣業者突破時間及地域限制, 本次展覽增設線上虛擬展, 吸引 3M、默克生醫等國際大廠參與, 展示超過 400 件專業醫療產品及服務。此外外貿協會透過海外 63 個駐外單位邀請重量級國際買主參與「視訊採購洽談會」, 精準媒合國際醫療需求, 並規劃買主線上看展 (Buyer's Live Tour) 活動, 藉由直播採訪, 使買主深入獲得產品資訊。另於 15、16 日分別舉辦「新創賦能, 跨界共創醫療新未來」及「後疫情時代給臺灣的醫療新機會」兩場產業論壇, 邀請產、政、經學界重量級人物進行專題演說, 共同探討跨界醫療及後疫情時代的挑戰與機會。

2020 Medical Taiwan kicked off on Oct. 15, focusing on the themes of "anti-pandemic industry ecology" and "smart healthcare," and emphasizing the "Taiwan Can Help" spirit. A total of 202 exhibitors are attending; due to the pandemic and the resulting travel restrictions, show organizer Taiwan External Trade Development Council (TAITRA) not only prepared the in-person show grounds but also hosted a virtual version as well - "Medical Taiwan Virtual," enabling online and offline shows commencing in tandem.

TAITRA Chairman James Huang said the island's biomedical industry is an example of integrating different industries together. With Taiwan's ICT industry, AI and IoT, the biomedical industry can see upgrades, and offer a critical chance for domestic firms to enter the global market. He lauded Taiwan's successful response as a combined effort from the industry, government, and public. Taiwan is also among the few countries still hosting large-scale exhibi-

tions. Aside from PPE, a focal point at the show is presenting mask-making production chain and smart medical solution, Huang said, an example of Taiwan's ability of fast integration of resources, expertise, and systems.

Huang says these challenging times have hastened digitalization, such as mobile healthcare and remote healthcare. TAITRA's decision to host a virtual version is to help Taiwanese firms overcome time and distance and attract global big-names. For example, 3M and Merck are attending the Medical Taiwan Virtual, which has 400 healthcare products and services exhibiting in the virtual show. TAITRA also invited international buyers to attend the "Medical Taiwan Online Sourcing Meeting." Global buyers can follow the show through Medical Taiwan's "Buyer's Live Tour," which live-streams exhibitors' interviews as well. On Oct. 15 and today, Medical Taiwan is hosting two forums: the "2020 International Smart Medical Forum" and "2020 The Future Smart Healthcare Trend Forum."

論壇議程 & 重量級講者

Highlight & Speaker

趨勢專講 Trends | 上午場 09:00-12:00



後疫情的新常態 智慧醫療新局面 (趨勢端)

The New Normal in Post-COVID and New Smart Healthcare Outlook

| 薛瑞元 / 行政院衛生福利部政務次長
Jui-Yuan Hsueh, Ministry of Health and Welfare Deputy Minister

一場科技與醫療的協奏曲 (科技端)

Integration of Technology and Healthcare

| 杜奕瑾 / 台灣人工智慧實驗室創辦人、PTT 創辦人
Ethan Tu, Taiwan AI Labs, PTT Founder



醫療產業的新轉機 (醫院端)

The Turning Point for the Healthcare Industry

| 李友專 / 國際醫療資訊協會 (IMIA) 預備主席
臺北醫學大學醫學資訊研究所特聘教授

Yu-Chuan (Jack) Li, Taipei Medical University Graduate Institute of Biomedical Informatics Distinguished Professor and IMIA Board President-Elect

產業專講 Industry | 下午場 14:00-16:10



翻開醫療產業新篇章

A New Chapter in the Healthcare Industry

| 彭裕民 / 工業技術研究院副院長
Alex Peng, Industrial Technology Research Institute Executive Vice President

企業的彈性管理與危機應變

Flexible Corporate and Crisis Management

| 張德成 / 中國衛生材料生產中心 (CSD) 營運長
Jonathan Chang, mask producer CSD COO



醫療產業跨界與轉型

Cross-Industry Integration and Transformation in Healthcare

| 楊宏培 / 佳世達科技(股)公司醫療器材事業群總經理
Harry Yang, Qisda Corporation Vice President and General Manager of Medical Devices Products



防疫專題 | HOT TOPIC

超前部署

Epidemic Prevention



Q0212

台灣康匠製造股份有限公司
TAIWAN COMFORT CHAMP MANUFACTURING CO., LTD.

Q0430

大謙科技材料股份有限公司
DACIAN TECHNOLOGY MATERIAL CO., LTD.



Q0312

國光生物科技股份有限公司
ADIMMUNE CORPORATION



Q0312

瑞磁生物科技股份有限公司
APPLIED BIICODE TAIWAN LTD.



P0504

漢唐集成股份有限公司
UNITED INTEGRATED SERVICES CO., LTD.



PM2.5 防霾口罩、外科口罩

PM2.5 Anti-Haze Masks, Surgical Masks

台灣康匠製造股份有限公司 TAIWAN COMFORT CHAMP MANUFACTURING CO., LTD.

台灣康匠於 2011 年成立，秉持著『一片口罩、萬分責任』的企業理念，對於原料、生產製造、環境保護等品質嚴格控管，廠區斥資打造無塵設備，並已取得 GMP 認證。康匠追求安心好品質，專注研發技術專利，獲得市場青睞及消費者的肯定，像是可回收的安全鼻線、立體造型口罩等。

台灣康匠擁有齊全設備，除設置 PM2.5 防霾口罩、外科口罩等客製機台，目前廠區配有 32 套口罩機台，並計劃於今年將鶯歌廠遷至桃園，擴大規模。台灣康匠成立時間雖短，但在短短數年間在已產業中已佔有重要一席之地。透過參展機會，期盼能宣傳台灣康匠企業理念及旗下品牌。

Taiwan Comfort Champ Manufacturing, founded in 2011, built its business on inspiring responsibility with each face mask they produce, with a focus on materials, the production process, and the impact on the environment. The firm has obtained GMP certification and invested in building clean-room equipment. Taiwan Comfort



Champ's efforts are to instill trust from consumers in their products, with masks made in safe environments. The firm's face masks are quality-made and developed with patented technologies. This has earned them the trust of markets and consumers, such as a recyclable nose bridge wire, and 3D-shaped masks.

Taiwan Comfort Champ can produce PM2.5 anti-haze masks, surgical masks, as the firm has equipped its factories with 32 mask machines, and earlier this year, expanded its factory to Taoyuan for increased production. Aside from domestic supply, the firm has also expanded its business to other countries with OEM mask orders, such as Japan and South Korea. In just a few years, Taiwan Comfort Champ has cemented its role in the industry. The firm hopes to continue to promote their brand at the show.

克微粒防護口罩

Microparticle Stopper Masks

大謙科技材料股份有限公司 DACIAN TECHNOLOGY MATERIAL CO., LTD.

大謙科技材料在不影響到過濾與保護效果下，推出的克微粒奈米薄膜口罩。顛覆一般人對口罩的既定印象，此產品使用的薄膜技術克服一般手術口罩因濕氣所導至過濾效能下降的問題，該產品已在台灣與國外通過多種檢驗測試。一般口罩是靠靜電產生來吸附顆粒，但因為呼吸中有水分，隨配戴時間愈長，過濾效果將大幅降低。大謙科技的薄膜技術不僅可達到 N95 等級的過濾效果，讓穿戴者更安心，同時解決戴 N95 引起換氣不順暢的問題。

大謙克微粒防護口罩是經美國 Nelson 測試油性粒子 (DOP) 過濾效果達 98%，可排除汽車廢氣油汙粒子，相當於 P95 口罩等級，然而此款口罩不僅能排除廢氣油汙粒子，更可以阻隔大氣中重金屬粒子，是此款口罩的指標性功能。大謙克微粒防護口罩亦具備水洗特性，利於重複使用，並降低對環境的汙染。該公司不僅考量後疫情時代，也一直關心 PM 2.5 空氣汙染對人體的傷害，將薄膜科技應用在克霾膜 / 紗窗過濾罩。大謙認為空氣汙染對人體健康的傷害，尤其對呼吸系統的影響更需要好好重視。

Dacian Technology Material overturns our ideas of what surgical masks look like, without sacrificing usability and filtration efficiency. The firm's "dc Microparticle Stopper Mask" uses its membrane technology to eliminate traditional issues that plague standard surgical masks. It has passed many tests and certifications both in Taiwan and other countries. As most surgical masks



rely on static properties to keep out particles and germs, filtration efficiency decreases as wearing time increases, due to the moist coming from our breathing. Dacian's microparticle stopper filtering capabilities enable N95 respirator-grade efficiency in surgical masks, instilling confidence in its wearers. The technology allows Dacian to offer N95 respirators without sacrificing breathability, which is the major weak point of N95-grade masks, protecting not just healthcare professionals, but also everyday citizens.

The filtering capabilities of Microparticle Stopper Masks also include oily particles from vehicle exhaust. For example, Dacian's masks passed the DOP test carried out by Nelson Lab with 98% oily-particle filtering capabilities in the U.S. This is crucial for more diverse use of these masks, as N95 typically can only block non-oily particles. Its washability also makes it reusable to an extent, making it a more environmentally-friendly choice over other surgical masks.

The firm acknowledges that they are looking beyond the pandemic. For example, Dacian's membrane microparticle stopper technology is not just limited to masks; it's also used in the firm's "Smog Stopper" window screen smog filters, as it can keep out PM 2.5 pollution. The firm believes more should be done about air pollution as a global threat to people's health, for example, on people's respiratory systems.



重組冠狀病毒疫苗 (臨床試驗用外包裝)

AdimrSC-2f Vaccine (Clinical Trial Packaging)

國光生物科技股份有限公司 ADIMMUNE CORPORATION

國光生技為台灣唯一之人用疫苗生產公司，並且是唯一獲得歐盟歐洲藥品管理局 (EMA) 和美國 FDA 認證的 GMP 認證的流感疫苗製造廠。該公司目前專注於人類疫苗的研發，製造，營銷和銷售。

國光生技建立桿狀病毒蛋白質表現平台 (Baculovirus-Based Expression Platform) 技術，結合已確效的昆蟲細胞庫 (Insect cells bank) 進行重組蛋白質疫苗開發；此技術可將標的蛋白質 (target protein)，以基因工程技术定序並合成 (gene synthesis) 後，再直接嫁接到 BBES 來大量表達標的蛋白質，接續再配合蛋白質純化技術，即可在短時間內，取得大量高純度的蛋白質。國光生技根據 S 蛋白 SARS-CoV-2 的氨基酸序列，設計了候選疫苗片段，融合了人的 IgG1 抗體的 Fc 片段基因，用於開發 COVID-19 疫苗。疫苗已順利地進入 PIC/S GMP 生產，在動物測試中，能產生高價值的中和抗體。國光表示已進入臨床一期計畫，若順利，預計十二月之前進入二期臨床試驗。未來將配合政府法規及防疫需求，量產新冠疫苗，期在明年中旬提供台灣接種新冠疫苗。

國光生技以重組冠狀病毒疫苗、新型流感疫苗、EV71 腸病毒 71 型及無血清細胞培養製程為中短期主要發展計畫，並以進入亞太地區市場為主要產品銷售目標。除此，發展新一代疫苗，提高自製率及產能，供應國家及其他亞太地區防疫計畫所需為持續發展目標，並計畫擴大與國內外生技公司及研究機構合作。

Adimmune Corporation Group (ADIM) is a Taiwan-based bio-pharmaceutical enterprise and the only flu vaccine manufacturer with GMP certifications from both EU's European Medicines Agency (EMA) and the U.S. FDA. The group is currently focused on the R&D, manufacturing, marketing, and sales of human vaccines.

Currently, the firm's immediate development projects include further development of the "AdimrSC-2f Vaccine (COVID-19 S-protein)," Pandemic flu vaccine, EV71 vaccine, and the serum-free cell culture process. Its TFDA-approved COVID-19 vaccine is a recombinant protein-based vaccine, which was found to have more favorable antibody responses. ADIM creat-

ed the "Baculovirus-Based Expression Platform" technology, combining confirmed insect cells bank to recombinant proteins. This method takes the target protein, using genetic engineering for sequencing and gene synthesizing, and grafting it to BBES to mass represent target proteins. Through the S protein candidate of the SARS-CoV-2, ADIM seeks to combine it with the IgG1 Fc in humans to develop the vaccine. It successfully underwent PIC/S GMP production, and has been tested on animals, showing favorable results. While the vaccine is in Phase 1 of clinical trials, should it prove to be successful, the firm expects to enter Phase 2 before December. Through cooperating with the government's laws and pandemic response needs, and laying out plans for mass production, ADIM hopes to provide vaccines for Taiwan by mid-2021.

In the meantime, ADIM continues to work towards important development goals. The firm aims to develop new generation vaccines; improve production rate and capacity; fulfill the needs in Taiwan and other countries in the Asia-Pacific region for epidemic control. In terms of product diversification, ADIM will focus on segments ranging from vaccines, test reagents, genetic reagents to other biological products for preventive and therapeutic uses. The firm is also open to expanding its scope of collaboration with local and foreign biotech companies and research institutions.



新冠肺炎分子檢測試劑 SARS-Cov-2 Assay

瑞磁生物科技股份有限公司 APPLIED BIOCODE TAIWAN LTD.

瑞磁生技致力於傳染性疾病體外診斷試劑與儀器的研發、製造及銷售，利用獨創的數位生物條碼 (BMB) 技術和檢測系統，提供多元、高通量且精準的致病原檢測以符合成本效益，並提供實驗室操作簡便，且全自動化的優勢。瑞磁生技的 4,096 種微型生物條碼是基於台灣優秀的半導體製程所開發出來，取代傳統上一次檢測只能一種病原，可一次檢測多種感染病原。檢測類型包括多元腸胃道診斷試劑，多元呼吸道診斷試劑，與新冠肺炎檢測試劑，依症狀檢測所有可能的病原，不再有模稜兩可的檢測結果。

瑞磁的新冠肺炎分子檢測試劑採用準確度最高的核酸 RT-PCR 檢測方式，定性檢測新冠病毒，可採用檢體包括鼻咽拭子，口咽拭子和

支氣管肺泡灌洗液。一天內可以檢測 564 份檢體 (8 小時檢測 188 份檢體)，充分應對大量檢驗需求。並可同時搭配多元呼吸道診斷。

Applied BioCode develops, manufactures, and commercializes infectious disease diagnostic assay kits and instruments. Based on the firm's proprietary technology Barcoded Magnetic Beads (BMB) and detection system, Applied BioCode provides high multiplex, high throughput, and precise pathogen detection at affordable costs, while delivering laboratories ease of use and full automation benefits. Applied BioCode's 4,096-BMB micro barcodes are developed through Taiwan's advanced semiconductor processes to realize the groundbreaking efficiency of testing multiple pathogens at once. The assay panels include Gastrointestinal Panel, Respiratory Panel, and SARS-Cov-2, and can detect all possible contracted pathogens according to the patients' symptoms.

Applied BioCode's SARS-Cov-2 assay uses the most accurate RT-PCR detection method, which qualitatively tests the virus and accepts specimens, including NPS, OPS, and BAL. It can test up to 564 patient samples per day (188 samples per 8 hours shift) and helps handle the high volume test needs. The SARS-Cov-2 assay may also work with the BioCode Respiratory Panel to fully comprehend the patient's respiratory tract infection, minimize guessing and repetitive testing costs, and provide the most appropriate treatment. In response to the Covid-19 pandemic, Applied BioCode extends the effort to develop products, including pooling tests, the combinational panel of SARS-Cov-2, and flu (Cov-2 Flu Plus), as well as non-extraction testing methods.



數位式紅外線熱影像診斷系統 Digital Infrared Thermal Image System

漢唐集成股份有限公司 UNITED INTEGRATED SERVICES CO., LTD.

漢唐集成光電事業處於 2003 年成立，專注於醫療紅外線診斷及雷射物理治療領域的應用及開發，以紅外線光電科技為基礎，結合了工研院及中科院之技術，自行開發多種紅外線應用科技產品。

今年主推「數位式紅外線熱影像診斷系統」SPECTRUM9000MB 系統是以高靈敏度的紅外線攝影機，針對人體進行攝影，以取得即時體表溫度變化之熱影像。紅外線熱影像基本上可應用於皮下循環系統、及神經系統的疾病診斷，並可應用於疼痛顯像、神經手術評估、肢體末梢循環代謝疾病評估等，分析軟體部分為漢唐獨立開發。另外 COVID-19 疫情期間，可藉由量測通過人員之溫度有效防止疫情擴散。第二項主推產品為「多頻道雷射暨電刺激治療儀」，謹遵循針灸與拔罐之傳統醫學原理，完成與雷射針灸介面整合之系統，將低能量雷射與負壓罩杯結合的獨家專利應用於消炎、疼痛緩解及改善循環，使雷射生物刺激效應與拔

罐疏通經絡作用，能相容運作，達「傳統中醫學科學化、治療模式多元化」目標。產品銷售至全國復健科與中醫科，目前也積極與國內醫療專業合作，將低能量雷射應用於醫學美容、牙科術後治療及動物治療之使用。未來展望紅外線熱影像醫療為目前世界各國積極開發的新興醫療診斷項目，具有一定的診斷效果，近年來為各國所重視；而低能量雷射治療應用領域之發展潛力更是不可限量，日後將朝向多元化醫療體系發展。

United Integrated Services (UISCO), founded in 2003, focuses on applying and developing Medical Infrared Diagnosis and Laser Therapy. Using infrared photonics as the basis, and combining that with technologies from the Industrial Technology Research Institute and National Chung-Shan Institute of Science & Technology, the firm developed various technological products with thermography application. The "Digital Infrared Thermal Image System SPEC-

TRUM9000MB" has a highly-sensitive infrared camera for imaging the human body, allowing the users to obtain real-time images of body temperature fluctuations. This technology sees applications in diagnosing the circulatory and nervous systems, illuminating pain areas in the patient, or producing imaging prognosis reference for surgery evaluation on nerves, peripheral circulation in the limbs, and evaluating metabolic disorders. During the COVID-19 pandemic, the Digital Infrared Thermal Image System can also see temperature screening usage to prevent virus spread. UISCO also developed the analysis software that comes along with the system.

Next is the "Multi-Channel Laser with TENS Function Therapy System." Using traditional medicinal applications like acupuncture and cupping therapy as a basis, it combines laser acupuncture, delivering the electrical stimulation effect through laser treatments, and cupping therapy to promote blood flow. This introduces anti-inflammatory pain relief and promotes better circulation, realizing its goal of scientized traditional Chinese medicine practices and diversified treatments through this machine's development. The system can be found in rehabilitation centers and traditional medicine clinics nationwide. UISCO is also actively collaborating with domestic medical experts to offer low reactive level laser therapy for aesthetic medicine, post-dentistry surgery treatment, and veterinary therapy. The firm hopes to develop new medical diagnoses with its infrared thermal imaging, which is gaining more attention with its successes; they also see great potential in low reactive level laser therapy uses in diverse medical situations.





Q0317 | 虹光精密工業股份有限公司 AVISION INC.

無線消化道內視鏡膠囊 + 讀取器 CapsoCam Plus + CapsoAccess

虹光精密創立於1991年，投入光學掃描器及傳真機組件之研發、製造與行銷，通過認證，確保產品的品質和可靠性。2012年虹光開始做影像醫療器材的研發，並獲得機會和美國的Capsovision Inc. 合作，研發新科技，而其中推出的產品也在全球疫情的環境中更有發揮的空間，虹光也成為這項產品的獨家代理商。其產品「CapsoCam Plus」，配有由虹光帶領設計CapsoCam Plus讀取器「CapsoAccess」技術。病人只要吞下這個小型無線消化道內視鏡膠囊，醫生就能在膠囊取出，獲得病人消化道內的影像。在後疫情時代，可免除病人和醫師在進行內視鏡檢查時，暴露在感染肺炎的風險。此產品亦不需安裝其他接收機在病人身上，可減少病人往返醫院設定儀器的步驟。



有別於市場上一般產品最大不同在於：多數產品通常僅使用一或二顆鏡頭，但CapsoCam Plus搭載四顆鏡頭可拍下高達221,884解析度的360度環景照片。醫師能輕鬆獲取零死角的消化道影像，降低影像不夠完整，讓病人又得重新來過的機率。其他優點包括電池有長達15小時的續航力，可在病人自然排出膠囊內視鏡前，有充裕的時間拍攝影像。

Avision Inc., founded in 1991, dedicated efforts to optical module, scanner, printer development and manufacturing, and obtained certification to ensure quality and reliability. Avision eventually entered the imaging medical instrument industry in 2012, and came across a rare opportunity by working together with U.S.-based company Capsovision Inc. to develop exciting new technologies that has become relevant in the post-COVID-19 era, and becoming the sole distributor of that product in Taiwan.

The "CapsoCam Plus" is the product in question, with Avision heading the design and development of the reader "CapsoAccess"

data access system that goes along with the CapsoCam Plus. This capsule endoscope is a small device that the patient swallows, and allows medical professionals obtain their GI tract images. More importantly, it is no receiver required. It prevents the patients and physicians from being exposed at the hospital, thus lowers the risks of getting infections, which is crucial in a post-COVID era.

At present, CapsoCam Plus specifications far exceed market standards, as it is equipped to take 360-degree panoramic images with 4 cameras in 221,884 pixel-resolution. This allows doctors to take wider panoramic GI tract images without any blind-spots, an advantage over competitors that traditionally use 1 or 2 cameras. Other advantages that the CapsoCam Plus holds is its battery-life – it has a 15-hour battery-life, sufficient enough for the camera to take enough images before it is discharged from the body.

Q0222 | 實創國際生技股份有限公司 STRONG BIOTECH CORPORATION

幽門螺旋桿菌尿素酶快速檢驗試劑 & 胃幽門螺旋桿菌抗原快速檢驗試劑 HelicotecUT® Plus & HelicotecAG®

實創生技掌握免疫學、微生物、蛋白質體學等自有技術開發出幽門桿菌體外檢測試劑及相關生技原物料，為全球第一家生產乾濕兩式幽門螺旋桿菌尿素酶檢驗試劑的公司，該試劑可提供醫師快速診斷由幽門桿菌引起的消化性潰瘍，作為處方用藥治療依據。此外，實創亦持續開發各式檢測試劑，未來將朝更全面的IVD產品線發展。

HelicotecUT®Plus 幽門螺旋桿菌尿素酶快速檢驗試劑為實創生技的乾式試劑，用於檢測胃黏膜上幽門螺旋桿菌產生之尿素酶反應。使用操作方便，排除訓練操作的需求，提供準確靈敏度高的判讀，更能在60分鐘內快速判讀。目前超過40個國家的醫療院所使用此檢驗試劑。

HelicotecAG® 胃幽門螺旋桿菌抗原快速檢驗試劑採集糞便檢體，無須



搭配儀器操作。本檢驗試劑準確靈敏度高，10~20分鐘快速判讀。除此之外，實創生技主打產品為困難梭狀桿菌毒素A/B檢驗試劑，可快速判讀困難梭狀桿菌造成的疾病好發於長期使用抗生素之病患。本試劑檢測可在20分鐘內快速判讀糞便檢體中毒素A、B之抗原，可輔助診斷困難桿菌的感染。

Strong Biotech Corp. holds key technologies in fields like immunology, microbiology, proteomics, such as developing *Helicobacter pylori* (*H. pylori*) in vitro diagnostic devices and related biotech materials. This development turned Strong Biotech the first firm worldwide to offer both paper and gel type *H. pylori* in vitro diagnostic tests. Doctors are provided with rapid tests to quickly diagnose peptic ulcers caused by *H. pylori*, serving as the basis for fast and reliable doctors' prescriptions. Also, Strong Biotech continues to develop different diagnosis tests, with the goal to roll out a more comprehensive product line for its IVD series.

The HelicotecUT®Plus paper test is used to detect *H. pylori* with urease ac-

tivity during gastric mucosal biopsies. It's easy to use, eliminating the need to train personnel and offers sensitive and accurate results. Doctors can usually obtain results within an hour. Such features have made it favorable and now is being used at hospitals in over 40 countries.

The HelicotecAG rapid test *H. pylori* Stool Antigen takes stool samples instead of relying on other instruments for diagnosis. Offering highly sensitive and accurate results, the HelicotecAG rapid test can quickly provide results between 10 to 20 minutes of application.

Strong Biotech's final offering is the *Clostridium difficile* toxin A/B, used to quickly diagnose *Clostridium difficile*-led diseases in patients on long-term antibiotics. This test takes stool samples to identify antigens of toxins A/B, serving as a secondary diagnosis tool to ascertain *Clostridium difficile* infections that offer results within 20 minutes.

Hsinchu Biomedical Science Park Incubation Center

新竹生醫產業及育成中心

新竹生醫園區是由科技部生醫科技與產品研發中心、經濟部生醫產業及育成中心、衛福部臺大醫院新竹生醫分院三個機構組成，培育的產業以高階醫材及新藥研發為主。

育成中心提供產學界研發及測試驗證服務平台、輔導研發團隊技術移轉、建立符合GMP規範程序之產品原型，及建構優質新創事業育成。育成中心帶領廠商參展，朝向爭取國際市場曝光度和訂單，推動產學研醫鏈結及挑選具市場潛力的團隊進駐育成中心。以下為育成中心的輔導廠商。

Founded with the premise of cultivating startups and companies that are developing high-level medical devices and innovative medicine, Hsinchu Biomedical Science Park Incubation Center (HB-SPIC) is an entity co-founded by three government agencies: Ministry of Science and Technology Biomedical Technology R&D Center, Ministry of Economic Affairs Biomedical Industry Incubation Center, and Ministry of Health and Welfare Taipei National Taiwan University Hospital Hsinchu Branch.

The incubation center focuses on providing industry-academia R&D and experiment services, as well as counseling for technology transfer, products that adhere to GMP standards, and building a quality start-up business. Its goal at Medical Taiwan is to help promote its exhibiting companies to more international market exposure and gain more orders, lead industrial-academia collaboration efforts, and get a pulse on potential teams to join the center. Read on to learn more cutting-edge trends.



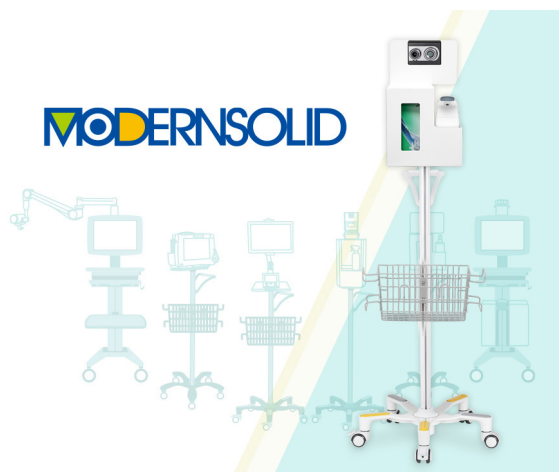
Q0321 | 青輔實業股份有限公司 MODERNSOLID INDUSTRIAL CO., LTD.

溫度測量移動式掛載支架

Fever Infrared Temperature Measurement Roll Stand

青輔實業擁有實力堅強的研發團隊，30多年來，豐富的產品開發經驗，以高效、快速專業的客製化設計服務，提供各式生物科技儀器裝載的解決方案。以人體工學、健康為設計發想根本，綠色環保材質使用為輔，搭配優異產品質感與始終堅持的品質、誠信第一的經營理念，達到客戶滿意、永續經營的目標。

該公司提供標準量產的各式醫療設備載具，例如掛載支架，為因應國外嚴峻的新冠狀病毒疫情，青輔推出結合三大功能的溫度測量移動式掛載支架，支架最上方有紅外線溫度測量儀器，中層內建乾洗手機及手套收納盒，最下方則有鐵欄，適用於醫院及照護中心，提供醫護人員收納資料夾或物品等等。青輔為排除支



架表面可能有病毒細菌附著於支架表面上，移動時引起交互感染，特別使用抗菌漆處理表面，且用鋁材製造以減輕重量。

除了協助設備商、醫療院所做系統化產品規劃整合，為滿足醫療產業的高度客製化需求，青輔實業也成立快速應對小組，以彈性、高靈活的思維及產製方式，提供超乎客戶需求的品質、功能與效能。

Modernsolid strongly emphasizes research and development. Thanks to the product development experience accumulated over thirty years, the firm can offer valuable and professional service for customized designs and resolve application problems for various biotechnology devices. The firm bases its designs on ergonomics and health, supplementing that with environmentally-friendly materials. Combined with leading aesthetic and product quality, Modernsolid aims to satisfy clients and achieve sustainable management.

Modernsolid features standardized, varied medical equipment and instruments, such as

roll stands for hospital or healthcare usage. The firm specifically rolled out its newest Fever Infrared Temperature Measurement Roll Stand to assist healthcare providers during the COVID-19 pandemic. The top of the stand is an infrared temperature measurement device, designed to ensure social-distancing when taking measurements; the middle is space for hand sanitizer bottles and a glove box holder. At the bottom is a wire basket for healthcare professionals to place folders or other items while rolling the stand. To limit cross-contamination, Modernsolid has painted the stand with an anti-bacterial coating and uses aluminum material to reduce weight.

Aside from assisting equipment clients and hospitals in designing and making systematic product solutions, Modernsolid has also created a team to provide fast, quality, flexible services to meet the highly-customized orders in the medical healthcare industry.

Q0218 | 台灣希施生物科技股份有限公司 CS BIO TAIWAN CO., LTD

胜肽合成儀 & Oligo(DNA) 合成儀

Peptide & Oligo(DNA) Synthesizer

台灣希施為美國CSBio的關係企業，總部位於舊金山，以提供高品質的定制肽，cGMP胜肽和自動化胜肽合成儀為主；所生產的胜肽產品和胜肽合成相關設備及儀器遍佈全球，同時和各地的研究型大學或國家級的研發實驗室，以及業界的GMP製藥公司合作。台灣希施生物科技的主要業務即是提供CSBio符合美國FDA認證之製藥設備（軟體與控制技術）。

目前台灣希施的產品包含胜肽合成儀與Oligo(DNA)合成儀軟硬體設備技術，產品具有彈性化的合成序列（配方）設計技術，可應用於千變萬化的序列組合中。在純化的技術上也有200毫升到20公升的製備型HPLC設備，目前更積極的為標靶型的癌症疫苗，研發個人化的平行量產型多胜肽合成儀與製備型多載純化設備，相關設備已進行銷售與量產。



未來台灣希施將評估在台灣設立小型的Peptide GMP生產單位，為台灣擴展本土型的技術平面，由設備研發生產到GMP的胜肽生產，一條龍整合在台灣落地生根。為台灣的生技產業開拓一條產業發展的大道，促使胜肽到製藥的產業鏈開花結果，最後發展出台灣獨有的生技產業聚落。

CS Bio Taiwan Co., Ltd. is an affiliated company of CSBio, based in San Francisco, U.S. The firm provides high-quality peptides, cGMP peptides, and automated peptide synthesizers, which are marketed globally to places including research facilities in universities, or national-level research laboratories, as well as GMP medicine manufacturers. The base in Taiwan currently handles and provides U.S. FDA-certified medicine manufacturing equipment (software and control technology) for CS Bio.

The firm is featuring its peptide synthesizer and Oligo(DNA) synthesizer software and hardware equipment technologies. CS Bio has

integrated flexibility into the design of their synthesizing formula, allowing them to quickly offer diverse formulas. The firm also offers 200 milliliter to 20 liters of Preparative HPLC equipment. CS Bio is now actively focusing on personalized, paralleled production of Multiple Peptides Synthesizer for targeted cancer vaccine, as well as Multiple-Peptide Loading PrepHPL. These products are already mass produced and on sale.

There are plans to setup a smaller Peptide GMP production site in Taiwan, in hopes of technical expansion with equipment development and production to GMP Peptide production. CS Bio Taiwan envisions this to offer a complete production chain based fully in Taiwan, and set a different path for industry success. In the future, the firm hopes Taiwan would eventually develop its own biotechnology industry cluster.

P0504

金屬工業研究發展中心 Metal Industries Research & Development Center

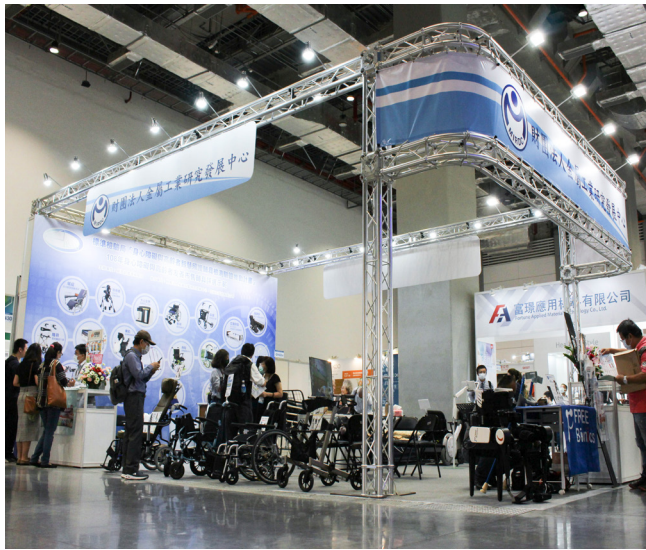
金屬工業研究發展中心今年帶領防疫與輔具兩大主題的廠商參展。對新型冠狀病毒的防疫努力，中心扮演要角，輔導協助國內醫材廠商改善設備，提高管理成效及生產技術，研究改良製造方法及成本控制，以有效利用資源。

台灣具有國際水準的醫療技術、優質的性價比，與良好的公共衛生環境等優勢，加上政府政策大力推動產業發展，使得台灣醫療獲得全球高度肯定並居領導地位，吸引其他國家病患來台接受治療服務。而台灣資訊科技基礎具備完整架構，電子產業供應鏈完整，於消費性電子產品、傳統機械等產業製造能力均達國際水準，且台灣的健保擁有的健康資訊大數據，整合成就台灣成為國際醫療工業研發重鎮。

本次「防疫科技與公衛醫材情境專區」，共分為四個主題，由 10 家代表性廠商參與，參加廠商分別為體溫監測的亞迪電子、泰博科技、漢唐集成；檢測試劑由台康生技與寶齡富錦共同研發的產品代表展出；生理監測類別有慧誠智醫、聿信醫療、超象科技和旺北科技；居家防疫則包含美維科技、倫嘉工業和泰陞等，展現台灣生技醫材廠商的防疫成果，提升國際能見度，並突顯台灣生技醫材產業之產品形象與研發成果，提升國內醫材產品曝光度，協助 MIT 產品突破困境，拓展國內外防疫科技與公衛醫材市場。

關於輔具，高齡化為近年來全球關切的重大議題，隨著各國人口結構逐漸老化，高齡者所需的健康照護相關產品與產業需求勢將蓬勃發展。此次展出的廠商多為 2019 年標準檢驗局辦理友善市售輔具評選活動優勝產品，相較於過去產品設計，優勝產品皆強調使用者實際使用的感受，提高商品設計的友善性。例如，大心高智能成人尿布（大心生技）針對長照用途，而松六 MAZROC 雙側掀馬桶扶手（福樂多）可以替長輩或身障者打造更安全的如廁環境。而 ProjectAir 睛遠寶（怡利電子）可以減緩年輕使用者的近視，長輩的老花眼及姿勢不良等問題。

長照中心，或年長者的在家照護者能善用省力的輔具，例如：BH-989KD 四馬達多功能護理床（亞護）；多功能居家輪椅床（城紹科技），以及樂休移離床輔助機器人 - 松下交流電力可調整式病床 - 未滅菌（福樂多）。其他床墊相關的優勝產品包含優護 8150 Replacement 防褥瘡交替減壓氣墊床（唐德工業）；EN-3M 四馬達電動收展多功能照顧床（強盛興），以及零壓力自動翻身氣墊床（樂安康）。有行動上的困難，可以考慮 Suniwin 出國專用超輕輪椅 W860（尚耘）；摩登樂空中傾倒舒適輪椅（益百利）；橫移動輪椅（惠祥貿易）；樂爾電動輪椅型號 M（樂鈞科技），以及全地形 360 度旋轉避震折疊拐杖 - 雷雕款（軒宇貿易）。針對需要行動上的復健需求，則可以參考 Sunrise Medical Gemino 30 Walker 前臂支撐助行器、Sunrise Medical Gemino30 前衛助行器、Trust Care Let's Go Out 輕便型戶外散步助行器（安德貿易）；MyWay 步態訓練器（沛得適）；福來臨助行車 FLYING ROLLATOR（隆羽實業），以及自立行動力式下肢外骨骼肢體裝具（福寶科技）。



The Metal Industries Research & Development Centre (MIRDC) brings two examples of its consulted-industries to the show: virus prevention and assistive devices. In terms of virus prevention amid the global COVID-19 outbreak, MIRDC plays a vital role by consulting its member medical instrument firms in equipment, management, and production technologies and research to bolster production methods and resource efficiency control.

MIRDC names Taiwan's top healthcare services, low prices, public health environments, and favorable government policies as advantages that attract patients to seek medical care in Taiwan. Coupled with the island's robust ICT infrastructure, electronics supply chain, and Taiwan's national health insurance database, all contribute to Taiwan becoming a global medical-industrial R&D hub.

There are four theme areas in the virus prevention tech and public health. Ten firms are exhibiting with MIRDC; temperature monitoring tech (ADE Technology, Taidoc Technology, UIS); testing kit makers (EirGenix and Panion & BF Biotech); vitals monitoring tech (imedtech, Heroic-Faith, LELTEK, and North-Vision Tech), home-based virus prevention tech (MWG Technologies, Rinka Corp, Taicend Tech). MIRDC hopes to bolster exposure of local biotech and medical device firms to a global audience.

The aging population has become a crucial topic in recent years globally, prompting the MIRDC's assistive device section design, considering the growth of the senior population means more demands for healthcare equipment. Many of the companies showcased here were awarded in the "2019 Urban-Friendly Assistive Device Selection" for prioritizing safety and holistic design attribute, as these designs are more user-centered to improve and encourage users' experience.

For example, Daxin Biotech's smart adult diapers targets long-term care needs, while Furoto Medical's Mazroc Toilet Safety Rails can provide safer environments for both the elderly and disabled. E-Lead's ProjectAir eases myopia, presbyopia and poor posture.

Also, long-term care facilities or those providing care for the elderly at home, can benefit from labor-saving tools: Sigma-Care's BH-989KD Electric Home Care Bed; Solid Focus' Multifunctional Homecare Bed with an integrated bedpan and Furoto Medical's Panasonic Age Free Robotic Care Bed/Wheelchair. Other assets include Air Kinetic Technologies' Elite 8150 Replacement; JosenCare's EN-3M Multifunctional Electric Healthcare Bed and Longcare's ProDiamond Alternating Air Mattress. Those with mobility conditions can look at: Suniwin's Lightweight Electric Wheelchair for Air Travel; 100Power's Lundal Moderato Wheelchair; HoldHands' France Bed Sideway-Direction Wheelchair; WHILL's Model M Power Wheelchair and SMS Corp's Dr. Cane Adjustable Cane Lightweight Walking Stick. Assistive devices targeting patients who require mobility rehabilitation can consider Ande Trading's Sunrise Medical Gemino 30 Walker Lightweight Rollator with forearm support, Gemino 30 Lightweight Rollator and Trust Care Let's Go Out Outdoor Rollator.; PADS Taiwan's Leckey MyWay Gait Trainer; LongYue's Flying Rollator and Free Bionics' FREE Walk exoskeleton.

P0602c | 葛萊美國際健康事業股份有限公司 GRAMMY CLINIC INTERNATIONAL

紅外線熱像儀 Non-Contact Body Temperature Detector for COVID-19

葛萊美國際是台灣著名的醫學集團公司，此次亮點產品是由董事長陳金德先生針對 COVID-19 疫情而設計的紅外線熱像儀。

此款紅外線熱像儀有四大特點：第一為產品本身特色搭載的偵測規格誤差只有 0.3 度 C，這是因為葛萊美採用業界唯一的溫度標準源感測儀，用來修正因為環境的溫度濕度距離產生的體溫誤差。另外，葛萊美選用的微處理器使得偵測過程也可以進行智慧溫度校正；IR Camera 也具備三萬個偵測點，擴大偵測範圍。第二是取得美國發明專利優先申請權，雖然尚未取得正式發明專利，但是已經取得美國專利局認可。第三，

熱像儀已取得歐洲 CE & 日本 VCCI 認證，使得公司能在挑戰性較高的日本市場，獲得日本醫院及公司的訂單。最後，第四為產品共同由明志大學師生團隊研發，確保為 100% MIT 台灣生產製造。

Grammy Clinic International, a well-known medical group in Taiwan, has rolled out video surveillance in the form of a thermal camera solution designed by the firm's chairman, Chen Chin-te, for the COVID-19 pandemic to screen individuals' temperatures in public areas.

The "Non-Contact Body Temperature Detector for COVID-19" has four advantages. First, the detector is equipped with plus or minus 0.3 degrees C level of accuracy, as the firm is the among the few in the industry hav-

ing equipped the camera with a temperature standard source sensor. The tolerance is to ensure changes to the room temperature, humidity or distance will be taken into consideration when attempting to screen multiple individuals. This is also achieved through the microprocessor powering the equipment, enabling smart temperature calibration. The IR camera also has three million sensor points, which helps spread out its detection area. Secondly, Grammy Clinic is currently prioritizing obtaining an invention patent in the U.S.; while the firm has yet to officially obtained one, the patent application has already been cleared. Thirdly, the firm has acquired CE and Japan's VCCI certifications. Obtaining VCCI has enabled the firm to enter the elusive Japanese market, and currently sees implementation at a Japanese hospital and company. Lastly, by designing the detector with Ming Chi University of Technology, Grammy Clinic ensures its product is 100% manufactured in Taiwan.



更多產品資訊



LINE 洽詢

P0104 社團法人台灣運動科技發展協會 Taiwan Sports Technology Association

全球高齡化為擋不住的趨勢，2018年台灣65歲以上人口占14.5%，已達「高齡社會」標準，據國發會預估，到2065年，台灣65歲以上人口比例將達到41.2%成為「超高齡社會」。高齡人口持續攀升，對醫療照護與科技輔助產品需求日益增加，社團法人台灣運動科技發展協會與財團法人鞋類暨運動休閒科技研發中心共同參展，聚焦AI醫療及銀髮產業。

運動科技發展協會與鞋技中心共同參展，前者提供廠商顧問服務，並擔任政府與企業之間的溝通橋樑，後者則負責提供技術研發相關的諮詢服務。由於台灣醫療輔具及科技產業相當強，邁向智慧應用的技術發展勢在必行。

全球面臨疫情帶來的不確定性，現階段的企業傾向慎重考量產品技術研發的必要性；這也是運動科技發展協會與鞋技中心能協助廠商的重要任務。由於協會與研究中心熟悉政策領域，能引導廠商將資源有效投入與配合相關政策，例如，近年政府提倡產業數位化，可成功結合台灣ICT與數位資源與技術的廠商更能獲得政府方

面的曝光協助。

鞋技中心今年度開發產品皆已技轉國內廠商，產品包含「電動站立移位機」除可坐站姿態變換，兼具電動移行、遙控叫車等多項實用功能，提升使用便利性與安全性；「復健手」可快速調整手部擺位姿勢與輕量化設計，並可外掛姿態感測提供復健擺位角度記錄。

As the world sees an aging population, Taiwan's National Development Council forecasted that the island's senior citizens (65 aged and above) would reach 41.2% in 2065 to become a super-aged society, increasing seniors and those who require long-term care. Yet, Taiwan is also known for its low fertility rates, meaning a future shortage of caretakers. Under these circumstances, Footwear & Recreation Technology Research Institute expects to see increasing demand for assistive devices and mobility aids. Forecasted trends place AI medical technology and senior citizen markets as the next frontier to tackle.

Co-exhibiting together at the show, the Taiwan Sports Technology Association mainly handles

P0206 財團法人鞋類暨運動休閒科技研發中心 Footwear & Recreation Technology Research Institute

consulting services and serving as the go-between enterprises and the government. At the same time, the Institute oversees technology-related R&D consultation with member firms. Taiwan's medical assistive device and technology industry is known to have a strong reputation and has outlined expectations to move towards a smarter future.

Under the current, uncertain environment amid the COVID-19 outbreak, firms are less likely to take risks, such as investing in R&D; this is where both entities come into play. As the Association and Institute are familiar with government policies, they can help firms direct resources into developing technologies that will most likely earn them the most significant exposure with the government and industry trends. The Institute has successfully transferred relevant technologies to domestic firms this year, as these innovative products are a combination of the Institute's R&D abilities and assisting firms' capabilities. One example is the "Electric Lifting and Mobility Assistive Device," which has electric-powered lifting and transferring functions. The device incorporates practical features, such as sensors to detect its environment, wireless, automatic power charging, and remote-controlled

usability to boost user convenience and safety measures. The other example is the innovative "Rehabilitation Arm," which features fast adjustment of the arm position and posture, and light-weight design. Combined with an external posture sensor, the Rehabilitation Arm can keep track of the positioning angle during therapy.



新創專區 Startups Village Q0612

詠捷生醫股份有限公司 UJ BIOMED CO., LTD.

高通量自動化新冠病毒核酸檢測平台 High Throughput Automated SARS-CoV-2 Nucleic Acid Testing Station

詠捷生醫為一家醫學檢驗服務及技術開發公司，已與數家台灣醫學中心及美國生技藥廠合作，提供癌症循環腫瘤細胞檢驗服務及微流道生物晶片開發生產。

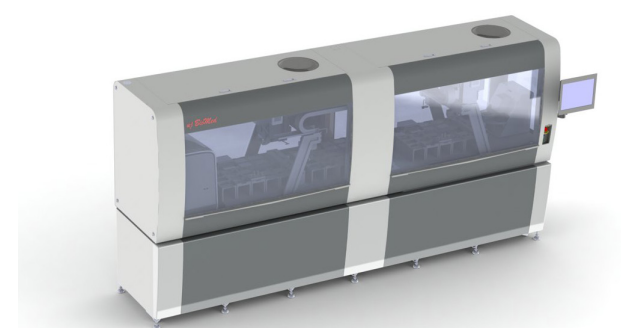
詠捷生醫結合台灣優秀醫事人員及自動化整合系統人才，採用國際大廠賽默飛世爾科技公司 (Thermo Fisher Scientific) 的系統，首度於醫療展展出高通量自動化新冠病毒核酸檢測平台。詠捷生醫設備優勢包含：(1) 高通量：每日檢測量可達2,000，進階版至8,000；(2) 自動化：使檢驗流程完全不須繁瑣的手動操作；(3) 無汙染：使設備隔絕汙染物，杜絕醫事人員感染(4) 連續性：達到24小時操作，持續大量檢驗結果，縮短出報告的等待時間。

詠捷生醫的高通量自動化新冠病毒檢測平台，搭配美國FDA核准(緊急授權通過)試劑，能提供大量和即時的防疫需求。

UJ BioMed Co., Ltd. is a medical diagnosis service and technology development company. Collaborated with local medical centers and biomedical companies in the U.S., Circulated Tumor Cells (CTC) diagnosis and microfluidic biomedical chips design/manufacturing are the few items the firm provides.

As the COVID-19 pandemic swept the globe and disrupted daily life, UJ BioMed saw the addition of medical and automatic system-integrat-

ing talents into its team and adapted the internationally-recognized Thermo Fisher Scientific's tooling and kits. The firm is debuting its High Throughput Automated SARS-CoV-2 Nucleic Acid Testing Stations at the show. UJ BioMed equipped these stations with several advantages: (1) High throughput capacity with 2000 up to 8000 real-time qPCR tests in 24 hours; (2) Automation that ensures minimum complex, manual operation during the testing process; (3) Self-contained environment to protect the healthcare workers and prevent contamination;



and (4) non-stop testing processes around the clock for up to 24 hours. This High Throughput Automated SARS-CoV-2 Testing Station works along with (but not limited to) ThermoFisher's EUA kits, capable of providing extensive number testing results in a short period.

智齡科技股份有限公司 SMART AGEING TECH CO., LTD.

Jubo 智慧照護解決方案 Jubo Long Term Care Solution

智齡科技為臺大團隊出身，以其長照研究成果與軟體科技實力，開發出完整的Jubo智慧照護解決方案、Jubo日照管理解決方案。在軟硬體一站式解決方案中，提供長照業者高設計質感的照護推車，和零手寫快速輸入的照護系統，自動產生視覺化報表和完成住民數據管理，並透過營運駕駛艙分析月報提升管理效率，還可以使家人安心，讓親屬遠距掌握長者日常。

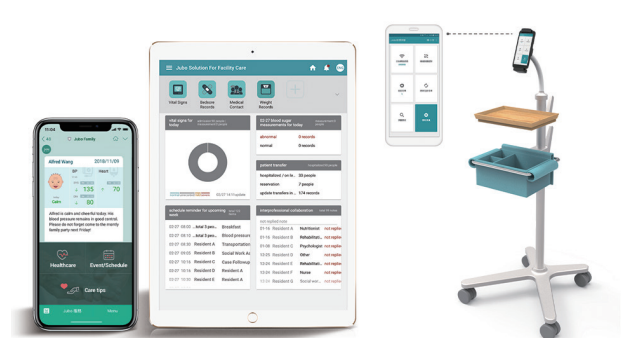
智齡科技的Jubo智慧照護解決方案產品，目前已有近40家長照機構與日照機構使用，專利開發出的IoT照護推車-應用於床邊健康數據量測後，自動上傳數值，翻轉傳統的照護場所，為長照產業開啟數位化的新契機。健康數據同步更新跨裝置的行動智慧照護系

統，有效降低重複溝通。智齡科技團隊利用智慧輸入協助提升護理紀錄的正確性與品質，也發展機構管理聊天機器人，照護人員可以利用智慧交班快速交代病人狀況給下個輪班，避免疏失，甚至讓家人也可以參與照護的過程，透過聊天機器人掌握病人恢復的進度。

Smart Ageing Tech Co, founded in 2018, is a firm with a National Taiwan University background dedicated a decade to long-term care research and software development. The result is the Jubo Long Term Care Solution and Jubo Adult Day Care Solution. The firm's one-stop hardware and software solutions come with several designs geared towards long-term care, such as an aesthetic healthcare trolley, a healthcare system equipped with quick input

functions, an automatic visual-report exporting function, and data management of residents. The system can analyze and provide monthly data reports to check trending issues for greater management efficiency. Family members can place faith in the system while remotely checking updates on their senior residents.

Currently, there are around 40 long-term care and daycare centers implementing the Jubo Long Term Care Solution. The patented IoT vital trolley can record bedside health vitals and automatically upload the data. Real-time uploading and sync-



ing across devices of the data can help improve inputting accuracy and quality. The firm is also developing its chatbot for more efficient shift handoff, ensuring that the next shift will have complete information on their patient status, and even enhancing family members' participation in the caretaking process by letting them follow the patient's recovery process.

◎ P0530 | 聚陽實業股份有限公司 MAKALOT INDUSTRIAL CO., LTD

隔離衣及防護衣 Protective Coverall and Isolation Gown

聚陽實業股份有限公司創立於1990年，是一間跨國，且多元產品的服裝製造商，以「整合」及「彈性」為核心競爭力，可多樣接單，擁有優異的成本管控能力。2003年SARS流行期間，與政府合作研發抗病毒、防體液污染的防護衣，並取得相關專利。今年2020年，在新冠疫情蔓延的情況下，成為防護衣國家隊一員，為台灣第一線醫護人員提供防護衣，保障醫護人員與病人的健康與安全。

聚陽公司這次參展的主打產品為隔離衣及防護衣，其材質透氣舒適，採全MIT原物料製造，並達到CNS14798 P3等級。1.0版產出時，係因應疫情初期，聚陽立即針對政府防疫需求快速反應，第一時間產出合格防疫產品，提供前線防疫團隊使用，如今已進入2.0版本。選用更優良的材質組合，以提升防護衣抗血液病毒的穩定度、

且更耐高溫。

聚陽防護衣已通過AAMI PB70測試標準，面料亦通過歐盟EN14126抗病毒測試標準，並已取得美國FDA Listing，目前國內外多家企業團體已選擇購買該公司產品來保護其員工。聚陽月產能已能達10萬件，目前除台灣外，已具外銷美國、日本資格；年底也有望開始銷往歐盟地區。

Makalot Industrial Co., Ltd., is a multinational apparel manufacturer with diversified valued products. During the SARS epidemic in 2003, Makalot cooperated with the government to develop protective clothing to prevent virus contamination and fluid spillage like blood, obtaining a related patent. Makalot has risen to the occasion against the Covid-19 pandemic in 2020 by becoming a supplier in the "Taiwan National Team," to

manufacture protective clothing for the front-line medical workers.

Makalot is featuring its isolation gowns and protective coveralls, which are breathable, skin-friendly, and comfortable compared to the existing products, and uses raw materials produced in Taiwan. These products have passed the CNS14798 P3 level certifications. The first version of the isolation gowns was initially produced in the early stages of the pandemic, in response to the government's fast pandemic strategy implementation. Even then, Makalot was able to offer functional gowns for front-line healthcare providers, but now, the firm has released a second version. Based on the first design, the firm improved the materials used to make the gowns, improving the wearability, quality, and functionality, such as better fluid-spill-



age prevention and high-temperature resistance. Makalot's protective gear is U.S. FDA-approved, obtained AAMI PB70 testing standards, the exterior material was approved by the EU's EN14126 anti-virus testing specifications, and obtained the U.S. FDA Listing. Domestic and overseas companies had chosen the firm's products to protect their employees amid a global shortage of protective equipment. The firm can now produce 100,000 pieces monthly, has obtained certification to sell to the U.S. and Japan, and has plans to export to the EU by the end of 2020.

◎ P0406 | 上銀科技股份有限公司 HIWIN TECHNOLOGIES CORP.

HIWIN 下肢肌力訓練機 HIWIN Robotic Gait Training System

上銀科技創立於1989年，為全球頂尖精密傳動技術專家。上銀運用其核心技术，提供自動化醫療服務，以解決醫療工作環境中的人力問題。醫療產品開發領域以復健治療、微創手術兩個領域為主，開發下肢肌力訓練機及內視鏡扶持臂兩項產品。

HIWIN 下肢肌力訓練機，可同時訓練站姿和行走，在復健初期做站立式的承重行走、高重複性動作與平衡等等訓練，可激勵復健者，提升復健的積極度，適用於早期介入之治療。此訓練機採用專利的「非懸吊式」的三點支撐訓練：腹部、臀部與膝關節給予支撐。另外一項亮點為電動上機系統，協助病人快速且安全坐到位，減

少治療師的負擔。訓練機也有訓練的行走軌跡選擇，可依據不同訓練項目：水滴、扁橢圓及橢圓的行走軌跡。機器也搭配HiKa訓練軟體，方便病人和治療師追蹤訓練過程、計畫及總覽。另外，HIWIN內視鏡扶持臂，於微創手術中提供穩定內視鏡影像，操控自如；直覺式操作及虛擬中心點運作，以確保手術品質，提升醫生執刀的自主性。

HIWIN, founded in 1989, is the world-leading manufacturer of professional motion controls and precise system parts. With HIWIN core robotic technology, the firm can provide solutions to problems of labor-intensive work through medical automation. The firm focuses on two medical fields: rehabilitation and MIS, with the development of medical equipment of Robotic

Gait Training System P100 and Robotic Endoscope Holder H100.

HIWIN Robotic Gait Training System helps to rehabilitate patients regain movement in their legs. It is an innovative walking training system that combines weight-bearing standing, repetitive stepping, and balance intensive training for early-stage patients to enhance motivation and achieve optimal results. The non-suspension support design supports three points: the abdomen, pelvis, and knee, which helps support the patient in the early stages of rehabilitation. The other feature is the patient transfer system, a power-aided sit-to-stand system that lessens the physical load on the therapists. The walk, flat ellipse and ellipse trajectory, three walking-pattern training models built in, allowing patients to practice with different conditions. Finally, the system's software HiKa allows the patients and therapists to manage and plan out training programs. A stable image is under the users' control, as the HIWIN Robotic Endoscope Holder is equipped with unique intuitive control. Its core technology of RCM (Remote Center of Motion) is used in minimally invasive surgery to provide stable endoscopic images, minimize incision size, and enhance surgical safety and efficiency.



◎ Q0512 | 智能量測設備 Smart Measurement MEDS-P1002

瑞仁生醫股份有限公司 MEDWEL, INC.



瑞仁生醫母公司瑞傳原為工業電腦設備製造商，另外成立瑞仁生醫，利用其專業投入醫療產業。智能量測設備解決方案，用來蒐集生理數據等醫療資料，自家AIO PC與系統能與醫院的HIS系統無縫接軌，可更有效率的串接醫療設備與建立先進的智慧醫療服務。在疫情期間，能夠提升智慧醫療普及化並更能減少接觸，降低彼此感染的風險。

主推產品10.1吋的MEDS-P1002，符合醫規的AIO PC，已獲IEC 60601-1、CE與FCC Class B等認證。由於體積小，可與醫院現有的量測設備結合，如電子血壓計或測量身高體重等儀器。病人只需插入健保卡，系統將量測的資料記錄並上傳至醫院資料庫，醫生在診療室可立即調閱。瑞仁也在軟體中融入人機介面設計，當病人進行量測時，螢幕介面會引導病人完成測量步驟，取得正確的生理數據，確保資料正確性、提升人機互動外，也能降低醫護人員與病人的接觸及感染，其產品設計能進行客製化和不同量測設備結合。瑞仁持續創新並優化現有流程，充分展現在中央管理系統之中，並導入至醫療系統，結合管理醫院內的智能量測設備，進行設備監控、軟體自動更新與量測上傳紀錄查詢，藉以提升病患資料的完整性。

Initially a supplier of computing solutions, Medwel Inc. moved its operations out of its parent company Portwell and rebranded itself into a "medical information communication and technology" (MICT) provider by integrating its expertise into the medical industry. The firm's all-in-one PCs collect medical data like physiological parameters, are integrated seamlessly with the native hospital information system (HIS), established cross-device connectivity, and implement efficient smart hospital solutions. During a pandemic, these measures can help lessen interactions.

Medwel's featured product is the 10.1" MEDS-P1002, a compact, medical-grade AIO PC designed for medical applications, and has obtained IEC 60601-1, CE, FCC Class B certification. Its small size makes it easy to attach it to equipment like digital sphygmomanometers or height and weight-measurement at outpatient clinics. Patients can insert their health insurance cards, and the system will record their measured data into the HIS, which doctors can view in the clinics. The system is also user-friendly, as it guides patients step-by-step on the monitor to take their vitals, ensuring patients record accurate data, enhance interaction with the system, and lower the risks of cross-infection between patients and healthcare workers. The software is also flexible and can integrate with any medical equipment. The Medwel vision is to innovate and improve existing processes. The firm developed a central management system that can monitor smart measurements in the system. The connectivity allows for real-time monitoring, software update, and maintenance and maintains records of uploaded data from linked equipment.

◎ P0427a | U-Van 智慧搬運機器人 U-Van Transport Robot

長庚醫學科技股份有限公司 CHANG GUNG MEDICAL TECHNOLOGY CO., LTD.

長庚醫學科技隸屬長庚醫療體系之下，今年合併展出，推出智慧醫療U系列，期盼透過U系列智慧醫療產品，協助醫護人員將時間與精力專注於病人照護，提升照護病人的品質。

U-Van 智慧搬運機器人初期使用在減省醫護人員運送工具進手術房的時間。機器已經應用在長庚醫院，平均下來可以把搬運或送物件至手術房的時間，從16.5分鐘縮到5.5分鐘。長庚醫學科技也希望利用機器人，帶入無紙化功能，例如簽收過程，可以直接在機器人的平台上做簽收，免除紙筆的使用。第二個產品為遠距醫療設備U-Dr.，以穩定的4G或5G網路傳輸高品質的畫面，如偏鄉地區的病人需要診斷，此設備使醫護人員，不受時間地形的限制在當地衛生所設起U-Dr. 與林口長庚不同科別的醫生連線會診。



Chang Gung Medical Technology (CGM), a business expansion of Taiwan's Chang Gung Medical Foundation, is taking a step further from its expertise in hospital beds and e-carts, medical carts, into smart medical equipment as its core focus. By showcasing its featured U-series, CGM hopes to save time for medical workers from the repetitive, administrative tasks, and to increase healthcare quality by returning

The U-Van Transport Robot was originally used to transport ordered tools or supplies to and into surgery rooms. The robot has been in use at Chang Gung Hospitals and has shaved off the average time of transporting orders from 16.5 minutes to only 5.5. There are other uses for the U-Van; sending the robots to patient wards to collect specimens. The firm expects to upgrade the robot to go paperless, such as signature collection when handing off equipment or papers. The second is U-Dr., a remote medical diagnosis system that aims to help more patients living in remote areas receive medical treatment, with high-quality images on 4G and 5G. U-Dr. allows medical professionals to set up the system anywhere, usually the local public health centers, and have doctors of different expertise see patients remotely. In the case of Taiwan's aging society, elderly citizens who are not mobile enough can see their doctors at home. Lastly, the U-ADC takes automated dispensing cabinets (ADC) to the next level, by focusing on turning the U-ADC into the management system for medicine, allowing for faster clarification processes, and control over medicine dispensing.