2023 台灣健康大數據整合服務平台年會 建構信任研究環境

2023 Taiwan Gateway to Health Data Annual Conference Capacity Building of Trusted Research Environment

會議手冊

Conference Handout

2023年11月25日 November 25th 2023

張榮發會議中心 801 會議室

Chang Yung-Fa Foundation International Convention Center Conference Room 801

2023台灣健康大數據整合服務平台年會-建構信任研究環境

2023 Taiwan Gateway to Health Data Annual Conference -

Capacity Building of Trusted Research Environment 11/25 張榮發會議中心801會議室

	11/25 派朱 沒 盲 裁 十 心 801 盲 硪 至				
開始時間	結束 時間	講題/topic	主講人/speaker	主持人/moderator	
09:30	09:40	開幕/opening	許惠恒 國家衛生研究院副院長		
09:40	10:00	信任研究環境的建構/Building Capacity for Trusted Research Environment	楊奕馨 國家衛生研究院 癌症研究所研究員		
10:00	10:30	次世代數位醫療平台之發展與標準規劃/ Planning for Taiwan's next-generation medical information platform	葉景三 衛生福利部資訊處 高級分析師	高純琇	
10:30	10:50	台灣健康大數據整合服務平台支援FHIR 格式的建置與應用/Taiwan Gateway to Health Data supporting the construction and application of FHIR format	李修安 國家衛生研究院 癌症研究所博士後研究員	健康大數據永續平台 專案辦公室主任	
10:50	11:10	休息/break			
11:10	11:40	國網中心可信賴雲之資訊系統架構介紹/ Introduction to NCHC's trusted cloud system architecture	蔡育欽 國家高速網路與計算中心 正工程師 潘怡倫 國家高速網路與計算中心 研究員	王聿泰 國家生醫數位資料與分 析運算雲端服務平台	
11:40	12:10	TRE面臨的資安風險/IT security risks in Trust Research Environments	蔡一郎 微智安聯股份有限公司 創辦人兼執行長	研究員	
12:10	13:20	午餐/lunch			
13:20	14:50	台灣生醫資料分析平台業界經驗分享 (台智雲, 微軟, IBM)/Taiwan biomedical data platform - experience sharing from industries (TWSC, Microsoft, IBM)	IBM:藍郁青IBM技術研究院顧問協理/首席AI科學家 台智雲:李立國台灣智慧雲端策略長 微軟:花凱龍台灣微軟技術長	徐建業 國立台北護理健康大學 資訊管理系所特聘教授 兼系主任	
14:50	15:10	休息/break			
15:10	15:50	Live demo and practical experience from implementation of secure TRE in different global environments	Mark Heffernan, Chief Architect, BC Platforms	楊奕馨 國家衛生研究院	
15:50	16:30	Tools and processes required to undertake analyses across secure data environments in the UK	Philip Quinlan, Professor, University of Nottingham/UK HDR	癌症研究所研究員	
	16:50	討論/panel discussion	Mark Heffernan/楊奕馨 研究員/ 花凱龍 技術長/陳謄州 助理教授/ 陳詩政 助理研究員	祝國忠 國立台北護理健康大學 資訊管理系所 特聘教授	
16:50	17:00	結語/closing remark	楊奕馨 研究		

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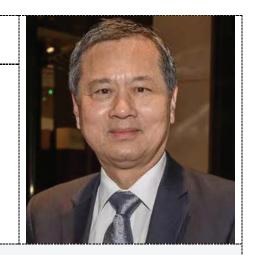
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Wayne Huey-Herng Sheu	National Health Research Institutes, Vice President	
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主講人 / Speaker		
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陳謄州 Teng-Chou Chen	國立陽明交通大學藥學系助理教授	28
陳詩政 Shih-Cheng Chen	國家衛生研究院 癌症研究所助研究員	29

貴賓 / Special Guest - 許惠恒 副院長

姓名 / Name:許惠恒 / Wayne Huey-Herng Sheu

現職 / Current Position: 國家衛生研究院 副院長

e-mail: whhsheu@nhri.edu.tw



學歷 / Education

PhD, National Taiwan University (NTU)

經歷 / Work Experience

臺北榮民總醫院 院長

臺中榮民總醫院 院長

世界糖尿病聯盟(IDF)西太平洋區(WPR) 主席

中華民國公立醫院協會 理事長

中華民國糖尿病學會 理事長

中華民國糖尿病衛教學會 理事長

臺中榮民總醫院 副院長

臺中榮民總醫院內科部 主任

臺中榮民總醫院醫療品質暨病人安全委員會 執行長

臺中榮民總醫院教學研究部 主任

臺中榮民總醫院新陳代謝科 主任

美國史丹福大學臨床研究中心 研究員

專長/ Areas of Expertise

糖尿病、高血脂症、血管硬化疾病、胰島素阻抗性、醫務管理

主持人 / Moderator - 高純琇

姓名 / Name:高純琇 / Churn-Shiouh Gau

現職 / Current Position:

Director in Program Office of Sustainable Platform for Big Data in Health, Ministry of Health and Welfare

e-mail: csg@ntu.edu.tw



簡介 / Short Bio

Dr. Gau is now the adjunct professor and the director of the Platform for Research and Inspiration in Regulatory Science, School of Pharmacy, National Taiwan University, and the distinguished senior specialist at the Ching-Kang Foundation for Pharmacy Promotion. Dr. Gau also serves as the project director for the Office of Sustainable Platform for Big Data in Health, a program sponsored by the Ministry of Health and Welfare, Taiwan since 2021.

Dr. Gau had been the Chief Executive Officer of Center for Drug Evaluation (CDE), Taiwan for 9 years, from April 1, 2011 to Feb. 29, 2020. CDE was established by Department of Health (DOH, now MOHW) in 1998, to assist the technical evaluation for market approval of drugs and medical devices. Dr. Gau was appointed as the Deputy Chief Executive Officer of CDE from June 2006 to Aug. 2009.

Prior to joining CDE, Dr. Gau served as expert/advisor in many Committees for MOHW, specializing in the evaluation of new drug application, assessment of drug safety, and accreditation of teaching hospital. Dr. Gau had led the projects for establishing the National ADR Reporting System in Taiwan for many years. Dr. Gau's research focus on the use of claim database of the National Health Insurance program of Taiwan to study the prescription pattern of drug utilization, the adherence of drug usage to the professional practice guidelines, and the association of adverse reactions and clinical outcomes with the drug used. Her extensive contributions to the field are evident through the publication of more than 60 research papers in the fields of pharmaceutical sciences, drug safety, and pharmaceutical regulation in internationally recognized medical journals.

學歷 / Education

1989-1992	Ph.D. in Pharmacy, School of Pharmacy, University of Wisconsin-Madison, USA
1987-1989	MSc in Pharmacy, School of Pharmacy, University of Wisconsin-Madison, USA
1977-1981	BSc in Pharmacy, School of Pharmacy, National Taiwan University, Taiwan

經歷 / Work Experience

2021-Present

Director, the Project Office of Sustainable Platform for Big Data in Health, Ministry of Health and Welfare

2021- Present

Director, the Platform for Research and Inspiration in Regulatory Science, School of Pharmacy, National

Taiwan University

2020- Present

Distinguished Senior Specialist, Ching Kang Foundation for Pharmacy Promotion

2013- Present

Adjunct Professor, National Taiwan University, School of Pharmacy

2011-2020

Chief Executive Officer, Center for Drug Evaluation, Taiwan

1992-2011

Associate Professor, National Taiwan University, School of Pharmacy

專長/ Areas of Expertise

Pharmaceutics, Clinical Pharmacy, Regulatory Science, Drug Safety

主持人 / Moderator -王聿泰

姓名 / Name: 王聿泰

現職 / Current Position:

國家生醫數位資料與分析運算雲端服務平台

e-mail: yutaiwang@narlabs.org.tw



簡介 / Short bio

王聿泰博士在博士學位之前是接受細胞生化和分子生物學相關的研究與生物實驗訓練,於 2000 年進入國立陽明交通大學博士攻讀期間,在生化暨分子生物學研究所於楊永正教授實驗室接受生物資訊的訓練,從事基因分析與生物路徑的相關研究,成為跨領域人才。隨後因專案計畫於台大醫學院附設醫院臨床卓越研究中心工作。於 2013 年起,至財團法人國家實驗研究院國家高速網路與計算中心工作至今。

學歷 / Education

國立陽明交通大學 生化暨分子生物研究所 博士

經歷 / Work Experience

- 國家高速網路與計算中心高速計算應用組組長
- 國家高速網路與計算中心 物聯生醫組組長
- 國家高速網路與計算中心 生物資訊研發與應用計畫主持人
- 科技部生技醫藥核心設施平台-GP1 計畫 計畫主持人
- 國家高速網路與計算中心 副研究員
- 亞太生醫矽谷-精準醫療旗艦計畫 計畫執行人
- 國家高速網路與計算中心 助理研究員
- 科技部生技醫藥核心設施平台-GP1 計畫 共同計畫主持人
- 生技醫藥國家型科技計畫(NRPB)-核心設施(GP1) 共同計畫主持人
- 國立台灣大學醫學院附設醫院 博士後研究員
- 國立陽明大學生醫資訊研究所 博士後研究員

專長/ Areas of Expertise

- 生物資訊分析、分析工具開發、網頁開發
- 資料正規化、資料庫結構設計、資料庫存取程式開發、程式開發與設計

主持人 / Moderator - 徐建業

姓名 / Name:徐建業 / Chien-Yeh Hsu

現職 / Current Position:

國立台北護理健康大學資訊管理系所特聘教授

Distinguished professor

Department of Information Management,

National Taipei University of Nursing and Health Sciences

e-mail: cyhsu@ntunhs.edu.tw



簡介 / Short Bio

Professor Chien-Yeh Hsu is currently a Distinguished Professor and the Chairman of the Department of Information Management, National Taipei University of Nursing and Health Sciences. Prof. Hsu is also currently the President of The Asia-Pacific Association for Medical Informatics. He became a fellow of the International Academy of Health Sciences Informatics (FIAHSI). The Academy, which is part of the International Medical Informatics Association (IMIA), serves as an honor society that recognizes expertise in biomedical and health informatics internationally and is one of the highest honors in the field.

His research domain includes electronic medical/health record, clinical/hospital information system, medical information standards, biomedical data sharing/processing/analysis, e-health/cloud computing infrastructure, biomedical database, and biomedical signal processing.

He was a member of HIMSS Analytics Asia Senior Executive Advisory Committee and a member of HIMSS Asia Pacific Governing Council from 2013 to 2015 and 2020 to present. Also, he had been helping on the promotion of the HIMSS EMRAM in Taiwan.

In 2019, Prof. Hsu lead the department of NTUNHS to obtain the certificate (effective from 2018 to 2024) from the Higher Education Evaluation and Accreditation Council of Taiwan (HEEACT).

From 2017 until now, Prof. Hsu has also been leading the collaboration of the Taiwan eHealth Association with AeHIN on hosting the conference, "AeHIN-Taiwan Health IT Collaboration Workshop" for seven times at different places around South-east Asia area.

He has been working on various topics in medical informatics for more than twenty years now. He has published various articles in Journal Medical Internet Research, The Journal on Information Technology in Healthcare, Computer Methods and Programs in Biomedicine, Expert Systems with Applications, PLOS ONE, European Journal of Nuclear Medicine and Molecular Imaging, Methods of Information in Medicine, International Journal of Andrology, Communications in Computer and Information Science, Telemedicine and e-Health, and The Journal of Taiwan Association for Medical Informatics.

He was the President of Taiwan Association for Medical Informatics from 2008 to 2011, and had served as the Editor in Chief of the Journal of Taiwan Association for Medical Informatics since 2004 to 2007. Professor Hsu is also a member of the board of HL7 Taiwan and Taiwan Association for Nursing Informatics. Prof. Hsu was also the President of the Taiwan eHealth Association from 2015 to 2021.

Prof. Hsu continues to contribute his efforts in networking with partners to share his knowledge and experience on medical informatics and health management. He continues to share his experience on the

best practices such as the Taiwan's national health insurance system and hospital information systems. He is expecting to contribute his knowledge on applying information technology to healthcare to improve patient care across the Asia-pacific region.

學歷 / Education

美國俄亥俄州立大學語言與聽覺科學 博士

Ph.D, Department of Speech and Hearing Science, The Ohio State University, USA

美國俄亥俄州立大學電機工程學 碩士

M.S, Department of Electrical Engineering, The Ohio State University, USA

台灣成功大學電機工程學 碩士

B.S , Department of Electrical Engineering, National Cheng Kung University , Taiwan

經歷 / Work Experience

Director of Computer Center, National Taipei University of Nursing and Health Sciences

- Professor and Director, Graduate Institute of Medical Informatics, Taipei Medical University
- · Chairman, Bioinformatics Computing Center, Taipei Medical University
- · President, Taiwan Association for Medical Informatics
- President, Taiwan e-Health Association
- Standing Supervisor, Supervisory Board, Health Level Seven (HL7) Taiwan
- Executive Director, Board, Taiwan Nursing Informatics Association
- Editor-in-Chief, The Journal of Taiwan Association for Medical Informatics, Taiwan Association for Medical Informatics
- · Project Manager, Product Development Office, Institute for Information Industry
- · Associate Researcher, The Department of Hearing and Language Sciences, University of Illinois

專長/ Areas of Expertise

- · Health and medical data analysis and processing for disease prediction model establishment
- · Biomedical signal analysis and processing
- Blockchain and cloud based electronic medical record architecture and applications
- Value-added applications and services of cloud based medical/health data analysis and processing
- Long-term care system and environmental assisted living technology

主持人, 主講人 / Speaker, Moderator - 楊奕馨

姓名 / Name:楊奕馨 / Yi-Hsin Yang

現職 / Current Position:

國家衛生研究院癌症研究所研究員

Investigator

National Institute of Cancer Research,
National Health Research Institutes

e-mail: yhyang@nhri.edu.tw



簡介 / Short Bio

Professor Yi-Hsin Yang, also known as Connie Yang, is a biostatistician by training. She has been actively involved in real-world data (RWD) and real-world evidence (RWE) development focusing on comparative effectiveness research. She has designed and implemented a common data model (CDM) for hospital-based health care big data to serve the needs of precision health research for the National Biobank Consortium of Taiwan (NBCT). While it is crucial to generated RWD by domain-knowledge experts to fulfill unmet needs in innovation biomedical science development, cross-government ministries and agencies have collaborated to the project of "Sustainable Platform for Big Data in Health Project". Professor Yang is currently in charge the sub-theme entitled "Gateway to Health Data & Data Governance" being part of "Health Big Data Infrastructure Establishment" program. The goal is to provide a portal to ensure data users can find fit-for-use data from data providers. While maximize data impact has become an important theme of current precision health, she has collaborated with multi-disciplinary experts to establish infrastructures in promoting fit-for-use data elements, facilitating data interoperability and data quality.

學歷 / Education

Ph.D. in Biostatistics, School of Public Health, University of North Carolina at Chapel Hill, US

經歷 / Work Experience

2023/01~present Deputy CEO, National Biobank Consortium of Taiwan (NBCT)

2021/08~present Adjunct Professor, School of Pharmacy, College of Pharmacy, Kaohsiung Medical

University (KMU), Taiwan

2013/07~2019/07 Professor, School of Pharmacy, KMU

2014/01~2019/07 Director, Medical Informatics and Statistics Center, Office of Research and

Development, KMU

2014/07~2019/07 Director, Health and Welfare Data Science Center KMU Research Sub-Center, KMU 2004/12~2019/07 Director, Division of Medical Statistics and Bioinformatics, Department of Medical

Research, KMU Hospital

專長/ Areas of Expertise

Real-world data science, Cancer epidemiology, Pharmacoepidemiology, Areca nut/betel quid epidemiology, Cancer control, Biostatistics (teaching & consulting)

主持人 / Moderator - 祝國忠

姓名 / Name:祝國忠 / Kuo-Chung Chu

現職 / Current Position:

Distinguished Professor, National Taipei University of Nursing and Health Sciences (NTUNHS)

e-mail: kcchu@ntunhs.edu.tw



簡介 / Short Bio

Kuo-Chung Chu holds a Ph.D. in Information Management from the National Taiwan University. He has been a part of the Department of Information Management at the National Taipei University of Nursing and Health Sciences (NTUNHS), Taiwan since 2007. During his tenure, he has served as the Director of the Computer Center and as the Dean of the Health Technology College at NTUNHS. Presently, he holds the esteemed position of Distinguished Professor at NTUNHS and serves as the Executive Director of the Taiwan Association for Medical Informatics (TAMI). Additionally, he works as an Adjunct Researcher at Taipei City Hospital, Taiwan, and serves as a Consultant for the National Health Research Institutes Biobank.

學歷 / Education

PhD, National Taiwan University (NTU)

經歷 / Work Experience

Executive Director, Taiwan Association for Medical Informatics (TAMI) Dean, College of Health Technology, NTUNHS

Director, Computing Center, NTUNHS

Visiting Professor, University of Colorado at Boulder, CU-Boulder, USA

Visiting Professor, National Oceanic & Atmospheric Administration (NOAA), USA

Chairman, Department of Information Management, Jinwen University of Science and Technology, Taiwan

Consultant, National Health Research Institutes Biobank, Taiwan

Consultant, Department of Information Technology, Taipei City Government Consultant, NEC Taiwan

Adjunct Research Faculty, Taipei City Hospital

Adjunct Associate Professor, National Taiwan University

Information Technology Staff, Department of Information Technology Services, Academia Sinica, Taiwan

專長/ Areas of Expertise

Big data analytics, Data mining, Artificial intelligence, Deep learning, Decision modeling, Healthcare systems, Medical decision support systems

主講人 / Speaker - 葉景三

姓名 / Name:葉景三/ Jing-Sun Yeh

現職 / Current Position:

衛生福利部資訊處高級分析師

e-mail: ccshadow@mohw.gov.tw



簡介 / Short Bio

葉高級分析師自 1997 年即任職於行政院衛生署資訊中心,協助醫療衛生資訊化相關工作,於衛生福利部組織改制後,負責帶領第三科(公衛醫療資訊系統)各項任務,並於 111 年榮獲衛生福利部模範公務人員,同時升任高級分析師,目前協同負責「次世代數位醫療平台計畫」之推動。

學歷 / Education

國立台灣科技大學資訊管理學系

經歷 / Work Experience

行政院衛生署技士

衛生福利部分析師

衛生福利部科長

衛生福利部高級分析師

專長/ Areas of Expertise

公務行政資訊系統、資訊開發專案管理、長照資訊化、電子病歷與憑證應用

演講講題 / Title of Speech

次世代數位醫療平台之發展與標準規劃

演講摘要 / Abstract of Speech

為加速醫療資訊系統革新, 普及接軌國際標準之次世代醫療資訊系統, 並鼓勵醫療院所數位轉型, 以利智慧醫療之推動, 衛福部規劃建置「次世代數位醫療平臺」, 協助各醫療院所雲端病歷系統之數位架構與資訊交換標準化。

主講人 / Speaker - 李修安

姓名 / Name: 李修安 / Hsiu-An Lee

現職 / Current Position:

國家衛生研究院癌症研究所 博士後研究員

Postdoctoral

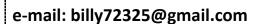
National Institute of Cancer Research, National Health Research Institutes

亞太醫學資訊學會 秘書長

Secretary General, Asia-Pacific Association for Medical Informatics

社團法人台灣醫學資訊學會 秘書長

Secretary General, Taiwan Association for Medical Informatics





簡介 / Short Bio

Hsiu An Lee a researcher working at the National Health Research Institutes, Taiwan. I received his Bachelor's and Master's degree in information management from National Taipei University of Nursing and Health Sciences and completed his Ph.D. in information Engineering at the Tamkang University. He work at NHRI focuses on the data integration and interoperability of clinical health data. I'm actively involved in researching the mechanisms underlying these data value-added using and the development of effective platform. His research has been published in numerous prestigious journals and has garnered international recognition. Specializes in healthcare system design, artificial intelligence applications, medical big data analysis, personalized medical artificial intelligence, decision-making framework, and conduct of international workshops.

With Taiwan's medical knowledge background and development experience, Dr. Lee shares with different countries how to build a complete framework and application model for international health care. Also has been involved in the implementation of many government projects around healthcare service planning, health management system design, interoperability architecture, and health record exchange architecture.

Dr, Lee had experience in introducing emerging technologies such as blockchain and artificial intelligence, and in deep-dive learning into the medical and health domain. And aims to create a new type of service and application model.

He is currently the General secretary of APAMI, CEO of the Taiwan eHealth Association and the Director of Standard and Interoperability Lab – Smart Healthcare Center of Excellence in Taiwan.

學歷 / Education

PhD. Tamkang University Department of Computer Science and Information Engineering

經歷 / Work Experience

May. 2021 – Postdoctoral, National Health Research Institutes - The National Institute of Cancer Research

Jul. 2017 – CEO, Taiwan eHealth Association, Taipei, Taiwan

Jul. 2015 – Jul. 2017 Assistant, Taiwan eHealth Association, Taipei, Taiwan

專長/ Areas of Expertise

Medical Information Application

Clinical Data Analysis

Database Structure

Electronic Medical Record Analysis and Structure Design

Medical Information Evaluation Standards

Personalized Health Management

演講講題 / Title of Speech

Taiwan Gateway to Health Data supporting the construction and application of FHIR format

演講摘要 / Abstract of Speech

This speech will explores the intricacies of designing a Fast Healthcare Interoperability Resources (FHIR) Implementation Guide (IG). The discussion delves into the meticulous process of mapping and designing the FHIR format specifically tailored for National Biobank Consortium of Taiwan (NBCT) Common Data Model (CDM) data. Through an in-depth exploration of design considerations and mapping methodologies, this session aims to provide valuable insights into optimizing health data interoperability, fostering a deeper understanding of FHIR IG construction, and showcasing its practical application in the context of NBCT CDM data.

主講人 / Speaker - 蔡育欽

姓名 / Name: 蔡育欽 / Yu-Chin Tsai

現職 / Current Position: Principal Engineer of NCHC

e-mail: thomas@narlabs.org.tw



簡介 / Short Bio

YUCHIN TSAI is a dedicated developer and Principal Engineer at the Free Software Lab at the National Center for High-Performance Computing in Taiwan. Within the lab, the primary focus is on developing free software that caters to the needs of the High-Performance Computing (HPC) field. Thomas's notable contributions include the creation of Partclone, a powerful tool that enables partition imaging under the GPL license. He has also played a crucial role in the development of other renowned free software projects, namely "DRBL" and "Clonezilla."

Thomas's accomplishments have been acknowledged and celebrated throughout his career. In November 2007, Our team was honored with the Public Sector Software Award at the International Free Software Contest in Soissons, France. Furthermore, in 2008, the Executive Yuan in Taiwan recognized our team's remarkable contributions to science and technology.

With a primary focus on middleware and free software research for high-performance computing (HPC),

Thomas is a core developer of Partclone. This invaluable tool allows users to preserve entire file systems by creating images of partitions or cloning them to alternative disks. Thomas's recent research efforts have involved the integration of streaming data and AI frameworks. Additionally, he holds the responsibility of overseeing the development of DAS, a data analysis platform at NCHC.

擅長 High-performance Computing 方面的知識,積極參與自由軟體開發、高速計算(High Performance Computing)相關之計畫,所以培養出 DRBL、Clonezilla、高速計算叢集之建置、開發與維運之經驗。加上虛擬化與容器化技術隨之而來,於是因為工作關係就主導與協助國網中心混合雲建置、資料分析平台服務與上線,以及前瞻計畫之 TWCC 相關建置與維運。而接下來的重大挑戰,就是建立臺灣第一個可信賴雲平台給關於生物醫療研究領域可以使用。

學歷 / Education

07/2005 MSc. Dept. of Library and Information Science, Fu-Jen Catholic University, Taiwan 07/2003 BSc. Dept. of Library and Information Science, Fu-Jen Catholic University, Taiwan

經歷 / Work Experience

2021 - Present: National Center for High-performance Computing Principal Engineer

2011 - 2021: National Center for High-performance Computing Associate Researcher

2006- 2011: National Center for High-performance Computing Assistant Researcher

專長/ Areas of Expertise

Passionate about the research and development of HPC platform systems, familiar with free software, and often interacting with various communities, looking forward to developing and contributing more free software. The 2020 GitHub Archive Program has recognized our project Partclone. In addition to continuous improvement, and hope do more good results will be spread to the world.

Technological expertise:

PAAS \ Operating system \ Information retrieval \ Text mining \ Search engine \ File system architecture \ System deployment \ Massive data service architecture \ Data aggregation \ Deidentification technology \ Linux system administration \ Middleware \ Federated Learning

Awards and honors:

- 2021, Presided over the DAS service and maintenance operation and won the encouragement of the Individual and Team Excellence Award.
- 2020 patent applied: The Method and Deployment System for Computer Operating System and Applications °
- 2019, Guided and cooperated with the team to complete the personal data de-identification verification and get the first unit in Taiwan to obtain ETC/CNS29100 certification without any defects.
- 2008 DRBL /Clonezilla got National Applied Research Laboratories Technical Achievement Award and The Executive Yuan Award for Outstanding Science and Technology Contribution
- 2007 DRBL got Cetril Trophées du Libre Public Sector Applications Winner
- 2005, The Phi Tau Phi Scholastic Honor Society of the Republic of China Honorary Membership

演講講題 / Title of Speech

國網中心可信賴雲之資訊系統架構介紹

演講摘要 / Abstract of Speech

國家實驗研究院國家高速網路與計算中心(以下簡稱國網中心)自成立起,即是國內唯一專業高速運算服務提供者,因此配合國家政策負責規劃可信賴雲端服務基礎設施建立,讓其雲平台之韌性與品質提升,且主要提供。雲端服務環境並提供高機敏資料的保障。故提供高機敏資料所需之雲端運算、儲存以及資料雲端服務為我們可信賴雲平台主要基石。而此次建置主要為雲環境必須保護重要的檔案與資料且提供系統的備援服務,確保關鍵服務不中斷與機敏資料加密化。未來更可提供新一代高效能運算架構,其中包含新型圖形加速卡,透過此雲平台繼而整合政府雲端服務,提供政府研究開發所需之計算力服務。

主講人 / Speaker - 潘怡倫

姓名 / Name:潘怡倫 / Yi-Lun Pan

現職 / Current Position:

Deputy Manager of High Performance Computing Division

e-mail: serenapan@narlabs.org.tw



簡介 / Short Bio

I have expertise in High-performance Computing and actively participate in projects related to Grid Computing and High-Performance Computing. As a result, I have gained experience in designing, developing, and operating Grid and High-Performance Computing clusters. With the emergence of virtualization and containerization technologies, I have taken the lead and assisted in the establishment of the National Center for High-Performance Computing's hybrid cloud, the AI Train artificial intelligence education platform, and educational cloud platform services, as well as the setup and operation of the TWCC initiative. The next significant challenge is to create Taiwan's first trusted cloud platform for use in the field of biomedical research.

擅長 High-performance Computing 方面的知識,積極參與格網(Grid Computing)、高速計算(High Performance Computing)相關之計畫,所以培養出格網、高速計算叢集之建置、開發與維運之經驗。加上虛擬化與容器化技術隨之而來,於是因為工作關係就主導與協助國網中心混合雲建置、人工智慧教育平台(AI Train)與教育雲平台服務與上線,以及前瞻計畫之 TWCC 相關建置與維運。而接下來的重大挑戰,就是建立臺灣第一個可信賴雲平台給關於生物醫療研究領域可以使用。

學歷 / Education

06/2023 Ph.D Dept. of Computer Science & Information Engineering, National Taiwan University, Taiwan 07/2017 Ph.D student at Dept. of Computer Science & Information Engineering, National Taiwan University, Taiwan

07/2005 MSc. Dept. of Information Management, National Chung Cheng University, Taiwan 07/2003 BSc. Dept. of Statistics Information Management, Fu-Jen Catholic University, Taiwan

經歷 / Work Experience

2022 - Present: National Center for High-performance Computing Researcher

2010 - 2021: National Center for High-performance Computing Associate Researcher

2005- 2009: National Center for High-performance Computing Assistant Researcher

專長/ Areas of Expertise

01/2019 – Present: AI Platform Optimization, Privacy Protection - high-resolution facial image, Information Hiding - Steganography

De-identification is one of the basic methods aims at protecting the privacy of imagery data and granting their legal usage, at the same time. I propose an approach towards high-resolution facial image de-identification/re-identification, which leverages the k-Same-Anonymity and Dual inference mechanisms, the Generative Adversarial Network, and the hyperparameter tuning methods. I try build a pipeline for providing Cloud information security computing services, including de-identification and re-identification.

01/2018 – 12/2018: GPU Virtualization, AI Platform, and Building Cloud Services with OpenStack and Container

After finishing Visiting Scholar, I am focusing on building AI Cloud services with OpenStack and container. To commit government AI project, I have a mission to design resource manager working engine to manage heterogeneous computing resources, and leverage HPC scheduling to achieve the computing resource allocation optimization. Therefore, I get lots of software experiences about Caffe, Caffe2, Tensorflow, Intel_Caffe, and Keras on P100, V100, and DGX-1 machines.

03/2017 – 12/2017: Virtualization – OpenStack and Software Defined Network - ONOS I was a Visiting Scholar at iCAIR (International Center for Advanced Internet Research) Northwestern University, USA, during these six months. The research and implementation what I did including a. designed and implemented OpenStack Baremetal VLAN, b. 100G Data Transfer Nodes (DTNs), c. integrated SDN & Open Network Operating System (ONOS), and system automatic deployment with DevOps.

01/2009 – 02/2016: HPC Fault Tolerance and Resource Optimization with Virtualization, and Cloud Computing

Ezilla Project (2012 - 2015) — It integrated the de facto Cloud middleware, and coordinated cloud infrastructure services such as storage, computing and networking services to form an integrated virtual computer. The merit of the Ezilla was simplifying the deployment complexity of the Cloud system for the users.

Performance Tuning for Dual 40 Gigabit Ethernet Link Aggregation Project (2013) - Tuned the performance of servers that were interconnected with 80GE, which was made possible by combining two 40GE ports on the same network card. Suggestions were offered to issues related to the enhancement of the network performance.

Lite Migration Toolkit (2009 - 2011) - The approach provided automatically and transparently the fault tolerance capability to the parallel HPC applications. This project was accepted by SC09.

08/2005 – 12/2008: Scheduling and Grid Computing

Grid WebOS Project (2006 - 2008) – Grid WebOS was with the capability of automatic resource allocation and the feature of dynamic load prediction, the Resource Broker (RB) improved the performance of the dynamic scheduling over conventional scheduling policies.

IEEE Cluster 2008 Data-Analysis Challenge – The designed scheduling algorithm won the second prize.

演講講題 / Title of Speech

國網中心可信賴雲之資訊系統架構介紹

演講摘要 / Abstract of Speech

國家實驗研究院國家高速網路與計算中心(以下簡稱國網中心)自成立起,即是國內唯一專業高速運算服務提供者,因此配合國家政策負責規劃可信賴雲端服務基礎設施建立,讓其雲平台之韌性與品質提升,且主要提供。雲端服務環境並提供高機敏資料的保障。故提供高機敏資料所需之雲端運算、儲存以及資料雲端服務為我們可信賴雲平台主要基石。而此次建置主要為雲環境必須保護重要的檔案與資料且提供系統的備援服務,確保關鍵服務不中斷與機敏資料加密化。未來更可提供新一代高效能運算架構,其中包含新型圖形加速卡,透過此雲平台繼而整合政府雲端服務,提供政府研究開發所需之計算力服務。

主講人 / Speaker - 蔡一郎

姓名 / Name: 蔡一郎

現職 / Current Position:

微智安聯股份有限公司 創辦人兼執行長

e-mail: yilang@shieldx.io



簡介 / Short Bio

蔡一郎(Steven Tsai),目前擔任 The Honeynet Project、Cloud Security Alliance 以及 OWASP 三大國際資安組織台灣分會會長,另負責 CSCIS Greater China 與北亞區副總裁,熱衷於資訊安全相關領域,為台灣數位安全聯盟榮譽理事長、台灣網際空間與安全策略發展協會理事長、以及台灣數位鑑識發展協會理事,積極投入與推動國內資訊安全領域關於偵測、分析、資安事件應變與誘捕技術之推廣與研究;熟悉資訊安全領域相關技術,涵蓋系統安全、網路安全、管理制度、資訊探勘與數位鑑識等領域,已有 36 本電腦資訊圖書著作,目前任職 微智安聯 (Shield eXtreme) 執行長,致力於開發資安演訓、威脅情資以及高階資安技術服務平台。

學歷 / Education

國立成功大學電腦與通訊研究所 博士候選人

國立成功大學電機工程研究所 碩士

經歷 / Work Experience

曾 服務於國家實驗研究院國家高速網路與計算中心 研究員、中華民國資料保護協會 監事、台灣 科技化服務協會 理事、台灣資安聯合發展協會 常務監事

專長/ Areas of Expertise

擁有 RHCE、CCNA、CCAI、CEH、CHFI、ACIA、ITIL Foundation、ISO 27001 LAC、ISO 20000 LAC、BS10012 LAC、CSA STAR Auditing、CCSK 等多項國際證照

演講講題 / Title of Speech

TRE 面臨的資安風險

演講摘要 / Abstract of Speech

因應多元化服務的資訊科技時代,從典型的資通訊架構、雲端服務架構以及行動化與數位化後的行動數據服務,再加上醫療院所分工精細,能夠接觸到病歷等敏感資料的人數眾多,容易衍生對於敏感資料使用上的資安風險,源自零信任架構所發展出來的安全服務存取邊界以及軟體定義安全的模型,從資訊安全的風險管理,面對醫療資訊的保護,對於從事醫療資訊研究的需求而言,如何建立一個信任的研究環境,在提供研究數據、確保隱私與取得有效數據間達成平衡,是目前許多醫療資訊平台在規劃設計與營運過程,皆需要面對的課題。

主講人 / Speaker - 藍郁青

姓名 / Name:藍郁青 / Yu-Ching Lan

現職 / Current Position:

Sr. Managing Consultant / Chief Al Scientist, IBM Expert Labs



簡介 / Short Bio

藍郁青目前任職於台灣 IBM 技術研究院,負責提供企業數據治理及人工智慧應用落地的諮詢服務。具豐富 ESG、資料治理及 AI 趨動智能化轉型實戰經驗。2019 榮獲 IBM Women Leaders in AI。專精於利用 Data/AI 技術於醫療體系資料治理; 製造業環安衛、品保、產銷、HR AI、瑕疵檢測及控制; 知識萃取管理、主數據分析治理工作。從人機料法環推動企業及組織數位轉型。大學教職工作期間,參與環境影響評估,主持勞工健康風險評估計畫。多次參與國際合作,利用真實世界資料及臨床醫學資料,做長期跨國臨床試驗。亦建構行動醫療方案。常年參與 NGO 工作,擁有多次成功輔導 NGO 新創公司取得投資之經驗。

學歷 / Education

PhD in Public Health— National Yang-Ming University

經歷 / Work Experience

2022-present Chief Al Scientist / Sr. Managing Consultant, IBM Expert Labs
Enterprise data governance, manufactory, and medical Al application

2017-2021 Data Science Manager, Walsin Lihwa Corporation Intelligent Systems Department, Big Data and Cyber Security Division

2013-2020 Associate Professor, China Medical University, Taichung, Taiwan Department of Health Risk Management, School of Management & Department of Public Health, School of Public Health

2006-2012 Assistant Professor, China Medical University, Taichung, Taiwan Department of Health Risk Management, School of Public Health

2010-2011 Visiting Scholar, University of California Los Angeles (Sponsor: Dr. Donald E. Morisky)

Department of Community Health Sciences, School of Public Health

專長/ Areas of Expertise

- Al and Data application
 - Data Governance
 - Manufactory knowledge extraction,
 NLU & KG for Young Talent
 Education
 - Exploratory Data Analysis for Manufacturing Production Line
 - HR Talent Management
- Public Health and Medical Research /Education
 - Bioinformation, GIS and Biostatistics
 - Virus evolution simulation and human behavior measurement

演講講題 / Title of Speech

以資料治理加速智慧醫療

演講摘要 / Abstract of Speech

智慧醫療有賴各種數據資料的支援,然而醫院組織在例行營運期間產生的所有數據中,有許多實際上並未被再次使用,以致沒有人分析來獲得洞察、推動決策或獲取醫療業務價值,這類「暗黑數據 Dark Data」是智慧醫療發展速度的關鍵。Dark Data 所帶來的影響包含:責任不清、累計成本、錯失機會、數據品質不佳。而對於如何在智慧醫療永續發展的過程中取得創新契機,並藉由數位平台帶動醫療轉型,數據團隊的效率與價值產出賴於三階段的旅程:一、檢視資料治理成熟度現況,規劃治理主軸與藍圖;二、建立以知識為基礎的「數據經緯 (Data Fabric)」服務架構,將資料整合、領域專業資料字典與自助分析放在單一平台進行管理;三、從「最簡可行產品 (MVP)」開始實施,專注於流程改善與技術強化。

主講人 / Speaker - 李立國

姓名 / Name: 李立國 / Kevin Lee

現職 / Current Position:

台灣智慧雲端服務股份有限公司 策略長

e-mail: kevin.lee@twsc.io



簡介 / Short Bio

擁有多年產業 AI 人工智慧應用、區塊鏈應用、雲運算服務及 資通數據營運經驗,並熟悉資通電信網路、IDC 機房、VoIP 語音通信等應用服務等商模發展。目前從事數據經濟發展, 實現產業數據、AI 智慧、5G 專網整合應用及致力以 AIHPC 超級電腦雲服務方式提供高效算力與資安解決方案。

學歷 / Education

國立交通大學 電信工程學系

經歷 / Work Experience

台灣智慧雲端服務股份有限公司 策略長

華碩雲端雲端暨數位架事業處 總監

國家高速網路與計算中心 顧問

是方電訊 協理

專長/ Areas of Expertise

資通訊數據電信網路服務、AI 與雲端應用服務策略規劃、區塊鏈與資料信任服務、數位醫療與生技應用

演講講題 / Title of Speech

產業應用數據的資料信仟架構基礎

演講摘要 / Abstract of Speech

台智雲提供國家級 Cloud +AI 基礎信任平台,提供數據落地、法尊合規、安全韌性等企業需求的資料信任解決方案,協助建構產業可信任的 GAI 和以資料可信任、可溯源,打造跨領域、跨企業的互信商業環境,實現 Web3 數位治理的資料信任生態。

主講人, 與談人 / Speaker, Panelist - 花凱龍

姓名 / Name: 花凱龍 / Kai Hua

現職 / Current Position:

Chief Technology Officer, Microsoft Taiwan

e-mail: kai.hua@microsoft.com



簡介 / Short Bio

Dr. Kai Hua received a MediaTek scholarship in 2004 to pursue his Ph.D. in Electrical and Computer Engineering at Purdue University in the USA. He has authored over a hundred Al-related academic papers published in international conferences and journals, and holds more than ten patents in the Al field. He has also been honored with numerous academic and technical awards, including Top Performance Award from ACM Multimedia Grand Challenges, Young Scholar Research Award, Teaching Excellence Award, and Research Excellence Award from National Taiwan University of Science and Technology, Operational Excellence Award from Microsoft Taiwan, and K. T. Li Cornerstone Award from the Institute of Information & Computing Machinery. Currently, Dr. Hua serves as the Chief Technology Officer at Microsoft Taiwan, where he is responsible for executing various digital strategic plans, participating in the development and deployment of cutting-edge products such as Azure OpenAl and Azure Cognitive Services, and is dedicated to enhancing the digital resilience of the organization and enabling industry transformation.

• 學歷 / Education

- PhD: School of Electrical and Computer Engineering, Purdue University, USA
- MS: Department of Communication Engineering, National Chiao Tung University (NCTU), Taiwan
- BS: Department of Electrical Engineering, National Tsing Hua University (NTHU), Taiwan

經歷 / Work Experience

- Deputy General Director, Information and Communications Research Laboratories, Industrial Technology Research Institute
- Dean, Office of Industry-Academia Collaboration, National Taiwan University of Science and Technology
- Vice Dean, College of Electrical Engineering and Computer Science, National Taiwan University of Science and Technology
- CTO, Samurai Spirit Inc.
- Director, Artificial Intelligence Research Center, , National Taiwan University of Science and Technology
- Engineer, Hewlett Packard Lab

專長/ Areas of Expertise

- Multimedia Big Data and Deep Learning
- Computer Vision and Pattern Recognition
- Data Science and Machine Learning

演講講題 / Title of Speech

Opportunities & Challenges for AI in Healthcare

演講摘要 / Abstract of Speech

As the Chief Technology Officer of Microsoft Taiwan, I am poised to deliver a speech titled 'Opportunities & Challenges for AI in Healthcare,' where I will deeply delve into the dynamic evolution and transformative potential of artificial intelligence (AI) in the healthcare field. This presentation seeks to comprehensively explore the revolutionary capabilities inherent in generative artificial intelligence, a cutting-edge technology that stands as a beacon in reshaping the healthcare landscape. Throughout the conference, I will illuminate the profound impact of AI on healthcare, with a particular emphasis on how generative AI can address key challenges such as the clinician workforce crisis, healthcare inefficiency and waste, and precision medicine. Real-world case studies and concrete examples will underscore how artificial intelligence, especially generative artificial intelligence, can propel medical practices into a new era of innovation and operational efficiency. Join me as we explore the limitless potential and transformative power of artificial intelligence, paving the way for a more efficient, resilient, and patient-centered healthcare ecosystem.

主講人,與談人 / Speaker, Panelist - Mark Heffernan

姓名 / Name: Mark Heffernan

現職 / Current Position: Chief Architect (BC Platforms)

e-mail: mark.heffernan@bcplatforms.com



簡介 / Short Bio

Mark has spent more than 25 years in the analytics industry and for the last 10 years has focused on designing and implementing RWD platforms including TREs. He has worked for ASCO CancerLinQ as well as numerous Research Biobanks, Hospital Networks and Pharmaceutical clients around the world. He approaches every new project with a unique blend of knowledge, experience and honesty and is based in Oxford, UK. Mark is a natural leader experienced in delivering customer implementation projects and bringing new products to market. A proven track record of success in large scale projects in multiple geographies and industries. Establishes trust with a unique combination of knowledge, experience and honesty. A passion for Healthcare and Life Sciences.

學歷 / Education

BACHELOR OF COMMERCE (HONOURS) | UNIVERSITY OF NSW, SYDNEY, AUSTRALIA

International Business Finance (Statistics) and Law

經歷 / Work Experience

CHIEF ARCHITECT | BC Platforms | 2019-present

- Solution Architect for sales cycles and project implementations
- Responsible for project implementation and support work for our customers globally with a focus on the largest key accounts and unique architectural solutions
- Working closely with organisations such as Astra Zeneca, Kaiser Permanente, BMS and Clalit.

GLOBAL CUSTOMER SUCCESS LEAD FOR HEALTHCARE | SAP | 2013-2019

- Line Manager responsibility for a global team of 12 consultants.
- Delivered unique, high profile, world first and multi-million dollar Patient Real World Data aggregation projects such as the ASCO CancerLinQ platform as well as similar projects at the National Centre for Tumour Diseases/DKFZ (Heidelberg) and Gustave Roussy (Paris).

- Project and Program Management responsibility for the end to end deliverables of 45+ technical resources from both SAP and customer side at the height of the ASCO implementation. Many of those resources worked remotely across 6 countries.
- Presented project rationale and status updates to more than 50 members of ASCO's Board of Governors and Board of Directors.
- Led an implementation of a prototype personalised medicine platform at The Christie NHS Foundation Trust. Initial release with sample data achieved in less than 10 days.
- Delivered 4 new SAP products to market in the context of healthcare customer implementation projects at the cutting edge of technology (Connected Health Platform, Clinical Measure Analytics, Medical Research Insights, HANA and R (statistics package)).
- Organised and ran more than 100 workshops onsite and remote for internal project team
 members as well as organising multiple end user councils for the project teams to listen
 closely to end users. Used Design Thinking and Personas to build rapid prototypes within a
 sprint framework and to integrate the best possible product feedback into development.

CUSTOMER SOLUTION ADOPTION FOR HANA | SAP | 2011-2013

- Responsible for the first global customer implementations of a brand new product from SAP (A high performance in-memory database called HANA).
- Led the first HANA implementation in Europe (Provimi) and delivered it in 14 days.
- Led the first HANA POC at Burberry to deliver new retail insights in seconds.
- Achieved a reduction in financial month end close time from a day to seconds/minutes with the very first Vodafone HANA project in 2012.

OTHER POSITIONS HELD

- Enterprise Performance Management Senior Specialist, SAP
- Led the initial customer implementations for 2 new products (Strategy Management and Profitability & Cost Management).
- CRM Analytics Senior Specialist (Asia and Europe), SAP
- Led the Marketing and Analytics business development for a new CRM solution.
- Used a statistics background from my University degree to implement and direct the development of SAP's Data Mining Workbench product.
- Led 3 customers through the onboarding process for SAP's first SaaS offering.
- Academy Instructor for ERP, CRM and Data Warehousing, SAP
- Honed my presentation and communication skills by delivering concise and popular training. Became the highest rated instructor in Australia and NZ.
- Management Consultant, Accenture
- Learned the methodology of management consultancy in the context of Business Process Re-engineering projects to deliver quantifiable FTE savings.

專長/ Areas of Expertise

- Building relationships with all levels of an organisation customers, developers, sales and marketing, executives, partners and other key stakeholders
- Communication and presentation. An ability to talk straight but to also adjust the messaging for a given audience. Listening skills and empathy for the end user

- Business acumen to understand the business rationale for the entire organisation and a given project/initiative
- Solution Architect skills to be the "glue" of a project and satisfy end user requirements with developed solutions
- Ability to lead teams in agile methodologies to deliver value to the customer and project as quickly as possible
- Project and Program Management, organising teams and building roadmaps

演講講題 / Title of Speech

Live demo and practical experience from implementation of secure TRE in different global environments

演講摘要 / Abstract of Speech

"Beginning with the definition of a Trusted Research Environment (TRE) in 2020, the guiding principles for secure data sharing have spread rapidly around the world. In this session we will explore those guiding principles and how technology can be used and has been used to enable secure data sharing by Data Controllers in Europe and around the world. The session will conclude with a demonstration of a secure data environment in action."

主講人 / Speaker - Philip Quinlan

姓名 / Name: Philip Quinlan

Dr. Philip Quinlan

I am a leader in health research and data analytics research infrastructures with a passion and drive to build the necessary relationships with clinical, academic and industry partners in order to deliver step-change in research capabilities.

Current Roles and Employment

- Director of Health Informatics at the University of Nottingham
 - o Health Data Research UK Associate Director
 - o Director of the UKCRC Tissue Directory and Coordination Centre
 - o Director of Digital Health Research, Nottingham University Hospitals NHS Trust

Funding Headlines:

£ 1.2M MIREDA, MRC, 2023, Co-Investigator

£3M HDR Federated Analytics, UKRI, 2023, CO-PI

£ 560k TRE-FX, DARE UK, UKRI, 2023, Co-Investigator

£ 300k FED-NET, DARE UK, UKRI, 2021, Co-Investigator

£ 2M Alleviate Pain Hub (£ 200k): Medical Research Council, 2021, Co-Investigator

£ 154k Gendius KTP: Innovate UK, 2021, Co-Investigator

£ 2M PROTECT-CH: NIHR, 2020, Co-Investigator

£ 4.05M CO-CONNECT (£ 1.3M): Medical Research Council, 2020, Principle investigator

£ 0.1M DEMISTIFI (£ 30,000): Medical Research Council, 2020, Co-Investigator

£ 0.2M ATLAS (£ 200,000): Health Data Research Capital Award, 2018, Principle Investigator

£ 3.5M Health Data Research Substantive Site (£ 723,000) 2018 Site Principle Investigator

£ 0.9M UKCRC Tissue Directory and Coordination Centre Phase II (£ 450,000) 2018 PI

£ 0.9M UKCRC Tissue Directory and Coordination Centre (£ 444,128) 2014, CO-I

£ 5M Breast Cancer Campaign Tissue Bank (£ 520,986) 2013 Dundee PI and Informatics Lead

£ 5M Breast Cancer Campaign Tissue Bank (£ 460,272) 2010 Dundee PI and Informatics Lead

£ 2M HCV Research UK (£ 52,443) Initial Funding 2010, Dundee CO-I, Informatics Lead.

CO-CONNECT

- A 4.05M project to develop a single data asset comprising of 44 data sources from across the UK in order to facilitate greater research into the potential immunity to COVID-19.
- A consortium comprising 20 research organisations under a common vision of FAIR data principles
- A collaboration with industry to bring the bleeding edge technical capabilities to the fore
- A data engineering effort to make data usable for research

HDR UK

- A £ 70M initiative under a single institute vision to bring health care data, clinicians and technical specialists together to drive change at scale
- Co-leading federated analytics work programme
- Developing the UoNs Trusted Research Environment for sharing of data
- Providing technical expertise to build the national data infrastructure to ensure researchers have access to the required datasets
- Seeking to develop hybrid career paths for digital health technologists

TDCC

- A focused long-term effort to change the dynamics in the sharing of human samples for research
- A collaborative across over 200 biobanks in the UK with a commitment to change
- Changing national policy to increase transparency in the collection of human samples
- The UKs nominated organisation in the European infrastructure BBMRI-ERIC

Digital Research Service

- A growing team (approx. 30) of technical specialists who have supported over £ 50M of research in the University of Nottingham
- A cost recovered service that is supported by the research community
- International recognition as a trusted intermediary in building appropriate data infrastructure to enhance and grow research capabilities
- Developing a national reputation for providing a unique career path in academia

Education

- 2013: PhD in Medical Informatics (AI in biomedical datasets), University of Dundee
- 2004: BSc in (Hons) Applied Computing, University of Dundee

Previous Employment History

- June 2014 June 2018: Chief Technical Officer, ADAC, University of Nottingham
- Jan 2010 June 2014: Principle Investigator and IT Lead for the Breast Cancer Campaign Tissue Bank (BCCTB)
- July 2007 June 2013: Part-time PhD
- Oct 2004 Jan 2010: Data Manager for the Tayside Tissue Bank and breast cancer research

Selected Senior Author Publications

- Jefferson, E. et al. (2022) 'A Hybrid Architecture (CO-CONNECT) to Facilitate Rapid Discovery and Access to Data Across the United Kingdom in Response to the COVID-19 Pandemic: Development Study', Journal of Medical Internet Research, 24(12), p. e40035. Available at: https://doi.org/10.2196/40035.
- Lawrence, E. et al. (2020) 'The Barriers and Motivators to Using Human Tissues for Research: The Views of UK-Based Biomedical Researchers', *Biopreservation and Biobanking*, 18(4), pp. 266–273. Available at: https://doi.org/10.1089/bio.2019.0138.
- Sims, J.M. et al. (2022) 'Lessons learned from the COVID-19 pandemic about sample access for research in the UK', BMJ Open, 12(4), p. e047309. Available at: https://doi.org/10.1136/bmjopen-2020-047309.

Selected First Author Publications

- Quinlan, P.R. et al. (2022) 'Cluster analyses of the TCGA and a TMA dataset using the coexpression of HSP27 and CRYAB improves alignment with clinical-pathological parameters of breast cancer and suggests different epichaperome influences for each sHSP', Cell Stress and Chaperones, 27(2), pp. 177–188.
- Quinlan, Philip R. *et al.* (2014) 'A Data Standard for Sourcing Fit-for-Purpose Biological Samples in an Integrated Virtual Network of Biobanks', *Biopreservation and Biobanking*, 12(3), pp. 184–191. Available at: https://doi.org/10.1089/bio.2013.0089.
- Quinlan, Philip R, Groves, M., et al. (2015) 'The informatics challenges facing biobanks: A perspective from a United Kingdom biobanking network', *Biopreservation and biobanking*, 13(5), pp. 363–370.
- Quinlan, Philip R. et al. (2017) 'The UK Clinical Research Collaboration (UKCRC) Tissue
 Directory and Coordination Centre: The UK's Centre for facilitating the Usage of Human
 Samples for Medical Research', Open Journal of Bioresources, 4(1), p. 6. Available
 at: https://doi.org/10.5334/ojb.31.

Contributions to papers

- Napoli, M. et al. (2020) 'Pan-cancer analysis reveals TAp63-regulated oncogenic lncRNAs that promote cancer progression through AKT activation', Nature communications, 11(1), pp. 1–16.
- Purdie, C. et al. (2010) 'Increased mortality in HER2 positive, oestrogen receptor positive invasive breast cancer: a population-based study', British journal of cancer, 103(4), pp. 475–481.

與談人 / Panelist - 陳謄州

姓名 / Name:陳謄州 / Teng-Chou Chen

現職 / Current Position:

國立陽明交通大學藥學系助理教授

e-mail: tengchou@nycu.edu.tw



簡介 / Short Bio

陳博士具備醫院藥師工作經驗,並在英國諾丁漢大學及曼徹斯特大學接受臨床藥學研究訓練。陳博士於英國攻讀博士班及執行博士後研究期間,應用英國電子病歷 Clinical Practice Research Datalink (CPRD)評估鴉片類藥品於英國初級照護系統的安全性,以及乾癬對婦女生育率及懷孕結果的影響.

學歷 / Education

英國諾丁漢大學藥學系 博士

高雄醫學大學臨床藥學研究所 碩士

經歷 / Work Experience

2023/8--迄今 國立陽明交通大學, 藥學系 助理教授

2023/04-迄今 英國曼徹斯特大學, 藥學暨驗光學系 榮譽研究員

2018/03-2023/3 英國曼徹斯特大學, 藥學暨驗光學系 博士後研究員

2014/02-2014/08 國立臺灣大學醫學院附設醫院新竹臺大分院, 藥劑部 藥師

專長/ Areas of Expertise

藥物流行病學、藥品使用評估、藥品政策評估、疾病流行病學、實證醫學

與談人 / Panelist - 陳詩政

姓名 / Name: 陳詩政 / Shih-Cheng Chen

現職 / Current Position:

國家衛生研究院癌症研究所助研究員

Project Assistant Investigator

National Institute of Cancer Research

National Health Research Institutes

e-mail: scchen@nhri.edu.tw



簡介 / Short Bio

Dr. Shih-Cheng Chen has multi-disciplinary training from academic/industrial/administrative perspectives in the field of biomedical science. He is particularly interested in medical RNA biology and related health data science.

學歷 / Education

Ph.D., Department of Molecular Genetics, Leiden University, The Netherlands

經歷 / Work Experience

Project Assistant Investigator, National Institute of Cancer Research, National Health Research Institutes, Taiwan

Adjunct Assistant Professor, Department of Biochemistry and Molecular Biology, College of Medicine, National Cheng-Kung University, Taiwan

專長/ Areas of Expertise

RNA biology in cancers and infectious disease.