


2021 臺北榮民總醫院國際醫學教育研討會
International Symposium of Medical Education at Taipei Veterans General Hospital

疫情下的醫學教育 -虛實相輔的科技運作

Medical Education amid the Pandemic
Virtual and Factual Applications
in Clinical Practices



主辦單位：  臺北榮民總醫院

協辦單位：  國立陽明交通大學醫學院 / 醫學系
思源內科醫學研究發展基金會
安斯泰來醫學研究發展基金會



**Taipei Veterans
General Hospital
Superintendent
Professor Huey-Herng Sheu**

Ever since 2011, we have been honored and very delighted to invite globally-renowned professionals to join the international symposium of medical education in our hospital annually. Every year we have learnt abundant cutting-edge knowledge delivered by either domestic or international experts and are always keen on bringing about the latest and most inspiring context for our attendees over the country. This year we will focus on the subjects as to AI applications that are implemented upon medical practices in an attempt to refine online professional training in medicine in the face of coronavirus variants. We look forward to becoming one of the pioneers in creating initiative and intelligent fashions in medical education.



**Taipei Veterans
General Hospital
Vice Superintendent
Professor Ming-Chih Hou**

We experienced the first COVID-19 outbreak since the mid-May of 2021. The Covid-19 pandemic has impacted almost every facet of normal life in Taiwan. However, advances in medical education are now happening at light speed. While the online applications are increasing, the medical training system could maintain to develop. Fortunately, we will invite the professionals of other post-pandemic countries in the international medical education conference. We expect them to share their precedent know-hows on advanced implementations and to discuss the applications of each other in medical education area.



**National Yang Ming Chiao
Tung University
Dean of College of Medicine,
Professor Chen-Huan Chen**

Clinical practices and fundamental medical education have always bonded tightly and thrived together, so have been the Yang Ming medical school and the TVGH. We together have cultivated plenty of prominent professionals and doctors. Currently though we are facing a mutual enemy, the pandemic, that hurdles the on-site practices and bedside education. Both have been traditionally commenced and trustworthy for student training. This year in February, National Yang Ming University has incorporated resources out of National Chiao Tung University, a university that owns a high reputation in computer and informative science. With this powerful alliance, we will expect a new dimension to be drawn out in medical education.



**Taipei Veterans
General Hospital
Director of Department of
Medical Education,
Professor Ying-Ying Yang**

While the pandemic outbreak suddenly emerged in May, the Department of Medical Education promptly has set up many COVID-19-associated mandates and provisions, including websites, guidelines, apparatuses and communication groups to tackle the upcoming emergent demands. For example, we created VR and AR guidelines and teleconference manner guidelines for demonstrating a proper online clinical procedure that was largely demanded during the period. Apart from advancing the training in clinical learning and practice online, we also arranged a series of conferences national wise in July, which consisted of four aspects of topic centering the issue of the pandemic. Each conference, attendees were swarmed not only from our three branches of Veterans General Hospitals but also from regional hospitals and local clinics national-wise. Furthermore, we have published special issues for subscribers to catch up with the latest coronavirus-related information. All of the aforementioned accomplishments were established on the foundation of newly-built internet technology and virtual development, which will be the core subject in the symposium as well. We hope to gather intelligent ideas and incredible innovations for no matter what viral variants come forward in the future.



**Taipei Veterans
General Hospital
Director of Division of
Faculty Development
Associated Professor
Ming-De Chen**

The international symposium of medical education has been one of the annual grand ceremonies for Taipei Veterans General Hospital. The theme of 2021 is “Medical Education amid the Pandemic—Virtual and Factual Applications in Clinical Practices”, which aims to lighten the powerful combination of AI and medical education under the torment of COVID-19. With the growing creativity of AI and cyber technology, we hope for a novel transformation in medical education in no time. The symposium will be conducted onsite and online synchronically due to the restriction in the pandemic. As the chief of DFD, I feel fully supported and grateful from the superiors and our staff for their innovation and devotion to the event.

疫情下的醫學教育-虛實相輔的科技運作

Medical Education amid the Pandemic Virtual and Factual Applications in Clinical Practices



Oct. 15th, 2021

Venue: 1st Conference Room, Chih-Teh Building

Time 時間	Topic 題目	Speaker 演講者	Moderator 座長
08:20-08:50		Registration 報到	
08:50-09:00	Opening Remarks 開幕致詞	Huey-Herng Sheu, Superintendent Taipei Veterans General Hospital 臺北榮民總醫院 許惠恒院長 Shan-Chwen Chang, Vice President, National Taiwan University 國立台灣大學 張上淳副校長 Chi-Hung Lin, President, National Yang Ming Chiao Tung University 國立陽明交通大學 林奇宏校長	
09:00-09:30	[Session I] Faculty Development Reimagining the Future of Medical Education	Teresa Chan, Associate Dean, Continuing Professional Development, Faculty of Health Sciences, McMaster University	Huey-Herng Sheu, Superintendent Taipei Veterans General Hospital 臺北榮民總醫院 許惠恒院長
09:30-10:00	We're Not Talking to Screens: How to Prepare Faculty for Interactive Online Teaching	Peggy Hsieh, Director of Educational Development, Office of Educational Programs, University of Texas Health Science Center Houston (UTHealth)	Chi-Hung Lin, President, National Yang Ming Chiao Tung University 國立陽明交通大學 林奇宏校長
10:00-10:30	Strategies to Promote Students' Cognitive and Social Engagement in Online Learning	Lu-Chun (Regine) Lin, Director of Higher Education Accreditation for Teaching, National Yang Ming Chiao Tung University 國立陽明交通大學 國際高教培訓暨認證中心主任 林律君教授	Chen-Huan Chen, Dean College of Medicine, National Yang Ming Chiao Tung University 國立陽明交通大學醫學院 陳震寰院長
	Lessons Learned from a Web-based Residents as Teachers Program: Local experience	Jen-Feng Liang, Attending Physician, Dept. of Medical Education, Taipei Veterans General Hospital 臺北榮民總醫院教學部 梁仁峯醫師	
10:30-10:50		Panel Discussion 綜合討論	
10:50-11:10		coffee Break 茶敘	
11:10-11:40	[Session II] Clinical Medical Education Transforming Clinical Training during COVID-19	Sara Fazio, Professor of Medicine; Advisory Dean, Director of Core Clinical Curriculum, Harvard Medical School	Yan-Shen Shan, Dean College of Medicine, National Cheng Kung University 國立成功大學醫學院 沈延盛院長
11:40-12:10	Assessment and Evaluation during COVID-19 pandemics	Maria Guadalupe Zavala-Cerna, Basic Sciences Director, International Program of Medicine, University Autonoma de Guadalajara	Han-Jung Chen, Dean College of Medicine, I-SHOU University 義守大學醫學院 陳翰容院長

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Time 時間	Topic 題目	Speaker 演講者	Moderator 座長
12:10-12:40	虛實交融的臨床醫學教育 - 挑戰與啟發 Interweaving virtual and factual clinical education -challenge and inspiration	Ling-Yu Yang, Director Dept. of Medical Education, Taipei Veterans General Hospital 臺北榮民總醫院教學部 楊令瑀主任	Ming-Chih Hou, Vice Superintendent Taipei Veterans General Hospital 臺北榮民總醫院 侯明志副院長
	在臺灣 COVID-19 疫情期間生理學線上教學之成果分享 Outcomes of Online Learning in Physiology Course amid COVID-19 Pandemic in Taiwan	Yuan-I Chang, Associate Professor Dept. of Physiology, National Yang Ming Chiao Tung University 國立陽明交通大學生理所 張原翊副教授	
12:40-13:00	Panel Discussion 綜合討論		
13:00-14:10	Lunch 中午休息		
14:10-14:40	【Session III】 Technology-assisted Online Teaching 智慧虛擬科技在臨床教育之應用 The Application of AI-enhanced Virtual Simulation in Clinical Education	Tsuen-Chiuan Tsai, Professor College of Medicine, Kaohsiung Medical University 高雄醫學大學醫學院 蔡淳娟教授	Ying-Ying Yang, Director Dept. of Medical Education, Taipei Veterans General Hospital 臺北榮民總醫院教學部 楊盈盈部主任
14:40-15:10	後疫情時代，改變銀髮健康促進的遠距智慧應用 Telehealth in preventive medicine: smart social network for enhancing health literacy and behavioral change	Ren-Hao Pan, Associate Professor, Dept. of Information Management, Tunghai University 遠距健康平台創辦人 潘人豪博士	Hao-Min Cheng, Director Dept. of Medical Education, Taipei Veterans General Hospital 臺北榮民總醫院教學部 鄭浩民主任
15:10-15:30	Panel Discussion 綜合討論		
15:30-15:50	coffee Break 茶敘		
15:50-16:20	【Session IV】 Medical Education in AI 人工智慧如何輔助醫學教育 How Medical Education Can Be Assisted by Artificial Intelligence	Yen-Yuan Chen, Associate Director, Dept. of Medical Education, National Taiwan University Hospital 國立臺灣大學教學部 陳彥元副主任	Shou-Yen Kao, Vice Superintendent Taipei Veterans General Hospital 臺北榮民總醫院 高壽延副院長
16:20-16:50	疫情下資訊化的跨領域教育的萬花筒 Digitised Interdisciplinary Education under the Impact of Covid-19	Ying-Ying Yang, Director Dept. of Medical Education, Taipei Veterans General Hospital 臺北榮民總醫院教學部 楊盈盈部主任	Ping-Keung Yip, Dean College of Medicine, Fu Jen Catholic University 輔仁大學醫學院 葉炳強院長
16:50-17:10	Panel Discussion 綜合討論		
17:10-17:20	Presentation Awards 頒獎典禮 (侯明志副院長 / 陳震寰院長 / 凌憬峯主任 / 葉炳強院長)		
17:20-17:30	Closing Remarks 閉幕致詞		Ming-Chih Hou, Vice Superintendent Taipei Veterans General Hospital 臺北榮民總醫院 侯明志副院長 Chen-Huan Chen, Dean College of Medicine, National Yang Ming Chiao Tung University 國立陽明交通大學醫學院 陳震寰院長

疫情下的醫學教育-虛實相輔的科技運作

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Oct. 16th, 2021

Venue: Clinical Innovation Center, 9F, The 3th Outpatient Building

Time 時間	Topic 題目	Speaker 演講者	Moderator 座長
8:00-8:30	Registration 報到		
	Workshop I Workshop of Video Production for OpenCourseWare (OCW) 開放式課程影音製作工作坊		
	Video Recording and Editing for Open Courses 開放式課程影片拍攝與剪輯流程建置	OpenCourseWare Team(Feng-Chen, Hsieh, Khoo Ken Nett, Mong-Ying, Lin), National Yang Ming Chiao Tung University 交大校區教學資源組 OpenCourseWare 團隊 (謝奉珍、林孟盈、邱津雷講師群)	Yong-Sheng Chen, Associate Dean, Office Of Academic Affairs(Chiao Tung Campus), NYCU 國立陽明交通大學 陳永昇校區副教務長
8:30-12:00 Concurrent Workshop	Workshop II Medical Teaching with Digital Tools and Information Technology 資訊科技及數位工具於醫學教育上之應用		
	Teaching Behavioral Science and The Humanities to Dental Students - A New Model of Context-based Learning Via Electronic Games 「醫者心」該如何教? - 以臨床醫病互動電子遊戲為學習媒介	Chia-Shu Lin, Professor, Dept. of Dentistry, National Yang Ming Chiao Tung University 國立陽明交通大學 牙醫學院牙醫學系 林嘉澍教授	Li-Fen Chen, Associate Dean, Office of Academic Affairs Director, Information Technology Service Center (Yang-Ming Campus), NYCU 國立陽明交通大學 校區副教務長暨資訊技術服務中心校區主任 陳麗芬主任

The background is a solid teal color. On the left side, there are several overlapping, wavy white lines that create a sense of motion and depth, resembling a stylized wave or a series of concentric curves. The lines are thin and closely spaced, creating a mesh-like effect in some areas.

Oct. 15th, 2021
Main Conference

疫情下的醫學教育-虛實相輔的科技運作

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CURRICULUM VITAE



Teresa Chan

Hamilton, ON, Canada

Associate Dean, Continuing Professional Development, Faculty of Health Sciences (Starting July 1, 2021)

Qualifications

MD FRCPC, MHPE

Past Appointments

- | | |
|--------------|---|
| 2017-Present | Specialty Committee Chair, Area of Focused Competence, Clinician Educator Program, Royal College of Physicians and Surgeons of Canada |
| 2019-Present | Associate Professor, Department of Medicine, Faculty of Health Sciences, McMaster University |
| 2019-2021 | Assistant Dean, Faculty Development, Faculty of Health Sciences, McMaster University |

KEYNOTE LECTURE INFORMATION

Reimagining the Future of Medical Education

The COVID-19 pandemic has changed the way we must teach. What does the future of medical education look like? What trends are there in the world around us that might signal the types of changes we must adapt to as faculty members?

Join Dr. Chan in a digital workshop to think through what the near future of medical education might look like. She will pull together some signals from healthcare and other fields to help you reflect on what skills you might need as a faculty member in today's modern era.

Objectives:

By the end of this session, participants will be able to:

- identify some hard and soft trends in the future of medical education;
- name one area of interest they'd like to explore;
- set a goal for their own future development.

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CURRICULUM VITAE



Peggy Hsieh 謝佩璇

U.S.A.

Director of Educational Development and Associate Professor, McGovern Medical School at University of Texas Health Science Center Houston (UTHealth)

Qualifications

MEd, PhD

Past Appointments

- Education Specialist
- Vice Chair of Faculty Development Special Interest Group
- Steering Committee Member at Large
- McGovern Medical School at UTHealth (2009-2014)
- Southern Group of Educational Affairs (2017-2018)
- Southern Group of Educational Affairs (2018-2020)

KEYNOTE LECTURE INFORMATION

We're Not Talking to Screens: How to Prepare Faculty for Interactive Online Teaching

When COVID-19 pandemic hit the US in March 2020, McGovern Medical School at UTHealth immediately shifted all in-person classes to remote education to abide by government regulations to slow the progression of the disease.

Although both online teaching and distance education have been utilized in health education for decades, this sudden shift to mandated remote teaching at our institution resulted in a lot of stress for faculty, staff, and learners. Our faculty have predominantly taught classes in-person prior to the pandemic so this mandate required immediate faculty development training. Faculty voiced concerns about their lack of preparedness to teach with the web-conferencing tool, WebEx. They also expressed uneasiness about finding ways to engage learners using technology when everyone is sitting behind computer screens. During faculty development sessions in previous years, the main focus has been engaging learners in large lecture halls. Now, training had to be geared toward the proficient use of educational technology tools and strategies for delivering effectiveness online teaching sessions. As much as educators want to use different teaching methods to engage learners, they often don't have the repertoire of strategies to do so in this new setting.

The focus of this session is to share online teaching strategies through the application of educational principles and learning theories. The goal is to promote interactive teaching and successful learning experiences. The presenter will demonstrate ways faculty can be interactive and engaging while teaching online. During the workshop, the presenter will provide opportunities for hands-on application of these tools.

By the end of the session, faculty will be able to:

1. Use basic Web-Conferencing functions
2. Use principles of teaching to conduct an interactive web session
3. Implement effective teaching strategies to engage with audience
4. Implement activities to conduct an interactive session

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CURRICULUM VITAE



Lu-Chun Lin 林律君

Taiwan
Associate Professor

Qualifications

Ph.D. Speech and Hearing Science at the Univ. of Illinois at Urbana-Champaign

Senior Fellow Higher Education Academy (HEA)

Google Certified Educator Level 1
Level 2

Past Appointments

Head Institute of TESOL

Director Language Teaching & Research Center

Director Higher Education Accreditation for Teaching
National Yang Ming Chiao Tung University, Taiwan

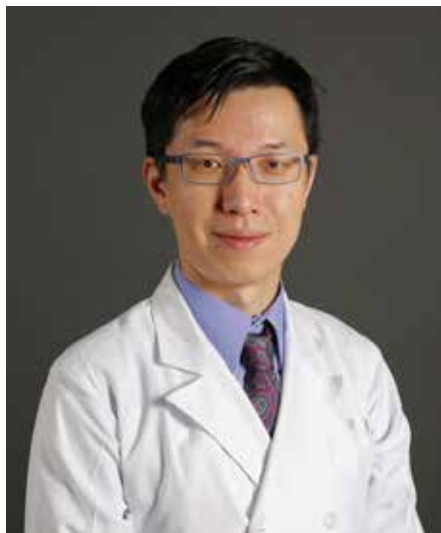
KEYNOTE LECTURE INFORMATION

Strategies to Promote Students' Cognitive and Social Engagement in Online Learning

Since early 2020, the Covid-19 pandemic hit the world and has impacted all aspects of our lives, especially education systems at all levels in almost all countries around the world. Within higher education, the shift to emergency online teaching and learning has raised concerns about how to facilitate or maintain student engagement in order to achieve the best learning outcomes possible. In this presentation, I will discuss how the Community of Inquiry framework (Col, Garrison et al., 1999) can inform and structure our online teaching. I will share ways to design online learning experience and environment through the three dimensions of the Col framework, namely teaching presence, social presence, and cognitive presence. These three presences have been shown to facilitate student engagement, contribute to students' perceived learning, satisfaction with the course as well as with the instructor, and develop a productive online learning environment through which knowledge is constructed and skills developed (e.g., Richardson, et. al., 2017). I will also share a variety digital tools that could be used to promote student engagement, active learning, and collaborative learning. As online teaching is becoming part of a new norm especially in higher education, now is the opportune moment for us to experiment, innovate, and break new grounds in online teaching.



CURRICULUM VITAE



Jen-Feng Liang 梁仁峯

Taiwan

Attending Physician, Department of Medical Education, Taipei Veterans General Hospital, Taiwan (2010~);

Assistant Professor, School of Medicine, National Yang Ming Chiao Tung University, Taipei, Taiwan (2016~)

Qualifications

MEd. University of Houston, Texas, USA (2020)

MD. Taipei Medical University, Taipei, Taiwan (2002)

Past Appointments

- Acting Chief, Section of Teaching Affairs, Taipei Veterans General Hospital, Taiwan (2020)
- Research Scholar, Center of Research, Innovation and Scholarship for Medical Education, Baylor College of Medicine/Texas Children Hospital, Houston, USA (2018-2019)
- Attending Physician, Department of Neurology, Taipei Buddhist Tzu-Chi General Hospital, Taipei, Taiwan (2008-2010)

KEYNOTE LECTURE INFORMATION

Lessons Learned from a Web-based Residents as Teachers Program: Local experience

Residents play an important teaching role in the medical care teams. Besides, teaching also has a positive impact on the clinical training of residents themselves. As a result, many "residents as teachers (RaT)" program emerged to enhance the skills as teachers for residents.

However, these trainee teachers are very busy in clinical training and have relative low willingness to attend the RaT training courses. Web-based courses have been increasingly used in medical education, especially during the COVID-19 pandemic. The flexibility of web-based learning, which appear to be ideal for busy residents because the learning related time consuming is substantially shortened, may inspire residents to participate such teaching skill training.

Since 2019, Taipei Veterans General Hospital launched a longitudinal, web-based RaT program for first year residents. The program is totally asynchronous and comprised of eight topics about teaching and evaluation within two years. In this short report, we would like to share the experience and lessons learned from implementation and evaluation of this online RaT program.

By the end of the session, faculty will be able to:

1. List the potential difficulty encountered during an online training program
2. Use the shared tips of development of asynchronous online training to plan the web-based courses.

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CURRICULUM VITAE



Sara B. Fazio MD

United States
Professor of Medicine, Harvard Medical School

Qualifications

MD Department of Internal Medicine, Beth Israel Deaconess Medical Center

Past Appointments

Advisory Dean Office of Student Affairs, Harvard Medical School

Core Curriculum Director Harvard Medical School

Associate Director of Education HMS Center for Primary Care

Board Chair Alliance for Academic Internal Medicine, 2015-2017

Clerkship Director Internal Medicine Clerkship, 1999-2015

KEYNOTE LECTURE INFORMATION

Transforming Clinical Training During COVID-19

The COVID-19 pandemic forced educational institutions around the world to change how students were taught. I will highlight some of the changes Harvard Medical School made to its clinical curriculum in order to meet the needs of the students during this unprecedented time, when students were unable to be present in the clinical setting.

- Creation of virtual radiology clerkship
- Asynchronous flipped classroom
- Telemedicine curriculum
- Medical Student COVID-19 curriculum
- Community engagement/advocacy
- Clinical reasoning didactics
- Virtual OSCE
- Advanced Clinical Content and Skills
- Lessons learned



CURRICULUM VITAE



Maria G. Zavala-Cerna

Mexico

Basic Sciences Director, International Program of Medicine, Universidad Autonoma de Guadalajara

Qualifications

MD, PhD

Past Appointments

- Research Professor International Program of Medicine, UAG
- President of the Mexican Chapter Medical Association of the United States and Mexico
- Director of Basic Sciences International Program of Medicine, UAG.

KEYNOTE LECTURE INFORMATION

Assessment and Evaluation during COVID-19 pandemics

A competency-based approach to medical education relies on continuous, comprehensive, and elaborated assessment and evaluation systems. There are several benefits on well performed assessments and feedback to instructors, students and programs, therefore we need to be confident on results obtained as being reflective of the truth. As COVID-19 became the new normal, the implementation of changes for assessment and evaluation were shaken, and we had to apply several changes. Hereby, I present several changes adopted by our institution with common mistakes and the way we were able to continue with remote assessment and feedback, while providing and equitable experience to our students, and more importantly how we were able to obtain trustable data for decision making and accreditation purposes. Data is trustable, since we were able to reinforce security on items and extra security on exam takers, by the use of a software that allowed for videorecording of exam sessions, examined by both AI and human eyes, in order to detect suspicious behavior of breaking academic integrity.

The completion of changes have had a tremendous impact in our evaluations and certain tools will be kept as they have shown to be very useful not only to continue with remote evaluations but also to facilitate value added assessment and tracking of evaluations and competencies achievements throughout the curriculum; which is useful for students in the purpose of acquiring metacognition, to faculty members in order to allow the creation of a scaffold of evaluations in a longitudinal form, and to the program for accreditation purposes.

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CURRICULUM VITAE



Ling-Yu Yang 楊令瑀

Taiwan
Professor

Qualifications

M.D.

Ph.D. Institute of Clinical Medicine, National Yang Ming University

M.D. School of Medicine, National Yang Ming University

Past Appointments

Commissioner Associate Dean of College of Medicine, National Yang Ming Chiao Tung University

Supervisor Director of Faculty Development Centre, College of Medicine, National Yang Ming Chiao Tung University

Director Director of Department of Medical Education/Taipei Veterans General Hospital

KEYNOTE LECTURE INFORMATION

Interweaving virtual and factual clinical education-Challenge and Inspiration

The COVID-19 pandemic has brought steep challenges to medical education, especially for clinical education given that its core value of "patient care". However, crisis brings innovation. Those previously being "impossible" and "not possible" have been forced to be redefined or invented. For example, online TBL flipped learning, online outpatient clinics learning, online ward teaching rounds, online surgery teaching and other clinical teaching activities are applied as substitute strategies for traditional one-to-one or one-to-few workplace-based training. Recently, the World Federation of Medical Education (WFME) has proposed a 2021 version guideline for distributed learning and distance learning. In this keynote speech, the speaker will share how National Yang Ming Chiao Tung University and Taipei Veterans General Hospital cope with COVID-19 pandemics and to initiate new platforms of clinical learning and evaluation alternatives to ensure sufficient clinical learning experiences for the medical students. Besides, the points of how to learn from the adoptive experience and to re-plan the clinical education by interweaving the virtual and factual clinical activities in post-pandemic era are also demonstrated. All the efforts are to bring the clinical education to a higher level no matter what new challenges might have in the future.



CURRICULUM VITAE



Yuan-I Chang

Taipei, Taiwan
Associate Professor, Department and Institute of Physiology, National Yang Ming Chiao Tung University

Past Appointments

- Assistant Professor Department and Institute of Physiology, National Yang Ming Chiao Tung University
- Secretary General Wisconsin Foundation & Alumni Association-Taiwan Chapter
- Postdoctoral Researcher McArdle Laboratory for Cancer Research, University of Wisconsin-Madison

KEYNOTE LECTURE INFORMATION

在台灣 COVID-19 疫情期間生理學線上教學之成果分享

Outcomes of Online Learning in Physiology Course amid COVID-19 Pandemic in Taiwan

The coronavirus disease of 2019 (COVID-19) is an infectious disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Efforts of preventing the spread of COVID-19 have prompted a widespread closure of schooling in over 100 countries. The COVID-19 pandemic also tremendously disrupted the routine of medical education. Due to the COVID-19 pandemic in the spring of 2020, the physiology course switched from face-to-face to online instruction from April to June of 2020 in National Yang Ming Chiao Tung University (NYCU). To face the COVID-19 pandemic and improve the learning outcome in basic medical education, the new policy of medical education was carried out in the College of Medicine, NYCU. Thus, on-line physiology course was practiced from February, 2021.

However, less is known whether students' academic motivation and outcomes changed accordingly, when accounting for students' mental health, which could be compromised by the pandemic-related stress. Here, I will describe firstly how we did for teaching physiology course on-line, and what students' responses in physiology and experimental physiology on-line courses in NYCU. Second, to understand the students' academic motivation and mental health change after shifting to online medical education, sixty undergraduate students who were taking physiology in spring 2020 completed a survey questionnaire and responded to questions pertaining to motivation of learning physiology, level of depressive symptoms, and mid-term and final grade before and after the transition to online instruction. Descriptive statistics, confirmatory factor analysis, and multivariate regression analyses were conducted to answer the research questions. Students reported a higher level of attainment value and self-efficacy in physiology after transitioning to online instruction. Moreover, an improvement in the positive mood before and after the transition was related to a better perceived academic achievement in physiology. The study highlights the potential of online instruction of physiology for aspiring medical professionals. In particular, instructors and counseling services should pay close attention to students' mental health in order to support academic success during online instruction under the pandemic.

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CURRICULUM VITAE



PAN, REN-HAOPH.D.

R.O.C. (Taiwan)

CEO, La Vida Tec Co., Ltd.

Assistant Professor, Department of Information Management, Tunghai University

Assistant Professor, Institute of Hospital and Health Care Administration,

National Yang-Ming University

Past Appointments

- 2014 – 2016 Project-Appointed Assistant Professor, Innovation Center for Big Data and Digital Convergence, Yuan Ze University, Chung-Li, Taiwan
- 2013 – 2014 Chief of Technology Research and Development, Office of International Affairs, TaoYuan General Hospital, Ministry of Health and Welfare, Tao-Yuan, Taiwan
- 2011 – 2012 Asistente Tecnico, Mision Tecnica de Taiwan en la Republica del Ecuador, Quito, Republic of Ecuador

Scholarly Activity

- 2018 Committee, "Open Medical and Health Data Project", Ministry of Health and Welfare
- 2017 Advisor, "Local Government Open Data and Innovative Application Project", Industrial Development Bureau, MOEA
- 2017 Technical Program Committee, International Conference on Big Data, Small Data, Linked Data and Open Data (ALLDATA 2017), Venice, Italy

KEYNOTE LECTURE INFORMATION

Telehealth in preventive medicine: smart social network for enhancing health literacy and behavioral change

In this aging generation, the demand for healthcare has increased significantly. Healthcare resources are highly concentrated in urban areas due to the effect of urbanization. This widening the gap between urban and rural areas brings a significant challenge for healthcare promotion in remote areas. Nowadays, with the rapid development of telecommunications infrastructure, broadband networks, and streaming technologies, the gap of healthcare accessibility could easily be solved by applying the telehealth in remote areas by digitally connecting urban healthcare professionals with rural residents.

This speech will share how our team overcomes distance barriers by using digital health and social network technology, and how attracted a large number of health-related experts to contribute their expertise online with an uber-like telehealth platform, providing diverse types of professionals for people in remote areas to solve various health needs. Also, by collecting medical and personal health data via telehealth from rural communities, community health workers can better understand the disease patterns and health education requirements of residents and elders and make customized health promotion arrangements according to their needs for enhancing health literacy and behavioral change.

Through this online telehealth feature, anyone anywhere can access to professional online consultation and capacity building curriculum services, allowing experts to support caregivers remotely, solve problems encountered in healthcare service, capacity building, and achieve preventive medicine.

疫情下的醫學教育-虛實相輔的科技運作

Medical Education amid the Pandemic Virtual and Factual Applications in Clinical Practices



CURRICULUM VITAE



Yen-Yuan Chen

TWN

Associate Chairman, NTU Medical School

Deputy Director, NTUH Dept. Medical Education

Director, NTUH Health Resource Service Center

Qualifications

MD National Taiwan University

MPH Johns Hopkins University

Ph.D. Case Western Reserve University

Past Appointments

Professor NTU Graduate Institute of Medical Education and Bioethics

Attending NTUH Dept. Medical Education

KEYNOTE LECTURE INFORMATION

How Medical Education Can Be Assisted by Artificial Intelligence

Because of the dramatically advanced information and communication technology in the past decade, algorithms are quickly emerging and can be employed even more rapidly than ever. Accordingly artificial intelligence is getting more and more widely being used not only in non-medical professions, but also is expected in medical profession and medical education. Unlike other non-medical profession, training and education in medical profession highlight not only the comprehension of medical knowledge, but also skillful acquaintance with clinical skills and mature attitude toward medical practice. In this talk, several different fields in medical education supposed to be assisted with artificial intelligence will be elaborated: online learning; game-based learning; assessment; and collaborative learning, and so on. In addition, the limitation and concerns about applying artificial intelligence to medical education



CURRICULUM VITAE



Ying-Ying Yang

Taiwan
Chief, Department of Medical Education, Taipei Veterans General Hospital

Qualifications

- | | |
|-----------|---|
| 2010-Now | TAME PGY mentors/ committee member, Taipei VGH "PGY clinical Instructor Training program" |
| 2014-now | Organizers for basic Clinical Skills (BCS) curriculum of National Yang-Ming University |
| 2009 | Liver Unit, Department of Medicine, University of Calgary, Calgary, Canada, post PhD |
| 2008-2011 | Yang-Ming Medical school, Taipei, Taiwan, MPH of and Public Health |
| 2004-2007 | Yang-Ming Medical school, Taipei, Taiwan, PhD of Physiology |

Past Appointments

- | | |
|---------------|--|
| 2002-2005 | Attending Physician of Taipei City Hospital |
| 2006- present | Attending Physician of General Medicine, Taipei Veterans General Hospital |
| 2014-present | Professor, School of Medicine, National Yang-Ming University |
| 2014-present | Professor, Institute of Clinical Medicine, Department of Medicine, National Yang-Ming University |

Awards

- | | |
|-----------|---|
| 2011-2021 | Excellence in Teaching Award, Taipei Veteran General Hospital, Yang-Ming University |
| 2013 | Wu Ta-Yu Memorial Award, National Science Council, Taiwan |
| 2012 | Young Investigator award, Academia Sinica, Taiwan |
| 2013 | Liver Disease prevention & treatment research foundation, outstanding research award |
| 2012 | The Taiwan Association for the Study of the Liver foundation, outstanding research award |
| 2011-2015 | Taipei Professor Lin Rung Yao foundation, research award
Taiwan Association of Medical Education, Best video award |

KEYNOTE LECTURE INFORMATION

Digitized Interdisciplinary Education under the Impact of Covid-19

In the most drastic period of the pandemic in Taiwan, the head of TVGH recruited program directors and CRs from different clinical units collectively to set up responding teams for coping with COVID-19 outbreak that promptly happened in May. We set up a page on the hospital website to announce the latest news following the policy released from the Ministry of Education for our students. Meanwhile, we set up many COVID-19-associated mandates, provisions, guidelines followed in 3-level alerts and plenty of accessible online learnings. We blend virtual with on-site training modules, adjusting and tracking the training efficacy through the way. The modules are delivered on diverse occasions. One example of Augmented Reality (AR), students get to review the hand-washing steps and guidelines of occupational safety through a smartphone whereas Virtual Reality (VR) implies a complete immersion experience that demonstrates surgical steps. For the training that requires physical presence, such as bedside teaching and daily ward rounds, we allow only a small number of participants in proper PPEs to conduct the procedures. Furthermore, we employ smart glasses in our theatres for enlarging the capacity of students limited by the pandemic policy and for exploring the detailed processes during a surgery. The surgeon aide can demonstrate a surgical process thoroughly and safely through a smart glass to students afar. As far as an assessment goes, take OSCE for instance, we are transforming conventional clinic visits to remote online visits in a way of splitting post-graduate-year students into small groups to take their practical exams.

Having said that, there are many developing modules due to the impact of the COVID-19, and we certainly look forward to creating more interdisciplinary platforms in low-risk contact to elevate medical education to another level.

The background is a solid teal color. On the left side, there are several overlapping, wavy white lines that create a sense of motion and depth, resembling a stylized wave or a series of overlapping curves. The lines are thin and closely spaced, creating a mesh-like effect in some areas.

Oct. 16th, 2021
Workshop

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CURRICULUM VITAE



Feng-Chen, Hsieh

Taiwan

Project Assistant, National Yang Ming Chiao Tung University

Qualifications

2014 MFA., Graduate Institute of Plastic Arts, Tainan National University of The Arts, Tainan, Taiwan

2009 B.A., Department of Fine Art, National Kaohsiung Normal University, Kaohsiung, Taiwan

Past Appointments

2017-present Project Assistant, National Yang Ming Chiao Tung University

WORKSHOP INFORMATION

Video recording and editing for open courses

Recommended Participants

20-30 persons, Medical professionals who demand production skills for digital teaching materials

Completion Message

Upon completion of this workshop, participants will be able to learn the setup and operation of video cameras, video editing, production skills of digital teaching materials for medical education through lectures and hands-on practices.

Description

This workshop will conduct the training for producing the digital teaching materials of medical education through introducing the producing process of OpenCourseWare (OCW) and hands-on exercises.

First, the workshop will briefly introduce the purpose of OpenCourseWare (OCW) in order to identify digital learning resources, promote the Creative Commons (CC) licenses terms, and emphasize the importance of the concept of intellectual property rights.

Second, in this workshop we will use photographic equipment, SONY-Z90, to demonstrate the operating process of video recording and explain the important issues of video recording. Participants can learn the basic concepts of the camera aperture, shutter, focal length, lens position, and tripod settings through hands-on practice.

Finally, we will demonstrate the basic concepts and skills of video editing by using the editing software "Camtasia". Participants will learn how to make picture-in-picture video, use video effects, and create simple opening animation.

Participants will be able to apply the relative editing skills to other editing software in the future.

By participating in this workshop, it can be anticipated to enhance the participants' capabilities to create the digital teaching material of medical education through hands-on exercises.

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CURRICULUM VITAE



Mong-Ying, Lin

Taiwan

Project Assistant, National Yang Ming Chiao Tung University

Qualifications

2019

B.A., Communication and Technology, National Chiao Tung University, Hsinchu, Taiwan

Past Appointments

2020- present

Project Assistant, National Yang Ming Chiao Tung University

WORKSHOP INFORMATION

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CURRICULUM VITAE



KHOO KEN NETT

Malaysia

Project Research Assistant, National Yang Ming Chiao Tung University.

Qualifications

2017 Bachelor Degree, National Yang Ming Chiao Tung University.

Past Appointments

2017-present Project Research Assistant, National Yang Ming Chiao Tung University.

WORKSHOP INFORMATION

Video recording and editing for open courses

Recommended Participants

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By participating in this workshop, it can be anticipated to enhance the participants' capabilities to create the digital teaching material of medical education through hands-on exercises.



CURRICULUM VITAE



Chia-Shu Lin

Republic of China

Professor, Department of Dentistry, National Yang Ming Chiao Tung University

Qualifications

2011 D.Phil., University of Oxford

2007 M.Sc., Imperial College London

2000 D.D.S., National Yang-Ming University

Past Appointments

2016-2019 Associate Professor, Department of Dentistry

2013-2016 Assistant Professor, Department of Dentistry

WORKSHOP INFORMATION

Teaching behavioral science and the humanities to dental students - a new model of context-based learning via electronic games

Recommended Participants

Healthcare workers and educators

Completion Message

Upon completing the workshop, the learners will experience designing a computer role-playing game for healthcare education and the effectiveness of such a teaching approach.

Description

The workshop consists of three sections:

1. A short lecture about how to translate an educational topic (clinical communication) into game design.
2. A demonstration of designing a game setting.
3. A practice of playing the computer game with group discussion.



2021 臺北榮民總醫院
國際醫學教育研討會

International Symposium of Medical Education
at Taipei Veterans General Hospital



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