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Welcome
Messages
On behalf of Taiwan Medical Association, I give my warmest welcome for your attendance of the Scientific Session of World Medical Association General Assembly in Taipei.

It has been 70 years or so since the first World Medical Association (WMA) General Assembly in 1947. During the past years, WMA has served as a solid link among doctors of varied nationalities and cultural backgrounds. In addition, WMA has endeavored on an extensive range of medical topic such as, ethics, human rights, public health, health education, advocacy, campaigns, publication, media, sparing no efforts for setting up networks among doctors.

Taiwan Medical Association is honored to host the scientific session for doctors around the world and in Taiwan likewise. The theme of this year is “Healthcare System Sustainability” which includes two topics- Health System Performance and e-Health. At Session I, Health System Performance, we are about to learn how healthcare organizations could mobilize resources to improve health outcome of the population. At Session II, e-Health, we will discuss how information and communication technologies can be employed for the sustainability of health systems. We expect highly respected doctors and leaders of the world for your diverse academic discussions on these topics. Through sharing and exchanging expertise, it is positive that we shall benefit greatly from the innovation of knowledge.

Thank you for your participation and contributions to this Scientific Session. We wish you a wonderful experience and pleasant stay in Taipei.

Dr. Tai-Yuan Chiu
President,
Taiwan Medical Association
Professor,
National Taiwan University, College of Medicine
An important feature of the WMA General Medical Assembly has been the Scientific Session. It is an opportunity for colleagues from around the world to share perspectives, and plan new approaches.

As we contemplate health care systems in the future, it is clear that things will not stay the same. There are threats, challenges, and opportunities. Our task is to turn the threats into opportunities, and rise to the challenges. The digital world is a clear example of a major trend that could be a threat, but must be transformed into an opportunity to do things better. Ageing populations, and unprecedented movement of people from their homes, provide challenges. Our health care systems must rise to these challenges, within a context of budgetary constraints and demands for quality.

The contributors to this session bring a unique set of perspectives. I have little doubt that we will all benefit from their wisdom and experience. We can all be grateful to them.

Prof. Sir Michael Marmot
President,
World Medical Association
As the Chairman of Scientific Session, it is my upmost pleasure to welcome you all to the Scientific Session of World Medical Association General Assembly, Taipei 2016.

This year, after several discussions, we have set the theme of Scientific Program as “Healthcare System Sustainability”. Along with this theme, we have designed two sessions, “Health System Performance” and “eHealth”. For the health system performance, we have speakers from different regions in regarding the regional differences, also including issues of gatekeeper, global migration and refugees as well as ageing society that impact on health system performance and sustainability. The issue of big data will also be an important topic on the health system assessment.

For the eHealth, with its potential of improving accessibility of medical care and reduce costs, it has a far-reaching impact on sustainability of health system. At this session, experts from North America, South America, Africa, Europe and Asia share various perspectives on eHealth. Your participating of discussion and brainstorming will be most valuable and appreciated.

I like to express my sincere appreciation for all international speakers for their efforts and willingness to share their knowledge with us in the scientific sessions. My gratitude also goes to Dr. Tzou-Yien Lin, Minister of Health and Welfare, Taiwan, and Prof. Jack Yu-Chuan Li for their keynote speech.

Last but not least, I thank you again for your participation. Only with your participation, the success of the scientific program can be guaranteed.

Dr. Ken N. Kuo
Chairman of Scientific Session,
WMA General Assembly Taipei 2016
Agenda
# Healthcare System Sustainability
**Thursday, 20 October 2016**

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<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>08:30</td>
<td>Registration</td>
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<tr>
<td>09:00</td>
<td><strong>Opening Remarks</strong>&lt;br&gt;Prof. Sir Michael Marmot, President of World Medical Association&lt;br&gt;Prof. Dr. Ken N. Kuo, Chairman of Scientific Committee</td>
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<tr>
<td>09:10</td>
<td><strong>Keynote Speech:</strong> The Roadmap for Better Healthcare in Taiwan&lt;br&gt;Speaker: Dr. Tzou-Yien Lin, Minister of Health and Welfare, TAIWAN</td>
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<tr>
<td>09:40</td>
<td><strong>Session I: Health System Performance</strong>&lt;br&gt;Moderator: Prof. Dr. Ken N. Kuo</td>
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<td>09:40-10:05</td>
<td><strong>Topic:</strong> Health System Sustainability With Regard To Global Migration and Refugees:&lt;br&gt;The Case of Germany&lt;br&gt;Speaker: Prof. Dr. Frank Ulrich Montgomery, President of German Medical Association, Vice-Chairman of WMA</td>
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<tr>
<td>10:05-10:30</td>
<td><strong>Topic:</strong> The Sustainability of Health Care in Aging Society, A Global View&lt;br&gt;Speaker: Prof. Dr. Kenji Shibuya, Chair of Department of Global Health Policy, Graduates School of Medicine, University of Tokyo, JAPAN</td>
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<tr>
<td>10:30-10:50</td>
<td>Coffee/Tea break</td>
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<tr>
<td>10:50-11:15</td>
<td><strong>Topic:</strong> The Role of Gatekeeper in Sustaining the Health Care&lt;br&gt;Speaker: Dr. Andrew Dearden, Treasurer and Chief Officer of British Medical Association</td>
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<td>11:15-11:40</td>
<td><strong>Topic:</strong> Health Care Reform in U.S.&lt;br&gt;Speaker: Dr. Steven J. Stack, Immediate-past President of American Medical Association</td>
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<td>11:40-12:05</td>
<td><strong>Topic:</strong> Personal and Private Big Data: Genomes and Health Records&lt;br&gt;Speaker: Dr. Ju Han Kim, Professor and Founding Chair, Div. of Biomedical Informatics, Seoul National University College of Medicine, KOREA</td>
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<tr>
<td>12:05-12:30</td>
<td><strong>Panel Discussion</strong>&lt;br&gt;Moderator: Prof. Dr. Ken N. Kuo&lt;br&gt;Panelists: Prof. Dr. Frank Ulrich Montgomery, Prof. Dr. Kenji Shibuya, Dr. Andrew Dearden, Dr. Steven J. Stack, Dr. Ju Han Kim</td>
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<tr>
<td>12:30-14:00</td>
<td>Lunch break</td>
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### Session II: eHealth

**Moderator:** Dr. Min-Huei (Marc) Hsu, Director General of Medical Informatics Center, Ministry of Health and Welfare, TAIWAN

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<th>Time</th>
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<tr>
<td>14:00-14:30</td>
<td><strong>Keynote Speech:</strong> Using Artificial Intelligence to Conquer Medical Errors</td>
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<td>Speaker: Prof. Dr. Yu-Chuan (Jack) Li, Dean, College of Medical Science and Technology, Taipei Medical University, TAIWAN</td>
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<tr>
<td>14:30-14:55</td>
<td><strong>Topic:</strong> Big Data Approach in Health Care Assessment</td>
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<td>Speaker: Dr. Chun-Ying Wu, Professor of Medicine, National Yang-Ming University, TAIWAN</td>
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<td>14:55-15:20</td>
<td><strong>Topic:</strong> Health IT: The Essential Infrastructure for Universal Coverage</td>
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<td>Speaker: Dr. Florentino Cardoso, President of Brazilian Medical Association</td>
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<td>15:20-15:45</td>
<td><strong>Topic:</strong> Transforming Healthcare with Information Technology</td>
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<td>Speaker: Dr. Robert Wah, Faculty of OB/GYN-Reproductive Endocrinology, National Institutes of Health and Walter Reed Military Medical Center at Bethesda Maryland, USA</td>
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<td>15:45-16:05</td>
<td>Coffee/Tea break</td>
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<tr>
<td>16:05-16:30</td>
<td><strong>Topic:</strong> eHealth and Electronic Medical Records – Problems and Pitfalls</td>
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<td>Speaker: Dr. Mark Sonderup, Vice-Chairman of South African Medical Association</td>
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<td>16:30-16:55</td>
<td><strong>Topic:</strong> eHealth Supporting Citizens and Healthcare Services</td>
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<td>Speaker: Dr. Andreas Rudkjøbing, President of Danish Medical Association</td>
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<td>16:55-17:20</td>
<td><strong>Panel Discussion</strong></td>
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<td></td>
<td>Moderator: Dr. Min-Huei (Marc) Hsu</td>
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<td></td>
<td>Panelists: Prof. Dr. Yu-Chuan (Jack) Li, Dr. Chun-Ying Wu, Dr. Florentino Cardoso, Dr. Robert Wah, Dr. Mark Sonderup, Dr. Andreas Rudkjøbing</td>
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<tr>
<td>17:20</td>
<td><strong>Closing</strong></td>
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Keynote Speech

The Roadmap for Better Healthcare in Taiwan
Keynote Speaker
Tzou-Yien Lin
Minister
Ministry of Health and Welfare, Taiwan

Educational Background

• Fellow, Pediatric Infectious Diseases, Children's Medical Center, Dallas University of Texas Health Science Center at Dallas, 1982-1984
• Fellow, Pediatric Infectious Diseases, Buffalo Children's Hospital, State University of New York at Buffalo, 1981-1982
• M.D., Taipei Medical College, 1966-1973

Professional Experience

• Professor, Chang Gung University College of Medicine
• Superintendent, Chang Gung Children's Hospital
• Attending Pediatrician, Chang Gung Memorial Hospital & Chang Gung Children's Hospital
• President, Taiwan Pediatric Association, April 2005~May 2008
• President, Infectious Diseases Society of Taiwan Jan. 2009~2012
• Member & Convener, Advisory Committee on Immunization Practices (ACIP), Department of Health, Chinese Taipei
• Member & Convener, Vaccine Injury Compensation Program (VICP), Department of Health, Chinese Taipei

Recent Publication

• Chen CC, Kong MS, Lai MW, Chao HC, Chang KW, Chen SY, Huang YC, Chiu CH, Li WC, Lin PY, Chen CJ, Lin TY*. Probiotics have clinical, microbiologic, and immunologic efficacy in acute infectious Diarrhea. Pediatr Infect Dis J 2010;29(2):135-8. (Corresponding author)
• Chang LY, Chang JS, Chen WJ, Huang YC, Chen GW, Shih SR, Juang JL, Shih HM, Hsiung CA, Lin TY*, Huang LM. HLA-A33 is Associated With Susceptibility to Enterovirus 71 Infection. Pediatrics 2008;122:1271-6. (Corresponding author)

Over 308 monographs
The Roadmap for Better Healthcare in Taiwan

Dr. Tzou-Yien Lin
Minister
Ministry of Health and Welfare, Taiwan

One of the Ministry of Health and Welfare’s primary goals is to create supportive environments for health from cradle to grave, covering maternal and child health, NCD prevention, communicable disease control, health promotion and others. Through pursuing public-private cooperation and partnership, the Ministry increases the private sector’s engagement, thus achieving and sustaining the desired health outcomes.

The ongoing demographic transition towards an aging society will bring challenges to the health-care financing and delivery systems. In other words, increasing numbers of older adults and chronic diseases will place further strain on resources. As a result, ensuring patient safety and healthcare quality while meeting the needs of an increasingly older population is one of the Ministry’s top priorities. Training healthcare workers is essential to building local capacity and providing comprehensive services that address an increasingly older population.

Since 2008, the government has implemented a series of policies, including the “The Ten-Year Long-term Care Plan” and the “Long-Term Care Service Network Plan”. In 2016, we further increased the flexibility and expanded the service content of Long-term Care Plan 1.0. Through innovation, resource integration and extending service types, we are in the process of launching the brand new Long-term Care Plan 2.0. Simultaneously, the Ministry is promoting active ageing to enhance the health, participation and security of older citizens. Local health bureaus are in charge of providing community support and health services through collaborating with hospitals, communities and social welfare networks.

In order to guarantee the issuing of welfare aid to individuals and families who face economic hardship due to child birth, old age, sickness, death, injury, disability, loss of independence in activities of daily living and unemployment, the government has implemented various social welfare and social insurance programs to establish a social safety net that is based on the concepts of self-sufficiency, mutual dependence, and risk sharing.

To make healthcare sustainable in Taiwan, the government implemented the second generation National Health Insurance in 2013 with the goals of improving healthcare quality and ensuring inclusive and sustainable universal coverage.
Session I

Health System Performance

- Health System Sustainability With Regard To Global Migration and Refugees: The Case of Germany
- The Sustainability of Health Care in Aging Society, A Global View
- The Role of Gatekeeper in Sustaining the Health Care
- Health Care Reform in U.S.
- Personal and Private Big Data: Genomes and Health Records
Other Positions

• Attending orthopedic surgeon, Children Hospital, National Taiwan University Hospital, Taipei, Taiwan
• Visiting Professor, Institute of Population Health Sciences, National Health Research Institutes, Taiwan
• Professor of Orthopedic Surgery, Rush Medical College, Rush University, Chicago, Illinois

Educational Background

• 1961 – 1966, College of Medicine, National Taiwan University, Taiwan
• 1968 – 1969, Surgical Residency, William Beaumont Hospital, Royal Oak, Michigan
• 1969 – 1973, Orthopedic Residency, College of Medicine, University of Illinois at the Medical Center, Chicago, Illinois

Professional Experience

• 2013, Visiting professor, Department of Orthopaedic Surgery, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia
• 2006-2010, Director, Center for Health Policy Research and Development, National Health Research Institutes, Taipei, Taiwan
• 2004-2006, Associate Director, Center for Health Research and Development, National Health Research Institutes, Taipei, Taiwan
• 2003-2005, Executive Director, Forum, National Health Research Institutes
• 2012-now, Chairman, Residency Review Committee, Ministry of Health and Welfare, Taiwan
• 2012-now, Vice-Chairman, Physician Workforce Committee, Ministry of Health and Welfare, Taiwan

Recent Publications

Speaker

**Frank Ulrich Montgomery**

President
Executive Board
German Medical Association (Bundesärztekammer)

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**Other Positions**

- Vice-Chairperson, World Medical Association (WMA)
- Treasurer, Standing Committee of European Doctors (CPME)

**Educational Background**

Prof. Dr. Frank Ulrich Montgomery graduated from the University of Hamburg in 1979 after studying medicine in Hamburg and Sydney.

**Professional Experience**

Prof. Dr. Frank Ulrich Montgomery, a radiologist from Hamburg, was elected President of the German Medical Association (GMA) in 2011. Before assuming this position, he had been Vice-President of the GMA since 2007 and a member of the Executive Board between 1987 and 2002, and again from 2006. He continues to work as a consultant radiologist at the University Hospital in Hamburg. Prof. Montgomery was Chairman of the Marburger Bund, the professional organisation of the hospital-based and employed physicians of Germany, from 1989 until 2007. He currently serves as Vice-Chairperson of the World Medical Association (WMA) and Treasurer of the Standing Committee of European Doctors (CPME).
Abstract

**Health System Sustainability with Regard to Global Migration and Refugees: the Case of Germany**

Prof. Dr. Frank Ulrich Montgomery  
President  
Executive Board, German Medical Association (Bundesärztekammer)

In 2015, the German healthcare system was confronted with a major challenge of having to integrate around one million refugees into the outpatient and inpatient sectors as quickly as possible. The burden of providing medical care has been borne primarily by volunteer doctors, psychotherapists and nursing staff. The system in place is a patchwork as reflected in the inconsistent policies regarding access to healthcare services, billing procedures and benefit eligibility, which vary not only from state to state, but also from municipality to municipality.

There are no uniform and reliable nationwide structures for administering healthcare to asylum seekers in Germany, which has made the situation challenging. However, constructive discussions about these issues have also given rise to potential solutions for improving the system and eliminating bureaucratic hurdles. For example, in order to streamline procedures and ultimately reduce administrative costs, German physicians have supported the idea of introducing a health card providing access to the full range of services available in the statutory health insurance system starting on the date of registration. It could also prevent redundant examinations and delays in medical treatment resulting from the complicated process of applying for treatment vouchers. In addition, the system could benefit from the reinforcement of financial and human resources in the public health sector at both the state and municipal level.
Speaker

Kenji Shibuya

Professor and Chair
Department of Global Health Policy
Graduate School of Medicine, University of Tokyo, Japan

Other Position
President, Japan Institute for Global Health

Educational Background
• MD at the University of Tokyo
• DrPH in International Health Economics at Harvard University

Professional Experience
After teaching at Teikyo University in Tokyo, Prof. Shibuya joined the WHO’s Global Programme on Evidence for Health Policy in 2001 and was chief of the Health Statistics and Evidence Unit from 2005 until 2008. He has published widely on mortality, causes of death, burden of disease, risk factors, cost-effectiveness, priority setting, health system performance assessment and health diplomacy. He spearheaded the future strategic directions of the Japanese global health policy agenda after the Hokkaido Toyako G8 Summit in 2008. He led the Lancet Series on Japan, published in 2011 in an effort to jump-start debates on Japanese domestic and global health policy reform. He is currently an advisor to both central and local governments. This year he chaired the landmark Advisory Panel on Health Care 2035 for the Minister of Health, Labour and Welfare. He is currently the Executive Advisor on Global Health for the Ministry of Health, Labour and Welfare.

Recent Publications
Abstract

The Sustainability of Health Care in Aging Societies: A Global View

Kenji Shibuya
Professor and Chair
Department of Global Health Policy, Graduate School of Medicine, University of Tokyo

Japan achieved universal health coverage (UHC) in 1961 at the time of rapid economic development, while the country was still relatively poor. Japan has achieved one of the best population health outcomes at relatively low cost with equity over the next half century. However, Japan is facing a huge demographic and fiscal challenge to the sustainability of its health systems. This presentation will review the historical context for Japan’s health system development, examine current challenges to its sustainability, and examine ongoing efforts to reform Japan’s health system. The major objective is to share important lessons in the current debates on global health policy from Japan’s experiences.
Other Positions

• Working as GP Expert for MDDUS, MDU, and various legal firms. 2011-
• Elected Treasurer and Chief Officer of the British Medical Association 2011–
• Trustee on board of BMA Charities 2011 -
• Observer on Board of the British Medical Journal (BMJ) 2011 –
• UK Faith Advisor for The Church of Jesus Christ of Latter Day Saints to the Justice Department UK Chaplaincy Council 2012 -
• Director on the Board of the BMA 2014-
• Member of the British Medical Associations delegation to the World Medical Association 2014-
• Member of the World Medical Association's Council 2015 -
• Chairman of the WMA Business Development Group 2015 –
• Chairman of the WMA Patient Centred Care working group 2015-

Educational Background

• Laverton High School (Australia) 1974 - 1975
• Church College of New Zealand 1976 - 1979
• Tonyrefail Comprehensive School (Wales) 1979- 1981

Qualifications

• MB ChB Welsh National College of Medicine June 1988
• MRCGP Member of the Royal College of General Practitioners July 1993
• FRCGP Fellow of the Royal College of General Practitioners November 2006
• DCCH Royal College of Physicians (Ed) May 1992
• DGM Royal College of Physicians (London) Dec 1992
• DFFP Royal College of Obs and Gynae Feb 1994
Membership / Fellowships

- Elected Fellow British Medical Association May 2006.
- Elected Fellow of the Royal College of General Practitioners (FRGP) June 2006
- Member of the Institute of Directors November 2011 – 2015
- Elected Fellow of Institute of Directors September 2015

Professional Experience

1st February 1994 to 8th July 2016
Senior partner / Principal GP Responsibilities:
116 Newport Road : Business lead 1995-1998, 2006 -
CARDIFF : Child Health/Antenatal 1994-7
CF24 1YT : Prescribing 1996 - 2006
: New Contract Lead 2002 -
5 Partner Practice
Inner City Area

Publications

Abstract

**The Role of the Gate Keeper is Sustaining Healthcare**

Andrew Dearden  
Treasurer and Chief Officer  
British Medical Association

The NHS was founded on July 5th, 1948. The central principles underpinning its establishment were clear: that the health service will be available to all and financed entirely from taxation, which means that people pay into it according to their means. There have been some changes since 1948 to the way the service is accessed and how people contribute to its funding for example prescription charges were introduced in 1952, abolished in 1965 and reintroduced in 1968.

The NHS today has one of the lowest spends per capita in the industrial world. According to a study produced by the Commonwealth Fund in 2014 the NHS spends £3,405 per capita, compared to say the USA $8,508, Germany $4,495 and Australia $3,800. Yet this same study placed the NHS in first place compared to 10 other health services in the quality, effective, co-ordinated, safety, and patient centred care. The NHS also ranked first place in patients accessing care and the efficient use of resources. It was ranked 2nd in equity of care and 3rd in timeliness of care.

Yet it has a comparatively low number of beds per capita at 2.8 per 1000 of the population and a low number of physicians per capita too, at 2.8 per 1000.

This efficient and effective use of resources in providing healthcare has been credited in the main to the well-developed and comprehensive primary care services provided by the General Practitioner of the UK and their extended Primary Care Teams acting as a gate keepers to secondary care investigations, assessment and referrals.

While no healthcare system is perfect or perfectly cares for the needs of its population the NHS does demonstrate how comprehensive primary care and general practice can help a health care system use its limited resources to the best for its people.
Welcome Messages
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Keynote Speech
Session I: Health System Performance
Session II: eHealth
Educational Background

Born and raised in Cleveland, Dr. Stack graduated magna cum laude from the College of the Holy Cross in Worcester, Mass., where he was a Henry Bean Scholar for classical studies. He then returned to Ohio, where he completed his medical school and emergency medicine residency training at the Ohio State University before moving to Memphis to begin his clinical practice.

Professional Experience

Dr. Stack has served as medical director of multiple emergency departments, including St. Joseph East (Lexington), St. Joseph Mt. Sterling (rural eastern Kentucky) and Baptist Memorial Hospital (Memphis, Tenn.). He is the first emergency medicine board-certified physician to serve on the AMA Board of Trustees (BOT).

Dr. Stack has special expertise in health information technology (IT) and has led multiple AMA efforts in this area. He has been a member of numerous federal advisory committees for the Office of the National Coordinator for Health Information Technology (ONC), including the Health IT Safety Center Task Force, the Health IT Implementation, Usability and Safety workgroup, the Information Exchange workgroup, the PCAST Report workgroup, and the Strategic Plan workgroup. A member of its board of directors since 2011, Dr. Stack has also served the past three years as the secretary of eHealth Initiative, a non-profit association committed to improving health care through the advancement of health IT.

Additionally, Dr. Stack has made notable contributions to the areas of physician licensure, regulation and assessment. He has served as chair of the Federation of State Medical Boards (FSMB) Maintenance of Licensure (MOL) Implementation Group and as a member of its predecessor, the MOL Advisory Group. He has also contributed in 2014 as a member of the FSMB Special Committee on Strategic Positioning; a role similar to his prior participation on FSMB’s 2008–2009 Strategic Repositioning Task Force.

For two decades, Dr. Stack has demonstrated his professional commitment as an elected leader within numerous specialty and geographic medical professional associations at both the national and state level in Kentucky, Ohio and Tennessee. During his AMA-BOT tenure he has served as board chair in 2012–2013 as well as chair of the Compensation Committee, the Communications Strategies Committee, and the Awards and Nominations Committee.
Abstract

**Health Care Reform in the United States: Past, Present and Future Challenges**

Steven J. Stack, MD  
Immediate Past President  
American Medical Association

Enactment of the Affordable Care Act (ACA) in 2010 was the culmination of a long and contentious battle in Congress to address shortcomings in the health care system that left millions of Americans uninsured.

While the ACA has achieved notable success in expanding health insurance coverage for millions of people, and in making improvements to quality and efficiency, significant challenges remain. Political resistance to the ACA continues, millions remain uninsured or underinsured, and many people still cannot afford health coverage. Recent reforms to health care payment and delivery systems also pose significant challenges.

Dr. Steven J. Stack, immediate past president of the American Medical Association (AMA), will discuss the history of health insurance reform in the United States, the rationale for reform, and the current state of implementation of the ACA. He will discuss the AMA’s involvement in reform efforts and the challenges physicians—as well as the next U.S. President and Congress—are likely to face in the near-term future.
Speaker

Ju Han Kim

Professor and Founding Chair
Div. of Biomedical Informatics
Seoul National University College of Medicine, Korea

Other Positions

• Director, Systems Biomedical Informatics National Core Research Center
• President, Korean Society of Bioinformatics and Systems Biology

Educational Background

• M.D. (1988) Seoul National University College of Medicine, Seoul 110-799, Korea
• Board of Neuropsychiatry (1992-1996) Seoul National University Hospital, Seoul, Korea
• M.S. (1995) (Psychiatry, Brain Imaging) Seoul National University Graduate School of Medicine, Seoul 110-799, Korea
• Ph.D. (1998) (Psychiatry, Brain Imaging) Seoul National University Graduate School of Medicine, Seoul 110-799, Korea
• Douglas Porter Fellow in Medical Informatics (1997-2000), Center for Clinical Computing, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA 02115, U.S.A.
• M.S. (2001) Biomedical Informatics, M.I.T. (Massachusetts Institute of Technology), Cambridge, MA, U.S.A.

Professional Experience

• Instructor (2000) and Assistant Professor (2001) in Biomedical Informatics, Children’s Hospital, Harvard Medical School, Boston, MA 02115, U.S.A.
• Professor and Founding Chair, Div. of Biomedical Informatics, Seoul National University College of Medicine, Seoul 110-799, Korea
• Director, Interdisciplinary Program of Medical Informatics, Seoul National University Graduate School, Seoul 110-799, Korea
• Director, Systems Biomedical Informatics National Core Research Center

Recent Publications

• APEX1 polymorphism and mercaptopurine-related early onset neutropenia in pediatric acute lymphoblastic leukemia. Hyery Kim*, Heewon Seo*, Yoomi Park, Byung-Joo Min, Myung-Eui Seo, Kyung Duk Park, Hee Young Shin, Ju Han Kim, and Hyoung Jin Kang. Leukemia 2016 accepted
• Association of FAT1 mutation with overall survival in patients with human papillomavirus-negative head and neck squamous cell carcinoma. Ki Tae Kim, Boo-Sung Kim, Ju Han Kim. Head & Neck 2016
Abstract

Personal and Private Big Data: Genomes and Health Records

Ju Han Kim
Prof. and Founding Chair
Division of Biomedical Informatics, Seoul National University College of Medicine

A flood of multi-modal high throughput clinical genomic data and personal health records means that many of the challenges in biomedical research and healthcare are now challenges in integrative and computational sciences for their bidirectional translations. Our ability to ‘connecting the dots’ in the wealth biomedical big data will bring us the ‘big picture’ in a mass of genes, drugs, diseases, and diagnostic, therapeutic and prognostic markers. Precision medicine attempts to determine individual solutions based on the genomic and clinical profiles of each individual, providing opportunity to incorporate individual molecular data into patient care. While a plethora of genomic signatures have successfully demonstrated their predictive power, they are merely statistically-significant differences between dichotomized phenotypes that are in fact severely heterogeneous. Despite many translational barriers, connecting the molecular world to the clinical world and vice versa will undoubtedly benefit human health in the near future.
Session II  
eHealth

- Keynote Speech: Using Artificial Intelligence to Conquer Medical Errors
- Big Data Approach in Health Care Assessment
- Health IT: The Essential Infrastructure for Universal Coverage
- Transforming Healthcare with Information Technology
- eHealth and Electronic Medical Records – Problems and Pitfalls
- eHealth Supporting Citizens and Healthcare Services
Moderator
Min-Huei (Marc) Hsu
Director General
Medical Informatics Center
Ministry of Health and Welfare, Taiwan

Educational Background
- 1988 M.D. School of Medicine, Taipei Medical University
- 2000 M.Sc. Graduate Institute of Medical Informatics, Taipei Medical University
- 2010 Ph.D. Graduate Institute of Medical Science, Taipei Medical University

Professional Experience
Dr. Min-Huei Hsu was appointed as Director of Medical Informatics Center at Ministry of Health and Welfare of Taiwan in March 2011. Prior to the MOHW appointment, Dr. Hsu served as CIO at Taipei Medical University and also a Consultant Neurosurgeon at Wanfang Hospital (a 746-bed hospital affiliated to Taipei Medical University). In addition, Dr. Hsu also chaired as the Head of Neurosurgery Department of Wanfang Hospital between August 2009 and July 2010.

Recent Publications
Keynote Speaker

Yu-Chuan (Jack) Li

Dean
College of Medical Science and Technology
Taipei Medical University, Taiwan

Other Positions

- Editor-in-Chief, International Journal for Quality in Health Care (IJQHC)
- Chair Dermatologist, Dept. of Dermatology, Taipei Medical University, Wan Fang Hospital, Taiwan
- Professor, Graduate Institute of Biomedical Informatics, Taipei Medical University, Taiwan
- Adjunct Professor, Dept. of Biomedical Informatics, National Yang-Ming University, Taiwan

Educational Background

- Ph.D., Medical Informatics, School of Medicine, University of Utah, USA
- M.D., Medicine, Taipei Medical University, Taipei, Taiwan

Professional Experience

1. Medical Decision Support Systems
2. E-learning in Medical Education
3. Patient Safety Information Systems
4. Clinical Information Systems
5. Dermatology
6. Health Informatics
7. Medical Informatics
8. Health Care
9. Epidemiology
10. Telemedicine

Recent Publications

- Usman Iqbal; Shabbir Syed-Abdul; Phung-Anh Nguyen; Wen-Shan Jian; Yu-Chuan (Jack) Li* Physicians Antibiotics Prescribing Behavior in Taiwan, 1998-2011. Brief Report. 2015 May 1;60(9):1439-41
Using Artificial Intelligence to Conquer Medical Errors

Prof Jack Li
Professor and Dean
College of Medical Science and Technology (CoMST), Taipei Medical University

In light of the newly developed AlphaGo program that win over one of the best Go chess players in the world, Artificial Intelligence (AI) is now back to the spotlight again. Given advice and warnings from some of the top minds like Elon Mush and Steven Hawkings, it seems inevitable that AI is going into a fast-pace development in the next few years and likely to impact every aspect of our lives very soon. This talk will describe the progress of AI applications in medicine in the past 30 years and discuss some possibilities about how Big Data and AI can go hand-in-hand in the future of biomedical research and clinical medicine. In terms of high-performance healthcare and patient safety.
Other Positions

- Professor of Medicine, National Yang-Ming University
- Professor of Law, Tunghai University
- Joint Appointment Researcher, National Institute of Cancer Research
- President, Taiwan Society of Law and Medicine

Educational Background

- M.D., PhD, National Taiwan University
- LL.M., MPH, Harvard University
- LL.B. Tunghai University

Professional Experience

- 2015 Outstanding Research Award, Taiwan’s Ministry of Science and Technology
- 2015 Emerging Leadership Award, Asia-Pacific Digestive Week
- Several patterns in gastric cancer screening, hepatitis B virus quantitative detection

Recent Publications

Abstract

**Big Data Approach in Health Care Assessment**

Chun-Ying Wu  
Professor of Medicine  
National Yang-Ming University;  
National Cancer Institute, NHRI

Big data approach in health care outcome assessment is an important trend in these years. Precision medicine initiatives proposed by President Obama is actually an ultimate big data project. Curing either rare diseases or common cancers does not just require more trials, but also linking all the data the researchers or physicians already have. Nationwide cohort studies base on big data have several advantages compared with traditional cohort studies and randomized clinical trials.

In this talk, we will use our previous big data research experience based on Taiwan's National Health Insurance Research Database (NHIRD) as examples to introduce the feasibility of big data approach in health care outcome assessment. Based on big data research, we found early Helicobacter pylori eradication and regular use of non-steroidal anti-inflammatory drugs (NSAIDs) associated with reduced risk of gastric cancer. We also reported that antiviral therapy reduced hepatocellular carcinoma (HCC) risk in patients with hepatitis B. Antiviral therapy also reduced HCC recurrence in patients with HBV and HCV-related HCC after liver resection or radiofrequency ablation (RFA).

In conclusion, big data approach can be used to conduct novel clinical studies, to assess effectiveness in real world, to make health policies, and to achieve precision medicine. Big data approach in health care outcome assessment is feasible and useful.
Other Position

Clinical Manager, Monte Klinikum Hospital

Educational Background

Dr. Florentino Cardoso is a general surgeon and surgical oncologist. He received his Medical degree from the University of Ceará (UFC) and after that, his residency in General Surgery and Surgical Oncology at INCA (National Cancer Institute) in Rio de Janeiro, Brazil.

He received a Master’s degree in Surgery and a specialization in Health Economics (from Ceará State University UECE). He has professional training in Hospital Management from the Institute of Hospital Administration and Health Sciences, in Rio Grande do Sul, Brazil.

Professional Experience

Dr. Florentino was a surgeon and the Managing Director from 2003 to 2006 at the Fortaleza General Hospital (HGF). From January 2010 to February 2014 he worked as the Superintendent of University Hospitals for the University of Ceará (UFC).

Dr. Florentino is currently the clinical manager at Monte Klinikum Hospital (in Fortaleza, Ceará).

He was the president at Ceará Medical Association for three terms, from 1999 to 2005 and from 2008 to 2011.

Dr. Florentino was elected the President of the Brazilian Medical Association in 2011 and is currently serving his second term until 2017.
Abstract

**Health IT: The Essential Infrastructure for Universal Coverage**

Florentino Cardoso  
President  
Brazilian Medical Association

As in other areas, information technology plays a key role in the development and optimization of health service. New possibilities in care and management become available thanks to democratizations of information between medicine key players and the society. Some developed countries have expertise in offering services related to remote health care, such as telemedicine, in regions where distance is a critical factor, which has improved in access.

Telecommunication enhances emergency medical services by helping expedite urgent patient transfer, provides remote consultation and supervision of paramedics and nurses, avoiding treatment delay, reducing mortality and improving quality of life. Furthermore, I.T. is also inserted in teaching and research.

Continuing online education to the physician training, even in places of difficult access and/or poor educational structure. Electronic Health Records systems allow advances in medical research, access to clinical guidelines, and also utilization of data for epidemiological and statistical purpose.

It is fundamental to discuss IT use new opportunities to use these tools to provide and contribute to universalization of health coverage.
Other Positions

- Global Chief Medical Officer, CSC
- Past President, American Medical Association

Educational Background

- Bachelor of Arts (BA), University of Oregon
- MD, Oregon Health Sciences University
- OB/GYN Residency, National Naval Medical Center
- Reproductive Endocrinology Fellowship, Harvard Medical School/Brigham and Women's Hospital
- Graduate of Advanced Management Program, Harvard Business School

Professional Experience

- First Deputy National Coordinator for Health IT and Chief Operating Officer in forming new Office of the National Coordinator (ONC) for Health IT at US Department of Health and Human Services (HHS)
- Associate Chief Information Officer for Military Health System caring for 10 Million patients in 520 hospitals and clinics worldwide
- Vice Chairman and ReproEndo Division Head of largest OB/GYN department in the US Navy
Abstract

**Transforming Healthcare with Information Technology**

Rober Wah  
Faculty  
Department of OB/GYN-Reproductive Endocrinology,  
National Institutes of Health and  
Walter Reed Military Medical Center at Bethesda Maryland

As the conversion from paper to digital format progresses across healthcare, the opportunity to use information technology to improve and transform healthcare grows larger. It is important to keep in mind that technology is a tool to help take better care of patients. There are 3 waves to the change; conversion to digital from paper; networking the digital information together; and then analyzing the digital, networked information in new and powerful ways to help population health and personalized medicine. This will provide better information for better decisions in healthcare.
Mark Sonderup

Associate Professor
Department of Medicine, Division of Hepatology
University of Cape Town and Groote Schuur Hospital, South Africa

Other Position
Vice-Chairman, South African Medical Association.

Educational Background
- Bachelor of Pharmacy (cum laude), University of Port Elizabeth 1990
- Bachelor of Medicine and Bachelor of Surgery (first class honours), UCT 1995
- Fellowship of the College of Physicians of South Africa [FCP (SA)] 2002
- Masters in Medicine, University of Cape Town

Professional Experience
- Current: Associate Professor, Senior Specialist and Lecturer, Department of Medicine and Division of Hepatology, University of Cape Town and Groote Schuur Hospital

Recent Publications
Abstract

**eHealth: Problems and Pitfalls**

Mark Sonderup  
Associate Professor  
Dept. of Medicine, Div. of Hepatology, University of Cape Town and Groote Schuur Hospital

eHealth encompasses information and communication technologies that have the potential to enhance the rendering of healthcare, particularly in under-resourced and remote regions.

Several challenges however pose problems and include technical, financing and political issues. For example, work is required to ensure the seamlessness between existing systems and platforms. However, the cost of developing such platforms may be prohibitive and new funding models and commitments from stakeholders such as government and corporates are needed. Furthermore, any eHealth system must be integrated into the existing health systems and Physicians may require additional training to ensure that eHealth systems are optimally utilized. Concerning, and a potential pitfall, is that eHealth systems must take into account the legislated protections on the processing and transfer of confidential medical information.
Speaker

Andreas Rudkjøbing

President
Danish Medical Association

Other Positions

- 2014- Postdoctoral Researcher and Public Health Resident, Section for Health Services Research, Department of Public Health, University of Copenhagen
- 2012- Council member, the Danish Human Rights Council
- 2012- Executive board member, Dignity Danish Institute Against Torture
- 2012-2015 Executive board member and Vice-President, the Association of Junior Doctors
- 2012-2013 Chief Union Representative, University of Copenhagen, the Association of Junior Doctors
- 2011-2012 President - State employed doctors, the Danish Medical Association

Educational Background

- 2018 Specialist Public Health Medicine (expected)
- 2016 MSc. Health Economics, Policy and Management, London School of Economics and Political Science (expected)
- 2014 PhD in Public Health/Health Services Research
- 2008 Medical Doctor, University of Copenhagen
- 2004 Diploma of Medical Research University of Aarhus
- 2002 B.Sc. Medicine, University of Aarhus

Professional Experience

- PhD Fellow, Section for Health Services Research, Dep. of Public Health, University of Copenhagen
- Assistant medical officer, Div. on Health Planning, The National Board of Health, Denmark
- Junior Medical Doctor, Hvidovre, Copenhagen University Hospital

Recent Publications

Abstract

**eHealth Supporting Citizens and Healthcare Services**

Andreas Rudkjøbing  
President  
Danish Medical Association

E-health in Denmark

20 years ago the Danish Ministry of Health launched a strategy for the public hospitals to implement EHRs – Electronic Health Records. This initiative coupled with a strategy for improving the electronic health data connection was the starting point of the digitalized Danish health care sector. In 2016 all public hospitals in Denmark have an EHR. The strategy has been to implement not only one EHR-system, but to ensure key information is collected and may be transferred between health care providers.

In 2016 every citizen in Denmark has access to his own personal health record through the site “Sundhed.dk”. When logged on it is possible for the citizen to read part of the patient record and see his own medication data and laboratory test results.

GPs have electronic patient records too - and referrals, prescriptions etc. are sent by standardized electronic communication between the GP, the hospital and the municipality.

I will talk about expectations to - and obstacles when - designing and implementing the Danish e-health infrastructure, and talk about what I see as the main challenges for health professionals in the Danish e-health care sector in the years to come.