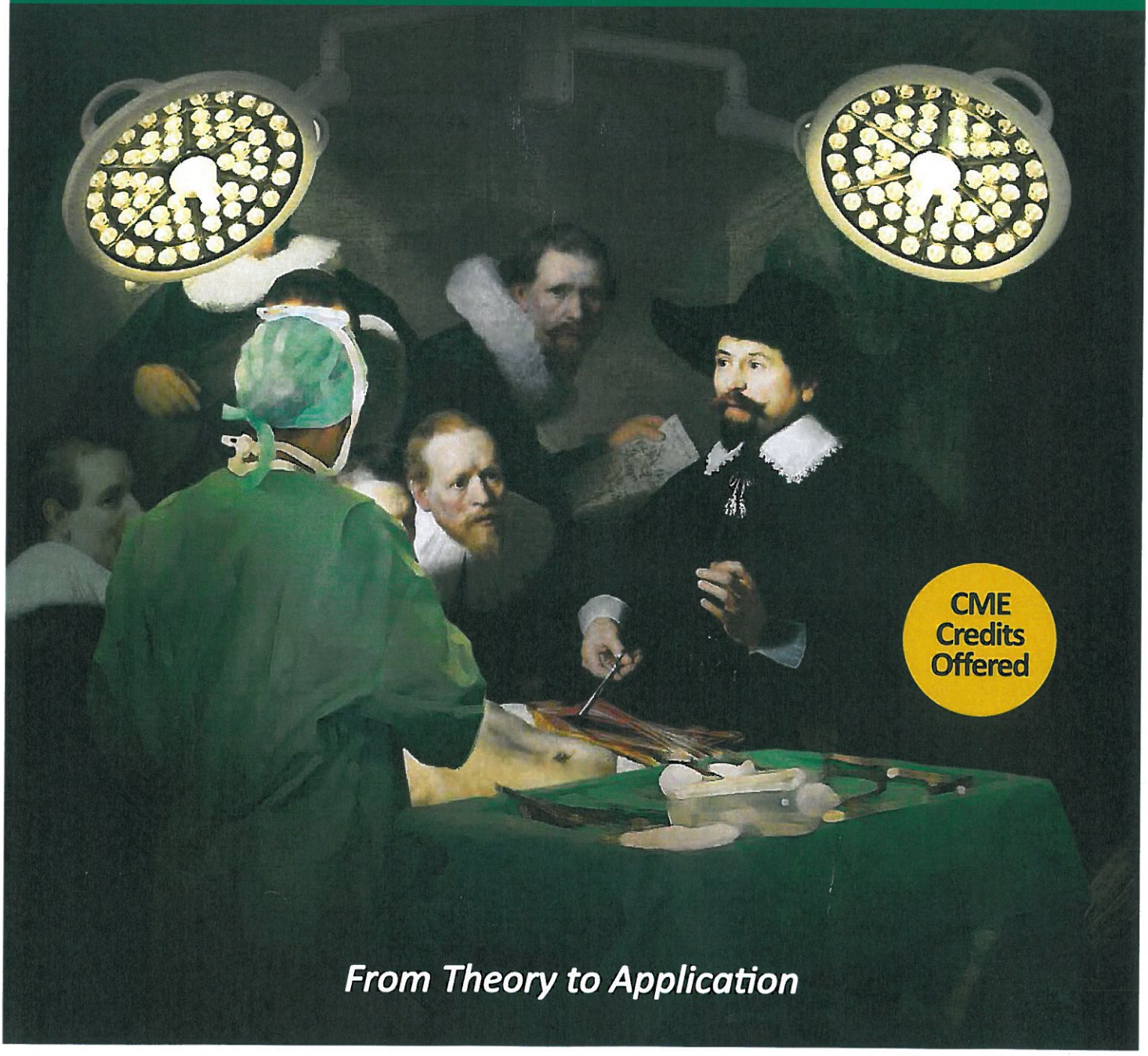
LAU
Gilbert and Rose-Marie Chagoury
School of Medicine

International Conference on Medical Education

Catalyzing Change to Improve the Quality of Health Care

21-22 November, 2014
Mövenpick Hotel - Beirut, Lebanon

CONFERENCE ABSTRACTS



From Theory to Application

TABLE OF CONTENTS

Dear Colleagues,

On behalf of the Lebanese American University, it is my great pleasure to invite you to the first LAU Gilbert and Rose-Marie Chagoury School of Medicine International Conference on Medical Education, held on 21-22 November, 2014, at the Mövenpick Hotel in Beirut.

The theme of this year's conference is "Catalyzing Change in Medical Education to Improve the Quality of Health Care". We aim to gather practitioners, researchers and educators from around the world in order to:

- Address current challenges in medical education
- Promote quality of care and patient safety
- Help incorporate innovative technologies in medical education
- Encourage networking among educators in health professions and related fields

This inspiring program will include specific hands-on experience through workshops and round tables led by world renowned professionals from academic institutions and other entities that are leaders in medical education.

We look forward to welcoming you all.

Best Regards,

Youssef G. Comair, MD, FRCSC
Professor of Surgery
Dean, Gilbert and Rose-Marie Chagoury School of Medicine
Lebanese American University

COMMITTEES AND INTERNATIONAL SPEAKERS

SCIENTIFIC COMMITTEE

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Dr. Ara Tekian - University of Illinois - Chicago, USA

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Dr. Mohamad Houri - Beirut Arab University
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Lebanese American University

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Dr. Maya Khairallah
Ms. Lama Naim
Mr. Nassib Nasr

INTERNATIONAL SPEAKERS

John (Jack) R. Boulet, PhD
Vice President
Research and Data Resources
Educational Commission for Foreign Medical Graduates

Katharine Boursicot, MD
Associate Professor and Assistant Dean for Assessment and Medical Education Research
Lee Kong Chian School of Medicine
Singapore, Republic of Singapore

Fadi Charbel MD, FAANS, FACS
Professor and Head of the Department of Neurosurgery at the University of Illinois at Chicago
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Janet Grant PhD, FBPsS, FRCGP, FRCP, MRCR, MIoD, ARSM
Director of the Centre for Medical Education in Context (CenMEDIC) and FAIMER Centre for Distance Learning
Honorary Professor in University College London Medical School
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John Norcini, PhD
President & CEO, Foundation for Advancement of International Medical Education & Research (FAIMER)
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Trudie E. Roberts, MD
Professor and Director, Leeds Institute of Medical Education
President, Association for Medical Education in Europe (AMEE)
Leeds, UK

Ara Tekian, PhD, MHPE
Associate Professor of Medical Education and Associate Dean for International Affairs
University of Illinois at Chicago College of Medicine
Chicago, USA

SCIENTIFIC PROGRAM

FRIDAY, NOVEMBER 21, 2014

LOCATION: MÖVENPICK HOTEL

08:00 - 09:00	**REGISTRATION AND COFFEE**
09:00 - 09:15	**WELCOME BY DEAN COMAIR**
09:15 - 10:45	**PANEL DISCUSSION:** Challenges in Medical Education Representatives from the Lebanese Medical Schools
10:45 - 12:00	**OPENING CEREMONY AND RECEPTION**
12:00 - 12:30	**PLENARY 1:** Medical Education and the Healthcare Service: A Lifelong Symbiosis **Janet Grant, PhD** Moderator: Elissar Dagher Nohra, MD, Holy Spirit University of Kaslik
12:30 - 13:00	**PLENARY 2:** Creating Leaders and Scholars to Improve the Quality of Healthcare **Ara Tekian, PhD, MHPE** Moderator: Imad El Hajj, MD, University of Balamand
13:00 - 13:30	**PLENARY 3:** Measurements, Outcomes and the Pursuit of Perfection **Fady Charbel, MD, FAANS, FACS** Moderator: Omar Hamaoui, MD, Clemenceau Medical Center
13:30 - 14:30	**LUNCH**
14:30 - 16:00	**CONFERENCE WORKSHOPS:** Workshop 1: Sources of Error During Verbal/Non-Verbal and/or Written Communication **Ara Tekian, PhD, MHPE** Workshop 2: How to Build an Examination: The Basics **John Norcini, PhD** Workshop 3: Teaching and Assessing Professionalism **Katharine Boursicot, MD & Trudie Roberts, MD** Workshop 4: Research in Simulation-Based Education **John (Jack) R. Boulet, Ph.D.** Workshop 5: Continuing Professional Development for Health Service Improvement **Janet Grant, PhD**
16:00 - 16:30	**COFFEE BREAK**
16:30 - 17:30	**PLENARY 4:** National Assessment Programs and the Quality of Care **John Norcini, PhD** Moderators: Elie Gharios, MD, Mount Lebanon Hospital Salah Zeineldine, MD, American University of Beirut

SATURDAY, NOVEMBER 22, 2014

LOCATION (08:00 - 12:00): THE CHAGOURY HEALTH SCIENCES CENTER - BYBLOS CAMPUS
LOCATION (13:00 - 17:45): MÖVENPICK HOTEL

08:00	**Transportation from Mövenpick Hotel and LAUMC-RH to LAU Byblos campus**
08:45 - 09:00	**COFFEE**
09:00 - 12:00	**CONFERENCE WORKSHOPS** *(registration required)* Workshop A: Teacher Assessment: Methods for the Educational Workplace **John Norcini, PhD** Workshop B: Tips for Improving OSCE Stations **Katharine Boursicot, MD & Trudie Roberts, MD** Workshop C: Developing and Scoring Simulation-Based Assessments **John (Jack) R. Boulet, Ph.D.** Workshop D: Managing Change in a Medical Context **Janet Grant, PhD** Workshop E: Patient Safety and Medical Errors **Ara Tekian, PhD, MHPE**
12:00	**Transportation from LAU Byblos to Mövenpick Hotel and to LAUMC-RH**
13:00 - 14:00	**LUNCH/MEET THE EXPERTS**
14:00 - 15:30	**CONFERENCE WORKSHOPS** Workshop 6: A Beginner's Guide to Setting Standards **John Norcini, PhD** Workshop 7: Getting Published **Ara Tekian, PhD, MHPE** Workshop 8: Developing Diagnostic Skills **Janet Grant, PhD** Workshop 9: Teaching and Assessment Using Simulations **John (Jack) R. Boulet, Ph.D.**
15:30 - 16:00	**COFFEE BREAK** *WITH THE COMPLIMENT OF FRANSABANK*
16:00 - 16:30	**PLENARY 5:** Performance Assessment at Undergraduate and Postgraduate Levels: The OSCE **Katharine Boursicot, MD** Moderator: Jacques Choucair, MD, St-Joseph University
16:30 - 17:00	**PLENARY 6:** Simulation to Improve Patient Safety: Challenges and Opportunities **John (Jack) R. Boulet, Ph.D.** Moderator: Mohamad Houri, MD, Beirut Arab University
17:00 - 17:30	**PLENARY 7:** Professional Integrity: Challenges and Consequences **Trudie Roberts, MD** Moderator: Fadi Abou-Mrad MD, PhD, Lebanese University
17:30 - 17:45	**CLOSING REMARKS** **Youssef Comair, MD, FRCSC** **Ara Tekian, PhD, MHPE**

BIOGRAPHIES

John (Jack) R. Boulet, PhD
Vice President
Research and Data Resources
Educational Commission for Foreign Medical Graduates

Dr. Boulet is Vice President, Research and Data Resources, for the Educational Commission for Foreign Medical Graduates (ECFMG®). For the past 18 years, Dr. Boulet has worked on the development and validation of performance-based credentialing assessments in medicine. He has published extensively in the field of medical education, focusing specifically on measurement issues pertaining to performance-based assessments, including objective structured clinical examinations (OSCEs) and various mannequin-based simulation methodologies. He has also investigated workforce issues, concentrating on the quality of international medical education programs, the international migration of healthcare workers, the contribution of international medical graduates (IMGs) to the labor force in the United States, and the quality of care provided by IMGs. Dr. Boulet currently serves on the editorial boards for Advances in Health Sciences Education: Theory and Practice, Education for Health, and Simulation in Healthcare. He is a deputy editor for Medical Education.

Katharine Boursicot, MD
Associate Professor and Assistant Dean for Assessment and Medical Education Research
Lee Kong Chian School of Medicine
Singapore, Republic of Singapore

Katharine Boursicot BSc MBBS MRCOG MAHPE NTF SFHEA FRSM joined the Lee Kong Chian School of Medicine in Singapore in March 2014, as Associate Professor and Assistant Dean for Assessment and Medical Education Research.

She graduated from the University of London with an Honours BSc in Anatomy and MBBS from the Medical College of St Bartholomew's Hospital. She worked as a Consultant Obstetrician and Gynaecologist in London for eight years, then moved into full time medical education. Since 2000, she has led the reform of assessment at the undergraduate medical schools at Barts and the London, Cambridge University and St George's University of London and been invited to advise on numerous national and international assessment initiatives.

In 2007, Katharine was awarded a UK Higher Education Academy National Teaching Fellowship, in recognition for her influence in raising standards and dissemination of evidence-based good practice in medical education in the UK and internationally.

Katharine was the Treasurer for ASME for six years and chaired the Board of Management of the prestigious journal Medical Education. She founded an annual conference dedicated to medical education research, which is now in its 8th year. In recognition of her outstanding contribution to ASME, she was awarded the President's Medal in 2013.

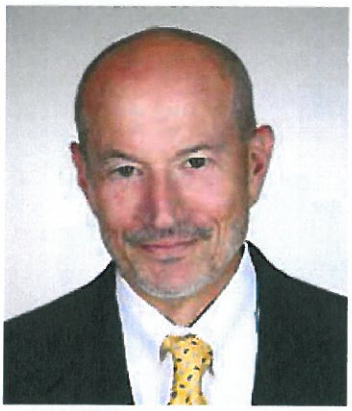
She has published widely and is an Associate Editor and a regular reviewer for several leading medical education journals. She is the Series Editor for the OUP companion volumes to their Handbooks of Medicine series, with six volumes published and another three in press (Oxford Assess and Progress series).

Fadi Charbel MD, FAANS, FACS
Professor and Head of the Department of Neurosurgery at the University of Illinois at Chicago
Chicago, USA

Dr. Charbel is the Professor and Head of the Department of Neurosurgery at the University of Illinois at Chicago. He is an internationally recognized clinical expert, researcher and educator in the areas of stroke, cerebrovascular disorders, cerebral blood flow metabolism, and complex cerebral tumors. He is active developing new technology and his work has led to innovations in medical devices as well as surgical simulators. He is the winner of prestigious awards such as the "Wall Street Journal Technology Innovation Awards: Medical Devices, Runner-up, 2006" and "Inventor of the Year, The University of Illinois at Chicago, 2002". He has been named one of America's Top Surgeons, Consumers' Research Council of America; Best Doctor, Best Doctors in America; Top Doctor, Castle Connolly Medical Limited. He is the developer and co-inventor of the "Charbel Micro-flowprobe®"Transonic systems Inc. and of the NOVA® system, Vassol, Inc. He currently holds eight patents, has produced over 200 scientific presentations and over 150 publications. He is an internationally sought after speaker and has been invited worldwide to lecture, teach and demonstrate complex surgical procedures.

Janet Grant PhD, FBPsS, FRCGP, FRCP, MRCR, MIoD, ARSM
Director of the Centre for Medical Education in Context (CenMEDIC) and FAIMER Centre for Distance Learning
Honorary Professor in University College London Medical School
London, UK

Janet is Director of CenMEDIC (the Centre for Medical Education in Context) and the FAIMER Centre for Distance Learning in London. She is, Honorary Professor in University College London Medical School, Honorary Professor in Plymouth University College of Medicine and Dentistry, and Emerita Professor of Education in Medicine at the UK Open University. She is Special Adviser to the World Federation for Medical Education. Her interests are in policy research, regulation, educational development, continuing professional development and curriculum. CenMEDIC runs an international distance learning Master's course on accreditation and assessment in health professions education for the US Foundation for the Advancement of International Medical Education and Research [FAIMER]. Her Centre also developed and manages Sci59, the online psychometric Specialty Choice Inventory. Janet has extensive experience as a regulator in both medical education and legal education. She is author of The Good CPD Guide [Radcliffe Publishers, 2012].



John Norcini, PhD
President & CEO, Foundation for Advancement of International Medical Education & Research (FAIMER)
Philadelphia, USA

John J. Norcini, PhD, is President and CEO of the Foundation for Advancement of International Medical Education and Research (FAIMER®). FAIMER has an active research program on international health professions education and physician migration, global fellowship programs for faculty from health professions schools, and databases of recognized medical schools around the world. For the 25 years before joining the Foundation, Dr. Norcini held a number of senior positions at the American Board of Internal Medicine. His principal academic interest is in the assessment of physician performance. Dr. Norcini has published extensively, lectured and taught in many countries, and is on the editorial boards of several peer-reviewed journals in educational measurement and medical education.

Trudie E. Roberts, MD
Professor and Director, Leeds Institute of Medical Education
President, Association for Medical Education in Europe (AMEE)
Leeds, UK

Professor Roberts graduated from Manchester with a degree in Medicine and a BSc in Anatomy. She undertook her early medical training in Manchester and her research in Manchester and the Karolinska Institute in Sweden. In 1995 she was appointed Senior Lecturer in Transplant Immunology at the University of Manchester. In 2000 she was appointed Professor of Medical Education at the University of Leeds. She was awarded a National Teaching Fellowship in 2006. In 2009 she was appointed Director of the Leeds Institute of Medical Education. She was a council member of the General Medical Council from 2009 until 2012 and Chair of the Association for the Study of Medical Education until July 2013. She was a council member for the Royal College of Physicians of London from 2010 until 2013 and is currently a Censor for the College. In September 2013 she became President of the Association for Medical Education in Europe. Professor Roberts's main interests and expertise are in the areas of assessment of competence, professionalism, and transitions in training and education.

Ara Tekian, PhD, MHPE
Associate Professor of Medical Education and Associate Dean for International Affairs
University of Illinois at Chicago College of Medicine
Chicago, USA

Dr. Tekian is Associate Professor and the Director of International Affairs at the Department of Medical Education (DME), and the Associate Dean for the Office of International Education at the College of Medicine, the University of Illinois at Chicago (UIC). He joined DME in 1992, and is involved in both teaching courses offered in the Master's of Health Professions Education (MHPE) program and advising graduate students. He also teaches one of the major courses in the Masters in Patient Safety Leadership program. Prior to joining DME, he was the founding Director of the Medical Education Department at King Saud University, College of Medicine in Riyadh, Saudi Arabia (1983 – 1990). He served during the 80s and 90s as a consultant to the World Health Organization (WHO) Eastern Mediterranean Regional Office (EMRO) for projects in the Division of Development of Human Resources for Health. He also served as consultant to the Ministries of Health and Education in most of the Eastern Mediterranean countries. Dr. Tekian established a number of medical education departments/ units in the Eastern Mediterranean countries.

Dr. Tekian is an internationally recognized scholar and leader in health professions education. He has organized and conducted over 200 workshops in more than 45 countries and 60 cities. His consultations and workshops have focused on curriculum development, assessment, program evaluation, and patient safety. He has received numerous honors and awards. In 1996, he was awarded an honorary doctorate by the Tashkent University in Uzbekistan. Dr. Tekian was the recipient of the 1997 Teaching Recognition Program Award from the University of Illinois (UIC) Council for Excellence in Teaching and Learning. He is also the recipient of the 2012 ASME (Association for the study of Medical Education) Gold Medal Award which is one of the most prestigious international awards in medical education. In 2014, he was honored by receiving the most revered Lifetime Achievement Award by the Armenian American Medical Society. He has served as the President of the Division of Education in the Professions of the American Educational Research Association (AERA) from 2009 – 2012, which is a major venue for presentation of scholarship in health professions education. AERA is the leading international professional association for the field of education. His scholarship in health professions education is reflection in publications in the premiere medical education journals. He is the senior author of the book "Innovative Simulations for Assessing Professional Competence: From Paper-and-Pencil to Virtual Reality" published in 1999.

ABSTRACTS: PLENARY SESSIONS

PLENARY 1:

Medical Education and the Healthcare Service: A Lifelong Symbiosis

Janet Grant, PhD

The quality of health care can only be judged by its practice. Medical education will be effective to the extent that it focuses on healthcare delivery. This is fundamental to the idea of social accountability. Yet the influence of medical education on the ultimate quality of health care is limited: the predictive power of pre-admission variables for selection to medical school is weak; prior academic attainment is still the best predictor of future performance; no curriculum type shows better overall predictive value than any other; and every variable has decreasing predictive power over time. Becoming a doctor is a process of navigating a complex and changing array of knowledge, skills, performances, and identities. It is not surprising that the educational activities at one stage have little predictive power beyond the end of that stage. So we need to think differently about the relationship between medical education and healthcare service, taking into account the following: medical education is an induction into professional practice; medical education takes place in the context of the healthcare service; the stages of medical education from basic to continuing professional development must all be considered; the context of the healthcare service is paramount at all stages; and the quality of healthcare is primarily a function of the service. The contextual nature of medical education means that we must focus equally on the educational process and on the healthcare service itself because being a good doctor is learned in the context of the service, and from the practice and role models observed there

PLENARY 2:

Creating Leaders and Scholars to Improve the Quality of Healthcare

Ara Tekian, PhD, MHPE

The challenge of improving the quality of healthcare is steadily getting more complex and expensive. Institutions and organizations have tried to deal with this issue in many different ways, such as introducing innovations in the continuum of medical education, improving the quality of teaching and assessment at both undergraduate and postgraduate levels, and monitoring the competence of practicing physicians through observations and requirements for maintenance of certification. Currently, North American countries are facing a number of challenges and there are lessons to be learned. The Institute of Medicine's recent report (Graduate Medical Education that Meets the Nation's Health Needs) released in September 2014 emphasizes the allocation of resources for graduate medical education; the Accreditation Council for Graduate Medical Education (ACGME) monitors the competence of graduates through assessment of specialty specific milestones; and the Association of American Medical Colleges published a list of 13 Entrustable Professional Activities (EPAs) to ensure the competence of graduates from medical school. Additionally, the Educational Commission for Foreign Medical Graduates (ECFMG) finalized their deadline that as of 2023 no medical graduate will get ECFMG certification if they are not graduating from an accredited medical school.

In light of these challenges, formal training programs in health professions education have been growing exponentially worldwide. For example, during the past two decades because of increased demand, there has been a proliferation of Masters' and doctoral programs in health professions education. This demand has been due to an increased need for leaders who have knowledge and competence in the theory and practice of medical education, along with an increased need to have teaching faculty who are up-to-date with the literature in HPE, have acquired the necessary skills to be effective teachers, and could act as resource individuals in their institutions. Additionally, recent developments and requirements by accrediting bodies— ACGME and the Liaison Committee on Medical Education (LCME)—for institutions to meet criteria for excellence in curriculum, instruction, assessment, and evaluation have increased the demand for leaders with applied knowledge in these areas in most institutions, hospitals, associations, and agencies. A recent longitudinal study capturing the performance of medical students and graduates from Arab countries confirmed that the number of Arab trained students/graduates seeking ECFMG certification is increasing. This means that the quality of medical education and training programs needs special attention to ensure success of these students and residents that in turn improve the quality of healthcare. Preparing leaders and scholars is one way of handling this challenge, which will be the focus of this presentation.

PLENARY 3:

Measurements, Outcomes and the Pursuit of Perfection

Fady Charbel, MD, FAANS, FACS

PLENARY 4:
National Assessment Programs and the Quality of Care
John Norcini, PhD

Many countries are exploring the use of national assessment programs for the licensure and certification of individual health care practitioners. In countries that already have such programs, there has been a movement to time-limit these credentials so that practitioners must be reassessed periodically. National assessment programs are often time-consuming and unpopular with the participants. However, they are justifiable if they make a difference in the quality of patient care. This presentation will explore some of the research around this question.

PLENARY 5:
Performance Assessment at Undergraduate and Postgraduate Levels: The OSCE
Katharine Boursicot, MD

Since the Objective Structured Clinical Examination (OSCE) was first introduced in 1975, it has become the most common way to access observed performance of clinical skills in a wide variety of health professional training and accreditation situations around the world. This plenary will chart the evolution of OSCEs and some key issues which have emerged over the last 40 years.

PLENARY 6:
Simulation to Improve Patient Safety: Challenges and Opportunities
John (Jack) R. Boulet, Ph.D.

The use of simulation-based assessments in medicine is expanding at a rapid pace. This growth has involved numerous modalities, including computer-based case simulations, standardized patients, part-task trainers, and electromechanical mannequins. While the development of new educational programs and related assessment activities can lead to better trained practitioners, there are numerous challenges, including those associated with finances, assessment administration logistics, scenario development, scoring, standard-setting, and the provision of meaningful feedback to trainees. Most important, gathering evidence to establish the link between simulation-based educational activities and patient safety can be very difficult, often demanding the design and completion of complex longitudinal research studies. This presentation will provide an overview of simulation-based assessment, concentrating on methods currently employed in the training and evaluation of medical students and residents. The review of the application of simulation techniques in this arena can provide guidance on how to deal with many of the challenges, especially those associated with the provision of valid and reliable scores. Knowing more about these challenges, and how to address them, will (a) allow educators to develop more effective simulation-based training programs and (b) provide researchers with a framework to design and conduct studies of linkages between simulation-based training (or assessment) and patient safety.

PLENARY 7:
Professional Integrity: Challenges and Consequences
Trudie E. Roberts, MD

Cheating is commonly defined as breaking the rules to gain advantage. How common is cheating in medical school examinations? It probably occurs more frequently than we would like to think. Why do students do it and how do they justify it when they are found out? Is cheating more morally wrong in would-be doctors than in other students? Are some types of cheating worse than others? How can we expose this type of deception and how can we deter students from deciding to cheat in assessments. How blameless are faculty when students cheat? Indeed do they sometimes collude in cheating and why are they so reluctant to report cheating when it is discovered. This presentation will explore these issues and look at the dilemma posed by medical students, residents and faculty who are academically and professionally dishonest.

ABSTRACTS: 90-MINUTE WORKSHOPS

WORKSHOP 1:
Sources of Error During Verbal/Non-Verbal and/or Written Communication
Ara Tekian, PhD, MHPE

Communication is a critical component of the health care system and a fundamental underpinning to patient safety. Communication, traditionally defined as a simple exchange of information, or a "message" between a "sender" and a "receiver," is now considered a complex process with verbal and nonverbal components, requiring interpretation and inferences of meaning, synthesis of information, and translation into situational context. In our current culture, communication takes on many forms—including oral and written—and is often presented by intermediaries (think of those hundred or so e-mail exchanges each day). In recent years, attention has focused on the frequent occurrence of clinical errors in hospital- and office-based medical practice. Although it was common practice in the past to cover up such mistakes, it is widely accepted today that patients should be informed when errors occur. The Joint Commission for Accreditation of Healthcare Organizations makes this an explicit requirement. Communication—whether verbal, nonverbal, written, and via technology (phone messages, e-mails, etc.)—is a core component of both medical error and quality improvement. This workshop will look more closely at how each of these elements plays a role in the evolving story of medical errors. The goal is to understand the importance of communication between doctors and patients and how poor communication can be a source of error. Participants will watch some videos and identify sources of error, and discuss ways of disclosing errors.

WORKSHOP 2:
How to Build an Examination: The Basics
John J. Norcini, PhD

The quality of a test depends on how well it has been developed. The goal of this workshop is to provide beginners a systematic, eight-step process for test construction. It will touch on topics such as test purpose, test content, item format, test time, and administration. In addition, it will describe the seven factors influencing good assessment. Both small and large group exercises will be conducted throughout and active participation will be encouraged.

WORKSHOP 3:
Teaching and Assessing Professionalism
Katharine Boursicot, MD

The aim of this workshop is to facilitate a better understanding of teaching and assessing professionalism in the undergraduate medical curriculum, although the general principles are applicable to the postgraduate area. As part of the workshop, participants will develop an understanding of the issues of professionalism in medical students. Building on this, they will look at the elements of professionalism that are desirable and how to develop a program of assessment to ensure graduating doctors are aware of, and committed to, these values in their working lives. Finally, the possibility of remediation of poor professional behavior will be examined.

WORKSHOP 4:
Research in Simulation-Based Education
John (Jack) R. Boulet, PhD

In most healthcare professions education programs, especially those that have embraced simulation in their curriculum, there is a growing need to understand pedagogical processes and how these relate to competence and patient outcomes. As a result, educational research in the healthcare professions is rapidly advancing and is routinely conducted to solve practical problems and guide quality improvement activities. Research topics in

simulation-based education are quite diverse and include those related to skills acquisition and decay, curriculum design, assessment methods and psychometrics, and student selection, just to name a few. While a host of research designs can be employed, including experimental and non-experimental, descriptive studies, where data are readily available or collected from surveys, case studies or personal observations, are most common. In terms of analysis strategies, both qualitative and quantitative methods have been employed. For qualitative methods, techniques include observations, in depth interviews and focus groups. For quantitative methods, everything from basic descriptive statistics to more complex causal analyses has been employed. Ultimately, the choice of research design, and associated analysis strategies, will depend on the purpose of the research and, more importantly, the specific questions that need to be answered. The purpose of this workshop is to provide the participants with a basic overview of research methods that can be applied to common questions concerning simulation-based education. Following the workshop, participants will be able to: articulate meaningful research questions; choose appropriate research strategies; understand, critique and evaluate the design of research studies; know the strengths and weaknesses of various research strategies; and know the publication outlets for simulation-based education studies.

WORKSHOP 5:
Continuing Professional Development for Health Service Improvement
Janet Grant, PhD

Continuing professional development (CPD), sometimes called continuing medical education, is a topic of increasing importance. Doctors in practice have both a professional and a practical duty to keep up to date and to fill in any gaps in their learning. In many countries this is now a condition for having a continuing license to practice. This workshop will look at: the conditions for CPD in participants' own contexts; the purposes of CPD; the characteristics of effective CPD; how to identify learning needs, undertake learning and take that learning back to the workplace; how to manage CPD for the doctor, the health care system and the regulator; and how to ensure that CPD delivers benefits for patient and the healthcare service.

WORKSHOP 6:
A Beginner's Guide to Setting Standards
John J. Norcini, PhD

The goal of this session is to familiarize participants with the major methods for setting standards [i.e., selecting the pass-fail point(s)] on written and clinical examinations. The session will start with a brief overview of standards, how they differ from scores, and the characteristics of a credible standard. The second part of the session will focus on specific methods for setting standards, including Angoff's method and the contrasting group method. Steps in the implementation of each will be described. Active engagement will be encouraged throughout.

WORKSHOP 7:
Getting Published
Ara Tekian, PhD, MHPE

The purpose of this interactive session is to provide a practical understanding of where and how to publish and present scholarship in health professions education. The first part of this workshop will review the research trajectory of five educators who started their career by identifying one research question, which eventually led to creating an entire research agenda. The second part will focus on understanding criteria against which publications and presentations are judged, and will identify venues for scholarship in health professions education. Participants will review each other's research hypothesis and answer the questions "So what? Who cares?"

WORKSHOP 8:
Developing Diagnostic Skills
Janet Grant, PhD

This interactive workshop will enable participants to understand the process of clinical problem solving from the point of view of a learner and an expert clinician. The aim of the workshop is to develop skills in helping students and postgraduates to improve in this area. We will consider examples of normal, effective clinical problem solving, as well as look at common errors and considering why these occur. The workshop will include a variety of exercises that participants will be able to use with their own students and trainees. In addition, participants will be invited to complete the online Diagnostic Thinking Inventory after the meeting and to have their students and trainees complete it. This instrument enables users to measure the structure and flexibility of their thinking in relation to making a diagnosis. The workshop will highlight the importance of the student's and doctor's memory, and how to improve access to stored knowledge within the clinical interview. Typical scenarios will be offered that illustrate the challenges of simultaneously conducting a clinical interview, communicating with the patient and making a diagnosis. The workshop will be practical, but is based on a strong theoretical framework.

WORKSHOP 9:
Teaching and Assessment Using Simulation
John (Jack) R. Boulet, PhD

Various simulation modalities, including standardized patients, mannequins, and part-task trainers are currently employed to educate and assess healthcare workers. While even well-constructed simulations cannot replace interactions with "real" patients, they do provide a standardized milieu in which to assess specific skills or competencies, give and receive feedback, and gather data for program evaluation. More important, one can create situations where trainees can practice techniques without the possibility of harming the patient. Although simulations can be constructed to model many situations relevant to healthcare professions education, there is relatively little guidance available to inform programs (e.g., medical schools, nursing schools) about their most effective and efficient use. Also, while some countries have the resources to build and maintain sophisticated simulation centers, others do not. Nevertheless, it may still be possible to develop simulation-based educational programs in resource-limited environments. The purpose of the workshop is to provide an overview of simulation methods that can be used to teach and assess healthcare workers. Issues related to the costs and benefits of specific modalities, simulation content, logistics, the provision of meaningful feedback, and impact on patient care will be discussed. Upon completing the workshop, participants will: understand the strengths and weaknesses of various simulation modalities; be able to determine the types of simulation tasks that could work in their local environment; and have the basic skills needed to initiate the development of valid simulation-based training and assessment tasks

ABSTRACTS: 3-HOUR WORKSHOPS

WORKSHOP A:
Teacher Assessment: Methods for the Educational Workplace
John J. Norcini, PhD

The quality of healthcare professions education is an issue of ongoing concern in many countries and central to it are the teaching skills of faculty. Methods for assessing and improving such skills are in their infancy, but many of those in use are the same as, or variations on, workplace-based assessments that are used with students, trainees and practicing doctors. This workshop will survey these methods and discuss a variety of issues in their deployment. Active involvement will be encouraged throughout, and small group exercises will focus on making judgments about actual teaching portfolios.

WORKSHOP B:
Tips for Improving OSCE Stations
Katharine Boursicot, MD
Trudie Roberts, MD

This workshop will offer some insights and suggestions drawn from 20 years of experience in designing and implementing OSCEs at undergraduate and postgraduate levels. Topics such as length of stations, design, different scoring approaches, timing, circuit set-up and management, as well as quality assurance issues will be covered.

WORKSHOP C:
Developing and Scoring Simulation-Based Assessments
John (Jack) R. Boulet, PhD

In medicine and other allied health professions, various types of simulations have been used to educate and evaluate students and practitioners. In many countries, simulations, including standardized patients, computer-based case management scenarios and electromechanical mannequins, have also been employed as part of the certification and licensure of physicians. While much work has been conducted to investigate the psychometric properties of the scores from these types of assessments, there remains some regarding the choice of metrics for these types of performance-based assessments. Moreover, given the vast array of simulation modalities available to educators, and the varying purposes of simulation-based assessment, guidelines concerning the proper construction of content-valid scenarios have not been well-articulated. Developing meaningful scoring rubrics for simulation-based assessments can be challenging. Depending on the skill, or skills, being measured, analytic (e.g., checklists, key actions) and holistic tools (e.g., rating scales), or various combinations, can be employed. The choice (or development) of scoring tools will depend on a number of factors, including the purpose of the assessment, the specific proficiencies being evaluated, and the availability of qualified raters. Regardless of the specific format of the evaluation tool or the logistics of gathering the data, the scores, if used to make inferences concerning ability, must be reliable and valid. The proper construction of scoring tools is a cornerstone of the validation process. Following the workshop, participants will be able to: choose appropriate simulation modalities for the competencies that they wish to evaluate; understand, critique, and evaluate the design of performance-based exercises; know the strengths and weaknesses of holistic (global) and analytic scoring systems and recognize where they can be best employed to gather valid and reliable assessment data; select appropriate scoring strategies and propose defensible data collection methods for typical simulation scenarios.

WORKSHOP D:

Managing Change in a Medical Context

Janet Grant, PhD

Effective change management is highly contextual. In planning how best to manage change in a medical environment, one must take into account: the role and skills of the change leader; the characteristics and challenges of the professional context; and the nature of the change intended. This workshop draws on published research on managing change specifically in a medical environment. The workshop with guide participants to consider their own contexts and skills and to learn how to use some change management tools such as network analysis, people charts and force-field analysis. The workshop will address: the special challenges for change managers in a medical context; the nature of academic leadership and the characteristics of medical professionals; the developing of a vision for change; the power that change leaders have; the orders and types of change; the frequently cited factors in successful change management; and core activities and tactical choices for the change manager. This highly interactive workshop is based on research which developed the 10-step model of change management in medicine.

WORKSHOP E:

Patient Safety and Medical Errors

Ara Tekian, PhD, MHPE

In 1999, the Institute of Medicine (IOM) report estimated as many as 98,000 patients die every year from preventable medical errors in U.S. hospitals. Medical errors are defined as the failure of a planned action, or the use of the wrong plan, to achieve an aim. To ensure patient safety, health care providers and systems must be prepared to recognize potential sources of error, to acknowledge vulnerability to error, and to fully engage in the process of continuous quality improvement. Most providers agree that medical errors should be disclosed to patients; however, research demonstrates that disclosure of errors is uncommon, with roughly only 1 in 4 errors being disclosed. Many providers continue to remain silent secondary to the fear of litigation, fear of stating explicitly to a patient that an error occurred, and the desire to put a positive spin on a situation. Addressing quality and safety issues in health care is difficult because the culture of secrecy and silence reduces awareness by future generations of providers.

This highly interactive workshop will explore error science and elaborate issues related to reporting, investigation, Root Cause Analysis, and quality improvement. By observing various segments of an unfolding real story, the participants will be able to identify a number of errors and explore ways of avoiding them. They will also be asked to reflect on ways of incorporating the discussion of different types of error into the undergraduate and postgraduate curriculum.