

# The Fourth Annual MHPE Summer Conference

## Educational Endeavors and Academic Promotion



## Master of Health Professions Education Summer Conference



July 31- August 1, 2003  
Lecture Hall Room 106 CMW  
Sponsored by:  
*Department of Medical Education*  
Conference Chair:  
*Ara Tekian, PhD, MHPE*

The MHPE Online Summer Conference is devoted to presentations of the work of MHPE students and alumni. This meeting provides a unique opportunity to network with other health professions educators, to learn about the educational innovations taking place in other institutions while they are still in developmental stages, and to participate in discussions tackling some of the major issues in health professions education.

**Purpose:** The purpose of this activity is to discuss issues and innovations in health professions education that have been spearheaded by MHPE students, faculty, and alumni.

**Intended Audience:** Health professions educators, including but not limited to current and former MHPE students.

**Program Objectives:**

At the conclusion of this program, participants should be able to:

1. Explain factors involved in faculty promotions and measurement of productivity.
2. Select innovative methods in assessment, instruction and curriculum development to apply in their own institutions.
3. Discuss presented innovations and evidence of their effectiveness.

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the University of Illinois at Chicago (UIC) College of Medicine and University of Illinois Medical Center at Chicago. The University of Illinois at Chicago (UIC) College of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

The University of Illinois College of Medicine designates this educational activity for a maximum of 3 category 1 credits toward the AMA Physician's Recognition Award. Each physician should claim only those credits that he/she actually spent in the activity.



## Conference Schedule for Thursday, July 31

- 8:30 CONTINENTAL BREAKFAST
- 9:00 WELCOME  
Leslie J. Sandlow, MD  
*Professor and Head, Department of Medical Education  
Senior Associate Dean for Educational Affairs*
- 9:05 INTRODUCTION OF THE SPEAKER  
Ara Tekian, PhD
- 9:15 KEYNOTE ADDRESS  
**The Impact of Using Nontraditional Appointments on Faculty Satisfaction, Commitment, and Productivity.**  
Carole Bland, PhD  
*Professor, Department of Family Practice and Community Health,  
University of Minnesota School of Medicine*
- 10:15 COFFEE BREAK
- 10:30 SESSION I – PAPER PRESENTATIONS  
Moderator/ Discussant: Steven Downing, PhD
- Some Validity Evidence for an Internal Medicine Undergraduate Objective Structured Clinical Examination**  
Narmin Kassam, MD, FRCPC
- Performance Assessment: The Effects of a Standardized Patient's Presence on a Practitioner's Clinical Performance**  
Bryan S. Malas, CO, CPed
- Resident In-Training Evaluation: Present Challenges and Future Directions**  
Aaron Cass, MD
- 11:45 LUNCH BREAK  
**Focus groups**  
Facilitator- Georges Bordage, MD, PhD
- 1:00 **Honor Codes and Professional Codes in Medical Education**  
Timothy Murphy, PhD
- 1:30 SESSION II– PAPER PRESENTATIONS  
Moderator/ Discussant: Mark Gelula, PhD
- Study Habits of Surgery Residents and Performance on American Board of Surgery In-Training Examinations**  
Anna M. Derossis, MD, MHPE
- The Mayo Ophthalmology Residency Outcome Project**  
Dennis W. Siemsen, OD, MHPE
- Enhancing Educational Quality: A Framework For Analyzing Course Objectives of a Professional Education Program**  
Rebecca Wojcik, PT, MHPE
- SNAPPS: A Learner-Centered Case Presentation Model for Outpatient Education**  
Terry Wolpaw, MD

3:00 COFFEE BREAK

3:15 SESSION III– PAPER PRESENTATIONS  
Moderator/ Discussant: Rachel Yudkowsky, MD, MHPE

**An Online Curriculum in Acute Ambulatory Care for Internal Medicine Residents**  
David A. Cook, MD, and Denise M. Dupras, MD

**Evidence-Based Medicine Teaching in the Mexican Army Medical School: An Evaluation**  
Melchor Sanchez-Mendiola, MD

**Patient Outcomes for Alimentary Tract Surgery According to Surgeon Experience**  
Jay B. Prystowsky, MD, and Richard H. Bell, Jr., MD

5:00 BREAK INCLUDING POSTER SETUP

5:15 POSTER SESSION

**How Title VII Has Impacted the Structure and Programs in the MWU/CCOM Department of Family Medicine**  
Carol Spector, MS, MHPE

**Scholars Collaboration in Teaching and Learning**  
Terry Wolpaw, MD

**Development of Clinical Questions by Medical Students in Pediatric Evidence-based Clerkship at the University of Illinois at Chicago**  
Priyasuda Hettrakul, MD

**Steps to a Successful Self-Study**  
Rebecca Wojcik, PT, MHPE

**Is Holistic Pharmacology Disappearing From North American Doctoral Programs in Pharmacology?**  
Theresa A. John, PhD, MHPE, G. Bordage, MD, PhD, R. A. Skidgel, PhD, and M. H. Gelula, PhD

**An Institution-Wide Assessment of Residents' Interpersonal and Communication Skills**  
Rachel Yudkowsky, MD, MHPE; Barbara Eulenber, BA; Steven Downing, PhD

**Assigning Residents to Interest Groups: An Innovative Procedure for Faculty Development**  
Mark Gelula, PhD (principal investigator); Rachel Yudkowsky, MD, MHPE; Brad Cannon, PharmD

6:00-7:30 GRADUATE RECOGNITION CEREMONY AND RECEPTION

## Conference Schedule for Friday, August 1

- 8:30 CONTINENTAL BREAKFAST
- 9:00 KEYNOTE ADDRESS  
**New Expectations for Professional Practice: Implications for Teaching and Assessment**  
Ilene Harris, PhD  
*Professor and Director of Medical School Office of Educational Development and Research, University of Minnesota Medical School*
- 10:00 COFFEE BREAK
- 10:15 SESSION IV - PAPER PRESENTATIONS  
Moderator/ Discussant: Joe York, PhD
- Achieving Tenure-Track Equity for Part-Time Faculty with Full Professional Effort**  
Geri Fox, MD
- The Dynamics of Interorganizational Collaboration**  
Phavinee Thongkhong-Park, PhD, RN
- 11:00 PANEL DISCUSSION  
Moderator: Ara Tekian, PhD
- Faculty Productivity, Promotion and Tenure**  
Debra Klamen, MD, MHPE  
*Associate Dean for Undergraduate Medical Education Curriculum, University of Illinois at Chicago; Associate Professor, Department of Psychiatry*  
David Rogers, MD, MHPE,  
*Clerkship Director, Surgery, Southern Illinois School of Medicine*  
Alex Stagnaro-Green, MD, MHPE (candidate)  
*Associate Dean for Curriculum and Faculty Development, New Jersey Medical School*
- 12:00 WRAP UP  
**Pearls**  
Carole Bland, PhD, and Ilene Harris, PhD  
**Best paper presentation**
- 12:15 LUNCH BREAK
- 1:15-4:15 **Investigator 101: Institutional Review Board Training**  
Room 423 College of Medicine West (4<sup>th</sup> floor, Polk & Wolcott)



## Biosketches of Keynote Speakers

**Carole J. Bland, Ph.D.** is Professor and Vice Chair of Research and Faculty Affairs in the Department of Family Practice and Community Health, Medical School, and member of the Department of Educational Policy and Administration, College of Education and Human Development, both at the University of Minnesota, where she has been a faculty member since 1974.

She received an M.A. in Experimental Psychology and a Specialist Degree in Behavior Modification from Drake University in 1970 and a Ph.D. from the University of Minnesota in 1974 in Educational Psychology with an emphasis on measurement, evaluation, and adult learning. During 1989-90, she was an American Council on Education Leadership Fellow, learning about higher education's administration, organization, and funding. She has been active in University-wide governance having served on the Senate Faculty Affairs, Judicial, and Faculty Consultative Committees. She has served as special assistant to the Provost and has co-directed a three-year university initiative to assist departments in solving complex academic issues. In the Academic Health Center she has served on the Faculty Consultative Committee and has Chaired the Faculty Affairs Committee.

Currently, she directs the following: a university-wide study on the characteristics of research-productive departments, a departmental division which provides consultation, resources, and programs to support research, a three-year Clinical Investigator Fellowship for Family Physicians; a one-year national fellowship to prepare family medicine educators for the deanship or higher level administrative positions; and courses and workshops on education, administration, research, evaluation and faculty vitality. She has served as a consultant in these areas as well as on physician specialty choice to departments, universities, foundations, professional associations, and the federal government. She served as Chair of the Board of Directors of the Alfred Adler Graduate School, is presently serving as a Regent for Augustana College and she has chaired or served on numerous other organizational and editorial boards, national peer review committees, and task forces. Her research focuses on the development and productivity of faculty, administrators, and institutions. She is Series Editor of the Springer Series on Medical Education (Springer Publishing Company), and has over eighty publications, including an award-winning book, *Vitality of Senior Faculty Members: Snow on the Roof-Fire in the Furnace*.

**Ilene Harris, PhD** is Professor and Director, Medical School Office of Education: Educational Development and Research, University of Minnesota Medical School and Adjunct Professor of Curriculum and Instructional Systems at the University of Minnesota, College of Education. Dr. Harris has worked at the University of Minnesota since 1973, when she began as a research fellow. She received an MA in Social Sciences and History from University of Chicago in 1972 and a PhD in Education with an emphasis in evaluation, curriculum, and philosophy from University of Chicago in 1979. An active member of the American Educational Research Association, she served as Vice President from 1995 to 1997. She has also been active in the American Association of Medical Colleges and is currently serving as Chair-Elect of the Central Region Group on Educational Affairs. Highlighted among her many additional professional activities are memberships on the Grants Review Committee of the Association of Surgical Education and the Educational Advisory Board of the National Fund for Medical Education. Dr. Harris has been a reviewer of Field-Initiated Studies Grants Program for the U S Department of Education and has been active in the Minnesota Geriatric Education Center and the Minnesota Medical Association. At the University of Minnesota, Dr. Harris has also served as a member of the Senate Judicial Committee and a member of the Hearing Officer Panel. She has been instrumental in developing, coordinating and overseeing new curricula, programs, workshops, and research at the University of Minnesota. She has received a number of grants for research that encompasses improving medical skills of medical fellows, sleep disorders, evaluation of clinical performance of medical students, expert systems and their effectiveness, and evaluation of competencies, to name a few. Dr. Harris has authored at least 76 articles in peer-reviewed journals, four chapters in books and monographs, five major evaluation reports, 100 refereed papers and invited presentations at national meetings, and at least 62 posters and abstracts. Editorial Board memberships have included the Springer-Verlag series of books on medical education, *Journal of Curriculum and Supervision*, and the *University of Chicago School Review*. She has been a consultant to the Bush Foundation in a variety of capacities, and has provided consultation to a wide range of medical schools, medical organizations, and medical centers in the United States and Canada. She has also mentored numerous graduate students as advisor, co-advisor, thesis committee member, advisory committee member, or oral exams committee member.



## Session I Paper Abstracts

*Steven Downing, PhD, Moderator/Discussant*

### **Some Validity Evidence for an Internal Medicine Undergraduate Objective Structured Clinical Examination**

*Narmin Kassam, MD, FRCPC, University of Alberta*

**ABSTRACT:INTRODUCTION-** Although the use of OSCEs is now commonplace in medical education, it is important to note that they are not a panacea. As with any other assessment method, each application of the OSCE must be evaluated for evidence of validity.

**OBJECTIVE:** The purpose of this study is to collect and analyze some validity evidence for an internal medicine undergraduate objective structured clinical examination (OSCE). The contemporary concept of validity as a unified concept is used to gather evidence for the validity of the OSCE.

**METHODS:** Student performance data is analyzed from 1999 to 2001 to assess the reliability and analyze the content aspect of validity. First-year residents in internal medicine also participated in the OSCE over the study period, and their performance is compared to that of students to gather evidence to support the structural aspect of validity of the OSCE. Student performance on the multiple-choice examination (MCQ) and ward evaluations (WE) are compared to their OSCE performance to gather evidence to support the external aspect of validity of the OSCE. Finally, the consequential aspect of validity is assessed in light of how the scores are used to calculate the final student grade on the internal medicine rotation.

**RESULTS:** The median Alpha Reliability Coefficient of the 12 cohorts studied was 0.68, which is greater than the 0.60 accepted for locally developed examinations. Over the two years studied, there was an adequate representation of both content and skills tested. Residents did not perform better than students on the OSCE as a whole, but did perform better on certain stations. The median disattenuated correlation between the OSCE and MCQ was 0.78, OSCE and WE was 0.56, and MCQ and WE was 0.21.

**CONCLUSIONS:** There is adequate evidence to support the use of the OSCE in its existing format for student assessment at the end of their internal medicine rotation. This examination should not be used for resident assessment, with the exception of a few stations. The OSCE does measure different attributes than the MCQ and WE, supporting the present formula for determining the students' final grade on the internal medicine rotation, which is 30 percent OSCE, 30 percent MCQ and 40 percent WE. Future areas of research and development will be identified based on this study in order to continually improve this OSCE and clinical examinations as a whole.

### **Performance Assessment: The Effects of a Standardized Patients Presence on a Practitioner's Clinical Performance**

*Bryan S. Malas, CO, CPed*

**ABSTRACT:** The Objective Structured Clinical Exam (OSCE) and use of standardized patients (SPs) are well-accepted methods for appraisal of clinical performance and competency in medical education (Regher, 1999). As a result, standardized patient use in medical schools, allied health education, and high stakes exams has grown dramatically in recent years. According to Kassebaum & Eaglen (1999), from 1993 to 1997 the number of medical schools using standardized patients increased from 34.1% to 50.4%. Despite this increase in popularity and evidence for the effectiveness of OSCE and standardized patient use, the effects of the SPs presence on a practitioner's clinical performance has not been properly addressed. In other words, if a practitioner knows that a standardized patient is assessing their clinical performance will that effect the performance? Several authors have cited the need to address the effects of an observer's presence on clinical performance (Hodges et. al., 1997; McGaghie et. al., 1994; Stillman et. al., 1990). Therefore, the purpose of this study is to determine if the presence of an SP has an effect on a practitioner's clinical performance in a real time clinical setting.

Twenty local practitioners agreed to allow SPs to enter into their office on two separate occasions. During one encounter, SPs enter the facility unannounced, while during the other encounter, SPs announce their presence as a standardized patient. Using a randomized crossover design, interventions (announced vs. unannounced encounters) were randomly assigned. SPs were developed and trained to assess and measure clinical performance using a combined rating scale/checklist.

Early results indicate that practitioner's with greater than ten years experience showed a significant increase in clinical performance when the SP encounter was announced compared to the unannounced encounter. Those practitioners with less than ten years experience showed no significant difference between the announced and unannounced encounter.

### **Resident In-Training Evaluation: Present Challenges and Future Directions**

*Aaron Cass, MD*

**ABSTRACT** The in-training evaluation of clinical competence is a vital component of any residency program. Despite its importance, it is often sorely neglected, or done in a haphazard fashion. This presentation will examine the challenges being faced by the Nephrology Training Program of the University of British Columbia in the evaluation of its residents.

The current state of affairs in the Nephrology Training Program will be presented, including an informal survey of its faculty and residents. A systems approach will then be used to delineate the components of in-training resident evaluation, and the common problems that arise. The systems approach will concentrate on four key areas of evaluation:

- 1) The reasons
- 2) The objects evaluated
- 3) The methodology
- 4) The impact

Solutions to identified problems will be considered, based on a survey of existing strategies in the education literature. Novel approaches to resident evaluation using comparative methodologies will then be outlined. Finally, an attempt to implement a single comparative strategy in the Nephrology Training Program will be discussed.

## Session II Paper Abstracts

Mark Gelula, PhD, Moderator/Discussant

### Study Habits of Surgery Residents and Performance on American Board of Surgery In-Training Examinations

Anna M. Derossis, MD\*; Debra Da Rosa, PhD; Alan Schwartz, PhD†; Linnea S. Hauge, PhD\*\*; Georges Bordage, MD, PhD‡

Jewish General Hospital Department of Surgery, McGill University\*; Department of Surgery, Northwestern University†; Department of Surgery, Rush University\*\*; Department of Medical Education, University of Illinois at Chicago‡.

**ABSTRACT:INTRODUCTION-** In 1972 an in-training examination for general surgery residents became available through the American Board of Surgery (ABS). The ABS has offered an annual in-training examination since 1975 to assist program directors with assessing the necessary knowledge for competence. The examination is offered only through directors of accredited surgery programs in the United States. Surgical residents across all levels of training prepare and take the American Board of Surgery In-Training Examination (ABSITE) annually.

**OBJECTIVE:** The purpose of this study was to evaluate the study habits of surgery residents as they prepare for the annual American Board of Surgery In-Training Examination (ABSITE). Research questions addressed were: Do better study habits correspond to better ABSITE scores? Are study habits related with better scores on the clinical or basic science component of the ABSITE exam?

**METHODS:** A validated instrument developed to assess study strategies in college students, the Survey of Study Habits and Attitudes (SSHA), was slightly modified for use with residents. The modified SSHA contains two subscale scores, one for work methods (WM) and one for delay avoidance (DA), and a combined overall study habit score. A total of 59 residents from two academic general surgical residency programs, and five levels of training were administered the modified SSHA. The SSHA scores were correlated to performance on the in-training examination.

**RESULTS:** There was a small but significant correlation between scores on the modified SSHA instrument and performance on the ABSITE ( $r = 0.29$ ,  $p < .05$ ;  $r^2 = 0.0841$ ). This was seen with the SSHA overall and with the work methods scale, but not with the delay avoidance scale. Linear regression analysis showed that the clinical component and overall performance on the ABSITE were significantly predicted by the total study habits scores; the basic science component was not.

Overall total ABSITE percent correct scores were significantly predicted by residency levels of training and the overall SSHA scales (DA and WM). Together they predicted 63% of the total variance in the overall performance scores. Residency level was the strongest predictor. Study habit performance accounted for 5.9% of the total variance over and above that contributed by residency level of training.

**CONCLUSIONS:** The correlations of surgical resident ABSITE performance with SSHA scores were in the same order of magnitude as those of college students and academic performance with the original SSHA (about 8% of the variance accounted for by study habits). While study habits in this study did account for a measurable yet small contribution to ABSITE performance, this contribution is not enough to consider using the SSHA instrument in its current modified form as a diagnostic and counselling tool. Published instruments not specifically designed for residents may not be tailored enough to measure residents' unique study habits. Future studies in this area may be informative in building a better study habit tool for residents.

### The Mayo Ophthalmology Residency Outcome Project

Dennis W. Siemsen, OD, MHPE; Mayo Clinic

**ABSTRACT:INTRODUCTION-** To develop a process for applying competency guidelines in an ophthalmology residency program.

**SIGNIFICANCE:** The Accreditation Council for Graduate Medical Education (ACGME) has proposed a system of evaluation of resident performance based on core competencies. The ACGME has proposed a gradual change in focus and evaluation within ophthalmology residency programs as a transition from a format based on the potential for learning, to one based on actual outcomes. The Mayo ophthalmology residency program has recently been granted a four-year accreditation. The Department has decided to begin a transition toward outcome-based evaluation, and in the process develop a more formal system of goals and educational objectives.

**METHODS:** The author and the Ophthalmology Education Committee propose to develop a curriculum model based on core competencies to be applied to each sub-specialty service within the Department. The model will include program goals, educational objectives, skills, evaluation tools, and learning tools, which include readings, simulations, surgical technique labs, and conferences. The model will be first applied to one service and an interim evaluation will take place. Once the final model is determined, it will be applied to each service in the Department.

**OUTCOME:** The expected outcome is a curriculum of specific goals and objectives, the efficacy of which can be determined using a goals-based method of evaluation.

**CONSULTATION GOALS:** There is little in the ophthalmology literature regarding learning objectives and nothing linking ACGME's core competencies to ophthalmology training. The author seeks guidance in applying the core competencies as well as suggestions for program evaluation in programs with small (4 per year) class sizes.

### **Enhancing Educational Quality: A Framework For Analyzing Course Objectives of a Professional Education Program**

*Rebecca Wojcik, PT, MHPE, Governor's State University*

**ABSTRACT: PURPOSE:** To satisfy criteria for specialized accreditation, health professions educational programs must develop learning objectives for each course and include objectives in a variety of specified content areas. The purpose of this presentation is to describe a framework for describing and analyzing the curricular and course objectives of a professional education program and their relationship to evaluative criteria for accreditation. **DESCRIPTION:** A framework for categorizing each course objective in an entry-level professional education program was developed. Faculty categorized each objective based on its level in traditional taxonomies of learning, its relationship to curricular objectives, curricular themes, and evaluative criteria for curricula established by the specialized accrediting agency. Using spreadsheet software, the data were sorted and tabulated to answer questions related to the depth and breadth of course objectives.

**SUMMARY OF EXPERIENCE:** Use of the framework enabled the faculty and the specialized accreditation agency to analyze the learning objectives of the curriculum from a variety of perspectives. Complex curricular relationships were easily communicated to faculty and site team visitors. Using the framework, faculty can readily identify the impact of changes in course objectives. Description of the curricular objectives for a variety of stakeholders can be expedited by using the framework.

**IMPORTANCE:** Assessment of the curriculum is an essential element of improving the quality of physical therapist and physical therapist assistant education. Use of a framework such as the one described in this presentation can facilitate improved description, reporting, analysis, and planning for change in education programs.

### **SNAPPS: A Learner Centered Case Presentation Model for Outpatient Education**

*Teri Wolpaw, MD, Case Western Reserve University*

**ABSTRACT: INTRODUCTION:** The fast-paced ambulatory teaching environment often results in passive learners who depend on preceptors to drive the learning encounters. Encounters focus on factual information, frequently without the promotion or expression of thinking and reasoning behaviors. How can we wake up the learners and enable their potential contributions to the encounters?

**OBJECTIVE:** 1) Create a learner-centered model for patient presentations in the office setting; 2) Position the learner in a central role in office learning encounters; 3) Enable the expression of thinking behaviors in case presentations.

**METHODS:** We have developed a collaborative model for outpatient education that links learner initiation and preceptor facilitation in an active learning conversation. This learner-centered model is called SNAPPS and consists of six steps: 1) Summarize briefly the history and findings, 2) Narrow the differential to 2 or 3 relevant possibilities, 3) Analyze the differential by comparing and contrasting the possibilities, 4) Probe the preceptor by asking questions about uncertainties or alternative approaches, 5) Plan management for the patient's medical issues, and 6) Select a case-related issue for self-directed learning.

**RESULTS:** The model has been piloted on 50 third year medical students rotating on an ambulatory medicine block. Students indicate that they: 1) Feel capable of assuming an active role and identifying learning points uniquely helpful to them; 2) Feel the model is intuitive and easy to learn; 3) Appreciate the unique approach of questioning the preceptor and selecting a focused issue for self-directed learning. Key aspects of faculty feedback are: 1) In contrast to traditional office interactions, students readily come up with questions for the preceptors; 2) The questions are appropriate to the case, generating an interactive discussion; 3) Preceptors enjoy teaching the engaged student; 4) Preceptors feel relieved of the pressure of thinking up learning points but rather can respond to the student's questions.

**CONCLUSIONS:** We believe SNAPPS represents a paradigm shift in ambulatory education that creates a collaborative learning conversation in the context of patient care.

A teaching video/DVD with edited but unrehearsed student presentations with and without SNAPPS along with student comments will be available for viewing.

#### **CONSULTATION FOCUS:**

1. How best to teach the model to learners; how best to teach the model to preceptors
2. How best to measure learner outcomes

## Session III Paper Abstracts

Rachel Yudkowsky, MD, MHPE, Moderator/Discussant

### **An Online Curriculum in Acute Ambulatory Care for Internal Medicine Residents**

David A. Cook, MD, Denise M. Dupras, MD; Mayo Clinic Department of Internal Medicine

**ABSTRACT:INTRODUCTION:** Post-graduate training in Internal Medicine often includes a rotation in a walk-in clinic for acute medical problems – an “urgent care” clinic (UCC). Formal education can be difficult to implement in this setting due to high patient volume and complex shift schedules. We developed an online curriculum in acute ambulatory care to meet this need. **METHODS:** We reviewed the most common diagnoses from our UCC over the preceding two years. For each diagnosis we inferred a probable “chief complaint” and selected the most common complaints as curriculum topics. For each topic we reviewed textbooks, practice guidelines, primary journal articles, and evidence-based reviews to construct a learning module. We developed eight online modules. Although we designed the modules to be read from start to finish, “hyperlinks” allow the learner to jump to points of immediate interest within the curriculum as well as full-text journal articles. Each module includes sections on Epidemiology, Differential Diagnosis, History and Physical Exam, Further Testing, General Therapeutic Measures, Management of Specific Diseases, Key Learning Points and Bibliography, as well as a pre- and post-test. Residents can access the curriculum from any Internet-ready computer. They complete the series according to their own schedule during their one-month UCC rotation. Tests are administered and automatically scored using WebCT. Feedback on the curriculum is obtained via a WebCT survey. Each module’s content is available in Microsoft Word and Palm PDA format. **RESULTS:** The curriculum has completed 12 cycles, during which time 56 of 73 residents completed at least one module and 50 completed the entire curriculum. The initially poor completion rate improved from 70 to 91% ( $p=0.05$ ) after the rotation secretary began to e-mail twice-monthly reminders. The curriculum has required no faculty maintenance other than periodic review of test scores and occasional minor updates.

The mean pre-test score (all modules pooled) was 70% and post-test score was 95% ( $p<0.0001$ ). Test scores for individual modules also improved ( $p<0.0001$  for each of the 8 modules). The survey showed that:

- \* 94% agreed or strongly agreed that the curriculum improved their knowledge
- \* 94% agreed or strongly agreed that it was an effective form of self-directed learning
- \* 54% listed the online modules as their first or second learning resource during the rotation
- \* 74% accessed full-text online journal articles
- \* 74% continued to use the modules more than once a week after completing the curriculum.

**DISCUSSION:** Our self-directed online curriculum had a dramatic impact on knowledge and was well received by learners. A twice-monthly e-mail significantly improved the completion rate. Most residents continued to use the curriculum as a resource.

The study is limited by the number of residents who didn't complete the modules and the lack of a control group. However, the curriculum has filled a gap in our residency program by avoiding scheduling conflicts while promoting active and self-directed learning and facilitating assessment. This evidence-based online curriculum could easily be adapted to other settings in post-graduate physician training.

### **Evidence-Based Medicine Teaching in the Mexican Army Medical School: An Evaluation**

Melchor Sanchez-Mendiola MD. Escuela Médico Militar, Hospital Central Militar

**ABSTRACT:INTRODUCTION:** The training of medical students must include the acquisition of the skills necessary to efficiently use advances in scientific research. The strategy of evidence-based medicine (EBM) has been proposed as one method to learn and practice medicine by finding, appraising and using biomedical research, with the ultimate goal of providing quality health care. EBM has been incorporated in undergraduate medical education programs in several countries, a process that requires specific dissemination and evaluation strategies in developing the country’s medical schools.

**OBJECTIVE:** To evaluate with a validated instrument the impact in attitudes and knowledge related to EBM and critical appraisal in a medical school in a developing country.

**METHODS:** An EBM course was incorporated in the curriculum of the Mexican Army Medical School, and in the first year of its implementation, it was given to half the 5<sup>th</sup>- and 6<sup>th</sup>-year medical student groups. At the end of the semester, a previously validated questionnaire designed to evaluate the effectiveness of EBM teaching (Taylor R et al. Development and validation of a questionnaire to evaluate the effectiveness of evidence-based practice teaching. Med Educ 2001; 35:544-7) was administered simultaneously to all the 5<sup>th</sup>- and 6<sup>th</sup>-year students (translated to Spanish and translated back to English), including the other half of the groups that had not taken the course.

**RESULTS:** Sixty-eight students took the course, and 64 did not. There was a significant increase in the attitudes score as measured by the questionnaire, 22.9 +/- 5.9 (mean +/- SD) in the non-EBM group vs. 28.8 +/- 3.2 in the EBM group ( $p<0.001$ ), and a trend towards higher scores in the knowledge domain that was not statistically significant, 1.89 +/- 3.3 in the non-EBM group vs. 2.56 +/- 3.6 in the EBM group ( $p>0.05$ ).

**CONCLUSIONS:** EBM concepts can be taught in a developing country medical school, with a short-term gain in attitude and probably in knowledge. In developing countries healthcare systems, that usually produce only a small fraction of the world’s biomedical research, it is particularly important for health care professionals to be educated consumers of the biomedical literature, to be able to provide the best medical care possible in an environment with limited availability of resources.

**Patient Outcomes for Alimentary Tract Surgery According to Surgeon Experience**

Jay B. Prystowsky, MD, and Richard H. Bell, Jr., MD, Department of Surgery, Northwestern University Feinberg School of Medicine, Chicago, Illinois.

**ABSTRACT:** There has been increased attention recently to the assessment of “competency” upon completion of residency training. The goal of this study was to determine if patient outcomes for alimentary tract surgery (ATS) varied according to surgeon experience. Specifically, we sought to determine if patient outcomes were worse for surgeons who recently completed their training.

**METHODS:** A statewide administrative database of patients (n=119,211) who underwent ATS from 1996-1999 was reviewed. Patient variables included age, emergency admission, and comorbid illnesses. Surgeon variables were years since American Board of Surgery (ABS) certification and surgeon volume. Patient outcomes were mortality, morbidity, and length of stay (LOS). Regression analyses were performed separately for patients undergoing appendectomy and cholecystectomy (low complexity operations) and all other procedures (high complexity operations).

**RESULTS:**

Surgeon Experience	Low Complexity Operations			High Complexity Operations		
	Mortality Rate (%)	Morbidity Rate (%)	LOS (days)	Mortality Rate (%)	Morbidity Rate (%)	LOS (days)
0-5 yrs	0.5	12.8	4.1+4.3	7.0	34.0	10.4+9.2
6-20 yrs	0.6	13.4	4.2+4.3	5.2 *	30.4 *	10.3+8.7
21-30 yrs	0.6	12.6	4.4+4.9 *	5.1 *	30.0 *	10.6+8.4
>30 yrs	0.6	13.6	4.6+4.3 *	5.8 *	30.4 *	11.0+9.0 *

\* Significance at p<0.05 using regression analyses compared to 0-5 yrs group

**CONCLUSIONS-** After risk adjustment, patients of surgeons with 0-5 years of experience suffered worse outcomes for high complexity operations. We conclude that attention to “competency” upon completion of general surgery residency training is warranted especially as it relates to performance of high complexity operations of the alimentary tract.

## Poster Session

### How Title VII Has Impacted the Structure and Programs in the MWU/CCOM Department of Family Medicine

Carol Spector, MS, MHPE

### Scholars' Collaboration in Teaching and Learning

Terry Wolpaw, MD

### Development of Clinical Questions by Medical Students in Pediatric Evidence-based Clerkship at the University of Illinois at Chicago

Priyasuda Hetrakul, MD

### Steps to a Successful Self-Study

Rebecca Wojcik, PT, MHPE

### Is Holistic Pharmacology Disappearing From North American Doctoral Programs in Pharmacology?

Theresa A. John, PhD, MHPE; G. Bordage, MD, PhD; R. A. Skidgel, PhD; and M. H. Gelula, PhD

### An Institution-Wide Assessment of Residents' Interpersonal and Communication Skills

Rachel Yudkowsky, MD, MHPE; Barbara Eulenberg, BA; Steven Downing, PhD

### Assigning Residents to Interest Groups: An Innovative Procedure for Faculty Development.

Mark Gelula, PhD (principal investigator); Rachel Yudkowsky, MD, MHPE; Brad Cannon, PharmD

## ***MHPE Graduate Recognition Ceremony***

*Thursday, July 31, 2003 at 6:00 PM*

*Welcome and Introduction: Leslie J. Sandlow, MD; Head, Department of Medical Education*

*Greetings: Michael D. Bailie, Ph.D.; Vice Dean - College of Medicine Office of the Dean*

*Remarks and Presentation of the Graduates and their Advisors by the Director of Graduate Studies:  
Dr. Georges Bordage, MD, PhD*

### ***Graduates and Advisors:***



***Anna M. Derossis***, McGill University; Fall 2002: *Study Habits of Surgery Residents and Performance on American Board of Surgery In-Training Examinations:*

✧ *Advisors: G. Bordage, A. Schwartz, D. DeRosa*



***Danielle Blouin***, McGill University; Spring 2003: *Development of a Teaching Skills Improvement Program for Emergency Medicine Residents*

✧ *Advisors: M. Gelula, R. Yudkowsky, L. Snell*



***Theresa Adebola John***, Spring 2003: *Is Holistic Pharmacology Disappearing from North American Doctoral Programs in Pharmacology?*

✧ *Advisors: M. Gelula, G. Bordage, R. Skidgel*



***Narmin Kassam***, University of Alberta; Spring 2003: *Some Validity Evidence for an Undergraduate Internal Medicine Objective Structured Clinical Examination*

✧ *Advisors: S. Downing, G. Bordage, E. Skakun*



***Pawasoot Supasai***, Maharat Korat Hospital, Thailand; Spring 2003: *Implementing Evidence-Based Medicine into Clinical Practice at the Maharat Korat Hospital, Thailand*

✧ *Advisors: R. Mrtek, P. Bashook, A. Schwartz*



**Bryan Malas**, Northwestern University, Summer 2003, *The Effects of a Standardized Patient's Presence on a Practitioner's Clinical Performance*,  
 ✧ Advisors: G. Bordage, A. Schwartz



**David Rogers**, Southern Illinois University, School of Medicine, Summer 2003, *Conflict in Medical Learning Groups: An Investigation of Sources and Participant Responses*,  
 ✧ Advisors: G. Bordage, A. Schwartz, G. Bordage, J. Goldberg



**Angela Nuzzarello**, Feinberg School of Medicine, Northwestern University, Summer 2003, *Medical Students' Risk Perception of Major Depression: Does it relate to clinical experience?*  
 ✧ Advisors: J. Goldberg, S. Poirier, L. Sharp, R. Yudkowsky

***A Note on Academic Regalia and the Presentation of Stoles***

*Academic regalia originated in the twelfth century medieval European universities of Bologna, Oxford, Cambridge, and Paris. The academic costume that we have today developed from the long robe and hood garments worn by scholars who were primarily monks and friars. Their dress met practical needs and incorporated church and state ceremonial traditions. Later, the beautiful robes of Roman Popes and the garments of church prelates set the tradition followed by bishops and vice chancellors as they became heads of universities. Universities developed regulations dictating costume styles to distinguish their officials from doctors, from lesser clerics, and from townspeople.*

*The use of academic costumes in this country was limited and sporadic before the Civil War. Subsequently, a renewed interest was spurred by the growth of American universities and their graduate programs and by increased contact with European universities. Also, students wanted to wear garments that would distinguish them as graduates at their graduation ceremonies.*

*Academic regalia include a gown, a cap, a hood, and a stole worn over the hood. Each of these components of the regalia contributes to the identification of the degree, the institution, and the field studied. At this ceremony, we are presenting each graduate with a stole. The sky blue identifies the specialty training area of the graduate as Health Professions Education.*

## **Session IV Paper Abstracts**

*Joe York, PhD Moderator/Discussant*

### **Achieving Tenure-Track Equity for Part-Time Faculty with Full Professional Effort**

*Geri Fox, MD; University of Illinois at Chicago, Department of Psychiatry*

**ABSTRACT:** This paper describes a proposal to amend the tenure track policy at University of Illinois. The proposal's intent is to achieve tenure track equity for part-time faculty with full professional effort. Our current tenure roll-back system is inadequate to fully achieve equity for this subset of our faculty. Instead, the author recommends a prorated tenure clock based on the percent-time appointment of those part-time faculty whose sole professional effort is at the University. This policy change would particularly encourage academic productivity among female faculty in their child-bearing years. It would also help to achieve a work-life balance for both mothers and fathers, as well as those providing eldercare. A similar policy is currently used successfully at other universities.

In the presentation, I will review the relevant literature, discuss the inherent conflict between the "ideal worker" and "good mother" roles in our society, and briefly examine the detrimental effects of these conflicting doctrines on families. I will also review data on the scarcity of women with tenure in the College of Medicine at University of Illinois. Finally, I will discuss the status of my efforts to effect policy change, and will report on the progress of a survey of the part-time faculty at University of Illinois College of Medicine. I would welcome a discussion of how to move the proposal forward within the University system.

### **The Dynamics of Interorganizational Collaboration**

*Phavinee Thongkhong-Park, PhD, RN*

**ABSTRACT:** Scholars have done much research on what compels the organizations to form linkages. Research over the past twenty-five years or so has contributed to an understanding of the factors that compel organizations to enter into interorganizational relationships such as alliances, joint ventures, etc. Why these interorganizational forms emerge has been a primary focus of the literature written on this topic during the past twenty years. Theories that have contributed to the explanation of the emergence of these interorganizational forms include resource dependence, corporate social performance/institutional economics, strategic management/social ecology, microeconomics, institutional/negotiated order, and political. Most of these models address primarily the antecedents and outcomes, while a few (Larson, 1992; Mohr & Spekman, 1994; Doz, 1996) attempt to address the strategies that contribute to the successful formation of these interorganizational linkages.

Very few studies have combined the evaluation of the preconditions, processes, and outcomes into one study. Some notable works that addressed the preconditions, processes, and outcomes include studies done by Van de Ven (1984), Gray (1985), Gray (1991), Larson (1992), Ring and Van de Ven (1994), and Doz (1996). Scholars have documented that the studies of alliances need to focus on process. The methodology used in this research is grounded theory, the method of choice when studying process. The research also used two case studies. The purpose of the case studies was to provide additional insight into the refinement of the framework proposed. The instrumental case studies in this research played a supportive role in understanding interorganizational collaboration and its attributes of success. The proposed framework allows for a more integrated approach toward examining the dynamics of interorganizational collaboration within the organizational context and social structures. The proposed framework may assist organizations in understanding the complex lateral dynamics when independent organizations decide to enter alliances.