

PURSuing YOUR PASSION WITH EXCELLENCE IN TEACHING



GOAL FOR THE ACADEMY

- Build excellence in teaching at the JCESOM.
- Provide a platform for the continuous recognition of excellence in teaching.
- Stimulate interest and visibility in teaching.
- Provide an interdisciplinary support network for medical educators.
- Promote scholarship of teaching and learning through research and innovation.

MESSAGE FROM THE CHAIR

Since its inception in 2004, the Joan C. Edwards School of Medicine (JCESOM) has benefitted greatly from the education, innovation, and collaboration that the Academy of Medical Educators has produced. By providing our faculty and residents with a varied and wide range of knowledge and teaching resources, the academy has faithfully and consistently taken our educational program to new levels of excellence. Through activities like curricular interventions, peer-reviewed publications, and national and regional presentations, academy members continue to bring honor and recognition to our institution. We are now building upon our success, improving the academy's structure to harness the input and experience of the growing membership.

These structural changes will bring new tools and skills to the teaching community for the medical school and the university as a whole. A graduated system of participation levels has been instituted encouraging junior and senior faculty participation. Criterion-based categories will be used for acceptance and advancement in academy membership.

The mission of the Academy of Medical Educators is to build excellence in teaching by supporting and nurturing pre-eminent medical educators, improving curriculum, and advancing educational scholarship. As a new class begins its training, I look forward to the inspired and imaginative projects of the academy. The implemented changes will augment the wonderful education that has been a staple at the Joan C. Edwards School of Medicine.

Adam M. Franks, M.D.
Chair, Academy of Medical Educators, JCESOM (2013)

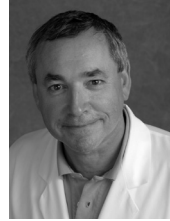
2013 Academy Inductees

Master Teacher



Susan Jackman, Ph.D.,
Professor Biochemistry & Microbiology

Fellow



Michael A. Krasnow, D.O., Ph.D.
Professor of Ophthalmology

Associate



Sydnee McElroy, M.D.
Assistant Professor
Family Medicine



Saroj Sigdel, M.D.
Associate Professor
Anatomy & Pathology



Sona Shah, M.D.
Assistant Professor
Neuroscience



Terrence Julien, M.D.
Associate Professor
Neuroscience



Adrienne Mays, M.D.
Assistant Professor
Family Medicine



Jiang Liu, Ph.D.
Associate Professor
Pharmacology, Physiology
& Toxicology



Russell Fry, M.D.
Assistant Professor
Ophthalmology

Protégé



Mahshid Mohseni, MD
Internal Medicine

Mentor - Larry Dial, MD



Adam Alley, MD
Family Medicine

Mentor - Adam Franks, MD



Shelly Nickels, MD
Internal Medicine

Mentor - William A. Nitardy, MD



Ekong Uffort, MD
Surgery

Mentor - Gerald McKinney, MD



Jennifer Gerlach, MD
Pediatrics

Mentor - Sean Loudin, MD



Neha Goyal, MBBS
Internal Medicine

Mentor - Paulette Wehner, MD



Lisa Carey, DO
Med/peds

Mentor - William A. Nitardy, MDD



Marco Yung, MD
Surgery

Mentor - Gerald McKinney, MD



**Muhammad Waqas,
MBBS (Fellow)** Cardiology

Mentor - Paulette Wehner, MD

Academy Educational Domains

1. Direct teaching
2. Curriculum development, instructional design, and assessment of student learning
3. Advising and mentoring
4. Leadership and service
5. Educational research, including patient QA/QI

Membership category

PROTÉGÉ

All residents, fellows, post-doctoral and doctoral students who are affiliated with the School of Medicine in good standing, and have faculty mentor.

ASSOCIATE

JCESOM Faculty who teaches a minimum of 10 hours per year and engaged in at least one educational domain.

FELLOW

Faculty who have demonstrated sustained involvement, engagement and evidence of excellence in at least one or two educational domains.

MASTER TEACHER

Faculty who have demonstrated sustained involvement engagement, excellence and scholarly approach in more than three educational domains with at-least one scholarly publications-disseminations.

EDUCATION SCHOLAR

JCESOM Faculty who have demonstrated sustained involvement, engagement, excellence and scholarly approach in more than three educational domains. Have a record of scholarly publications/presentations with regional, national, and/or international recognition as an educator.

Benefits of Academy Membership

The academy offers multiple opportunities to its members to achieve its mission and purpose. Members can take advantage of the professional development opportunities in educational scholarship and publication, become involved in the mentoring process, win rewards of recognition for teaching excellence, and apply for innovative Educational Project (iEP) funding.



GRADUATES OF THE ACADEMY

2004-2005

Master Educators

- David Denning, M.D.
- Brenda Dawley, M.D.
- Joe Evans, M.D.
- Vern Reichenbecher, Ph.D.
- Darshana Shah, Ph.D.
- Paulette Wehner, M.D.

Teaching Scholars

- Rafael Molina, M.D.
- Mehdi Ak-Hevan, M.D.
- Ben Allen, M.D.

2005-2006

Master Educators

- Adam Frank, M.D.
- Betts. A. Carpenter, M.D.
- Todd Green, Ph.D.
- Gerald McKinney, M.D.
- Mitch Charles, M.D.

Teaching Scholars

- Sarah Rinehart, M.D.
- H. Keblawi, M.D.
- Farid Mazaffari, M.D.

2006-2007

Master Educators

- Eduardo Pino, M.D.
- Mehdiar O. El-Hamdani, M.D.
- William E. Triest, M.D.
- Chuck Clements, M.D.
- Bobby L. Miller, M.D.

Teaching Scholar:

- Matthew Weimer, M.D.

2007-2008

Master Educators

- Vincent Sollars, Ph.D.
- Anne Zappacosta, M.D.
- Mumtaz Zaman, M.D.
- Tracy L. Legrow, Psy.D.
- Chuck Giangarra, M.D.

Teaching Scholars

- Samar Abu-Sultaneh, M.D.
- Ben Mossavi, M.D.
- Karima Zwawi, M.D.

ACADEMY 2013

Abstracts



Assessing EBM knowledge of pediatric residents in West Virginia

Maria G. Lopez Marti, M.D.

Department of Pediatrics, Joan C. Edwards School of Medicine, Marshall University

Background: Evidence-based medicine (EBM) seeks to integrate the best research evidence with clinical expertise and patient values to optimize clinical outcomes for patients. EBM is considered the “new paradigm” in medicine, and the Accreditation Council for Graduate Medical Education (ACGME) has recognized the importance of EBM skills as core competencies for resident training¹. Overall, pediatric residencies tend to lag behind internal medicine in incorporating EBM into the curriculum. In this project, we sought to determine the baseline of pediatric residents’ EBM knowledge and to use that information as a valuable tool to design an integrated EBM-Pediatrics curriculum. The Fresno test of Evidence Based Medicine is a validated tool that has been used extensively to document EBM knowledge².

Goal: This study intends to investigate the baseline EBM knowledge of pediatric residents by administering a modified version of the Fresno test.

Methods: The Fresno test of Evidence Based Medicine consists of 12 questions and requires 30 minutes to complete, with a maximum score of 212 points. Due to time constraints, we designed a shortened version of this test, consisting of only 4 questions. The Marshall University Institutional Review Board approved this study. Residents were invited to participate in this activity voluntarily and anonymously during a noon conference session; they were allowed 10 minutes to take the test and then hand their written responses to the research team. Participant responses were evaluated using the grading rubrics provided by the UCSF-Fresno Medical Education tool.

Results: Eighteen of 24 (75%) residents participated in the baseline assessment of EBM knowledge. Residents from all three post-graduate levels participated: PGY-1 (n=5), PGY-2 (n=7) and PGY-3 (n=6). Our modified Fresno test included 4 questions, with a maximum score of 45 points. Responses were graded by the principal investigator according to the UCSF-Fresno Medical Education tool rubric. Scoring results are displayed in Table 1. Mean score for all participants was 14.2 points.

Table 1: Grading scores of residents’ responses (out of 45 points)

PGY1	PGY2	PGY3
16	10	16
16	29	18
11	26	10
10	15	10
6	8	7
	10	31
	6	
mean		
11.8	14.9	15.3

Kruskal-Wallis test, p-value: 0.86

Conclusion: This preliminary study, as a baseline analysis, shows that the EBM knowledge of our pediatric residents is low. The results reinforce the need to integrate EBM teaching into the pediatric residency curriculum. As expected, there were lower scores in the first years of residency in comparison to the more senior residents studied, but the difference was not statistically significant. Larger studies are needed to further depict the best educational methods needed to optimize EBM education in pediatric residency programs.

References:

1. Accreditation Council for Graduate Medical Education. Teaching Evidence-Based Medicine and Assessing Competence in the Era of Milestones. Available at: <http://www.acgme.org/acgmeweb/Portals/0/PDFs/2013AEC-Presentations/SES107.pdf>. Accessed on June, 5th 2013.
2. Ramos KD, Schafer S and Tracz SM. Validation of the Fresno test of competence in evidence based medicine. *BMJ* 2003 Feb 8; 326(7384):319-21.

Use of cognitive chunking to enhance pathology learning

Thomas Dougherty, M.D., and Darshana Shah, Ph.D.

Department of Anatomy and Pathology, Joan C. Edwards School of Medicine,
Marshall University

Background: Preclinical years are challenging for most medical students. In order for students to learn and apply their preclinical knowledge, they must be motivated, actively engaged, and personally invested. Students are motivated when instruction includes a supportive learning environment and student-centered processes. Educators, in turn, engage and motivate students through challenging curriculum content delivered in an effective learning environment.

Goal: The study examined the use of cognitive chunking as a pedagogical tool for environmental pathology.

Chunking is a learning technique used most commonly to organize or classify large amounts of information, especially when there are no obvious patterns in the material. Chunking reduces and organizes the cognitive load as the learner processes information. Segments of material can then be reinforced using programmed learning techniques, such as question-answer sequences, which provide immediate feedback to the student.

Method: A self-learning module based on the concept of a cognitive chunking and using a programmed learning format was developed for environmental pathology. The module template was based on the format of *Sidman and Sidman's Neuroanatomy: A Programmed Text* (1965), with modifications to include more information per frame. The material was broken into segments and followed an information-questions-answer sequence. 87 slides of information were matched with 113 question-and-answer slide pairs; each question-answer slide pair emphasized the material immediately prior and provided instant feedback. Questions incorporated fill-in-the-blank, true/false, and multiple-choice formats and ranged in difficulty from simple to challenging. A short survey was offered after completion. Student (N=28) comments on the self-learning chunking modules were thematically analyzed.

Results: The module was completed in 1, 2, or 3 hours by 9%, 40%, and 31% of students respectively. The majority (87.5%) of the students did not think there were too many questions. 96% found the module to be a meaningful learning exercise that kept the student engaged.

Several themes emerged after the qualitative analysis of the student comments. Students found the self-learning module helpful, effective, and engaging. The module also provided a built-in self-assessment, which helped students learn and understand the material. Students recommended that other topics be taught using the same self-learning chunking format.

Conclusion: Results indicate that the self-learning chunking module for environmental pathology was a useful learning exercise. The use of chunking, reinforced with immediate question-and-answer feedback, helped build the students' knowledge base and aided in the development of the critical thinking process. Students found the format engaging, which helped move information into long-term memory through repetition without monotony.

References:

1. Furukawa, James M.; Cohen, Nancy. Chunking Method of Teaching and Studying (III): Test Effects. <http://eric.ed.gov/?id=ED183604>
2. Miller G A. The magical number seven, plus or minus two: some limits on our capacity for processing information. *Psychol Rev.* 1956; 63:81-97.

GRADUATES OF THE ACADEMY

2008-2009

Master Educators

- Dilip Nair, M.D.

Teaching Scholars

- William Nitardy, M.D.
- Shadi Obeidat, M.D.
- Yousef Darrat, M.D.
- Waseem Ostwani, M.D.

2009-2011

(**Program extended to 15 months)

Master Educators

- Nesreen BenHamed, M.D.
- Stephen Petrany, M.D.
- Tina Sias, M.D.
- Mary Kathryn Gould, Ed.D., R.D., L.D.
- Kelli Williams, Ph.D.

Teaching Scholar:

- Stephen Eaton, M.D.

2011-2012

Master Educators

- Penny G. Kroll, D.P.T.
- Wesam Abdulati Bolkhair, M.D.
- Sarah Price, M.D.

Teaching Scholars:

- Dana Eilen, M.D.
- Amanda N. Pauley, M.D.
- Mohammed Ebraheem, M.D.

2012-2013

Master Educators

- Thomas H Dougherty, M.D.
- April Kilgore, M.D.
- Maria G. Lopez Marti., M.D.

Teaching Scholars

- Courtney B. Saunders, M.D.
- Farah Al Khitan, M.D.
- Baraa Alabd Alrazzak, M.D.

Academy Governing Structure

Academy Executive Council:

Chair:

Adam Franks, M.D.

Founding Chair:

Darshana Shah, Ph.D. (2004-2013)

Academy Advisory Committee:

Hisham Keblawi, M.D.
(Academy graduate 2006)

Todd Green, Ph.D.
(Academy graduate 2006)

Bob Miller, M.D.
(Academy graduate 2007)

Nesreen BenHamed, M.D.
(Academy graduate 2011)

Steve Petrany, M.D.
(Academy graduate 2011)

Academy Program Committee:

David Denning, M.D.
(Academy graduate 2005)

Joe Evans, M.D.
(Academy graduate 2005)

Paulette Wehner, M.D.
(Academy graduate 2005)

Tracy LeGrow, Psy.D.
(Academy graduate 2008)

A Failed Intervention for Perceived Lack of Efficacy in Physician to Physician Transition of Care: Investigation of the Underlying Challenges

Courtney Saunders, M.D., Farah Al-Khitan, M.D. and Dana Eilen, MD, *Department of Cardiology, Marshall University, Joan C. Edwards School of Medicine*

Background: Transition of care amongst a group of physicians during shift changes is an area of patient care vulnerable to medical error and resultant patient harm. Physicians are often charged as being the leader of the healthcare team, and hence a source of behaviors for other members of the healthcare team to observe and replicate. A previously performed study at our institution demonstrated that there was a multi-disciplinary perception of inadequate cardiology-fellow-to-cardiology-fellow transition of care. After this perception was identified, an electronic instrument was designed to facilitate transition of care. This instrument, constructed with the assistance of information technology personnel at our institution, was a patient list kept in table format. The tool was created to be compatible on any computer running a mainstream software internet browser. The tool was implemented, but after approximately one to two months, ceased being utilized by the cardiology fellows. Notably, 88% of fellows said they were either “very often” or “frequently” inadequately prepared to provide cross coverage. This paradox was perplexing as there was a clear need for improvement in the transition-of-care process; when a system was implemented to do so, however, it was not successful. Review of the literature does not reveal a previous evaluation of reasons for failure of physician-to-physician hand offs.

Goal: This study strived to understand why and how the tools failed and also to provide ideas for potential improvement and further awareness in physician-to-physician communication.

As this study was prompted by an unsuccessful attempt to implement a structured transition-of-care mechanism amongst fellows, it was deemed a priority to investigate the specific means of failure of this diligently developed tool. Through this evaluation, we hoped to gain insight into barriers to communication and transition of care among physicians.

Methods: Previously, an anonymous survey was conducted on the cardiology fellows, attending cardiologists, and nurses that work together throughout our teaching system. This survey was utilized to identify the lack of efficacy in the existing transition-of-care mechanisms. After this survey was performed, the aforementioned electronic tool was implemented and failed. In order to further assess this failure and the underlying reasons, all of the fellows who participated in this process were asked to share their reflections on why and how this system failed. Their comments were analyzed qualitatively in various themes.

Results: Nine of the eleven fellows involved in this process responded to this request, with one stating he was not involved sufficiently with the tool to fully assess its failure. The responding fellows each provided multiple suggestions as to the perceived obstacles in this process.

Some of the recurrent concepts described included the following: lack of enforcement by attending physicians, the cumbersome nature of the electronic tool, computer difficulties/malfunctions/inconsistencies, the time obligation necessary to maintain details of the lists, multiple hospitals, lack of universal involvement from all fellows, patient turnover/volume, and resistance to change/adding a new process that senior fellows had not been doing for most of their training.

Conclusion: Despite an inadequate transition of care as identified by all members of the healthcare team, including the fellows, the electronic tool provided as a solution failed. Many recurrent themes were noted in the fellows’ survey responses about the failure; the exploration and development of these themes could lead to a greater understanding of the obstacles regarding physician-to-physician communication, ultimately improving the transition-of-care process.

Improving resident attendance at pediatric teaching conferences

Baraa Alabd Alrazzak, M.D., and April Kilgore, M.D.

Department of Pediatrics, Joan C. Edwards School of Medicine, Marshall University

Background: Teaching conferences for pediatric residents create the backbone of medical knowledge that clinical experiences/rotations build upon. Teaching conferences are thus a critical component of resident medical education and are necessary for the development of competent, knowledgeable physicians. The Accreditation Council for Graduate Medical Education (ACGME) mandates regularly scheduled didactic conferences as “structured educational experiences.”

Additionally, the ACGME requires programs to set reasonable attendance requirements for residents, document resident attendance, and ensure faculty participation. Prior studies have highlighted the challenges of ensuring these sessions are meaningful in their impact on resident education.

Goal: The purpose of this study was twofold: (1) to determine if blocking lectures improves resident attendance, verified by attendance records, and (2) to assess the impact of the new curriculum on resident perceptions and satisfaction of educational activities.

Methods: A retrospective review of resident attendance at teaching conferences was obtained from the administrative office of the Department of Pediatrics. The teaching conferences used two different schedules: The first schedule broke conferences into one-hour segments, meeting four times per week. The second schedule was a single three-hour block, held just once a week. Educational time during lectures was protected by requesting that attending physicians (1) dismiss residents on time regardless of the duties assigned to them and (2) manage all calls and patient-related duties during that time period.

Attendance between the two different time-tables was compared during equal periods of time (for the daily lectures, from July 1st through December 31st, 2011; for the three-hour blocked lecture, from July 1st through December 31st, 2012). The t-test was applied to compare the mean attendance of the two schedules. A survey instrument was developed and distributed to residents to evaluate the block lecture format for each of the following: Satisfaction, protected time, on-time arrival, and whether lectures aided preparation for the in-training examination.

Results: A total of 14 residents were included in the daily lectures group and 16 were in the block lectures. Results are shown below in Table 1.

Table 1. Resident Conference Attendance		
	Lecture Type	
	Daily lectures	Block lectures
Residents (n)	14	16
Attendance (mean)	66.7 %	79.08 %

The means were obtained in each group and compared using t-test . P value: 0.018 (statistically significant).

A total of 16 surveys were obtained and 15 residents (93%) agree/strongly agree that the block lecture format is better. Tables 2 and 3 illustrate responses to specific survey questions.

Table 2. Resident on time arrival				
	Never	Sometimes	Often	Always
On-time arrival	-	1 (6%)	8 (50%)	7 (44%)
Protected time	-	-	5 (30%)	11 (70%)

Table- 3: Block lecture- Resident satisfaction			
Block Lectures	Disagree/strongly disagree	Neutral	Agree/strongly agree
Improves clinical knowledge	-	5 (30%) 1	1 (70%)
Better than daily lectures	-	1 (6%)	15 (94%)
Too long (3 hours)	14 (88%)	2 (12%)	-
Satisfaction	-	-	16 (100%)
Boring	14 (88%)	1 (6%)	1 (6%)

Conclusion: As teaching conferences play an important role in improving the medical education of residents, attendance of those conferences is essential. Pediatric teaching conferences using a blocked schedule show a marked improvement in resident attendance and satisfaction when compared to a daily-lecture schedule.

SAVE THE DATE

Academy Educational Grand rounds:

January 24, 2014

March 28th, 2014

Academy Summer Symposium

May 23rd 2014



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