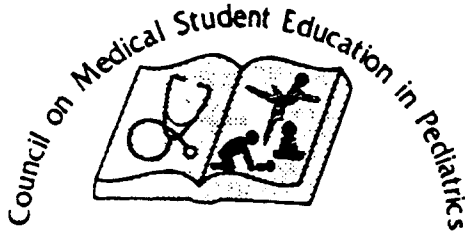


# The Pediatric Educator



Summer, 1994, Vol. 2 No. 1  
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Co-Editor, Emory University  
School of Medicine

This newsletter is dedicated to the memory of Edward B. Charney who died February 6, 1994. Ed was a 17 year career pediatrician in the department of pediatrics at the Children's Hospital of Philadelphia. He was a full professor of pediatrics, recognized educator and recipient of a humanitarian award from the Spina Bifida foundation. Friend and colleague of many of us, his wonderful demeanor and thoughtful contributions will be missed. Ed is survived by his wife Linda and his two daughters, Laura and Rebecca.

## **PRESIDENT'S MESSAGE**

Larrie Greenberg, M.D.  
Children's Hospital Medical  
Center, Washington, DC

Although this short update on what's happening within COMSEP is my first written communication to the membership, I must confess that since taking the gavel from Fred McCurdy (Nebraska) in San Antonio, I have been frenetically busy. The purpose of my message is to inform you about issues that have occurred since the March and May meetings.

Before I do that, I want to express my sincere thanks to the Board for their hard work, especially to Fred who provided leadership over this past year. We also owe a debt of gratitude to Bob Nolan and the CME office at the University of Texas in San

Antonio for a wonderful meeting and great hospitality. A successful meeting implies that we learned new knowledge or skills and/or acquired new attitudes. Most importantly, I hope that everyone was able to take back at least one new idea to implement within their own clerkship.

We're also very lucky to have a knowledgeable and industrious person for our support staff: Jean Bartholomew. She has helped us with the day-to-day administrative responsibilities, decompressing the work load for the rest of us.

As President I have made a couple of appointments about which I am very happy. First, Rich Sarkin (Buffalo) has accepted the position of SIG Chairman, his term of office

being 1994-1997. Rich is very talented and above all, knows how to plan and run an interactive meeting. I think you can look forward to some innovative educational sessions and I'm sure he will be calling on some of you for help. A special thanks to O.J. Sahler (Rochester) who has headed the SIG since its inception.

The SIG meeting in Seattle, which addressed the generalist initiative as it applies to ambulatory and inpatient models, was attended by a smaller group than usual but was very successful. Thanks to Liz Goldman, Ardis Olson & Ben Siegel for their planning & thoughtful comments. The guest facilitator was David Irby, from the U of Washington, nationally known for his work in medical education. He was very helpful in synthesizing our comments during our breakout sessions.

I also asked Mike Lawless (Bowman Gray) to replace Al Scheiner (U Mass) as our representative to the Council on Pediatric Education (COPE), organized under the auspices of the AAP, with representatives from the major pediatric groups. Al's term expires after the May meeting and I thank him for his proactive participation in the group.

Plans are evolving for the COMSEP/AMSPDC meeting in March, 1995 at the Loew's Coronado Bay Resort in San Diego. Nan Kaufman (UC San Diego) will be our chair and host for this meeting. COMSEP plans to meet as a group on

Saturday afternoon, March 11 and Monday, March 13. Our sessions will focus on how do we train the teachers to teach the new curriculum being proposed by Ardis Olson's (Dartmouth) task force. We will try to get someone with national recognition to be the tone-setter and then will have small groups discussions as our format. The Board did vote to include research presentations and Mike Lawless will chair the selection of these papers. To give people free time, we have not scheduled activities for Monday afternoon.

Finally, it will be a squeeze but we will try to have some minimal time available for the Task Force to meet. Whew - what a juicy-sounding meeting!

Our session with AMSPDC is tentatively set for all day Sunday, March 12 and we have proposed to their leadership that we discuss aspects of the new curriculum. Again, the format would be to have a speaker with a national reputation to challenge us at the opening plenary and then have clerkship directors and chairpersons work together in small group discussions. More to follow in future newsletter!

We are not letting grass grow under our feet - the 1996 meeting will be in sunny Tampa and hosted by the University of South Florida. The co-chairs will be Dan Riggs and Cynthia Samra.

A note of congratulations to Lewis First (Harvard) who will be leaving our ranks as

clerkship director to take on the chairmanship of Pediatrics at the University of Vermont. Although we're losing a devoted clerkship director, we have gained a new advocate in the chairman ranks.

Lastly, I don't need to tell you that we are living through a time of rapid educational change. All of our medical schools are planning or have already implemented change in the traditional basic science years. We, as pediatric clerkship directors, have to be proactive about how change is going to occur in our clerkships before someone decides our fate for us. In most instances, we are the educational leaders in our departments and we must form meaningful liaisons with our chairpersons and with faculty that we know are education-friendly. We need to address both short-term and longer-term strategic goals for our clerkships that are in concert with departments and move ahead, with support from administrators and chairs, to implement these. The ACME-TRI report should be a major part of our vision in this process. Change is difficult and is not going to occur overnight. Our goals need to be realistic; i.e., attainable, measurable, affordable and most importantly, must result in a better educational process and ultimately, more humanistic and caring physicians. We're in this together and I hear a commitment from many in COMSEP to be available to assist those who need help.

In closing, COMSEP is not an 'old boys' club' - please

feel free to call, (202) 884-3022), FAX (202) 884-2399), write or e-mail (Larrie@gwuvvm.gwu.edu) me any time with your thoughts, and advice. I look forward to working with all of you in moving COMSEP forward over the next two years. A happy, safe summer!

#### **SECOND ANNUAL MEETING OF COMSEP**

March 17-20, 1994  
San Antonio, Texas  
Robert Nolan, M.D.,  
Coordinator, University of  
Texas Health Science Center  
in San Antonio, Texas

The conference focused on Educating the Educator. The pre-conference meeting, Teaching Residents to Teach, was presented by the pediatric educators of Canada. Mark Montgomery, M.D., Calgary, is the PUPDOC representative. Two plenary sessions included: Educating the Educator: Roles and Responsibilities, William Walter, M.D., Associate Dean for Academic Affairs, University of North Carolina at Chapel Hill. M. Brownell Anderson, Assistant Vice President Educational Program AAMC reviewed the ACME-TRI Report.

Research papers included:

1. A Four-year Experience with Problem-based Learning in a Pediatric Clinical Clerkship. D. Riggs, University of South Florida, Tampa, FL, C. Samra, All Children's Hospital, St. Petersburg, FL. A four-year experience with 376 third year students found no difference in grade distributions, but 85% ranked the PBL experience

as above average to outstanding. With the change in format the numbers of students choosing pediatrics as a career increased from 8% to 18%. There was little or no change in the NBME/USMLE Part II exam.

2. The Pediatric Colloquium: A Hybrid Model for PBL Teaching During the Clinical Years. P. Rudoy, D.C. Derauf, University of Hawaii and Kapiolani Medical Center for Women and Children. The hybrid model includes greater faculty participation than is used in the traditional PBL model where the faculty serve only as facilitators. Evaluation indicated a preference for the hybrid model.

3. A Maternal Child Health Clerkship. A.P. Scheiner and T. Johnson, University of Massachusetts Medical School, Worcester, MA. This is a 12-week combined obstetrical and pediatric clerkship that permits a student to follow 2 patients through pregnancy, the birth of their infant, and newborn care. 56 students and 112 patients participated in the program which was enthusiastically accepted by both students and patients. Evaluation indicated improved skills in managing biopsychosocial issues.

4. A Change in Course: Ambulatory Teaching in a Pediatric Clerkship Adapted to multiple Community Sites. M. Morts, A. Kumar, M. Hamp, C. Cyshurst, L. Kurlandsky, D. Passal, Michigan State College of Human Medicine, E. Lansing, MI. 8-week clerkships were held in six different

community sites. The educational experience included 40%-50% of educational time spent in outpatient sites and focus on 25 core topics using problem based learning and student log book. The new clerkship format allowed the use of multiple sites while ensuring uniform experiences to specific topics.

5. Teaching Residents to Teach Using a Model Integrated Primary Care Curriculum in Substance Abuse. A.J. Alario, S. Riggs, Brown University School of Medicine, Providence, RI. Educational methods used for self-contained teaching modules designated to educate and illustrate teaching strategies were presented. Residents received a copy of a training manual. Not only did residents learn how to assess and educate adolescents in the area of substance abuse, but were also able to impart their skills to the medical students.

6. Evaluation of Pediatric Medical Students. D.F. Soglin, Rush Medical College, Chicago, IL. R.L. Berkow, University of Alabama at Birmingham, Birmingham, AL. 124 U.S. and Canadian medical schools were questioned regarding methods of evaluation and grading. 70.3% responded. All schools use faculty evaluation; 92% use written exams; 60% used the NBME; 1/3 of the 9 Canadian schools use an OSCE. Only 25% indicated that the faculty regularly observed the students even though 63± 18% of the students' grade was dependent on observation.

The remainder of the conference included a series of mini workshops and an opportunity for the committees on curriculum, teaching, and methods of evaluation to meet. (see below)

Our hats off and appreciation to Bob Nolan for the success of the conference and making us all honorary Texans.

**COMSEP EXECUTIVE COMMITTEE MEETING, San Antonio, TX  
March 17-20, 1994**

1. The treasury report indicates a balance of \$39,793.94 as of January 1, 1994. Proposed budget for '94-'95 \$16,325. Major costs include mailings, conference calls, travel of guest speakers, and liaison support for members to a few select organizations. Major source of annual revenue: 144 U.S. and Canadian members @ \$125 each = \$18,000.

2. Alliance for Clinical Education (ACE), an AAMC group that includes family medicine, psychiatry, internal medicine, gynecology and obstetrics, pediatrics, and surgery. The relationship to this organization will be clarified.

3. APA SIG chair will serve for three years and someone outside the executive committee will be appointed by the COMSEP chair. Rich Sarkin of Buffalo was subsequently appointed by Larrie Greenberg.

4. The focus of 1995

program in San Diego will be the presentation of the implementation of the curriculum to the AMSPDC members.

5. Osteopathic departments are not represented in AMSPDC and it is unlikely that osteopathic clerkship directors will be COMSEP members.

6. Nan Kaufman from UCSD will be the COMSEP program representative for upcoming joint COMSEP AMSPDC meeting in San Diego, March 10-14, 1995. She will be assisted by Larrie Greenberg and Ardis Olson. The meeting is currently scheduled for two half days with chairs and two half days for COMSEP with half day off.

7. Susan Marshall, Children's Hospital and Medical Center, University of Washington, Seattle, WA, was appointed secretary of COMSEP.

8. 1996 site for annual COMSEP meeting was discussed. Tampa, Florida will be pursued as a potential site.

**COMSEP SIG  
SPECIAL INTEREST GROUP FOR  
MEDICAL STUDENT EDUCATION**  
Richard Sarkin, M.D., Chair,  
University of Buffalo,  
Buffalo, NY  
APA, May 2, 1994, Seattle, WA

The Special Interest Group for Pediatric Clerkship Directors (now called the SIG for Medical Student Education) had a very productive meeting in Seattle. The major portion of the meeting led by Liz Goldman (Einstein) was titled "Applying the Generalist Curriculum: Ambulatory and

Inpatient Models." Ardis Olson (Dartmouth) discussed the efforts of the team she is leading to develop a generalist curriculum in pediatrics for medical students. Ben Siegel (Boston University) discussed a framework for an interdisciplinary core curriculum using community-based primary care settings.

Participants were then divided into several small groups and David Irby, Ph.D., a national leader in medical education from the University of Washington, charged these groups with developing ways to apply a generalist curriculum. The small group topics included strategies for teaching, faculty development, curriculum and evaluation. Summaries of the small group discussions were then presented to the large group with Dr. Irby providing a final summation.

Our group acknowledged the very significant contributions of O.J. Sahler (Rochester). O.J. founded this Special Interest Group seven years ago and has served as its only Chair. She also founded the Council on Medical Student Education in Pediatrics (COMSEP) as well as the Alliance for Clinical Education (ACE). She has been a national leader of pediatric medical student education for the past several years.

Rich Sarkin (SUNY at Buffalo) was named to replace O.J. as the new Chair of this Special Interest Group. The name of the SIG was changed from Pediatric Clerkship Directors to Medical Student

Education to reach a broader audience by making sure that anyone interested in this topic could attend future meetings.

At the next meeting of this SIG at the APA meeting in San Diego in 1995, the topic of facilitating change in medical student education will be explored. Anyone interested in working on the committee to plan this meeting should contact Rich Sarkin (Children's Hospital of Buffalo, 219 Bryant Street, Buffalo, NY 14222, (716) 878-7288, e-mail: Rsarkin@ubmedb.buffalo.edu).

#### UPDATE ON COMSEP INITIATIVES

A. The identification of the basic competencies and development of a core curriculum for required third year clerkships in general pediatrics. Ardis Olson, Dartmouth, Project Director. Susan G. Marshall, Children's Hospital University of Washington, Nan Kaufman, University of California in San Diego, Terry Woodhead, University of Iowa Hospitals and Clinics, Iowa City, Iowa.

The format has been established. It will be available as both written and computer disc versions. The detailed development of objectives and competencies will be done in June. Curriculum task force members will be reviewing it with their chairmen. In addition, we will be requesting review from the education committee members of AMSPDC (the Chairmen's organization). At the same time the components of the resource manual are

being developed. In addition to guidelines of how to implement it will include information on teaching and evaluation strategies. In the fall of 1994 review of the revised curriculum will be offered to all clerkship directors and their chairmen.

B. Task Force on Teaching Methods, Richard Sarkin, Co-Chair, SUNY at Buffalo, Buffalo, NY and Karen Wendelberger, Co-Chair, Medical College of Wisconsin, Milwaukee, WI.

In 1993, The Task Force on Teaching Methods developed a "Resource Manual for Faculty Development" which is available to all COMSEP members through the COMSEP Clearinghouse by contacting Jennifer Johnson (Univ. Cal-Irvine, 101 The City Drive South, Building 27, Route 81, Orange, CA 92668, (714) 456-6155.

Another resource manual, "Resources to Enhance Resident Skills for Teaching Medical Students," was developed this past year by Janet Fischel (Stony Brook) and Allan Freidman (St. Louis University). This manual is also available through the COMSEP Clearinghouse or by contacting Janet Fischel, SUNY at Stony Brook, Department of Pediatrics, Stony Brook, NY 11794-8111, (516) 444-7865. (see Appendix III)

At the COMSEP meeting in San Antonio, a Task Force on Teaching Methods workshop, "Teaching in the Ambulatory Setting," was presented by Lewis First (Harvard), David Lyons (Bay State), Patricia

Kokotailo (Wisconsin) and Robert Yetman (Univ. of Texas, Houston). Andrew Wilking (Baylor) assisted in the development of this workshop. A "How To Do It" manual from the workshop is available by contacting Lewis First (Harvard Medical School, The Children's Hospital, 300 Longwood Ave, Boston, MA 02115, (617) 738-7006, First@al.tch.harvard.edu). (Lew has moved to become chair at University of Vermont. We are awaiting new address).

A "Position Paper on Medical Education in Pediatrics" was developed by several members of this Task Force including Larrie Greenberg (George Washington), Fred McCurdy (Nebraska), Dan Riggs (South Florida) and Karen Wendelberger (Med. College of Wisconsin). This paper will be part of the Generalist Pediatric Curriculum being developed by the team led by Ardis Olson. This position paper will also be presented to the members of AMSPDC.

At the COMSEP meeting in San Antonio, several ideas were identified for future projects by this Task Force. The first idea was a "Mentoring Project" where various COMSEP members or others would be identified to serve as mentors for other COMSEP members in the area of faculty development/improving teaching skills programs. The next idea was a "How To Do a Workshop" project which could be in the form of either a document or an actual workshop to teach others how to effectively present a workshop. The last idea was a

"Certification of Teaching Skills" project modeled after ACLS, ATLS or PALS courses where a course could be developed to certify teaching skills in such areas as lecturing, leading small groups or one-to-one precepting.

Any COMSEP member interested in working on one of these projects should contact either Rich Sarkin (Children's Hospital of Buffalo, 219 Bryant St, Buffalo, NY 14222, (716) 878-7288, Rsarkin@ubmedb.buffalo.edu) or Karen Wendelberger (Children's Hospital of Wisconsin, PO Box 1997, MS #9, Milwaukee, WI 53201, (414) 266-3563, Kwendel@its.mcw.edu).

C. Task Force on Evaluation  
Benjamin S. Siegel, M.D.,  
Boston City Hospital, Chair.  
Mary Ellen Bozynski,  
University of Michigan Medical Center.  
David Link, Cambridge & Mt.  
Auburn Hospitals, Harvard University.

First draft is due June 30, 1994 to:  
Ben Siegel, Boston City Hospital, 818 Harrison Ave., Talbot 201, Boston, MA 02118. Topics include:

1. Performance based evaluation of clinical competence;
2. Use of video for evaluation;
3. Evaluation of faculty & house officers in teaching competency/teaching methods;
4. Written & essay exams;
5. Oral exams;
6. Computer assisted exam;

7. Grading policy;
8. Monitoring clerkship; and
9. Evaluation of curriculum

#### **ADDITIONAL NEW APPOINTMENTS**

Michael R. Lawless, (Bowman Gray) appointed to replace Al Scheiner as COMSEP representative to the American Academy of Pediatrics (AAP) Council on Pediatric Education (COPE). This is an important committee that meets in May of each year. There is broad representation from regional pediatric chairs, the Board of Pediatrics, various pediatric societies and residency committees. The discussion centers around the education of medical students, residents, and pediatricians. National educational initiatives often generate from this group. Staffed by Errol Alden from the AAP and chaired by Jimmy L. Simon, Chair at Bowman Gray. Minutes of May 17-18, 1994 meeting are available by contacting Errol Alden, M.D., 141 Northwest Point Blvd, P.O. Box 927, Elk Grove Village, IL 60009.

Gary E. Freed appointed co-editor of Pediatric Educator  
Gary is clerkship director at Emory University School of Medicine. In addition to adding his creativity to the Educator he will monitor the educational literature and include appropriate abstracts.

The goal of this new and important section is to present a sample of the educational literature and encourage much needed research in pediatric education.



**ABSTRACTS OF APA (Seattle)**  
**Meeting**

**Posters**

Gary Freed, Emory University  
School of Medicine

The 34th annual meeting of the APS/SPR/APA took place in Seattle, Washington on May 2-5, 1994. The following are abstracts which are relevant to pediatric education that were presented as poster presentations.

**Evaluation of Clinical Competence: The Gap Between Expectations and Performance**  
**B. Joorabchi and J. M. Devries**

Departments of Pediatrics, Henry Ford Health System, Detroit, Michigan, and St. Joseph Mercy Hospital, Pontiac, Mich. (1994 Ray E. Helfer Award Winner)

**Objectives:** To evaluate a 3-year experience with Objective Structured Clinical Examinations (OSCEs), and to compare faculty expectations with resident performance.

**Design:** Descriptive analysis of measures of resident performance.

**Setting:** Community-based pediatric residency program in Michigan.

**Participants:** 126 pediatric residents at all levels of training.

**Methods:** The three exams consisted of 34 to 36 stations, testing skills in physical exam, history, counseling, telephone management, and test interpretation. A committee of faculty and chief residents predetermined minimum pass levels (MPL) for each resident level. Results were compared with other indices of resident performance.

**Results:** There was evidence

for content, construct, and concurrent validity, as well as a high degree of reliability ( $\alpha = 0.80-0.88$ ). However, 42% to 94% of residents fell below the MPL for their level. In each exam, PL-3s had the highest failure rates, yet they scored well on the Pediatric Board's In-Training Exam and on their monthly clinical evaluations. Furthermore, for residents at all levels, the scores reflecting data processing skills were significantly lower than those assessing data gathering.

**Conclusions:** in-training exams may assess a different knowledge and skill than the OSCE (the OSCE is an excellent predictor of clinical performance. Ed.)

**Pediatric Nurse-Medical Student Preceptor Program: Back to the Basics**

**R. S. Walter, K. M. Trzcinski, R. M. Simonetti, and J. Lawrence**

Department of Pediatrics, A. I. duPont Institute, Wilmington, Del, and Jefferson Medical College of Thomas Jefferson University, Philadelphia, Pa.

**Objective:** To evaluate the effectiveness of a PED RN/med student preceptorship on hands-on experiences and student awareness of nursing roles.

**Design:** Prospective, randomized, controlled trial using surveys.

**Setting:** Children's hospital inpatient pediatric service.

**Participants:** All 93 third-year medical students during one year.

**Intervention:** On alternate 3-week blocks, students either spent one entire day during

week 2 as a pediatric nurse or acted as controls.

**Results:** 47 students were nurses for a day (Ns) plus 46 controls. 60% were males and 6% were parents themselves. After 3 wks, Ns did all 26 tasks surveyed more often, including diaper change (65% vs 39%,  $P < .01$ ), bottle feed (55% vs 11%,  $P < .001$ ), blood pressure (77% vs 28%,  $P < .001$ ), taking temps (77% vs 13%,  $P < .001$ ), and giving meds (38% vs 0%,  $P < .001$ ). 70% of all students reported spending too little time with patients over the 3 wks. Ns directly interacted with patients 3.0 hrs as a nurse vs 1.7 hrs for both Ns and controls on typical days. Of the 47 Ns, 66% had a more positive opinion of Ns, 41% found following physician orders harder than expected, 81% felt the day made them a better physician, and 87% thought it would help them in future nurse interactions, 96% of Ns felt the program worthwhile, as did 100% of RN preceptors, 32% of all students did not know the difference between RNs and LPNs.

**Conclusions:** The program significantly increases direct patient experiences for students. It is well accepted and gives students a greater awareness and respect for the nursing role on the medical team.

#### **What Do Residents Read?**

R. K. Kamei and J. I. Takayama  
Department of Pediatrics,  
University of California-San  
Francisco School of Medicine  
**Objective:** A primary goal of graduate medical education is to develop a personal program

of self study that may extend over an entire medical career. In order to advise residents on their reading practices, we set out to determine what residents were currently reading and what factors were affecting their reading practices.

**Design:** Descriptive, survey.

**Setting:** University-based pediatric residency program.

**Participants:** 65 pediatric residents in all 3 years of training were surveyed, 57 responded (response rate 88%). Of those who responded, 23 were male and 34 were female, and 17 had  $\geq 1$  children.

#### **Measurements/Results:**

Residents read 8.5 hours per week; 38% (3.2 hours) of the time was spent on medical literature. No differences in reading medical literature were found with respect to gender, having children, or year of residency. Residents read general pediatric textbooks and review articles 58% of the time, pediatric subspecialty texts 15%, and research articles 14%. When asked why they read, residents indicated patient care decisions most often (39%), followed by teaching purposes (21%). The proportion of reading time devoted to teaching preparation increased with year of residency, from 14% in the first year to 26% in the third year ( $P < .05$ , ANOVA). Residents in higher levels of training were more likely to read about specific diseases rather than symptoms ( $P < .05$ , ANOVA).

**Conclusions:** Despite more electives and less time on call, residents in higher levels of training did not read more. Patient care decisions and teaching were

the primary motivators for resident reading. Further understanding of resident reading may help residency programs better prepare residents to develop lifelong learning skills.

**A Comparison of the Educational Effectiveness of a Pediatric Multimedia Textbook to a Standard Lecture or Printed Textbook**

D. M. Santer, V. E. Michaelsen, W. E. Erkonen, R. J. Winter, and J. C. Woodhead

Departments of Pediatrics, The Children's Hospital, Boston, Mass, and Children's Memorial Hospital, Chicago, Ill, and the Department of Pediatrics and Radiology, University of Iowa Hospitals and Clinics, Iowa City

**Objective:** Multimedia textbooks (MMTBs) appear similar to conventional printed textbooks but differ in function. They contain video clips, audio clips, and animation, which allow the reader to dynamically interact with the content. The goal of this study was to compare the instructional effectiveness and efficiency of a pediatric MMTB (regarding airway disease) with a traditional lecture and with a printed textbook.

**Design:** Randomized, prospective cohort.

**Settings:** An urban (Northwestern University Medical School) and rural (The University of Iowa College of Medicine) medical school affiliated with tertiary care referral hospitals.

**Population:** Third-and fourth-year medical students during their general pediatric clerkship from June 1992 to June 1993 (n=179).

**Interventions:** Students were randomized to one of four treatment groups; computer-aided instruction by MMTB, traditional lecture, printed textbook, or a control group.

**Measurements/Main Results:**

Following their randomized instruction, all groups were tested via a 26-question, multiple-choice test. Statistical analysis was done using an analysis of variance (ANOVA) and the amount of time students spent with each educational intervention was recorded. Instructional content was the same for all treatment groups and lecture instruction between institutions was standardized. Three hundred two students were eligible for the study; 267 entered and 179 completed the study (MMTB, n=39; lecture, n=39; printed textbook, n=39; and control, n=62). The instructional effectiveness of the MMTB, measured by ANOVA, was greater than lecture ( $P<.05$ ) and the same as the printed textbook. All instructional methods were more effective than the control group ( $P<.05$ ). The instructional efficiency of the MMTB was the same for all groups as each group spent approximately 60 minutes in instruction.

**Conclusion:** MMTB instruction is an effective and efficient educational instructional method.

**Objective Structured Clinical Examination (OSCE) as a Measure of Pediatric Clerkship Performance**

B. A. Glista, C. S. Uy, D. J. Johnson, M.C. Toft, A. Ty, and S. G. Mautone

Department of Pediatrics, UMD-New Jersey Medical School and

Children's Hospital of New Jersey, Newark

**Objective:** To assess the value of the OSCE as a measure of clinical performance in the pediatric clerkship.

**Design:** Comparison of the OSCE with the written objective board examination and other components of the clerkship grade.

**Settings:** Urban children's hospital.

**Participants:** 177 third-year medical students.

**Interventions:** Sets of OSCE stations were developed and implemented for each of the six-8-week clerkship rotations. Scores were maintained for the OSCE and other components of the students' grades.

**Measurements/Main Results:**

Mean scores for each component of the total clerkship score were: board exam, 80.3; clinical, 88.4; preceptor, 86.6. Each OSCE weighted to a mean of 78. The distribution of the OSCE scores was similar to the distribution of the board scores, with ranges of 58 to 97 and 57 to 100, respectively. The clinical and preceptor scores showed a tight distribution with ranges of 70 to 94 and 74 to 98, respectively. The correlation for board vs OSCE was 0.50 and for board vs clinical was 0.30.

**Conclusions:** The OSCE provides a more objective measure of clinical performance skills than the clinical/preceptor evaluations. The OSCE and the board examination measure different aspects of performance (practical clinical vs cognitive) and therefore may be complementary

evaluation methods.

**Acute Illness During Junior Medical Students' Clinical Clerkships**

V. N. Gan, D. L. Phillips, and T. V. Murphy

General Pediatrics, Children's Medical Center, Dallas, Tex

**Objective:** To determine if the rate of acquired respiratory illness differs by the type of clinical clerkship during the third year of medical school.

**Design:** A standard questionnaire was administered at the completion of pediatric outpatient, pediatric inpatient, obstetrics-gynecology, and psychiatry rotations.

**Setting:** Hospital-based and outpatient teaching facilities.

**Participants:** Junior medical students at a medical school during one academic year.

**Results:** Of 230 students invited to participate, 62 (27%) students responded to the questionnaire after completion of all four clinical rotations. The rates of students showing two or more symptoms of respiratory illness with onset during the rotation were: pediatric inpatient 53.2%, pediatric outpatient 54.8%, obstetrics-gynecology ( $P < .001$ ) or psychiatry 30.6%. The rate of illness during each pediatric rotation was significantly higher than during obstetrics-gynecology ( $P < .001$ ) or psychiatry ( $P \leq .01$ ). This trend persisted when analyzed for the effect of season and for the 168 students who completed questionnaires after only one, two, or three rotations.

**Conclusion:** Among third-year

medical students, both inpatient and outpatient pediatric rotations posed a greater risk of acquired respiratory illness than obstetrics-gynecology or psychiatry rotations.

#### **How Can We Attract Medical Students to Generalist Careers?**

J. I. Takayama, S. Mutha, E.H. O'Neil, and the Pew Health Professions Program

Department of Pediatrics, University of California-San Francisco; Robert Wood Johnson Clinical Scholars Program, Stanford University School of Medicine, Palo Alto, Calif; and Pew Health Professions Program, University of California-San Francisco

**Objective:** To determine how medical students choose their careers and what factors are important in their decisions.

**Design:** Qualitative, focus group methodology.

**Setting:** Three California medical schools.

**Participants:** 100 randomly selected students representing all four years of medical school and assembled into 26 focus groups.

**Measurements/Results:** Based upon preliminary analysis of 14 focus groups held among 52 third-and fourth-year students. Family medicine, internal medicine, and pediatrics are defined as generalist careers. Among 23 students initially interested in generalist careers, 13 planned residencies in those careers; in contrast, 21 of 23 who initially chose specialties maintained their interest. Generalists valued continuity of care and expressed interest in psychosocial issues, while

specialists shared a strong desire for immediate tangible results. All students raised lifestyle and negative role model issues. Female students reported the lack of female role models, especially those who could balance family and career responsibilities effectively. Among those who considered but later rejected generalist careers, many felt overwhelmed by the vast knowledge required in those fields.

**Conclusions:** While personalities and values differentiated those who generalize from those who specialize, lifestyles, role models, and apprehensions about mastering a large knowledge base were important factors. Recruiting and training better role models and teaching skills to organize knowledge may be important steps in reversing this current trend towards specialization.

#### **Residents Attitudes and Perceived Competencies Regarding Biomedical vs. Psychosocial and Problem-Oriented vs. Preventive Aspects of Pediatric Primary Care**

K. J. Overby and E. A. Link

Department of Pediatrics, University of Iowa, Iowa City

**Rationale/Design:** In addition to addressing problem-oriented biomedical concerns, the nature of pediatric primary care has shifted to place greater emphasis on the management of psychosocial/behavioral issues and the provision of preventive care/health promotion. To facilitate curricular change in this area, we surveyed pediatric

residents' regarding their attitudes towards these and other aspects of primary care and, through the use of clinical scenarios, their perceptions of: overall competence with, level of interest in, perceived relevance to future career plans, and appropriateness/beneficial impact of physician effort in each of 4 types of primary care encounters: problem-oriented biomedical, preventive biomedical, problem-oriented psychosocial/behavioral, and preventive psychosocial/behavioral.

**Participants/Setting:** All 37 residents at a university-based pediatric training program participated in the survey.

**Results:** Residents reported greater personal enjoyment of biomedical over psychosocial/behavioral ( $P=.0001$ ) and problem-oriented over preventive ( $P=.0188$ ) aspects of care. In response to clinical scenarios, residents perceived themselves to be more competent in their management of biomedical over psychosocial/behavioral ( $P=.0001$ ) and problem-oriented over preventive ( $P=.0002$ ) patient interactions. While residents anticipating careers in general pediatrics, compared with those electing subspecialties, reported significantly greater relevance to future career plans of competence in each of the 4 clinical scenario categories, they did not differ significantly from other residents with respect to their relative enjoyment of biomedical vs. psychosocial/behavioral and

problem-oriented vs. preventive aspects of care nor in their perceived competence or level of interest in these areas.  
**Conclusions:** Data from this study suggest an educational and attitudinal mismatch between postgraduate training and the realities of contemporary pediatric primary care, and that a greater emphasis should be placed on psychosocial/behavioral and preventative aspects of pediatric care in both pregraduate and postgraduate medical education.

#### **SELECTED ABSTRACTS FROM THE EDUCATIONAL LITERATURE:**

Gary Freed, Emory University School of Medicine

**Vinson D and Paden C. The Effect of Teaching Medical Students on Private Practitioners' Workloads. Academic Medicine. 69:237,1994.**

Daniel Vinson and Carrie Paden from the University of Missouri-Columbia School of Medicine sent questionnaires to 56 physicians, all in non-academic solo or small group practices, who had taught medical students during 1991-1992. The questionnaire asked for the physician's perception of changes in time spent at work, in clerical or nursing staff time spent, and in billed charges when a student was in the practice. Of the 46 physicians who responded: 5 noted no change in their work times when they had a student with them, 1 noted a decrease of 60 minutes, and 40 noted increases of 30 to 120 minutes per day with a mean of 46 minutes (Standard Deviation

32.1). Most perceived no change in staff time required or billed charges (5 reported decreases of between \$87 and \$4,000, and one reported an increase of \$200).

Overall, the results indicated that private practitioners spend about 45 minutes more per day when there is a medical student in the practice. It should be noted that the data were entirely subjective. However, perception was very consistent, with 70% of the respondents sensing an additional 30 to 60 minutes per day.

**Miller D, Crowder D, et al. Evaluations of Small-Group Teaching. Academic Medicine. 69:215,1994.**

In a letter to the editor Drs. Miller, Crowder, Sadler, and Mohl, from the University of Texas Southwestern Medical Center at Dallas, point out the virtues of conducting mid-course evaluations. It was noted that most medical school course directors conduct end-of-course (summative) evaluations, whereas few conduct mid-course (formative) evaluations. Students rated components of the course, provided general comments and evaluated the teaching performance of the faculty. They concluded that "qualitative formative evaluations dramatically improved small-group teaching and assisted faculty in correcting weaknesses before the end of the course. By providing immediate feedback and the opportunity for faculty to modify their teaching styles, they were

able to turn a negative experience for students and faculty into a positive one.

**INFLUENCE OF INCOME, HOURS WORKED, AND LOAN REPAYMENT ON MEDICAL STUDENTS' DECISION TO PURSUE A PRIMARY CARE CAREER**

**Rosenthal M, et al. Influence of Income, Hours Worked, and Loan Repayment on Medical Students' Decision to Pursue a Primary Care Career. JAMA. 271:914,1994.**

This study surveyed the 1993 graduating classes of 6 U.S. Medical Schools (Jefferson, Ohio State, Penn State-Hershey, SUNY-Stony Brook, University of Kentucky, and the University of Michigan) in the fall of their senior year.

Students were asked which specialty they planned to practice, to indicate their expected average yearly income, how many hours they expected to work in an average week, and their estimated debt for education when they graduated from medical school.

Primary care specialties were defined as Family Practice, General Internal Medicine, and Pediatrics. The non-primary care (NPC) students were asked which (if any) of 3 specific factors would cause them to change to a primary care specialty and to designate the one most important factor that would cause them to change. The three specific factors investigated were annual income, number of work hours per week, and debt alleviation via medical school loan repayment.

Primary care specialties were chosen by 27% (15% Family Practice, 6% Internal Medicine, 6% Pediatrics). Little difference existed between primary care and NPC students' estimates of their mean debt for education (\$49,000 vs \$49,000) and anticipated weekly work hours (62 hrs vs 64 hrs). The major difference was found in expected incomes (\$92,000 vs \$152,000). Primary Care students showed a 50:50 male-to-female gender distribution where NPC students had a 69:31 mix.

Of the NPC students 17% indicated they would change to primary care for improved salary (mean salary incentive of \$180,000/year); 19% would change for less working hours (mean of 50 hours/week); and 10% would change to Primary Care if "all my medical school loans would be repayed."

Overall, 45% of the students said there was a willingness to pursue primary care careers: 27% who planned to enter primary care and 18% who would change if appropriate adjustments in income, hours worked, or loan repayment were made.

#### **MEDICAL STUDENTS AND PRIMARY CARE-WHAT MAKES SPECIALTIES SO SPECIAL**

**Petersdorf R. Medical Students and Primary Care-What Makes Specialties so Special? JAMA. 271:946,1994.**

This editorial by Robert G. Petersdorf criticizes the previous article (Influence....on Medical Students' Decision to Pursue a

Primary Care Career) and makes suggestions of his own. He starts by pointing out several limitations of the Rosenthal, et al report.

First, the survey did not consider the possible impact of a myriad of other variables that influence student decision making. Petersdorf points out that in the 1993 Graduation Questionnaire (GQ), students rated the influence that each of 36 factors had on their specialty decisions. Students ranked "income perspective" as 24th in priority, "not too demanding of time and effort" as 33rd, and "level of educational debt" as 34th. The top 9 factors having the greatest influence on selection of specialties were the patients, the content and quality of the specialty, and the perceived fit of the graduate's personal traits and abilities for practicing his or her chosen specialty. The 10th most significant factor was a role model in the specific specialty.

Second, the survey did not report the percentage of graduates selecting primary care who would switch to a specialty based on factors not asked in the survey (as just mentioned, debt, working hours, and salaries were considered low-order factors influencing student choices).

Third, the study was conducted in a favorable environment--6 schools with departments of family practice and good track records of turning out generalists. 27% of their graduates chose primary care while nationwide



the figure was only 19.3% Here lies Petersdorf's 1st lesson: medical schools with supportive primary care environments graduate more generalist physicians. "Good role models are necessary if we want to produce more generalists."

Petersdorf states that Rosenthal's suggestion that generalists' incomes be raised is too expensive over the lifetime of generalist physicians. Rather, a better short-term solution might be to increase the salaries of primary care residents relative to the subspecialists. This could be done without much increase in cost if the number of non-primary care residencies were reduced, freeing funds, while containing the number of residents entering specialties.

Finally, Petersdorf describes his own plan to increase the number of generalists. "Every young physician would give 2 years of national service and receive, in exchange, a tuition-free education. In lieu of tuition payment by students, medical schools would get government subsidies. A forme fruste of this proposal is that loans be subsidized for residents who enter and remain in a generalist specialty."

#### **RESULTS OF COORDINATED COMSEP STUDY**

#### **RESULTS OF SURVEY ON THE EFFECT OF THE PEDIATRIC CLERKSHIP ON ATTITUDES TOWARDS PEDIATRICS BEING ANALYZED**

Paul Kaplowitz, M.D.  
Medical College of Virginia

The survey examines how student attitudes towards pediatrics change during their clerkship, and how this related to their interest in a pediatric career. All survey items were rated from 1 to 5 indicating strong agreement to strong disagreement. Eleven programs were involved. Twelve hundred paired pre- and post-clerkship surveys were included.

#### **Summary**

1) Of the 7 attitude items rated by the students, the highest correlation between change in attitude and change in interest in a pediatric career was for the statement "Children are very enjoyable to work with".

2) There was a marked sex difference in the % of students agreeing strongly with an interest in a pediatric career. For males, it was 3.9% pre-clerkship increasing to 10.9% post-clerkship; for females it was 11% pre increasing to 22% post.

3) When students were asked to rate different aspects of the clerkship (ward patients, clinic patients, ward attendings, ward residents, outpatient attendings, lectures) on a 1-5 scale, there were some major differences from school to school, indicating areas of relative strength and weakness in different programs. The correlation between these ratings and the change in the

score rating interest in a pediatric career was highest for the ward residents and lowest for the lecture series. Perhaps this has some implications for improving recruitment into pediatrics.

Anyone wishing a copy of the survey itself for possible use in their clerkship, can call (804) 786-9616.

## **INNOVATIONS**

**Two-week community-based ambulatory 3rd year clerkship experience offered by Ed Sumpter, East Carolina University, Greenville, NC.**

Four weeks are spent on the inpatient service, about two weeks each in ambulatory and community sites. These consist of several practices in eastern North Carolina. The goals of the community rotation are as follows:

1. To learn the evaluation, differential diagnosis, and management of common pediatric problems.
2. To learn the basics of well-child care and anticipatory guidance.
3. To view the child within the context of his/her family and community milieu, and understand the impact of this environment on the child's emotional and physical health.
4. To learn about the available community resources that may be used to aid in the care of pediatric patients.
5. To have the pediatrician provide a role model for the students by providing competent, high-quality, caring pediatrics, having a reasonable lifestyle, and enjoying his/her professional

role.

The responsibilities of the community preceptors are as follows:

1. After a period of orientation, medical students will be allowed to have "first contact" with patients.
2. The community preceptor will try to become mentor to the student, developing a relationship that teaches the basics of primary care, but also attempting to demonstrate the values of the longitudinal physician/patient relationship, life-long learning, and the altruistic dimension of primary care medicine.
3. Community preceptors should emphasize the skills of problem-solving rather than memorization of facts.
4. The medical student should be given feedback about his/her performance at frequent intervals during the rotation, and the preceptor will complete an evaluation of the student at the end of the rotation.

The preceptors are paid \$250 per student and there is never more than one student at a time. Geography requires that students be housed in the communities where they are precepting, an arrangement for which has been made for each community, and of course, paid for by the medical school as are other travel expenses. This has had the unanticipated benefit of allowing a student to become more intimately involved with the pediatrician and his community than if she were precepting at a site where she commuted daily.

## **ANNOUNCEMENTS**

### **Dates to Remember:**

#### **American Association of Medical Colleges**

105th Annual Meeting  
October 28 - November 3, 1994  
Boston, MA

A must for all clerkship directors who are interested in educational careers.

#### **Annual COMSEP Meeting**

March 10-15, 1995  
Loew's Coronado Bay Resort  
Coronado Island (San Diego), CA

March 10: Frontiers in Science

March 11: Frontiers in Science/PSDP/COMSEP

March 12-13: General sessions AMSPDC and COMSEP

March 14: Tentative COMSEP Session

#### **APS/SPR/APA Annual Meeting**

May 8-12, 1995  
Convention Center,  
San Diego, CA

**O.J. Sahler, University of Rochester, NY, named Chair of Alliance for Clinical Education (ACE)**

The mission of ACE is to provide a forum for the discussion of cross-disciplinary issues relevant to the clinical instruction of medical students and the support of involved faculty. Activities include development of national agendas, programs, and procedures of mutual benefit with the goal of enhancing undergraduate medical education.

The membership of ACE consists of representatives

from the Association of Directors of Medical Student Education in Psychiatry; the Association of Professors of Gynecology/Obstetrics; the Association for Surgical Education; Clerkship Directors in Internal Medicine; the Council on Medical Student Education in Pediatrics; and the Predoctoral Directors in Family Medicine.

Current focus is advocating for appropriate funding in the face of health care reform.

**Robert Nolan, University of Texas, will represent COMSEP at the Association of Pediatric Program Directors (APPD). Members are residency directors.**

**Guidelines for Medical Student Education in Community-Based Pediatric Offices - published. Scheiner, AP. Pediatrics. 1994;93:956-959.**

Developed by American Academy of Pediatrics (AAP) for the purpose of encouraging the use of community-based practice sites for third year pediatric clerkships. The guidelines will be distributed to all clerkship directors and presidents of Regional Academy chapters. Clerkship directors will be encouraged to collaborate with pediatric chapter presidents and their members to implement this important educational experience.

COMSEP and the AAP will provide core faculty to assist in regional faculty development. If you have further questions, please contact A.P. Scheiner at UMass (508) 856-3102 e-mail:

AScheiner@BANYAN.UMMED.EDU or  
Holly Mulvey, AAP Director of  
Pediatric Practice (708) 981-  
7915 or fax (708) 228-5097.

Lewis First becomes first  
COMSEP member to be appointed  
pediatric chair at the  
University of Vermont in  
Burlington, VT. (Who says an  
educational career doesn't  
have academic value!)  
Congratulations! I think!

A comprehensive pediatric  
curriculum is just an order  
away. The Resource  
Clearinghouse directed by  
Jennifer Johnson in Irvine, CA  
is awaiting your request.  
Attached to newsletter.

Anything you wanted to know  
about COMSEP and was afraid to  
ask:

Jean Bartholomew, COMSEP  
Coordinator, American Board of  
Pediatrics, 111 Silver Cedar  
Court, Chapel Hill, NC 27514.  
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(919) 929-9255.

HAVE A HAPPY, HEALTHY SUMMER!!  
BE ± PRODUCTIVE.