



GME ON-CALL

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A Message From The Co-Chairs

Alan D. Woolf, MD, MPH

Frederick H Lovejoy, Jr, MD

We continue to host exciting events and make progress in graduate medical education at Children's Hospital.

Comings & Goings: We want to take this opportunity to welcome Dan Herrick, who is the new part-time data manager for the Office of GME. Dan is currently an MD/PhD student at Tufts University School of Medicine and has extensive previous experience in analyzing datasets. He has already begun to develop some proficiency with the use of our duty hours monitoring software, New Innovations, and has begun to develop the data on resident and clinical fellow activities that we review on a monthly basis.

We also want to take this opportunity to extend our welcome to Dr. David Brown, who has begun his work as the new director of pediatric cardiology fellowship training program. David brings an excellent perspective to this position and has already taken charge of the preparations of the program for its 2011 site visit by the ACGME. We also want to thank Drs. Jane Newberger and Peter Lang for their work as the previous co-directors over the years and the extraordinary training program that they helped to craft. We know that both Jane and Peter will continue to advise and support David in his new role.

We are also pleased to announce the appointment of Dr. David Urion who has been named the new director of the neuro-developmental disabilities (NDD) fellowship training program at Children's Hospital. Dr. Urion, who is also the director of fellowship training in pediatric neurology, brings a tremendous amount of insight and experience to this added position, and we know that this nationally important subspecialty will flourish under his tenure. We also want to thank Dr. David Coulter, the former director, for his support of NDD and his service to the trainees.

In conjunction with the Boston Combined Residency Program (BCRP), the GME Office sponsored a GME Spring Retreat for training program directors on June 17th from 12:30-4:00 pm at the Harvard Research Center on Avenue Louis Pasteur. This retreat was attend by all who are interested in graduate medical education, which is the 6th such retreat that has been sponsored by the GME office over the past 3 years. Dr. Jennifer Kesselheim, our GME educator, worked closely with Dr. Ted Sectish of the BCRP to develop offerings at this retreat specifically related to interpersonal communications

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GME STAFF

Alan Woolf, MD, MPH
Designated Institutional Official (DIO); Co-Chair, GME Committee

Fred Lovejoy, MD
Co-Chair, GME Committee

Mira Irons, MD
Director, Internal Reviews

Jennifer Kesselheim, MD, M.Ed, MBE
Medical Educator

Mary Beckman
Director, Compliance

Tery Noseworthy
Manager, GME Office

Samantha Taylor
Administrative Associate IV

Daniel Herrick
Data Coordinator

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skills-building: between trainees and faculty, of trainees with each other, and of trainees with their patients. Drs. Laura Rock, Elizabeth Rider, and Chris Landrigan presented thought-provoking and inspiring concepts and all participants were able to engage in well-conceived and well-executed small group sessions. This retreat was truly an unforgettable event! Please look for more information on this retreat and others in the next issue of the GME On-Call newsletter.

The Office of GME is also pleased to announce a new “Medical Education Grand Rounds” to be featured annually on one Wednesday in the Judah Folkman Auditorium of the Enders Research Plaza at Children’s Hospital. We were especially delighted and honored to have hosted this year the president of the Accreditation Council on Graduate Medical Education (ACGME), Dr. Thomas Nasca. Dr. Nasca gave our first medical education grand rounds on May 4, 2011. His presentation was entitled: “ACGME, and the Responsibilities of America’s Medical Educators”. See the other article in this month’s GME On-Call for details of his visit.

The Office for GME, in partnership with the Program in Patient Safety & Quality (PPSQ) at Children’s Hospital and officials at the independent Institute for HealthCare Improvement (IHI), has developed a novel way to help individual programs satisfy the dual ACGME competencies of practice-based learning & improvement and systems-based practice. Drs. Michael Farias, Mira Irons, Caleb Nelson, and David Waisel are leading that effort on behalf of the GME Committee. The new initiative consists of four themes and eight mandatory on-line educational modules intended for all residents and clinical fellows. This didactic learning will be paired with opportunities for trainees to participate in projects that address patient safety and the quality of their medical care. These hands-on projects are to be completed over the course of their training. Drs. Farias, Irons, Waisel, and Nelson are planning to present a workshop covering this innovative work at an upcoming AAMC seminar on quality improvement to be held in Chicago, IL, in June 2011. Congratulations to the team on this positive step forward in developing educational materials on quality improvement aimed at the needs of our residents and fellows.

[Note: These mandatory QI training modules can be found at the Graduate Medical Education Program area of the internal website of Children’s Hospital under “Practice-Based Learning and Improvement.”]

The GME Office is also pleased to announce a new granting mechanism to support research projects initiated by trainees (residents, fellows, and/or medical students). The Children’s Hospital has committed some research funds to this new initiative. It is expected that several projects will be funded. The goals and objectives of these research endeavors must center on some aspect of improving health care and/or the safety of patients and the research must be completed during training, with a work-plan not to exceed two years. The subcommittee to develop this new Trainee QI Research Grant Program is being formed and more information and as schedule of requests for applications for funding is expected to be released in 2012. Keep checking the GME site on the Children’s Hospital internal webpage to learn more details about this exciting new funding opportunity.

Finally it is a time of change in GME. Residents and fellows who are finishing their training are packing up and moving on to even greater challenges and opportunities in new professional positions. We want to thank them for their service at Children’s Hospital, as well as enlivening our Hospital with their energy, enthusiasm, their

ACGME by the Numbers
ACGME Data
Resource Book
Academic Year 2009-2010

393

Programs in
Massachusetts

8,814

Accredited Programs

3,703

Accredited Programs
Receive 5 Year Cycle

188

Accredited Pediatric
Programs

4,003

Specialty Programs

5,271

Residents in
Massachusetts

ACGME by the Numbers
ACGME Data
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Academic Year 2009-2010

92,590
Residents in Specialties

4,811
Subspecialty Programs

18,796
Residents in Subspecialty
Programs

1,013
Total Programs with at
Least One Program Di-
rector Change

7.1
Mean Length in Years be-
tween Program Director
Appointment Dates

spirit of inquiry and their resourcefulness. And we of course wish all of them well in their future pursuits, just as we are preparing the welcome for new house-staff on orientation day on July 1st.

PRESIDENT OF ACGME VISITS CHILDREN'S HOSPITAL

Dr. Thomas Nasca, the president and chief executive officer of the Accreditation Council for Graduate Medical Education (ACGME) in the United States, came to Children's Hospital on Wednesday, May 4th, to help celebrate the Hospital's inaugural



Dr. Thomas Nasca presenting at Grand Rounds

GME Day. Dr. Nasca is a pre-eminent medical educator who graduated from the University of Notre Dame and completed his MD degree at Jefferson Medical College in Philadelphia. He then completed residencies at both Mercy Hospital and the University of Rhode Island and is board-certified in both internal medicine and nephrology. Dr. Nasca has had a distinguished career as a medical educator and has served a variety of national organizations in leadership roles, including the Liaison Committee on Medical Education and the National Board of Medical Examiners. As the president of ACGME, he is current engaged in championing and re-envisioning the training of physicians in this country.

Dr. Nasca spoke with groups of training program directors, faculty, fellows, and residents during his visit and he also met with the leadership of the Hospital. Dr.

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Jennifer Kesselheim facilitated the discussion during a morning session with faculty while Dr. Stacy Croteau led the clinical discussion during morning case rounds and, later, facilitated the dialogue during a session where Dr. Nasca met with residents and fellows. A wide range of topics was discussed, from the ACGME's perspective on duty hours and how trainees reach milestones of competency in their knowledge and skills over the course of their training, to the current environment of the practice of medicine and the paramount importance of patient safety.

Dr. Alan Woolf, the ACGME's Designated Institutional Officer (DIO) at Children's Hospital welcomed the audience to GME Day Grand Rounds and introduced Dr. Nasca. Dr. Nasca spoke eloquently during his grand rounds presentation about the social contract inherent in the Hippocratic oath and the philosophic traditions built



(From left) Drs. Frederick H. Lovejoy Jr., Thomas Nasca, Stacy Croteau (Chief Resident), Alan Woolf

over centuries that define the patient-doctor relationship. He observed that the oath assumes the altruistic, virtuous character of a physician. And he described the demands for professionalism that the oath places upon all who take it. Dr. Nasca pointed out that the provision of equitable health care for all is a matter of social justice, and all who enter the profession do so with the understanding that they must serve the interests of society. He spoke of the importance of preserving the public's trust in physicians. The development of the highest standards of excellence in patient care begins during training. Dr. Nasca emphasized the need for faculty to model for trainees the professionalism and dedication that results in an effective patient-doctor relationship. Finally he challenged academic hospitals to change their approach to the training of physicians proactively so as to meet the evolving medical needs of the society of the future.

Graduate Medical Education Day events concluded with a luncheon for members of the GME Committee and GME Office staff. At the luncheon Dr. Nasca explored with attendees the goal of mastery in medicine and how we as educators can and must

ACGME by the Numbers
ACGME Data
Resource Book
Academic Year 2009-2010

111,140
Active Full Time
Residents

8,209
Pediatric Residents

42.1
Mean Number
of Residents
in Pediatrics

Numbers are based on
the United States,
unless otherwise
specified.

Upcoming Meetings

Association of Pediatric Program Directors 2011 Fall Meeting

- September 7-9, 2011

Renaissance Arlington
Capital View
Arlington, VA

Association of Pediatric Program Directors 2012 Annual Spring Meeting

- March 28-31, 2012

San Antonio Marriott
Rivercenter San Antonio,
TX

ACGME Leadership Skills Training Program for Chief Residents

- June 13 - 15, 2011

Redondo Beach, CA

- June 27 - 29, 2011

Chicago, IL

ensure that our trainees reach that pinnacle of success in their careers. Finally the Children's Hospital community expressed its deep appreciation of Dr. Nasca's time and effort in joining us for what proved to be a most interesting and constructive dialogue on all aspects of medical education.

CRITICAL THINKING: WHAT DOES IT MEAN? HOW DO WE TEACH IT?

One of the leading concepts being described in academic medicine is that of 'critical thinking'. A special interest group of faculty in the Academy at Harvard Medical School has been formed this year to explore more fully this topic. The group is interested in determining whether there is the need to cultivate deliberately these deeper reasoning skills in medical trainees. Or even whether within a defined pedagogy one is even capable of teaching others to develop what may, in part, be loaded as an intrinsic intellectual quantity.

Critical thinking has been defined variously as 'purposeful' and 'reflective' thinking or, in a clinical context, the ability to sort through and inter-connect an enormous amount of objective and subjective patient-related data to come to rational decision-making with regard to diagnosis and management. A related term "elaborative knowledge" discusses the process:

- 1st: gathering information
- 2nd: sorting through it in algorithmic fashion
- 3rd: integrating it all intellectually with the additional inputs of experience and judgment.

Thus critical thinking has been described as a "process of purposeful, self-regulatory judgment. This process gives reasoned consideration to evidence, context, conceptualization, methods and criteria." (Facione, 2006)

While there may be many descriptions for critical thinking, none of them precise, many teachers will "know it when they see it" being practiced. At grand rounds, the application of diagnostic thinking directed towards a patient with a perplexing constellation of symptoms and signs and culminating with an elegant denouement of the correct diagnosis logically following the exclusion of other entities, is an example. This describes the ability to take some diagnostic pathways and intuit enough so as not to take others, while attending to competing and complex patient-centered problems. Such intellectual processing can underlie why the seasoned clinician orders some laboratory or imaging tests but deliberately not others, when judgment and experience suggest they are unimportant, or is comfortable with some uncertainty when addressing the needs of his or her patient. Thus critical thinking is one of the skills that the ACGME associates with the 'master teacher' concept in describing the developmental milestones of progress in becoming an effective, independent physician.

A medical student may start with composing the “Harrison’s textbook” laundry list of a differential diagnosis for a patient’s presenting complaints. It is a perplexing and difficult process for the beginner to sort through the myriad of diagnoses that may underlie this patient’s particular chronic cough or elevated blood pressure. With more and more clinical coursework within various hospital-based and out-patient rotations, the student slowly develops the capacity to be able to refine his or her ability to include or exclude a hierarchy of reasonable possibilities when confronted with the need for clinical decision-making.

A related skill is to cultivate a healthy skepticism, becoming ‘slow to believe’ those diagnostic labels that may have been previously attached to a particular patient. Well into house-staff training, the seductive style of making preconceived but unfounded assumptions about a patient’s previous circumstances, or diagnoses, or care, or profile can result in what is called “motivated reasoning.” Motivated reasoning describes the bias or prejudice that causes a clinician to narrow his or her thinking prematurely so as to ignore certain contradicting information while blindly in pursuit of a dead-end diagnosis. The same motivated reasoning can thus lead a misguided clinician to insist on a wrong therapy or an inappropriate plan of management in the face of all evidence to the contrary, to the detriment of the patient’s outcome and well-being.

We can certainly teach content—the fact-rich domains such as genetics or endocrinology that build a trainee’s medical knowledge. And we hope that at the same time we can deliberately teach humanism, professionalism, systems-based care, working in teams, practice-based learning and improvement in the quality and safety of patient care, and the communication and other inter-personal skills that will serve the physician well in practice. But the question remains as to whether or not we can teach the deeper reasoning skills that underlie critical thinking. Is there a deliberate way for faculty to ‘model’ their approach to diagnosis and patient care that positively inspires trainees and, in an iterative fashion, imprints them over the time of their training? Can this deeper reasoning be built into small group interactions between trainees and faculty by including the open-ended approach to the diagnostic pathway? This is just a short introduction to the topic; but some general references are included below for those who may have interest in exploring further the use of ‘critical thinking’ in medical education.

References

Facione PA. *Critical Thinking: What It Is and Why It Counts*. Millbrae, California: California Academic Press, 2006.

Petress K. *Critical thinking: an extended definition*. *Education* 2004; 124: 461-6.

Staib S. *Teaching and measuring critical thinking*. *J Nurs Ed* 2003; 41: 498-508.

Yuretich RF. *Encouraging critical thinking*. *J College Sci Teach* 2003; 33: 40-45.

Upcoming Meetings (con't)

Basics of Accreditation for New Program Coordinators, Chicago, IL (con't)

- July 25th
Internal Medicine &
Subspecialties
- August 8th
Anesthesiology, Nuclear
Medicine, Obstetrics
& Gynecology,
Orthopaedic Surgery,
Physical Medicine
& Rehabilitation,
Preventive Medicine,
Radiology
- August 22nd
Colon & Rectal
Surgery, Pediatrics
& Subspecialties,
Neurology, Urology
- October 10th
Allergy & Immunology,
Dermatology,
Ophthalmology,
Otolaryngology,
Pathology, Radiation
Oncology, Transitional
Year

Upcoming Meetings (con't)

Basics of Accreditation for New Program

Coordinators, Chicago, IL (con't)

- October 24th

Emergency Medicine,

Family Medicine

- November 7th

Institutional/GME Office

- November 14th

Neurosurgery, Medical

Genetics, Plastic Surgery,

Psychiatry, Thoracic

Surgery, Surgery

New Innovations GME

Seminar, Cleveland, OH

- October 24-25, 2011

New Innovations Fall

Coordinator Conference,

Cleveland, OH

- October 26-28, 2011

Association of Pediatric Program Directors Spring Meeting

Jennifer Kesselheim, MD, M.ED.

The Association of Pediatric Program Directors (APPD) had its spring meeting March 31-April 3, 2011, in Miami. This was the second year in which APPD hosted a “stand-alone” meeting; the group had previously coordinated its meeting with larger conferences like Pediatric Academic Societies (PAS). Last year’s “stand-alone” meeting in Chicago was such a success that APPD decided to build on this momentum.

This spring marked a particularly special time for APPD which is celebrating its 25th anniversary. The first day of the meeting therefore included a unique and inspiring lecture from Dr. Ken Roberts, a medical historian who described how APPD evolved over the last 25 years and how the association gained repute as an organization dedicated to excellence, innovation, and leadership in pediatric education. We also heard reports from each of APPD task forces: Curriculum, Evaluation, Faculty and Professional Development, Learning Technology, and Research.

Throughout the meeting, participants had the opportunity to hear updates from other key stakeholders in pediatric residency training, including the Pediatric Resident Review Committee (RRC), the American Board of Pediatrics (ABP), and others. Sessions were provided to explore top education research, curricula on quality improvement, patient safety and resident sleep, hand-offs in the training setting, global health training, and the use of technology to enhance teaching and learning.

APPD will offer its Fall meeting September 7-9, 2011 in Arlington, VA and the next Spring meeting will take place in San Antonio, TX on March 28-31, 2012. Please save these dates and consider joining in one of these terrific learning opportunities. Also, if you are interested in membership within the APPD, or if you have questions about this organization, please e-mail Jennifer.kesselheim@childrens.harvard.edu.

Office of GME Announces New Data Coordinator

The Office of GME is pleased to announce the appointment of Mr. Daniel Herrick to the position of Data Coordinator. Mr. Herrick received his degree at Colby College in Waterville, Maine, with a major in Chemistry and is currently pursuing a MD/PhD at Tufts University School of Medicine in hopes of eventually specializing in Neurology/Neurosurgery. He will begin the PhD portion of his training in June 2012. Mr. Herrick is proficient in a variety of computer software programs and will be working in the compilation, analysis, and presentation of data on house-staff performance that is collected using the New Innovations database, as well as the analysis of data generated by routine periodic faculty and house-staff surveys. In the coming months, we hope to get Mr. Herrick started on the GME Dashboard and other special GME Office projects. When time permits, Mr. Herrick enjoys surfing in New Hampshire and Maine. Under the supervision of our program manager Mrs. Tery Noseworthy, he began working at Children's Hospital Boston in April 2011. Please join us in welcoming Dan to the GME team. Please feel free to contact him with any data-related questions at daniel.herrick@childrens.harvard.edu.

Questions? Contact the
GME Office

Tery Noseworthy
Program Manager
617-355-3396

Samantha Taylor
Administrative Associate IV
617-355-4372

Daniel Herrick
Data Coordinator
857-218-5195