

# Perspectives



FROM THE OFFICE OF FACULTY DEVELOPMENT

Children's Hospital Boston

## Perspectives on a New Paradigm in Medical Education: Hospital-based Simulation

*"Life is a series of lessons that need to be lived to be understood."* Helen Keller

"The on-site simulator creates a realistic, interactive experience that can be readily adapted to teach a host of learning objectives to a wide range of health care professionals," according to Peter Weinstock, MD, PhD, Associate Director of the Simulator Program, Division of Critical Care Medicine, during a unique Office of Faculty Development workshop, "How Doctors Learn: The Role of Simulation in Modern Medical Education."

He explained that adult learners prefer to use past experience to problem-solve scenarios and want to apply what they learn to everyday life. The adult experiential learning cycle begins with the incorporation of new knowledge through experience followed by reflection, conceptualization, and ends with experimentation. Dr. Weinstock showed how the simulation experience maps perfectly onto this cycle. This increased understanding and appreciation of how adults learn is driving physician educators such as Dr. Weinstock to develop hospital-based simulator programs as new paradigms in post-graduate medical education. *Continued on p. 2*

### Office of Faculty Development Milestones and Transitions for 2007!

The Office of Faculty Development celebrated its 5 year anniversary in 2006, and we are proud of our accomplishments. The Career Development Fellowships have expanded from two fellowships to thirteen this year, including two post-doctoral fellowships. We continue to build our mentoring program, conduct workshops on faculty promotion, and provide skills for a successful career. Our most recent efforts include developing a new initiative in diversity and cultural competency, hosting a career and family network program, and instituting new workshops in medical education.

Carole Goldberg, the Administrative Director of the Office of Faculty Development from its founding in 2001 through 2006, was the catalyst in developing the CHB faculty development "menu of activities and opportunities" and worked closely with Dr. Emans to foster the careers of all Children's Hospital faculty members. Carole retired in December after many years in academic medicine, working at MGH, HMS, and CHB. She was especially concerned with encouraging faculty to advance to leadership positions and to achieve a healthy work-life balance. We have deeply appreciated her commitment to the field and to improving the career satisfaction of faculty. We wish her continued success with her plans to complete a novel.



*Carole Goldberg*



*Maxine Milstein*

### Director's Perspectives . . . S. Jean Emans, MD

As you can see from the article and photos adjoining this box, the Office of Faculty Development has welcomed a new Administrative Director, Maxine Milstein, whose considerable skills will help facilitate and focus the many CHB initiatives, including medical education and diversity. We are dedicating this 2007 inaugural *Perspectives* to challenges and achievements in these areas. All of us in the OFD wish you a very happy new year!  
Jean

At the start of our 6<sup>th</sup> year, we welcome our new Administrative Director, Maxine Milstein, MBA. Maxine worked recently at Boston University as the Director of the Educational Resource Center, an academic support center serving more than 3000 undergraduate and graduate students. Prior to this position, she was the Associate Director of Graduate Programs at the Boston University School of Management where she oversaw the doctoral program. She brings extensive expertise in strategic goal setting, operational planning, and project management. Maxine lives in Newton with her husband Bob and son Sam, a college junior majoring in accounting. She enjoys Sudoku, hiking, ethnic cooking, and antiques. With Maxine's guidance, we look forward to expanding the Office of Faculty Development's agenda and continuing to provide creative services.

Please feel free to contact Maxine at [Maxine.Milstein@childrens.harvard.edu](mailto:Maxine.Milstein@childrens.harvard.edu), 617-355-2923, and/or introduce yourself at any OFD event. She is looking forward to meeting you.

## Perspectives on Medical Education, *cont.*

During the workshop, Dr. Weinstock demonstrated one of several novel curricula he and his colleagues have developed.\* For the MSICU critical care curriculum for residents, Dr. Weinstock worked with attending faculty, nurses and respiratory therapists to identify and transform lectures that could best be enhanced by simulation into two-day modules. Learners are given a didactic lecture on day one. On day two the residents are immersed in a case scenario which allows them to practice concepts within a clinical context. Dr. Weinstock refers to this as “the virtual bedside.” This allows the MSICU team to insure exposure of all trainees to a standard set of important learning cases. Simulations were found to enhance the learning experience and to teach to all of the ACGME clinical competencies including communication and professionalism.



*The virtual bedside on day 2*



*The didactic lecture on day 1*

The simulation room is an exact replica of an intensive care unit, with heart monitors, medication carts, and real ventilators. A high-fidelity mannequin patient lies on the bed. Hidden in an adjoining room, the simulation center coordinator controls the mannequin’s vital signs and speaks into a microphone to provide the patient’s voice. At the virtual bedside, the faculty member stays with the learners. During the faculty development workshop, participants engaged in an actual scenario where Dr. Weinstock demonstrated the technique of what he calls the “pause principle.” He explained that the ability to pause the mannequin in clinical context followed by more in-depth discussion, allows for principles to be better retained by “anchoring” them to the ongoing emotional experience of the scenario.

In pediatrics, Dr. Weinstock noted, there are few opportunities to practice teamwork and management of high-risk crisis events. A hospital-based simulator program captures the so-called “volume-outcome relationship” by enhancing the frequency and breadth of critical-incident training for clinicians from multiple disciplines.

\*P Weinstock, MD, PhD; L Kappus, MD; M Kleinman, MD; B Grenier, BA, RRT; P Hickey, RN, MS, MBA; J Burns, MD, MPH. Toward a new paradigm in hospital-based pediatric education: The development of an onsite simulator program. *Pediatr Crit Care Med* 2005 Vol. 6, No. 6.

*As noted in the previous issue of Perspectives, Dr. Alan Leichtner will be facilitating a medical education initiative at Children’s Hospital to establish new resources for faculty teachers. Here is his response to Dr. Weinstock’s simulation workshop:*

Simulator programs, such as the one conducted by Dr. Weinstock, encourage physicians to engage in a critical-incident scenario on many levels: scientifically, emotionally, and as the primary care-provider. As a vehicle to develop problem-solving skills, the simulator model presents unique and challenging learning opportunities that reach beyond those offered by the traditional lecture hall. Importantly, a physician’s abilities to communicate to both the patient and other medical staff can be tested and strengthened in a safe, but realistic setting. Dr. Weinstock’s work is innovative and promises to stimulate new educational endeavors throughout the hospital.

### OFD Advisory Committee

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### New Harvard University Faculty Development and Diversity Goals for Faculty Retention

Nearly two years ago Harvard University established the Office of the Senior Vice Provost (SVP) for Faculty Development and Diversity to respond to the need to improve the recruitment and retention of talented women and minority faculty at Harvard. Evelyn Hammonds, PhD, the first SVP, discussed the program’s mission regarding both diversity and work-life balance at a well-attended event on December 19th at CHB. Dr. Hammonds introduced the Harvard University initiative on creating an institutional culture that examines the training and professional development of individual faculty members in all departments, on all campuses. The goal is to create policies that will lead to faculty “thriving and succeeding.”

*article continued on p. 3*

### 2007 Career and Family Network Luncheons Developed and Hosted by Drs. Lydia Shrier and Jenifer Lightdale

All faculty who are parenting, or who have competing family and career concerns, are invited to attend.

Thursday, January 25, 12 - 1 PM, Karp 9 Conference Room  
Monday, February 26, 12 - 1 PM, Karp 8 Conference Room  
Tuesday, March 27, 12 - 1 PM, Enders Seminar 1  
Monday, April 23, 12 - 1 PM, Karp 8 Conference Room

**On the Career and Faculty Development Collection Shelf:**  
*Every Other Thursday: Stories and Strategies from Successful Women Scientists*, by Ellen Daniell, Yale University Press, 2006

With the plethora of recent articles and stories on special interest collectives and hobbyists who discover, almost by accident, the healing nature of communication and support, it is somewhat of a relief to find this study of scientists and administrators who meet at the outset solely to discuss individual members' problems. Daniell traces her involvement and history in a California-based "Group" that adapts therapeutic techniques to bi-weekly gatherings. Prompted in each meeting with the introductory question of "who would like to work?" members discuss any obstacles or crises in their lives, both professional and personal. The Group provides feedback and alternative ways to interpret and resolve the crisis. When Daniell is unexpectedly denied tenure at the University of California-Berkeley, the Group helps her to build a new career trajectory. *Every Other Thursday* also provides concrete suggestions and guidelines for starting problem-solving Groups.

### FACULTY KUDOS

**Larry Benowitz, PhD**, Associate Professor of Neurosurgery, was included in *Scientific American's* list of 2007 "50 scientists to watch" list for his work on reversing optic nerve damage.

**Sandra Friedman, MD, MPH**, Assistant Professor of Pediatrics, General Pediatrics, received a 5 year grant from the Disability Determination Initiative project funded by the Association of University Centers on Disabilities and SSA to create a Pediatric Medical Unit.

**Sion Harris, PhD**, Instructor in Pediatrics, Adolescent/Young Adult Medicine, is a recipient of the Young Professional award from the Maternal and Child Health Section of American Public Health Association.

**Celeste Wilson, MD**, Instructor in Pediatrics, General Pediatrics, was awarded the 2006 New Investigator/Educator Award from the Association for Medical Education and Research in Substance Abuse.

**Gerald Healy, MD**, Professor of Otolaryngology, has been elected President of the American College of Surgeons for 2007-08, a position that honors dedication to patient care and surgical education.

We would like to congratulate 3 faculty members who have been named fellows of the American Association for the Advancement of Science (AAAS). The AAAS fellows are honored for their scientific and social contributions.

**Nancy Andrews, MD, PhD**, Professor of Pediatrics, for her work on human iron disorders.

**Raif Geha, MD**, Professor of Pediatrics, for his study of immunodeficiency diseases and allergic responses.

**George Daly, MD, PhD**, Associate Director of the Stem Cell/Developmental Biology Program, for his public communication of stem cell research.

### Additional Recipients of the 2006-07 OFD/OFT/BREC/CREC Career Development Fellowships

**Ingeborg Friehs, MD**, Instructor in Surgery, HMS; Department of Cardiac Surgery, *Endogenous angiogenesis inhibitors prevent adaptive capillary growth in hypertrophying myocardium*

**Hanna Gazda, MD, PhD**, Instructor in Pediatrics, HMS; Division of Genetics, *Genetics and biology of Diamond-Blackfan anemia*.

As reported by *Perspectives* in its early fall issue, Valerie Ward, MD, Faculty Co-chair of the Diversity and Cultural Competency Council (DCCC), will discuss the renewed hospital-wide diversity initiative in her column. Please feel free to contact Dr. Ward at [Valerie.ward@childrens.harvard.edu](mailto:Valerie.ward@childrens.harvard.edu) regarding any questions or suggestions.

We welcome 2007 with goals to strengthen diversity at Children's Hospital. The newly expanded Diversity and Cultural Competency Council (DCCC) co-chaired by myself and Elvira Paulino, HR Director of Diversity, convened December 14 to outline the 2007 agenda. Faculty and staff on the Council divided themselves into five working groups charged with advancing the following preliminary goals:

- Promoting research in health care disparities
- Improving cultural competency across Children's Hospital
- Monitoring the tracking of metrics for diversity and cultural competency initiatives

Throughout the year the working groups will collect and review baseline data on patient and staff diversity and satisfaction, identify issues important to diverse populations, develop improved measurement tools, and create and implement diversity and cultural competency training. The groups will also recommend enhancements to CHB's internal and external websites that affirm its commitment to diversity and inclusion. By applying metrics that ensure that CHB's values, services, and policies reflect diversity and cultural competency, the goals of increasing the satisfaction of a diverse patient population, as well as recruiting and retaining a diverse workforce, will be addressed.

### Harvard University Faculty Development Goals, cont.

New "research enabling grants," have been released to provide funding for those faculty with dependent care obligations. Each pilot program will eventually be accessed and evaluated, to determine the best practices for faculty development in a changing cultural climate. Dr. Hammonds emphasized that child care needs are continually brought up in her discussions across the university and that Harvard has examined properties with the intention of converting them to child care facilities. In addition, faculty are requested to be articulate in communicating their needs and expectations with administrators, to increase the possibility of further programmatic or policy changes.

### 3rd Annual Symposium in Cellular, Molecular and Clinical Research in Surgery

The Surgical Research Council (SRC) of Children's Hospital Boston held another successful Symposium on November 28th, 2006 in the Enders Auditorium and Longwood Galleria Conference Center. The lectures were delivered by Drs. Diana W. Bianchi (Tufts University), and a number of investigators from Children's Hospital Boston, including Pedro J. del Nido (Cardiac Surgery), Gabriel Kreiman (Ophthalmology and Neurobiology), Marsha A. Moses (Vascular Biology Program), and Matthew Warman (Orthopaedic Research). The research studies being conducted by this community vary from basic studies of the molecular and cellular processes by which blood vessels grow in tumors to the development of surgical procedures for use during fetal life. The goal of the SRC has been to foster interdisciplinary collaborations among members of the surgical departments and programs. For more information please see <http://www.cellmolsurg.org>. The 4th Annual Symposium will be on November 27, 2007.

## Time Out . . .

### Boston Bites – Beacon Street Tavern – 01-12-07

Open for only a few months, **The Beacon Street Tavern** (1032 Beacon St., 617-713-2700) has nicely filled a niche in the restaurant scene on Beacon Street near Park Drive. Situated in a large space, site of many-a-failed restaurant, the restaurant manages to pull off the cozy tavern feel of its sister restaurant (Washington Street Tavern) with dark red walls, a large bar area with long, high tables, and a more modestly sized dining area with lots of banquettes. The night we dined, candles flickered on the tables but, in un-tavernlike fashion, the house lights were turned up enough to make it easy to read the menu over French bread and a garlicky spread. The staff were friendly but soon became a little harried as the Saturday night traffic picked up. From the 7 starters (\$8-9), we chose the oyster raw bar (Pepperhill Cove), served with a light mignonette and cocktail sauce, and a massive field greens salad with a few roasted pears and a sprinkling of walnuts and blue cheese. Better were the entrees (\$16-24), a succulent pan-seared red grouper with Cajun-like seasoning, accompanied by smoky black beans and avocado salsa (the special) and a melt-off-the-bone Cabernet braised lamb shank atop whipped potatoes, served with a few asparagus spears and gremolata. A side (\$3.50) of crisp sweet potato fries was appealingly presented in a pint-sized carryout container. We were disappointed to hear that the one dessert, a 7-layer chocolate cake, was not available but, to be honest, we sated by the generous portions. Wine list was varied, the bottle selection looking much more interesting than wines-by-the-glass. More upscale than a bar, less chic than a typical Back Bay or South End restaurant - just good, solid food. A great place for an intimate dinner for two or drinks with the crew after work. The restaurant doesn't take reservations, so go early and enjoy! If you've tried a really good restaurant in the Boston area and are willing to share, I'd love to hear from you! [lydia.shrier@childrens.harvard.edu](mailto:lydia.shrier@childrens.harvard.edu)

## Leisurely Learning

by Jill Dobriner

In a modest spirit of adventure, I will occasionally take out the MBTA commuter rail schedule and select a town to explore. One mild autumn day, I stepped out of the Ipswich train station and followed Market Street up into Meetinghouse Green, ready to observe the mid-day routines of a New England seaside village.

Well-known for sandy Crane Beach during the summer, Ipswich presents a motley set of attractions other than its shoreline. For one, Market Street is an actual, versatile main street, with inexpensive shops, as well as some highly regarded galleries, cafes, and restaurants where townspeople still gather to meet with neighbors as well as shop. Within minutes, a passerby handed me a flyer for an upcoming chowder festival and chatted with other patrons on the sidewalk. Somehow, a small-town friendliness persists even after tourist season.

Ipswich's colonial and revolutionary roots become evident on Meetinghouse Green where a memorial calls your attention to the 17th century local revolt against excessive taxation and British governor Sir Edmund Andros. Along the Green, the Ipswich Public Library, built in 1869, is a charming, Victorian structure, housing town archives. This is a community, though, where historic houses emerge unobtrusively on neighborhood blocks, and I eventually crossed paths with the Whipple (1677) and Heard Houses (1800) on the South Village Green. Both houses offer low-cost guided tours in the summer season. In any season, Appleton Farm, on route 1A and created in 1636, is considered the oldest working farm in the US and its walking paths are open to visitors year-round. For further information on Ipswich, see [www.ipswichma.com](http://www.ipswichma.com)

## Perspectives

Maxine Milstein, MBA, Administrative Director  
Jill Dobriner, Editor

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