SBH-PHYSICIAN
Summer 2014

New Strategies for the DEPARTMENT of MEDICINE

Edward E. Telzak, MD

from the

Chief Medical Officer *and* President of the Medical Board

David Perlstein, MD, MBA

Ernest Patti, DO, FACOEP

Dear Colleagues,

This is our second issue of the ***SBH Physician***, the "Summer Issue." We hope to continue to publish the magazine quarterly, introducing our medical staff and highlighting a sample of our outstanding clinical programs both new and established.

We would like to encourage our readers to continue to submit recommendations for future features to our editorial department (Susan Kapsis) for review and consideration.

This quarter's issue in part focuses on the department of medicine, including a lead story by our new chairman of medicine, Dr. Edward Telzak.

We are very excited to have a forum for introducing you to SBH's world-class staff and clinical programs, and encourage you to share our accomplishments with others and hope you feel proud to be a member of the SBH Health System.

We are very proud to be associated with you.

Sincerely,

David Perlstein, MD, MBA
Senior Vice President
Chief Medical Officer

Ernest Patti, DO, FACOEP
President, Medical Board
Director, Medical Media Affairs

SBH·PHYSICIAN

Summer 2014 Vol. 1 • No. 2

SBH Physician is published by
SBH Health System
4422 Third Avenue, Bronx, NY 10457

In the next issue:

- The department of emergency medicine under the leadership of Chairman Daniel Murphy, MD
- The newly merged department of pulmonary and critical care medicine directed by Ragu Loganathan, MD
- SBH Men's Health Center

SBH Health System
BRONX

4422 Third Avenue
Bronx, NY 10457
www.sbhny.org

The new surgery intensive care unit (SICU) cares for critically-ill trauma and non-trauma surgical patients, providing state-of-the-art surgical critical care, monitoring, and treatment. It is directed by Dr. Robert Davis and staffed by surgical critical care surgeons and general surgeons in close collaboration with the medical intensivists of the adjacent Medical Intensive Care Unit (MICU). The SICU is housed in 6 single-bed rooms, 511 through 516, on the fifth floor of the main hospital building.

SBH·PHYSICIAN

Table of Contents

New Strategies for the **Department of Medicine**

By Edward E. Telzak, MD, Chairman, Department of Medicine

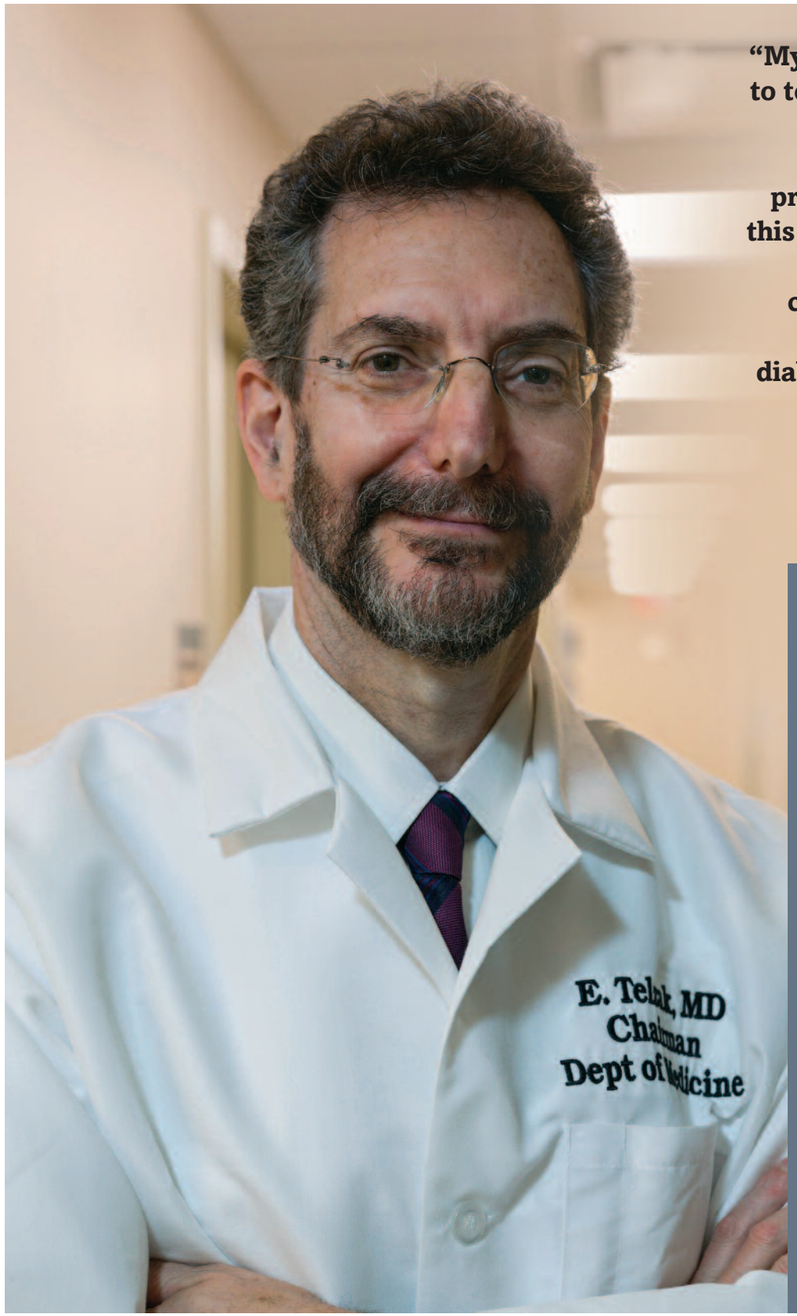


Photo: Bud Glick

"My goal over the next five to ten years is to take what we've learned from the world of HIV/AIDS primary care and provide this kind of comprehensive care to patients with congestive heart failure, kidney failure, asthma, diabetes and other chronic diseases we see in the Bronx in order to keep these patients well and out of the hospital."

EDWARD E. TELZAK, MD

MD
Albert Einstein College of Medicine, Bronx, NY

Internship/Residency
Tufts University School of Medicine-New England Medical Center, Boston, MA

Fellow in Infectious Diseases
Harvard University Affiliated Hospitals—Brigham and Women's Hospital, Beth Israel Hospital and Dana-Farber Cancer Institute Joint Program, Boston, MA

Epidemic Intelligence Service (EIS) Officer
Centers for Disease Control and Prevention

Academic Appointments
Professor of Medicine, Albert Einstein College of Medicine

I am extremely honored to be the new chairman of medicine at SBH Health System. It is worth publicly reflecting how I came to this point in my professional life and what my current goals are for the department of medicine and SBH Health System.

WHAT WE'VE LEARNED FROM HIV/AIDS

As an intern in Boston in the early 1980s, I was witness to among the very first cases of HIV and AIDS, then known as GRID (Gay-related immune deficiency). I became deeply involved in caring for these extremely ill young men, and this experience motivated me to do an infectious disease fellowship, followed by a two-year period with the Centers for Disease Control and Prevention. I subsequently have devoted a substantial part of my professional life to the prevention, care, treatment and research of this disease, much of it in the South/Central Bronx. Even as this disease has had a devastating impact on our community, it has taught us so much: it has inspired infected and affected communities to activism; motivated impressive scientific discoveries and how to scale up these discoveries for clinical care; and most importantly for me, now, how to deliver truly comprehensive and compassionate care to an inner-city community.

BRONX COUNTY'S COMPLEX HEALTHCARE CHALLENGES

By numerous measures, the Bronx has the poorest health of any county in New York State, and the health districts served by SBH Health System have among the highest rates of asthma, diabetes, HIV/AIDS, mental illness, substance abuse and obesity in the country. The major causes of premature death for patients served by SBH are heart disease, cancer, diabetes and HIV. As we know, poverty is endemic in our community and many of our patients are undocumented. I am confronted with asking how we can make SBH a leading light in caring for this complex social and medical population—our population. Part of my vision is to leverage the success of many HIV care management strategies and programs in improving the health and well-being of all of our patients.

A MODEL FOR CHRONIC DISEASE MANAGEMENT

The model of care that has been developed and shown to be highly effective for patients who are HIV infected should become the basis of care for the other chronic diseases that disproportionately affect our community. The field of HIV has been a leader in screening programs, identifying those who are infected but asymptomatic. The irony is that with all of the social and political obstacles to "screening" for HIV, the offer of a test is now mandated in many clinical situations. Cancer, diabetes, asthma and many other common chronic conditions plague our community and fill our hospital beds and intensive care units. This is partly due to inadequate screening programs, which should be used to identify and prevent progression of illness. Many of our patients present for medical care when they are already very ill. In the HIV community, once a patient with HIV has been diagnosed there is an aggressive team of outreach workers, or patient navigators, who maximize the likelihood that these individuals will see a primary care provider and continue clinical care.

This is not so with the other common chronic diseases — once diagnosed, linkage to medical care is not predictably available, nor is there a team of providers committed to working with those affected individuals in order to keep these patients healthy. Though effective medications and preventive therapies exist for many of these chronic diseases, patient navigators and the co-location of vital services to maintain patients in care are only just beginning to be employed in clinical situations.

A PROGRAM TO KEEP THE COMMUNITY HEALTHY

Aggressive screening, linkage to care, maintenance-in-care, medication management and ongoing wellness education, co-location of a broad range of vital medical, mental health and social services, and a robust outcomes evaluation assessment are the essential elements of a program that will keep the patients in our community healthy.

This is not easily achieved and requires a cultural shift and a shift of resources — a re-orientation from inpatient-focused to ambulatory-based medicine. This requires having talented primary care physicians who will serve as the cornerstone for building a strong healthcare system that ensures positive health outcomes and health equity; skilled hospitalists and the full complement of knowledgeable subspecialists; nurses who are second to none; a broad range of support services so our patients do not "fall through the cracks"; an appealing physical plant; and an integrated electronic health record system that supports all aspects of care. It requires compassionate care from all in the SBH Health System, from wellness care to end-of-life care.

MOVING FORWARD

Many of these elements currently exist at SBH Health System, but clearly some are lacking and need to be developed and supported. We are just beginning to embark on this very important journey and it is my goal and expectation that five years from now we will have made great progress in creating an integrated and highly functional system of care for our patients and our community. Population health will be well on its way and we will all be very proud of the work we have done to improve the health of our patients and our community. My goals are no less.

An Update on Pain Treatments

AJAY SUMAN, MD

MD
University of Missouri-Kansas City, School of Medicine

Internship/Residency
Anesthesiology, St. Luke's Hospital, Kansas City, MO

Fellowship, Pain Management
Texas Tech University Health Sciences Center, Lubbock, TX

By Steven Clark

For a pain specialist, it was equivalent to being on the frontlines.

Working in the interdisciplinary pain medicine department at Tripler Army Medical Center in Honolulu, Dr. Ajay Suman treated soldiers returning from active duty in Afghanistan and Iraq as well as veterans from past wars, ages 18 to 75. Since coming to SBH Health System, he's been dispensing that knowledge to doctors and patients in the Bronx.

"In medicine today, you're trying to keep the body at homeostasis," said Dr. Suman. "In the case of back pain, for example, surgery may be the right way to go initially if there's leg weakness or neurologic change. Otherwise taking more conservative measures to avoid permanent mechanical or structural changes to the body is always optimal. The thinking used to be, 'We need to go straight to surgery,' now half or more of the time when doing surgery strictly for pain, it's not going to help."

According to Dr. Suman, treating chronic pain needs to begin with identifying the patient's etiology. "Why is he or she having pain?" said Dr. Suman. "That's the toughest part. Is it the disc? Nerve irritation? Joint issues? Muscular pain? Not moving the back? It all starts there."

Spinal Cord Stimulators

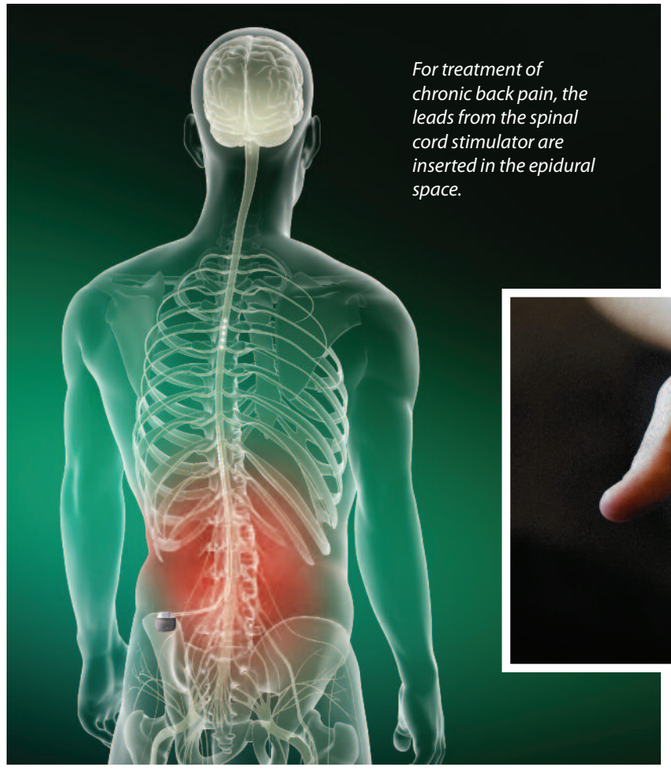
In addition to using minimally or non-invasive treatments like radiofrequency ablations, nerve blocks, infusions, and facet joint and epidural injections, Dr. Suman has had a great deal of success in working with spinal cord stimulators (SCS) – which he recommends for certain patients only after more conservative measures have been exhausted. This has proven effective not only in patients with chronic back pain, but also for those suffering from such disorders as trigeminal neuralgia, complex regional pain syndrome, peripheral vascular disease and abdominal pain.

SCS, also referred to as the "pacemaker for pain," has been available since the 1980s, but has become greatly improved in recent years. It works on the "gate control" theory by sending electrical pulses to the spinal cord that interfere with the nerve impulses that cause one to feel pain. Instead of pain, the patient experiences a very pleasant and mild tingling feeling.

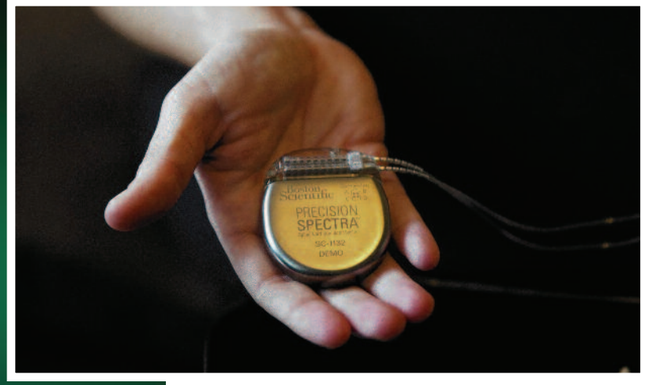
"We thread two wires or 'leads' through the epidural space, which are hooked up to a battery for a trial that is external," said Dr. Suman. "For three to five days the patient can try it out and see if they like it. They know pretty quickly and then we either pull out the leads or implant them in a simple procedure. It is the only surgery where you can 'try out' the surgery before having it implanted."

Among the best candidates for SCS are patients whose problems have been exacerbated by surgery. "Post-fusion patients, for example, have complex pathology with scarring in the epidural space that can lead to nerve entrapment, joint stiffness, spinal stenosis, or recurrent disc herniation," said Dr. Suman. "The device works on multiple modalities without any addictive (medication) issues."

Patients can adjust settings and turn the device off when not needed. Unlike with surgery, it's not permanent and can be removed without side effects.



For treatment of chronic back pain, the leads from the spinal cord stimulator are inserted in the epidural space.



A spinal cord stimulator, also referred to as a "pacemaker for pain."

Other Pain Treatments

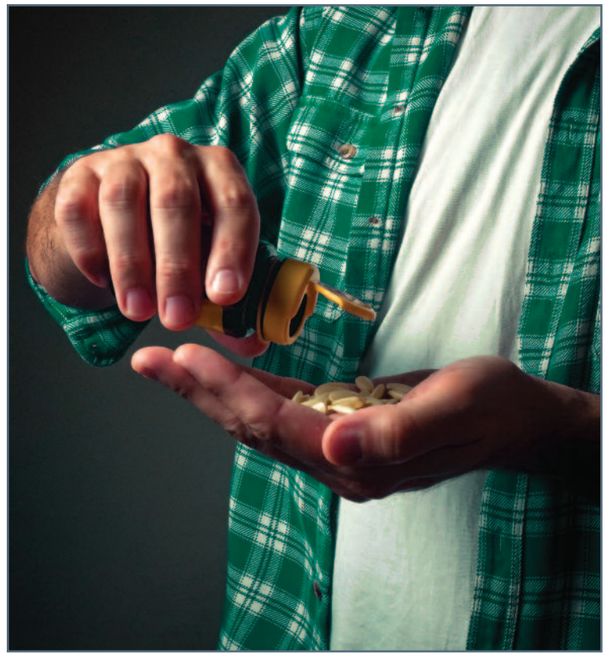
Dr. Suman also treats patients suffering from chronic headaches. One of the more common causes amenable to interventional techniques is occipital neuralgia, which can result from whiplash, with pain snaking across the back of the neck and resulting in shooting pains in a "Mohawk fashion" across the head. In addition to using nerve blocks and ablation, he has had success with Botox to eliminate tight and irritated muscles and spasms for up to three months at a time.

An effective option for patients with vertebral fractures, often elderly people with severe osteoporosis or cancer – although Dr. Suman also saw this with victims of IED blasts from war – is a procedure called kyphoplasty. The doctor makes a small incision in the back and places a narrow tube. A special balloon is then inserted through the tube and into the vertebrae, and inflated. The balloon is removed and the cavity left is filled with a cement-like material. By restoring some or all of the lost vertebral body height due to the fractures, the procedure also increases the patient's pulmonary function if the fractures have occurred in the thoracic region.

While insurance coverage is limited, platelet-rich plasma (PRP) is a therapy Dr. Suman also hopes to bring to the Bronx. PRP uses a dose of concentrated platelets from the patient's own blood to promote healing. Effective in treating lower back pain and other orthopedic injuries that aren't responding to traditional methods, PRP employs a series of safe injections to promote healing.

Pain Medication: One Soldier's Story

For days, the soldier had been trapped in the foothills of Afghanistan, with severe injuries to his lower extremities. A



dropped to about 10 percent. While opioids may blunt a patient's pain, doctors now know that they often limit how a patient functions physically and socially.

"Opioids are okay to prescribe with certain conditions, like cancer, if used in the right dose, yet from a medical and legal perspective, to protect the community, the physician and the patient, precautions need to be put in place," said Dr. Suman. "This begins with appropriate patient screening and education."

Physicians need to be at the front of the learning curve. "Less than 60 milligrams of a morphine equivalent is the maximum efficacious dose according to research and a big pitfall doctors fall into is increasing the medication if the pain persists," said Dr. Suman. "Once you ramp up to a certain dose, it becomes more and more difficult to bring the patient down. This can result in not only dose tolerance [with the patient requiring higher doses for the same effect], but also in mistrust for the pain specialist who wants to reduce the dosage."

Although it may seem counterintuitive, he said, patients get better pain relief when the dose is lowered when they are above 60 mg of morphine equivalent. This, he explained, regulates the body's opioid receptors and improves their sensitivity.

Urine drug screenings and, taking it a step further, mass spectrometry, will help prevent patient abuse. Checking with pharmacy records will help uncover patients who go doctor to doctor in search of prescriptions, or "doctor shopping."

In general, he said, physicians as a general rule should not prescribe opioids for initial treatment of non-severe injuries, must educate their patients of the limited time-frame when opioids are necessary, and monitor them closely.

"If you have a patient with a badly sprained ankle and you start him on Vicodin and then ramp up the dosage, you could be looking at a problem if the patient has an addictive potential," he said. "If the patient is over 65 and has severe osteoarthritis or spinal stenosis, and injections haven't helped, it would be okay to use a short-acting opioid medication three times a day maximum.

"Every patient is different in terms of their needs and their body's dose requirements. The patient who is given medication that is not helping can come across like an addict when they are being inadequately treated. If the patient's pain is not being treated on an initial dose of opioids, you need to consult with a pain specialist, a surgeon or rheumatologist. You need to nip it in the bud."

As for the soldier who had returned from Afghanistan, Dr. Suman prescribed a Clonidine patch and Seroquel to deal with his withdrawal symptoms. Within six to eight weeks with weekly follow up – with the support of his family, his own motivation and Dr. Suman's regimen – his pain dosage was reduced nearly 90 percent.

medic had kept him calm by giving him morphine, the only drug he had at his disposal. Since returning to the states, the soldier's tolerance for pain medication had increased and had not been properly regulated.

"His life was quickly falling apart," said Dr. Suman. "His wife told me she couldn't live with him anymore, and he said, 'I don't feel like I'm real anymore; I feel like a zombie.' Time was short and for his sanity, we needed to quickly wean him off the opioids he was taking."

The use of opioids has great potential for abuse. Some 16,000 Americans die every year because of opioid overdoses. For others, it has the potential to take over their lives. The military and the Department of Veterans Affairs have started to recognize this problem. Whereas five years ago approximately 80 percent of the injured soldiers treated at Walter Reed Army Medical Center in Washington D.C. were prescribed opioids, that figure has since

The Role of Palliative Care

STEVEN REICHERT, MD

MD
University of Cincinnati School of Medicine, Cincinnati, OH

Internship/Residency
Baystate Medical Center, Springfield, MA

By Steven Reichert, MD, Director, Palliative Care, Associate Program Director, Medical Education

I came to SBH Health System in July 2013 to establish the division of palliative care in the department of medicine. I had served for eight years as the residency program director and director of quality assurance for the department of medicine at New York Hospital Queens, and before that had spent ten years on the faculty of Mount Sinai School of Medicine, both in Manhattan and at their affiliate in Englewood, NJ.

While at New York Hospital Queens, I was integral in establishing a palliative care service, and in 2011 began working with the newly established palliative care team. I received board certification in hospice and palliative medicine in 2012. After witnessing the improvement in quality of patient care I was eager to bring the same services to patients in the SBH Health System.

Dr. Reichert confers with: (r-l) Najwah Williams, social worker, Mohammad Azam, MD, hospitalist, and Christopher Williams, resident, on 3 North.

Palliative care practitioners provide team-based care to patients and families of patients with serious illness. Working closely with patients, families, primary care providers, subspecialists, social workers, case managers, nursing staff and clergy, the aim of palliative care is to improve quality of care using a **Patient-Centered Approach**. Referrals for palliative care include:

- **Goals of care discussions in patients with advanced and or terminal illness**
- **Management of cancer-related pain**
- **Reduction of non-pain-related symptoms in patients with advanced illness**
- **Facilitation of family discussions in patients with complex illness**
- **Reduction or elimination of suffering for the patient and family unit including physical, psychosocial, spiritual and cultural aspects of healthcare**

At SBH I work closely with all members of the healthcare team to help patients and families cope with the struggles of advanced illness. I also work closely with the members of the Hospice of New York team on 3 South and assist patients with initiation of hospice services as appropriate. I have found the hospice unit to be a valuable resource for patients with advanced illness.

In my past encounters, hospice was a concept, foreign and at times frightening to patients and families. Having an on-site hospice unit and a close partnership with Hospice of New York allows my patients and their families to better understand the values of hospice and the benefits of hospice care. While I work closely with hospice, the discipline of palliative care differs from hospice in that patients may receive palliative care services concurrently with aggressive life-restorative care, and patients do not need to have a less-than-six-month life expectancy to qualify for palliative care. (Hospice care is restricted to those who have forgone aggressive care and must have an estimated limited life expectancy).

Since starting the palliative care program, I have performed over 500 consults and have expanded palliative care services to patients in the St. Barnabas Rehabilitation and Continuing Care Center. I plan to begin seeing outpatients through the Center for Comprehensive Care this summer.

Inpatient consultations (not limited to patients on the medicine service) may be obtained by contacting Dr. Reichert through the department of medicine at 718-960-4423.

SBH Center for Patient Blood Management

By Robert Karpinos, MD
Medical Director, Perioperative Services
Director, Anesthesiology

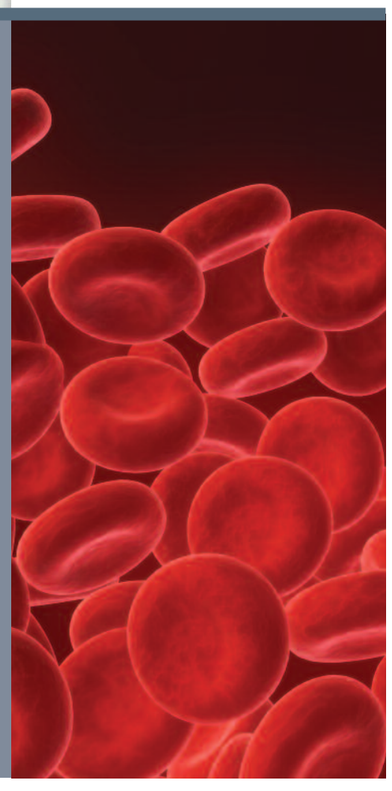
How can we manage blood use more effectively, reduce waste and change hospital practice to provide better patient care? SBH Health System is proud to introduce the Center for Blood Patient Management (PBM), a new initiative in the DRIVE to Patient-Centered Excellence. This new Center is founded on a multidisciplinary, evidence-based approach to ensure appropriate blood use, and in many cases minimize or eliminate the administration of blood and blood component therapy, emphasizing anemia management, and the optimization of hemostasis to support and guide medical decisions.

ROBERT KARPINOS, MD

MD
Sackler School of Medicine, Tel-Aviv, Israel

Internship
Cornell University Medical College North Shore University Hospital/ Memorial Sloan-Kettering Cancer Center

Residency & Chief Resident
New York University Medical Center, Bellevue Hospital Center, Manhattan VA Medical Center



Mission and Structure

Our mission at the Center is to provide our patients with the best options in transfusion medicine ensuring the best possible results. By recognizing that personal and cultural beliefs influence individual healthcare decisions, the Center will provide patients with the necessary information to not only participate in, but also to guide their therapy in a comfortable and supportive environment. The Center will provide transfusions only as appropriate, necessary and consistent with the patient's physical, mental and spiritual needs.

Led by a multi-disciplinary steering committee, the Center for PBM has representation from the hospital administration, blood bank, nursing, and the departments of anesthesiology, medicine, obstetrics and gynecology, outreach and community affairs, patient experience, pharmacy, surgery, and trauma.

The challenge is to develop a program that will improve patient care, improve the patient experience and create global savings. A PBM program will accomplish each of these directives, thus accomplishing the triple aim. Eliminating unnecessary transfusions is a logical step in the delivery of better care; it is economically sound and encourages respect for patient autonomy. Anemia management is clearly an essential part of patient blood management.

Dr. Karpinos leads the SBH Center for Patient Blood Management multidisciplinary steering committee

Anemia Screening

The department of surgery also maintains a surgical critical care fellowship approved by the American Osteopathic Association for up to three fellows per year. SBH holds the distinction of having one of only three AOA-approved surgical critical care fellowships in the nation. While currently the department has only one fellow, the plan is to fund two fellowship positions in July 2014. Surgical critical care fellows at SBH play a crucial role in assuring continuity of care and communication between the multiple disciplines involved in the daily care of SICU patients. In return, the fellows gain invaluable experience as major providers of care to critical care patients. They also participate in the education of residents and students rotating through the service.

The new SICU is a timely addition as the department of surgery continues to expand and move forward with surgical services of increasing diversity and complexity.

History

Patient Blood Management is not a new concept. In 1988 the NIH consensus conference focused on the risks and potential benefits of blood product transfusions and the reassessment of the then-current transfusion practices. The consensus was to replace the traditional 10/30 trigger, which dates back to 1942 and is based on clinical impression, with a more scientific and restrictive therapy where the directive was to decrease the trigger to a hemoglobin of 7 and base the need for transfusion on a clinical assessment including symptom evaluation.

PBM has been recognized by the World Health Organization as a way to promote transfusion alternatives, (World Health Alliance Resolution A63.R12) leading the healthcare community to focus on blood utilization as a means to improve clinical outcomes and patient safety. In November of 2013 the American Hospital Association identified a "top five" list of hospital-based procedures that deserved intense review. The first area of focus was appropriate blood management. Partnering with the AABB, the AHA has supported the development of PBM programs around the country. SBH was recently recognized as one of the first hospitals serving a primarily Medicaid population to develop a PBM program. An article to be published in the *Journal of the American Medical Association* later this year highlights the progress and direction we have taken.

Education as a Tool for Change

In the *JAMA* article it is noted that the most difficult thing to change in a hospital system is culture. Our plan at the Center for Patient Blood Management is to manage this challenge through education and staff empowerment. To that effect, on March 28, 2014, SBH hosted Dr. Aryeh Shander, a world renowned authority on PBM, to deliver our opening PBM lecture. Dr. Shander is professor of anesthesiology, medicine, and surgery at the Mount Sinai School of Medicine and director of anesthesiology, critical care medicine and patient blood management at Englewood Hospital in NJ. Our next event was a series of lectures on transfusion medicines for our nursing staff.

Next Steps

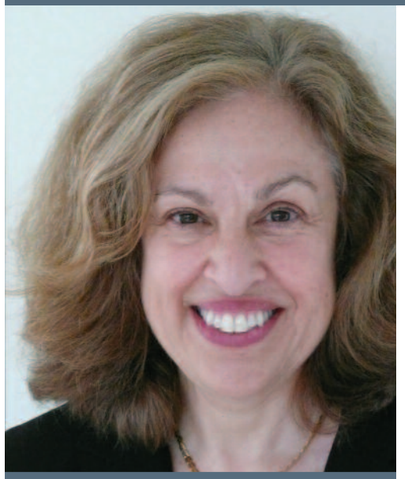
At this time, the PBM program is developing practice guidelines and revisions to current order sets which we expect to initiate early this fall. Many of these implementations are based on the 2014 AABB "Choosing Wisely" Campaign which gives five steps to decrease the overuse of blood and improve patient care:

1. **Don't transfuse more units of blood than absolutely necessary**
2. **Don't transfuse red blood cells for iron deficiency without hemodynamic instability**
3. **Don't routinely use blood products to reverse warfarin**
4. **Don't perform serial blood counts on clinically stable patients, and**
5. **Don't transfuse O negative blood except to O negative patients and in emergencies for women of child-bearing potential with unknown blood group**

Following guidelines presented by the Society for the Advancement of Blood Management, the Joint Commission Patient Blood Management Certification Program and the newly released AABB Standards for a Patient Blood Management Program, we are well on our way to establishing a very successful Patient Blood Management Program. We look forward to applying for Designation from the AABB as well as Certification from the JCAHO by year's end.

On the Cutting Edge: **Lasers in Dentistry**

By Dara Rosenberg, DDS, MPH
Director, Department of Dentistry



DARA ROSENBERG, DDS

DDS
New York University College of Dentistry

MS
CUNY, Hunter College, Environmental Health Sciences

MPH
University of California, Los Angeles, School of Public Health

Residency
Long Island Jewish-Hillside Medical Center, New Hyde Park, NY

Current
NYS AIDS Institute Standards of Care Committee

Consultant, Commission on Dental Accreditation

Depending on your age, you might associate lasers with Star Wars or planetarium shows. Today, low power lasers (<1mW) are used for CD players and laser pointers; two types of intermediate power lasers (1-5 mW) are used to scan barcodes, and (5-500mW) are used for light shows; and high power lasers (> 500 mW) are found in devices from dental lasers to steel welders. Einstein published a paper on the theoretical basis for lasers in 1917, but it wasn't until the 1960's that the first laser devices were actually made. The dental department at SBH has used a variety of lasers for over 20 years. During that time we have collaborated with a leading dental laser company, Biolase Inc., to develop new applications for this evolving technology.

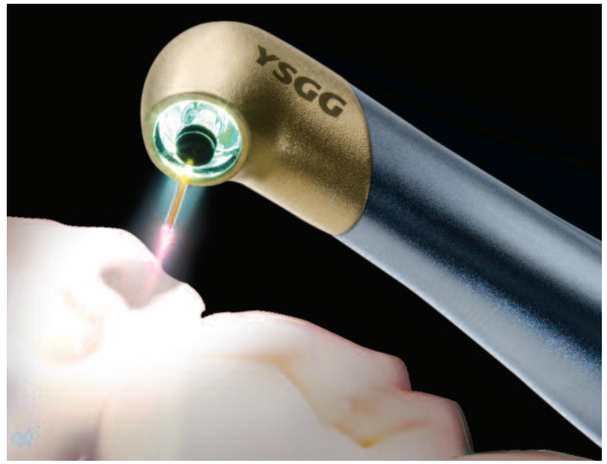
What Are Lasers?

Lasers (Light Amplification by the Stimulated Emission of Radiation) consist of a power source, which is used to excite molecules of a crystal or a gas in a chamber to create photons. Mirrors within the chamber direct and concentrate the photons through the hand piece as an intense beam of laser light. The type of laser is dependent upon the gas or crystal used. Examples of common mediums include carbon dioxide, argon, ruby, and sapphire. The newer lasers, particularly ones used in dentistry, have combinations of elements such as chromium, erbium, and gallium. Each substance produces a specific wavelength of light, specific to a targeted use of the energy. Laser light is not like normal light. It contains only one unique wavelength of light (one color), and exists as an organized beam.

At SBH Health System we have several 2,780 nm Er,Cr:YSGG (Erbium, Chromium:yittrium-scandium-gallium-garnet) lasers with an air & water hand piece that combine to excite water molecules from within both the spray and the target tissue. This results in a biological, effective micro-ablation of tooth structure, bone, or soft tissue. We also have a number of 940 nm and 810 nm diode lasers, which are semiconductor lasers that have shorter wavelengths in the infrared spectrum of light. They are smaller, use low power and do not have an air and water component. They are used for soft tissue surgery, bleaching teeth, and low level laser therapy for pain, healing, and immune enhancement.

What Types of Procedures Are Lasers Used For?

The FDA has, over the years, approved dental lasers for use for specific procedures, including removal of decay, cutting teeth, treatment of root canals, removing infected tissue in periodontal pockets, and a variety of other soft and hard tissue procedures. Lasers are used to make a tooth insensitive to pain, to the point where decay (cavities) can be removed and the tooth can be prepared for a filling without local anesthesia. A laser treated tooth is more resistant to decay. Soft tissue can be cut without anesthesia and bleeding. Root canals can be cleaned and sterilized with the laser (killing 99.8% of the bacteria in the root canal). The success of a root canal depends upon the extent to which all the bacteria in the canal are destroyed. Caries detection devices also employ lasers.



Lasers provide precision cutting, enhanced healing and bloodless treatment.

The FDA has most recently approved the first diode laser for low-level laser therapy (LLLT). The responses to low-level laser therapy, photobiomodulation (PBM) include a reduction in inflammation, swelling and pain, muscle relaxation, improved healing (tissue repair and regeneration), and improvement in the immune system response. In dentistry, these diode lasers are used to cut soft tissue, remove inflamed tissue from periodontal pockets, reduce swelling and pain after extractions, and to treat facial pain. The duration of apthous ulcers and herpetic lesions are reduced with laser exposure.

Research, most of which was not done in the US, provides explanations of how and why lasers affect tissues.

Why Can Teeth Be Cut Without Anesthesia?

The drill works with friction (a bur grinds away tooth structure), which causes heat, and vibration and triggers pain. The laser cuts target tissues without contact, heat, vibration or pressure. Additionally, the laser pulse lasts under 50 millionth of a second, effectively staying below the nerve threshold.

How Can Lasers Enhance Wound Healing?

While we all understand how plant cells containing chlorophyll respond to light, the fact is mammalian cells also house chromophores which respond to various wavelengths of light. Red light, for example is absorbed by mitochondria, while the infra-red wavelengths are absorbed by membrane components of some cells. PBM modifies cell activity. So what happens when a photon meets a cell? Free radicals are generated affecting ATP synthesis, increasing the energy transmitted to the cell increasing cell activities, including DNA, RNA, and collagen synthesis. There is also a reversible increase in cell membrane permeability to calcium and other ions. This stimulates a range of cellular events including growth factor release, keratocyte proliferation, angiogenesis and fibroblast proliferation. PBM accelerates the resolution of inflammation and results in starting granular tissue formation. Wounds treated with the appropriate wavelength and dose heal faster and are stronger.

How Do Lasers Decrease Pain?

Laser light stimulates B-endorphine secretion, reduces inflammation, blocks depolarization and inhibits conduction of small and medium diameter nerve fibers reducing nociceptive input.

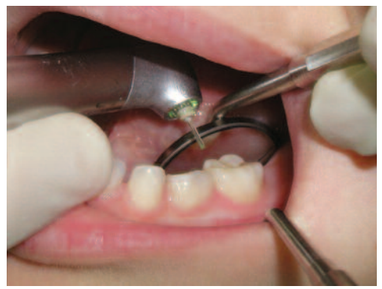
How Do Lasers Modulate the Immune System?

The immune system is made up of a complex group of defensive cells, (neutrophils, macrophages, T & B lymphocytes, mast cells, etc.), tissues and organs that recognize and attack non-self substances, and produce inflammation after injury. The peripheral immune system components (skin and mucosal associated lymphoid tissue) are directly affected by photons. The deeper components (lymph nodes, spleen, thymus, and bone marrow) are affected indirectly by photons as these activated cells and molecules travel through the lymphatic vessels and blood vessels to reach them. Increasing exposure time to laser light will increase the number of modulated circulating cells.

Advantages of Lasers in Dentistry

There are many advantages to the use of the lasers in dentistry. Patients need less anesthesia during most procedures. Lasers allow more conservative tooth preparation and do not cause micro fractures of the tooth enamel, the way a drill does. They improve healing, and decrease pain postoperatively. When used to kill off bacteria, particularly in the periodontal pocket, they do not cause microbial resistance, or create adverse drug or allergic reactions. Lasers provide precision cutting, enhanced healing and bloodless treatment.

The unique quality of laser therapy makes it ideal for a range of other uses throughout medicine. Our dental lasers are currently in use in the hospital by podiatrists, in the wound care center, and by physiotherapists in the Rehab Center, and more potential uses are likely in the future.



Laser hand piece, showing air and water spray, cutting a tooth.

Ruth E. Cassidy, BS, PharmD, AACHE, Vice President/Chief Pharmacy Officer

An Expanding Role for Pharmacy
The New Clinical Pharmacy Division at SBH

By Ruth E. Cassidy with Antonia Alafris, Valery L. Chu, Yumi Lee, and Rachel Sussman

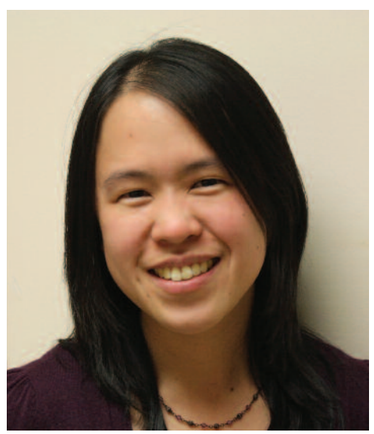
The new clinical pharmacy division at SBH Health System is breaking new ground for the organization. The clinical pharmacy division will embark on areas of clinical pharmacy practice that are entirely new to the institution. Each of the clinical coordinators will be residency trained and/or board certified in their area of expertise. Each will engage in collaborative drug therapy agreements with SBH Health System providers and deliver comprehensive drug management to their patients. Three new clinical areas that have recently been initiated are in ambulatory care, transitions of care, and infectious diseases. Future plans also include opening PGY-2 pharmacy residency programs in each one of these specialty areas.

Ambulatory Care

In January 2014, Dr. Valery L. Chu, BS, PharmD, BCACP, CACP, a clinical pharmacist specializing in ambulatory care, joined the healthcare team at the new Center for Comprehensive Care, an innovative approach to address outpatient medication-related issues that persistently lessen the effectiveness of health interventions and contribute to hospital admissions and re-admissions. In partnership with ambulatory care leaders and providers, endeavors will encompass these interrelated areas: medication adherence, appropriate medication use, and education. These interventions will be enhanced by collaborative practice agreements with providers, allowing a pharmacist the authority to initiate, modify, refill, or discontinue medications for specified conditions. In a typical workflow, the clinical pharmacist sees the patient immediately prior to or after the provider to identify medication issues or to reinforce discharge plans and education, respectively. Although Dr. Chu will be principally situated in the Center for Comprehensive Care, she will participate in medication-related endeavors affecting ambulatory care as a whole.

Antonia Alafris, BS, PharmD, CGP, Associate Director

Poor medication adherence is a major, preventable cause of poor outcomes and healthcare system waste. In the United States, as many as one-third to two-thirds of medication-related hospital admissions are related to non-adherence, a tremendous financial burden with real negative impact on quality of life.[1,2] Improving medication adherence is a multi-faceted problem requiring a multi-faceted solution. Dr. Chu assesses adherence to medications using validated tools, then identifies and systematically works with the patient to resolve barriers, including reduced pill burden, reduced frequency of dosing, consolidated dosing times, use of pre-filled medication boxes, identification of medications covered by third party payers at point of prescribing, alleviating concerns about adverse effects, and increasing patient confidence in the benefit of their treatments.



Valery L. Chu, BS, PharmD, BCACP, CACP

Managing medications for an outpatient requires consideration of patient-specific characteristics. Use of high-risk medications necessitates evaluation, especially in the elderly. Through comprehensive medication reviews, Dr. Chu assists in optimizing drug selection, dosing, and frequency. Through the use of information technology and electronic medical records, patients may be identified at a population level for interventions related to drug-drug interactions, contraindications, and disease-related dose adjustment.

Successful chronic care requires sustainable, life-long healthy behaviors, such as self-monitoring, problem solving, and medication taking. For any given behavior, the patient must acquire knowledge, develop skills, believe in the benefit and their ability to achieve (self-efficacy), and then successfully implement. To support the patient, education is key. Dr. Chu supports the healthcare team as educator, providing teaching of basic disease knowledge, training in self-management skills and behaviors, and training in the use of medications and monitoring devices. Education is enhanced by high-quality language-appropriate written materials, innovative use of portable tablet devices for video materials, and group workshops.

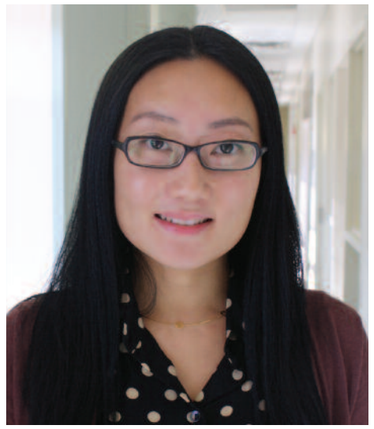
Care Transitions

As the paradigm of healthcare is shifting from volume-based to value-based care there is an emphasis upon care transition initiatives. The dramatic need for SBH Health System to provide patients with efficient continuity of care was recognized in the establishment of the transition of care (TOC) department. This team is rapidly evolving to close the gaps in healthcare provided to SBH patients. Pharmacy joined this interdisciplinary effort in early April of this year with the addition of Rachel Sussman, PharmD, a pharmacy clinical coordinator specializing in TOC.

Through intensive collaboration and efforts with the TOC team, Dr. Sussman will delve into streamlining practices as patients transition through levels of care within and also when leaving the institution. This involves closely evaluating and surveying the current level of performance. The overarching review encompasses process mapping, root cause analysis of readmissions, and gap analysis to identify both areas of improvement and fragments in care. Once identified, Dr. Sussman will aid in standardization of formalized policies and procedures surrounding medication management, thus resulting in the adoption of best practices involving medication therapy, such as obtaining the best possible home medication list, accurate medication reconciliation, and timely communication of a reconciled discharge medication list to outpatient providers. The creation of a closed-loop system with seamless transitions will be benchmarked by audits of compliance with policies, as well as outcome data reflecting decreased medication errors, readmission rates, and healthcare utilization.

In the development of the program, Dr. Sussman will serve as a resource to staff, being consulted for patients deemed at high risk for adverse events and readmissions. She will review patients' complex medication profiles to identify potential medication-related problems and barriers that result in negative patient outcomes. Patient education will be performed using teach back methods and well validated

Rachel Sussman, PharmD



Yumi Lee, PharmD, BCPS, AAHIVP

tools and resources to engage the patients in their care. This education is innately intertwined with the institution's DRIVE to Patient-Centered Excellence. Patients will be assessed for health literacy, access to medication, and compliance. Dr. Sussman's unit-based activities entail working in concert with other providers to utilize medication access resources to overcome patients' barriers in obtaining medication. Optimization of bedside medication delivery prior to patient discharge is also in the scope of her role. Hence, patients will have an increased understanding of their medications, leaving better equipped and empowered to manage their medications and chronic disease states. The success of this utilization of clinical pharmacy services will be demonstrated by measureable improvements in CMS and meaningful use compliance for patient education, improved HCAHPS scores relating to medications, and decreased readmission rates.

Infectious Diseases

Yumi Lee, PharmD, BCPS, AAHIVP joined the clinical pharmacy team as the infectious diseases clinical coordinator. Dr. Lee will be working in collaboration with the division of infectious diseases in establishing a formal Antimicrobial Stewardship Program (ASP) here at SBH Health System. Dr. Lee has been put to the task to coordinate interventions designed to improve and measure the appropriate use of antimicrobials via the ASP.

The Antimicrobial Stewardship Committee was created to provide direct oversight of the ASP. The committee, chaired by Dr. Michelle Dahdouh of infectious diseases and co-chaired by Dr. Lee, convenes monthly to discuss clinical topics and antimicrobial stewardship initiatives. The ASP at SBH Health System comprises of both a "front-end approach," where anti-infectives that are high cost, high use, or require preservation due to the potential for resistance issues to develop are restricted and a "back-end approach" through prospective audit and feedback, where target drugs are reviewed for appropriate use and direct communication with the prescriber occurs. During this process, interventions such as de-escalation based on culture results, dose optimization based on pharmacokinetic and pharmacodynamic parameters, discontinuation of unnecessary or duplicate therapy and IV to oral conversions are accomplished. This process also allows targeted education of the prescribers, which is another key component of the ASP.

To launch the ASP, the antimicrobial stewardship team administered a survey during Annual Resident Research Day on May 21st to assess clinicians' perception of an antimicrobial stewardship program, current prescribing practices, and the scope of the institution's resistance problem. The results of the survey will provide important information about barriers that may be encountered by the ASP and topics for which educational interventions are needed. Moving forward, the Antimicrobial Stewardship Committee plans to incorporate members from different specialties including but not limited to pharmacy, infectious diseases, infection control, microbiology, intensivists, emergency medicine, hospitalists, nursing, and information technology to develop evidence-based practice guidelines and clinical pathways and facilitate communication among their respective groups. Through a collaborative approach, ASP is dedicated to optimize outcomes while reducing antimicrobial resistance, improving patient safety, and promoting cost-effective care.

Future endeavors of the new clinical division of pharmacy include clinical coordinators in critical care, emergency medicine, mental health, and pediatrics. The pharmacy clinical coordinators will be board certified in their area of specialty. They will collaborate with physicians, nurses, and social workers in order to select the most efficacious and safest medication therapy for patients and to create systems to reduce medication errors. In addition, each clinical coordinator will oversee a PGY-2 pharmacy resident. Ultimately, pharmacy clinical coordinators and PGY-2 pharmacy residents will be available to collaborate with every medical team at SBH Health System.

1. Osterberg L, Blaschke T. Adherence to medications. NEJM. 2005;353:487-97.
2. New England Healthcare Institute. Waste and inefficiency in the U.S. Healthcare System. February 2008.

Meeting the Healthcare Challenges of Adolescents in the Bronx

URI BELKIND, MD, MS

MD
Facultad de Medicina de la Universidad Nacional Autonoma de Mexico

MS
Clinical Epidemiology, Netherlands Institute of Health Sciences, Rotterdam, Netherlands

Residency and Chief Resident
Holtz Children's Hospital, University of Miami, FL

Fellow in Adolescent Medicine
Montefiore/Albert Einstein College of Medicine, Bronx

Teen Health center

It can be tough being a teenager. Growing up as a teenager in the Bronx, can be even tougher.

For the last three years, the Teen Health Center at Union Community Health Center and Dr. Uri Belkind, a board certified fellowship-trained physician in adolescent medicine who serves as medical director of the Teen Health Center and director of adolescent medicine at SBH, have helped make it a little easier.

"Adolescents in the Bronx face major issues like teen pregnancy, growing up poor in single parent homes, STI and HIV, obesity, dropping out of school, drugs and violence," said Dr. Belkind. "We try to provide resources that will teach adolescents about making good choices and fostering healthy relationships, and we give them a safe place to be with other teenagers."

The program also provides comprehensive medical services to teens, including primary care and specialty services. The latter includes contraceptive management (including the free distribution of condoms); and the diagnosis and treatment of reproductive endocrinology disorders including PCOS (polycystic ovarian syndrome), amenorrhea and dysmenorrhea; sexually transmitted diseases; eating disorders; obesity; and mental health.

"When patients are depressed, or there are bad family dynamics and they don't want to go to a mental health professional because of the stigma attached, they come to us," said Dr. Belkind. "We'll work with them and their parents, and prescribe antidepressants, if necessary, and try to help them understand the importance of mental health counseling."

Obesity is a problem throughout America – with as many as a third of all adolescents considered obese or overweight. This problem is exacerbated in the Bronx, which has the highest rate of obesity in New York State. It is not surprising – according to a report released in April by the New York City Department of Health and Mental

Caroline Davis, director of teen services

Dr. Tahshann Richards

Hygiene, bodegas and fast food restaurants account for a combined 65 percent of the local food environment. Meanwhile, sites specializing in fresh produce comprise just four percent of the establishments. In addition, many teens favor diets heavy in saturated fats and laden with calories.

Dr. Belkind and the Teen Health Center team work with nutritionists to educate teens and their families on healthy eating choices. Mental health support is available to those who suffer from depression or anxiety that may accompany obesity. Dr. Belkind and his associate, Dr. Tahshann Richards, a family medicine physician, work with teens who may suffer from these issues, or be victims of bullying.

Through a grant featuring an evidence-based program called "Making Proud Choices," the Teen Health Center's staff speaks before hundreds of students a year at middle and specialty schools in the Bronx with the aim of decreasing the incidence of adolescent pregnancy and STI/HIV. (The Bronx has the highest rate for both among New York State's 62 counties.) It holds presentations at schools and churches that address such issues as parental communication, adolescent parenting, and healthy relationships.

"Our job is not to tell young people to have sex, or not to have sex," said Caroline Davis, director of teen services. "It is to provide them with enough information for them to make healthy decisions they are comfortable to live with."

Partnerships have been formed with local groups, such as the new Bronx LGBTQ Center, which now holds weekly meetings with gay and transgender youth. The Teen Health Center's summer internship program provides youths with paid jobs and mentorships. Dr. Belkind and his team also offer training and teaching to other medical professionals in the Bronx on standards of care and best practices, including minors' rights for confidentiality.

"We offer services to all teens, with the realization that those who are the most troubled rarely take advantage of these kinds of resources," said Dr. Belkind. "Still, we've found that when they do come, they really thrive."

For more information on the Teen Health Center, call 718-220-2020 ext. 8479.

A letter in praise of Dr. Uri Belkind:

I am writing to commend the exceptional service provided by Dr. Uri Belkind to a young patient of his. The 19-year-old patient got bad news about potentially serious and life altering diagnoses and required a lumbar puncture. Dr. Belkind accompanied his patient to the ED and stayed with him to support him through the ED visit and the procedure. This kindness was clearly appreciated by the young patient and made the ED visit smoother for everyone involved.

This act of kindness really went above and beyond and demonstrates the incredible qualities that Dr. Belkind embodies. His patient and the SBH Health Care System are very fortunate to have Dr. Belkind.

Letter, April 1, 2014, to Dr. David Rubin, SBH Chairman of Pediatrics from the then-Director of the SBH Emergency Department, Dr. David Listman

Bronx teens learn about healthy eating, time management, and kitchen hygiene at a Bronx Girls Cook program event funded by the Teen Health Center.

Center for Wound Healing and Hyperbaric Medicine

By Emilio A. Goez, DPM, FACFAS and J. Ronald Verrier, MD, FACS, Co-Directors

It is estimated that six (6) million Americans suffer from chronic, non-healing wounds of many varieties. At SBH Health System's Center for Wound Healing and Hyperbaric Medicine, a great majority of wounds are associated with complications from diabetes and other related vascular disorders. Our general surgeons also treat other types of hard-to-heal wounds including pressure sores, and trauma-related injuries. Treating these wounds can be very challenging, but a successfully healed wound is extremely gratifying for both the patient and the physician.

Approaches to Wound Care

The Center for Wound Healing and Hyperbaric Medicine utilizes the most up-to-date approaches in wound care. The Center's goal is to heal the patient's wound, promote early recovery, and avoid prolonged or permanent disability. Designed to complement the services of both primary and specialty care providers, the Wound Center uses the expertise of its staff to identify the type of wound for each referred patient and assess any contributing factors. After a thorough examination, our providers use clinical-based evidence to design a treatment plan specifically tailored to optimally heal the patient's wound. As a hospital-based service, the Center provides patients access to consultations with experts from infectious disease, vascular surgery, physical therapy and nutritional management. Specialists experienced with orthotics and prosthetic devices are also part of the treatment team.

Hyperbaric Oxygen Therapy

The Center also utilizes hyperbaric oxygen therapy in the treatment of hard-to-heal wounds. Hyperbaric oxygen therapy involves the systemic delivery of oxygen to patients placed in a chamber at two to three times atmospheric pressure. While in the chamber, patients breathe one hundred percent oxygen for ninety to one-hundred-twenty minutes. This helps accelerate the healing process through increased oxygen delivery to the tissues. Other effects from this treatment modality include:

- **Stimulation of new vessels in devitalized tissues**
- **Reduction of swelling in the area of trauma for crush injuries**
- **Support of oxidative bacteria killing as an adjunct to antibiotics and wound care**

Staff at the Center includes physicians and podiatrists credentialed by the Undersea & Hyperbaric Medical Society (UHMS). Other professionals on the team include registered nurses and technicians trained in the care of chronic wounds and who can perform therapies and non-invasive studies. We also employ administrative support staff to assist with appointments, health insurance verification and authorization, and follow-up to the patient's referring provider.

To make a referral to the Center for Wound Healing and Hyperbaric Medicine please call 718-960-5064.

The Case for Including Podiatry as a Primary Care Service

By Emilio Goez, DPM, Chief, Department of Podiatry, Director, Podiatric Surgical Residency

EMILIO GOEZ, DPM

DPM
New York College of Podiatric Medicine, New York, NY

Residency
New York College of Podiatric Medicine affiliated hospitals

Dr. Emilio Goez and a podiatry resident treat a patient in the SBH Center for Wound Healing.

With high rates of chronic disease affecting our community, foot problems are a major health issue for large numbers of patients seen at SBH Health System. For more than 35 years the SBH Podiatry Service has treated patients of all ages, ranging from weekend warriors to those with symptoms caused by trauma, or systemic diseases such as diabetes, rheumatoid arthritis and gout. Among people with diabetes foot complications account for approximately 25% of all diabetic-related hospital admissions. Each year our podiatrists treat thousands of patients suffering from a broad spectrum of foot and ankle problems including musculoskeletal conditions, dermatological conditions, vascular conditions, congenital abnormalities in children and geriatric foot care.

At the SBH ambulatory care facility patients have access to complete foot and ankle care resources, including urgent treatment for patients with acute problems (e.g., infections, difficult wounds, sprains, strains, injuries and trauma). As a teaching hospital, SBH offers patients access to a wide range of specialists including vascular for circulatory system problems and infectious disease for hard to heal infections.

We have built one of the most accomplished teams of podiatric surgeons in the tri-state area. Dedicated to advancing the discipline of podiatry through post-graduate education, the hospital runs one of the most advanced Foot & Ankle Surgery residency programs in the United States. With an emphasis on trauma and reconstruction of the foot and ankle, SBH podiatrists are involved with some of the most complicated injuries presented anywhere. With a focus on meeting the needs of the community we serve, the Section of Podiatry is developing a "Limb Salvage Service" to address foot complications associated with diabetes and other chronic diseases. The goal of this new service is to improve outcomes and prevent morbidity.

Patient referrals to our Podiatry Service can be made by calling 718-960-9122.

What's Happening in Medical Education?

DAVID H. RUBIN, MD

MD
Case Western Reserve University, Cleveland, OH

Internship/Residency
Department of Pediatrics, University of California, San Francisco, CA

Fellow
General Academic Pediatrics, Yale University School of Medicine

Fulbright Scholar
University of Copenhagen, Denmark

By David H. Rubin, MD, Chairman and Program Director, Pediatrics

These are times of significant changes in medical education. There are two evolving, seismic developments, which are certain to impact the future of graduate medical education in the United States. The first development is the merger of the Accreditation Council for Graduate Medical Education or ACGME and the American Osteopathic Association or AOA.

The second development is the clinical learning environmental review program or CLER, which is being developed by the ACGME in response to the public's need for a physician workforce capable of meeting the challenges of a rapidly evolving healthcare environment. The third topic of importance is the annual graduation of residents from the many varied SBH residency programs.

ACGME/AOA Merger

The merger of the ACGME and the AOA was announced on March 13, 2014 in a letter to the graduate medical education community from Dr. Thomas Nasca, the chief executive officer of the ACGME. Dr. Nasca introduced the concept of a single accreditation system to "set standards and oversee the education and training of future generations of physicians to serve the American public." This accreditation of all GME programs will occur under the auspices of an expanded ACGME. Dr. Nasca went on to explain that the single accreditation system can achieve four significant goals:1) to ensure that the evaluation and accountability for the competency of physicians in graduate medical education programs are consistent across all programs, 2) to eliminate unnecessary duplication in the accreditation of GME, 3) to achieve efficiencies and cost savings for institutions that sponsor dually accredited or parallel accredited allopathic and osteopathic residency programs, and 4) to enable residents to be eligible to enter all accredited programs in the USA and transfer from one accredited program to another without being required to repeat training and without causing sponsoring institutions to lose Medicare funding.

The specifics of the new merger are still under discussion. However, a few details have been published and have been discussed recently with this author during a conversation with a senior ACGME official.

First, the ACGME will accredit AOA approved programs under the terms of agreement from July 1, 2015 through June 30, 2020. Programs that enter this accreditation process will be assigned a status of "pre-accreditation." This transitional phase will require a complete application to the ACGME. However, it will neither require a site visit nor formal program approval by the ACGME. Formal program approval must, however, be granted by the ACGME prior to June 30, 2020. Physicians who graduate from programs with the status of pre-accreditation for the five-year period will be eligible for entry into ACGME accredited advanced standing residencies and fellowships determined by specialty specific eligibility standards that are in place today. Program directors and faculty positions in each specific specialty will have to pass ACGME specialty specific guidelines including certification in the specialty by the American Board of Medicine or Pediatrics for example or "possess qualifications acceptable to the review committee." Clearly many of the specific requirements suggested by this merger need to be worked out and will be posted on the ACGME website as they arise (www.acgme.org).

CLER Program

Another exciting development in medical education is the clinical learning environment review or CLER. The six CLER focus areas are patient safety, supervision, professionalism, duty hours and fatigue management, transition of care, and health care quality. These focus areas are really about resident competency. The program focuses on integration of residents into an institution's safety programs-quality improvement programs, efforts to reduce disparities in healthcare delivery, establishment of and implementation and oversight of supervision policies, oversight and transitioning care, oversight of duty hours policy in fatigue management and mitigation, and education and monitoring of professionalism as well as the impact of all of these programs on the institution.

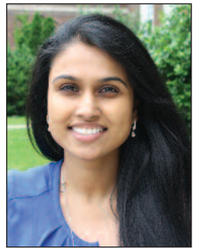
At this time, the ACGME is conducting site visits at institutions across the country to ensure compliance with the CLER program. To date, St. Barnabas Hospital has not been site-visited. However, the groundwork for compliance has been established including the assignment of section chiefs responsible for each of the six focus areas (see WIKI for details) and the 2013 establishment of the Resident Quality Safety Committee which meets monthly and is chaired (as per CLER regulations) by a resident, Dr. Richard Bauer from podiatry.

Resident Graduation

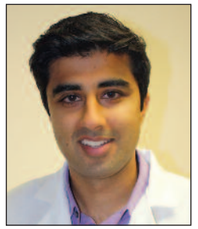
We recently celebrated the graduation of our SBH senior resident classes, and we would like to inform you of who they are, where they are headed, and practice and/or fellowship programs they intend to pursue. We are extremely proud of all of the following graduates and wish them every success.

	Name of Graduate	Destination	Professional Position
PEDIATRICS	Rajeswari Arun, MD	Grover City, MI	Primary Care Pediatrics
	Alvaro Coronado, MD	Jackson Memorial Hospital, Miami, FL	Pediatric Critical Care Fellowship
	Soultana Kourtidou, MD	Seattle Children's Hospital, Seattle, WA	Pediatric Cardiology Fellowship
	Maria Pertubal, MD	Hackensack, NJ	Primary Care Pediatrics
	Shanika Uduwana, MD	Montefiore Wakefield Campus, Bronx, NY	NICU Hospitalist
	Vincent Uy, MD	SBH, Bronx, NY	Chief Resident in Pediatrics
SURGERY	Justin Eisenberg, DO	Luthern Hospital, Brooklyn, NY	Vascular Fellowship
	Maura Pearlstein, DO	New Jersey	Trauma/Critical Care Fellow
	Maria Roberto, DO	SBH, Bronx, NY	Critical Care Fellow
	PLASTICS		
	Rakhesh Guttikonda, DO	San Diego, CA	Private Practice
	Lioudmima Haimovici, DO	West Florida	Group Practice
	PODIATRY		
	Richard Bauer, DPM	Albany, NY	Private Practice
	Eliezer Eisenberg, DPM	New York, NY	LEG Foot & Ankle Associates
	Omodunni Osofisan, DPM	Wyckoff Hospital, Brooklyn, NY	Wound Care Fellowship Program
	Jacqueline Quintero, DPM	New York, NY	Private Practice
OMM	Sarah Curtis, DO	NYIT-COM	Faculty, Osteopathic Medical School
	Michael Geis, DO	Stamford, CT	Private Practice, OMM
	Kirstin Sanborn, DO	Philadelphia, PA	Private Practice, FP/OMM
DENTAL	Jonathan Bindiger, DDS	Maimonides, Brooklyn, NY	Orthodontic Residency
	Abraham Blashka, DDS	New York, NY	Private Practice
	Annie Brandenburg, DMD	Milwaukee, WI	Pediatric Private Practice
	Nithya Chalikonda, DMD	Philadelphia, PA	Private Practice
	Sindhura Citineni, DDS	Raleigh-Durham, NC	Pediatric Private Practice
	Robert Costisevschi, DDS	SBH, Bronx, NY	Pediatric Dental Resident
	Dip Desai, DDS	California	Orthodontic Private Practice
	Leah Fine, DMD	New York, NY	Pediatric Private Practice
	Michael Freeman, DMD	Florida	Private Practice
	Ryan Frost, DDS	Colorado Springs, CO	Orthodontic Private Practice
	Tom Gutberg, DMD	TBD	Private Practice
	Melissa Harris, DDS	California	Private Practice
	Justin Hughes, DDS	Iowa	Orthodontic Residency
	Sunna Huh, DDS	New York/New Jersey	Private Practice
	Patricia Izquierdo, DDS	New York/New Jersey/Connecticut	Private Practice
	Keith Keller, DMD	New York, NY	Orthodontic Private Practice
	Angie Kim, DMD	Pittsburgh, PA	Pediatric Dental Residency
	Ariel Levy, DDS	SBH, Bronx, NY	Chief Resident
	Mark Macaoay, DDS	California	Pediatric Private Practice
	Sam Margulies, DMD	TBD	Private Practice
	Lauren Pitluck, DMD	SBH, Bronx, NY	Chief Resident
	Michael Plaut, DDS	Stony Brook, Stony Brook, NY	Periodontics Residency
DENTAL (continued)	Kyle Sever, DDS	New York	Private Practice
	Marita Smith, DDS	Rockland County/North Bergen	Pediatric Private Practice
	Brian Steele, DDS	Houston, TX	Dental Anesthesia Private Practice
	Marcus Sur, DDS	New York	Private Practice
	Kush Thakrar, DDS	Dallas, TX	Dental Anesthesia Private Practice
	Oren Wachstock, DDS	New York/New Jersey	Private Practice
	Jason Wong, DDS	SBH, Bronx, NY	Dental Anesthesia Resident
	Rami Yassine, DMD	Ottowa, CA	Private Practice
	Isaak Yelizar, DDS	New York/New Jersey/Connecticut	Orthodontic Private Practice
	Gita Yitta, DMD	Texas	Private Practice
INTERNAL MEDICINE	Edwin Alberto, MD	Cogent Healthcare Southwest Florida	Hospitalist
	Giuseppe Annunziata, MD	SBH, Bronx, NY	Outpatient Attending
	Ernesto Badui, MD	Lee Memorial Hospital Fort Myers, FL	Hospitalist
	Francisco Brea, MD	Marietta Memorial Hospital Marietta, OH	Hospitalist
	Sonia Carvajal, MD	TBD	TBD
	Lozano Enrique, MD	Orlando Florida Waterman Hospital Orlando, FL	Hospitalist
	Manohar Gajjela, MD	Medstar Franklin Square Hospital Baltimore, MD	Hospitalist
	Manik Garg, MD	Baptist Medical Center Jacksonville, FL	Hospitalist
	Amandeep Goyal, MD	Marietta Memorial Hospital Marietta, OH	Hospitalist
	Raquel Grossman, MD	Montefiore Wakefield Campus, Bronx, NY	Geriatric Fellowship
	Rahul Gujurathi, MD	Baptist Medical Center Jacksonville, FL	Hospitalist
	Nang Zar Che Htun, MD	Sutter Health Affiliates, Roseville, CA	Hospitalist
	Adarsha R. Kattaya, MD	Yakima Memorial Hospital, Yakima, WA	Hospitalist
	Harikrishna Kotra, MD	Baystate Medical Center Springfield, MA	Hospitalist
	Pankaj Kumar, MD	Wake Forest University Winston Salem, NC	Hospitalist
	Juan Medaura, MD	Harlem Hospital, New York, NY	Nephrology Fellowship
	Prakash Nakrani, MD	Shady Grove Adventist Hospital, Rockville, MD	Hospitalist
	Praveen Namireddy, MD	Memorial Sloan Kettering Cancer Center, New York, NY	Pain & Palliative Medicine Fellowship
	Hesham Nasser, MD	University of Florida/Shands Hospital, Gainsville, FL	Hospitalist
	Rajaneesh Pachala, MD	Baystate Medical Center Springfield, MA	Hospitalist
	Kaylan Prudhvi, MD	University of Arizona Medical Center, Tucson, AZ	Assistant Professor of Medicine
	Sharatkumar Rokkam, MD	SBH, Bronx, NY	I.M. Chief Medical Resident
	Venkata Rokkam, MD	University of Arizona , Tuscon, AZ	Assistant Professor
	Venkata Rongala, MD	Medical Center of Central Georgia, Macon, GA	Hospitalist
	Rajeswar Sarasam, MD	Baystate Medical Center Springfield, MA	Hospitalist
	Pratikkumar Sheth, MD	Bayview Physician Group Private Practice	Hospitalist
	Aseesh Sreedharala, MD	Baystate Medical Center Springfield, MA	Hospitalist
	Radhika Sreeram, MD	TBD	TBD
	Umang Swami, MD	TBD	TBD
	Tagore Sunkara, MD	SBH, Bronx, NY	In-Patient Attending
	Pedro Veloz, MD	Capefear Valley Medical Center, Fayetteville, NC	Hospitalist
	Christopher Caesar Williams, MD	University of South Alabama, Mobile, AL	Pulmonary Critical Care Fellowship
OSTEO IM	Rebecca Aleck, DO	Freeman Hospital, Neoshi, MO	Internist
	Mohammed Siddiqui, DO	TBD	Private Practice - Internal Medicine
FAMILY PRACTICE	Elizabeth Lee, DO	St. Luke's Hospital Baylor University, Houston, TX	Private Office Practice
	Devon White, DO	Caribbean American Family Health Center, Brooklyn, NY	Attending
	Abdullah Yousuf, DO	Urgent Care Clinic, NY	Attending
EMERGENCY MEDICINE	Mohammed T. Adamu, DO	Clear Lake Regional Medical Center, Houston, TX	Attending Physician
	Jonathan Arciniegas, DO	EM PROS Flagler Hospital, FL	Attending Physician
	Amil Badoolah, DO	Winthrop University Hospital, Mineola, NY	Attending Physician
	Mark Curato, DO	RWJ University Hospital Rahway	Attending Physician
	Sofia Farooqi, DO	West Houston Medical Center, Houston, TX	Attending Physician
	Joseph Jose, DO	Clear Lake Regional Medical Center	Attending Physician
	Hong Le, DO	Bay Area Hospital, Coss Bay, OR	Attending Physician
	Thomas Liu, DO	Orange Regional Medical Center, Middletown, NY	Attending Physician
	Michael Lu, DO	West Houston Medical Center, Houston, TX	Attending Physician
	Namrata Patel, DO	Emergency Medicine Associates, San Diego, CA	Attending Physician
	Rana Ram, DO	Emergency Medicine Associates, San Diego, CA	Attending Physician
	Angela Regina, DO	North Shore Long Island Jewish, Plainview Hospital	Toxicology Fellowship
	Joyce Soler, DO	MidState Medical Center, Meriden, CT	Attending Physician
	Leon Sultan, DO	North Shore Long Island Jewish, Plainview Hospital	Attending Physician

Residents Earn Top Honors



Sindhura Citeneni, DDS, took first place at the Annual National meeting of the American Association of Pediatric Dentistry for her poster, To Rinse or Not to Rinse—Impact of oral rinses on Salivary pH after sugary beverages. The award was presented in Boston in May.



Karan Parmar, DO, EM/IM, won first place at the 2014 Case Study Poster competition at the AOCEP spring conference in Scottsdale, AZ. The study was titled: "Keep Cool and Carry On: Rapid cooling in Heatstroke with cerebral edema.

Congratulations to **Annie Brandenberg**, DDS, PGY III, one of only two dental residents nationwide that received the prestigious American Academy of Pediatric Dentistry Resident Recognition Award, presented at the AAPD Annual Session in Boston in May.

Brian Steele, DDS, DMS, won the blue ribbon and $2500 from the National Board of Dental Anesthesiology for his poster on nasal strips and supplemental oxygen therapy.

Cory Ruddy-Ramirez, DO, winner of the Jose Morales Distinguished Community Service Award with Dr. Nelson Eng . This new award is named after the late Jose Morales, a former vice president at SBH and tireless advocate for the underserved in the Bronx community.

Resident Research Day

Dr. Jitendra Barmecha and Dr. Rosa Lee, a visiting judge from the Sophie Davis School of Biomedical Education, with the first-place winners, Dr. Richard Bauer and Dr. Eliezer Eisenberger.

Clinical research takes center stage at the hospital's annual Resident Research Day poster competition, an event that showcases research projects produced by house staff as part of their residency training requirements. The 58 posters submitted this year were exhibited on May 21 and evaluated by a panel of five judges led by Dr. David Rubin.

Ariel Bales-Kogan, DMD-MSD, winner of the Research Mentor Award.

Winning first place was podiatry's "Gunshot wounds to the foot and ankle: A new treatment protocol," submitted by Drs. Richard Bauer, Eliezer Eisenberger and Emilio Goez. The department of pediatrics was the runner-up with "Outcomes of initial management of skin abscess in the pediatric emergency room," submitted by Dr. Alvaro Coronado. Dr. Umang Swami won the Allscripts award for "Renal Cell Carcinoma presenting with Peritoneal metasteses."

First runner-up, Dr. Alvaro Coronado, with SBH Trustee John Tognino (left).

The prestigious Research Mentor Award for outstanding leadership went to Ariel Bales-Kogan, DMD-MSD.

Three visiting judges joined Dr. David Rubin and Dr. Dara Rosenberg on the panel this year: Drs. Erica Friedman and Rosa Lee from the Sophie Davis School of Biomedical Education, and Kurt Amsler, PhD, from NYIT College of Osteopathic Medicine.

Doctor's Day Celebrates SBH Physicians

Dr. Burgess retires! Medical Board president Dr. Ernest Patti thanked Dr. John Burgess, psychiatry, for 25 years of service and wished him well in his retirement.

Dr. Edward Telzak, chairman, department of medicine, honored Dr. James Croll for his 25 years of service in nephrology. Others reaching the 25-year mark were Drs. Dara Rosenberg and Joseph Piliero, dentistry, Dr. Christopher Grantham, crticial care, and Dr. John Della Badia, radiology.

The wife and father-in-law of the late Dr. Ron Ciubotaru accepted the physician to physician award named in his honor.

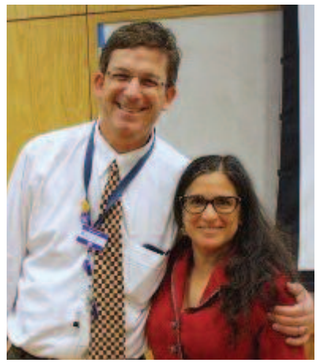
The Ronald L. Ciubotaru Physician to Physician Award

The Medical Staff of the SBH Health System Wishes to recognize you as the very embodiment of an Exceptional clinician, a Dedicated mentor, and a Valued colleague.
An individual characterized by integrity and humility, deeply committed to the teaching and practice of medicine and the delivery of compassionate care to all patients, you embody the very foundation of the SBH Health System.

The day-to-day work of healing done by physicians throughout the United States was officially recognized in 1991 when Congress passed a resolution designating March 30 as "National Doctor's Day." At SBH, the celebration of Doctor's Day has gained momentum under the leadership of the medical staff office directed by Susan Diaz. This year a special awards ceremony recognized physicians for years of service and outstanding accomplishments. Highlights included the presentation of the prestigious Medical Staff Achievement Award to Dr. Malcolm Phillips, and the Ron Ciubotaru Physician to Physician Award presented to the family of the late Dr. Ciubotaru.

Capping the length-of-service awards were six physicians clocking 30 years at SBH: Dr. Ashoke Das, internal medicine; Dr. Rubin Silverman, cardiology; Dr. Ralph Silverman, cardiology; Dr. Leslie Walter, nephrology; Dr. Ilana Kochen, psychiatry; and Dr. Aaron Glockenberg, surgery.

Dr. Judy Berger, leader of the recently established Physician Engagement Team, introduced the team's mission and goals, stating: "We are working together to make things better for our doctors, dentists and advanced practitioners." Among the initiatives on the agenda are efforts to gain and maintain camaraderie, the development of a new paging and communication app, a buddy system for new doctors, and a practice-based solutions committee.



Dr. Mark Rosing, director, OB/GYN, congratulated Mary Gratch on 15 years of service in the Ob/Gyn department.

Dr. Ridwan Shabsigh, chairman, department of surgery, congratulated Dr. Kordai DeCoteau, podiatry, for ten years of service.

Malcolm Phillips, MD, JD

The SBH medical staff honored Dr. Malcolm Phillips with the SBH Health System Medical Staff Achievement Award.

Dr. Phillips has been a driving force in the department of medicine since his arrival at SBH in 1980. He was a leader in the transformation of the hospital from a chronic care to an acute care facility and a champion of academic medicine, launching in 1982 what is today the hospital's largest residency program. The award eloquently summarized his contributions and the personal qualities that shaped his esteemed reputation.

Announcements *and* Awards

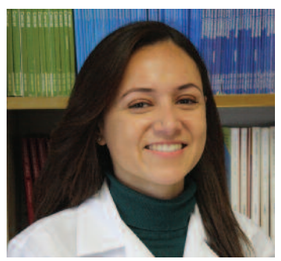
Dr. **Manisha Kulshreshtha** was promoted to medical director of care transitions.

Dr. **Allen Glied** was named chief of oral surgery in the dental department.

Dr. **Raid Sadda** was promoted from clinical assistant professor to clinical associate professor in the department of oral and maxillofacial surgery at New York University.

Dr. **Sulejman Celaj** was appointed director of the cardiac catheterization laboratory and interventional cardiology program.

Dr. **Jae Ahn** was appointed director of RAPIDCare and Occupational Health Services for Union Community Health Center.



Dr. **Vanessa Salcedo**, pediatrics, was selected to participate in the American Academy of Pediatrics Young Physicians' Leadership Alliance, a three-year training program to develop leaders and build a leadership community among early career pediatricians and pediatric subspecialists. Dr. Salcedo is on staff at UCHC, East188th Street.

Presentations *and* Publications

PRESENTATIONS

- **Jitendra Barmecha**, MD, MPH, FACP, Chief Information Officer, SVP Information Technology and Clinical Engineering participated as a Panelist at the 2nd Annual HealthIMPACT EAST Conference, NY NY, April 20, 2014 and discussed: Provider Based Population Health Management - Using Aggregated Public and Private Data to Identify Hot Spots and Effectively Coordinate Care and Reduce Overall Healthcare Costs.
- **David Perlstein**, MD, and **Robert Karpinos**, MD, were interviewed by the American Hospital Association in preparation for a *JAMA* article about Blood Management Programs.
- **Manisha Kulshreshtha**, MD, and **Jitendra Barmecha**, MD, were interviewed for an article in the United Hospital Fund's summer 2014 newsletter, *Blueprint*, titled "Fund Helps Hospital Reduce Preventable Readmissions."
- **Mark Rosing**, MD, presented at ACOG District II Conference: Overview of the Safe Motherhood Initiative, NY State Partnership for Patients, April 7, 2014.
- **Alvaro Coronado, MD, Tsoline Kojaoghlanian, MD, Paulo Pina, MD, Uri Belkind, MD, David Listman, MD, Smita Prakash, MD,** and **David H. Rubin, MD**, presented: Outcome after initial management of S. aureus infections in the pediatric emergency department at the Pediatric Academic Societies Annual Meeting, Vancouver, Canada on May 3rd 2014.

PUBLICATIONS

- **David Perlstein**, MD, MBA, FAAP, SVP, CMO
  Rosen & Barkin's 5-Minute Emergency Medicine Consult, 5th Edition 2014. *Inborn Errors of Metabolism.*
- **David H. Rubin**, MD
  Rosen & Barkin's 5-Minute Emergency Medicine Consult, 5th Edition 2014. *Irritable Infant*.
- **Dara Rosenberg**, DDS, MPH
  Oral and Dental Health in Epidemiology of Women's Health, Ruby T Senie, Editor , Jones & Bartlett Learning, 2014.
- **Raid Sadda**, DDS
  Dental management of Florid-cemento Osseous dysplasia, New York Dental Journal, April 2014.

*Dr. **Ronald McLean**, surgery, received the Caribbean American Healthcare Award presented at the Paradise Ballroom in Brooklyn on June 25. The award recognizes Caribbean American Healthcare professionals who have achieved professional success in their field. Dr. McLean has been an attending physician in the department of surgery at SBH for 20 years and is a graduate of Mount Sinai School of Medicine.*

Around the Globe

Dr. **Mary Gratch**, OB/GYN, instructed physicians and nurses in a public health clinic in Haiti on how to use an ultrasound machine.

Pediatric dental resident Dr. **Mark Macaoay**, (second from right) volunteered at a dental clinic in Tel Aviv through the Dental Volunteers for Israel organization. St. Barnabas Hospital allows its residents the opportunity to participate in humanitarian missions around the world.

Art Donation

Artist Christina Blaabjerg, Tine Rubin, Dr. David Rubin.

An extraordinary art donation by Danish painter Christina Blaabjerg has transformed the SBH auditorium lobby. A friend of Dr. and Mrs. David Rubin, Ms. Blaabjerg graciously gave SBH an original artwork in her signature style that interprets landscapes through color and intriguing abstract forms. A second painting by the artist was purchased by the Auxiliary. Together, the two artworks create an inspiring ambiance for the enjoyment of SBH patients, visitors and staff.

In Memoriam

Trustee Grover O'Neill, Jr.

SBH Health System mourns the loss of esteemed Trustee Grover O'Neill, Jr., who passed away on February 14 at the age of 91. Mr. O'Neill's long and distinguished service left an indelible mark on St. Barnabas. He will be remembered for his leadership and dedication, gracious presence, kindness and goodwill toward all. His wise counsel strengthened the hospital's course over many decades.

As an active board member from 1960-2012, Mr. O'Neill took the stewardship role with a great sense of purpose that he fulfilled faithfully. His mighty intellect, business acumen and genuine concern for the community helped shape the institution that we are today. He served as chairman of the board from 1991-1997 and in 1994 was honored at the hospital's annual Auxiliary gala. In 1998 he received a St. Barnabas Hospital Lifetime Achievement Award acknowledging his extraordinary leadership role.

With his quiet dignity, depth of character, boundless wisdom and generosity of spirit, Mr. O'Neill touched the lives of all who knew him.

For SBH Health System, the loss of Grover O'Neill is the loss of a true champion.

Trustee John McKew, Esq.

SBH Health System mourns the loss of Trustee John McKew, who passed away in May at the age of 81. An active member of the board for 23 years, Mr. McKew served as chair of the retirement committee and contributed a strong voice on the audit, finance and budget, investment, development and nominations committees.

Mr. McKew had strong ties to the Bronx. He was employed by the New York Zoological Society (now Wildlife Conservation Society) in 1962 and retired as vice president of administration services in 1999.

A passionate advocate for the arts, he served as trustee and corporate secretary for the Bronx Council on the Arts. He also served on the Phipps Community Development Corporation.

SBH Health System is grateful for John McKew's years of devoted service. He will be missed not only as a board member but as a friend.

The recent restoration of the Sycamore Grove behind St. Barnabas Hospital is more than a lush lawn and a beautiful setting for future hospital events. In keeping with our commitment to wellness and disease prevention, the Grove has been repaved and includes a one-quarter mile fitness walk, mapped out and marked with bilingual signage.

SBH
Health System
BRONX
4422 Third Avenue
Bronx, NY 10457
www.SBHNY.org

St. Barnabas Hospital

St. Barnabas Rehabilitation & Continuing Care Center

SBH Hemodialysis Center

Southern Medical Group

SBH Health System

We are more than just a hospital

SBH
Health System
BRONX

Fordham-Tremont Community Mental Health Center

SBH Ambulatory Care Center