



SPOTLIGHT

Stem Cell Biology: New Directions in Clinical and Basic Research

INSIDE

SPOTLIGHT: Stem Cell Biology:	cover
Chairman's Message	2
Research Awards	3
In Patient Palliative Care Partnership Established at Rhode Island Hospital.	3
Sidney Braman, MD, Steps Down as Pulmonary Division Director After over 35 Years of Dedicated Leadership	4
Brown Launches a Global Health Initiative	4
Dr. Mitchell Levy Appointed Division Director for Pulmonary, Critical Care and Sleep Medicine	5
Occupational Health Service at Rhode Island Hospital.	5
Graduate Medical Education	6
RESEARCH NEWS	6
Profiles	7
Appointments and Promotions	8
Department of Medicine Grand Rounds.	8

On September 30, 2009, RIH was awarded \$11,088,327 over five years from the National Center for Research Resources (NCRR) to support the COBRE Center for Stem Cell Biology.

Under the direction of Dr. Peter Quesenberry, this COBRE "Stem Cell Biology: New Directions in Clinical and Basic Research", supports the creation of a Center for Stem Cell Biology focused around understanding the biology and regulation of marrow stem cells and their potential utility in clinical settings for tissue restoration. The focus is 2-fold: 1.) to bring together established investigators at RIH and collaborative institutions who can complement one another in the study of stem cell biology, in order to effectively support the career development of junior faculty all working in areas related to stem cell biology, cell differentiation and function. A primary goal of the mentoring group relates to assisting these talented young investigators in obtaining RO-1 research grants; and 2.) create an environment which will foster the retention of productive young faculty at the collaborative Providence institutions in order to develop a critical mass of investigators in this area of research that will continue to obtain NIH funding above and beyond this COBRE including state and federal center grant funding.

The COBRE is comprised of three Cores: Administrative, Flow Cytometry and Molecular. These Cores support the professional and scientific careers of the COBRE investigators. A Flow Cytometry Core is headed by Mark Dooner and a Molecular Core is headed by Bharat Ramratnam. The investigators, Dr. Jason Aliotta (Pulmonary Medicine), Dr. Gerald Colvin (Hematology Oncology) and Dr. Wentian Yang (Orthopedics) will be mentored by an exemplary group including: Drs. Quesenberry, Timothy Flanigan, Douglas Hixson, James Klinger, Bharat Ramratnam, Sharon Rounds and Robert Smith.

Dr. Aliotta's project, "Injured Lung and its Influence on Marrow Cell Phenotype" will examine cell-to-cell communication between injured lung



Peter Quesenberry, MD

cells and bone marrow cells and mechanisms by which this communication aids in marrow cell-based lung repair of lung injury. Ultimately, wishing to demonstrate that marrow cells possess sufficient reparative properties to provide a novel therapeutic option for pulmonary diseases. Dr. Colvin's project, "Directed Stem Cell Hematopoiesis and Differentiation", will define cell cycle related directed lineage differentiation in pre-clinical murine transplant models and to study human stem/progenitor cells for directed differentiation opportunities. These studies promise to further define the basic nature of the hematopoietic marrow stem cells and could lead to interesting preclinical cellular bioprocessing models for selective lineage support of various myeloablative therapy approaches or progenitor deficient states. Dr. Yang's project, "Tyrosine Phosphatase Shp2 in Hematopoietic Stem Cell Property Maintenance" is designed to elucidate the function of protein tyrosine phosphatases in normal hematopoiesis and hematopoietic disorders. Elucidating the molecular and cellular mechanism through which Shp2 modulates HSC self-renewal and multi-lineage differentiation will: 1) provide insights relevant to mobilizing HSC for regenerative medicine; 2) help understanding of how Shp2 mutations cause human hematopoietic disorders, such as juvenile myelomonocytic leukemia1 (JMML) and other myeloid proliferative disorders (MPD).

Chairman's Message

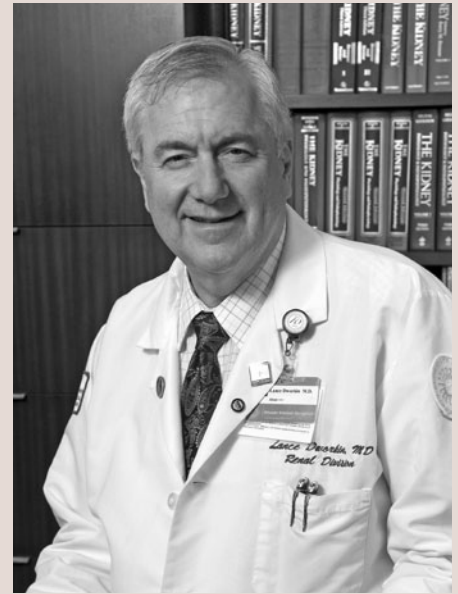
Earlier this year, I had the opportunity to visit two of our department's long standing sites of international collaboration. One program, led by Jane Carter, MD of the pulmonary/critical care/sleep division is at Moi Medical School in Eldoret, Kenya. The other program, led by Rujun Gong, MD, PhD of the division of hypertension and kidney disease, is at the Research Institute of Nephrology of Jingling Hospital and Nanjing University in China. For me, visiting these programs was not only a wonderful opportunity to expand my understanding of illness and medical care outside the United States, but also a time to reflect on the medical education and on the principles of lifelong learning and service, which are the very foundation of our profession.

By this time, many of our faculty and trainees have traveled to Kenya to work, teach, and learn at Moi Teaching and Referral Hospital (MTRH). In Eldoret, you live in a complex of houses that is only about a half mile from the hospital. While I also live close to the hospital in Providence, the commutes are quite different. In Eldoret instead of driving, you walk to work along a narrow road traveled by speeding public mini-vans that are operated with complete disregard for the safety of unwary pedestrians. You walk on packed dirt or mud, depending on the weather, and in the company of cattle and goats that graze on the sparse roadside brush. A rough hut at the first turn is filled with aging bicycles in various stages of disassembly, and with men whose relation to the bicycles is uncertain. Further on, a woman with a small child sits by an open grill cooking and selling enormous ears of corn impaled on short wooden sticks. Arriving at the hospital, you enter through a metal gate staffed by uniformed guards who examine you with interest as you pass. As you enter someone calls out from a nearby fenced in lawn, which serves as the psychiatry ward.

As seems to be true of academic medical centers everywhere, MTRH is a confusing collection of randomly oriented buildings whose structures in no way connote function. Most are low, one or two story buildings that are connected by open, covered walkways and separated by large rectangular lawns. Depending on the time of day, the lawns may be filled with row after row of freshly laundered sheets and blankets, hung out to dry in the equatorial sun. As you travel along you must constantly change direction to avoid workers with buckets, mops, and brushes that seem to be constantly

scrubbing the cement walkways. The building that houses the medicine wards looks like all the others. You enter into a large common space that separates the two main patient areas; men are on one side of the building and women on the other. On the wards, the beds are arranged in a U-shape around the walls of large open bays. There are about twelve beds per bay, three bays per ward, and one or two patients per bed. A team may have 45 or more patients; up to a third of the patients may be new every day. There is a sink in each bay; no one seems to use them. Many of the patients have infectious diseases; HIV, pneumonia, TB, malaria, meningitis, but there is also severe hypertension, end stage renal disease, congestive heart failure and COPD. The average oxygen saturation in one bay seems to be about 85%. In another bay a patient is septic with a very low blood pressure; a resident rushes off to hang liters of saline that are bottled on site. Another patient will get a CAT scan if the family can raise enough money to pay for the test at a nearby private hospital; the scanner at MTRH is broken. Rounds go on for hours. Laboratory data are semi-reliable or even misleading. Diagnoses are largely empiric, based on history and physical examination that are truly conducted at the bed side, the side of the bed that has your patient and not his bedmate. Somehow, it all still works. Patients are examined, diagnoses are made, and treatments are administered. Some improve while others fare less well, but that is always the case. The Kenyan physicians are intelligent, well informed, dedicated and competent. You see illnesses that you have previously only encountered in books; you learn at least as much as you teach. Two weeks pass by very quickly.

Visiting Nanjing is a very different experience but no less fascinating. Nanjing is a modern and, despite a population of about 8 million, only a medium sized city for China. It was the southern capital for China for many centuries and has a rich and sometimes troubled cultural history. Nanjing University is the fifth oldest and one of the best universities in China, with over 40,000 students on three campuses around the city. Jingling Hospital is a 2000 bed combined military and civilian institution that houses the foremost kidney program in China. The renal unit within the hospital comprises 200 beds, including a dedicated renal ICU. The kidney outpatient clinic sees about 150,000 patients with diverse forms of kidney disease from across the country; more than 5000 kid-



Lance Dworkin, MD

ney biopsies are performed each year. Many of the patients have diseases that are much less common in the United States, providing a rich opportunity for clinical education and research. The hospital is modern and well equipped by any standard, but medical practice is an interesting combination of western and traditional Chinese medicine. Until very recently, medical education in China emphasized classroom and textbook learning, but this is evolving and more and more they are adapting our bedside approach to clinical education. Once again, I meet and round with extremely talented and dedicated physicians. Research is often conducted at night after a full day of clinical work. As yet there are no limitations on shifts, hours or the number of patients to be seen. If anyone minds this, it is not apparent.

International programs like those in Eldoret and Nanjing provide us with an opportunity to experience medical practice outside our normal confines, which can be tremendously illuminating and motivating. Medical education is still an apprenticeship; we learn from every patient encounter, by working side by side with other physicians, and from every decision that we make. Our education never ceases. Lifelong learning means maintaining not only our skills but also our commitment. I encourage each of you to support and to take advantage of the education, research, and service opportunities that the rich panel of international programs in the Department and at Brown provides. It is well worth your time and effort.

Research Awards

Bum-Rak Choi, PhD, from the Cardiology Division, has received a five-year R01 from the National Heart, Lung, and Blood Institute at NIH for his grant titled "The role of dynamic changes in repolarization and calcium transients in Long QT related arrhythmias." This 5-year R01 averages \$250,000 in direct costs per year. The overall goal of this grant is to investigate the mechanisms of long QT-related arrhythmias including tissue characteristics as substrate for reentry and conditions that exacerbate early afterdepolarizations (EADs) and enhanced dispersion of repolarization. Emerging evidence indicates that genetic predisposition plays an important role in sudden cardiac death, which claims the lives of approximately 350,000 Americans each year. However, the molecular determinants of this apparent predisposition have remained elusive. These studies hope to shed light on these molecular determinants.

Djuro Josic, PhD, from the Division of Hematology and Medical Oncology, has received approximately \$500,000 in equipment funding from the National Institutes of Health for the purchase of an Ultraflex III TOF/TOF 200 MALDI-TOF Mass Spectrometry Imaging System. To be located within the Proteomics Centers located on Coro-04, the system will complement and enhance the Proteomics Core mass spectrometry services, thus providing the scientific community with the flexibility and breadth to analyze proteins in numerous ways with the final goal to discover disease biomarkers and biomarkers for cellular differentiation.

James Klinger, MD, from the Pulmonary Division, has received \$200,000 in direct cost funding from the AARA federal stimulus package via the National Heart, Lung, and Blood Institute. This proposal will test the hypotheses that natriuretic peptides (NPs) blunt thrombin-induced increases in pulmonary microvascular endothelial cells (PMVEC) permeability via NPR-A by a cGMP/PKG pathway and facilitate restoration PMVEC barrier dysfunction via NPR-C. In addition, the that the inhibitory effects of the NPs on thrombin-induced increases in PMVEC permeability are mediated via downstream inhibition of the small GTPases RhoA, Rac1 and cdc42. The proposal aims to test these hypotheses by 1) examining the effect of NPs, phosphodiesterase inhibitors and PKG inhibitors on the permeability of PMVECs, 2) examining the effect of altered expression of NPR-A, NPR-C, PKG and the small GTPases on the ability of NPs to protect against thrombin-induced barrier dysfunction in vitro, and 3) examine the effect of NPs on pulmonary edema formation in mice with targeted disruption of NPR-A and NPR-C. Findings from these studies will further our understanding of cellular mechanism that modulate pulmonary edema formation and determine if the NPs and their receptors are potential therapeutic targets for acute lung injury.

Ulrike Mende, MD, from Cardiology Division, has received funding via a subcontract to Myonics Inc. via an R-43 SBIR grant funded by the National Institutes of Health. The title of the project is 'High content drug screening with

cardiac tissue.' With approximately \$20,000 in funding, this project will extend technology created by Myonics Inc., the Myo-Force Assay System (MFAS), to neonatal rat cardiomyocytes miniaturized bioartificial muscles (BAM's) for potential use in screening for compounds to treat human heart diseases affecting heart force contraction or electrophysiological activity. Dr. Mende's lab will work to isolate and purify high-quality myocytes and fibroblasts for these studies as well as the simultaneous mapping of action potential and calcium transients.

Wen-Chih (Hank) Wu, MD, from the Cardiology Division at the Veterans Administration Hospital – Providence, has been awarded a VA Health Services Research and Development Research grant from the Department of Veterans Affairs entitled: "Group Intervention for DM Guideline Implementation." The one-year grant is for approximately \$170,000 in direct costs. Group intervention has emerged as a potentially cost saving patient-centered approach to help achieve the necessary lifestyle and medication changes for the treatment of some chronic diseases. However, the efficacy in the absence of direct physician participation is not well known in the management of patients with diabetes. The objectives of the grant are to assess whether a 12-month non-physician-based, group diabetes behavioral and pharmacotherapy intervention program will: 1. Improve cardiac risk as measured by the UKPDS risk engine; 2. improve health-related quality of life; add only minimal institutional cost when compared to usual care in veterans with Type 2 Diabetes.

Stem Cell Biology *continued*

We are in a unique position given the recent award to Dr. Douglas Hixson for the COBRE Center for Cancer Research Development. We intend to work closely with him to enhance the collaboration of basic and clinical scientists.

Our long term objective is to develop an interdisciplinary Center for Stem Cell Biology based physically at RIH, but in a collaborative network with other Providence institutions, through recruitment and retention of established faculty with expertise in this area, and the nurturing of promising young faculty with the potential to develop independent funding. Developing a critical mass of productive investigators in stem cell biology will accomplish a number of important goals, consistent with the development of an outstanding research community at the institutions.

The project described above is supported by Award Number 1P20RR025179 from the National Center for Research Resources.

In Patient Palliative Care Partnership Established at Rhode Island Hospital

The Division of Geriatrics of the Department of Medicine, in collaboration with Home & Hospice Care of Rhode Island (HHCRI), is pleased to announce the availability of palliative care consultation at Rhode Island Hospital (RIH), beginning October 13, 2009, for medical patients. RIH Social Work and the Multi-Faith Chaplaincy Center will participate. Staffed by Edward Martin, MD, MPH, Medical Director of HHCRI, and Rachel Roach, NP, of the Geriatrics Division, the service will be available at all times. The team has expertise in pain and symptom management, and provides consultation services to patients with chronic, progressive, life-threatening diseases. To initiate consultation, referring physicians or their designees should call the Division of Geriatrics Office – 728-8245 – and the consultation request will go

to the team. Collaboration with existing palliative care services at RIH has been solidified, including surgical oncology (Dr. Miner) and Pediatrics.

The mission of Rhode Island Hospital is to be at the forefront of patient care by creating, applying and sharing the most advanced knowledge in healthcare. Its role in the community is to care for many seriously ill patients. In many instances, there is a role for Palliative Care. Palliative care is interdisciplinary care that emphasizes relief of suffering and improving quality of life for patients with life-threatening illnesses and their families. Expert control of pain and other symptoms, and practical support of patient and family are integrated into every stage of illness, along with all other appropriate medical treatments.

Sidney Braman, MD, Steps Down as Pulmonary Division Director After over 35 Years of Dedicated Leadership

Richard P. Millman, MD
Sharon Rounds, MD

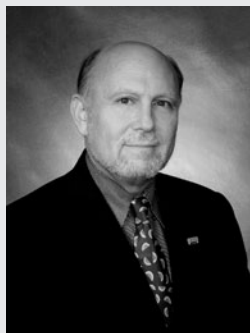
In 1973, Dr. Sidney Braman arrived in Rhode Island to build an academic division as the head of Pulmonary Medicine at Rhode Island Hospital. After an illustrious 36 years at the helm, Sidney stepped down as the Director of the Division of Pulmonary, Critical Care and Sleep Disorders Medicine at Brown University on August 1

of this year. Sid received his Bachelors Degree from Franklin Marshall College and his Medical Degree from Temple University School of Medicine. He did internal medicine internship and residency at the Philadelphia General Hospital and then pulmonary training at the University of Pennsylvania and at Walter Reed General Hospital.

A superb clinician and teacher, he promptly made his mark by winning the Milton W. Hamolsky Rhode Island Hospital House Officer Association Teaching Award in Medicine in 1976 and the Brown University Program in Medicine Senior Class Teaching Award in 1975, 1976 and 1978. This excellence in teaching has persisted. In 2003, he was awarded the Brown Medical School Dean's Teaching Excellence Award, and in 2009, the Brown Alpert Medical School Certificate of Recognition for Exemplary Teaching.

As a clinician, Sid's expertise is famous. He is frequently asked to consult on both local and distant referrals. Former Brown Pulmonary/Critical Care fellows call him for clinical advice—even years after leaving the training program.

Sidney has also been a prolific writer, with over 100 articles and chapters. Throughout his career he has both supported and participated in scholarly activity and clinical research. At the present time, he is a recipient of the American College of Chest Physicians/Glaxo Smith Kline Distinguished Scholar in Respiratory Health Award (2007 to 2010) with the goal of improving treatment of his favorite disease, Chronic Obstructive Pulmonary Disease.



As he has matured in the field, Sid has achieved both national and international recognition. He has served on multiple national and international committees and, from 2001 to 2002, was President of the American College of Chest Physicians, an international organization dedicated to education and training in diseases

of the respiratory system. In 2005 he became a member of the United Nations Environment Programme (UNEP) Medical Applications Technical Options Committee. When Sidney is away from the Division, he could just as easily be in Philadelphia, Washington DC, or in Brussels or Rome giving lectures and promoting pulmonary medicine.

This world travel has not prevented Sid from playing a significant role in the life of Rhode Island. He has been a member of the healthcare team for the Rhode Island Public Expenditures Counsel as well as a member of the Advisory Board for the Rhode Island Anti Drug Coalition. He has been President of the Board of the Friends of the Haffenreffer Museum of Anthropology at Brown University.

It has been a great pleasure and honor to have worked with Sidney Braman and to be inspired by his passion and drive. He has stimulated us and taught us. The fact that Sidney is stepping down as division director does not mean he is leaving Brown Pulmonary/Critical Care/Sleep Medicine. In fact, his dream has always been to enhance our scholarly approach to allergy at RIH and at Brown. Starting in January, Sid will be commencing a well-deserved sabbatical to enhance his knowledge of that field. He will also continue his work as the ACCP Distinguished Scholar in Respiratory Health on a project to create a Chronic Care Model for COPD and its co morbidities.

Brown Launches a Global Health Initiative

Susan Cu-Uvin, MD

Brown University launched the Global Health Initiative (GHI) on September 29, 2009. Global health has become a defining issue of our time. The new NIH Director, Dr. Francis Collins, has singled out global health as one of his top priorities. He says that



global health research "should be a conversation" with other countries, but not one in which "the great U.S. tells the world what the answers are without listening to their experiences."

The Brown GHI is a multidisciplinary university-wide effort to reduce health inequalities among underserved populations locally and worldwide through education, research, service and development of partnerships. Brown has a strong tradition of working with international partners over many decades and continues to expand partnerships particularly with resource limited countries. Current projects and programs involve 33 countries (28 of which are in the developing world) with \$15M in research funding. The GHI has strong support and commitment from Dean Edward Wing, who together with Dr. Jane E. Carter, initiated Brown's decade long partnership with Moi University in Eldoret, Kenya. Dr. Susan Cu-Uvin, Professor of Obstetrics and Gynecology and Medicine has been named the Director of the GHI. The GHI Executive Committee reflects the multidisciplinary emphasis of this new program. They include: Charles Carpenter, director, Center for AIDS Research; Kenneth Mayer, director, Fogarty Training Program; Timothy Flanigan, chief of Infectious Diseases; Michael White, professor of sociology and director, Population Studies and Training Center; Stephen McGarvey, director, International Health Institute; Daniel Smith, associate professor of anthropology; Jeffrey Borkan, chief of family medicine; Terrie Wetle, associate dean, public health; Jane Carter, director of the Brown-Moi University program.

The GHI will coordinate global health related activities; organize and disseminate information; lead efforts in multidisciplinary translational research, education and clinical program-projects; develop and enhance institutional partnerships; facilitate faculty collaboration; establish GHI as a home for grants and monitor major funding opportunities; and provide future pilot funding for global health research.

Dr. Mitchell Levy Appointed Division Director for Pulmonary, Critical Care and Sleep Medicine

This is to announce a transition in leadership of the Pulmonary, Critical Care, and Sleep Division of the Department of Medicine effective August 1, 2009. Dr. Sidney Braman has served as Director of this Division with great distinction for many years. Dr. Braman was first appointed Director of the Division of Pulmonary and Critical Care medicine at Rhode Island Hospital and joined the faculty at Brown Medical School in 1973. In 2000, he also became Division Director for Pulmonary, Critical Care and Sleep for Warren Alpert Medical School at Brown. Over his many years of distinguished service, Dr. Braman recruited a cadre of extremely talented faculty, built outstanding clinical programs, developed highly competitive fellowship programs in pulmonary and critical care medicine, and fostered the development of cutting edge clinical and basic research programs in several key areas. He has been an outstanding clinician, educator and investigator and has achieved international prominence in his field. In addition to his service to our institutions, he has held many important positions nationally including serving as President of the American College of Chest Physicians in 2001–2002. Although he is relinquishing his administrative duties as division director, I am pleased to report that Dr. Braman will be



Dr. Mitchell Levy

continuing as a member of the division, focusing his efforts on clinical medicine, research, and education.

It is with great pleasure that we announce that Dr. Mitchell M. Levy will be assuming the position of Interim Director of the Division. Dr. Levy is currently Director of Critical Care Services at Rhode Island and The Miriam Hospitals and is also a highly accomplished academic physician.

Dr. Levy was educated at the University of Buffalo, completed his training in Internal Medicine at the University of Colorado, where he also served as Chief Medical Resident. Dr. Levy initially joined the medicine faculty at Dalhousie University in Halifax, Nova Scotia, and then moved to the John A. Burns School of Medicine of the University of Honolulu, where he served as Chief of the Division of Critical Care Medicine from 1992 to 1994. He was recruited to Rhode Island in 1996 to become the Director of the Medical Intensive Care Unit at Rhode Island Hospital. He was initially appointed as Associate Professor of Medicine at Brown Medical School in 1997 and then promoted to Professor of Medicine in 2004. Dr. Levy has done an outstanding job directing the Critical Care program here at Lifespan, which is one of most highly regarded programs in the country. He is a prolific clinical investigator with more than 100 publications on diverse topics in critical care medicine, most notably improving outcomes in patients with sepsis. His work has earned international recognition and he has served in a number of important roles both nationally and internationally, including his present position as the President of the Society of Critical Care Medicine.

Occupational Health Service at Rhode Island Hospital

Philip Parks, MD, MPH, MOccH

In the last year, two Occupational and Environmental physicians have joined the medical staffs at Rhode Island Hospital and the Miriam Hospital and the Department of Internal Medicine.

Dr. Philip Parks, MD, MPH, MOccH joined Lifespan in August of 2008 as the Medical Director for Lifespan's Health Plan and as Medical Director of Occupational Health Services. Dr. Dana Sparhawk, MD, MPH joined Lifespan in January of 2009 as Clinical Physician in Occupational Health Services. Both Dr. Parks and Dr. Sparhawk provide urgent care and work-related injury management in support of Employee Health Services. The clinical services are provided in Grads Dorm on the Rhode Island Hospital campus.

At Newport Hospital, Dr. Susan Green, MD, MPH continues to serve as Medical Director of Occupational and Employee Health Services. Recently, Dr. Green has also joined the staffs at Rhode Island Hospital and the Miriam Hospital and the Department of Internal Medicine. Dr. Green is also provides part-time clinical services at the RIH campus.

As board-certified specialists in Occupational Medicine, a subspecialty governed by the American Board of Preventive Medicine, Drs. Parks, Sparhawk's, and Green's medical training encompasses expertise and core competencies in public health, occupational health and safety, blood borne and bodily fluid pathogen exposure, musculoskeletal injury, industrial medicine, environmental and toxic exposure assessment, health and productivity management, return to work, disability management and fitness for duty evaluation.

The following clinical and administrative services are provided at Grads Dorm on the Rhode Island Hospital campus:

- Convenient, accessible, high quality urgent care for Lifespan employees
- Work-related injury management
- Blood and bodily fluid exposure treatment and follow-up
- Pre-employment Screenings
- Immunizations and Vaccinations
- Tuberculosis Surveillance
- Health Promotion
- Ergonomic Evaluations
- Fitness for Duty Evaluation
- Absence Management

Medicine/Pediatrics at Fifteen

Elizabeth Toll, MD and Suzanne McLaughlin, MD

The combined Internal Medicine/Pediatrics residency turns fifteen this year, and this has been an occasion to look back at this unique program's evolution. In 1994, Dr. Sarah Shreter-Labine, a senior medical student at Boston University, approached Brown University's Internal Medicine and Pediatrics Departments about undertaking a combined residency, becoming the "founding mother" of Brown Med/Peds. Three residents enrolled the following year, and in 1996 Brown accepted its first residents through the match. At the heart of this undertaking was Internal Medicine Categorical Residency Director Dominick Tammam, MD, the program's "founding father" and long-time Director, who worked sequentially with pediatric Co-Directors Edwin Forman, MD, Joel Adelson, MD, Patricia Flanagan, MD, and Adam Pallant, MD to create the vision and reality of a residency spanning two departments. In 1998, The Medicine/Pediatrics Primary Care Center opened in the Physician's Office Building as a practice where Med/Peds residents train in the outpatient care of children, adults, and families alongside dual-boarded Med/Peds attendings who also practice at this site. The clinic has since undergone two major expansions, most recently annexing the adjacent space previously used by the former Kid's Health Team. Informally known as the "Med/Peds Clinic," the practice has become a recognized and productive member of the Rhode Island and Hasbro Hospitals' medical community. From the outset, Med/Peds has worked like a family, depending on the ideas and efforts of residents and faculty to move ahead. Recently, our faculty has grown, and along with our residents, is making forays in many new and exciting directions.

One of the most striking new changes is the September roll-out of EClinical Works, establishing the Med/Peds Clinic as the pilot primary care site at RI Hospital to institute the electronic health record. The project has been spearheaded by Dr. Jennifer Gartman, who recently assumed Directorship of the clinic, and Assistant Clinical Manager Mayra Rivera, RN. This project has provided an excellent opportunity to witness the dedication and teamwork of all in the clinic. Med/Peds residents are also learning the nuts and bolts of modern medical practice through the Health Policy and Practice Management curriculum created by attending and former RIH resident Kristin Anderson, MD and Internal Medicine Primary Care Residency Director Kelly McGarry, MD who have implemented this unit as part of the Internal Medicine block rotation and have recently been awarded a GME Grant in this undertaking. "After graduation, trainees need to know about the realities of practice management from CPT codes to RVUs, as well as have an introduction to primary care health policy and advocacy. We feel this

should be a part of residency training," states Dr. Anderson. Attending physician and former RIH resident Nicholas Grumbach, MD is contributing his expertise to this undertaking and continues to share his "real-world" experience gained by combining private practice with precepting and patient care at the Med/Peds Clinic. Attending Kimberly Babb, MD, who graduated from the University of Michigan's Med/Peds program, integrates patient care and precepting at the clinic with her roles as ward attending and primary care provider at the Women's Health practice.

Medical care of patients from around the world remains an important theme of Med/Peds training. In addition to the diversity of our clinic's patient population, many Med/Peds residents pursue rotations in the underdeveloped world during residency and have been to Kenya, Rwanda, Uganda, Burundi, India, Cambodia, Peru, Guatemala, Honduras, the Dominican Republic, and Ukraine. Sybil Cineas, MD, Med/Peds Assistant Residency Director, has served on a number of Rhode Island Hospital-sponsored outreach projects in Armenia and the Dominican Republic. Residents Susanna Winston and Jacqueline Firth have been working with Drs. Adam Pallant, Pediatrics Residency Training Director and Dominick Tammam (who both continue to advise our program) and others to develop a Global Health Track. The Global Health Track received the endorsement of the GME Committee in October 2009 and will be accepting applications from Med/Peds and categori-

cal medicine and pediatric residents in the new year. International health care has also come into our clinic as Drs. Jennifer Gartman and Elizabeth Toll and many Med/Peds residents, led by Sylvia LaCourse and Natasha Rybak, have worked with the International Institute to become a primary care site for RI refugees. Dr. LaCourse has been awarded the 5th annual National Med/Peds Residents' Association Advocacy Grant to implement a curriculum teaching basic health concepts to our interpreters who contribute significantly as cultural brokers and informal mentors within the refugee community. Her proposal expands on the pediatric health topic training developed by Hasbro pediatrician Carol Lewis, MD which has been met with great enthusiasm by interpreters and refugee patients alike. Resident Sarah Bagley taught health topics and peacemaking to Israeli, Arab, and Palestinian teens at the Nir School in Israel last summer under the direction of Dr. Pallant. Dr. Jerome Larkin continues to share commitments between Med/Peds and Infectious Disease and has mentored many residents who have pursued ID fellowship in recent years.

Med/Peds-trained physicians bring unique experience to the care of adolescents, young adults, and families, and the Med/Peds faculty has developed related clinical interests. The care of chronic illness and the interface between the medical and psychosocial concerns are also areas of interest to those in Med/Peds. Dr. Elizabeth Toll, who helped launch The Medicine/Pediatrics Primary Care

RESEARCH NEWS

Women & Infants Hospital and The Alpert Medical School of Brown University Host the Office of Research in Women's Health (ORWH) of the NIH Conference

On September 21–23, 2009, Women and Infants Hospital and The Alpert Medical School of Brown University hosted a national meeting on behalf of the Office of Research in Women's Health (ORWH) of the NIH to help develop research and funding priorities for the next five to ten years. The conference was one of four nationally intended to incorporate input from researchers, clinicians, patients, advocacy groups, community organizers and industry. The conference provided the Brown community and our colleagues throughout New England with a unique opportunity to identify disparities and gaps in women's health research and to influence the future research agenda. Public testimony, invited speakers and work groups culminated in presentations by the Adolescent, Careers, Oral Health and Systemic Disease,

Menopausal Transition, Reproductive, Pregnancy, Prenatal and Childhood workgroup leaders that will lead to a formal document reflecting the recommendations. We are very grateful to the Department and to the whole Brown community who contributed their time and expertise to the meeting and the onsite scientific writing. The meeting was a huge success, thanks to many people and to the extraordinary efforts of my co-chairs, Maureen Phipps, MD, Director of Research, Women & Infants Hospital and Associate Professor of Ob/Gyn and Community Health, Alpert Medical School of Brown University and Joanna Cain, MD, Chace/Joukowsky, Professor and Chair, Obstetrics and Gynecology, Assistant Dean for Women's Health, The Alpert Medical School of Brown University. The combined efforts of Joanna and of Connie Howes, CEO of Women and Infants, were instrumental in having WIH be the site of this meeting. The final documents and recommendations will be available on the NIH website in the next few months.

Center and has served as its Medical Director since 1998, recently stepped down from that role to focus on the integration of mental health care in primary care settings. Her efforts include mental health care training for primary care providers and co-locating mental health providers in the Med/Peds clinic. "About half the patients presenting to primary care providers have a somatic aspect to their complaints, and the reality is that primary care doctors treat a lot of mental health. We hope to develop novel methods to teach providers how to do effective, basic interventions," says Dr. Toll. She has been awarded a GME grant to study the training and implementation of basic mental health care in the Med/Peds Clinic and will be collaborating on this project with psychiatrists Jody Underwood, MD and Michelle Rickerby, MD. Dr. Toll has an ongoing interest in practice improvement and has led a seven-year Quality Improvement Project sponsored by the RI Department of Health focused on improving diabetes care through the use of a computerized registry.

Dr. Jennifer Gartman has a deep interest in the medical needs of incarcerated adolescents at the Training School where she continues to contribute weekly clinical time. The RITS is an elective training site for Med/Peds and categorical residents with an interest in incarcerated youth and advocacy.

Dr. Suzanne McLaughlin, MD became our first Med/Peds-trained Program Director in the fall of 2008. She has received a 2009 Picker Institute–Gold Foundation award to develop training curriculum in health care transition and is working with the RI Department of Health and Hasbro's Adolescent Leadership Council to develop a Transition Consultation Clinic helping children with chronic diseases mature from family-oriented pediatric care through adolescence and on to successful self care as adult patients working with internist and specialists. "The survival of children with once-fatal conditions into adulthood is a tremendous success story of modern medical treat-



Back row: Nick Grumbach, Dom Tammamro, Natt Songdej, George Hardy, Jerry Larkin, Susanna Winston, Sara Bagley, Betsy Toll, Alex Diaz de Villalvilla

Middle row: Sybil Cineas, Natasha Rybak, Michaela Griffin

Front row: Sue McLaughlin, Justin Eldridge

ments – but we're still learning how to care for their changing needs. Health care transition is the process of preparing them to move into adult-care settings. Physicians need to learn about transitioning their care, and Med/Peds doctors are uniquely suited to this role," states Dr. McLaughlin.

Reflecting the commitment of its residents, the Med/Peds program continues to maintain strong involvement in the Providence community. The Young Doctors program, begun by attending Kristin Anderson, MD during her residency continues with her mentorship and is now under the leadership of resident Raina Phillips. The program brings middle school students to RI Hospital monthly to learn about topics in medicine and health care fields from our residents and other hospital employees. Attending Sybil Cineas, MD and resident Stephanie Tecun volunteer regularly at the RI Free Clinic. Stephanie is a founding

board member of the Esperanza Clinic – expanding outreach and clinical services for Providence's Spanish-speaking community.

Med/Peds residents pursue a range of research interests. Melinda Biernacki is the recipient of an American Society of Hematology travel award to travel to their national meeting in New Orleans to present a poster of her work in the coordination of B and T cell immunity undertaken as a medical student. Raina Phillips was honored with a prize for her clinical case abstract at the 5th Annual National Med/Peds Residents Association National Meeting in Washington, DC.

As the Med/Peds program looks back over fifteen years from its start with a single request through years of challenges and dreams, there is much to celebrate in the dedication and accomplishments of this unique program. And there is much to watch as the program heads into the future.

Profiles

Michael Poshkus, MD, has joined the Division of General Internal Medicine and Infectious Diseases. Dr. Poshkus graduated from Columbia Medical School and then completed his General Internal Medicine Residency and Infectious Disease Fellowship at Brown University and, in addition, he has served as the Medical Director of the Rhode Island Department of Corrections for 5 years. He returns to the Divisions of GIM and Infectious Diseases, continuing his interests in teaching and providing care to underserved populations.

Dr. Katherine Richman has recently joined the faculty in the Division of Kidney Diseases and Hypertension at Warren Alpert Medical School of Brown University, where she serves as an Associate Professor of Medicine in the Teacher Scholar track.

Dr. Richman is a graduate of the Brown medical school, its internal medicine residency, and its nephrology fellowship. She is a clinical nephrologist who will maintain clinical practices in kidney diseases and hypertension at sites in Providence and Warwick, and participate in educational programs for students, residents, and nephrology fellows.



Dr. Jigme Michael Sethi joined the Critical Care Division of the Miriam Hospital in May, 2009. Dr. Sethi completed a fellowship in Pulmonary and Critical Care Medicine from Yale University in 2000, and since then has been an Assistant Professor of Medicine in the Division of Pulmonary, Allergy and Critical Care Medicine at the University of Pittsburgh. Dr. Sethi's main research interests lie in the field of exhaled gas biology, specifically, the role of exhaled nitric oxide and carbon monoxide as markers of pulmonary inflammation in humans, and mice models of asthma.

In his spare time, Dr. Sethi enjoys sailing, kayaking and playing the trumpet. He holds a private pilot's license and is training for his instrument rating.

Department of Medicine Appointments and Promotions

Full Time and (Research) Appointments

Miriam Hospital

Infectious Diseases

Brian Montague, MD
Assistant Professor

Amy Nunn, PhD
Assistant Professor (Research)

Hematology/Oncology
Jorge Castillo, MD
Assistant Professor

Pulmonary
Jigme Sethi, MD
Assistant Professor

Rhode Island Hospital

Cardiology
Ohad Ziv, MD
Instructor (Research)

General Internal Medicine
Traci Green, PhD
Assistant Professor (Research)

Hematology/Oncology
David Berz, MD, PhD
Assistant Professor

Nephrology
Katherine Richman, MD
Assistant Professor

Full Time and (Research) Faculty Promotions

Memorial Hospital

General Internal Medicine
Joseph Diaz, MD
Associate Professor, TST

Infectious Diseases
Andrew Arstenstein, MD
Professor, TST

Miriam Hospital

Infectious Diseases
Jane Carter, MD
Associate Professor, TST

Michelle Lally, MD
Associate Professor, RST

Rhode Island Hospital

Gastroenterology
Steven Moss, MD
Professor, RST

Hematology/Oncology
Edward Filardo, PhD
Associate Professor (Research)

Women & Infants Hospital

Obstetric Medicine
Raymond Powrie, MD
Professor, TST

Department of Medicine Grand Rounds

Tuesday Mornings at 8:00 am

George Auditorium, Rhode Island Hospital

Lecture Hall, The Miriam Hospital (teleconferenced from RIH)

Room 653, VA Medical Center (teleconferenced from RIH)

Library Video Room, Newport Hospital (teleconferenced from RIH)

February 9, 2010: Morbidity & Mortality Conference

Case 1: "A 66-year-old woman with a history of COPD presents with shortness of breath"

Presenter: William Corrao, M.D.,
Pulmonary

Case 2: "An 84-year-old woman with history of CVA presents with a left sided facial droop"

Presenter: Michael Poshkus, M.D.,
General Internal Medicine

**February 16, 2010:
CANCELED**

February 23, 2010: General Internal Medicine Update

The Emperor's State of Dress: Perioperative Evaluation 2010"

Benjamin L. Sapers, M.D., Attending Physician in General Internal Medicine, Rhode Island and The Miriam Hospitals; Assistant Professor of Medicine (Clinical), The Warren Alpert Medical School of Brown University

March 2, 2010: "End of Life"

David Casarett, M.D., University of Pennsylvania

March 9, 2010: Psychiatry Update

March 23, 2010: Hematology/Oncology Update

Visit our website at www.brownmedicine.org

The Department of Medicine Newsletter is published quarterly. To submit an article or provide information contact Denise Lavery-O'Hara at 444-5127, e-mail to dlavery-ohara@Lifespan.org or contact Dan Bryant at 444-6893, e-mail to dbryant@Lifespan.org.