



Serine Protease Inhibitors in Cancer and Sepsis: Theranostic and Therapeutic Applications



Yow-Pin Lim, MD/Ph.D.

The research of Dr. Lim in the Division of Hematology and Oncology focuses on the identification and characterization of biomolecules that can be used as diagnostic or theranostic markers. The term theranostic refers to the use of a test to diagnose the disease, choose the correct intervention, guide and monitor therapy. Monoclonal antibodies together with immunochemical techniques are used to identify several tumor-associated proteins which appear at different levels in the serum and other bodily fluids of normal versus cancer patients.

Cancer Research. One of the monoclonal antibodies generated (MAb 69.31) recognizes inter-alpha inhibitor proteins (IaIp), a complex glycoprotein composed of several polypeptide chains. IaIp is known to inhibit several serine proteases such as trypsin, human leukocyte elastase (HLE), plasmin, cathepsin G and granzyme K which are involved in inflammation, shock, tumor invasion and formation of metastases. In *in vitro* 3-dimensional cell invasion assays, IaIp effectively inhibits the migration of human tumor

cells. Working with Neal Ready, M.D./Ph.D., an oncologist at RIH, Dr. Lim is currently evaluating the potential therapeutic use of this serine protease inhibitor in inhibiting metastasis *in vivo*, a pilot translational project currently supported by the COBRE CCRD. In addition, promising results from recent studies indicate that IaIp may be a valuable marker in cerebrospinal fluid for the diagnosis and prognosis of primary and metastatic CNS cancers.

Sepsis Research. Since IaIp has been implicated in inflammation, Dr. Lim has expanded the research to examine the role of IaIp in sepsis, a deadly disease that affects more than 750,000 Americans and kills more than 200,000 each year. Current studies are focused on the therapeutic use of IaIp as a novel immuno modulator in sepsis. Dr. Lim has been awarded a \$2-million SBIR Phase II grant from the NIGMS/NIH to conduct preclinical studies and Phase I/IIa clinical trial of IaIp in septic patients. This study was launched last summer at ProThera Biologics, Memorial Hospital, Rhode Island Hospital and The Miriam Hospital. It will be the first controlled trial of this treatment in the United States. Steven Opal, MD, Chief of Infectious Diseases at Memorial is the Co-Investigator of this multi-center study. This groundbreaking research is based on Dr. Lim's work showing that the onset of sepsis decreases markedly the level of IaIp in patient's blood. In preclinical studies using an animal model of sepsis, treatment with IaIp produced a dramatic increase in survival of septic animals. In collaboration with Dr. James Padbury at Women and Infants' Hospital, Dr. Lim is developing neonatal sepsis animal models to further investigate the

role of IaIp in neonatal sepsis, a research currently funded by the NICHD/NIH. At this time there is no safe and effective treatment for sepsis in newborns. Furthermore, based on plasma studies in adult patients and newborns with sepsis, IaIp is potentially useful as a prognostic or theranostic marker in this disease. Along with Loren Fast, Ph.D., a research immunologist and Gregory Jay, MD/Ph.D., Emergency Medicine Dept. at RIH, Dr. Lim is developing Granzyme K as a sensitive early indicator for sepsis leading to crucial early intervention that could save thousands of lives. The sepsis research being carried on by Dr. Lim could prove revolutionary in the challenging battle against this fatal disease.

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Michele G. Cyr Named 2005 Woman Physician of the year

Kelly McGarry, MD



Dr. Michele Cyr, Professor of Medicine, Brown Medical School was named Rhode Island Medical Women's Association Physician of the Year at a ceremony on May 9, 2005.

Dr. Cyr serves as Director of the division of general internal medicine and the program director for the general internal medicine residency at Rhode Island Hospital. She holds two associate dean positions at Brown Medical school: the associate dean of graduate medical education and the associate dean for women in medicine. She is the Leadership Director for the Brown University/ Women and Infants Hospital National Center of Excellence in Women's Health. In these roles she has served to unite many women in the Brown medical community.

Nationally Dr. Cyr is recognized as an expert in women's health. In 1987, she co-founded Women's Health Associates, a multidisciplinary practice for women. She co-authored the book, The Complete Book of Menopause: Every Woman's Guide to Good Health and its sequel: The New Truth About Menopause

and she has appeared on NBC's Dateline and Lifetime Medical. Dr. Cyr has been the PI on several residency-training grants that enabled the General Medicine Residency at RI Hospital to innovate ambulatory education. She has served as a co-PI for the Women's Health Initiative Vanguard Center at Memorial Hospital of Rhode Island since 2001. Dr. Cyr has also served on several national committees addressing women's health issues and has presented women's health topics at many national meetings. She has written over 60 peer-reviewed articles, reviews and chapters on women's health topics specifically in the areas of women and alcohol abuse, menopause, breast cancer and osteoporosis and has volunteered her time to talk to many groups of women in the community about a variety of health issues.

Brown medical students and residents have honored Dr. Cyr's teaching with the AMWA's Gender Equity Award. She was named an Outstanding Woman in Science and was also recognized by the Perishable Theater's Board of Directors with the Influential Women of Rhode Island Award.

Dr. Cyr has served on the Lifespan Board of Directors and is currently a member of the Board of Trustees at Bowdoin College, her alma mater, where in keeping with her diverse talents, she majored in Art & Biochemistry. Michele Cyr is truly a national leader in the women's health movement.

IN THE NEWS...

In the April issue of the journal *Clinical Infectious Diseases* was the article 'Is it time to implement Routine, not Risk based HIV Testing.' Lead author of this article was Curt Beckwith from the Division of Infectious Diseases. The data reflected that Primary health care providers should incorporate HIV testing into routine patient care for all sexually active individuals. The researchers recommend that routine testing be covered by private medical insurance and by Medicare and Medicaid. They also recommend changes in current counseling practices for HIV. Minimal counseling could be performed during the consent process for the test, followed by in-depth counseling for persons who receive a positive test result, for patients who request counseling, or when the health care provider believes counseling is appropriate.



The Department of Medicine Newsletter is published quarterly.

To submit an article or provide information contact Denise Lavelly-O'Hara at 444-5127, e-mail to

dlavelly-ohara@Lifespan.org

or contact Dan Bryant at 444-6893, e-mail to

dbryant@Lifespan.org

RESEARCH AWARDS

J. Dawn Abbott, MD, in the division of Cardiology at Rhode Island Hospital, has been awarded a 1-year grant from the American College of Cardiology Foundation. The grant is entitled "Prognostic Angiographic Findings in Patients with Acute Coronary Syndromes Undergoing Percutaneous Coronary Intervention". Patients with acute coronary syndromes have a high incidence of long-term adverse outcomes. The goal of the grant is to determine if angiographic variables may help further guide therapy and predict outcome in patients treated with an invasive strategy of angioplasty, including coronary stenting.

Christine Duffy, MD, in the division of General Internal Medicine, has received a BIRCWH Scholar award from Women and Infant's Hospital/ORWH. The purpose of these grants is to provide a period of protected time for career and academic development for junior faculty. Dr. Duffy will participate in didactic sessions and conferences to advance and nurture efforts in women's health research, dedicate two years to a mentored research training program, and complete a research project pertaining to women's health.

Timothy Flanagan, MD, in the division of Infectious Diseases, has received a funding from Thundermist Health Associates and HRSA to provide HIV/AIDS specialty care services at Thundermist Health Center in Woonsocket, Rhode Island. Included in these services are physician clinics at the Health Center, enrollment opportunities for patients to participate in clinical trials, case consultation, and medical education for Thundermist clinical staff.

Michelle Lally, MD in the division of Infectious Diseases, has received a grant from the CDC via a subcontract from MAP for a project titled: 'MAP's Targeted HIV Outreach Program: Project Faith and Sara's Light.' The purpose of this grant is to increase HIV testing among ethnic minorities who are injection drug users, crack users, and/or commercial sex workers, as well as include partners and family members who also engage in these behaviors. Using outreach workers, potential clients will be notified of the opportunity and testing will then occur at MAP (Providence-based community-based organization) and TMH. 100 people per year for 5 years will participate in this project.

Steven Moss, MD, in the division of Gastroenterology, has received a grant from the National Institutes of Health via Epivax. The grant is titled 'A Genome-Derived Epitope-Driven H. Pylori Vaccine.' The grant aim is to use a genome based approach for the development of a therapeutic vaccine against H. pylori disease.

Michael Newstein MD, division of Infectious Diseases, has been awarded a subcontract from National Institutes of Health for a project titled 'Isolation of a Intracellular HIV-1 Inhibitor from a Monkey Genomic Episomal Library.' HIV-1 replicates in humans and chimpanzees but not other primates. The aim of this grant is to isolate the intracellular HIV-1 inhibitor, termed Lv1, which has been recently described in the cells of Rhesus macaques.



Chairman's Message Edward J. Wing, MD

The close of the academic year is always a time of mixed emotions. House staff and fellows who have been with us in some cases for six or more years are moving on to other positions. It is exciting to see physicians grow and mature in their careers but hard to see them go. On

the other hand it is invigorating to see new house staff and fellows join the training programs. Fifty-four interns started at the Rhode Island Hospital/ The Miriam Hospital /VA programs and 9 interns at Memorial Hospital of Rhode Island. Fellows also began in each of the medical subspecialties on July 1st. Joining the new house staff are third year medical students from Brown/Dartmouth for their first clerkship. I am rounding or have been rounding at Rhode Island Hospital in General Medicine (A) in July and as usual find that the residents and students are doing a terrific job. The range of illnesses is very broad, the services are busy, and the learning is exciting.

Research in the Department continues to grow. A number of investigators recently received notice of RO-1 awards including Bharat Ramratnam, Steven Gregory, and Jody Rich. Other grants are listed elsewhere in the newsletter. Despite the decreased funding from the NIH, the Department continues to hold its own and grow.

The international programs have been growing very quickly. Our Kenya program has been enhanced by the addition of Janet O'Connell who is providing administrative help. Mary Hohenhaus, who recently joined the Division of General Internal Medicine at The Miriam Hospital, will be helping Jane Carter organize the rotations for students, residents, and faculty. Our program in the Dominican Republic is likewise becoming very popular. A number of students have rotated through Cabral Madre Hospital in Santiago. Mike Stein has begun a research project in HIV/AIDS. Mark Fagan and Joe Diaz, the program directors, are planning rotations in October 2005 and April 2006 for any who are interested.

Further developments in the Department include the establishment of fellowship in Rheumatology under Ted Lally, the restructuring of Cardiology under Al Buxton, and an exciting search for a permanent Division Director of Hematology/Oncology. Ed Wittels has done an exceptional job as interim Division Director during the past 6 years, and will continue in a leadership role in the Division.

I hope everyone is enjoying the start of the new Academic Year, as well as summer in Rhode Island.

University Medicine Foundation Primary Care: Rehoboth, Massachusetts

David A. Herec, MD

The University Medicine Foundation primary care site in Rehoboth was initially founded by Dr. David A. Herec in August of 1983, through the U.S. Public Health Services for the practice of internal medicine. A year later he was joined by his wife, Laurie J. Grauel, M.D. who practices pediatrics and adolescent medicine. At that time they were the only practicing physicians in Rehoboth. Both doctors are board certified in their specialty. In 1995 the practices were merged into the Rhode Island Hospital Medical Foundation which later became University Medicine Foundation. The doctors are both active in teaching activities at Brown Medical School. Over the past 22 years the population of Rehoboth and Dighton have doubled, making the practices very busy. Many of their patients are referred to Rhode Island sub-specialists. There is room for interested sub-specialists to see patients at our site. The staff and office are friendly, caring and efficient with a convenient location at the intersection of Rts.118 and 44.

237 Winthrop Street, Rehoboth, MA 02769

Phone: 508-252-4834 • Fax: 508-252-4013



Leslie J DeGroot, MD, Professor of Medicine, Division of Endocrinology

Correction: Leslie J. DeGroot, MD, Professor of Medicine, was listed incorrectly as Assistant Professor of Medicine in the April 2005 Issue of the Department of Medicine Newsletter.



Eli Y. Adashi, Dean, Brown Medical School with Dr. Edward Wing, Chairman, Department of Medicine at the 11th Annual Department of Medicine Research Forum on Tuesday, June 14, 2005

Pediatric Diabetes and Endocrinology Patient Care in the Hallett Center Facility

Outpatient care of pediatric diabetes and endocrinology patients in the Hallett Center facility will begin July 1, 2005 through a cooperative arrangement between the Departments of Medicine and Pediatrics. This will expand upon very effective synergies that Dr. Robert Smith (Director of Endocrinology) and Dr. Philip Gruppuso (Director of Pediatric Endocrinology) already have established in research and training programs. It will bring an important area of diabetes and endocrine care into the Hallett facility. Other current programs of the Hallett Center include diabetes-oriented nephrology, podiatry, and weight management services, in addition to comprehensive adult diabetes and endocrinology patient care.



Senior Research Day

The Thirteenth Annual Department of Medicine Senior Residents' Research Day was held on Wednesday, May 18, 2005 at the Gerry House, Rhode Island Hospital. Oral Presentations were delivered by Drs. Renee Amori, Tara Lagu, Donnah Mathews and Shivani Sood. 28 Poster presentations were on exhibit. All senior residents are required to complete a research project during their residency. Both subspecialty and primary care faculty serve as mentors to the residents. Drs. Anne Moulton, Karen Tashima and Edward Feller serve as Co-Chairs for the Internal Medicine Residency Research Committee.

Beckwith Teaching Awards



Presentation of the Beckwith Teaching Awards: L to R: Andrew Artenstein, MD, Kevin M. Dushay, MD, Anthony E. Mega, MD, Benjamin L. Sapers MD, Pamela A. Harrop, MD and Mel Anderson, MD (missing from photo)

The Brown University Department of Medicine held its Fourth Annual Chairman's Teaching Awards ceremony on Tuesday, May 24, 2005. It followed the Grace McLeod Rego Lecture where Dr. Charles Hatem was the guest lecturer. His topic was "Renewal in the Practice of Medicine". Dr. Hatem is the Harold Amos Academy Professor, Professor of Medicine, Harvard Medical School and the Director of Medical Education at Mt. Auburn Hospital in Cambridge, Massachusetts.

This is the fourth year that the Department of Medicine has offered awards to recognize superb teaching by its faculty. These awards are supported by The Beckwith Family Research and Education Fund. The recipients are nominated and chosen by students, residents, physicians, program and course directors in the Brown Medical School Department of Medicine. Each winner was presented with a plaque and a cash prize.

The recipients this year were:

- Andrew Artenstein, MD - Memorial Hospital Associate Professor of Medicine and Community Health Physician-in-Chief, Department of Medicine Director, Center for Biodefense and Emerging Pathogens

- Mel Anderson, MD - VA Medical Center Clinical Assistant Professor of Medicine Associate Chief of Medicine Site Director, VA Residency Program
- Kevin M. Dushay, MD - Rhode Island Hospital Assistant Professor of Medicine (Clinical) Division of Pulmonary, Critical Care & Sleep Disorders Medicine
- Anthony E. Mega, MD - The Miriam Hospital Assistant Professor of Medicine, Division of Hematology/Oncology Co-Director, Brown University Hematology/Oncology Fellowship Program
- Benjamin L. Sapers MD - Rhode Island Hospital Assistant Professor of Medicine (Clinical), Division of General Internal Medicine
- Pamela A. Harrop, MD - Medical Associates of Rhode Island Clinical Assistant Professor of Medicine, Division of General Internal Medicine

Full Time and (Research) Faculty Appointments

Miriam Hospital
Infectious Disease
 Curt Beckwith, MD
 Assistant Professor

Rhode Island Hospital

Cardiology
 Gideon Koren, MD
 Professor, Research Scholar

Endocrinology
 Haiyan Xu, MD, Ph.D.
 Assistant Professor

Hematology/Oncology
 Gary Strauss, MD
 Associate Professor, Research Scholar

Infectious Disease
 Abigail Harrison, PhD
 Instructor (Research)

Rheumatology
 Edward Lally, MD,
 Associate Professor, Teaching Scholar

Women&Infants Hospital
General Internal Medicine
 Ghada Bourjeily, MD
 Assistant Professor

Full Time and (Research) Faculty Promotions

The Miriam Hospital

Infectious Diseases
 John Lonks, MD
 Associate Professor, Teaching Scholar Track

Infectious Disease and Community Health
 Josiah Rich, MD, MPH
 Professor, Research Scholar Track

Rhode Island Hospital
Infectious Diseases
 Leonard Mermel, DO, ScM
 Professor, Teaching Scholar Track

Veterans Affairs Medical Center

Pulmonary
 Elizabeth Harrington, Ph.D.
 Associate Professor (Research)

Kenyan Medical Students Reflect On Experiences at the Brown Department of Medicine

Mary Hohenhaus, MD

The weather was their first clue that things were going to be different. When Isaac Kogos Birech, Arthur Rubia Gatumbi, Abendego Muena Mosau, and Stephen Oteino left northwestern Kenya in April, the days were sunny, dry, and in the 80s. When he stepped out of Logan International Airport in Boston, Isaac could only think of one thing: he had never been so cold in his life.

These four fifth-year medical students were the most recent participants in the Department of Medicine's ongoing educational exchange with the Moi University School of Medicine in Eldoret, Kenya, residing in Providence for six weeks this past spring. The students spent their first month as medical clerks, rotating with resident-led teams on the inpatient medicine wards – Isaac and Arthur at Rhode Island Hospital and Stephen and Abendego at the Miriam Hospital.

Despite the many commonalities between medical education in Kenya and the United States – hours of lectures, late nights studying, and long days in the hospital – the students found striking differences in their experiences on a number of levels.

The teaching hospital at Moi University is sizable, featuring an active casualty (emergency) department, large adult and pediatric wards, and busy surgical and obstetric services. Arthur, however, had one word for the Rhode Island Hospital campus: overwhelming. He also had the opportunity to see the newly opened emergency department, which he described as “a hospital in itself.”

Beyond the hospitals' size, the students were impressed with the extensive record-keeping for each patient and how easily past medical history and medication lists could be obtained for patients newly admitted to the hospital. In contrast to home, they noted that diagnostics

– radiology and laboratory services – were readily available and frequently utilized. At home, there is a greater emphasis on the physical examination in diagnosis. In addition, patients must be able to pay for tests before they can be ordered, and malfunctioning equipment can take weeks or months to repair. Consequently, medical teams must often make decisions about diagnosis and treatment without confirmatory test results. The Kenyan students also thought that medical care here reflected a high degree of specialization and that consultants were readily and quickly available to help, which was good for patient care.

For one thing, it is much less hierarchical than in Kenya. “Here, everyone’s opinion is considered, even the medical student’s,”

The students were exposed to a much broader array of internal medicine than they had seen at home, where infectious diseases and their complications – particularly HIV and AIDS-related disorders – prevail. Crohn's disease, coronary artery disease, and asthma are some of the disease states for which they developed a greater appreciation during their stay.

On the whole, the Kenyan students thought their American patients were in some ways much sicker than their patients at home. They noted that almost all of their patients here were admitted with multiple medical problems. They also thought that American patients were very knowledgeable about their conditions and that their American colleagues worked hard to teach patients how to take better care of themselves.

And what were their impressions of American medical education? For one thing, it is much

less hierarchical than in Kenya. “Here, everyone’s opinion is considered, even the medical student’s,” Isaac said. At home, students interact almost exclusively with their intern (an internal medicine residency program is just now being established at Moi University), and rarely with attendings and consultants.

The number of patients cared for by each team is much smaller here as well, which they thought was better for patient care. An intern on the medical wards at the Moi University hospital routinely oversees the care of 30 or more patients in a day. They were also struck by their American colleagues' thoroughness, noting how their residents emphasized the importance of finding an explanation for each of their patients' symptoms.

Not all of the students' time was spent on the medical wards. Each had the opportunity to explore personal interests and spent their last two weeks in Providence rotating in other departments, such as orthopedic surgery and obstetrics. They fit in some local touring of Bristol and Newport, and claim they now understand why Rhode Island is called the “Ocean State.” They also took advantage of their proximity to Boston and went to cheer fellow Kenyans competing in the Boston Marathon.

Arthur, Isaac, Stephen, and Abendego left Providence in mid-May and returned to Eldoret for their final year of medical school. Before they can enter specialty training, each will complete a year's general internship before being assigned duty as a general medical officer at a hospital or other health care facility in Kenya. But first they will reciprocate as hosts for the next group of Brown medical students and internal medicine faculty and residents to participate in the exchange program this September and October.

Rhode Island Free Clinic: A Source Of Free Inspiration

Allison Friedenberg, MD



After finishing with my last patient, I thank Judith, the Brown undergraduate who was translating for me, and walk back into the main room. As I look around the Rhode Island Free Clinic, I have several emotions. The most overwhelming of these feelings is gratitude. After volunteering at this unique clinic, I am grateful for many things- for my health; that I have medical insurance and that I don't have to worry about my loved ones not being able to afford their medications. I feel thankful that there are places like this- a place where very busy people volunteer and take the time to really listen to people; to provide them with medical care, nutrition counseling, cooking classes, and much more.

The second emotion I experience is inspiration. The people that volunteer here are from all walks of life. There are residents who are working many hours in the hospital but still take time out of their schedules to come here and provide health care. There are also attendings that volunteer here who have demanding schedules in anything from busy outpatient practices to subspecialty consult services in the hospital. Even the Chief of the Department of Medicine volunteers here. There are also nurses, nurse practitioners, nutritionists, pharmacists, pre-med and pre-pharmacy students, administrators, lawyers, and undergraduate students who help us translate for the large number of Spanish

speaking patients that come here. I am humbled by the dedication of these people- all of who are very busy but who come here to make this world a little better each day. The time constraints of residency have often made me feel like volunteering was out of the question. Being at the RI Free Clinic, however, made me remember why I first went into medicine- to help the underserved. I realized that I had very little excuse not to volunteer here when people who are busier than me dedicate their time to this clinic.

Not only am I inspired by those who work here, but also by the patients who come to the clinic. Their stories are fascinating; many have come thousands of miles to live in this country. Others have left families behind and are struggling to get by. They tell you these stories, and it is hard not to feel extremely lucky. And in the end, these patients are the most appreciative I have encountered. They always express that they wish they could do more to show their gratitude- as if a simple thank you wasn't enough.

Although most of the emotions I experience are positive and inspiring, I also feel an underlying sadness. Health care is a human right, not something that is only for the privileged. It is heartbreaking to see patients who are forced to use the little money they have to feed their families instead of buying medications that will ultimately save their lives. And although I look forward to the day when health care will be provided for these patients, I am thankful for places like this: the Rhode Island Free Clinic- where I know these people will receive the highest quality health care possible

The Rhode Island Free Clinic is located at 655 Broad Street in Providence.

For more information about volunteering, please contact Mary Logeais at (401) 274-6374.

Flea Follies 2005

Every spring the future Brown Internal Medicine chief residents coordinate and produce an evening of home grown entertainment including original resident skits, teaching award presentations and delectable refreshments. Flea Follies is a long time tradition in the residency program at Rhode Island Hospital, The Miriam Hospital and VAMC residency programs that has tapped into the rich talent reserve of our doctors and also provides an occasion to recognize the outstanding teaching of our residents, fellows and attendings. The 2005 Flea Follies was no exception. This year's award recipients are listed below.

Excellence and Dedication to Resident Education

Resident:

Khaled Abdel-Kader, MD,
Categorical Internal Medicine

Fellow:

Gerry Carino, MD Pulmonary
and Critical Care

Appreciation of Outstanding Teaching Skills and Dedication To The Education of House Officers

VAMC

Full Time Attending:
Mel Anderson, MD

Rhode Island Hospital

Full Time Attending:
Kevin Dushay, MD
Community Based Attending:
Dan Levine

The Miriam Hospital

Full Time Attending:
Achal Dhupa, MD
Community Based Attending:
Robert Dobrzynski, Jr.

2005 Internal Medicine Graduates

Rhode Island Hospital - The Miriam Hospital - VAMC



Categorical Internal Medicine

Khaled Abdel-Kader, MD
2005 - Chief Medical Resident,
Brown Medical School,
Providence, RI
2006 - Nephrology Fellowship
University of Pittsburgh Medical
Center Medical Education
Program
Pittsburgh, PA

Renee Elizabeth Amori, MD
Endocrinology, Diabetes and
Metabolism Fellowship
Tufts-New England Medical
Center
Boston, MA

Elliott James Anderson, MD
2005 - Hospitalist
Hawthorn Medical Associates
New Bedford, MA
2006 - Hematology/Oncology
Fellowship
Roger Williams Medical Center
Program
Providence, RI

Christina Seung Baik, MD
2005 - Masters in Public Health
Harvard School of Public
Health
Boston, MA
2006 - Hematology/Oncology
Fellowship
NEMC-Tufts Medical School
Program
Boston, MA

John Patrick Brennan, MD
Pulmonary Disease and Critical
Care Fellowship
Tufts-New England Medical
Center Program
Boston, MA

Alison Rita Comite, MD
Clinician-Educator Faculty
Tufts-New England Medical
Center
Boston, MA

Vadim Fayngersh, MD
2005 - Chief Medical Resident
Memorial Hospital
Pawtucket, RI
2006 - Pulmonary and Critical
Care Medicine Fellowship
Brown Medical School
Providence, RI

Anthony John Febles, MD
Radiology Residency
University of Vermont
Burlington, Vermont

Beth Ann Fisher, MD
Pulmonary Disease and Critical
Care Fellowship
Mount Sinai Pulmonary, Critical
Care and Sleep Medicine
Fellowship Program
New York, NY

Soniya Sharad Gandhi, MD
2006 - Infectious Disease
Fellowship
New York Presbyterian Hospital
(Columbia Campus) Program
New York, NY

**Ellen Leigh Hartmann-
Chirichella, MD**
Hematology/Oncology
Fellowship
Brown Medical School
Providence, RI

Joseph Hou, MD
2005 - Hospitalist
The Miriam Hospital
Providence, RI
2006 - Pulmonary & Critical
Care Fellowship
Mount Sinai School of Med.
Program
New York, NY

Robert Bruce Holland, MD
Pulmonary Disease and Critical
Care Fellowship
University of Wisconsin
Program
Madison, WI

Sujani Sarada Kakumanu, MD
Allergy Fellowship
University of Wisconsin
Program
Madison, WI

Christine Alice Kerr, MD
2005 - Chief Medical Resident
Brown Medical School
Providence, RI
2006 - Infectious Disease
Fellowship
New York Presbyterian Hospital
(Columbia Campus) Program
New York, NY

Emmy Ann Mahoney, MD
Cardiovascular Disease
Fellowship
University of Connecticut
Program A
Hartford, CT

John Omar Mascarenhas, MD
Hematology/Medical Oncology
Fellowship
Mount Sinai Medical Center
New York, NY

Tarun Mathur, MD
2005 - Academic Teaching
Attending/Hospitalist
Lankenau Hosp. TCC
Wynnewood, PA
2006 - Cardiology Fellowship
University of Connecticut
Program A
Hartford, CT

Jeffrey Michael Mazer, MD
2005 Chief Medical Resident
Brown Medical School
Providence, RI
2006 - Pulmonary and Critical
Care Medicine Fellowship
Brown Medical School
Providence, RI

Cara Eilese McLaughlin Gavin, MD
General Internal Medicine
Fellowship
HMS Faculty Development and
Fellowship Program in GIM
Boston, MA

Cathryn Anne McNamara, MD
9/2005 Group Practice
Harvard Vanguard Medical
Associates
Quincy MA

Stephan George Muhlebach, MD
2005 - Hospitalist
Jordan Hospital
Plymouth, MA
2006 - Cardiology Fellowship
Brown Medical School
Providence, RI

Richard Andrew Regnante, MD
Cardiovascular Diseases
Fellowship
Brown Medical School
Providence, RI

Anna Grant Rudnicki, MD
2005 - Hospitalist
Kent County Hospital
Warwick, RI
2006 - Pulmonary & Critical
Care Fellowship
Boston Univ. Medical Center
Program
Boston, MA

Daniel Alexander Selo, MD
2005 - Chief Medical Resident
Brown Medical School
Providence, RI
2006 - Gastroenterology
Fellowship
Lahey Clinic Program
Burlington, MA

Anisa Shaker, MD
Gastroenterology Fellowship
Washington University/B-
JH/SLCH Consortium
Program
St. Louis, MO

Shivani Sood, MD
Gastroenterology Fellowship
North Shore Universital
Hospital/NYU School of
Medicine Program
Manhasset, NY

Robert Andrew Swierupski, MD
Group Practice
Sturdy Memorial Hospital
Attleboro, MA

Sejal Ashok Thaker, MD
2005 - Hospitalist
Coastal Medical
Providence, RI
2006 - Pulmonary and Critical
Care Medicine Fellowship
Mount Sinai School of Medicine
Program
New York, NY

Raymond E. Tsao, MD
Hematology/Medical Oncology
Fellowship
Cleveland Clinic Foundation
Program
Cleveland, OH

Barton Lahn Wise, MD
Rheumatology Fellowship
Boston University Medical
Center Program
Boston, MA

General Internal Medicine/Primary Care

Laurel Athena Bliss, MD
Group Practice
University Medicine Foundation
Providence, RI

Elisa Anne Freeman, MD
Private Practice
Caritas Good Samaritan
Medical Practice Corp.
Brockton, MA

Allison Sonny Friedenberg, MD
2005 - Chief Medical Resident
Brown Medical School
Providence, RI
2006 - Pulmonary Disease and
Critical Care Med. Fellowship
New York, NY

Tara Catherine Lagu, MD
General Internal Medicine
Fellowship
The Robert Wood Johnson
Clinical Scholars Program
Philadelphia, PA

Catherine Ann Malone, MD
Hospital Practice
Rhode Island Hospital, Division
of General Internal Medicine
Providence, RI

Donnah Mathews, MD
Geriatrics Medicine Fellowship
Brown Medical School
Providence, RI

Bismruta Misra, MD
2005 - Hospital Practice
Rhode Island Hospital, Division
of General Internal Medicine
Providence, RI
2006 - Endocrinology, Diabetes,
and Metabolism Fellowship
New York Presbyterian Hospital
(Columbia Campus) Program,
New York, NY

Sheri Xue Qi, MD
Primary Care Practice
Harvard Vanguard Medical
Associates
West Roxbury, MA

Megan Ashley Tamburini, MD
Clinical Instructor
SUNY Upstate Medical
University
Syracuse, NY

Traci Lynn Tupper, MD
Endocrinology, Diabetes and
Metabolism Fellowship
Brown Medical School
Providence, RI

Medicine-Pediatrics

Jocelyn Paige Beattie Nolte, MD
Group Practice, General IM and
Pediatrics
Palmyra Family and Internal
Medicine-Hosp
Charlottesville, Virginia

Joanna Danni Bell, MD
Hospital Practice, Assistant
Professor of Medicine
Drexel Univ. College of
Medicine, Div of HIV/AIDS
Medicine, Partnership
Comprehensive Care Practice
Philadelphia, PA

Loida Elena Bonney, MD
T-32 Research Fellowship
Program, STD/HIV Prevention
The Miriam Hospital, Brown
Medical School
Providence, RI

Anitha Sara John, MD
2005 - Instructor in Medicine &
Pediatrics
Chelsea Health Care Center
Chelsea, MA
2006 - Pediatric Cardiology
Fellowship
Children's Hospital of
Philadelphia
Philadelphia, PA

Chief Medical Residents

Mary Hohenhaus, MD
Hospital Practice
Rhode Island Hospital, Division
of General Internal Medicine
Providence, RI

Thomas Isaac, MD
General Internal Medicine
Fellowship
Harvard Public Health School
Boston, MA

Kathryn Mehegan DeAnzeris
Private Practice
Newton-Wellesley Internists
Newton, MA

Randall Pellish, MD
Gastroenterology Fellowship
Brown Medical School
Providence, RI

Ana Tuya, MD
Geriatric Medicine Fellowship
Brown Medical School
Providence, RI

2005 Internal Medicine Graduates Memorial Hospital of Rhode Island



Ahmad Abu-Halimah, MD
Cardiology Fellowship
Vanderbilt University,
Nashville, TN

Joanne Castro, MD
Primary Care Physician

Jonathan Costa, DO –
Hospitalist at Falmouth Hospital,
Massachusetts
Applying Nephrology
Fellowship for July 2007

Michelle Costa, DO
Rheumatology Fellowship
Roger Williams Medical Center
Providence, RI

José Felix Huerta, MD
Primary Care Physician
Brenner Medical Group
Santa Cruz, CA

Geraldina Kica, DO
Hospitalist Physician
Morton Hospital
Taunton MA
Applying for Cardiology
Fellowship July 2007

Hemchand Rambaran, MD
Gastroenterology Fellowship
Yale University
New Haven, Connecticut

Rameshwar Reddy, MD
Hospitalist Medicine

Kurush Setna, MD
Hospitalist Position
Memorial Hospital of
Rhode Island
Pawtucket, RI

Another View of The Brown/Moi Program in Kenya

Edward Wing, MD

The Brown Department of Medicine at the Brown Medical School formed a collaborative relationship nine years ago with Moi University Faculty of Health Sciences in Kenya. Moi is the second and newest medical school located in the northwest highlands in Eldoret, a city about the size of Providence, RI. This relationship has as its core mission education and clinical care and is based on mutual respect, collaboration, and support. Brown joined an already existing program originally developed by Indiana University in 1990 called the ASANTE (America/sub-Saharan Africa Network for Training and



A patient who was moribund with complications of HIV, was treated at Moi Teaching Hospital and recovered. He is pictured with his daughter at an experimental farm where he works providing food for other HIV infected patients.

Education in Medicine) group. The initial impetus for the collaboration came from a trip the Chief of Medicine took with a Brown faculty member. After the initial commitment and organization, Brown internal medicine and Med/Peds residents, Brown medical students, fellows from various disciplines, and faculty from both the full time faculty and voluntary faculty have traveled to Eldoret. A total of 14 students, 19 residents and 12 facul-



*The Moi Teaching and Referral Hospital,
Eldoret, Kenya*

ty have spent rotations in Kenya. Sixteen Kenyan students and five faculty have visited Brown. Individuals from Brown typically stay for four to eight weeks at Moi. The mornings are spent rounding with medical teams on the wards of the teaching hospital. The ward experience is shocking and transforming to trainees. There are open wards, two to three patients per bed, a mortality on the wards approaching 10%/day, and an HIV positive rate of 50-70%. The clinical expertise of Kenyans is immediately apparent. They are masters of physical diagnosis and clinical reasoning. The entire range of internal medicine is seen. Afternoons are spent in various clinics, attending conferences or admitting patients. Brown students stay in the Medical School dorms with their Kenyan counterparts. Residents and faculty live in ASANTE housing, approximately one half mile from the Hospital. In turn, four Kenyan medical students come to Brown for eight weeks each year. They typically live with Brown medical students and join one of our medical teams. In addition, Moi faculty has come to Brown to lecture, collaborate in research projects, and learn specialty procedures.

Research has blossomed in this program, particularly in the areas of Tuberculosis and HIV. The program director, Dr. Jane Carter, has received funding through the NIH, the International Union against Tuberculosis and Lung Disease, and PEPFAR to carry out research in Kenya. Dual Infection with TB and HIV is one of the most important and daunting problems facing Kenya, and Dr. Carter's research is directed at optimizing therapy for both.¹ Therapy for HIV is

the highest Public Health priority in the country and has allowed the program through Indiana University to receive approximately \$30 million dollars from the Gates Foundation and PEPFAR funding.² Research at Moi is particularly attractive because of the resources at MOI University including faculty in basic science departments and a school of Public Health. There have been a number of positive results from the Kenya/Brown program. Perhaps the most important is that it has become a public signature or brand of the Department of Medicine at Brown. The rest of the faculty, the medical school, and the community know that the Department is committed to this program for education and clinical care in a developing country. The program has distinguished the Department for being committed to the core values of our profession in an area of the world with critical needs. As more and more physicians and students go to Kenya, there is a growing community of interested and supportive physicians who regard their experience as highly significant and often life changing. Everyone who goes to Kenya comes back excited and full of ideas about how to improve care in Kenya. On the other hand, the Kenyan medical students and house staff who we interact with learn the American approach to medicine. They are awed by our technology, but not by our wasteful utilization of resources. They learn the latest diagnostic and therapeutic modalities from us, and we learn how much can be done in a resource poor area. Both groups learn another culture, the pluses and minuses, and come away with a broader view of the world and a respect for another country and culture. It is the latter, the effect we have on the future leaders of Kenya, and the effect on our own young physicians and students that is probably the most important result of these programs.

¹ Invited Presentation: 30th Tuberculosis Surveillance and Research Unit Meeting (TSRU) sponsored by K.N.C.V. Tuberculosis Foundation, Paris, France 2005

² Cohen J, Kimaiyo S, Nyandiko W, Siika A, Sidle J, Wools K, Mamlin JJ, Carter J. Addressing the educational void during the antiretroviral therapy rollout. *AIDS* 2004; 18: 7-8

Residency Exchange Program Cabral Y Baez Hospital Santiago, Dominican Republic

Mark Fagan, MD

The Brown Internal Medicine Residency Programs are continuing the exchange program with Cabral y Baez Hospital in Santiago, Dominican Republic. This elective is available to a limited number of PGY2 and PGY3 residents during October 2005 and April 2006.

Cabral y Baez is a large, public teaching hospital in Santiago, the second largest city in the Dominican Republic. The hospital has an internal medicine residency training program, and the goal is for our residents to integrate into the system there as much as possible. In this elective, residents will work with inpatient teams of Cabral residents and faculty, attend teaching conferences, and participate in outpatient clinics at Cabral. In addition, residents will have the opportunity to work with a community development organization in a poor neighborhood of Santiago and to work in a clinic in a rural area about 30 minutes from the hospital.



The elective offers the opportunity to work in a large public hospital in a resource scarce country. HIV, tuberculosis, dengue, and leptospirosis are common diagnoses at Cabral. Conferences and rounds are conducted in Spanish. Spanish language instruction can be arranged in Santiago. Cabarete, an internationally known windsurfing beach, is 1 1/2 hours away by bus.

The Department of Medicine has leased an apartment about 3 blocks from the hospital. The housing cost is \$100/person/month.

Flexibility and a spirit of adventure are required!

If you are interested in hearing more, contact Mark Fagan at 444-5344 or MFagan@lifespan.org.

Office of the Chairman of Medicine
Rhode Island Hospital
593 Eddy Street
Providence, RI 02903

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)

A continuing medical education activity sponsored by Rhode Island Hospital

August 2005
Grand Rounds CANCELED
during August ~

September 6, 2005:
CANCELED

September 13, 2005:
Mortality and Morbidity Conference

September 20, 2005:
"Tuberculosis in the 21st Century:
Challenges and Opportunities

Jeffrey Glassroth, M.D., Chair, Department of
Medicine, University of Wisconsin Hospital and
Clinics, Vice Dean and Professor of Medicine,
Tufts University School of Medicine

September 27, 2005:
11th Annual Brown University
Paul J. Galkin Lecturer
Peter Kilmarx, M.D., Director of the
Botswana and USA (BOTUSA) project,
US Centers for Disease Control & Prevention

October 4, 2005:
Guest Lecture
Kenneth Jamerson, M.D.,
University of Michigan

October 11, 2005:
CANCELED

October 18, 2005:
Morbidity & Mortality Conference

October 25, 2005:
Endocrine Update

The Rhode Island Hospital fully intends to comply with the legal requirements of the Americans with Disabilities Act. If any participant of this conference is in need of accommodation, please contact the Rhode Island Hospital CMR office at (401) 444-4260

The Department of Medicine Grand Rounds series is supported by an unrestricted educational fund as contributed by: Abbott Laboratories, Hoechst Marion, Merck & Co., The Liposome Company, Parke-Davis, Schering, Pfizer, Wyeth-Ayerst Laboratories, Eli Lilly and Company.

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