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# A DAY IN THE LIFE

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Beth Israel Deaconess  
Medical Center



HARVARD MEDICAL SCHOOL  
TEACHING HOSPITAL

2016 DEPARTMENT of MEDICINE ANNUAL REPORT



Above: Ritesh Kotecha, MD, Anita Vanka, MD, and Javier Villafuerte Galvez, MD (left to right)



The Department of Medicine wishes to thank the many individuals who contributed to this report, including department leadership, division chiefs, administrators, partners, and affiliates. We also thank Gigi Korzenowski and Jerry Clark of Korzenowski Design, and Jennie Greene and Jacqueline St. Onge of the Department of Medicine. The photography in this report was done by BIDMC's James Derek Dwyer and Danielle Duffey, who also helped with photo research. Jane Hayward, of BIDMC's Media Services, provided expert copy editing and design consultation. We also thank several members of the Departments of Development and Communications for their input. Last but not least, we wish to thank all of the individuals and teams featured in these pages for their valuable contributions to the BIDMC community and to this year's annual report.

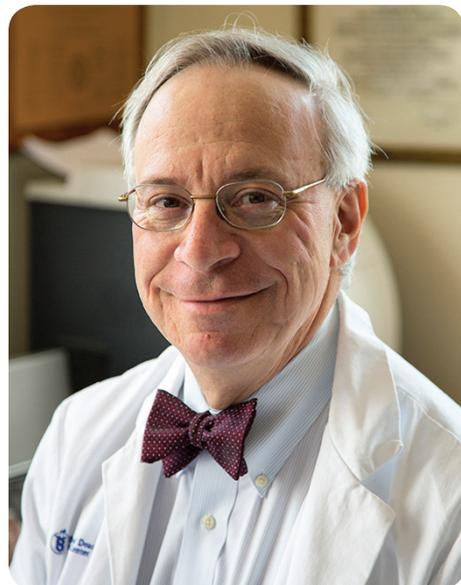
Cover: Gabriel Cohen, MD, Leah Taffel, MD, Eubee Koo, MD, and Jazmine Sutton, MD (left to right)

# A DAY IN THE LIFE

## TABLE OF CONTENTS

3	<a href="#">From the Chair</a>	19	<a href="#">A Day in the Life of a Primary Care Team</a>
4	<a href="#">Departmental Leadership</a>	21	<a href="#">A Passionate Translational Researcher</a> <i>Jacalyn Rosenblatt, MD</i>
5	<a href="#">New Division Chiefs</a> <i>Robert Gerszten, MD, and Manuel Hidalgo, MD, PhD</i>	23	<a href="#">A Pioneer in Geriatrics</a> <i>Susan Mitchell, MD, MPH</i>
7	<a href="#">A Night in the Life</a> <i>Daniele Ölviczky, MD, MS</i>	25	<a href="#">A Day in the Life of an Inpatient Team</a>
9	<a href="#">A Committed Physician and Mentor</a> <i>Adolf Waller Karchmer, MD</i>	27	<a href="#">Medical Education</a>
11	<a href="#">A Day in the Life of a Transformative Project</a>	31	<a href="#">Honors and Accolades</a>
13	<a href="#">An Environmental Health Champion</a> <i>Mary Rice, MD, MPH</i>	33	<a href="#">A Year in the Life: Department of Medicine Patient Care</a>
15	<a href="#">An Innovative Investigator</a> <i>Linus Tsai, MD, PhD</i>	35	<a href="#">Research Funding</a>
17	<a href="#">A Departmental Anchor</a> <i>Ellen Volpe, MBA</i>	36	<a href="#">Selected Publications</a>
		42	<a href="#">Department of Medicine Faculty</a>

# FROM THE CHAIR



Dear Colleagues and Friends,

A “Day in the Life” in a medicine department like ours is filled with wonder. As physicians, we offer care and guidance to patients and families at pivotal life moments, and they touch our lives in return. As investigators, “eureka” moments lead to breakthroughs in our work, shifting the course of our research and the future care of patients. As educators, we teach and inspire our students, housestaff, and fellows, steering them to career paths as leaders—and learning much about ourselves in the process. Indeed, in medicine we are fortunate that many of our days are marked by exceptional and often life-changing moments.

I feel very lucky to spend my days in a community that’s so dynamic and transformative. As the Chair of the Department of Medicine, I have the opportunity to work with some of the greatest minds and biggest hearts around. Our faculty and staff are bright, vibrant, committed, and energetic people, who work around the clock furthering our missions of clinical care, research, and medical education. We’re pleased to introduce you to some of them in this report. As you’ll see, their days (and often nights) are full in many ways: full of work to be done and deadlines to be met, but also full of intellectual stimulation, purpose, and deep satisfaction. They are passionate about their contributions to the Department, BIDMC, their patients, their mentees, and their research. We are fortunate to have each of them in the Department, and I’m proud to say that the individuals featured in this report are only a sampling of our many exceptional faculty and staff.

In addition to these “Day in the Life” profiles, I am pleased to share with you information that tells the “Year in the Life” story of the Department in 2016. This includes research publications and funding, honors and awards, and data on clinical volume and growth. Putting our days and years into a wider context still, we’re proud to be celebrating some major milestones at BIDMC this year: Beth Israel Deaconess Medical Center is celebrating 20 years; and our two predecessors, the New England Deaconess Hospital and Beth Israel Hospital, were founded 120 and 100 years ago, respectively. This, of course, amounts to many thousands of days lived and lives enhanced—a humbling and inspiring thought indeed.

Warm Regards,

Mark L. Zeidel, MD  
Chair, Department of Medicine

## DEPARTMENTAL LEADERSHIP

This list reflects our administration and leadership as of December 2016.

### ADMINISTRATION

**Mark Zeidel, MD**  
*Chair, Department of Medicine*

**Mark Aronson, MD**  
*Vice Chair, Quality*

**Barbara Kahn, MD**  
*Vice Chair, Research Strategy*

**Eileen Reynolds, MD**  
*Vice Chair, Education*

**Anthony Hollenberg, MD**  
*Vice Chair, Mentorship*

**Peter Weller, MD**  
*Vice Chair, Research*

**Sam Skura, MPH, MBA**  
*Chief Administrative Officer*

**Jennie Greene, MS**  
*Director, Communications*

**Tim McDermott, MHA**  
*Executive Director, Finance and Business Operations*

**Paul Hart Miller**  
*Director, Network Operations*

**Scot Sternberg, MS**  
*Director, Quality Improvement*

**Ellen Volpe, MBA**  
*Director, Projects*

### CLINICAL DIVISIONS

**Allergy and Inflammation**

**Peter Weller, MD**  
*Division Chief*

**Brian Duckman, MHA/MBA**  
*Division Administrator*

**Cardiovascular Medicine**

**Robert Gerszten, MD**  
*Division Chief*

**John DiGiorgio, MPS-HHSA**  
*Division Administrator*

**Endocrinology, Diabetes, and Metabolism**

**Anthony Hollenberg, MD**  
*Division Chief*

**Nicholas Lord, MHA**  
*Division Administrator*

**Gastroenterology**

**J. Thomas Lamont, MD**  
*Division Chief (interim)*

**Eileen Joyce**  
*Division Administrator (outgoing)*

**Sara Montanari**  
*Division Administrator (incoming)*

**General Medicine and Primary Care**

**Mark Aronson, MD**  
*Division Chief (outgoing)*

**Eileen Reynolds, MD**  
*Division Chief (incoming)*

**Louise Mackisack, MA**  
*Division Administrator*

**Patrick Curley, MS**  
*Division Administrator*

**Gerontology**

**Lewis Lipsitz, MD**  
*Division Chief*

**Kerry Falvey**  
*Division Administrator*

**Hematology/Oncology**

**Manuel Hidalgo, MD, PhD**  
*Division Chief*

**Ellen Volpe, MBA**  
*Division Administrator (interim)*

**Infectious Diseases**

**Peter Weller, MD**  
*Division Chief*

**Nicholas Lord, MHA**  
*Division Administrator*

**Nephrology**

**Martin Pollak, MD**  
*Division Chief*

**Kerry Falvey**  
*Division Administrator*

**Pulmonary, Critical Care, and Sleep Medicine**

**J. Woodrow Weiss, MD**  
*Division Chief*

**Brian Duckman, MHA/MBA**  
*Division Administrator*

**Rheumatology**

**George Tsokos, MD**  
*Division Chief*

**Patricia Harris**  
*Division Administrator*

### RESEARCH DIVISIONS

**Clinical Informatics**

**Charles Safran, MD**  
*Division Chief*

**Clinical Nutrition**

**Bruce Bistrain, MD, PhD, MPH**  
*Division Chief*

**Experimental Medicine**

**Jerome Groopman, MD**  
*Division Chief*

**Genetics**

**Pier Paolo Pandolfi, MD, PhD**  
*Division Chief*

**Hemostasis and Thrombosis**

**Bruce Furie, MD**  
*Division Chief*

**Immunology**

**Cox Terhorst, PhD**  
*Division Chief*

**Interdisciplinary Medicine and Biotechnology**

**Vikas Sukhatme, MD, PhD**  
*Division Chief*

**Signal Transduction**

**Alex Toker, PhD**  
*Division Chief*

**Translational Research**

**Steven Freedman, MD, PhD**  
*Division Chief*

**Transplant Immunology**

**Terry Strom, MD**  
*Division Chief*

**Center for Virology and Vaccine Research**

**Dan Barouch, MD, PhD**  
*Division Chief*



# NEW DIVISION CHIEFS

Robert Gerszten, MD, and Manuel Hidalgo, MD, PhD, both started at BIDMC during the 2015-2016 academic year, selected as new division chiefs from an international pool of leaders in their fields and recruited from world-class organizations. Gerszten, Chief of the [Division of Cardiovascular Medicine](#), and Hidalgo, Chief of the [Division of Hematology/Oncology](#), now spend their days heading two of the largest clinical areas in the Department of Medicine and, indeed, all of BIDMC.

They are charged with leading the patient care, research, and educational efforts of divisions that each have a sizable faculty, busy clinical practices, robust fellowship programs, and significant National Institutes of Health funding. Both are excited about the prospects and challenges of their new roles and set out on a daily basis to raise the bar even higher.

Gerszten, an expert in translational cardiology research, starts his day practicing what he preaches. “I study metabolic and cardiovascular disease, so I try to live the healthy lifestyle I recommend to patients,” he says. Each morning, he spends half an hour exercising at the gym, eats a healthy breakfast (“a homemade smoothie”), and walks the 1.5 miles from his home in Brookline, MA, to work. The walk to work is a nice perk, he says, of his move from Massachusetts General Hospital, where he had to commute by car.

A global expert in pancreatic and solid tumor cancers, Hidalgo recently relocated to Boston from Madrid, Spain, where he was the Director of the Clinical Research Program and Vice Director of Translational Research at the Spanish National Cancer Center. Although his day starts somewhat earlier than it did in Spain, he says the overall hours are about the same. “And, no, we didn’t take a siesta mid-day,” he chuckles.

After arriving at work, Hidalgo often goes straight into meetings. He works in close

collaboration with colleagues in the Division of Hematology/Oncology, the [BIDMC Cancer Center](#) (of which the Division is an integral part), and the Dana Farber/Harvard Cancer Center. So his typical day takes him all over BIDMC’s quickly-expanding campus, the broader Longwood Area, and even off-site to member hospitals and partners like [BID-Needham](#), [BID-Plymouth](#), [Cambridge Health Alliance](#), and [Anna Jaques](#)—all of which have recently opened or expanded their cancer programs, or are in the processing of working with BIDMC to do so.

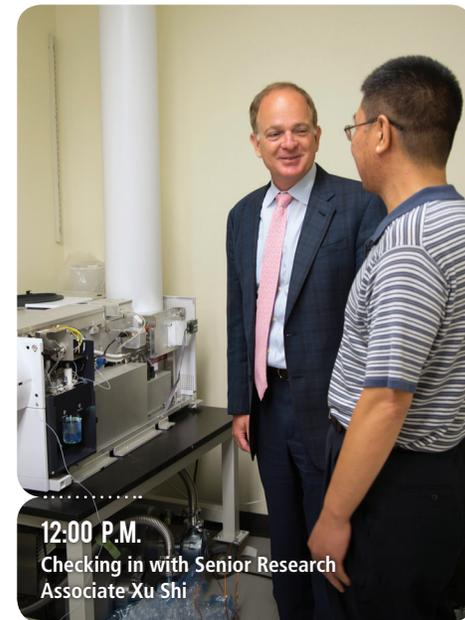
Gerszten also hits the ground running each morning. He usually starts with early-morning clinical meetings, and then he walks over to the Center for Life Sciences, a leading-edge research facility, where he checks in at his lab. He meets weekly with his research team, whose work focuses on the intersection between metabolic and cardiac disease. His new state-of-the-art lab boasts three mass spectrometry instruments to classify and quantify thousands of metabolites in the blood, and a robot that can analyze thousands of proteins. “The liquid-sampling robot assays dozens of blood samples in a day. It’s amazing,” Gerszten exclaims. Having collaborated with researchers at BIDMC for many years, he’s excited to be at the medical center because he has long known “what an exceptional place it is.”

Hidalgo was similarly drawn to BIDMC for what it already is—“a top academic medical center at Harvard with incredibly talented faculty”—and its potential to be even greater. “It’s a place where you can innovate, make a difference, and take care of people with life-threatening diseases.” And he’s been particularly impressed by the camaraderie at BIDMC. “There’s a collegial, team-oriented mindset at this hospital. People are truly eager to collaborate,” he notes.

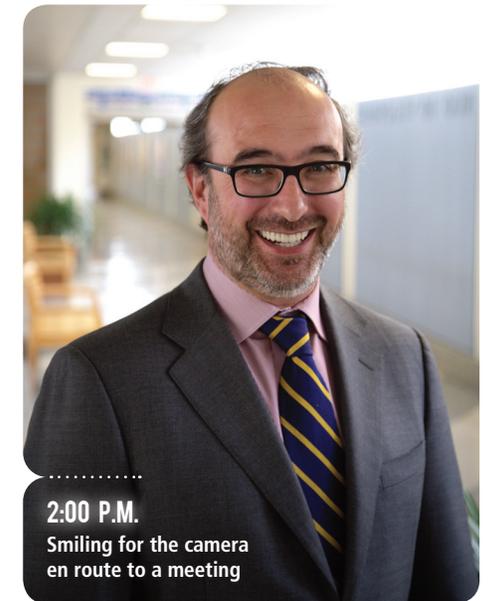
Gerszten and Hidalgo both enjoy seeing patients, which Hidalgo describes fondly as a time when “you can’t think of anything else—when you’re in the trenches, you’re doing exactly what you should be doing, and there are no distractions.” Gerszten’s clinical time includes attending in the Cardiac Critical Care Unit and on the cardiology consult service. He’s particularly enthusiastic about BIDMC’s new [Cardiac Direct Access Care Unit](#). “There are a lot of cardiology patients who are somewhere between needing to get care in two minutes at the ER and two weeks in an outpatient clinic,” he notes. “The new center will serve them—it’s an important and novel health care delivery approach.”

As new division chiefs, both men dedicate a significant portion of their day to administrative duties. Gerszten says he’s very focused on “helping to catalyze the division—taking a gem of a clinical division

(with the busiest cardiac catheterization and electrophysiology lab in the city) and helping to transform it into the academic powerhouse that it has all the tools to be.” Hidalgo, whose division is among the fastest growing Hematology/Oncology programs in the region, is particularly excited by the potential to deliver the highest level of care to an even greater number of people. “I love that BIDMC is so focused on taking good care of patients,” he says. “The ‘Human First’ approach is real.”



12:00 P.M.  
Checking in with Senior Research Associate Xu Shi



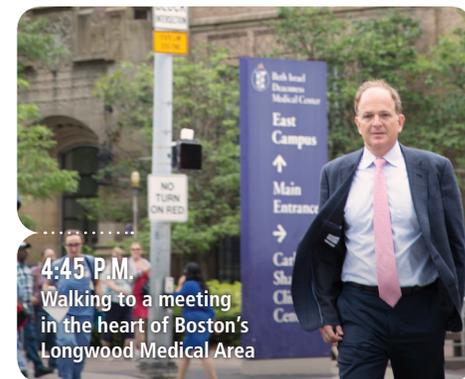
2:00 P.M.  
Smiling for the camera en route to a meeting



7:00 A.M.  
Conferring with Marybeth Dalton and Sheila Delamere in the Catheterization Lab



11:00 A.M.  
Meeting with members of his lab



4:45 P.M.  
Walking to a meeting in the heart of Boston’s Longwood Medical Area



8:30 A.M.  
Walking across campus with Will Decaneas, Administrative Director of BIDMC’s Cancer Center



11:30 A.M.  
Attending a Cancer Center conference where he is introduced

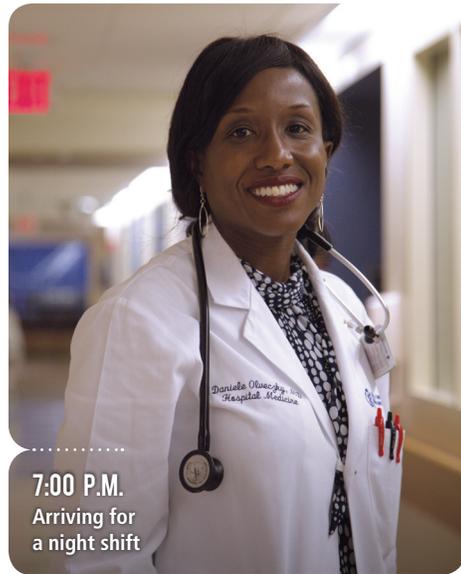


5:45 P.M.  
Catching up on email before wrapping up for the day

Daniele Ölveczky, MD, MS

# A NIGHT IN THE LIFE

Around 7am, as her colleagues stream into the hospital with coffee cups in hand, Daniele Ölveczky, MD, MS, is focused on her pager, reviewing messages from the previous 12 hours to make sure she's addressed each of them. As a "nocturnist" (a hospitalist who works at night), she receives up to 160 pages per shift. In addition to covering six floors, Ölveczky is part of the BIDMC code response team and works with specialists across the medical center. "I get pages for everything from a patient needing Tylenol to someone's heart stopping," she explains.



7:00 P.M.  
Arriving for a night shift

But the greatest portion of her time is spent admitting the new patients who arrive each night—a process she relishes: "Walking in the door to see the patient—it's like an arranged marriage," she laughs, revealing a remarkable smile. Ölveczky went to boarding school in England and finished medical school at Johns Hopkins, but she was born in France and lived most of her life in Trinidad. "I'm not even from here, but I'm always surprised by how much we have in common," she explains. Getting to know her patients is a source of great satisfaction: "Even if I'm busy, I know how many grandchildren they have." Particularly if there's bad news, she says, "I try to sit with them and witness

their suffering and losses." She adds, "Being hospitalized can be frightening, especially in the middle of the night." As Joe Li, MD, head of BIDMC's [Hospital Medicine Program](#) notes, "Daniele is an extraordinary physician and human being. With her warmth and energy, she's able to connect with people in such a special way, whether they're patients, colleagues, or trainees." It is no surprise that Ölveczky has received many awards recognizing this quality—among them, the BIDMC Hospitalist Clinician of the Year Award and Harvard Medical School's Principal Clinical Experience Outstanding Teacher Award. Grateful patients often send her cards or cookies—one even donated to BIDMC after witnessing Ölveczky interact with a fellow patient.

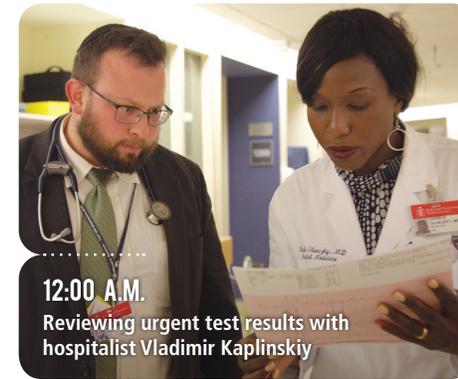
In many ways, Ölveczky reflects, her days are about "building bridges." In addition to bridging divides between patients and physicians, physicians and nurses, or night and day shifts, Ölveczky is invested in bridging cultural divides. She's a member of BIDMC's Office of Diversity and Inclusion, headed by Albert Galaburda, MD. Although she speaks candidly about racism and sexism—and is working to reduce them—



9:00 P.M.  
Checking in on patient Janet Phelps-Thomas with nurse Christine Salans

she believes in forgiving people's prejudices and notes, "We all have our own biases and it's important for us to recognize them." Galaburda marvels, "Daniele has an extraordinary ability to see the best in everyone she encounters and sometimes that means looking beyond biases that would alienate other people. She's exceptionally open to people, flaws and all."

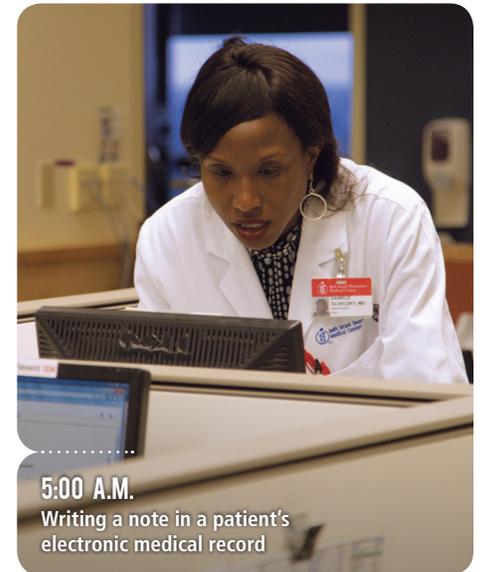
Around 4am, Ölveczky begins to plan for the morning hand-off ahead. She completes her notes in the electronic medical record and emails the team that will be taking over for her. Overall, she says, there's less paperwork at night, which is one of the reasons she likes being a nocturnist. She also loves the sunrise: "There's a great view from the top of the Reisman Building," she notes. In addition, Ölveczky's schedule enables her to have time during the day with her three young



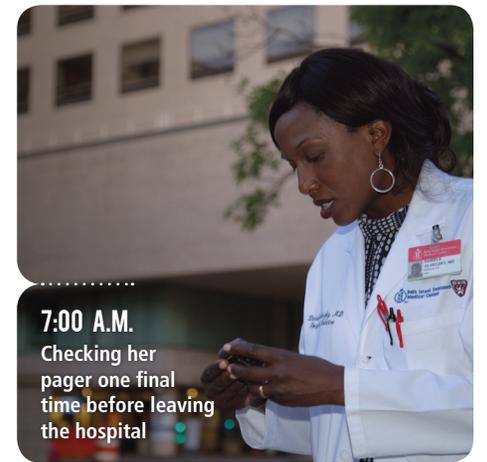
12:00 A.M.  
Reviewing urgent test results with hospitalist Vladimir Kaplinskiy

children (ages seven, five, and three) and her Hungarian neuroscientist husband. They live in Harvard housing in Cambridge, which she describes fondly as a familial melting pot of cultures and languages.

After tying up any loose ends and visiting with patients who require morning follow-up, Ölveczky looks forward to getting home. Once there, she has some strict rules for herself: She doesn't drive ("I'm just too sleepy by then!") and she goes to bed by 10am. That way, she's up in time to spend the afternoon with her children, often going swimming or to piano lessons. A passionate cook, who especially loves the Caribbean food of her childhood, she usually makes the family dinner. By 6:20pm, she hands off the kids to their father as she sets out for work—yet another bridge crossed in her day. When she arrives at the hospital around 7pm, her pager is, once again, in hand.



5:00 A.M.  
Writing a note in a patient's electronic medical record



7:00 A.M.  
Checking her pager one final time before leaving the hospital

Adolf Waller Karchmer, MD

# A COMMITTED PHYSICIAN AND MENTOR



8:30 A.M.  
Responding to emails at his desk

The office of Adolf Waller “AW” Karchmer, MD, speaks volumes about his work and his life. It is at his desk, under which hundreds of the journal *Clinical Infectious Diseases* are almost artistically arranged, that he starts each morning, reading emails from patients, colleagues, and mentees. His first priority is always patient emails, he says. “Patient care—that’s what we’re here to do. You can’t not respond to a patient’s needs.”

A professor at Harvard Medical School and former Chief of the BIDMC [Division of Infectious Diseases](#) (ID)—and prior to that, founding Chief of ID at New England Deaconess Hospital—Karchmer considers himself first and foremost a doctor. He takes pride in the relationships he has with his patients, many of whom he’s known for years. He recalls a man whom he treated in the ’80s before HIV/AIDS was well understood or treatable. Karchmer cared for him in the hospital when he was very sick and thought, “He’s not going to make it.” But the patient lived just long enough to benefit from the emerging medications. “He was right on the cusp,” Karchmer says, and in fact, the man is still Karchmer’s patient today. “I enjoy the longitudinal relationships with people whom you’re able to help through difficult times,” he

reflects. During twice-weekly ID conferences, Karchmer is often asked to share his clinical perspective with trainees and junior faculty. His longtime colleague and Infectious Diseases Division Chief, Peter Weller, MD, notes, “AW has vast clinical experience and he’s a thoughtful and patient teacher. He’s a highly respected and valuable member of the Division, the Department of Medicine, and BIDMC overall.”

Karchmer also spends much of his day advising and collaborating on research projects. Over his career, he has directed ID fellowship programs, mentored approximately 100 fellows—many of whom have gone on to head ID divisions across the country—and won multiple teaching awards, including the Infectious Diseases Society of America’s

Clinical Teacher Award and BIDMC’s S. Robert Stone Award. He’s currently working with ID fellow Alex Leahey, MD, and faculty members Chris Rowley, MD, and Mary LaSalvia, MD, on a retrospective study of endocarditis in intravenous drug users. It is a follow-up study to [work recently published in the \*American Journal of Medicine\*](#) by a former fellow and mentee, Elana Rosenthal, MD, which suggested that ID teams at BIDMC—and other medical centers—often treat the endocarditis but undertreat the underlying drug addiction. “We kind of wore our heart on our sleeves, but we know that we’re not alone and we hope people will learn from the findings,” Karchmer explains in the thoughtful manner to which he is inclined.

Karchmer is engaged in several additional retrospective studies looking, for instance, at the long-term treatment of patients with infections related to joint replacements and diabetes. “Much of the research I’m interested in these days involves looking back at the care of different groups of people and asking: Did we do as well as we could? What could we do to improve?” he reflects. Karchmer is similarly conscientious about the care he provides on a daily basis. Although he recently reduced his clinical time to a half day



11:00 A.M.  
Meeting with Chris Rowley, Alex Leahey, and Mary LaSalvia about a research project

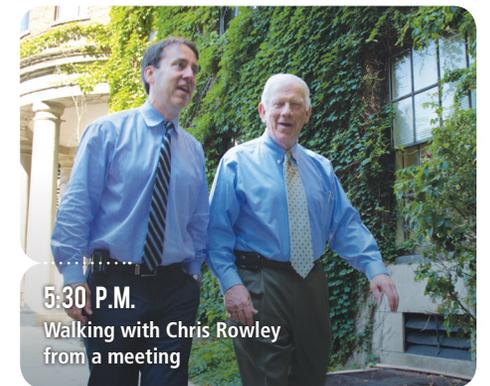
a week, he chuckles, “Nature abhors a vacuum,” and he’s happily filling the time “thinking through clinical questions and challenges that arise with his patients.”

As Chair for Alumni Relations at Harvard Medical School, his alma mater, Karchmer also meets regularly with the Alumni Relations Office Director, the Editor of *Harvard Medicine*, and the Alumni Council, which he oversees. “I see my role as trying to build stronger and lasting ties between the medical school and its alumni in ways that are truly, mutually beneficial,” he notes.

Karchmer finishes his day much as he starts it: with patients foremost on his mind. “I try to make sure that all the patient needs are taken care of. I will often call patients (hands-free, of course!) on my way home—before it gets too late to call or I get too distracted by what’s going on at home.” Judging from the framed photos filling his office walls and bookshelves, these distractions have long taken the form of children. With six children and now 18 grandchildren—along with a country house in Maine where he enjoys gathering his family—Karchmer’s life is as full as his office of over 20 years would suggest.



1:00 P.M.  
Talking with a patient during an appointment



5:30 P.M.  
Walking with Chris Rowley from a meeting

# A DAY IN THE LIFE OF A TRANSFORMATIVE PROJECT



9:00 A.M.  
Patient representatives Lindy Lurie (back) and Manny Rosa (front), responding to calls from patients and family members

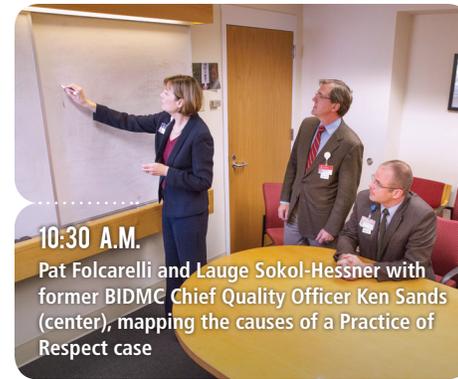
BIDMC's Patient Relations Office receives a call from a man upset about his hospital stay. A physician writes a journal article about respect in medicine. Doctors and nurses in the ICU stop what they're doing to quietly recognize the death of a patient. A BIDMC team joins a conference call with national quality improvement leaders.

Though seemingly unrelated, these occurrences are all part of BIDMC's groundbreaking initiative to ensure that patients and their families are treated with respect while in our care. This initiative has grown out of the medical center's ongoing effort to "eliminate preventable harm." In the spirit of transparency and continuous improvement, nearly a decade ago, BIDMC began to publicly report and evaluate physical harms that were deemed preventable—such as surgical site infections—with the goal of avoiding them in the future.

Building on the success of this work, leaders in the Departments of Medicine and [Health Care Quality](#) are now applying the preventable harm model to other injuries that

patients and their families may experience. "Sometimes the harm people suffer isn't just physical. They may come away from their experience feeling disrespected, even though that is not our intent," says Lauge Sokol-Hessner, MD, Associate Director of Inpatient Quality at BIDMC and a hospitalist in the Department of Medicine. "But we're innovating by addressing such harms head on and trying to prevent them," he explains.

At BIDMC, identifying these harms often begins with a phone call from patients or family members after they've left the hospital, explains Pat Folcarelli, RN, PhD, Senior Director of Patient Safety. These calls—an average of 14 per day—are handled by four



10:30 A.M.  
Pat Folcarelli and Lauge Sokol-Hessner with former BIDMC Chief Quality Officer Ken Sands (center), mapping the causes of a Practice of Respect case

patient relations representatives, who flag about 10 percent as potentially respect-related. Folcarelli meets weekly with a small team to review these cases for severity and preventability. "About 20 percent are deemed severe enough and potentially avoidable enough that we begin a thorough analysis," she says. They use a framework developed by a BIDMC steering committee that categorizes areas of potential harm, such as communication, privacy, or management of patients' possessions.

One area where particular progress has been made this year involves post-death protocols. "We were hearing from family members that deaths in the hospital weren't always handled as respectfully as they should be," Folcarelli explains. She describes the case of a woman who called BIDMC looking for information on her husband's cause of death. After getting passed from office to office and finally being told that she could not access the autopsy results without being his legal representative, she called the Patient Relations office. "She said she felt like BIDMC was hiding something from her," Folcarelli explains. "This caused unnecessary anxiety and confusion on top of the grief she was already experiencing."



1:30 P.M.  
Barbara Sarnoff Lee, Catherine Annas, and Stephanie Roche (left to right), key members of the project's strategy committee

In response to cases like this, the team has partnered with BIDMC's [Patient-Family Engagement](#) and [Palliative Care](#) Programs to better understand the emotional needs of the deceased's family members. They are now developing a single point of contact for post-mortem inquiries, from autopsy results to medical record inquiries. On any given day, multiple working groups are simultaneously addressing related issues. For example, BIDMC's [Spiritual Care](#) team has enhanced a bedside "comfort cart" for family members of patients who are actively dying. Across the Department of Medicine, clinical areas are implementing a "Pause" among staff after the death of a patient to appropriately recognize the event. And new materials on coping with loss are being developed to support surviving family and friends.

With funding from the [Gordon and Betty Moore Foundation](#), BIDMC's work has received attention this year in [The Boston Globe](#), the [New England Journal of Medicine Catalyst](#), and the [British Medical Journal of Quality and Safety](#); and Folcarelli, Sokol-Hessner, and their colleagues are often asked to speak about it at national conferences. "The exciting thing about this work is that every hospital has the infrastructure to do it,"



5:00 P.M.  
Lauge Sokol-Hessner talking with a patient about treatment options

Folcarelli notes. "They all have an ombudsman or someone who hears from patients and family members." The team hopes to inspire other health care organizations. Folcarelli reflects, "Bad things sometimes happen. We can avoid talking about them, in which case we're destined to repeat them, or we can talk about them and improve the care we deliver every day."



6:15 P.M.  
Molly Hayes, Kristin Russell, and Katie Rimer (left to right) delivering a comfort cart to a patient's family

Mary Rice, MD, MPH

# AN ENVIRONMENTAL HEALTH CHAMPION

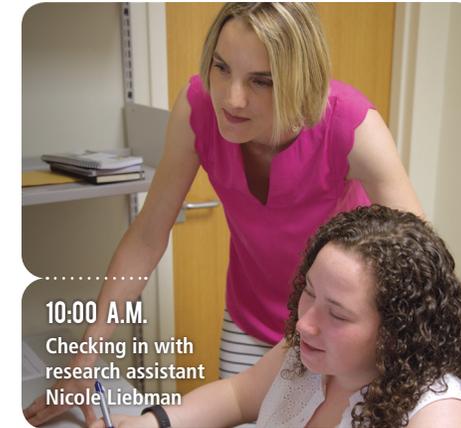
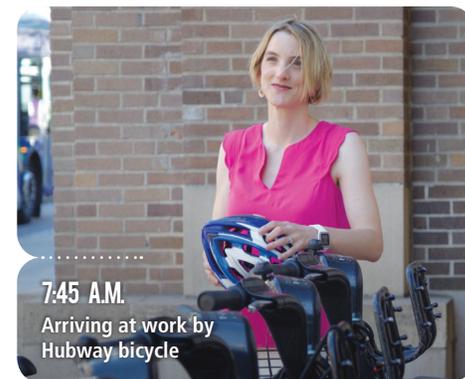
It comes as little surprise that Mary Rice, MD, MPH, has regularly been invited to Washington, DC, to testify before Congress. She's smart, articulate, and passionate, particularly about an interest she's had since she was an undergraduate in Environmental Science and Public Policy at Harvard. Rice, an Assistant Professor of Medicine in the [Division of Pulmonary, Critical Care, and Sleep Medicine](#), has become a nationally-known spokesperson on the connection between air quality and human health.

Vice Chair of the [American Thoracic Society's](#) (ATS) Environmental Health Policy Committee, Rice has a rare perspective: She knows the research on air pollution and its effects on respiratory health, and she cares for patients with chronic lung disease, who are among the most susceptible to air pollution. In addition to her research and policy work, Rice spends one day a week at Beth Israel Deaconess HealthCare—Chelsea seeing patients in an outpatient pulmonary clinic, and several weeks a year in BIDMC's Medical Intensive Care Unit and on the pulmonary consult service.

Given the various roles she plays at BIDMC and nationally, Rice's days vary widely. But most of the time, she and her husband drop off their three children (two-year-old twins and a six-year-old) at the school bus or day care, and Rice then bikes from her Charlestown home to work. During the day, she participates in conference calls with collaborators at ATS and meets with colleagues, like BIDMC sleep epidemiologist Suzanne Bertisch, MD, pulmonary physiologist Bob Banzett, PhD, and cardiovascular epidemiologist Murray Mittleman, MD, DrPH. Rice works closely

with researchers at the [Harvard T.H. Chan School of Public Health](#) (HSPH), where she is on the faculty advisory committee of the [Center for Health and the Global Environment](#). Mittleman, Rice's longtime mentor, reflects, "In addition to being extraordinarily rigorous and committed, Mary has a truly collaborative and multidisciplinary approach to all that she does. She always brings her clinical perspective to her research. It's no wonder she's so quickly becoming a nationally-recognized physician-scientist."

When she's not on service, Rice spends much of her day on research; analyzing data, writing manuscripts, and working with research teams at BIDMC and HSPH. She recently partnered with BIDMC's [Clinical Research Center](#) (CRC), a resource for junior investigators that has been funded by the National Institutes of Health (NIH) since



the '70s. Rice is working with the CRC's Administrative Director, Michelle Beck, and Mona Lauture, RN, on an innovative study in which BIDMC patients with chronic obstructive pulmonary disease (COPD) will wear portable air quality and activity monitors to track their daily environmental exposures and respiratory health.

Her research is supported by an NIH K award, an ATS Foundation award, as well as Harvard Medical School's prestigious [Eleanor and Miles Shore 50th Anniversary Fellowship](#), designed to support junior faculty, especially women, as they navigate their research careers and families. Rice was one of two Shore Fellows selected by Harvard this year. "Mary is at the stage in her career where a little support will mean a big difference in her professional trajectory and her ability to thrive. She is doing great work," notes Eileen Reynolds, MD, Medicine's Vice Chair for Education.

"It's been a particularly eventful year for national policies aimed at improving air quality and health," Rice explains. Her Congressional testimony supported stricter Environmental Protection Agency ozone

standards and new requirements for carbon emissions from power plants, both of which were enacted recently. "This is so important," she says, pointing out that the environmental health movement stemmed from pulmonary medicine, dating back to the "Great Smog of 1952" in London, during which many people became ill or died of respiratory disease. "That connection is so important and it underlies everything I do. In clinic and the ICU, you see the ways in which a person's environment affects their health," she explains. "As a provider, you need to take care of the whole patient, and sometimes, especially in the ICU, that includes their

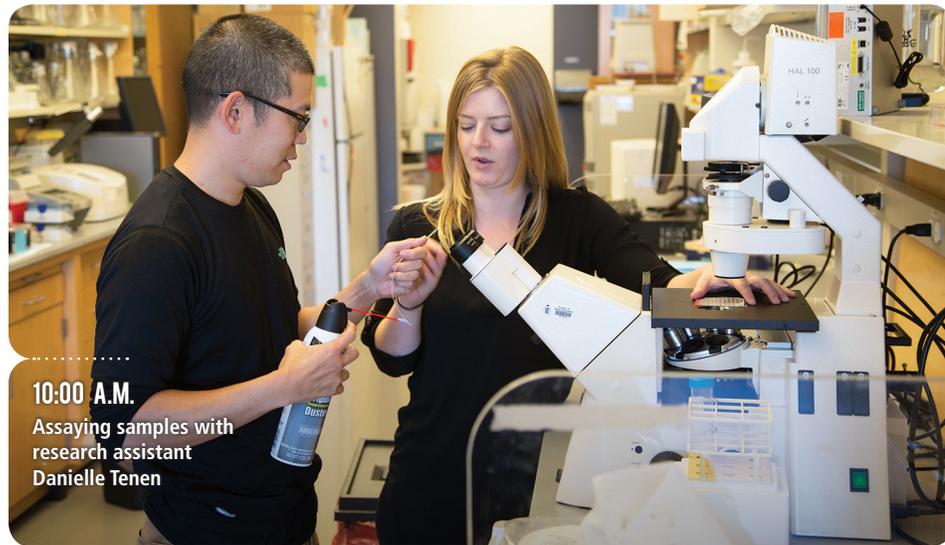
families too. It can be difficult to address environmental exposures that are beyond a patient's control, and that is the inspiration for my research."

Toward the end of Rice's day, she's often rushing out the door to get home and take care of her own family. She needs to collect her children from school and day care, "so there's usually a hard stop." Although some days run longer, she normally leaves the office by 5pm and bikes home. Her work days often end only after her children go to bed. "I tend to tie up loose ends once they're asleep," she says, "Then I get ready for the day ahead."



# AN INNOVATIVE INVESTIGATOR

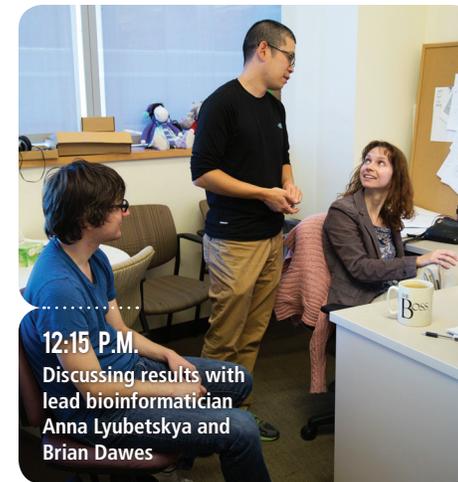
As early as 6:15 some mornings, Linus Tsai, MD, PhD, arrives at one of BIDMC's pre-operative areas. He's there to ask a patient undergoing abdominoplasty for consent to take a blood sample—and to keep some of the fat tissue they're about to have removed. "It sounds strange, but most patients say yes," says Tsai, a researcher in the [Division of Endocrinology, Diabetes, and Metabolism](#). "The tissue would otherwise be thrown away and they're usually happy to donate to science."



10:00 A.M.  
Assaying samples with research assistant Danielle Tenen

Tsai collects these samples as part of an ongoing project that studies epigenetic markers on human fat cells as potential indicators of insulin resistance. After testing the blood sample to determine the patient's insulin sensitivity and breaking down the fat sample into individual cells, Tsai works with research assistant Danielle Tenen to assay the cells' DNA and RNA to pinpoint differences in insulin-resistant patients. "Those are my long days—often until midnight," Tsai laughs. Then, the data is passed on to lead bioinformatician Anna Lyubetskya, PhD, who helps to parse, integrate, and interpret the massive amount of data.

Tsai describes himself as a translator of sorts: not only between the clinical and research realms, but also between members of his team. As he explains, he "sits between bench science and computation" literally and figuratively. His team's physical workspace is home to postdocs, lab technicians, bioinformaticians, and programmers. And Tsai often finds himself bridging the gap between his colleagues in the lab and at the computer. "I explain the numbers to the biologists and the biology to the programmers—though I'm probably pretty bad at both!" he laughs.



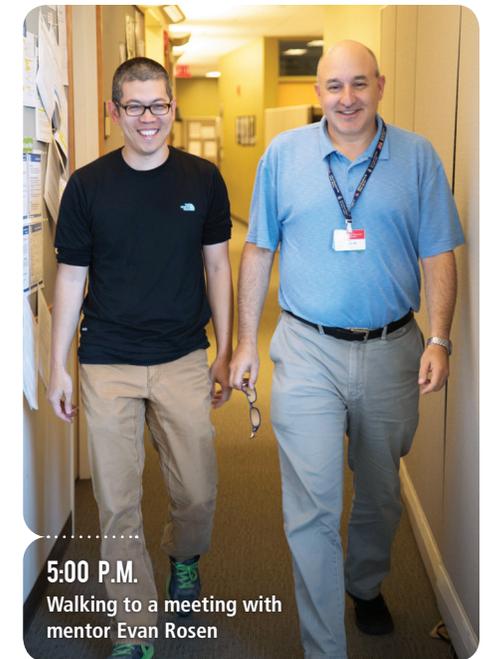
12:15 P.M.  
Discussing results with lead bioinformatician Anna Lyubetskya and Brian Dawes

But Tsai's modesty is contradicted by an impressive range of research projects and roles. In addition to his work on insulin resistance, he works frequently with Bradford Lowell, MD, PhD, another BIDMC endocrinologist, on a project aiming to define cell types in the arcuate nucleus, an area of the brain linked with appetite and obesity. Tsai also serves as co-director of the Functional Genomics and Bioinformatics Core for the [Boston Nutrition Obesity Research Center](#) (BNORC), a consortium of research facilities dedicated to facilitating and supporting cutting-edge basic and translational research in the fields of nutrition and obesity. Evan Rosen, MD, PhD, also of the Division of Endocrinology, is Tsai's co-director at the core, a close collaborator on his insulin resistance work, and a mentor since Tsai came to BIDMC as a resident nearly 10 years ago. "Linus is a remarkable and versatile investigator, approaching research questions with a particularly innovative lens," says Rosen.

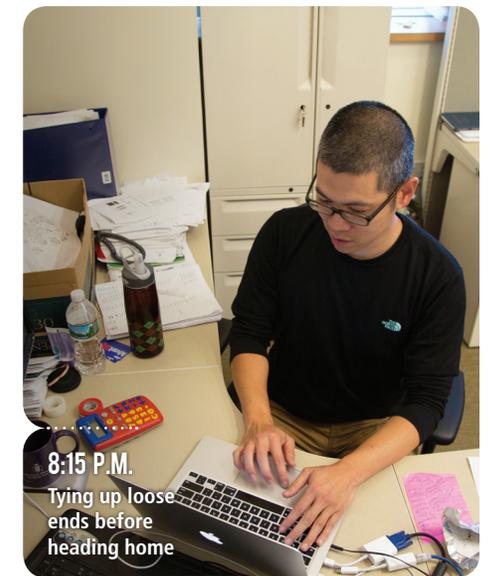


3:00 P.M.  
Checking in with postdoc John Campbell and grad student Ken Tao in the lab

Over the last decade, Tsai and his team have earned a reputation as night owls, often working late into the evening. Anthony Hollenberg, MD, Chief of the Division of Endocrinology, affectionately calls their corner of cubicles "college dorm-y"—a description that Tsai finds amusing. He admits, "There's a certain vibrancy to being able to look over your shoulder and ask a question or bounce ideas around. And we do have a snack cabinet, which is particularly handy when we're working long days." Although he's the father of teenagers, Tsai himself seems to retain the energy and enthusiasm of an undergraduate. "I like research because it's never static," he says. "Science is creative, and I've always enjoyed brainstorming and doing new things. We're always challenging ourselves here."



5:00 P.M.  
Walking to a meeting with mentor Evan Rosen



8:15 P.M.  
Tying up loose ends before heading home

Ellen Volpe, MBA

# A DEPARTMENTAL ANCHOR

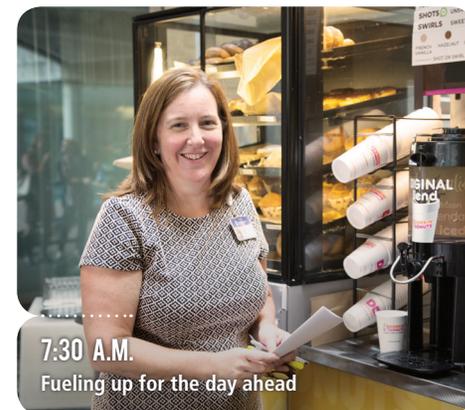
Every department needs a person like her: someone who rolls up her sleeves and knows how to get things done. Ellen Volpe, MBA, is the [Department of Medicine's Projects Director](#), a role which is every bit as all-encompassing as it sounds.

Working closely with leadership across the Department, Volpe's days are spent problem-solving. "I think of myself as the director of convoluted problems—the more complicated the better," Volpe laughs. "I like to get to the root cause of an issue, and I'm pleased to serve as a resource for my colleagues trying to accomplish a task or resolve an issue." Indeed, helping faculty and administrators across the Department and its 22 divisions is how Volpe spends most of her busy days.

After leaving her Needham, MA, home before 7am, she stops by the Dunkin' Donuts cart in the BIDMC lobby for coffee on her way to her office. She has a standing Monday morning meeting with Department Chair Mark Zeidel, MD, each week; and most days she has several meetings with the Department's Chief Administrative Officer (CAO). Sam Skura, MPH, MBA, former CAO who is now BIDMC's Senior Vice President of Ambulatory and Clinical Services, says that Volpe was his "right-hand person," noting that she has the institutional and industry knowledge, intelligence, determination, and willingness to help that make her a truly invaluable member of the Department.

On a daily basis, Volpe interfaces with a range of administrators and faculty from

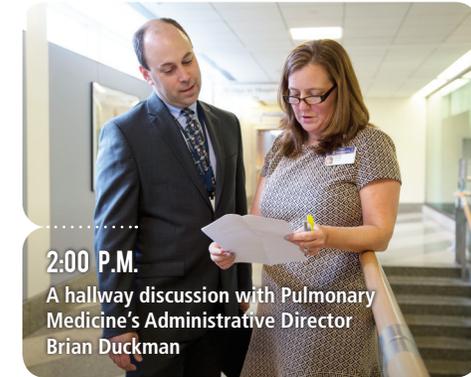
across the Department of Medicine, BIDMC, its network of members and affiliates, and Harvard Medical Faculty Physicians. One of her core responsibilities is to serve as the administrative liaison between the Department and its 11 research divisions. She is also responsible for research space in the Department, which means serving as the single departmental point of contact for BIDMC's Research and Academic Affairs team and helping divisions meet their dollar density targets. Beyond these core responsibilities, Volpe is instrumental during transitions in division leadership. Most recently, she's filled in as administrative director for the



7:30 A.M.  
Fueling up for the day ahead



10:00 A.M.  
Meeting with Department of Medicine research administrators Jennifer Sabbagh, Stephanie Wasserman, and Andi Hernandez (left to right)



2:00 P.M.  
A hallway discussion with Pulmonary Medicine's Administrative Director Brian Duckman

Divisions of [Pulmonary, Critical Care, and Sleep Medicine](#) and [Hematology/Oncology](#). She's also the "go-to" person for launching new programs, like the Hematology/Oncology practice at [Anna Jaques Cancer Center](#). This year, she worked closely with the Department's Network Operations Director, Paul Hart Miller, and Pulmonary Medicine's Administrative Director, Brian Duckman, MHA/MBA, to create an Intensivist Program at [Beth Israel Deaconess Hospital-Needham's](#) ICU, providing critically ill patients an extra level of support from a team of BIDMC intensivists. "This means that some patients can be cared for in their own community rather than sent to Boston, which can be inconvenient and costly for patients and their families," she notes.

Over the 23 years she's been at the medical center, Volpe's been recognized for her skills and drive, completing the BIDMC Sloane Fellowship, a leadership training program awarded to particularly effective administrators. "Even though I've been here for many years, this place is always changing so it never gets boring!" she says.

Volpe's attention to detail and organizational skills make her effective throughout her work day at BIDMC and in her hours outside of the



3:30 P.M.  
Discussing departmental finances with Medicine's Paul Hart Miller, Mark Zeidel, and Sam Skura (left to right)

office. She is actively involved in the Parent Association at her children's school, volunteers as a Girl Scout leader, holds a leadership position at her church, and serves as a stage manager at her daughter's ballet school.

Regarding her role in the Department of Medicine, she reflects: "Health care is a special industry. Even if I'm not directly interacting with patients, I never forget that my work with faculty and colleagues has an impact on the care that patients receive at BIDMC."



5:15 P.M.  
On the phone with a colleague while wrapping up for the day

# A DAY IN THE LIFE OF A PRIMARY CARE TEAM

On a recent Friday morning, over a dozen doctors, nurses, medical assistants, nurse care managers, and community resource specialists gathered in a BIDMC conference room. After a volunteer took attendance, Jim Heckman, MD, a newly-minted primary care doctor, asked the group to share any “wins” from the week.

A nurse on the team recapped a success she was proud of: One of the patients cared for by several team members in the room had been struggling to schedule an important appointment. After a 20-minute phone conversation with the patient, the nurse better understood the challenges the patient faced and together they booked the appointment. The group nodded in appreciation of the nurse’s efforts and the “win” on behalf of the patient.

The individuals at this meeting comprise a multidisciplinary team at [Healthcare Associates](#) (HCA) that works together on a daily basis to help manage the care of patients with complex medical needs. Communication and collective problem solving are at the core of the team-based approach that HCA, BIDMC’s primary care practice, has implemented in recent years. A Level 3 [Patient Centered Medical Home](#)—an accreditation of

the National Committee for Quality Assurance—with over 40,000 patients, HCA has been a proud participant in Harvard Medical School’s [Center for Primary Care’s Academic Innovations Collaborative](#). Marc Cohen, MD, an Assistant Medical Director at HCA, leads team-building efforts across the practice, a project he started as a 2014-2015



8:45 A.M.  
Lead medical assistant Kristy Moradel, Maureen Mamet, intern Susan McIlvaine, and Jim Heckman (left to right) discussing a patient’s care

[Linde Family Fellow in Primary Care Leadership](#). “Our goal is for patients to see their providers as part of a team and for us, as providers, to see ourselves as part of a team where each of us is practicing to the top of our skill set,” Cohen explains.

On this particular team—in HCA’s South Suite—Heckman serves as the physician lead. He notes, “As a doctor, I may have a clear sense of someone’s medical issues but a very foggy idea about all the other factors that may be impacting his or her health. This is where the team approach is so helpful to me and, more importantly, to patients.” He often turns to Maureen Mamet, RN, one of HCA’s three nurse care managers who serve as the primary point person for patients. Regularly in contact with patients and family members, Mamet often understands the complex web of barriers like insurance, language, literacy, transportation, and family dynamics that can influence health and wellbeing. Several times a day Heckman, Mamet, and other team members confer about particular patients—a process that’s been made easier by the recent relocation of nursing stations into more centrally-located and accessible areas. “We used to be in different physical spaces, but now our common areas are much more



11:45 A.M.  
Daisy Macasaquit and Michelle Fiorenzo responding to patient calls in a newly centralized nursing station

conducive to information sharing and team building,” explains Heckman.

Another benefit of the team approach, Mamet says, is that every member feels like they have a voice and can make a meaningful contribution using their particular skill set. “People in various roles feel like they can speak up, even if it means challenging the physicians,” she notes. At the recent team meeting, in fact, a nurse raised an issue related to certain paperwork required from physicians. She spoke confidently—with a playful finger wagging at some of the doctors in the room—and they responded with warm expressions of “mea culpa.” Heckman is widely recognized for his efforts to establish this type of collaborative environment, and attendance and engagement at team meetings have grown significantly since their launch. In recognition of his leadership, Heckman has received a 2016-2017 Linde Family



1:30 P.M.  
An HCA South Suite team meeting

Fellowship, through which he plans to further examine the roles of non-physician team members, including the use of scribes within primary care.

HCA patients benefit from this team approach in many ways. Cohen tells the story of a man who had struggled for years trying to stop smoking. When he came into HCA after quitting the habit, everyone—from the front desk staff to the medical assistants and physicians—were congratulating him. “He knew he had a whole team of people who cared about him and were cheering for him, and we all felt great for being part of his success,” Cohen says.

For patients who may feel nervous questioning a physician or speaking candidly about certain issues, the team approach offers several health professionals with whom to communicate. On any given day in HCA’s

South Suite, patients can be seen talking with front desk staff about getting the flu vaccine, with a medical assistant about selecting a [Health Care Proxy](#), with a nurse care manager about how best to make a lifestyle change, or with a physician about their diagnoses—just a sampling of the interactions that reflect the burgeoning team spirit within HCA.



5:45 P.M.  
Marc Cohen and Jim Heckman debriefing after a meeting

Jacalyn Rosenblatt, MD

# A PASSIONATE TRANSLATIONAL RESEARCHER

Among the bustling corridors of BIDMC's East Campus lies an office suite labeled "Cancer Clinical Trials." This is the hub of some of the medical center's most robust clinical trial programs. The Department of Medicine offers 421 different investigational treatments for a wide range of cancer types.

Many of these clinical trials were developed by pioneering Department of Medicine researchers. Among them is Jacalyn Rosenblatt, MD, who directs the clinical research program in multiple myeloma and, alongside David Avigan, MD, Chief of the section of [Hematological Malignancies and Bone Marrow Transplantation](#), co-directs a program in cellular immunotherapy. Rosenblatt, an Associate Professor of Medicine at Harvard Medical School and a member of the [Division of Hematology/Oncology](#) and the [Center for Virology and Vaccine Research](#), is as hopeful as she is committed. "This is a very exciting time to be in hematology/oncology research," she says. "Novel treatments continue to be developed, and outcomes for our patients are tangibly improving."

Reflecting the dual nature of her role as physician-scientist, Rosenblatt splits her time between seeing patients and working in the

laboratory. Two days a week, she sees patients in the Hematological Malignancy/Bone Marrow Transplant Clinic in the Shapiro Clinical Center. She also spends 8-10 weeks per year working on BIDMC's inpatient service. "I was drawn to work in the field of hematological malignancies because it allows me to care for people and their families at a critical and very vulnerable point in their lives," she says. "I was drawn to cancer research because, as a care provider, I was faced with the limitations of our current treatments. Caring for patients whose cancer was not controlled made me want to play a role in improving outcomes for future patients."



8:30 A.M.  
Reviewing data with research colleague Dina Stroopinsky



10:00 A.M.  
Working in the lab with research assistant Leandra Cole



12:30 P.M.  
Walking between meetings outside the Clinical Cancer Center



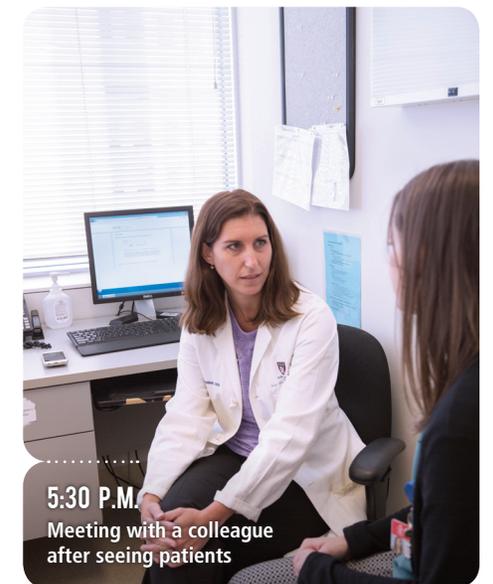
2:30 P.M.  
Arriving at the Hematology/Bone Marrow Transplant Clinic

Rosenblatt's work is highly collaborative, and she spends much of her research time in correspondence and contact with colleagues. She often works in collaboration with Avigan, whom she credits as a mentor. They have [developed a personalized cancer vaccine](#) in which a patient's own cancer cells are isolated and fused with powerful immune system teachers, known as dendritic cells. The vaccine works by presenting a broad array of tumor markers to these dendritic cells, which in turn activate the immune system against cancer cells. Rosenblatt, Avigan, and colleagues have used this vaccine in a series of clinical trials involving patients with multiple myeloma and acute leukemia. Based on their promising results, the team was chosen by the National Institutes of Health cooperative oncology group to lead a national study of the fusion vaccine in myeloma patients. The trial is a first-of-its-kind collaboration of leading cancer centers across the United States to study a cancer vaccine.

Rosenblatt also partners with Dina Stroopinsky, PhD, of BIDMC's [Cancer Research Institute](#). Rosenblatt and Stroopinsky co-authored a paper based

on [research identifying a protein called MUC1 as a marker on leukemia-initiating cells](#). Rosenblatt and her colleagues also work closely with Donald Kufe, MD, leader of the [Experimental Therapeutics Program](#) at Dana-Farber Cancer Institute. "Our partnership with Dana-Farber is a huge asset," says Rosenblatt. "We work with several of their faculty very closely, and collaborate both in the laboratory and in conducting clinical trials."

Between taking care of patients, teaching residents and fellows, and collaborating with colleagues on various research efforts, Rosenblatt has the opportunity to interact with many different people—a part of her day that she particularly enjoys. "I only wish I had more time to spend with some of them individually!" she says. A Canadian transplant, Rosenblatt has been at BIDMC since 2001 and reflects, "I stayed because I value the collaborative environment; there are so many areas of research going on here and in Boston." As an investigator at an academic medical center, she has also been able to pursue her dual passions in clinical care and research under the same roof. "I really enjoy taking care of patients, and I value the



5:30 P.M.  
Meeting with a colleague after seeing patients

connections and relationships that are made with patients and their families. I have always been drawn to sciences and enjoy the pursuit of novel therapies," she says. "Translational research really encompasses both."

Susan Mitchell, MD, MPH

# A PIONEER IN GERIATRICS

Massachusetts is widely recognized for the high quality of health care available to seniors. This is thanks to organizations like Harvard-affiliated [Hebrew SeniorLife \(HSL\)](#), an institution that provides exceptional care to thousands of elders across its nine sites.

HSL's main facility in Roslindale, MA, is home to many of these elders, and it also houses one of the largest gerontological research facilities in a clinical setting in the US: the [Institute for Aging Research \(IFAR\)](#). For many years HSL, IFAR, and BIDMC's Department of Medicine have enjoyed a close and dynamic partnership. All HSL faculty members are members of our [Gerontology Division](#); the Chief of the BIDMC Division of Gerontology, Lewis Lipsitz, MD, is also the Director of IFAR; and HSL is a main training site for the [Harvard Geriatric Fellowship](#) led by BIDMC.

At the heart of this collaboration is Susan Mitchell, MD, MPH, a Professor of Medicine at Harvard Medical School, a member of BIDMC's Division of Gerontology, and the Director of [Palliative Care Research at IFAR](#). Since joining the BIDMC/HSL faculty in 2000, Mitchell has significantly furthered our

understanding of how to provide high-quality end-of-life care to older people with serious illness, particularly advanced dementia. She has been the Principal Investigator on many National Institutes of Health (NIH) funded research projects and has authored over 150 articles on related topics. Most notably, she was lead author on [a seminal paper in the \*New England Journal of Medicine\*](#) that rigorously described the clinical course of advanced dementia for the first time.

Mitchell estimates that about 75 percent of her time is spent on research and mentoring young investigators. She reserves the bulk of the morning for writing grants and papers, and most of the afternoon for meetings with collaborators and mentees, including BIDMC's Dan Kramer, MD, MPH, and Corey Fehnel, MD, MPH, both of whom are learning to conduct palliative care research under Mitchell's tutelage. These meetings



are her favorite part of the day: "I enjoy the teamwork—it's the personal part of the research process," she says. With HSL as her home base, Mitchell works with collaborators on projects at Harvard and beyond. Among her current undertakings is an NIH-funded, randomized clinical trial aimed at improving advance care planning in patients with dementia. The trial, involving over 60 nursing facilities across Boston, is testing whether showing a short video about advance care planning to families can help them better make treatment choices for loved ones with advanced dementia. "Projects like this benefit hugely from the BIDMC and HSL partnership.



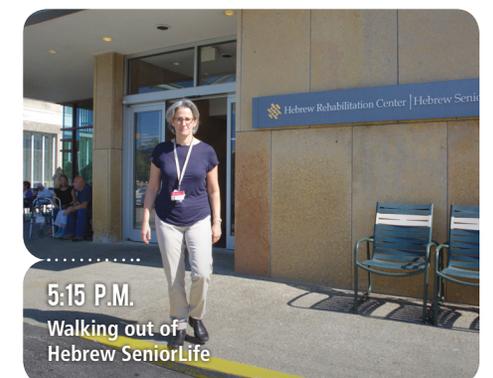
Community nursing homes are busy places and a challenging setting to conduct research. The fact that these facilities are willing to partner with us is largely thanks to the combined reputation and research experience that HSL, BIDMC, and Harvard Medical School bring to the table," she notes.

Because HSL is both a care facility and a research center, Mitchell can see first-hand how her work impacts people's lives. "We're making a difference in how care is ultimately delivered, and we can see that right here at HSL," she explains. Mitchell also enjoys the interaction with residents that her HSL office affords, and she often makes the rounds accompanied by her five-year-old black labradoodle, Piper, a certified Canine Good Citizen, beloved by staff and residents alike. Mitchell also looks forward to the three weeks per year that she spends on geriatric



service at BIDMC, where she sees patients and mentors residents and fellows. "Gerontology isn't always seen as the most glamorous specialty, so I try to be a role model to show that you can have an impactful and exciting career as a researcher and clinician," she says.

Mitchell also aims to impart a strong sense of work-life balance to her mentees. "I have been successful at work in part because I have always managed to keep that balance," she says. She makes sure that she has time for herself outside of work, spending evenings with her partner, Mary Beth Hamel, MD, MPH, of BIDMC's [Healthcare Associates](#) and an editor at the *New England Journal of Medicine*, and keeping up with hobbies like gardening and reading. "Having cared for many older people and having been very close to my own grandmothers, I am well aware of what ultimately matters,"



Mitchell says. "Fulfilling work and accomplishment are of course important, but attending to key relationships and mental and physical health are also critical to being happy and productive."

# A DAY IN THE LIFE OF AN INPATIENT TEAM

As a Harvard teaching hospital, BIDMC is home to just over 160 Internal Medicine house officers each year. Based on the general medicine floors, intensive care units, and other specialty services, the medical housestaff are involved in the care of hundreds of inpatients each day along with countless outpatients in clinics across the BIDMC network. When they are not seeing patients, they are attending educational conferences, teaching medical students, completing research and quality improvement projects, and often lending their peers a helping hand.



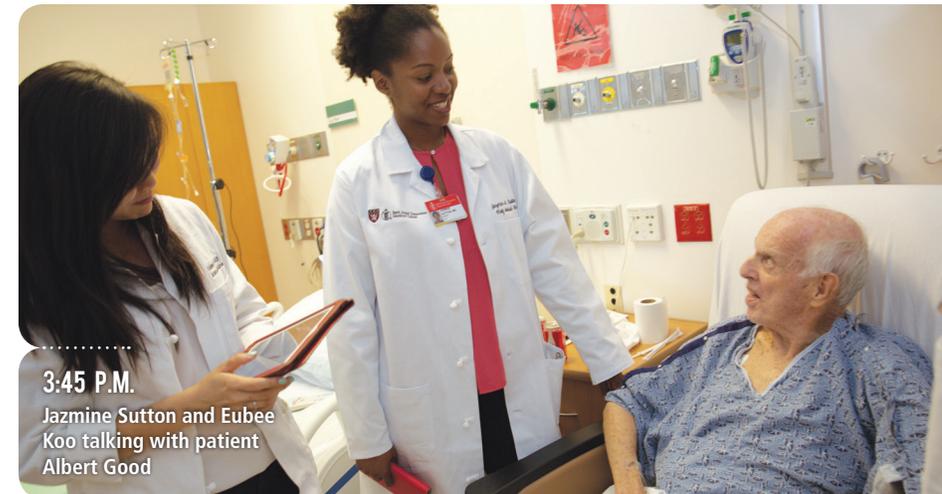
**7:00 A.M.**  
Leah Taffel and Eubee Koo during the morning “hand off” from the night team

While working on inpatient units, residents and interns are paired up with attending physicians. Interns Eubee Koo, MD, and Jonathan Li, MD, resident Leah Taffel, MD, and attending physician Jazmine Sutton, MD, spent the better part of a month this year working as an inpatient team.

For Koo, Li, and Taffel, the work day begins at 7am when the overnight team hands off patient updates to the day shift. Then, says Li, “The first hour for interns is spent pre-rounding—checking vital signs and lab results, talking with patients, and performing brief physical exams.” Interns start forming

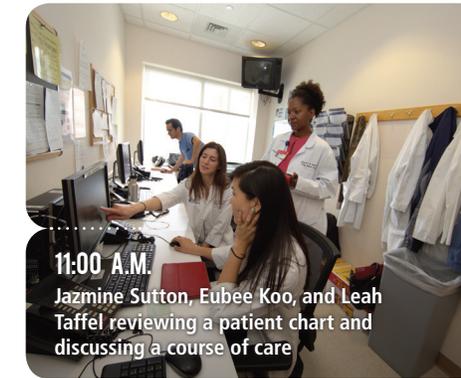
a daily plan for their patients, which they present to their team when they round—at around 8am, when Sutton’s work day begins. Sutton, a former BIDMC resident and 2016-2017 Chief Medical Resident, appreciates working with housestaff: “Seeing them learn, progress, and grow as clinicians is very rewarding,” she says.

“We think a lot about how to design teams and offer the best education to our housestaff, providing clinical support while also encouraging independence,” explains [Residency Program](#) Director Chris Smith, MD. The team structure fosters “graduated autonomy”: Attending physicians supervise, residents guide and teach, and interns learn to lead discussions about patients. Taffel, a member of the [Clinician-Educator Track](#) (the first of its kind in the country), says that this thoughtful approach was one of the reasons she chose BIDMC for residency. The program also offers tracks in [primary care](#), [global health](#), and [research](#), while emphasizing [quality improvement](#) for all residents. Having done clinical research during residency, Sutton notes, “These tracks are one of the many ways that the program supports our professional development.”



**3:45 P.M.**  
Jazmine Sutton and Eubee Koo talking with patient Albert Good

After rounding until noon, the team’s day is peppered with filling orders, checking lab results, writing notes, and patient follow-up. But, Taffel says, “The most rewarding part of my day is when I can sit and talk to the people we’re caring for.” The rest of the team agrees. Li reflects, “It’s very satisfying when you can get to know your patients and take good care of them.” The team’s commitment to providing compassionate, high-quality care is no accident. As Smith explains,



**11:00 A.M.**  
Jazmine Sutton, Eubee Koo, and Leah Taffel reviewing a patient chart and discussing a course of care



**2:00 P.M.**  
Jonathan Li conferring with a specialist by phone

collegiality and a healthy work/life balance through flex days, coverage for fellowship interviews, peer support, and group activities.

The team’s day ends with sign-out in the housestaff lounge—recently upgraded through the wellness program—where they update the doctors working the night shift. Koo says it’s an enjoyable part of her day because it means reconnecting with colleagues who have been occupied all day, sometimes decompressing over a game of pool or table tennis. Despite the busy days and long hours, each member of this team is passionate about their patients and being at BIDMC. “It’s such a warm place to do residency,” says Taffel. “In my mind, we’re all one team, and we do everything we can to help the day run smoothly and make sure our patients get the best care possible.”



**6:00 P.M.**  
Leah Taffel relaxing in the housestaff lounge at the end of a busy day

# MEDICAL EDUCATION

## RESIDENCY LEADERSHIP

**Residency Program Director**  
C. Christopher Smith, MD

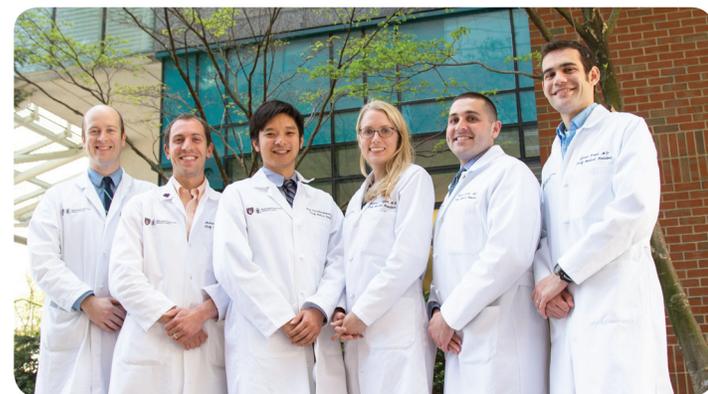
**Primary Care Program Director**  
Howard Libman, MD

**Associate Program Directors**  
Jonathan Crocker, MD  
Grace Huang, MD  
Jakob McSparron, MD  
Kenneth Mukamal, MD, MPH  
Benjamin Schlechter, MD  
Anjala Tess, MD  
Anita Vanka, MD  
Julius Yang, MD, PhD

**Education Manager**  
Ruth Colman

## CHIEF MEDICAL RESIDENTS

Jason Freed, MD  
Andrew Hale, MD  
Daniel Ricotta, MD  
Roy Sriwattanakom, MD  
Jessica Taylor, MD  
Mark Tuttle, MD



2015-2016 Chief Medical Residents

## INTERNS

Ilana Abeles, MD, PhD  
Abdulhamied Al Faddagh, MBChB  
Jonathan Amatruda, MD  
David Arboleda, MD  
Eric Ardolino, MD  
Abraham Aron, MD  
Matthew Basciotta, MD  
Molly Brett, MD  
Luke Brindamour, MD  
Elizabeth Chao, MD, PhD  
Horacio Chiong-Rivero, MD, PhD  
Jeffrey Cohen, MD  
Elise Coulson, MD  
Leela Davies, MD, PhD  
Joseph Deters, MD  
Jonathan Feld, MD  
Bess Flashner, MD  
Brisas Flores, MD  
Juliet Gibson, MD  
Jennifer Girard, MD  
Natalie Goldstein, MD  
Konstantin Grigoryan, MD  
Rim Halaby, MD  
Steven He, MD  
Ivana Jankovic, MD  
Yoav Karpenshif, MD

Michelle Kelsey, MD  
Amanda Klinger, MD  
Eubee Koo, MD  
Nicole LaHood, MD  
Adam Lamm, MD  
Kathleen Leahy, MD, MPH  
Dawn Lei, MD  
Jonathan Li, MD  
Joy Liu, MD  
Julie Lucas, MD  
Chelsea Ma, MD  
Patrick Mulvaney, MD  
Scott Navarrett, MD

In 2016, Medicine's Continuing Medical Education offerings brought in over \$465,000.

Gregory Olson, MD  
Pankaj Pal, MD, PhD  
Anupama Parameswaran, MD  
Heather Pemberton, MD  
Nathan Raines, MD  
Shana Rakowsky, MD  
Zachary Ranta, MD  
Hannah Recht, MD  
Maria Rosasco, MD  
Emily Rosenberg, MD  
Mohana Roy, MD  
Alexander Sherman, MD  
Dylan Sherry, MA, MD  
Jason Shpilsky, MD  
Bilal Siddiqui, MD  
Elizabeth Sienkiewicz, MD  
Nicole Skinner, MD, PhD  
Gretel Terrero, MD  
Erin Truitt, MD, MPH  
John Vassaur III, MD  
Priyanka Vedak, MD  
Daniel Wann, MD  
Gil Weintraub, MD  
Shu Yang, MD

## JUNIOR RESIDENTS

Sean Bhalla, MD  
Benjamin Bier, MD  
Dhruvatej Boddupalli, MD, MBA  
Priya Borker, MD  
Zachary Borman, MD  
Ohn Chow, MD, PhD  
Amanda Cooke, MD  
Joshua Davis, MD  
Michael DeSimone, MD  
Anjan Devaraj, MD  
Ellen Dinerman, MD  
Trenton Elliott, MD  
Stephanie Feldman, MD  
Danielle Fine, MD  
Gabriel Foster, MD  
John Mark Gubatan, MD  
Philip Kemp, MD  
Allison Kimball, MD  
Ritesh Kotecha, MD  
Kristina Krecko, MD  
Anne Levenson, MD  
Josephine Li, MD  
Jennifer Manne, MD  
Charlene Mantia, MD  
Emmanuel Mensah, MD, MBA  
Michael Mi, MD  
David Miller, MD  
Donya Mohebali, MD  
Robert Montgomery, MD  
Adam Nadelson, MD  
James Parris, MD, PhD  
Ritika Parris, MD  
Camille Petri, MD  
Paawan Punjabi, MD  
Guilly Rebagay, MD  
Jane Roberts, MD, PhD  
Gregory Salber, MD  
Lucy Schulson, MD, MPH  
Olivia Severdija, MD  
Sarah Shannahan, MD  
Robert Stretch, MD  
Paige Szymanowski, MD, MPH  
Leah Taffel, MD  
Hailu Tilahun, MD

## IMPROVING MEDICAL STUDENT EDUCATION: A NEW HARVARD CURRICULUM

BIDMC recently adopted a new curriculum for Harvard medical students aimed at better integrating clinical practice with basic science courses. The curriculum, called [Pathways](#), was developed by interdisciplinary education leadership at Harvard Medical School (HMS) and has been rolled out across the Harvard teaching hospitals. A particularly exciting element of the curriculum is the year-long "Practice of Medicine" (POM) intensive clinical skills course, in which students learn interviewing and communications skills, physical diagnoses, and reflective practice. The course, which meets all day once a week for 12 months, comprises nearly a third of the first-year HMS curriculum. Along with multiple observed bedside patient encounters, small group peer to peer practice, and discussion groups, students participate in a longitudinal primary care clinic experience where they see patients under the direction of a preceptor.

At BIDMC, the POM course is made possible by 80 faculty preceptors and more than 700 patient volunteers. Ronald Silvestri, MD, is the BIDMC Site Director, assisted by Associate Site Directors Daniel Sullivan, MD, and Anita Vanka, MD, and Associate Directors Susan Frankl, MD, and Amy Ship, MD.

Adam Tosh, MD  
Alexa Triot, MD  
Patrick Tyler, MD  
Wenxin Xu, MD  
Lauren Yang, MD  
Ching Zhu, MD



Sheeja Thomas, MD, MPH

Lauren Glassmoyer, MD  
Hani Hazani, MD  
John Ho, MD  
Grace Hsieh, MD  
Lily Huang, MD  
Katherine Joyce, MD  
Joshua Kiss, MD  
Tristan Kooistra, MD  
Whitney Kress, MD  
Carol Lai, MD  
David Lam, MD  
Kristi Larned, MD  
Andrew Locke, MD  
Ian McCoy, MD  
Susan McGirr, MD  
Jessica Meisner, MD  
Shimontini Mitra, MBChB  
Elliot Naidus, MD  
Sunil Nair, MD, MBA  
Asongu Ncho, MD  
Erin Nuzzo, MD

There were **3,480 applicants** for 60 internal medicine intern spots at BIDMC this year.

Patrick Reeves, MD  
Alaina Ritter, MD  
Megan Ritter, MD  
Alexandra Rose, MD  
Erika Runge, MD  
Elizabeth Targan, MD  
Alok Tewari, MD, PhD  
Sheeja Thomas, MD, MPH  
Javier Villafuerte Galvez, MD  
Christopher Whitcomb, MD  
Manida Wungjiranirun, MD

## MEDICINE-DERMATOLOGY RESIDENTS

Daniel Bach, MD  
Anar Mikailov, MD  
Philip Song, MD

## UNDERGRADUATE EDUCATION LEADERSHIP

**Core I Clerkship**  
Amy Weinstein, MD, MPH  
Course Director

John Danziger, MD  
Course Co-Director

**Core II Clerkship**  
Pamela Hartzband, MD  
Course Director

Alexander Carbo, MD  
Course Director

**Practice of Medicine Clerkship**  
Ronald Silvestri, MD  
Site Director

Daniel Sullivan, MD  
Associate Site Director

Anita Vanka, MD  
Associate Site Director

**Primary Care Clerkship**  
Susan Frankl, MD  
Site Director

## FELLOWSHIP PROGRAM DIRECTORS

**Cardiovascular Medicine**  
Joseph Kannam, MD

**Electrophysiology**  
Alfred Buxton, MD

**Interventional Cardiology**  
Jeffrey Popma, MD

**Non-Invasive Cardiology**  
Warren Manning, MD

**Clinical Informatics**  
Charles Safran, MD



Colin Phillips, MD, and Hailu Tilahun, MD

The Department's faculty garnered total financial support of over **\$10 million** from Harvard Medical School and BIDMC in 2016.

- Endocrinology, Diabetes, and Metabolism**  
Evan Rosen, MD, PhD (Outgoing)  
Alan Malabanan, MD (Incoming)
- Gastroenterology**  
Ciaran Kelley, MD
- Advanced Endoscopy**  
Ram Chuttani, MD

- Celiac Disease**  
Daniel Leffler, MD
- Hepatology**  
Michelle Lai, MD
- Inflammatory Bowel Disease**  
Alan Moss, MD
- Motility**  
Anthony Lembo, MD
- Transplant Hepatology**  
Nezam Afdhal, MD
- General Medicine and Primary Care**  
Christina Wee, MD, MPH  
Gloria Yeh, MD, MPH
- Gerontology**  
Sarah Berry, MD, MPH

## GLOBAL HEALTH FELLOWSHIP BOLSTERS BIDMC-BOTSWANA PROGRAM

Now in its second year, the BIDMC [Global Health Fellowship in Medicine](#) is an integral part of the [BIDMC-Botswana Program](#), a partnership between BIDMC and [Scottish Livingstone Hospital](#) (SLH) in Botswana. The program, which has hosted more than 120 US medical residents from more than 15 residency programs, now gives fellows valuable global health delivery skills and experience. In Botswana, the fellowship has a dual purpose: championing medical care at SLH through education of SLH medical trainees and staff; and teaching US residents to address global health disparities by strengthening their skills in resource-challenged settings. Fellowship

- Global Health**  
Jonathan Crocker, MD
- Hematology/Oncology**  
Reed Drews, MD
- Hospice and Palliative Medicine**  
Mary Buss, MD, MPH
- Infectious Diseases**  
Wendy Stead, MD
- Christopher Rowley, MD  
Associate Director
- Nephrology**  
Stewart Lecker, MD
- Pulmonary and Critical Care**  
Peter Clardy, MD (Outgoing)  
Jakob McSparron, MD  
Associate Director (Incoming)  
Asha Anandaiah, MD  
BIDMC Site Director (Incoming)

- Sleep Medicine**  
Robert Thomas, MD
- Rheumatology**  
Robert Shmerling, MD

### CLINICAL FELLOWS

- Cardiovascular Medicine**  
Paul Bailey, MD  
Gordon Burke, MD  
Brett Carroll, MD  
Daniel Cruz, MD  
Marcin Dobaczewski, MD  
Jason Matos, MD  
Ian McCormick, MD  
Colin Phillips, MD  
Alefiyah Rajabali, MD

Director Jonathan Crocker, MD, says, "The fellows are exemplary clinicians—passionate and compassionate, enthusiastic, and humble. They leave this program with a robust ability to persevere and innovate in providing care for the underserved." The fellowship emphasizes clinical stewardship, medical education, and quality improvement over the year, during which fellows spend six months as clinician-educators at SLH and six months as hospitalists at BIDMC. To date, the fellowship has supported five clinical fellows and will welcome four more in the 2017-2018 academic year.



Jason Matos, MD

- Jeremy Robbins, MD  
Khanjan Shah, MD  
Ravi Sharma, MD  
Jakub Sroubek, MD, PhD  
Jordan Strom, MD  
Jill Whelan, MD  
Sylvia Yang, MD
- Cardiology - Electrophysiology**  
Yaw Adjei-Poku, MD  
Anuj Basil, MD  
Barry Bui, MD  
Fernando Contreras Valdes, MD  
Haisam Ismail, MD  
Guy Kulbak, MD  
Daniel Steinhaus, MD

- Cardiology - Interventional**  
Ali Andalib, MD, MSc  
Ankur Kalra, MD, FACP  
Abdul Moiz Hafiz, MD

The Department of Medicine trains more than **140 clinical fellows** a year.

- Marie-France Poulin, MD  
Ronnie Ramadan, MD  
Hector Tamez Aguilar, MD, MPH

- Cardiology - Non-Invasive**  
Shweta Motiwala, MD  
Gene Quinn, MD, MS  
Sudip Saha, MD  
Aferdita Spahillari, MD

- Clinical Informatics**  
Eugene Kim, MD  
Frank Pandolfe, MD  
Jorge Rodriguez, MD  
John Torous, MD

- Endocrinology, Diabetes, and Metabolism**  
Amanda Eliot, MD  
Natasha Kasid, MD  
Holly Kilim, MD  
Roeland Middelbeek, MD  
Alexandra Migdal, MD  
Christopher Mulla, MD  
Jeena Sandeep, MD  
Catherine Tang, MD

- Gastroenterology**  
Mona Akbari, MD, MPH  
Suzanne Chan, MD, PhD  
Jonah Cohen, MD  
Ghideon Ezaz, MD  
David Fudman, MD  
Katharine Germansky, MD

- Robert Gianotti, MD  
Zhenghui Gordon Jiang, MD, PhD  
Laurie Grossberg, MD  
Douglas Grunwald, MD  
Darshan Kothari, MD  
Anna Juncadella, MD

- Gastroenterology - Advanced Endoscopy**  
Ioannis Anastasiou, MD  
Vijay Bapat, MD  
Kiran Timmappa Bidari, MD  
Meir Mizrahi, MD

- Gastroenterology - Celiac Disease**  
Dharmesh Kaswala, MD  
Satya Kurada, MD  
Gopal Veeraraghavan, MD, MPH  
Abhijeet Yadav, MD

- Gastroenterology - Hepatology**  
Abdulmajeed Albarrak, MD  
David Einstein, MD  
James Marcus, MD

- Gastroenterology - Motility**  
Mohammed Zakari, MD

- Gastroenterology - Transplant Hepatology**  
Elliot Tapper, MD

- General Medicine and Primary Care**  
Sara Chacko, MA, MPH, PhD  
Brian Halbert, MD, MPH

- Janet Ho, MD  
Selma Holden, MD, MPH  
Machiko Inoue, MD  
Nina Shinday, PhD

- Gerontology**  
Julia Siegel Breton, MD  
Rajkiran Khattra, MD  
Alexandra Nothern, MD  
Laura Perry Fernandez, MD  
Lindy Romanovsky, MB, BCH, BAO  
Randi Rothbaum, DO, MPH  
Mousumi Sircar, MD

- Global Health**  
Colleen Kershaw, MD  
Saikiran Kilaru, MD  
Margaret Williams, MD

- Hematology/Oncology**  
Bruno Bockorny, MD  
Elizabeth Brem, MD  
David Einstein, MD  
Xin Gao, MD  
Joseph Grossman, MD  
Benjamin Izar, MD, PhD  
Rebecca Karp, MD  
Xiuning Le, MD  
Mary Linton Peters, MD  
Aparna Mani, MD, PhD  
David Miller, MD, PhD  
Jason Moran, MD  
Myrna Nahas, MD  
Sol Schulman, MD, PhD  
Meghan Shea, MD

- Infectious Diseases**  
Spyridon Chalkias, MD  
P. Alex Leahey, MD  
Preeti Mehrotra, MD  
Ruvandhi Nathavitharana, MD, MPH  
Lovisa Olafsdottir, MD  
Nitipong Permpalung, MD  
Alison Rapoport, MD  
Francisco Salgueiro, MD  
Gregory Schrank, MD  
Pratibha Seshadri, MD  
Conor Stack, MD  
Liza Valdivia, MD

- Nephrology**  
Zubia Alam, MD  
David DeWolfe, MD  
Neetika Garg, MD  
Ljubomir Ilic, MD  
Lee Leeaphorn, MD  
Matthew Lynch, MD



Kristi Larned, MD

- Kenneth Ralto, MD  
Joseph Tremaglio, MD  
Raman Vinod, MD  
Vaughan Wascho, MD

### [Pulmonary, Critical Care and Sleep Medicine](#)

- George Alba, MD  
Jehan Alladina, MD  
Elias Baedorf Kassiss, MD  
Laura Brenner, MD  
Joshua Davis, MD  
Amy Dickey, MD  
Michael Feldman, MD, PhD  
Anica Law, MD  
Sean Levy, MD  
Ari Moskowitz, MD  
Laura Myers, MD  
Alexander Rabin, MD  
Rod Rahimi, MD, PhD  
Christopher Richards, MD  
Morgan Soffler, MD  
Andrew Syinn, MD  
Alison Witkin, MD

### [Rheumatology](#)

- Gelareh Atefi, MD  
Irina Gavanescu-Stockton, MD, PhD  
Jonathan Hausmann, MD  
Isaac Kasper, MD  
Anita Laloo, MD  
Kristie Smith, MD

### [Sleep Medicine](#)

- Stacey Gunn, MD  
Michael Mohan, MD  
Sreelatha Naik, MD

# HONORS AND ACCOLADES

Every year, members of the Department of Medicine receive numerous local, national, and international awards for their outstanding work. This is a sampling of the accolades bestowed upon faculty from across our divisions in the 2015-2016 academic year.

## TEACHING AWARDS

### Abdulhamied Al Faddagh, MD, and Jennifer Manne-Goehler, MD

Outstanding Resident-Fellow Teaching Award, from the Center for Education and the third-year Harvard Medical Students in the Principal Clinical Experience course

### Tomer Barak, MD

Oregon Health and Science University (OHSU) Chief Residents' Award, in honor of his role teaching OHSU residents at Scottish Livingstone Hospital in Botswana

### Daniel Barker, MD

Preceptor of the Year Award, chosen by the Internal Medicine housestaff

### Kenneth Bauer, MD

Stephen H. Robinson Memorial Teaching Award, for Excellence in Teaching in Hematology/Oncology at BIDMC, from the Division of Hematology/Oncology



### Molly Brett, MD, and Stephanie Feldman, MD

Elmer Hinton Award, from the Internal Medicine Residency Program, for outstanding physician-patient relations; intern and junior recipients, respectively

### Avraham Cooper, MD

Lowell McGee Award, chosen by Internal Medicine housestaff for contributions to educating fellow residents and interns



### Roger Davis, ScD

A. Clifford Barger Award for Excellence in Mentoring, from Harvard Medical School

### Susan Frankl, MD

Excellence in Teaching Award, from the Affiliated Physicians Group

### Monica Fung, MD

Resident as Teacher Award, from Harvard Medical School students who rotate on medicine clerkships at BIDMC

### Penelope Greenstein, MD

Teaching Award for Non-Medical Specialties, chosen by the BIDMC Chief Medical Residents



### Rahul Ganatra, MD, and Joshua Kiss, MD

Resident Inductees of the BIDMC Academy of Medical Educators, chosen by Academy members

### Leslie Gurrisi, RN, and Paula Wahl, RN

Nursing Excellence Award, from the Internal Medicine housestaff

### James Hennessey, MD

Award for Excellence in Tutoring, from Harvard Medical School

### Melanie Hoenig, MD, and Jeremy Richards, MD

Best Pre-Clinical Instructor, from the Harvard Medical School Class of 2016

### Anna Juncadella, MD

Fellow Teaching Award, from the Internal Medicine housestaff

### Joshua Kiss, MD

Steven E. Weinberger Award, for selfless contributions to the residency program

### Joshua Kiss, MD, and Alexandra Rose, MD

Resident and Fellow Teaching Award, from the Harvard Medical School Class of 2016



### Whitney Kress, MD

Jeffrey Silver Ambulatory Care Award, from the Internal Medicine Residency Program for exceptional patient care and commitment to excellence through teaching

### Susan McGirr, MD

Stoneman Center Quality and Safety Award, given to a resident whose work has improved care at BIDMC



### Jakob McSparron, MD

Herrman Blumgart Award, from the Internal Medicine Residency Program, for contributions to housestaff education and development

Off-Service Teaching Award, from the Emergency Medicine Residency Program

### Vaishali Moulton, MD, PhD

Medical Student Preceptorship Award, from the Rheumatology Research Foundation

### Samir Parikh, MD

Gordon J. Strewler, MD, Faculty Mentorship Award, from the Internal Medicine housestaff



### Jennifer Potter, MD

Excellence in Ambulatory Student Teaching in Primary Care Medicine, from the Department of Medicine

### Simon Robson, MD, PhD

Excellence in Ambulatory Student Teaching in Subspecialty Medicine, from the Department of Medicine

### Shivani Sahni, PhD

Certificate of Excellence in Tutoring, from Harvard Medical School

### C. Christopher Smith, MD

Robert C. Moellering, Jr., Teaching Award, chosen by the Internal Medicine Chief Medical Residents

### Robert Stanton, MD

Special Faculty Prize for Sustained Excellence in Teaching, from Harvard Medical School

### Elizabeth Targan, MD

Katherine Swan Ginsburg Award for Humanism in Medicine, Resident Award, from the Internal Medicine housestaff

### Nancy Torres-Finerty, MD

Hospital Medicine Clinician of the Year Award, from the Hospital Medicine Program

### Gil Weintraub, MD

Medical Intern Award, chosen by the nursing staff for exceptional collaboration

### Julius Yang, MD, PhD

Katherine Swan Ginsburg Award for Humanism in Medicine, Faculty Award, from the Internal Medicine housestaff

Hospital Medicine Teacher of the Year Award, from the Hospital Medicine Program

### Lauren Yang, MD, and Shu Yang, MD

James Tullis Award, from the Internal Medicine Residency Program, for enthusiasm and intellectual growth; junior and intern recipients, respectively

## SELECTED NOTABLE AWARDS

### Mark Andermann, PhD

McKnight Scholar Award, from the McKnight Endowment Fund for Neuroscience

### Adam Cheifetz, MD

Humanitarian of the Year, from the New England Chapter of the Crohn's and Colitis Foundation of America

### Bruce Furie, MD, and Barbara Furie, PhD

E. Donnell Thomas Lectureship and Prize, from the American Society of Hematology

### Ary Goldberger, MD

2016 Laufman-Greatbatch Award (co-recipient), from the Foundation of the Association for the Advancement of Medical Instrumentation (AAMI)

### Kelly Graham, MD

BIDMC Department of Medicine Shore Fellowship, from the Eleanor and Miles Shore 50th Anniversary Fellowship Program for Scholars in Medicine

### Anthony Hollenberg, MD

Rosalind Pitt-Rivers Lectureship Award, from the Endocrine Society

### Sharon Inouye, MD, MPH

M. Powell Lawton Award, from the Gerontological Society of America and the Yale School of Public Health



### Barbara Kahn, MD

Banting Medal for Outstanding Scientific Achievement, from the American Diabetes Association

### Ciaran Kelly, MD

Appointed Editor-in-Chief of *Current Opinion in Gastroenterology*, and Associate Editor of *Gastroenterology*

### Maria Koulmanda, PhD

Elected President of the Cell Transplant and Regenerative Medicine Society

### Kenneth Mayer, MD

Ward Cates Spirit Award, from the HIV Prevention Trials Network

### Susan Mitchell, MD, MPH

David H. Solomon Award, from the UCLA Multicampus Program in Geriatric Medicine and Gerontology

### Duane Pinto, MD, MPH

2016 Coeur d'Or Award, from Kalra Hospital in New Delhi, India, and the World Heart Federation

### Mary Rice, MD, MPH

David Bates Award, from the American Thoracic Society

Harvard Medical School Shore Fellowship, from the Eleanor and Miles Shore 50th Anniversary Fellowship Program for Scholars in Medicine

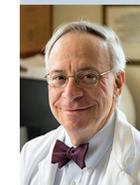
### Charles Safran, MD

Leadership Award, from the American Medical Informatics Association



### George Tsokos, MD

Carol-Nachman Prize in Rheumatology, from the city of Weisbaden, Germany



### Mark Zeidel, MD

Robert G. Narins Award, from the American Society of Nephrology

# A YEAR IN THE LIFE: DEPARTMENT OF MEDICINE PATIENT CARE

## A GROWING NETWORK



After achieving greater inpatient growth than any other system in Massachusetts in 2015, the BID system continued to expand dramatically in 2016, increasing inpatient discharges by 4.7%.

## 15,000 HOSPITALIST PHYSICIAN SHIFTS

In addition to BIDMC's main Boston location, our hospitalists care for patients in [Milton](#), [Needham](#), and [Plymouth](#), staffing approximately 15,000 physician shifts a year across these four sites.

## 119,000 HOSPITAL MEDICINE PATIENT ENCOUNTERS

Across the BIDMC member hospital network, there were over 119,000 hospital medicine patient encounters in 2016.

## CLINICAL VOLUME

### Department of Medicine Clinical Volume at BIDMC's Boston Hub

Clinical revenue	\$67,060,440
Patient days in hospital	100,784
Inpatient discharges	16,161
Observation discharges	4,397
Work RVUs	974,343
Outpatient visits	274,319
Endoscopic procedures	28,359
Cardiac catheterizations	4,766
Patients in BIDMC's Boston-based Healthcare Associates primary care practice	41,000

## PATIENT EXPERIENCE

### COMPASSIONATE CARE & PATIENT SATISFACTION



BIDMC was rated #1 in compassionate care and #1 in patient satisfaction as compared to other hospitals patients recently used.

## 93% PATIENT RECOMMENDATION RATE

Nearly 93% of patients seen in a Department of Medicine practice in 2016 say they would definitely recommend it to friends or family. Medicine ranks better than 79% of other academic medical centers on this question.



Hannah Recht, MD, and Elizabeth Targan, MD, with patient Katja Davidoff



Community Health Workers at Bowdoin Street Health Center: Maria Pinto, Noemia Monteiro-Do Canto, Nicollette Echevarria, and Susan Young (left to right)

## BOWDOIN STREET HEALTH CENTER EXPANDS COMMUNITY PROGRAMS

[Bowdoin Street Health Center](#), which is licensed through BIDMC, received generous support this year to further expand its wellness initiatives. Building on nearly 100 years of philanthropic involvement at BIDMC, the Casty family donated \$290,000 to the Dorchester-based community health center. During a visit, Ronald Casty and his daughter, Nicole Casty Vignati, were

impressed by the new wellness programming at Bowdoin Street. The holistic, preventive approach to care struck a chord with Vignati, who has worked as a teacher in Boston public schools and has seen the impact that poor mental and physical health can have on families. The family's gift provides seed funding for important pilot programs, such as further integrating social workers into primary care teams. In addition, Bowdoin Street received funding through the [Massachusetts Executive Office of Health and Human Services](#) to support its innovative Community Health Worker program. With this funding, the health center has built upon its previous experience with community health workers to better engage and promote healthy behaviors among its highest risk patients.

## 110,000+ RECEIVED CARE

Each year, over 110,000 people receive care at BIDMC's six licensed or affiliated community health centers.

## GENEROUS FUNDING SUPPORTS PATIENT-PROVIDER COMMUNICATION

This year, four major philanthropic organizations—the [Robert Wood Johnson Foundation](#), the [Gordon and Betty Moore Foundation](#), the [Peterson Center on Healthcare](#), and the [Cambia Health Foundation](#)—gave more than \$10 million in combined grant funding to support the national expansion and evaluation of [OpenNotes](#). Co-founded by Tom Delbanco, MD, and Jan Walker, RN, MBA, and led by new Executive Director Cait Desroches, DrPH, OpenNotes aims to bring more transparency to the patient-provider relationship by making easy access to providers' notes the standard of care for all patients. Having spread from its initial pilot sites, including BIDMC, OpenNotes is now available to more than 11 million people across the country. In addition to substantial foundation funding, in 2016 OpenNotes also received generous backing from the Keane Family, who created a \$3.3 million Harvard Medical School Professorship in Patient Engagement to support OpenNotes and help to ensure that BIDMC remains a leader in health care innovation.

## \$73,500,000 RAISED

BIDMC raised \$73.5 million in 2016, a 10.5% increase over 2015. This includes support for the Department of Medicine and affiliated programs.

# 2016 RESEARCH FUNDING

Division	Funding Source	Direct Award	Indirect Award
Allergy and Inflammation	Federal	\$272,084	\$136,981
	Non-Federal	\$176,645	\$4,581
Cardiovascular Medicine	Federal	\$4,750,330	\$2,196,966
	Non-Federal	\$8,410,130	\$1,466,315
Clinical Informatics	Federal	\$417,610	\$66,037
	Non-Federal	\$1,747	—
Clinical Nutrition	Federal	—	—
	Non-Federal	\$32,485	—
Endocrinology, Diabetes, and Metabolism	Federal	\$5,304,254	\$2,905,288
	Non-Federal	\$4,207,219	\$976,962
Experimental Medicine	Federal	\$965,860	\$460,868
	Non-Federal	\$1,011,023	\$111,196
Gastroenterology	Federal	\$2,441,754	\$1,481,155
	Non-Federal	\$3,372,873	\$1,023,415
General Medicine and Primary Care	Federal	\$3,612,845	\$1,182,619
	Non-Federal	\$4,945,535	\$402,325
Genetics	Federal	\$3,280,549	\$1,905,070
	Non-Federal	\$4,001,785	\$202,592
Gerontology	Federal	\$139,982	\$8,657
	Non-Federal	\$483,061	\$66,836
Gerontology/Hebrew SeniorLife	Federal	\$6,734,560	\$2,416,370
	Non-Federal	\$1,264,533	\$77,349
Hematology/Oncology	Federal	\$9,257,246	\$4,207,472
	Non-Federal	\$9,651,767	\$1,414,497
Hemostasis and Thrombosis	Federal	\$1,980,931	\$1,272,499
	Non-Federal	\$326,157	\$77,061
Immunology	Federal	\$815,339	\$313,746
	Non-Federal	\$51,203	—
Infectious Diseases	Federal	\$1,021,105	\$450,704
	Non-Federal	\$376,346	\$39,455
Interdisciplinary Medicine and Biotechnology	Federal	\$1,182,063	\$490,049
	Non-Federal	\$2,114,907	\$344,383
Nephrology	Federal	\$3,763,600	\$1,944,662
	Non-Federal	\$3,993,769	\$301,669
Pulmonary, Critical Care, and Sleep Medicine	Federal	\$838,742	\$311,565
	Non-Federal	\$671,615	\$15,250
Rheumatology	Federal	\$2,027,222	\$1,245,519
	Non-Federal	\$717,827	\$25,378
Signal Transduction	Federal	\$300,580	\$130,361
	Non-Federal	\$282,610	\$75,429
Translational Research	Federal	\$3,826,363	—
	Non-Federal	\$35,298	\$2,186
Transplant Immunology	Federal	\$438,329	\$524,664
	Non-Federal	\$126,038	\$14,135
Virology and Vaccine Research	Federal	\$24,086,303	\$3,285,240
	Non-Federal	\$16,827,031	\$2,711,714
	Total Federal	\$77,457,651	\$26,936,493
	Total Non-Federal	\$63,081,601	\$9,352,727
	<b>GRAND TOTAL</b>	<b>\$140,539,252</b>	<b>\$36,289,220</b>

TOTAL RESEARCH FUNDING  
\$176,828,472

## SELECTED PUBLICATIONS

The following publications highlight just some of the scholarly work conducted in the Department during the 2015-2016 academic year.

### ALLERGY AND INFLAMMATION

Akuthota P, Weller PF. [Spectrum of eosinophilic end-organ manifestations](#). *Immunol Allergy Clin North Am* 2015; 35:403-11.

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### CARDIOVASCULAR MEDICINE

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## THE SMITH CENTER: EXPANDING CARDIOVASCULAR RESEARCH AT BIDMC

BIDMC launched the [Richard A. and Susan F. Smith Center for Outcomes Research in Cardiology](#) this year. The Center brings together clinicians and researchers to examine today's most pressing challenges in cardiovascular care, including clinical effectiveness, cost, quality, ethics, and public policy. Supported by a multimillion-dollar gift from Richard A. and the late Susan F. Smith, the Center uses rigorous scientific methods to evaluate and transform the delivery of care for cardiovascular conditions. Robert W. Yeh, MD, MSc, MBA, a national leader in cardiovascular outcomes research and an interventional cardiologist specializing in complex coronary interventions, serves as Director. Through clinical trials and data analysis, the Smith Center researchers assess clinical practices, therapies, and devices used to treat the full range of cardiovascular conditions. As Yeh explains, "The engagement of physician-scientists in this new center will inform the clinical care offered by BIDMC's [CardioVascular Institute](#) and allow our patients to benefit quickly from new insights."



Robert Yeh, MD, MSc, MBA, Smith Center Director

## SELECTED PUBLICATIONS

### CENTER FOR VIROLOGY AND VACCINE RESEARCH

Abbink P, Larocca RA, De La Barrera RA, Bricault CA, Moseley ET, Boyd M, Kirilova M, Li Z, Ng'ang'a D, Nanayakkara O, Nityanandam R, Mercado NB, Borducchi EN, Agarwal A, Brinkman AL, Cabral C, Chandrashekar A, Giglio PB, Jetton D, Jimenez J, Lee BC, Mojta S, Molloy K, Shetty M, Neubauer GH, Stephenson KE, Peron JP, Zanutto PM, Misamore J, Finneyfrock B, Lewis MG, Alter G, Modjarrad K, Jarman RG, Eckels KH, Michael NL, Thomas SJ, Barouch DH. [Protective efficacy of multiple vaccine platforms against Zika virus challenge in rhesus monkeys.](#) *Science* 2016; in press.

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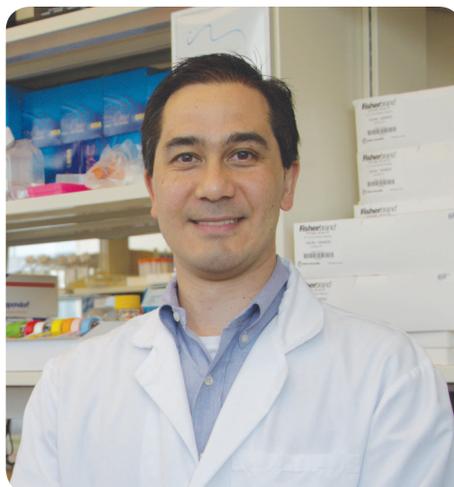
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### CLINICAL INFORMATICS

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Crotty BH, Walker J, Lpstiz L, O'Brien J, Fischer S, Slack WV, Safran C. [Information sharing preferences of older patients and their families.](#) *JAMA Intern Med* 2015; 175:1492-7.



### A YEAR IN THE LIFE OF DAN BAROUCHE, MD, PHD

It's been a big year for Dan Barouch, MD, PhD, Director of the [Center for Virology and Vaccine Research](#) at BIDMC. The National Institutes of Health [awarded BIDMC \\$42 million](#)—the largest grant in BIDMC's history—to support a five-year research initiative to advance the treatment and prevention of HIV/AIDS. Under the leadership of Barouch and Louis Picker, MD, of Oregon Health and Science University, a consortium of researchers from across the country will explore the mechanisms behind promising new HIV vaccine candidates and potential treatment strategies. Additionally, Barouch has received more than \$25 million from the [Bill & Melinda Gates Foundation](#) to support his ongoing HIV/AIDS research, published this year in [Science](#), [Nature](#), and [Cell](#).

Barouch also made headlines this year for his ground-breaking work on the Zika virus. Just five months after Zika was declared a global health emergency, he and colleagues at Walter Reed Army Institute of Research and the University of São Paulo in Brazil released findings on the development of vaccines to prevent infection. As was published in [Science](#) and [Nature](#) and widely reported in the media, several different vaccines provided complete protection against Zika virus exposure in both mice and monkeys.

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## BEYOND THE GUIDELINES

The Department of Medicine is proud to partner with the *Annals of Internal Medicine* on "Beyond the Guidelines," which is now in its second year. These six Medical Grand Rounds per year focus on a patient for whom the optimal course of care is unclear, and feature a discussion between two experts about how best to apply a clinical guideline to a particular patient's care. A manuscript is published in the *Annals of Internal Medicine* following its presentation at Grand Rounds. One of the "Beyond the Guidelines" installments presented and [published this year](#), pictured here, was a discussion between Ateev Mehrotra, MD, MPH, and James Heffernan, MD, MPH, on the pros and cons of regular health examinations. Eileen Reynolds, MD, and Howard Libman, MD, also participated in the session, serving as assistant editor and moderator, respectively.



A special "Beyond the Guidelines" session at Medical Grand Rounds

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### GENERAL MEDICINE AND PRIMARY CARE

Herzig SJ, Rothberg MB, Guess JR, Stevens JP, Marshall J, Gurwitz JP, Marcantonio ER. [Antipsychotic use in hospitalized patients: rates, indications, and predictors.](#) *J Am Geriatr Soc* 2016; 64:299-305.

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### INTERDISCIPLINARY MEDICINE AND BIOTECHNOLOGY

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## SELECTED PUBLICATIONS



Department of Medicine physicians learning a procedure at BIDMC's Shapiro Institute Simulation Center

### ENSURING PATIENT SAFETY THROUGH PROCEDURAL TRAINING

Procedures performed at the bedside are an essential part of patient care. However, they are associated with risks that can cause harm to patients. To better understand how physicians are taught to perform bedside procedures, Grace Huang, MD, Jakob McSparron, MD, Christopher Smith, MD, Lori Newman, MEd, Gerald Smetana, MD, and colleagues conducted a systematic review of the biomedical literature to identify articles pertaining to procedural training. After screening almost 10,000 articles, they identified 161 papers of relevance. They found that simulation (using plastic models of body parts) was the most effective method for teaching procedures. Furthermore, emphasizing mastery of a procedure before completing training was also effective. These results, [published this year in \*BMJ Quality & Safety\*](#), provide a roadmap for programs, like BIDMC's, that aim to teach their physicians to perform procedures with the highest regard for patient safety.

### QUALITY IMPROVEMENT

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Ary Goldberger, MD  
Junichi Hanai, MD, PhD  
Zaheed Husain, PhD  
Towia Libermann, PhD  
Chung-Kang Peng, PhD  
Pankaj Seth, PhD  
Vikas Sukhatme, MD, PhD  
Griffin Weber, MD, PhD  
Albert Chih-Chieh Yang, MD, PhD

### Immunology

Gongxian Liao, PhD  
Cox Terhorst, PhD  
Ninghai Wang, MD, PhD

### Infectious Diseases

Mary Albrecht, MD  
Carolyn Alonso, MD  
Rachel Baden, MD  
Clyde Crumpacker, MD  
George Eliopoulos, MD  
David Fessler, MD  
Howard Gold, MD  
Camilla Graham, MD, MPH

Adolf Karchmer, MD  
Doug Krakower, MD  
Mary LaSalvia, MD, MPH  
Kenneth Mayer, MD  
Anne Nicholson-Weller, MD  
Simi Padival, MD  
Lori Panther, MD, MPH  
Nira Pollock, MD, PhD  
Chris Rowley, MD  
Roger Shapiro, MD, MPH  
Graham Snyder, MD  
Wendy Stead, MD  
Sabrina Tan, MD  
Peter Weller, MD  
Robin Wigmore, MD  
Sharon Wright, MD  
David Yassa, MD  
Rebecca Zash, MD

### Nephrology

Seth Alper, MD, PhD  
Robert Brown, MD  
Francesca Cardarelli, MD  
Robert Cohen, MD  
John Daziger, MD  
John D'Elia, MD  
Bradley Denker, MD  
David Friedman, MD  
Warren Hill, PhD  
Melanie Hoenig, MD  
Antoine Kaldany, MD  
Eliyahu Khankin, MD  
S. Ananth Karumanchi, MD  
Stewart Lecker, MD, PhD  
Katherine Lynch, MD  
Bryce MacIver, PhD

C. John Mathai, PhD  
Samir Parikh, MD  
Martha Pavlakis, MD  
Martin Pollak, MD  
Ali Poyan Mehr, MD  
Sylvia Rosas, MD  
Burton Rose, MD  
Johannes Schlondorff, MD, PhD  
Robert Stanton, MD  
Theodore Steinman, MD  
Isaac Stillman, MD  
Terry Strom, MD  
Vikas Sukhatme, MD, PhD  
Jeffrey William, MD  
Mark Williams, MD  
Wei-qun Yu, MD, PhD  
Kambiz Zandi-Nejad, MD  
Mark Zeidel, MD

### Pulmonary, Critical Care, and Sleep Medicine

Anjali Ahn, MD  
Praveen Akuthota, MD  
Amit Anand, MD  
Asha Anandaiah, MD  
Robert Banzett, PhD  
Douglas Beach, MD, MPH  
Katherine Berg, MD  
Suzanne Bertisch, MD, MPH  
Leo Celi, MD, MS, MPH  
Jacqueline Chang, MD  
Peter Clardy, MD  
Michael Donnino, MD  
Katherine Dudley, MD  
Erik Folch, MD  
Norma Gerard, PhD  
Geoffrey Gilmartin, MD  
Robert Hallowell, MD  
Margaret Hayes, MD  
Eric Heckman, MD  
Douglas Hsu, MD  
Henry Koziel, MD  
Barbara LeVarge, MD  
Adnan Majid, MD  
Jakob McSparron, MD  
Carl O'Donnell, ScD, MPH  
Michael Parker, MD  
Sanjay Patel, MD  
Melanie Pogach, MD

Susan Redline, MD, MPH  
Mary Rice, MD, MPH  
Elisabeth Riviello, MD, MPH  
David Roberts, MD  
Laura Rock, MD  
Richard Schwartzstein, MD  
Ronald Silvestri, MD  
Jennifer Stevens, MD, MS  
Amy Sullivan, EdD  
Souvenir Tachado, MD  
Robert Thomas, MD  
J. Woodrow Weiss, MD  
Joseph Zibrak, MD

### Rheumatology

Ingrid Avalos, MD  
Fadi Badlissi, MD  
Arturo Diaz, MD  
Lisa Fitzgerald, MD  
Vasileios Kytтарыs, MD  
Vaishali Moulton, MD, PhD  
Jennifer Nashel, MD  
Ziv Paz, MD  
Paul Romain, MD  
Robert Shmerling, MD  
George Stojan, MD  
Francine Ton-Nghiem, MD, MMSc  
George Tsokos, MD

### Signal Transduction

John Asara, PhD  
Stephen Soltoff, PhD  
Alex Tokor, PhD

### Translational Research

Steven Freedman, MD, PhD  
Anna Johansson, PhD  
Camilia Martin, MD, MS

### Transplant Immunology

Keiichi Enjyoji, PhD  
Zhigang Fan, MD, PhD  
Tahereh Ghaziani, MD  
Effi Kokkotou, MD, PhD  
Maria Koulmanda, MSc, PhD  
Alan Moss, MD  
Simon Robson, MB, ChB, PhD  
Terry Strom, MD  
Thomas Thornley, PhD  
Yan Wu, PhD



Transplant nephrologists Eliyahu Khankin, MD, Martha Pavlakis, MD, and Francesca Cardarelli, MD (left to right)



Department of Medicine physicians provide around-the-clock care on thirteen inpatient floors and in four dedicated intensive care units across BIDMC's Boston Campus

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