91V119 Omatters



Renewable Energy p. 5



In the Spotlight

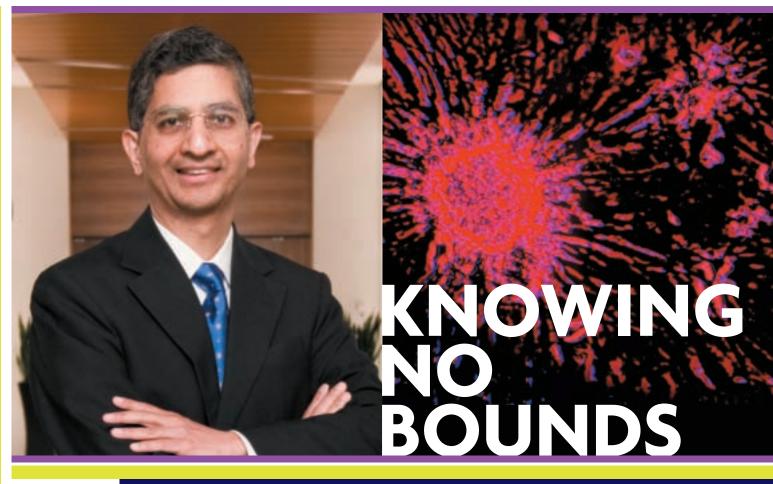




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VIKAS SUKHATME, M.D., PH.D.

It's difficult to pigeon-hole Vikas P. Sukhatme, M.D., Ph.D., into any particular occupational category—a situation that suits this soft-spoken individualist just fine. A doctoral physicist who went on to get his medical degree, Sukhatme has since added chief of nephrology, cancer scientist, and, most recently, chief academic officer at Beth Israel Deaconess Medical Center to his wide-ranging resume. "Over the years, I have always been interested in how cells multiply and spread and the general problem of cancer," he muses. "But along the way there has been, I would say, more than one significant detour, making me a bit of a jack of all trades and perhaps not a master of any one."

Most would disagree. Sukhatme's ability to almost seamlessly usher scientific knowledge from one field to another and bring it to bear on some of the most pressing problems in medicine has led to groundbreaking discoveries in the vasculature of tumors; the pregnancy disorder, preeclampsia; and the side effects of cholesterol-lowering drugs, just to name a few. "I'd like to think that some of the best solutions to problems have come from people who traditionally have not been educated in that discipline but who bring in something from somewhere else," says Sukhatme. "It could be a technology, it could be a way of thinking, it could be anything, but it's that crossing of

CONTINUED ON P. 2



VIKAS SUKHATME, M.D., PH.D.

CONTINUED FROM P. 1

borders, that interface between two areas that often pays off the richest dividend."

With the majority of his emphasis now on research and research administration (although he does still see a few patients on the side), Sukhatme believes that the potential rewards of this philosophy are such that he's applying it to just about everything he does, from the interdisciplinary focus of his own laboratory to finding synergies across the medical center at large. Indeed, the chief academic officer post he now holds was created so that there would be one individual reporting directly to the CEO with the ability to cross departmental borders to help set and implement the research and academic strategy for the medical center. While Sukhatme might seem tailor made for this role, building consensus around sensitive issues like space allocation, recruitment, and finances is no simple task. "We have to have administrative silos; you can't have an organizational structure without them. But they ultimately shouldn't become intellectual silos," says Sukhatme. "It requires a lot of effort, though, to get people to work with each other, and the barriers are many."

Finding creative strategies to break down these barriers is what Sukhatme enjoys most. In 2006, he established the Division of Interdisciplinary Medicine and Biotechnology at BIDMC, which, as its name suggests, was designed to facilitate efforts among divisions, departments, and even institutions to tackle biomedical problems. Although a major goal of the division is to foster translational research, it focuses not on a single disease entity but medical problem-solving in the broadest sense, drawing especially on the quantitative, computational, and engineering sciences. A theme that runs through its recent work is signals. "They look at signals that vary in time," says Sukhatme of several of his division colleagues, "and they try to uncover certain patterns in those signals that tell you something about the underlying medicine or biology that's generating them. So it's a way of analyzing the data that is quite innovative and much more complex than just taking an average of things or looking at standard deviations."

Because of his affiliation with this group, Sukhatme is looking at the possibility of incorporating this type of analysis into his own interdisciplinary laboratory work.

Recently, Sukhatme changed the direction of his cancer investigations to focus on two different avenues of promise: metabolism, how the cell generates energy and regulates its internal environment, and tumor immunology, how the cancer cell evades recognition by the body. Not surprisingly, he is particularly intrigued by where these two distinct fields may intersect. "The area that we're very excited about is this: if we manipulate the local environment of the tumor, say if the tumor makes less acid or takes up less sugar, are the immune cells more likely to do their thing," says Sukhatme. "And we have very early data that this is the case. We can by manipulating one system actually get the host, the immune system, to be much more alert."

Measuring and manipulating the intracellular milieu of a cell can be technically and technologically complex, and Sukhatme is initiating some intriguing collaborations that might be key to unlocking the cell's secrets. Working with Ary Goldberger, M.D., his co-chair of the Division of Interdisciplinary Medicine and Biotechnology, Sukhatme is in the initial phases of a project to look at pairs of cells that differ only by a single gene mutation—one exhibiting

'I'd like to think that some of the best solutions to problems have come from people who traditionally have not been educated in that discipline but who bring in something from somewhere else..."

cancerous properties and one not; their goal is to determine if there are early metabolic signals that Goldberger's sophisticated analysis can detect, which ultimately might indicate that the cell is moving on a cancerous path. "It's highly speculative," he notes. "It's one of those far-out ideas that might make a big splash in the journals if it were to work." Sukhatme and his colleagues also recently won a Harvard Catalyst pilot grant to partner with the medical center's radiology team to see if imaging techniques might be useful in assessing the metabolic changes within a tumor, either when it's growing independently or when manipulated with prospective drug therapies.

Sukhatme finds inspiration in the Harvard Catalyst, a universitywide project designed to provide a systematic way for investigators from disparate disciplines and institutions to find and collaborate with each other with the goal of reducing human disease. For one, it provides modest seed grants for more adventurous, cross-disciplinary efforts, like his own, that traditional larger funding sources tend to shun. "The kind of ideas that people are putting forward when they're asked to work with somebody they haven't usually worked with for a relatively small amount of money is quite remarkable," says Sukhatme, who adds he would love to create a similar project specifically for the medical center. "It really gets the juices going." Sukhatme also directs the Catalyst's work in novel technologies, which has a laboratory where investigators can experiment with innovative tools in their infancy. "These are emerging technologies," he says, "and often the people developing them don't know what the clinical questions are and the clinicians don't know about their existence. This would also be a very nice area to build here at BIDMC; we just haven't had the funding to do it."

Funding, or lack thereof, is a recurring theme in Sukhatme's professional life because the numbers tend to add up very quickly in biomedical science. Luckily some of his fiscal worries have been tempered by the generosity of BIDMC donors, including an anonymous philanthropist and Marian Miller Cronin and Michael F. Cronin, longstanding and ardent supporters of innovative research. Sukhatme has been pleased to see individual donors take up this cause because he believes it is an area where philanthropy can have a tremendous impact, with smaller donations leveraging future government and foundation grants. "Promoting unique collaborations, purchasing specialized equipment, supporting out-of-thebox ideas—these are all things that individuals can bring to pass that larger funding sources cannot," he says.

In particular, Sukhatme notes what a saving grace this kind of funding can be for physician/ scientists who are early in their careers. "I honestly believe they're a courageous bunch of characters," he says of this group, "because there are a lot of other occupations you can be in with a lot more job security and a lot better pay. These people are doing what they're doing because it's their passion, but they are also very vulnerable so if we don't sustain them and mentor them in the right way, I think they will fail. And then we ultimately only have ourselves to blame." To keep that from happening, Sukhatme has started the Young Investigators Think Tank, which offers early-career physician/researchers at BIDMC resources, advice, and empathy. After all, he knows that his vision for interdisciplinary research lies in their hands. "It's a great group to be with," he smiles. "It keeps you young and through their eyes you can see the future."



Howie Rich with members of Team Howie in 2009

How We Remember Howie

Bike-a-thon's success a lasting tribute to local pastor

Howie Rich's optimism throughout his battle with brain cancer was an inspiration to the people around him. As an ordained minister, Rich was a man of great faith, commenting once that "if my tumor can do some good for others, it's worth the journey."

Along the challenging path of diagnosis and treatment, Rich found motivation and encouragement in the 2009 *A Reason to Ride* bike-a-thon presented by Fuddruckers, a fundraiser to support brain cancer research at BIDMC. "Howie had a childlike enthusiasm about the ride," says his close friend Jim Boland, "and could see the tremendous impact it had on others with cancer, as well as their loved ones. In some ways, I think being a part of it kept him going."

It kept his loved ones going, too. Rich was a respected member of the North Shore community, where the ride takes place, and his friends and family in the area were eager to support his cause. Members of Rich's church, the Union Congregational Church of Magnolia, formed a team of riders and set up a water stop in its parking lot. Another group formed "Team Howie." The ride last year raised \$60,000.

Rich passed away from his illness on November 20, 2009. The 2010 *A Reason to Ride* bike-a-thon presented by Fuddruckers will take place on Sunday, September 12. Riders will be striving to reach this year's goal of \$80,000 in memory of Rich and so many others like him.

You, too, can find meaning in the journey. For more information on riding, starting a team, donating, or volunteering, please visit www.gratefulnation.org/areasontoride. •



Giving Matters | www.gratefulnation.org gratefulnation gratefulnation 3

GIVING matters



Giving Matters is published by the Office of Development at BIDMC.

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LETTER FROM THE SENIOR VICE PRESIDENT OF DEVELOPMENT

Dear Readers,

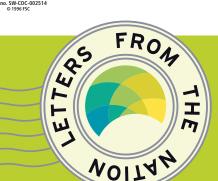
The end of March marked the midpoint of our fiscal year, and I am excited about all the activity that has taken place in our development program thus far. As we move into our second half, we have raised \$10.6 million toward our \$40 million goal for new gifts and pledges to support BIDMC's strategic priorities and almost \$3 million toward our \$8.5 million cash goal for operating budget support. Many of the generous gifts we have received are highlighted in the pages herein, including a wonderful \$1 million unrestricted donation from Bill Johnston, chair of our Finance Committee, and a significant donation from Jo Ann and Stuart Nathan to support our immunology research.

Just in the past few months, we have hosted some spectacular events on the vitally important topic of health care reform. We were honored to have U.S. Senator John Kerry join us for our annual Palm Beach event in March to give us insights on the issue from the front lines in Washington. Glenn Steele, Jr., M.D., Ph.D., president and CEO of Geisinger Health System, whose innovative approach to health care was highlighted in President Barack Obama's State of the Union address, also graciously gave the keynote speech at the third annual celebration of the Silverman Institute for Health Care Quality and Safety. These events are in step with the unwavering commitment of BIDMC's staff, administration, and Board members to making health care better, safer, and more cost effective for patients everywhere.

Sincerely,

Kristine C. Laping





Grateful Nation Makes It Easy for People to Share and Express Their Gratitude.

While this expression can take many forms, one of our favorites is receiving grateful letters from the Nation. We are pleased to share some of these letters with you in the hope that one thanks will lead to another and we'll create an unending cycle of gratitude.

Want to share your gratitude too?

E-mail us at gratefulnation@bidmc.harvard.edu or visit www.gratefulnation.org/lettersfromthenation.



Dear BIDMC,

Giving birth live on the *Today* show at your hospital was an experience we will treasure forever. All the nurses, doctors, and food service staff made our stay so fulfilling, and we thank you for making the birth of Brody so memorable.

Kerrie, Josh, and Brody

Dear Beth Israel Deaconess Medical Center NICU,

We are happy to present you with this check of \$236.06 on behalf of the Lt. Job Lane Elementary School of Bedford, Massachusetts. We hope that you will use this money to continue your important work saving the lives of so many tiny babies.

This year, the Lane School Student Council organized a bake sale to raise money for worthy charities. One of our students sponsored this unit in honor of a former patient who was a baby in your NICU for ten weeks in 1997.

Sincerely,

The Lane School Student Council

Dear Mr. Levy,

My 2009 encounters with BIDMC have been absolutely wonderful, something I really didn't expect from a big medical organization.

After a hiking accident, I was taken care of by Drs. Tamara Rozental, Arun Ramappa, and Emily McPhillips as well as by the wonderful Physical and Occupational Therapy staff at the BIDMC Lexington facility.

I never thought I'd write an enthusiastic letter to a health care organization, but you all deserve it and more. I come away as a satisfied patient and "customer."

Enclosed please find my check. I know it is only a small contribution to a great effort, but I want to show my appreciation for the care I received and for your organization.

Many thanks,

Maggie P.



Cheryl LaFleur: Renewable Energy

Cheryl LaFleur knows sometimes approaching a problem from a different perspective can be just what the doctor ordered. She's found her background, most of which is well outside the scope of health care, to be a powerful asset in making meaningful contributions to Beth Israel **Deaconess Medical Center.**

"This organization," says LaFleur, "is blessed with having a talented cadre of lay leadership and volunteers across the organization who bring a wealth of different life experiences to the table—in many cases in related fields but also from unrelated fields, like mine in energy."

A lawyer by training, LaFleur has spent most of her 30-year career at the management level in the electric and gas industry. She watched BIDMC president and CEO Paul Levy make the transition from public works to health care so when he asked her to join the Board of Trustees at the medical center, it seemed a natural fit. Her experience as a trustee over the last four years has only deepened that impression. "I previously worked in a large organization with a big dedicated workforce and a 24/7 environment with real-time challenges," says LaFleur. "I've seen a lot of parallels with the issues that BIDMC faces, whether it's redesigning processes to help different silos communicate better, enabling cultural transformations to make sure people in different jobs work as a team, or structuring checklists to ensure patient and employee safety."

It's BIDMC's leadership in clinical safety that has particularly piqued LaFleur's interest, an area that has adopted many of its processes and procedures from industries outside the medical field. LaFleur notes that in the world of energy, the safe delivery of electricity and gas for both the public and employees is paramount; as a result, she became very involved in transforming her field's approach to safety basing it on understanding systems rather than assigning blame. "It's all about behavior," she says. "Nobody goes to work, whether they're an electric lineman or a medical caregiver, and says, 'I think I'll have an accident today.' The people who do those jobs do them because they have genuine expertise and care about what they're doing. Preventable harm and accidents usually happen because multiple things went wrong."

While LaFleur firmly believes the hospital's attention to improving patient safety and eliminating preventable harm is "exactly in line with where the health system has to be going," she agrees that the learning curve for everyone remains steep. For LaFleur, getting immersed in a new field, particularly

through her involvement as vice chair of the Patient Care Committee and member of the Patient Care Assessment and Quality Committee, has been an opportunity for personal growth. "I still have an enormous amount to learn about the subject matter with all its complexities," she says. "Even if I'm working on a challenge that has some parallel to what I've seen before, it's a different environment and I'm using different muscles to think about it. And I think you can always grow in how you interact with other people."

Personal interactions certainly have made LaFleur's experience as a Board member extremely rewarding. She says that some of her most inspiring moments as a trustee have come at events where the members of the BIDMC community celebrate each other's efforts, like the Nursing Scholarship Awards and the Melzer Awards at the Annual Meeting of the Boards. "It's all about the patients and taking good care of them, but you can't do something well unless you feel good about it," says LaFleur. "And I see the role of a trustee as being a champion for the organization to recognize and appreciate what the wonderful people here are doing and to encourage them philanthropically if you're in the position to do so."

With that in mind, LaFleur and her husband, Bill Kuncik, recently made a generous five-year pledge to the medical center, thoughtfully making it an endowment, for longevity, with an unrestricted annual payment, for greatest impact. While a "stretch gift" for the couple given their capacity and history of philanthropy, they viewed their donation as a natural extension of their increasing engagement with the medical center and confidence in its leadership. "I think why we give relates to why I volunteer: we think this institution is really important to patients and to the city and to the region and even nationally through its research," says LaFleur. "We feel lucky to have had the opportunity to make a contribution."

"If you look at a hospital on TV, it's just doctors and nurses, they are obviously important, but when you're actually involved as a volunteer, you also see the patient care techs, the people who clean the operating room between surgeries, the food preparers, the housekeepers, and the IT people—all the people that it takes to make a place like this run. It's an amazing team."

After this interview took place, LaFleur was nominated by President Barack Obama to be a commissioner in the Federal Energy Regulatory Commission. If confirmed by the Senate and sworn in as a commissioner, she would be required to resign from her Board trustee positions. However, she and her husband would plan to continue as friends and supporters of BIDMC.



By the NumbersWilliam Johnston and the BIDMC Finance Committee

illiam Johnston knows that, for many, the world of finance holds a certain ineffable mystique. As a result, he often finds himself trying to put his role as chair of BIDMC's Finance Committee in more accessible terms. "Everyone says, 'Ooooh, the Finance Committee," laughs Johnston. "For some reason, people attach this aura to it and think that to be on it, you must understand a whole lot of intricate financial details. But I don't really think so. It's not magic, it's not science, and it's really not mystifying. Our job is pretty straightforward."

Straightforward perhaps, but not necessarily simple. The Finance Committee is charged with periodically reviewing the medical center's fiscal situation, from its incoming funds from operations to its outgoing capital expenditures, to ensure that obligations at both ends of the spectrum are being met. For Johnston, who has been a high-level financial executive for decades, it's somewhat familiar territory, but he also recognizes the unique complexities that health care adds to the mix.

"I think that most people, unless they're in this industry, don't understand how hospitals operate," says Johnston, who stresses that he, too, knew little about this specialty when he started on the committee. "So there's the intellectual challenge of learning what low margins they work on and how there are so many factors involved. It's like steering a super oil tanker—you can't dodge and weave; if you're going to make a change in course, it's going to take you a long time to do it. And there's no single decision you make that's going to have a huge impact; they're small incremental decisions."

Helping the management team in this ongoing decision-making process is what Johnston sees as the Finance Committee's primary function. "We're not making the difficult choices here. Paul, Eric, and Steve are," he says of Paul Levy, Eric Buehrens, and Steven Fischer, chief executive officer, chief operating officer, and chief financial officer at BIDMC, respectively. "But I think it helps when they can go to the Board and say that the Finance Committee, which is made up of financial people, patient care people, and people with long-standing legacies here, supports or doesn't support something. It expedites their ability to run the hospital."

Since he and his wife, Leslie Sennott, have had little reason to go to a hospital aside from the births of their three children, Johnston says that the opportunity to interact with and assist such a talented management

team keeps him engaged at the medical center. Johnston says that the trio makes his job easy because while they are always abreast of every issue, they are also open to debate and challenging dialogue, which allows for progress. "Steve is a CFO who's really on top of the numbers, he knows what's going on," he says. "Eric doesn't need to be out in front of everyone and quietly, with a high level of efficiency, gets things done. And Paul, he's got conviction, and he's not afraid to show it. I think the combination of the three is what makes it so refreshing."

The team's out-of-the-ordinary temperament was also fundamental in the couple's decision to make a \$1 million unrestricted gift to BIDMC for the administration to use as it sees fit. "This team is trying to do a whole lot without the luxury of the means to fulfill the wish list they have," says Johnston, "and yet day in, day out, they keep fighting the good fight. And so it was pretty simple to make our gift unrestricted because they said that was really important. Why would I ever second guess them?"

Johnston bore witness as the management team's need for unrestricted philanthropy became particularly acute during the recent economic crisis. He observes that it is difficult enough for a

business whose primary mission—patient care—can be incompatible with meeting its financial needs, but when confronted with a market downturn that affects both philanthropy and endowment, the focus has to switch from an organized approach to growth to putting out multiple fires. "I didn't know when I got engaged here that I was going to be on the committee in such times. If I had, I might have rethought things," he quips.

But Johnston is quick to add in more serious tones that the recent situation has been a wonderful learning experience on many levels, from weighing the hospital's fiscal options to watching how others make critical decisions in times of stress. "You don't want to go through it every day," he says, noting the unprecedented sacrifices BIDMC staff made including salary, 401K match, and earned time cuts to save people's jobs, "but I think this experience has been an interesting ordeal for everyone. All the painful things everyone went through here, the management team handled with great empathy, concern, and knowledge—not a trace of arrogance. You have to admire the way they've managed through it all."

Faces of BIDMC

with Terry B. Strom, M.D.

What is your primary research interest?

I'm interested in immune tolerance—when the immune system does opposite of what it should do. The immune system's job is to identify and fight off microbes and destroy foreign or malignant cells, and in almost all cases it's a wonderful thing. But in the case of organ transplantation, the immune response can cause major problems; the body may reject the organ and even after a successful transplant, a patient's immune system may continue to attack and damage the new tissue.

So a successful transplant does not necessarily mean improved health for a patient?

An organ transplant is often the best choice in the case of organ failure, but patients can be troubled by complications from taking daily immunosuppressant medications—which prevent the immune system from attacking the new organ but increase susceptibility to cancer and infectious disease. I'm researching how we can create immune tolerance—essentially "flipping" the immune system to a protective rather than an aggressive mode.

Wouldn't we want the immune system to sometimes remain aggressive to fight off disease? Is there a way to control this?

The immune system has within it a protective sub-compartment and if protective cells gather at the site of the transplant or autoimmune injury, they can "turn off" the aggressive cells and protect the tissue from further damage.

Have you developed any therapies that do this?

My lab was the first to develop and use an antibody therapy that kills aggressive immune T-cells, cells that aid in immune response, stimulated by a transplant. When T-cells stimulated by a transplant are destroyed, they lose the ability to recognize and destroy the new organ. The therapy is extremely safe because it does not destroy resting T-cells that can still fight invading microbes. We also developed a therapy that controls malignant T-cell growth and is used as a therapeutic agent in T-cell disorders, like some lymphomas.

Is your research only focused on complications with organ transplantation?

No, as an immunologist I'm focused on finding therapies for several autoimmune diseases. I'm tremendously thankful for philanthropic support that enables me to develop new treatments that we think will have broad implications.

My lab designed what we call "power mix," a protein cocktail therapy that destroys aggressive T-cells and fosters the growth of tissue-protective immune cells. We think "power mix" will successfully treat new-onset Type 1 diabetes, an autoimmune disease in which a person's own T-cells destroy insulin-producing pancreatic cells. The National Institutes of Health is currently producing our protein mix under pharmaceutical-grade conditions.

Also, we're investigating the therapeutic potential of proteins in inflammation. A protein called alpha-1 antitrypsin works to stop prolonged inflammation and may aid in autoimmunity, transplantation, and metabolic diseases. Our data in preclinical disease models shows promise for clinical application, and a clinical trial of alpha-1 antitrypsin



TERRY B. STROM, M.D. Director of the Transplant Research Institute at BIDMC

Early philanthropic investment from the following people has made Strom's work possible: Stuart C. and Jo Ann Nathan, Daniel E. Rothenberg, Scott C. and Heidi Schuster, and Carole Segal.

will be initiated in new-onset Type 1 diabetes patients.

With even more therapies on the horizon, where do you see your research headed?

There are millions of people with organ failure so I'll continue to focus on making organ transplants work better for patients. At some point, because there is a limited amount of organs available, my interests will merge with stem cell technologies to develop ways to regenerate tissue from our own stem cells and help the body foster its own successful healing process. •

One of the leading cancer scientists in the world, Pier Paolo Pandolfi, M.D., Ph.D., discovered the genes underlying a rare form of leukemia, transforming its diagnosis from "death sentence" to "curable" in almost all the young adults it strikes. Today, his goal is to apply his knowledge from this experience to a wider range of cancers.

Thanks to unrestricted donations to the BIDMC Annual Fund, the medical center has the resources to invest in the talent that makes it extraordinary. Be a part of the wonder and progress of biomedical research at BIDMC, and support the Annual Fund today.

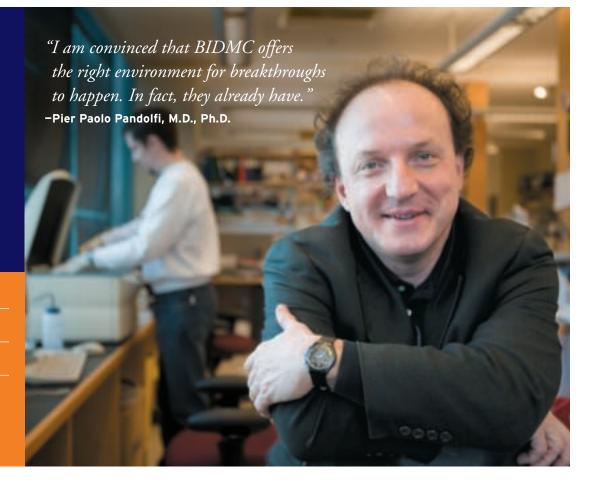
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Go online at www.gratefulnation.org/annualgiving

Call (617) 667-7330

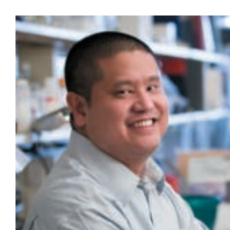
Send a check (made payable to BIDMC) to:

The Annual Fund, Office of Development Beth Israel Deaconess Medical Center 330 Brookline Avenue (BR), Boston, MA 02215



The Science that Binds

Philanthropy enables neurologist to find links between two deadly diseases



Beth Israel Deaconess Medical
Center neurologist Volney Sheen,
M.D., Ph.D., knows that when
basic scientific research helps link
two different diseases, the results
can be twice as powerful. His
research to understand the genetic
components of a rare neurological
disorder is also helping him
further explain the progression
of some types of cancers.

Sheen, who primarily treats patients with epilepsy, is researching potential therapies for periventricular heterotopia (PH), a rare congenital disorder that causes seizures in women and is generally fatal in men. Sheen's PH research is funded in part by the Beckman Foundation, the Doris Duke Charitable Foundation, and Carol Feinberg Cohen and the late Julian Cohen. Thanks to this generous support, Sheen discovered specific proteins that contribute to the development of PH and possibly to the metastasis, or spread, of breast and brain cancers.

"My lab began researching the cause of PH with the idea that once you identify the genes that cause this stem cell disorder then you can somehow regulate them," says Sheen. "But this research has also taken a twist that may help us better understand some cancers."

PH is an abnormality that occurs during brain development that disrupts the initial migration and fate of neural stem cells—cells that have the ability to become

different types of brain cells—and thereby affects where cells ultimately reside in the brain and what type of brain cell they will become.

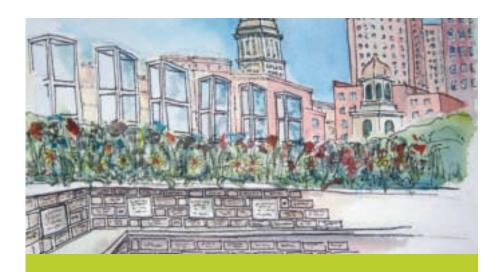
Mutations in a gene called filamin can cause PH; people with this mutation have seizures and sometimes mild mental retardation.

Thanks to a recent \$405,000 gift from the Doris Duke Charitable Foundation that has allowed him to continue this avenue of research, Sheen discovered that filamin, a protein which helps other adhesion proteins within a cell stay together, preserves cell structure. These adhesion proteins act as a "glue" that is required for a cell to bind and interact with neighboring cells, to move, and to differentiate into a neuron. If filamin is mutated, the cell becomes "less sticky," and the loss in adhesion disrupts these normal developmental activities.

A similar process may be involved in determining a cancer cell's ability to

invade tissue and metastasize further. Sheen and collaborator Orge Alper, president and CEO of Alper Biotech, discovered that filamin is secreted at high levels by breast and brain cancer cells. When secreted, filamin may actually block the adhesion proteins of neighboring cells, causing these cells to lose their "glue-like" capabilities and impair tissue integrity. "It's like greasing a wheel," says Sheen. "If the surrounding tissue is less sticky, it presents less of a barrier for a cancer cell to invade and spread."

While his work is still in its early stages, Sheen believes that the filamin secreted by cancer cells is important for cancer progression. Because filamin is secreted, it is an attractive target for therapeutic intervention. "Further investigation will allow us to understand the mechanisms that cause PH and help us understand and control the metastasis of some cancers," he says. •



CEMENT YOUR SUPPORT OF THE CANCER CENTER

Sustain the efforts of BIDMC's Cancer Center with a lasting tribute to a loved one when you purchase a plaque or brick in the Cancer Garden of Hope at Boston City Hall Plaza.

"Being able to make a contribution to BIDMC while at the same time honoring my late husband made me so happy. The staff at BIDMC took such good care of us, and this is one way I can express my thanks."

- Nancy Lynch, Cancer Garden of Hope supporter

The Cancer Garden of Hope is sponsored by the Conquer Cancer Coalition of Massachusetts. To learn more, please visit www.conquercancer.org/gardenofhope.





GRATEFUL NATION PUTS ITS STARS IN THE SPOTLIGHT

In Grateful Nation's new Spotlight Series, well-known people from all walks of life discuss the idea of gratitude—what it means to them and the role it plays in their lives.



9





LONGTIME BOSTON BRUINS DEFENSEMAN AND CANADIAN OLYMPIC FIGURE SKATER

DON AND CHRISTINE SWEENEY

"We have a very close connection to BIDMC....Our boys are here in this world because of the people and the facility that we were fortunate to be a part of."

When former Boston Bruins hockey player Don Sweeney—who is now an assistant general manager with the team—and Christine Sweeney, a two-time Canadian Olympic figure skater, had their twin sons, Jarrod and Tyler, more than ten years ago, the situation was grave. That the boys, born at 25 weeks, each weighing only 1.5 pounds, even survived was a miracle—one the Sweeneys attribute to the remarkable efforts of the doctors, nurses, and staff of BIDMC's labor and delivery unit and the Klarman Family Neonatal Intensive Care Unit (NICU).

Aside from having access to the most advanced technologies and treatments for premature newborns, the Sweeneys were most amazed by all the extra touches that the BIDMC team added to their sons' care—from providing the couple with a special computer so they could see Jarrod and Tyler before bedtime to dressing the boys up in Bruins outfits (taken from teddy bears) to keep things light. The Sweeneys believe that they have BIDMC to thank that the twins, now 11, are doing well, attending school and, of course, playing hockey.



To read more of the Sweeneys' story and watch a video featuring both Don and Christine, please visit www.gratefulnation.org/sweeney.

AUTHOR OF THE BEST SELLER
LOOK ME IN THE EYE
AND THE UPCOMING BE DIFFERENT

JOHN ELDER ROBISON

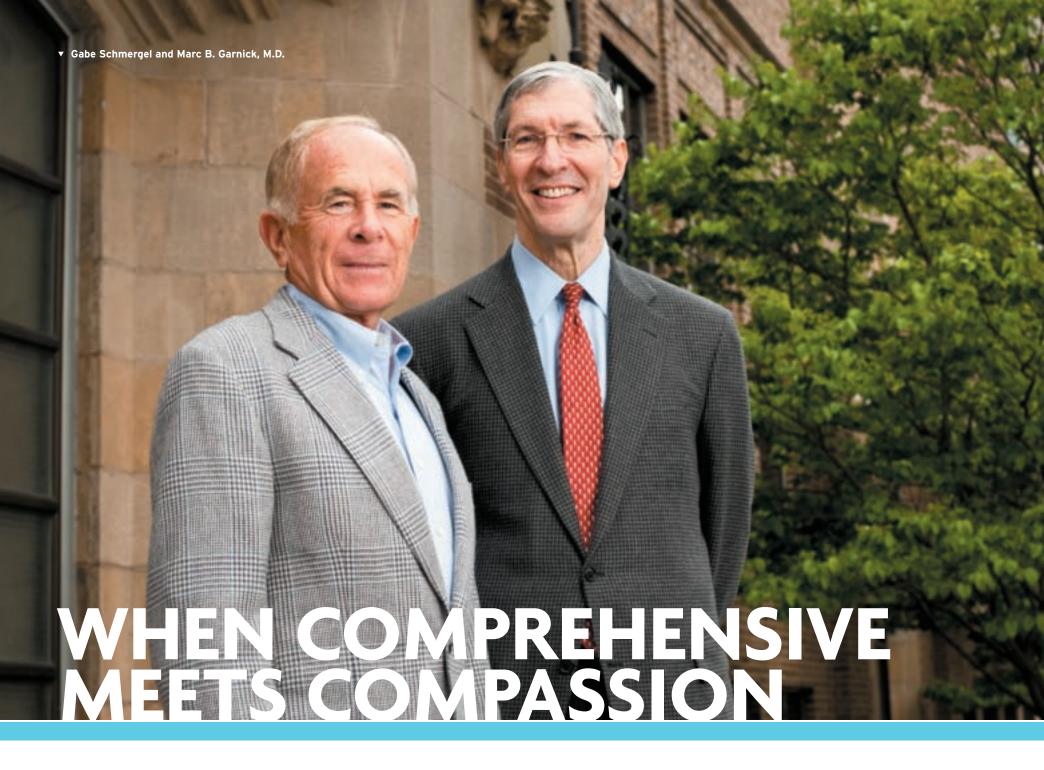
"I am grateful for Dr. Alvaro Pascual-Leone and the brilliant doctors and scientists in BIDMC's TMS lab. I am also grateful for the opportunity to have contributed to what I believe is one of the fundamental breakthroughs in autism research and neuroscience."

For best-selling author John Elder Robison, a diagnosis of Asperger's syndrome at the age of 40 was something of a revelation, explaining everything from the social isolation of his youth to his penchant for electronics. With this new insight into his life, Robison discovered that he could help others with the disease, an autism spectrum disorder. Writing a book (with another to come in April 2011) and speaking publicly about his own experiences has earned Robison national recognition and caught the attention of BIDMC neurologist Alvaro Pascual-Leone, M.D., Ph.D.

In April 2008, Pascual-Leone invited Robison to participate in groundbreaking research involving transcranial magnetic stimulation (TMS), a noninvasive technique that is helping doctors better understand how the brain works and alter its performance to potentially treat disorders as varied as autism, depression, epilepsy, and stroke. For Robison, TMS has been a life-changing experience. He attributes it with giving him the ability to read ordinary nonverbal cues from other people, an essential part of successful social interaction and something otherwise difficult for people with Asperger's.



To read more of John Robison's story and watch a video featuring Robison, please visit www.gratefulnation.org/robison.



Generous Donations Advance Prostate Cancer Center's Patient-Focused Efforts



▲ Glenn Bubley, M.D.

here is calmness and patience in the way Glenn Bubley, M.D., a co-director of the Prostate Cancer Center at Beth Israel Deaconess Medical Center, speaks; his comforting demeanor is something in which even the sickest of patients can find solace. But he isn't alone in his compassion. From the way his colleagues are working to develop gentler hormone therapies to studies focused on improving quality-of-life outcomes for people with prostate cancer, the focus is always the same: the patient.

"They are a hard-working and motivated group," says Bubley. "They don't care about the accolades anymore; they care about the benefits of their work for the patient." Bubley isn't concerned with the accolades either. He came to BIDMC almost 30 years ago and became friendly with William DeWolf, M.D., now chief of urology at the medical center. Bubley developed an interest in urologic disease, which eventually led to his specialty in prostate cancer; it has remained his focus ever since.

The Prostate Cancer Center now includes many designated prostate cancer clinicians, urologists, radiation oncologists, pathologists, research investigators, nurses, and the staff who manage the center's tissue bank. "We provide soup to nuts in terms of what we offer patients," says Bubley. "We have prevention, genetic diagnostics, and a variety of therapies. We can manage the most aggressive cancers, and we have tools in place to help patients decide what's best."

The Power of Prediction

Manzanilla gift allows prostate cancer patients to make more informed decisions



▲ Martin G. Sanda, M.D.

While research to develop gentler, more tailored therapies for prostate cancer remains a focus, another initiative within the Prostate Cancer Center at Beth Israel Deaconess Medical Center aims to help patients make decisions about their own treatment options.

A generous gift from Luisa and Fernando Manzanilla is funding the effort to create a "predictive calculator" that equips patients with statistical information to guide them in envisioning what their own quality of life might be like after different prostate cancer treatments.

The initiative is built upon information the Prostate Cancer Center collected as part of a large nationwide study funded by the National Institutes of Health (NIH) that researched quality-of-life outcomes for patients within the first years following treatment. The NIH selected BIDMC to lead the study, which surveyed 1,200

patients and their spouses across eight hospitals.

"The Manzanillas' gift allowed us to continue to follow those men and women to reanalyze data to predict outcomes based on a patient's individual characteristics like age, how big their prostate was, how high their PSA levels were, and what their quality of life was like before treatment," says Martin G. Sanda, M.D., director of the Prostate Cancer Center. "We hope it will become a valuable tool that gives patients an active role in their own treatment plan."

A Web site is under development that compiles this data and will allow patients to log in and enter specific information about themselves and their own cancer to generate predictive outcomes for different treatments. Results, for example, will tell a patient if a therapy may cause urinary or bowel problems or may interfere with sexual activity. "This type of patient-focused use of data is tough to fund through federal grant agencies," says Sanda,

"and it's really something that we wouldn't be able to do if it weren't for the Manzanillas."

As a result of this work, the program recently secured a new grant from the NIH that will enable Sanda and his colleagues to continue long-term follow-up of the patients in this study to look at the effects of prostate cancer recurrence and its treatment. Both the NIH grant and the Manzanillas' gift are funding a new national study that will also compare outcomes in traditional versus robotic-assisted surgery in prostate cancer.

Sanda says he hopes to expand the project even further to include assessments of quality of life for patients who were treated more aggressively for their prostate cancer versus those whose treatment, or lack thereof, began with "active surveillance." Also known as "watchful waiting," active surveillance describes an option to not immediately treat the cancer based on factors about the patient and the cancer's progression. •

Helping patients make informed decisions about their own care is a personal interest of Marc B. Garnick, M.D., a clinician and the medical director of cancer network services at BIDMC. Thanks to several philanthropic gifts from his patients, Garnick created a free comprehensive Web site, called www.harvardprostateknowledge.org, which provides recent news about prostate cancer, research updates, commentary, and personal patient case studies. "My work is to provide patients with a clear understanding of prostate cancer and the issues surrounding the disease," says Garnick, "to help patients understand the medical and biological aspects of their disease and how it will affect them physically, emotionally, socially, and sexually."

Garnick, who in the 1980s helped put Lupron—a widely used prostate cancer drug—on the market, says that a lot of conflicting information exists on the disease. "We are constantly refining therapies to treat aspects of the cancer, but we're still learning how to treat the whole cancer," he says, "and this information is changing and previous strategies are being debunked." Garnick is also editor-in-chief of an annual report on prostate cancer, published by Harvard Medical School. Both the Web site and the publication, funded through philanthropic support, aim to provide the most up-to-date and scientifically accurate information to the public.

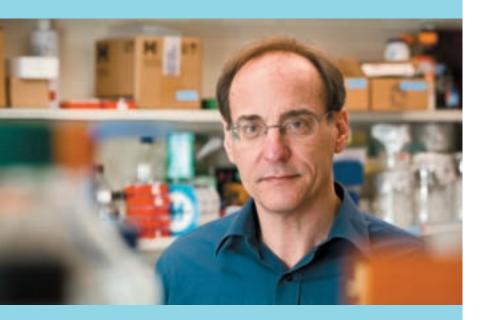
The information includes research findings based on what the prostate cancer team learns from the more than 600 patient prostate samples that exist in the Hershey Tissue Bank, the largest tissue bank in Boston. A gift from one of Garnick's patients, made through the Hershey Family Foundation, funded its establishment and several related research projects. "This gift catalyzed a lot of what we can do now," says Martin G. Sanda, director of the Prostate Cancer Center. "We can review tissue and blood samples from patients over time, which is incredibly valuable to learn what's working and what's not. This resource has put us on the map in prostate cancer research."

Over the past three years, Sanda has led a nationwide network of prostate cancer researchers funded by the National Cancer Institute (NCI) to improve prostate cancer screening and early detection. In collaboration with several cancer centers nationwide, this group has developed new approaches to prostate cancer screening that use urine tests to detect genetic abnormalities, such as gene rearrangements called gene fusions that are a 'fingerprint' of prostate cancer. In addition, BIDMC's team is leading a collaborative initiative to determine whether such new urine tests for prostate cancer can improve upon the limitations of using protein specific antigen (PSA), a protein that causes cancer when produced in high levels by prostate cells, as a prostate cancer screening test.

CONTINUED ON P. 12

Gentle Science

\$1M Prostate Cancer Foundation gift funds research to find less debilitating therapies



Prostate cancer research at Beth Israel Deaconess Medical Center is not just about finding new therapies that work; it's about finding new therapies that work with the patient. Steven P. Balk, M.D., Ph.D., and his lab are investigating how to improve therapies to reduce side effects and eliminate the chance of cancer relapse.

In addition to its generous support of innovative research and young investigators at BIDMC, the Prostate Cancer Foundation is funding Balk's work with a \$1 million challenge grant which has allowed him to develop small clinical trials to measure success of therapies in patients. His research aims to improve and create new hormonal therapies—therapies that involve adjusting hormone levels as a form of treatment.

"This patient-centric work holds the promise to reduce death rates from advanced prostate cancer," says Howard R. Soule, Ph.D., executive vice president of discovery and translation and chief science officer at the Prostate Cancer Foundation. "We hope it will help physicians to better understand how to use new and existing drugs to maximize their effectiveness."

Balk's team is focused on selectively lowering androgen levels to treat prostate cancer. Androgenic hormones, like testosterone, stimulate and control male characteristics; when androgen levels are high, prostate cancer can develop. Lowering androgen levels, called androgen deprivation therapy (ADT), is an effective method to shrink tumors but can cause serious side effects like metabolic and cardiac issues, muscle loss, and sexual complications.

"I'm interested in selectively blocking the androgen receptor in prostate cells only, to reduce or avoid the patient cost," says Balk. "We have a good understanding of how the androgen receptor's metabolism is regulated, and we've developed some novel androgen receptor antagonists that we think will be effective in more advanced prostate cancer."

BIDMC is among the leaders in developing more aggressive and selective ADT treatments, and Balk's clinical trials have helped lead to the development of a trial drug that blocks androgen synthesis in tumor cells.

"If I look where we were when I started working in this area 15 years ago to where we are now, it has been a big change," says Balk. "We've made seminal findings along the way; we have a consistent record of advancing the field." • WHEN COMPREHENSIVE MEETS COMPASSION CONTINUED FROM P. 11

While the tissue bank offers research opportunities at BIDMC and beyond, maintaining it is costly. "The tissue bank is an upside down pyramid. We add samples daily from new patients and samples from patients who we continue to follow," says Bubley. Gifts from Randi and Joel Cutler and Pamela and Richard Remis are helping to keep the tissue bank running and support translational research within the program.

In keeping with the center's patient-centric philosophy, the focus of research is translational—to develop therapies and tests to help prostate cancer patients today. "Glenn sees patients, and I do research," says Steven Balk, M.D., Ph.D., "and we interact well because he understands the biology of lab work and I understand what the prostate cancer population is like. What results is bench-to-bedside work."

Balk is working to develop improved hormonal therapies for the large number of advanced stage, or castrate-resistant, prostate cancer patients—patients for whom removal of the testicles is no longer effective. Testicular removal deprives the body of testosterone, slowing the growth of cancer in the prostate gland. With time, however, the body can readjust to the chemical's absence, and the cancer continues to grow. "Balk has been a leader in second-line hormonal therapies, and his scientific observations have helped us bring several drugs to clinical trials," says Bubley. "Using some of the therapies that we have pioneered here has been most rewarding."

While a majority of research in the prostate center at BIDMC is translational, some young investigators are conducting basic research to learn more about the disease. Garnick, a senior clinician who helps young investigators secure funding for their work, recently received a generous gift from Valerie and Gabe Schmergel that supports these efforts. "As a senior clinician, I look to enable a wide group of young investigators who are doing important and meritorious work," says Garnick. In addition, under Sanda's leadership, the prostate program established the Prostate Cancer Executive Committee to allocate donor funds to spur innovation and improve patient care.

The prostate cancer group has also teamed up with other leaders in cancer research at BIDMC, like Lewis C. Cantley, Ph.D., and Pier Paolo Pandolfi, M.D., Ph.D., to integrate some of their discoveries into clinical trials to test drug treatments for advanced stage prostate cancer patients. A gift from Priscilla S. and Richard M. Hunt, made in honor of Garnick, is helping to fund this collaborative research to study the genetics of prostate cancer.

But efforts within the Prostate Cancer Center are not limited to developing new therapies. In fact, Sanda and DeWolf, who have been dedicated to treating the disease for years, are exploring "active surveillance," an alternative way to treat patients. The approach, which involves monitoring a patient for disease progression, is used when maintaining a patient's quality of life outweighs the benefit of drug treatment. "Our work in early detection, to find new ways to detect prostate cancer and distinguish which cancers can be left alone and which should be treated aggressively, is how we focus on the patient," says Sanda.

Thanks to Sanda's pioneering advances in developing vaccines for prostate cancer over the past decade and the combined efforts of the prostate cancer team at BIDMC, vaccines for the disease are poised to become a widely available treatment for advanced prostate cancer. "One of the unique strengths that brought me to BIDMC was the creative abilities and commitment of my colleagues," says Sanda. The group recently embarked on an initiative funded by the U.S. Department of Defense and the Prostate Cancer Foundation to develop new immunotherapies for prostate cancer.

With an experienced team of clinicians and researchers, many of whom have been working together for more than three decades to better treat the disease, patients of the Prostate Cancer Center at BIDMC can expect some of the best personalized clinical care around. "I'm the guy who gets to treat some of the worst off patients and when I see our own therapies and treatments work that's the best thing," says Bubley. •

Foundation support enables repair of genetic wear and tear



t's true; humans do have a lot of stress. In fact, cells within the body constantly undergo stress, from exposure to sunlight to the chemical effects of chemotherapy, which cause DNA within cells to break apart or mutate. Thankfully, the body fights back with repair pathways, chemical processes that rejoin breaks in a cell's DNA to restore function. If repair pathways cease to work, however, cells mutate and multiply leading to cancer, the acceleration of aging, and agerelated diseases.

Catherine Yan, Ph.D., a pathologist at Beth Israel Deaconess Medical Center, is studying the body's inability to repair its own genetic structure to provide insight into the pathology of certain cancers with the goal of finding new therapies. Recent gifts from the V Foundation for Cancer Research and the Emerald Foundation are supporting Yan's research. "To be a young researcher and to have organizations fund you is very inspiring," says Yan. "Foundation support allows a researcher to be innovative."

In particular, Yan's lab is studying how one specific pathway, called the non-homologous end-joining pathway (NHEJ), repairs DNA and works with proteins and genes in the body. She is investigating how this pathway collaborates with p53, a crucial protein that either initiates cell death in a severely damaged cell, called apoptosis, or stops a damaged cell from multiplying until a repair pathway, like NHEJ, can fix it. NHEJ is pivotal in repairing DNA breaks. Malfunctions in NHEJ can result in chromosomal translocations or the improper swapping of genetic material. Defective NHEJ, combined with a loss of p53, can contribute to the development of cancers and other diseases.

Part of Yan's work seeks to answer if cancer is a result of cell damage due to outside stress or from malfunctions in DNA repair. A \$200,000 gift from the V Foundation for Cancer Research is supporting research to

investigate the impact of eliminating NHEJ on DNA methylation, the process by which a cell "remembers" its specific cell role. "If the methylation process is not working," says Yan, "cells can forget what kind of cell they are and mutate."

Thanks to a \$150,000 gift from the Emerald Foundation, Yan has expanded her research to investigate some of the basic genetic aspects of DNA repair to identify errors and patterns in pathway repair and ultimately ways to fix them. Her sophisticated research in mouse models has also led to an important observation—as mice age, their genetic ability to suppress the development of mutated cells decreases, suggesting a potential link between aging and tumor suppression. "What's really interesting is that aging actually may be a by-product of the several attempts the body makes to prevent a cell from becoming malignant," says Yan. •

TICKETS PLEASE!

Grateful Nation is calling for tickets to raffle off in support of BIDMC's efforts to advance patient care.

From concert to sporting event tickets, any donation to the Nation will be gratefully accepted.

Your tickets will be put to good use, and the proceeds of our contests will be used to do good.

Please sign up at www.gratefulnation.org to hear about our sweepstakes.

To donate, e-mail us at gratefulnation@bidmc.harvard.edu.







'We're not doing this
because there's something
inherently wrong with the
relationship but because
the information they have
access to is not equal'

JAN WALKER

An Open Notes Test

RWJF-funded project aims to increase transparency between doctor and patient

The key to any good relationship is open communication, so the saying goes. For a group of clinicians and staff at Beth Israel Deaconess Medical Center, these are more than just words—they have spent years of dedicated effort toward bringing more transparency to the traditionally enigmatic, complex, and often one-sided relationship between doctor and patient. Their longstanding experience, helped by recent advances in electronic technology, has culminated in a project designed to transform how these two mutually dependent individuals interact. "The best way to articulate it is that the doctor has a unique body of knowledge that the patient, unless he or she is also a doctor, usually doesn't have," says Tom Delbanco, M.D., a primary care physician at BIDMC and the Richard and Florence Koplow-James Tullis Professor of General Medicine and Primary Care at Harvard Medical School, "and the patient has unique knowledge about him or herself that the doctor cannot possess. The goal is to facilitate moving these perspectives closer together. In my view, that gives patients the best chance to do well."

For the past 30 years, Delbanco has been on a mission to learn from patients' experiences in the clinical setting and involve them more directly in enhancing care. Harkening back to experiments he led in the 1970s giving patients control of their own medical records, he and co-investigator Jan Walker, R.N., M.B.A., have now embarked on a project called OpenNotes™ to evaluate the impact of giving patients full access to the observations and plans their physicians make about them after each clinical encounter. "We're not doing this because there's something inherently wrong with the relationship but because the information they have access to is not equal," says Walker. "It's the classic professional interaction, where the professional has all the knowledge and the client doesn't, and patients can suffer because of that."

To make this interaction more equitable, OpenNotesSM will uncover a previously hidden core of the medical record—the doctor's note, which documents a patient's unique personal characteristics and medical history and insights into determining diagnoses and care strategies from the physician's perspective. A logical extension of the type of information increasingly available to patients on secure medical portals like BIDMC's own *PatientSite*, this documentation could potentially be a critical untapped resource for patients to improve recall or understanding of what took place in the examination room and put them on a more level playing field in terms of health care decision making. A recent \$1.4 million grant from the Robert Wood Johnson Foundation (RWJF) Pioneer Portfolio will allow

the OpenNotesSM team to put this hypothesis to the test. "It's a subtle change," says Stephen Downs, assistant vice president at RWJF and a Pioneer Portfolio member, "but it could reposition notes to be *for* the patient as well as *about* the patient, which might have a powerful impact on the doctor/patient relationship and in the long run lead to better care. Doctors have a strong difference of opinion about this, but there is an almost religious character to the debate—it's uninformed by evidence."

Despite some doctors' hesitation to this degree of openness, citing fears of misinterpretation or additional demands on their time for editing or clarification, Delbanco and Walker firmly believe that the benefits for patient care will far outweigh the drawbacks. Referencing previous studies out of their research team, they say that patients today not only want but increasingly expect this degree of transparency in health care, a situation encouraged by the evolution of information technology. Indeed, the fact that much of this information is now electronic has made the execution of OpenNotesSM pretty straightforward despite the inherent complexity of the medical environment. "Health care is hard," says Walker. "Our care systems can be wonderful, but they are incredibly complicated. One of the things about this particular project is that it's very simple, which appealed both to us and the Robert Wood Johnson Foundation. It's something anybody, theoretically, could do because it's just flicking a switch in the electronic medical record—the note is there, you just have to open it up."

With the RWJF funding, a 12-month OpenNotes[™] study will flick that switch between close to 100 participating primary care physicians and more than 30,000 of their diverse patients not only at BIDMC but also from the Geisinger Health System in rural Pennsylvania and the Harborview Medical Center in Seattle. In particular, the team will examine if this new access will promote better communication, improve recall, prevent errors or misconceptions, and ultimately create an environment of shared decision making. "We're counting e-mails, phone calls, and visits, and we're surveying doctors and patients before and after," says Delbanco, who adds that they are working with an incredible group of both clinicians and information technology professionals, including physician/information specialist Henry Feldman, M.D., and health systems researcher Suzanne Leveille, R.N., Ph.D. "So we're not just doing it; we're really studying it. And the basic question we're asking is simple: after a year, will the doctors and/or the patients want to turn the machine off? Our best guess is that they'll say no, but we'll see." •

Courting a Good Cause

Tennis tournament supports valuable community-oriented programs



For the principals of Boston Realty Advisors (BRA), supporting the community is something that brings out their passion.

A premier commercial and residential real estate company in Boston and New York, BRA has a long track record of giving to a number of regional charitable groups, and in 2008 the management team embarked on a mission to create a fundraising effort they could call their own.

"As a small boutique brokerage firm, we wanted to find unique, underfunded programs to support—

something that would parallel our business," says Jeremy Freid, a partner at BRA. "By creating our own targeted fundraiser, our efforts could go a long way for lesser known causes."

Partnering with BIDMC, BRA developed a successful tennis tournament, now in its third year. To date, the tournament has raised more than \$30,000 to benefit the medical center's Healing Music harp program, DriveWise program for aging driver safety, and Center for Violence Prevention and Recovery—all of which rely enormously on philanthropy to carry out their meaningful work in the community.

On Wednesday, September 29, BRA will hold another full day of round robin tennis matches at the famed Longwood Cricket Club in Chestnut Hill, which for the first time will make all of its historic grass courts available for tournament play. The proceeds from this year's event, which will also include a dinner, will benefit BIDMC's Parkinson's Disease and Movement Disorders Clinic.

For more information or to get involved, please visit www.gratefulnation.org/tennistournament. •

NEWS OF NOTE

Visit www.gratefulnation. org/newsofnote for more.

YES BONES ABOUT IT Christopher Evans, Ph.D., director of BIDMC's Center for Advanced Orthopaedic Studies, received the 2010 Arthur Steindler Award from the Orthopaedic Research Society, created to recognize experts who have made significant contributions to the understanding of the musculoskeletal system and related diseases. A molecular biologist, Evans is a leader in the development of gene therapies for the treatment of arthritis.

MUSIC TO OUR EARS BIDMC neurologist Gottfried Schlaug, M.D., Ph.D., and his research team have shown extremely promising preliminary results from their first clinical trial using melodic intonation therapy to treat aphasia—loss of speech—in stroke victims. The team hopes their work will encourage broader acceptance of the therapy, which uses singing and rhythmic tapping to engage compensatory communication centers in the brain.

TODAY'S CHILD

NBC's **Today** show recently put the BIDMC obstetrics team center stage as part of its three-part, three-city series called "Today Goes Inside the OR." **Nancy Snyderman, M.D.,** the program's medical editor, provided the play-by-play as the team brought **Brody Rock Johnson** into the world by a scheduled Caesarean section.

RESEARCH OF MERIT

As part of the most recent class of young scientists participating in the Harvard Catalyst K12 Medical Investigator Research Training (MeRIT) program, BIDMC neuroscientist Lindsay Oberman, Ph.D., is examining how the brain's circuitry might differ in patients with autism spectrum disorders. Founded in 2008 with the help of a five-year \$117.5 million NIH grant, the Harvard Catalyst brings together the intellect, technology, and clinical expertise of the university and its affiliates/partners to reduce the burden of human illness.

Playing it safe with a BIDMC Charitable Gift Annuity



"Harold and I enjoy our lives and live them to the fullest; however, when considering our finances, we don't take risks. This is why I chose to fund a charitable gift annuity at Beth Israel Deaconess Medical Center. The annuity provides a secure income to me for my lifetime, and we are supporting one of our favorite charities."

CHARLOTTE MAZONSON

While Charlotte and Harold like excitement, their health and their financial stability are not something they are willing to chance. For this reason, they chose a charitable gift annuity to support BIDMC, which has provided them excellent care throughout their adventures.

Benefits of a BIDMC Charitable Gift Annuity include:

- Lifetime income from your contribution
- Secure annual payments to you and/or a loved one
- An immediate income tax charitable deduction
- The knowledge that your gift supports the important work of the medical center

For more information, please contact Greta Morgan at (617) 667-7395 or *gmorgan@bidmc.harvard.edu*, or visit us online at *www.bidmc.org/plannedgiving*.

RUNNING A HOSPITAL

THIS IS A BLOG STARTED BY A CEO OF A LARGE BOSTON HOSPITAL TO SHARE THOUGHTS ABOUT HOSPITALS, MEDICINE, AND HEALTH CARE ISSUES.

BIDMC President and CEO Paul Levy recently posted on his blog about the medical center's success in reducing two common complications in the intensive care unit (ICU)—ventilator associated pneumonia and central line infections—and its societal and financial impact. His comments are reprinted here. For more, visit www.runningahospital.blogspot.com.

Our Medical Executive Committee recently received a report from our Critical Care Committee. I cannot be more proud of our staff and the progress they have made to reduce harm and improve quality of care in our ICUs.

Let me translate the implications of the reduction in ventilator associated pneumonia (VAP). Preventing 744 cases over three years—at a treatment cost of about \$20,000 per case—translates into a societal savings of \$14.9 million during this period.

The rate of central line infections also dropped from 4.14 to 0.52 cases per 1,000 patient days between FY2003 and FY2009, a reduction of 83 percent.

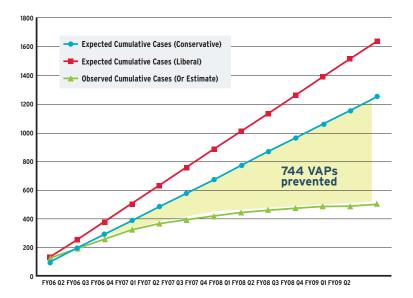
This probably reflects lost revenue for the hospital under the fee-forservice reimbursement system. So why do we do it? First, because it is the right thing to do and saves lives.

Hundreds of lives.

On the business front, it has contributed to a reduction in length of stay in our ICUs. We were able to avoid the multi-million dollar capital cost of expanding our ICU capacity. Indeed, we were able to create capacity out of the existing facilities and improve throughput.

I hope that those who argue that global payments (i.e., capitation) are a necessary condition to create societal cost savings and improve patient care will read this. I do not deny that such a payment methodology may be worth implementing for other reasons, but there is a lot that can and should be done under the current payment system.

While the state debate goes on about cost control, why can't we get all of the hospitals in Boston to release information like this about their quality improvement efforts to provide the public and public officials with a sense of confidence that we care about these matters and are willing to be held accountable?





Sponsored by the BIDMC Board of Overseers

Tuesday, June 8

6 p.m. Cocktail Reception7 p.m. Panel Discussion

One Marina Park Drive at Fan Pier Boston (Located next to the new Louis store)

Health Care Reform continues to occupy the national stage and with the historic passage of the bill, the implementation will affect us all—hospitals, physicians, community health centers, and patients. We now have the right and the responsibility to be even more intimately involved as policymakers unite with decision makers in the field to put this bill into action.

with special guests

STUART ALTMAN, PhD

Professor of National Health Policy, Heller School for Social Policy and Management, Brandeis University

ROBERT J. BLENDON, PhD

Professor of Health Policy and Political Analysis, Harvard University School of Public Health and Harvard Kennedy School of Government

PAUL F. LEVY

President and CEO, BIDMC

REVEREND LIZ WALKER

Award-winning television journalist, documentary film producer, entrepreneur, and humanitarian currently working in the war-torn country of Sudan. She is also a member of the Board of Overseers at BIDMC.

Valet Parking is Complimentary Business Attire Additional Guests Welcome Kindly reply by June 1 to Kirsten Doyle at 617.667.7331 or kdoyle@bidmc.harvard.edu. This event is complimentary.

WHAT AN EVENTFUL WAY TO SAY THANKS!

Are you a fan of jazz music? Do you enjoy playing golf? Grateful Nation can provide you with the tools to turn any kind of fun into a fundraiser in support of the great work of BIDMC.

With everything from social events to sporting events, people just like you have raised hundreds of thousands of dollars for patient care and research at the medical center.

Make something you love a little more eventful for a worthy cause.

To learn more, please visit www.gratefulnation.org/events or contact Erin Wholey at (617) 667-7426 or ewholey@bidmc.harvard.edu.



GRATEFUL NATION EVENT

Since the launch of Grateful Nation, BIDMC's program centered around gratitude, we have brought more than 4,500 people together through more than 20 events, raising close to \$590,000. Sponsored by grateful patients and their friends and family,

all of our fundraisers support the great work of BIDMC. To learn more about attending our upcoming events or even starting one of your own, visit *www.gratefulnation.org/events*, where you can also view more photos under "Past Events."



RUNNING FOR A CAUSE: THE GRATEFUL NATION MARATHON TEAM

APRIL 19

Thanks to the generosity of John Hancock Financial Services, which gifted BIDMC five numbers for the 114th Boston Marathon, Grateful Nation team members Jaclyn Everett, Julia Lindenberg, M.D., Kathleen Quackenbush Spiegel, Aaron White, and Mark Zeidel, M.D., hit the ground running in support of the Healthy Champions program at Bowdoin Street Health Center. As a team they ran the grueling 26.2 mile course raising more than \$30,000 to benefit this program that teaches children about important health and wellness issues such as nutrition and violence prevention.

Even though the race has been run, the Marathon Team's cause, Healthy Champions, still needs your support. To donate, please visit www.gratefulnation.org/bostonmarathon.

- 1 Kathleen Quackenbush Spiegel
- 2 Phillomin Laptiste, Program Manager, Healthy Champions, Bowdoin Street Health Center; Erin McCloskey, Senior Coordinator, Corporate Social Responsibility, John Hancock Financial Services; Adela Margules, Executive Director, Bowdoin Street Health Center
- 3 Mark Zeidel, M.D., with his wife, Susan Freedman, M.D., (left) and daughter, Rebecca Zeidel (right)



ON THE SCENE









BRAIN HEALTH-BODY WEALTH

FEBRUARY 9

In February, BIDMC's Board of Overseers sponsored the Brain Health–Body Wealth event in support of The Center for Brain Health at BIDMC, whose mission is to extend overall health, societal productivity, and quality of life as we age through the development of novel technologies and interventions. The evening included interactive brain fitness assessment activities and engaging presentations by BIDMC staff members Alvaro Pascual-Leone, M.D., Ph.D., director of the Berenson-Allen Center for Noninvasive Brain Stimulation, and Daniel Press, M.D., a neurologist in the Cognitive Neurology Unit.

- 4 Daniel Press, M.D., Jonathan L. Samen, Alvaro Pascual-Leone, M.D., Ph.D.
- 5 Alvaro Pascual-Leone, M.D., Ph.D., John Elder Robison
- 6 Guests enjoy the Connections Count booth hosted by Antonio Bullon, M.D.
- 7 Pat Black, Lisa Franks, Alvaro Pascual-Leone, M.D., Ph.D.

BIDMC AND QUALITY CARE IN AN ENVIRONMENT OF REFORM

As the government embarks on reforming the nation's health care system, BIDMC recently developed a number of events designed to promote meaningful discussions on the topic. In this time of great change, the medical center's goal is to keep its community informed while continuing to provide the highest quality patient-centered care to anyone in need. As a national leader in innovative efforts to transform the delivery of health

care, BIDMC will continue to invest significantly in programs like these along with groundbreaking projects to improve quality and safety. If you are interested in supporting the medical center's work in this area, we have a wide range of funding opportunities available at all levels of support. For more information, call the Office of Development at (617) 667-7330.

PALM BEACH 2010

MARCH 6

BIDMC President and CEO Paul Levy and BIDMC Chair of the Board of Directors Steve Kay along with Event Co-Chairs Elayne and David Weener welcomed loyal members of the BIDMC family to a special dinner featuring keynote speaker Senator John F. Kerry at The Breakers in Palm Beach, Florida. Senator Kerry discussed the complexities of health care reform and the transparency of bringing the bill to life including televised hearings. He also spoke about the specific content of the bill and the implications on the health care system in the United States overall. Guests of the event had the opportunity to hear from someone at the forefront of the health care debate before the recent bill was passed.

- 1 David and Elavne Weener
- 2 Carl Sloane, Senator John Kerry, Toby Sloane
- 3 James Yashar, M.D., and Lois Silverman Yashar
- 4 Jack Manning, Ted Ladd, Senator John Kerry, Paul Levy
- 5 Althea and Buddy Lank









THIRD CELEBRATION OF THE SILVERMAN INSTITUTE OF HEALTH CARE QUALITY AND SAFETY

MARCH 22

Lois Silverman Yashar, founder of the Silverman Institute of Health Care Quality and Safety, Paul Levy, BIDMC president and CEO, and Kenneth Sands, M.D., M.P.H., senior vice president for health care quality at BIDMC, welcomed the BIDMC community to this celebration of the national recognition earned by the medical center for its ambitious goals including: being in the top two percent of hospitals in the country in terms of patient satisfaction and eliminating all preventable harm by 2012. The evening also included the Michael F. Epstein, M.D., Lectureship on Clinical Quality and Patient Safety, featuring guest speaker Glenn Steele, Jr., M.D., Ph.D., president and CEO of Geisinger Health System, who spoke about the climate and expectations of health reform.

- 6 From left to right: Gene Lindsey, Susan Epstein, Michael Epstein, M.D., Glenn Steele, Jr., M.D., Ph.D., Lois Silverman Yashar, Kenneth Sands, M.D., Paul Levy
- 7 Cynthia and Robert Lepofsky
- 8 Mary Ellen and David Stevenson
- 9 Sandra and Jordan Golding









Q&A WITH GLENN STEELE

Glenn D. Steele, Jr., M.D., Ph.D., is the president and CEO of Geisinger Health System, an integrated health delivery system in central Pennsylvania. Geisinger has earned the accolades of President Barack Obama, among others, for its innovative chronic disease care management and unique provider-driven, pay-for-performance program. Aided in its efforts by a system-wide electronic health record and a wholly owned insurance plan, Geisinger has become a leader in pioneering approaches aimed at increasing efficiency and quality in health care. Steele worked for two decades at BIDMC's predecessor institution, New England Deaconess Hospital, and *Giving Matters* recently chatted with him prior to his keynote address at BIDMC.

Here's what he had to say...

Q. Many say the U.S. health care system today is overrun with challenges. What do you see as the biggest problem facing health care currently?

A. The first issue is that we don't really have a U.S. health care system. I'm talking about System with a large "S"—a system in general. In fact, not many places even have a system with a small "s." You have one, we have one, and we're trying to learn from each other, but overall there's no strategic plan, no alignment, or even a mission as far as I can see. And the way we get paid essentially exacerbates the situation. So I think the lack of "systemness" is the biggest problem we have in this country, and everything else, whether it's strategic or transactional, is a subset of that problem.

Q. Is there anything hospitals are doing right under the constraints of this system-less situation?

A. Absolutely. If you look at that seminal report issued more than ten years ago by the Institute of Medicine looking at needless bad outcomes in hospitals, there's evidence that we can improve in areas like hospital-based mortality and hospital-acquired infections. It showed that if you set really defined and high-minded health care goals—which everyone except for the most egregious outliers would agree are worthy goals—and if you have established metrics, some sort of a data feedback approach and accountability, you can make improvements even within this lack of system-ness. But it's not enough, and what places like BIDMC and Geisinger are trying to do is change that.

Q. Geisinger, with you at the helm, has been praised almost universally for being a leader in changing the status quo to optimize health care delivery. What makes you so "innovative?"

A. Our number one strategic goal is innovation—that's something we actually set at the top of our own five-year strategic plan. And our particular structure and sociology are perfect for doing care innovation. We're responsible for a stable group of citizens; we have a provider group and an insurance company; and we have had great operational success. So these elements allow us to take chances in changing how we care for high-volume hospital-based and non-hospital-based patients. We're able to see if what we are doing makes a difference, not only short term but also long term.

Q. Sounds risky. How can you do this and still run an effective business?

A. If you're really going to do core innovation, not everything is going to work. But at the same time, you don't want to fail too much. So we're not betting the entire ranch on it. We're focusing our core re-engineering and innovation on about 30 percent of our business, at the sweet spot where we provide care to and insure the same patients. Now if things work, either by increasing quality or decreasing cost, then we can scale up and take it out to all of our other patients and members.

Q. What do you think leaders in health care quality innovation like Geisinger and BIDMC—one in a rural, homogenous setting and one in an urban academic setting—can learn from one another?

A. We will learn if some of what we're doing is scalable to completely different health care environments and if organizations can innovate without owning an insurance company. There will have to be institutions, even though they're in different markets and different sociologic milieus, that are committed to care re-engineering. And I would love to see a great institution like Beth Israel Deaconess have care re-engineering as a top mission. You have the ability to analyze these programs in ways we aren't. You're exploring some of these issues in your very interesting experiment with Atrius Health right now.

Q. What role does technological innovation play in the kind of thoughtful analysis that both Geisinger and BIDMC are trying to do in this arena?

A. In our programs, we've committed to hit best practice targets along the entire continuum of the pre-hospital, hospital, and post-hospital episode. It's hitting those targets that allow us to feel a little more comfortable in guaranteeing an outcome and taking financial responsibility for any complications. You can't do that unless you know precisely what's happening to every patient in every one of our platforms in real time. Technology is the enabling factor in the equation. Looking to the future, I'm convinced we must get patients much more actively involved in their health maintenance or care, and that's not going happen through the phone and certainly not through physical interactions. At Geisinger we have about 150,000 (with a goal of 200,000) patients who deal with us in large part through MyGeisinger, our patient portal. We're collaborating on projects like

BIDMC's OpenNotesSM (see page 14) to transmit information between the patient and the provider prior to interacting. We're not there yet. It's a promissory note. But that's a future that is predicated on the kind of electronic infrastructure we both have.

Q. Beyond technology and infrastructure, does it take a certain type of culture or mentality for a health care organization to be successful at innovation?

A. When you are trying to build a unique identity and distinctive mission dedicated to the reengineering of care like Geisinger or Beth Israel Deaconess, I think it's interesting to hark back to pedigree. It's amazing how often we look to the values our founder Abigail Geisinger espoused to emphasize what's important to us strategically. It's no different for Beth Israel Deaconess. When I was at the Deaconess, I could not think of a better place to practice. Other places in the area were great, but the Deaconess had a very special flavor, and my bet is that it was the same at Beth Israel. I hadn't experienced that again since—until I joined Geisinger. For those of us who've got the right cultures along with all the structural components, the goal should be to change the entire clinical model. We should learn from everything we do, and we should assume every result we get is a baseline for some subsequent improvement. Now I know that's glib, but I've tried to advocate for that through most of my ten-year tenure at Geisinger, and I think that has helped get this innovation engine concept going. •



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On March 6, BIDMC welcomed United States Senator John F. Kerry as the keynote speaker at the medical center's annual Palm Beach event. With the landscape of health care uncertain, this year's event focused on future reform and the implications for Massachusetts teaching hospitals, physicians, community health centers, and patients. As someone at the forefront of the debate, Senator Kerry offered attendees a more in-depth perspective on the topic.

Senator John Kerry (center) with Steve Kay, chair of the BIDMC Board of Directors, (left) and his wife, Lisbeth Tarlow



BETH ISRAEL DEACONESS MEDICAL CENTER
SUMMER 2010

Longwood Cricket Club, Chestnut Hill

UPCOMING EVENTS

FRIDAY JUNE 4	Mary E. Lunn Society Luncheon 12:00—2:00 p.m. Leventhal Conference Center at BIDMC	SATURDAY JUNE 26	Foundation Fundraising Event 6:30 p.m. Cafe Escadrille, Burlington Sisters Against Ovarian Cancer Walk
TUESDAY JUNE 8	BIDMC Board of Overseers Hosts: Health Care Reform Has Passed—Now What? 6:00 p.m. One Marina Park Drive at Fan Pier, Boston	SATURDAY SEPTEMBER 11	
TUESDAY JUNE 15	BIDMC Board of Trustees Meeting 8:00-9:30 a.m. Leventhal Conference Center at BIDMC		
THURSDAY JUNE 17 SATURDAY	"Model M.D.": Bloomingdale's Shopping Event and Fashion Show 6:00-9:00 p.m. Bloomingdale's Men's Store, Chestnut Hill Eighth Annual Robert Murphy Memorial	SUNDAY SEPTEMBER 12	A Reason to Ride Bike-a-Thon, presented by Fuddruckers Benefitting Dr. Eric Wong's Brain Tumor Research at BIDMC 8:30 a.m2:00 p.m. Begins and ends at the Liberty Tree Mall Danvers
JUNE 19	Golf Tournament Benefitting Dr. Mark Huberman's Thoracic Oncology Research Program at BIDMC 9:30 a.m.—6:30 p.m. Heather Hill Golf Club, Plainville	THURSDAY SEPTEMBER 23	Annual Meeting of the BIDMC Boards 6:00-8:30 p.m. Four Seasons Hotel Boston
		WEDNESDAY SEPTEMBER 29	Boston Realty Advisors' Tennis Tournament and Dinner Benefitting Parkinson's Disease and Movement Disorders Clinic at BIDMC 11:00 a.m.—8:00 p.m.