

breakthrough

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There's a Disconnect

The Importance of Traction

MERIT-ing Medical School

Celebrating Change

Taking Care of Mommy and Baby

Medicine is a public trust
THE JOHNS HOPKINS CENTER
FOR INNOVATIVE MEDICINE

breakthrough



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ADDING AND SUBTRACTING

Happy Holidays!

In this issue of *Breakthrough*, we have several stories on new initiatives. Entirely new projects and centers, all of which are exciting – and, all of which, in my opinion, make Johns Hopkins Bayview, and our community, a better place. One of them is a Latino Health Center (see Page 10). The immigrant Latino population in our neighborhood has increased dramatically, and we are welcoming them with open arms. We have a new clinic that’s designed for busy new moms, who often put their own health on hold (see Page 12). Two of our medical students are founding members of MERIT, a program that gives disadvantaged students who want to go to medical school a decent shot at actually making their dream come true (see Page 8). Another new program is called Medicine for the Greater Good (see Page 4), and although I think that title applies to everything we do, this one – started by one of our Chief Residents – takes our doctors beyond our hospital walls and out into the community, where they may help people make lasting changes in their health care. We are changing our curriculum to teach our residents how to approach issues of behavior (see Page 14), which account for so many of our nation’s illnesses. Our Miller-Coulson Academy of Clinical Excellence, which recognizes and supports outstanding clinicians, is expanding (see Page 20), first to the Johns Hopkins Hospital and then outward to our several affiliate hospitals. We have a remarkable story of one doctor’s commitment to help a terribly ill patient who had been written off by many, and who is not only still alive today, but thriving (see Page 16). And one of our tenets at the CIM, collaboration, is being promoted earlier than ever – in medical and graduate students (see Page 19) – by the Miller Scholar, now Vice Dean for Education.

So many additions to our campus, and culture, and community. And, I’m sorry to report, one big loss. The name of G. Thomas Miller is a familiar one on these pages; the CIM owes so much to the Miller family’s generosity. Our Miller Lecture, the Miller Scholar, the Miller-Coulson Academy all are initiatives that support clinical excellence. Thomas Miller was the husband of Anne, the father of Sarah and Leslie, a noted attorney, an avid military historian, and a brilliant thinker. He was also a good friend. Scott Wright, director of the Miller-Coulson Academy, remembers him as a “thoughtful listener, a terrific mentor who was just a great man and a lovely person.” Roy Ziegelstein, the Miller Scholar, says that Mr. Miller was “one of the smartest guys I have ever met. He had this ability to seemingly know everything, even minute details, about everything. You could talk to him about anything. Also, wherever he went, Mr. Miller was the smartest person in the room.” I remember Mr. Miller’s excellent sense of humor and grace at all times, even when he was very sick. He inspired us, and we miss him.

Best wishes,

David B. Hellmann, M.D.

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WE BELIEVE

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“There’s a Disconnect Somewhere” And Medicine for the Greater Good is Aiming to Fix It

The starfish story. It’s a familiar one to young doctors and medical students at Johns Hopkins Bayview, but in case you haven’t heard it, here goes:

Hundreds, maybe thousands of starfish had washed up on the beach and were going to dry out. An old man was standing at the edge of the water and throwing them back in. A little boy came up to him and said, “This is a waste of time. There are too many of them. You can’t make a difference.” The old man picked up a starfish and said, “It makes a difference to this one,” and threw it into the ocean. There are different versions of this story, but you may like the one where the boy starts picking up starfish and throwing them in, too.

Panagis Galiatsatos, M.D., Chief Resident in internal medicine, not only knows this story well, he would like to see a sequel. “We try to be like the old man, taking the extra time to talk to the patients, helping them know how to manage their disease when they leave the hospital,” he says. “But why should the story end when the patient leaves the hospital – when we throw that starfish back into the water? We really need to know what’s going on, because they’re coming back to the hospital or clinic with the same health issues. There’s a disconnect somewhere.”

For years, Bayview physicians including Colleen Christmas, M.D., director of the residency program, cardiologist and teacher Roy Ziegelstein, M.D., now Vice Dean of Education (see story on Page 19), and David Hellmann, M.D., Chairman of the Department of Medicine and Vice Dean of Johns Hopkins Bayview, have been encouraging young physicians to think beyond the hospital.

When Galiatsatos was an intern and resident, he learned from these and other faculty that “disease management isn’t just talking about disease in a clinic in the confines of the hospital.” He made many trips out into the neighborhoods around Johns Hopkins Bayview during his residency; a local fellow himself, he talked to church and community groups he knew, spoke at health fairs, and fielded health questions at ask-a-doctor sessions. “I was always astonished at what I thought people knew and what they actually understood.” After a while, he started wondering, do these health fairs ever make a difference? There were some meaningful successes: “I went and spoke to a school, and four months later, a mom came up to me and said, ‘My daughter and I heard your talk, and we lost weight together, about 20 pounds each!’”

And yet, Galiatsatos says, he kept wondering whether these community talks were actually making an impact. “Isn’t this like giving someone a medication but not knowing the ramifications? Don’t we need some kind of follow-up?” He saw his fellow residents making their own forays into the neighborhoods, taking the initiative to reach out – writing a column in a local Spanish-speaking newspaper, for instance – and decided that a more formal program was needed.

“We are training a different sort of physician for the 21st century, one with the skills and belief that genuine investment in community health is an integral part of what we do here.”

“That’s how Medicine for the Greater Good (MGG) was born,” he says. When Galiatsatos became Chief Resident, he worked with Hellmann and Christmas to add a required community service component to the teaching curriculum. The requirement is very much open to the residents’ interpretation, particular interests, and timing. At some point – they choose when – during their three-year training,

they need to do something – they choose what – in the community to promote health. Then, after their experience, they give a presentation on how it went and what they learned. Galiatsatos has also tapped Johns Hopkins physicians who are involved in their own outreach to help by talking to the residents, fielding their questions, and offering guidance; Galiatsatos calls them “champion faculty.”

“These champion faculty are people who are already doing a lot of work with areas like health policy, health disparities, and international health,” he says, “so we asked them to come and talk to the residents and answer questions like, ‘Why did you feel you needed to promote health in this area? How have you done this, and what have been the results and the outcomes?’”

Some categories for MGG projects include:

- International health and health in other cultures
- Spiritual Influences in Medicine (talking to congregations)
- Behavioral Counseling
- Health Policy and Advocacy
- Communication with the Lay Public
- Inter-Professional Care and Team Building
- Medical Journalism and Public Speaking through Media
- Promoting Health through Public Organizations
- Health Disparities and Social Determinants of Health

“One of our interns wants to have health fairs for refugees in Baltimore, where they learn things like how to set up doctor appointments, and how to manage their medications at home,” says Galiatsatos. Another is doing an internship with the local ABC

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“I was always astonished at what I thought people knew and what they actually understood.”

news affiliate. Another wants to use Twitter Chat for Johns Hopkins Bayview clinic patients: “For an hour every week, there will be a health expert in a specific field. Our patients can log on and there will be a physician talking about a specific subject like back pain, and the community can tweet their questions and comments. It will be educational, with real-time responses.” One resident wants to talk to groups about setting up advanced directives. Another would like to make posters for homeless shelters with practical advice on how to combat frostbite.

Its planners hope that MGG will be helpful for all demographic groups, not just the poor, not just minorities, not just refugees, not just the homeless. There are unhealthy people everywhere: Go to the mall, or Hershey Park, or the Inner Harbor, and you’ll see plenty of people in all walks of life who are headed for health problems because of their lifestyle.

Whether the project is a one-shot deal or something that requires more time, “We want them to approach these opportunities with critical thinking: How are you hoping this is going to affect the community? We’re not asking residents to come up with answers, but to really think about it.” MGG, he hopes, “is going to influence how we talk to our patients, what our idea of medicine is going to be from this point on. Maybe it will even influence these residents’ career choices.”

Many of the projects require little or no extra money, although Galiatsatos is seeking grant support to pay for travel expenses, the cost of printing posters or pamphlets, and some small equipment purchases – a few blood pressure cuffs and scales – to take on the road.

The program is very new – it just started in July – but Galiatsatos is planning to study its impact on “communication skills, empathy, humanism, advocacy, and burnout” in these doctors for years to come. “We will track participation in MGG experiences – we anticipate that most residents will not only participate in one, but will likely participate in many – and at the end of each one, we will ask them to write a one-page reflection of what they learned, felt, and can use in their future practices from this experience.” He also plans to follow residents’ career choices, and to ask community members who have participated in these experiences for feedback on how they thought it went.

The residency is a delicate time in a physician’s life, Galiatsatos says, “when their identity as a physician is being molded. This is an opportunity to grow trust in the physician, and trust in Johns Hopkins Bayview,” and this is important because “for every great partnership we’ve created, there have been one or two that never worked out.” One incident he will never forget happened when Galiatsatos was a resident himself. “There were three African American Baptist churches, and they told me, ‘We don’t want your help, we’re not a charity, don’t come and preach, and then just leave.’”

Christmas hopes that through MGG and other programs, communities in Baltimore will see that Johns Hopkins Bayview is making a long-term commitment to their health. “We hope that our neighbors as well as our residents will see that we are training a different sort of physician for the 21st century,” she says, “one with the skills and belief that genuine investment in community health is an integral part of what we do here, and central to making a lasting impact in medicine.” ■

The Importance of Traction

Small But Mighty Grants Can Make All the Difference

Never underestimate the power of traction. Just a little bit of it can mean the difference between spinning your wheels and actually getting somewhere in your scientific career. Since 2007, extra traction for scientists studying arthritis and inflammatory disease at Johns Hopkins has been the great gift of the Dr. Ira T. Fine Discovery Fund, established by patients of the beloved Hopkins rheumatologist, Ira Fine, M.D.

The fund provides small grants, ranging from \$3,000 to \$15,000. These allow investigators to pursue innovative ideas that might not otherwise get funded, says Antony Rosen, M.D., Ph.D., Director of the Division of Rheumatology. “Sometimes you have a great idea, an idea that could be easily proven or refuted. But it’s going to cost money up front in order to determine if it’s a great idea that could be true, or a great idea that’s just not true.”

The grants come in one lump sum and are ideally suited to answering specific questions – setting up a new assay, for instance, or collecting tissue samples from a group of patients – and getting a relatively quick answer to the query, “Is this line of research worth pursuing?” Like old-time prospectors looking for gold, scientists often don’t know if an idea is going to pan out until they do a little digging; but many questions are expensive to answer because they involve prohibitively costly high-tech equipment. These awards are ideally suited for creative, novel ideas, says Rosen. The Fund supports between three and five grants each year – about 21 total so far – and “everything has been definitive,” one way or the other, he says. “Not all scientific ideas are

right, so if you can relatively cheaply determine that it’s not worthwhile going after, more power to you.”

The awards were the brainchild of philanthropists Stephanie and Erwin Greenberg, whose donations helped establish the fund, and their success shows that “you don’t always need to throw a lot of money at something right away,” says Rosen. “Particularly for early, innovative ideas, with small amounts of money, you can really get good traction,” build up momentum, and target larger questions.

“Not all scientific ideas are right, so if you can relatively cheaply determine that it’s not worthwhile going after, more power to you.”

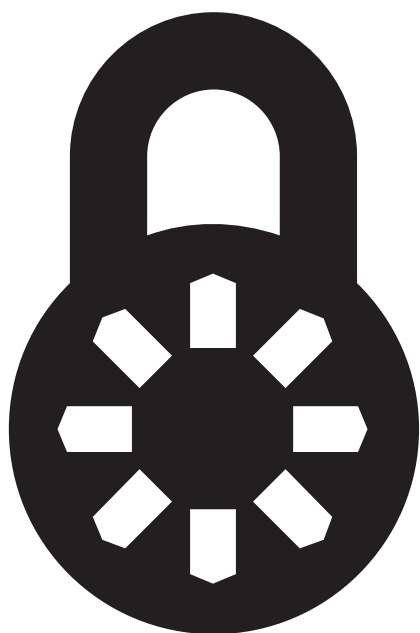
Many young investigators in the U.S. have Career Development Awards from the National Institutes of Health. These provide salary support and laboratory start-up costs, but most young scientists are stretched pretty thin nonetheless, Rosen notes. “They don’t give you anywhere near what you need to accomplish the research, and people tend not to have enough money to do the kinds of experiments that they actually need to do.” If the investigation points to electron microscopy, genetic sequencing, or other tests involving expensive equipment, many young scientists find themselves up the proverbial creek.

Which is why “these grants are absolutely life-saving,” Rosen says. “If you need to get an assay done and it costs five thousand dollars, there is no other place to get that kind of money. It’s just not possible.” ■

MERIT-ing Medical School

A Plan to Help Underprivileged Students Become Doctors

By the time Tyren and Shanquel decided they wanted to go to medical school, they barely had any hope of getting in. It wasn't that they weren't sufficiently bright, or hardworking, or caring, or inquisitive. They were all of those things and more. The problem was that they were way behind other high school students at different, wealthier schools, not just in science, but in the basics, like English and math.



But three teachers – Tyler Mains, Mark Wilcox, Shyam Gadwal, recent college graduates in their 20s, working in inner-city Baltimore schools through the Teach for America program – saw great potential and thought these students, and others like them, deserved some extra help. Without knowing anything about how to start an initia-

“Really it’s just a lot of rolling up our sleeves and being willing to tackle it.”

tive, and all working full-time jobs, the guys met at night and on weekends and in 2010 formed MERIT: Medical Education Resources Initiative for Teens. Mains and Wilcox went on to become medical students at Johns Hopkins, and Gadwal still works for Teach for America, training new teachers. All three have remained committed to MERIT and are looking to hire a full-time executive director to take the program to the next level.

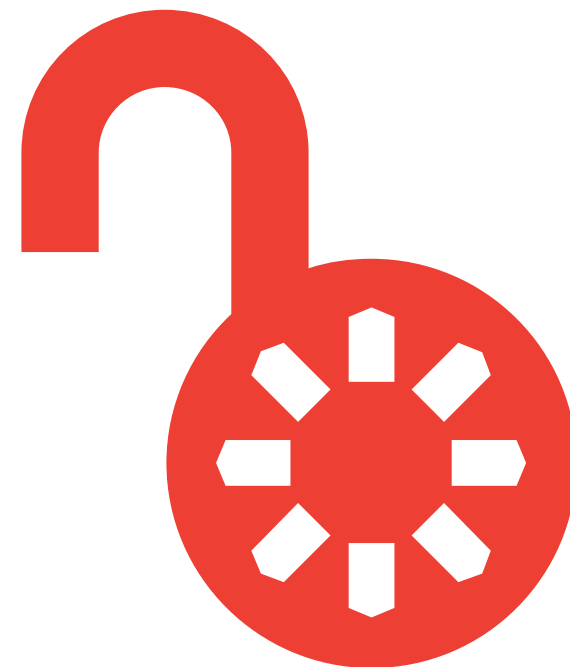
It was in 2010, his second year of teaching 11th-grade biology at Carver Vocational Technical High School, that Tyler Mains met Tyren. “He came into my class, like many of my students, without a good science background at all,” says Mains. “He told me in the first week of school that we would get along if I would just let him sleep.” But that didn't last long: “A couple of months later, he wrote one of the best essays out of all my students comparing mitochondria and chloroplasts and their roles in photosynthesis and respiration. He started getting really excited about science, and the next month, we did a body systems unit and he told me that he wanted to become a doctor.” Mains was thrilled at Tyren's rapid transformation – but also dismayed, because “I knew that his English and math skills were really far below grade level, and that he realistically wasn't going to become a doctor unless there was a lot of extra support for him.”

Meanwhile, Mark Wilcox, teaching chemistry at Patterson High School, had a 10th-grader named Shanquel in his class. “She was absolutely inspiring

to watch,” he recalls. “She showed up every day very enthusiastic to learn, always prepared. But she was behind academically, having difficulty with single-factor algebra problems, reading well below grade level.” Shanquel told Wilcox that she wanted to be a cardiologist. Again, there was a big gap between the ambition and her likelihood of reaching it. “I saw a very difficult path for her.”

And then there was Michael, another of Mains' students. He didn't want to be a doctor; he wanted to be a film director. One day, Michael came limping into class, and Mains asked what was wrong. “He said, ‘Don't worry about it.’ I asked if he had seen a doctor and he told me that he doesn't see doctors.” It turned out that the closest doctor Michael knew was two bus rides away, his mother didn't have insurance, and he didn't want to ask her to spend the money. “Fortunately, a week later, he was fine, and it was probably just a sprain,” says Mains. “But I wondered, what if it had been something more serious? What if any of my students had something serious, and they're not going to see doctors, either?” And then he put the stories of Tyren and Michael together. What if, he wondered, “we could create a program for students like Tyren who have this interest in medicine but need a lot of extra help, to help them become physicians so kids like Michael could have access to health care and feel comfortable going to them because they are from the neighborhood?”

Mains went to Wilcox and Gadwal and asked if they had any similar students, and if they wanted to try to help them. They did, and they did. “We got together every week at Panera Bread on Boston Street,” says Wilcox, “and talked about what this program should look like. We built a framework, came up with a mission and vision statement, and then we just started talking to people. I had a science club that was already partnering with the National Institute on Drug Abuse,” located on the Bayview campus. Wilcox spoke with the director of that program, who suggested that he speak with Richard Bennett, M.D., president of Johns Hopkins Bayview. “Dr. Bennett was really our earliest champion,” Wilcox says.



How do three science teachers go about setting up a program like MERIT? “Really it's just a lot of rolling up our sleeves and being willing to tackle it,” Wilcox says. “We've learned at each step of the way – how to build teams, how to project-plan, what's the ideal management structure, how to have events and coordinate the relationships between scholars and mentors and make sure that we're shepherding parents throughout the program. It's taken a little while.”

“Would it be a failure on our part if someone became a physician in a suburban county?” Or wouldn't it be a success anyway, to give a kid with a dream a decent shot at actually making it happen?

Mains, Wilcox and Gadwal hammered out a three-year curriculum. “We take in students as sophomores and follow them through graduation,” says Mains, although that first year's class had five

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Celebrating Change: A New Latino Health Center

You can fight change, ignore it, or celebrate it, but it's still going to happen, and the only thing you have any say over is how you deal with it. Everything changes: Twenty years ago, if you drove down Eastern Avenue near what is now Johns Hopkins Bayview – it used to be a Hopkins hospital known as the Francis Scott Key Medical Center, and before that, it was the old Baltimore City Hospital – you would see a lot of Greek restaurants, coffee shops, and people. The Greek culture is still there, still vibrant, but now the Greek restaurants are mixed in with Spanish restaurants and grocery stores. Billboards are written in Spanish, and city buses have Spanish-language ads on the sides.

The neighborhood is definitely changing. And Hopkins is changing, too. As the Latino population has skyrocketed in the rowhouses around Bayview and the Broadway campus, Hopkins has opened its arms to welcome them. David Hellmann, M.D., Vice Dean and Chairman of the Department of Medicine, is fond of quoting something that Ralph Waldo Emerson once said: "Health is the first wealth." Hellmann notes, "Mr. Johns Hopkins started this place to take care of the indigent of this city. I think he would be proud of the things we are doing today." One initiative, covered in our last issue of *Breakthrough*, is a huge project called the Johns Hopkins Community Health Partnership (J-CHIP), aimed at transforming the health of the people who live in the nearby urban neighborhoods. An even newer initiative, just a few months old, is focused on brightening the health prospects for the growing Latino community. Centro SOL – "sol" means "sun" in Spanish; the official name is the Johns Hopkins Center for Health/Salud and Opportunity for Latinos; it's also called the Latino Center of Excellence – is the result of the combined dreams of several Johns Hopkins physicians.

"Who would have thought or predicted that this neighborhood would change so dramatically?" says Hellmann. But Johns Hopkins Bayview has also been changing; Hellmann's Pyramid Model of academic medicine – taking the traditional mission, usually depicted as a triangle of "teaching, research, and patient care" but tying them all together, with the patient at the apex – focuses on patients, their families, and the community. "How could we not respond to this?"

As often happens at Johns Hopkins, there has been a fortunate confluence of events and people: Tina Cheng, M.D., M.P.H., has just joined the Bayview faculty as Director of Pediatrics. Cheng, who continues as head of general pediatrics and adolescent medicine at the Johns Hopkins Children's Center, has long been interested in child health disparities; her work "has always been very much community-oriented and community-based," she says, and much of it has centered on African American communities. But because



around Bayview, the rapidly growing and underserved population is Latino immigrants, Cheng felt that a commitment and effort from Hopkins to address the needs of Latino families was something that needed to happen. She felt that a Center could build on the efforts of the Bayview Latino Family Advisory Program led by Sarah Polk, M.D., M.P.H., and Lisa DeCamp, M.D., in pediatrics, and of HOLA, the Hopkins Organization for Latino Awareness, a multidisciplinary group aimed at improving access and quality of clinical care for Latino immigrants. HOLA was founded by infectious disease specialists Kathleen Page, M.D., and Adriana Andrade, M.D., M.P.H., who had also hoped for a dedicated Latino center.

As the Latino population has skyrocketed in the rowhouses around Bayview and the Broadway campus, Hopkins has opened its arms to welcome them.

Cheng had worked on several projects with the Aaron and Lillie Straus Foundation, a Baltimore-based philanthropic organization that supports programs for children. When she approached the Foundation with the idea of a center for Latino Health, it responded with an enthusiastic thumbs up – a five-year grant. Hellman provided a hefty contribution from the Department of Medicine and garnered matching funds. The result is a multidisciplinary, family-centered approach to caring for Latinos that involves pediatrics, obstetrics-gynecology, internal medicine, and psychiatry.

Why, you might wonder, do Latinos need a center specially dedicated to addressing their needs? Isn't health the same for everyone? In one sense, yes; this population struggles with many of the same issues, like obesity, high blood pressure, and diabetes, as do millions of Americans. But many Latinos don't speak or read much English and need interpreters. Even then, it's not always easy when health care providers are trying to explain medical problems, educate about health and discuss complicated discharge plans. "Many families come from cultural backgrounds and health systems that are very different from the systems we have here," says Cheng. "So our big challenge is to deliver care for families that may have low health literacy as well as limited English proficiency."

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Taking Care of Mommy and Baby

New moms tend to put their babies first, and their own needs – sometimes even their postpartum health check-up – on hold, and this is not a good thing. Particularly if they have any health issues, like hypertension or diabetes, that could affect their long-term health and any future pregnancy.

So how do you get a busy mom to take a half-hour or so for herself and go see the doctor? Maybe, say physicians at Johns Hopkins Bayview, you combine the postpartum visit with a regular baby checkup. An interdisciplinary effort, originated by general internist Wendy Bennett, M.D., M.P.H., links internal medicine, obstetrics, and pediatrics. She and pediatrician Sarah Polk, Sc.M., M.D., are heading the new “Mommy and Me Transitional Care” study to improve family-centered care after delivery. It is a clinic without walls; the mommy-baby visits will take place in existing patient examining rooms, “and we will provide additional services including social work, case management, breastfeeding promotion, and a dietician,” says Bennett. The pediatric and obstetrics visits will be scheduled back-to-back so only the clinicians need to move.

“The postpartum visit is just one visit,” usually about six weeks after delivery, says Bennett, “but it provides a unique opportunity to review the pregnancy course, coordinate future preventive health care with a primary care physician, provide guidance about health in the next year,” and discuss contraception. With obesity on the increase in the U.S., Bennett notes, “there are more women entering pregnancy obese and with obesity-related chronic illnesses like high blood pressure.” These women also may develop gestational diabetes, and are at a higher risk for preeclampsia – complications that are increasingly common. Further, “women with gestational diabetes or preeclampsia are at higher risk for developing diabetes and



heart disease later.” Which is why doctors believe this window – after a baby is born, and before another pregnancy might happen – is critical to helping lower a mom’s risk of future chronic health problems. “When we have patients who are at higher-risk, we’ve been more worried about them during pregnancy, we’re probably more likely to be worried about them after delivery, but because many women lose health insurance, we don’t have the opportunity to keep following them. Women at highest risk for chronic illness and future pregnancy complications are also less likely to come for their first postpartum visit.” The postpartum visit is considered so important that health insurers use it as a measure of quality and accountability of care.

“The thing is,” says Polk, “these same higher-risk women are in general very good about bringing in their babies for care. So we can say to them: ‘Listen, I know you’re going to be really good about coming in for your newborn. If you see the obstetrician for 30 minutes leading up to your child’s visit, could we just do both visits in one day, because we think it’s really important?’”

How do you get a busy mom to take a half-hour or so for herself and go see the doctor? Maybe you combine the postpartum visit with a regular baby checkup.

The postpartum visit is “not a panacea,” Polk notes, “but we hope this will make new moms feel invigorated to focus on their health, and to understand the relevance of their health to their child’s health.” Pediatricians know that children don’t exist in a vacuum, she adds, but within a family. When there is a health problem in one person, it can affect the entire family. “When I see a five-year-old who comes in and is overweight or obese, and drinking two cans of soda a day, there’s not a lot of point for me to say, ‘the child should not drink soda.’” Instead, Polk believes the better strategy is to figure out, without seeming accusatory, why there’s soda in the house to begin with. “The kid doesn’t buy the groceries.” Are there teenagers downing multiple Mountain Dew’s a day? Maybe the parents have gotten into the bad habit of drinking soda with their meals, adding empty calories to calories. “There is no nutritional value to soda. If we can get the soda out of the house, that’s not a bad change for anybody, especially for the child.”

Similarly, if the mother smokes, or consumes alcohol or drugs, or is overweight, this could affect not only her baby, but the health of any future babies she may have. The postpartum visit is an excellent opportunity for the obstetrician to connect the mother with an internist, behavioral specialist, or family physician who could help her manage these problems.

Many of the women who will be seen in the mother-baby clinic are immigrant Latino women who are only insured during pregnancy (for more on Latino health, see story on Page 10). If they come to the postpartum visit, they may be more likely to stay connected to a doctor – and less likely to fall through the cracks down the road. “This may be a particularly relevant program for uninsured immigrant Latino women,” says Polk. “These are women who are

going to have less access to care moving forward. If they had gestational diabetes, is it gone or not gone? It’s important to have these health issues clarified, because these women won’t easily pick up the phone and make an appointment with an internist if they decide they want or need to two months later. Our thought is that they are particularly vulnerable.”

An evolution in thinking about producing healthy babies has been happening in medicine. Tina Cheng, M.D., M.P.H., director of the Department of Pediatrics, says that there is an increasing emphasis on pre-conception. “The infant mortality rate in the U.S. has decreased, but it is still quite high in this country and in some minority groups,” she says. “There have been lots of interventions to try to address this that have mostly focused on the prenatal time period,” when a woman is pregnant but before childbirth. “But researchers are finding that if we’re really going to address infant mortality, we also need to think about women’s health before the baby is even conceived, because this is influencing her health outcomes as well as the baby’s health outcomes.” In a project that encompasses five different area pediatric clinics, Cheng is encouraging greater discussion of women’s and family health issues in addition to the health of the child. Pediatric clinicians are well-positioned to address women’s health before conception, she notes. This is especially important for teenage girls who are likely to have children in the future, and for women coming with their new babies who are “interconceptional” for their next child.

One way to fund this model might be through insurance companies. “If the postpartum visit is part of the national accountability standards, insurance companies know they are going to have to invest in finding a way to get moms to come in for this visit because they’re being tracked on it,” says Polk. Increasing the likelihood that a woman will come to this checkup “might be enough to justify the expense. It’s cheaper than a bunch of case managers who are individually tracking patients.”

If the pilot study is as successful as Polk and Bennett hope, it will be offered on a larger scale. ■

Not Just Fixing Dents

Say you're a medical resident and you're writing up your notes on the patient you've just interviewed. Eileen, age 43, mother of two really nice teenagers. She has high blood pressure, trouble with sleep apnea, and joint pain in her knees. She's also overweight. The kids are on the heavy side, too. You know the whole family most likely eats too much fast food and not enough fruits and vegetables, and that pretty much all of Eileen's health problems – including her future risk of diabetes and heart disease – would get better if she would just lose some weight, exercise more, and change her diet.

But you didn't say a word. You tried several ice-breaker lines in your head to introduce the subject, and none of them sounded right; in fact, they all seemed a bit preachy. Also, maybe you figured she might think you had no right to say anything about weight because, let's face it, you've been eating a lot of fast food lately and have packed on a few pounds, yourself. So, to sum it up, you missed an opportunity here and you're kicking yourself for it. You just didn't know what to say.

This happens a lot, and not just to residents and interns, but to physicians who have been practicing for years. It's the doctor-patient equivalent of a bad date. Doctors want to say something but don't know how. Many patients know they have a problem and



wish the doctor would bring it up. Both parties hope something will happen, nothing does, and they just go home, thinking, "maybe next time."

And yet, healthy behaviors are life-improving, life-extending, and life-saving. "We must promote healthy behaviors in our patients," says David Hellmann, M.D., Chairman of Medicine and Vice Dean, "because basically what we do is, we operate a body shop. We fix dents but do little to teach people to drive better."

"The doctors are the ones who are anxious about bringing it up. But when they finally do, it's actually a relief for the patient to have someone to talk to about it."

A new curriculum for medical residents, ready to launch soon at Johns Hopkins Bayview, aims to change this. It is a collaboration between the Department of Internal Medicine, the Department of Psychiatry and Behavioral Sciences, and the Center for Behavior and Health. The goal is to help young doctors learn how to broach behavioral issues that are generally under-treated – obesity, depression, anxiety, substance abuse, poor sleep habits, sedentary lifestyle. "There's pretty good evidence showing that issues of unhealthy behaviors are not addressed by anyone until it's too late," says Colleen Christmas, M.D., Director of the Medical Residency program, who is designing this curriculum with Michael Smith, Ph.D., Director

of the Center for Behavior and Health. "When somebody develops hypertension, heart disease, or diabetes, then we say, 'You need to diet and exercise.' But there's not really a whole lot of prevention going on – for years – before that."

A novel aspect of this two-week rotation – which will take place on a regular teaching ward in the hospital – is that the residents will be monitoring and attempting to change one aspect of their own behavior, as well (see side story). Christmas cites an interesting study in which investigators looked at the incidence of obesity in young doctors in training at two academic hospital centers. Nearly half of the medical residents studied were overweight or obese by standard criteria, but in a survey, "only 10 percent recognized that they were overweight or obese," she says. "So that may be a part of the problem – that doctors in general not only don't recognize obesity in their patients, they don't even recognize it in themselves," perhaps because the average weight in the U.S. is noticeably heavier than it used to be. "And if you don't perceive it in yourself, why would you be likely to say anything to your patients?"

Recognizing that "most doctors don't even know where to start," Christmas and Smith are preparing scripts – conversation starters. They also will be using the Vital Score iPad app (written about in the Holiday 2012 *Breakthrough*, available at <http://www.hopkinsmedicine.org/innovative/research/newsletter.html>). The app, developed by Hilary Hatch, a clinical psychologist in New York who is also on the faculty at the Johns Hopkins Center for Behavior and Health, contains a survey that patients complete on their own, usually in the waiting room before a clinic visit. The results serve as a

How do you promote healthy behavior in someone else if you have never tried to change behavior in yourself? Part of the new behavioral health curriculum is for residents to work on one aspect of their own lives. As interventions go, it's a little one – for just two weeks – but it focuses on making one small, doable change. Michael Smith, Ph.D., Director of the Center for Behavior and Health, hopes this will help give residents "authenticity and compassion when they talk about behavioral change, so they can say to patients, 'I know what it's like for you, because I've done it, too. I had a goal and I didn't always have success every day, but I met it, and I know that you can, too.'" Smith also hopes that the change – and the thinking about their own behavior – will last well after the rotation is over. "Ideally, we would love to make it a longer program. Most people can do things for a short period of time, but the hard part is the long-term behavioral change."

"Two of the basic principles important to successful behavior change," says Smith, "are cultivating confidence in your ability to change, and self-monitoring progress to achieve and maintain realistic goals." With this in mind, he is "arming" the residents with FitBit devices – in looks, similar to the LiveStrong wristbands – rubbery bands containing tiny, sophisticated monitors that measure sleep and physical activity, light up when the set goal is near, and buzz when it's achieved. The device estimates whether its wearer is asleep or awake based on the frequency and intensity of movement. It also tells the number of steps taken each day. "You log in and it wirelessly syncs to an iPhone or iPad, so you can get information in real time. You set a baseline, know where you're starting from and try to set realistic goals, and then get

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basis for discussion. Faculty from the Center for Behavior and Health, psychologists, psychiatrists, and internists who have expertise in addiction and substance abuse will teach the house staff, as well. "Residents will present patients to them, discuss their health and behaviors and get some advice about how to move them along the spectrum." Also, once a week, "the team will present a patient to a guest expert from Behavioral Health or Psychiatry to help guide both the assessment of the behavioral issues and suggest where to start to enact change."

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There are a lot of reasons why Jennifer should be dead, but there are at least three good reasons why she is not only alive but well: One, she never gave up, no matter how sick or discouraged she felt. Two, her parents never gave up on her, and she never had to bear her illness alone. And three, her doctor, L. David Martin, M.D., not only provided steadfast care for nine years; he also found a new treatment that had never been tried in this country, and collaborated like crazy with basic scientists, surgeons, hepatologists and officials in two states to make it happen.

Dave Martin is not a liver specialist, but an internist and teacher, who has expertise in treating addiction and pain. He first met Jennifer in 2004, when he was a Chief Resident at Johns Hopkins Bayview. He was her attending physician while she was in the hospital, and just kept on being her doctor. Jennifer, now 36, had been diagnosed with acute intermittent porphyria (AIP), an inherited disease involving the lack of an essential enzyme that helps metabolize a protein called heme, the iron-rich component of hemoglobin that gives blood its dark red color. There are different forms of porphyria, depending on which of several enzymes is deficient. In Jennifer's case, the particular enzyme she lacks is called PBG deaminase. Because she doesn't have enough of this enzyme, heme builds up, often causing severe pain. Heme can also get washed out in the urine, causing it to turn a dramatic, deep purple.

Because porphyria is not very common, Jennifer's illness had been missed by doctors for years. "She had already had her appendix and gallbladder removed," says Martin, "and then it was thought that she might have endometriosis." At another Baltimore hospital, with her parents at her bedside, one doctor stated, "You're just going to be one of these people going from ER to ER looking for pain medication." Jennifer was finally diagnosed with AIP and referred to Hopkins. When Martin met her, it was clear to him that she was in terrible discomfort, yet there was a plan to reduce her pain medication. "That did not seem workable to me."

"She was the first patient I've ever known who ran out of Medicare hospital days."

Martin got Jennifer through that flare-up – caused by toxic levels of heme that inflamed nerves and tissue – and many more. "Most of her flare-ups were a sensory neuropathy," he says, "deep, burning, fiery pain in her abdomen, back, and legs." Martin remembers them all. "In June of 2005, she had a very severe motor neuropathy. She was



almost completely paralyzed, in intensive care for about a month. For weeks, her breathing was so weak, nearly unsustainable – 40-50 times a minute." But Jennifer pulled through and recovered almost completely, except for a mild foot drop, Martin says. She has had several seizures and some scary episodes of neuropsychiatric symptoms, "when she became paranoid at the beginning of a flare. It has been bad at times." But even after the paralysis, Jennifer tried to have a normal life. She went to a friend's wedding in San Diego; the festivities included a cruise. "She got sick on the boat, had to be airlifted off, went to a hospital, no one there knew anything about her condition, she was eventually transferred to a university hospital, and after that, she didn't want to go anywhere." Except for one five-month stretch where she remained out of the hospital, "she would be home for up to about 30 days and then would have a flare-up- and have to be admitted again for 10 to 21 days. She only got sicker, and spent more and more time in the hospital. She was the first patient I've ever known who ran out of Medicare hospital days."

In 2009, Martin read medical reports from the United Kingdom about doctors using liver transplantation to cure porphyria. At Martin's request, hepatologist Frank Herlong presented Jennifer to liver transplant committees at Johns Hopkins and other hospitals in Maryland and Pennsylvania. "People were intrigued, but because there was no precedent in the U.S., they all declined to accept her as a candidate," he says. Martin had mixed feelings about the procedure, himself: "I really didn't know whether it was the right thing to do," he says. "I was thinking, what if it doesn't work, and then she's having to take these rejection medicines, and she can't swallow them, because she goes literally for weeks without eating." Meanwhile, Jennifer kept getting worse.

Then, in late 2010 and early 2011, there were two reports, one from a group at Mt. Sinai Hospital in New York, on liver-directed gene therapy for mice with AIP. "This disease is a prime candidate for genetic therapy, because there is only one mutation," says Martin. "The mouse model of AIP has exactly the same mutation." Scientists created

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“It’s easier for people to understand pain when someone comes in with a bone sticking out of their leg. This pain is excruciating, but you can’t really see anything.”

a genetic band-aid, linked to the common cold virus, that targeted the DNA in the liver and started making the normal amounts of PBG deaminase. Martin began talking to one of the researchers at Mt. Sinai, who said that although there were not yet clinical trials of this form of therapy, he might be able to engineer Jennifer’s own stem cells to fix the deficiency. Martin was aware that basic scientists at Hopkins had recently figured out how to harvest stem cells from a blood sample, but the Mt. Sinai scientist put the project on hold; it was still too soon, the science wasn’t ready yet.

Still, Jennifer’s condition deteriorated. “By this time, she was spending most of her time in the hospital, with periods of maybe five days at home.” As happens so often in people who are chronically ill, other serious complications developed. She developed several infections in the port in her chest where she received medications. “In the spring of 2012, she really had no quality of life. She was always hopeful, but she was definitely getting demoralized.” Meanwhile, the UK physicians published a follow-up on their series of liver transplants, and the Mt. Sinai liver transplant team agreed to evaluate Jennifer. “At the initial meeting, the transplant surgeon didn’t understand why she and her parents were there,” says Martin. “She didn’t have liver failure.” But the surgeon soon saw the possibility of the transplant as a cure, and Jennifer was put on the list. Back in Maryland, Jennifer’s family was dealing with insurance issues. She was out of Medicare hospital days. Her Medicaid and another Maryland program that serves as a safety net for people with rare diseases had tapped out. “She had met her \$2 million lifetime cap.” It took a while, but with help from Martin, Jennifer was approved for coverage of this transplant and was transported to New York.

“Nothing was ever easy,” says Martin. Jennifer had always been relatively resistant to a recombinant form of heme that can temporarily ease porphyria symptoms. She also had become so tolerant to pain medications that she needed massive amounts of IV opioids every three to four hours. “Anyone who didn’t know her would think, ‘how is this person not dead, taking this much narcotic?’ Yet she would be awake and talking.” The pain of a porphyria flare-up is similar to that of an acute episode of sickle cell anemia. “It’s easier for people to understand pain when someone comes in with a bone sticking out of their leg,” says Martin. “This pain is excruciating, but you can’t really see anything.”

Jennifer finally got her transplant in April of 2013. “Almost immediately, she was better.” Except for one infectious complication of the immune-suppressing medication she must take, her recovery has been remarkably smooth. “She is back in school, at community college. She is hanging out with her friends, swimming at her uncle’s pool. Getting sunburned was one of the things that could trigger a porphyria flare before,” because the physiologic stress activated the heme production pathway. “She has her life back.”

“Anyone who didn’t know her would think, ‘how is this person not dead, taking this much narcotic?’ Yet she would be awake and talking.”

Why did the transplant work? “We only needed to fix the genetic defect in the liver, because that’s the primary site of the production of heme. It is a radical treatment for one little mutation.” Martin still believes that one day genetic therapy will fix this problem in patients like Jennifer.

Nearly 10 years ago, Martin presented Jennifer at a Grand Rounds. The title of his talk was, “Living With Porphyria.” He is looking forward to giving another talk starring Jennifer: “Living Without Porphyria: 10 Years Later.” ■

Nipping Silos in the Bud

At the Center for Innovative Medicine, we call them silos – towers within Ivory Towers, where scientists and physicians tend to hole up with their own kind, fellow specialists in the same disease or branch of science. Often getting stuck in a silo is not intentional, just a bad habit that develops when you work with the same people every day, publish papers together, see patients together, and mainly just talk to the people whose labs and offices are right by yours.

But a rut’s a rut, intentional or not. Throughout academic medicine, there are a lot of silos, and we have been pushing the antidote – collaboration – since the CIM began in 2004. One of our key faculty is Roy Ziegelstein, M.D., a cardiologist, master clinician and teacher, the Miller Scholar – our very first Bayview Scholar at the CIM – and most recently, the Vice Dean for Education at Johns Hopkins University School of Medicine. One of his first official functions as Vice Dean has been to take a giant step toward nipping silos in the bud – boosting collaboration while scientists and physicians are still students.

“The phenomenal thing,” he says, “is that we have awesome students working to get their M.D.s and Ph.D.s, the best and brightest in the world.” But they don’t know each other. They live parallel lives in different buildings, hardly ever having the chance to meet. It wasn’t always this way at Hopkins. Back in the late 1980s, when Ziegelstein was a resident and chief resident, “I can remember sitting and talking with people who were studying the basic science of HIV and viral replication,” he says. “At that time, the disease was completely untreatable.

It was so sad, like taking care of people back before there were antibiotics, and there was basically nothing we could do for these patients, who were often very young. But I remember thinking, ‘here I have colleagues who are actually working on the promise of controlling or even curing the disease,’ and now, 30 years later, it’s a reality.” At places like the hospital Doctor’s Dining Room, which doesn’t exist anymore, doctors could talk about aspects of the disease they were trying to treat, and scientists could share their strategies for targeting them.

That’s not so easy anymore. “What we’ve done here, inadvertently, is we’ve disconnected,” says Ziegelstein. “We have set up physical barriers to bringing students together.” A prime, yet beautiful and state-of-the-art culprit is the Armstrong Medical Education Building used by medical students. “Everybody used to be in the same buildings together. Now that they’re physically disconnected, it really creates a lot of barriers to getting M.D. and Ph.D. students to connect and to collaborate, to sit and have a cup of coffee and discuss things with each other.”

To combat this, Ziegelstein has established a monthly lecture series for M.D. and Ph.D. students. He brainstormed with the presidents of the Medical Student Senate and of the Graduate Student Association and came up with a format: A faculty expert sets the scene with a brief overview of the evening’s subject. Then a medical student presents the important clinical aspects for about 20 minutes, and a graduate student discusses the basic science for the same length of time. Then they both field questions.

As important as this first hour is, for Ziegelstein, the next hour is even more meaningful. “It’s purely social.” Ziegelstein gives the audience – about 100 people at the first lecture – an assignment: “They have to introduce themselves and speak to at least one person that they don’t know. I want the graduate and medical students to connect.”

The first lecture was on HIV cure. The second was on targeted therapies for cancer. Based on the emails and evaluations Ziegelstein has seen so far, both events have been a success. As one faculty member commented: “What a great idea that was long overdue.” ■

One Academy, Now On Two Campuses

In many teaching hospitals, academic success and promotion tend to favor researchers with grants and scientific publications over astute clinicians and gifted teachers. Not here. The Miller-Coulson Academy of Clinical Excellence, an initiative sponsored by the Center for Innovative Medicine and made possible through the generous support of the Miller-Coulson family, is changing the culture of academic recognition.

Built on the idea that clinical excellence is the foundation for both discovery and education, the Academy uses a rigorous process to identify masterful clinicians and select them for membership. In just a few years since its inception at Johns Hopkins Bayview, the academy has sparked interest in starting similar programs at several academic hospitals in the U.S. and Canada, and now it is expanding to include the Johns Hopkins Hospital.

"It is a really exciting time," says Scott Wright, M.D., the Academy's director, who was approached this summer by Paul Rothman, M.D., Dean of the School of Medicine and CEO of Johns Hopkins Medicine, about spreading the initiative throughout all of Hopkins. That's a tall order, because the realm that is Johns Hopkins Medicine includes not just the two Baltimore campuses but Suburban Hospital and Howard County General Hospital in Maryland, Sibley Hospital in Washington, D.C., and All Children's Hospital in St. Petersburg, Florida. Wright and Vice Dean David Hellmann, M.D., Director of the CIM, met with other Hopkins officials and came up with a plan to extend the Academy to Johns Hopkins Hospital first.

"Stage 1 was building a successful program at Bayview," Wright says. "Stage 2 is happening now." In September, the Academy issued a call for nominations for clinicians at Johns Hopkins Hospital. Clinicians must be nominated by four peers to be invited to apply, says Wright. Most of those who applied were already familiar with the Academy, "but some weren't, and they looked at our website, read our papers, and became seriously interested. There is an outstanding cohort who are applying, and the members on the Bayview campus are looking forward to collaborating with them." Each applicant prepares a detailed portfolio that assesses clinical accomplishment, which will be reviewed and scored by an external committee of respected physicians at top academic medical centers, and then by an internal selection committee.

Among the Academy's programs are an annual symposium devoted to excellence in patient care; a blog called "Reflections on Clinical Excellence," which has reached an international audience of doctors; a curriculum to help clinicians move from competence to excellence; a medical student elective on clinical excellence; an "oath development" program to help residents focus their commitment to humanism in medicine; and Academy-led Medical Grand Rounds. Academy members also publish papers on the subject of clinical excellence.

Wright envisions the Academy members at the two campuses working together seamlessly, alternating meetings on each campus, doing teaching, clinical coaching and mentoring together, contributing to the blog, and writing papers. There will be an associate director on each campus, "but I think there will be tremendous collaboration and there will be one Academy to recognize and value and support clinical excellence." Stage 3 will be the roll-out to the affiliate community hospitals, "which are a little bit dissimilar to the academic hospitals at Johns Hopkins and Bayview," he notes. "These may form a distinct academy that will have liaisons with the Miller-Coulson Academy."

Meanwhile, he adds, "it's wonderful to know that clinical excellence is getting more thought and attention than it ever did in the past." The winners here? "Faculty, patients, students and residents. Everybody." ■

sophomores, including Shanquel, plus two juniors, including Tyren. The sophomore curriculum focuses on professionalism and the Seven Habits of Highly Effective Teens, based on the book by Sean Covey. The junior year is focused on academic remediation – mostly English and math, and preparing for the SAT – and the senior year is dedicated to getting the students into college, applying for scholarships and then working on the transition into college. "They get two paid summer internships," says Mains. "The one between the sophomore and junior year is clinical work at Bayview, and the one between the junior and senior year is in a Johns Hopkins research lab."

At the beginning, "before we even had the students," says Mains, "Dr. Bennett said he would pay for the internships for the first summer, but we would have to find funding for future summers." The internships are the most costly element of the MERIT program. Last summer, most of the internships were paid for through Youth Works, a program with the Baltimore mayor's office. Other funding comes from private donations, grants, and fundraisers. "We just kind of pick up money as we go."

For the entire program, each scholar is paired with two mentors, an undergraduate and a graduate student. The mentoring, says Wilcox, "is incredibly important. The high school students gain access to a whole world of information that they otherwise would not have." Parents contribute in various ways, too, ranging from bringing food to an event or sharing their life and career experiences at MERIT meetings, Wilcox says. MERIT is a partnership of mentors, parents, and students, and everybody helps. "What we provide are opportunities and institutional support and the community that's going to push everyone forward together."

Students are accepted into MERIT during the winter of the school year. At press time in November, there were seven alumni, six seniors, nine juniors, and 150 volunteers. Mains is now a third-year medical student at Johns Hopkins, and Wilcox is a second-year medical student. Tyren is a sophomore at the Community College of Baltimore County, and through a program that connects to

the University of Maryland-Baltimore County, will get his four-year degree from UMBC.

Shanquel did her first internship at NIDA, researching the effects of cocaine on different cell lines. The next year, she did a clinically based internship in neurology at Johns Hopkins Hospital. "Those internships allowed her to build some confidence," says Wilcox, "and also exposed her to a larger world, so she could see what it was going to be like when she entered a much larger applicant pool where the competition is stiff." The Salutatorian of her class, Shanquel is at Goucher College in Baltimore on a full scholarship. "But as she would tell you herself, it has been a very difficult transition, because of the nature of urban education and cycles of poverty, and all of the social determinants that go into what we think about as an opportunity gap," Wilcox adds. A big part of the MERIT curriculum is aimed at getting the students to think about the health care disparities in their neighborhoods, and what they can do to eliminate them. "That's what we're trying to do, is find kids like Shanquel and Tyren, provide them with opportunities that we are uniquely able to put together and put them on a slightly different trajectory, so that ultimately they become the health professionals who are addressing the health disparities in their community."

However, Mains notes, scholars have no obligation to stay in Baltimore and work in underserved neighborhoods. "Would it be a failure on our part if someone became a physician in a suburban county?" Or wouldn't it be a success anyway, to give a kid with a dream a decent shot at actually making it happen? "I think part of our job is to convince other people that these students can become doctors. The passion that these students have is really inspiring. A lot of people don't know that, and I think that's the most difficult thing – to convince people that it's worth doing all of this, that these students do have the the potential to become leaders in health care." ■

If you would like to learn more about the MERIT program, please go to this website: <http://www.meritbaltimore.org>.

Certain health issues are more common in Latino patients, like tooth decay or obesity, says Cheng. Exposure to tuberculosis is also more common, and “there are a lot of family stress issues that we see in all families these days that we also see in the Latino population.” Cheng adds that not only are there specific needs, but also specific strengths: “We can learn a lot from the strong families and social networks that exist in the Latino community.”

For Cheng, advocating for patients is one of the most important parts of her job, and one of the things she wants the Department of Pediatrics and Centro Sol to achieve. She believes in supplementing patient care with other services whenever possible. For example, the Children’s Medical Practice at Bayview, has a Health Leads® Family Help Desk staffed by undergraduate volunteers whose job is to help patients and their families connect to community services. Mental health resources for families are a huge need, as well, and Cheng has worked to make them available for patients. All residents in pediatrics go out on home visits, too, “partly to learn about what happens outside of the clinic, and partly to get a better sense of some of the issues that our families are facing.”

“Many families come from cultural backgrounds and health systems that are very different from the systems we have here. So our big challenge is to deliver care for families that may have low health literacy as well as limited English proficiency.”

This advocacy comes in large part, she says, from a “recognition that the health issues that we see are very much influenced by things that are going on in the family, in the community – what we call social determinants of health. We know that behavioral choices, the physical and social environment, and access to health care all influence health. There’s also a recognition that we as pediatricians shouldn’t just be giving immunizations and measuring children’s height and weight – of course we do those things – but also address their health more holistically.”

In research: Centro Sol is developing a research consultation program for scientists interested in recruiting and working with Latino populations. Research on Latino health disparities is also under way.

In clinical care: “We are doing needs assessment, to determine the biggest health issues that we need to address,” says Cheng. The Latino Family Advisory Board, made up of patients and families, will help determine the kinds of clinical services that are needed. In clinical care another focus is on making sure interpreter services are available and being used.

In education: The Center offers a variety of programs, including teaching medical students “cultural competency” and how to work with interpreters. “The Center also works closely with many wonderful community organizations with similar goals,” Cheng notes. Health promotion and education efforts include a regular radio show on a popular Spanish station, a regular column in a local Latino newspaper, and a regular series of talks at local churches.

All of this, Hellmann believes, sounds exactly like what the Quaker philanthropist Johns Hopkins had in mind when he bequeathed the funds to start his university and hospital. “His will – literally and figuratively – is even more alive today.” ■

Behavior change is not easy. Even in inpatient rehab centers where patients stay for weeks at a time, there is a high failure rate. Christmas knows this. “We don’t expect that our residents are going to make a massive immediate impact on these patients,” she says. “But we do hope they will start to develop some comfort in this area.” For example: “Right now, most residents don’t even ask their patients about exercise, because they don’t know what to tell them for advice, other than, ‘You should exercise more. Exercise is good for your health,’ in a very general way. What we’re trying to do is move them along from being so completely overwhelmed that they don’t even bring up these issues to starting the conversation and referring patients to other resources for further help. They’re not going to cure someone’s addiction in three to four days in the hospital. But what they can do is uncover their addiction, give patients a strong recommendation that they need help, give them resources, and encourage them to follow up.” Even if only a few patients take action to change their health based on these conversations, “it’s certainly better than zero, which is where we are now.”

But what about the possibility of hurting the feelings of a nice lady like Eileen? “Our job as doctors,” says Christmas, “is to give advice on how the patient can improve her health, no matter what our particular hangups are.” And this is where the self-changing aspect of the curriculum (see side story) may be particularly empowering. “If a resident who is a little overweight is talking to a patient and can say, ‘Yes, I’ve tried dieting, too. It’s really hard,’ that will give the whole conversation a lot of credibility.”

Christmas anticipates that before the rotation, the residents will report “very poor confidence in their ability to have these discussions with patients.” Afterward, she and Smith hope “that they will feel much more capable, they will know the words to use, know the resources for people who are motivated to change, and they feel like they are starting to make a difference.” Talking about unhealthy behavior with patients is akin to having a discussion about advanced directives, she adds. “It’s the same sort of thing. Patients really want to talk about those things. The doctors are the ones who are anxious about bringing it up. But when they finally do, it’s actually a relief for the patient to have someone to talk to about it.” ■

constant feedback in terms of how you’re doing, and that helps you make short-term course corrections.” Smith hopes that the week before the rotation actually starts, residents can wear the devices and set their goals ahead of time, so they will be ready to go on Day One.

Success, Smith says, is a bunch of little steps – literally. One option the residents have is to increase their exercise, measured in the number of steps they walk each day. “Say we take a baseline and they’re averaging 5,000 steps a day. We’ll set a goal that’s reasonable, and for the next week, maybe they’ll try to take 2,000 more steps.” Small goals that are reasonable are much better than lofty goals that aren’t. “It’s all about confidence. You don’t want to make the goal so easy that it’s meaningless. But if you set a goal that’s way too hard, you’re likely to fail,” and get discouraged, and not keep trying.

Another option is to monitor and improve sleep. “Sleep will be interesting,” Smith says. “Are they sleep-deprived? There has been a major effort to extend the amount of sleep time young physicians are getting; it’s a lot better than it used to be.” But some people log plenty of time on the pillow and think they’re getting plenty of rest – yet maybe they toss and turn, or wake up a lot in the night, and don’t get nearly as much sleep as they think they do.

“What I would love to do,” Smith adds, “since the residents will be rotating through in cohorts, is to set up social networks, so they can get feedback about their peers and about the other groups doing this.” That’s another key to maintaining behavioral change – peer support. “If there’s a culture of change, they’re much more likely to stick to it. Conversely, if the culture is against a change, it’s very difficult.”

Smith hopes this effort will not only help residents be more empathetic to their patients in need of change, but that it will “allow them to speak from a place of confidence. If they actually know something about behavior change and relate it to their own lives, they’re going to be much more effective at communicating and more willing to talk to their patients about it in a way that’s likely to be helpful.”

The wristbands are hard to miss. “Maybe other members of the medical community will see these bands and ask about them, and maybe the patients will ask and get interested,” says Smith. “I’m hoping it will snowball, if we do it right and make it fun. That’s my big vision.”

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Mr. Seth E. Frank,
Georges Lurcy Charitable & Educational Trust

“If people are constantly falling off a cliff, you could place ambulances under the cliff or build a fence on the top of the cliff. We are placing all too many ambulances under the cliff.”

Denis Parsons Burkitt (1911-1993), Irish surgeon, whose many achievements included the description of the pediatric cancer that bears his name, Burkitt's lymphoma.

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