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A roundup of noteworthy *Dome* stories and milestones from 2016.

6 CURBING ANTIBIOTIC PRESCRIPTIONS

How a group of infectious disease specialists at The Johns Hopkins Hospital works with clinical teams to prevent the spread of antibiotic-resistant bacteria.

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Meet the eight recipients of the 2016 Martin Luther King Jr. Community Service Awards.

INSIGHT

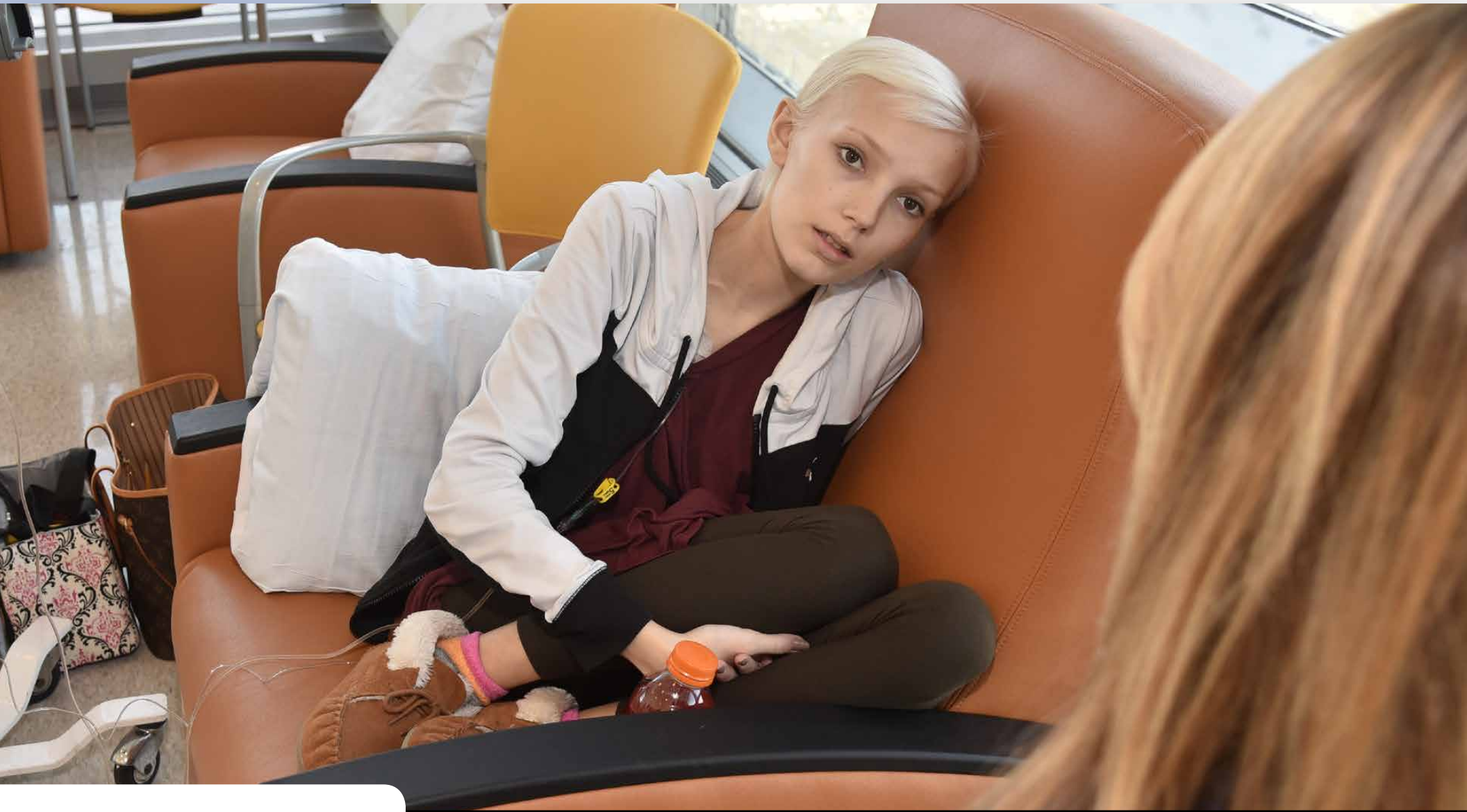
TAKE HEART

A 3-D bioprinter makes beating heart tissue that could one day help patients with heart failure.

Dome

A publication for the Johns Hopkins Medicine family

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Matsie Bosmans, 19, talks to nurse Lauren Wendt while receiving treatment in the pediatric oncology unit of the Johns Hopkins Children's Center.

MIKE CIESIELSKI

A New Approach for Adolescents and Young Adults with Cancer

Johns Hopkins patients like Matsie Bosmans, 19, receive care that takes into account the physical and emotional characteristics of their age group.



Learn more about the strategic priority for patient- and family-centered care online at hopkinsmedicine.org/strategic_plan.

MATSIE BOSMANS WAS 17, finishing her junior year of high school and looking forward to a summer of waitressing at the beach in North Carolina. But she had to call the Outer Banks restaurant to say she wouldn't be able to work there after all. She needed to stay in Maryland for a year—actually, 54 weeks—for chemotherapy. She had cancer.

Two and a half years later, Matsie, now 19, is being treated for her third recurrence of the disease. She wants to go to college like her friends, or at least hop in the car for weekend visits. She wants to wear a cute outfit for a giggly brunch in Fell's Point.

Instead, she's living in Howard County with her parents and younger sister, only going to Baltimore for weekly treatments in the pediatric oncology unit of the Johns Hopkins Children's Center.

Johns Hopkins, like other institutions, is changing the way it cares for adolescents and young adults like Matsie. New research and treatments for diseases, including AIDS, cystic fibrosis and cancer, are rooted in a growing recognition that this age group

(continued on page 4)

Providing High-Value Health Care

PAUL B. ROTHMAN, M.D.
DEAN OF THE MEDICAL FACULTY
CEO, JOHNS HOPKINS MEDICINE

As leaders in medical and biomedical education, research, and clinical care, we at Johns Hopkins Medicine understand the need to reduce the costs of health care and optimize patient outcomes and experience by eliminating unnecessary tests, treatments and procedures. In fact, high-value health care is a key focus of both the education and the patient- and family-centered care components in our five-year Strategic Plan. As a result, high-value health care at Johns Hopkins has quickly evolved from smaller programs into a national, collaborative effort. Here are just a few examples of some of our ongoing work.



With the rising costs in health care, the future of medicine rests on our students and trainees. One goal in our Strategic Plan calls for each residency and fellowship program to identify a commonly used test or procedure that is unnecessary, and then design and implement a plan to reduce or dispose of it. Such measures make patient care safer and more cost-effective. As a result of this school of medicine effort, more than 40 clinical initiatives have been embraced by our residency and fellowship programs to date. They are changing the way medicine is practiced.

WITH THE RISING COSTS IN HEALTH CARE, THE FUTURE OF MEDICINE RESTS ON OUR STUDENTS AND TRAINEES.

Another example is an effort led by Johns Hopkins anesthesiologist Stephen Frank that began in 2015 to reduce the number of red blood cell units transfused unnecessarily at Johns Hopkins member hospitals. Although standard protocol has been to automatically infuse two units at a time, one at a time is more appropriate in most cases. All of our hospitals have implemented the Why Give Two When One Will Do? campaign and evidence-based criteria for transfusions, with the goal to reduce blood use by 10 percent across the health system, providing better care for our patients and achieving an annual savings of \$2.8 million.

Finally, earlier this year, the school of medicine hosted its first high-value practice research symposium for our own faculty members and trainees that highlighted more than 50 of our initiatives to increase the value of care we deliver to patients. That successful forum showed us just how much we can learn from each other, so we invited all academic medical centers across the country to join us in the High Value Practice Academic Research Alliance, a consortium started by radiologist Pamela Johnson to advance high-value medical practice through research, innovation, collaboration and education.

At the core of this initiative is an annual High Value Practice Academic Research Alliance national research symposium. All academic medical centers are invited to participate in the inaugural symposium, which will be held on Oct. 9, 2017, here in Baltimore and sponsored by the school of medicine. The symposium will include abstract presentations demonstrating evidence of cost reduction in concert with patient care quality improvement, educational lectures from leaders in high-value care and best-practice presentations. Learn more about the symposium, and mark your calendar for this important event.

We are committed to delivering the best care to our patients every day. The onus is on us to provide the right care at the right time, at the right place and at the right cost. By collaborating with other academic medical centers, we can learn from their success stories, adopt best practices and advance our own ongoing efforts to achieve greater value for our patients. Together, we can improve the quality and change the cost of medicine in the United States.

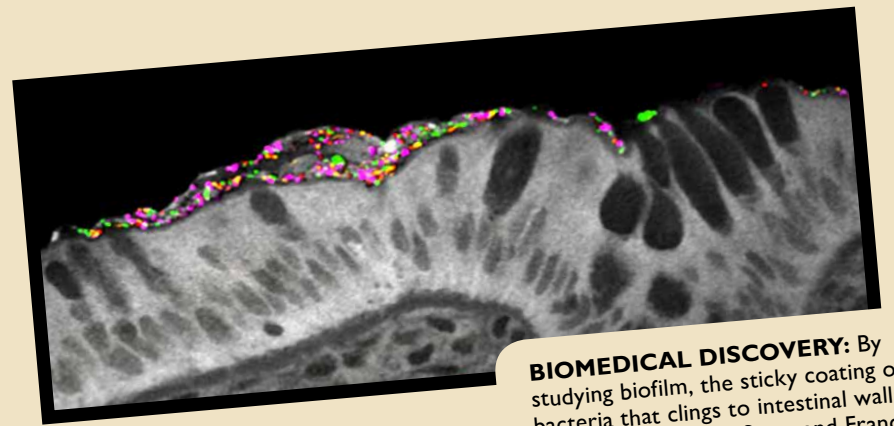
Learn more about JHM's high-value health care efforts at bit.ly/highvaluehealthcarejhm.

Year in

Highlights from *Dome* stories



PEOPLE: Redonda G. Miller becomes the first female president of The Johns Hopkins Hospital. She has more than 20 years of institutional service, most recently as senior vice president for medical affairs for the Johns Hopkins Health System. Miller is a graduate of the Johns Hopkins University School of Medicine.



BIOMEDICAL DISCOVERY: By studying biofilm, the sticky coating of bacteria that clings to intestinal walls, researchers Cynthia Sears and Francis Giardiello may have discovered the earliest marker in the progression of colon cancer.



PERFORMANCE: Johns Hopkins HealthCare Solutions, a business division within Johns Hopkins HealthCare, manages a Johns Hopkins-run workplace clinic at Coastal Sunbelt Produce in Laurel. In FY16, the Solutions group distributed \$6 million to faculty members and departments across the schools of medicine, public health and nursing from revenue it generated by providing Johns Hopkins consulting services and programs to industry clients.

Review 2016

about Johns Hopkins Medicine

INTEGRATION: Johns Hopkins All Children's Hospital celebrates its 90th anniversary and new name with a logo unveiling. The event also marks the fifth anniversary of the hospital joining Johns Hopkins Medicine.



PATIENT- AND FAMILY-CENTERED CARE: The Center for Addiction and Pregnancy at Johns Hopkins Bayview Medical Center is one of the first to co-locate and often integrate prenatal care, substance abuse treatment, psychiatric care and a pediatric clinic that treats children until they are 21.

EDUCATION: The primary care clerkship at Johns Hopkins brings first-year medical students face to face with patients and community doctors. The yearlong program allows trainees to learn how to build relationships with patients.



COMMUNITY OUTREACH: The Supply Chain Institute, a job training partnership between Johns Hopkins and Baltimore City Community College, is an eight-week course for high school graduates who want to learn about large-scale shipping, receiving and distribution operations.

HIGHLIGHTS FROM AROUND THE HEALTH SYSTEM

- **Sibley Memorial Hospital** opens a 475,000-square-foot patient tower with 200 single-occupant rooms, a state-of-the-art operating room, two floors of women's and infants' services, and an orthopaedic unit with a rehabilitation clinic. The tower also holds the Johns Hopkins Kimmel Cancer Center at Sibley, with 34 private infusion rooms, an inpatient oncology unit and the region's only dedicated pediatric radiation oncology program.
- **The Johns Hopkins Hospital** once again ranks #1 in Maryland and is #4 nationally out of nearly 5,000 hospitals in *U.S. News & World Report's* Best Hospitals list for 2016. Of the 16 specialties ranked by *U.S. News*, The Johns Hopkins Hospital has 15 that are nationally ranked, with 10 specialties among the top five and 14 specialties in the top 10.
- Vice President Joe Biden attends the launch of the **Bloomberg-Kimmel Institute for Cancer Immunotherapy**. One of the most promising avenues of cancer research, immunotherapy has the potential to cure all cancers by redirecting each patient's highly individual immune systems to target, detect and destroy cancer cells.
- **Johns Hopkins Medicine** creates the Armstrong Institute Center for Diagnostic Excellence, led by neurologist David Newman-Toker, an internationally recognized leader in diagnostic research and diagnostic safety.
- **Johns Hopkins Medicine** and the **Johns Hopkins University Applied Physics Laboratory** launch Johns Hopkins inHealth. This precision medicine effort uses data analytics and systems engineering to tailor diagnoses and treatments to individual patients.
- **The Johns Hopkins Hospital** becomes the first hospital in the United States to perform HIV-positive to HIV-positive kidney and liver transplants.
- Enrollment in **Johns Hopkins HealthCare's** Priority Partners exceeds 275,000, making it the largest Medicaid managed care organization in Maryland.
- The Johns Hopkins University School of Nursing

- and **Johns Hopkins Aramco Healthcare** create a Doctorate of Nursing Practice program that is the first of its kind in Saudi Arabia. An inaugural cohort of 13 students will graduate in May, ready to take on advanced roles as clinical and health care policy leaders through the program, which accepts nurses with bachelor's and master's degrees.
- **Johns Hopkins Medicine** researcher Gregg Semenza is among three scientists to win the 2016 Albert Lasker Basic Medical Research Award. Semenza is known for his groundbreaking discovery of a protein that switches genes on and off in response to low oxygen levels.
- **The Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, Howard County General Hospital, Sibley Memorial Hospital, Suburban Hospital and Johns Hopkins All Children's Hospital** are named designated leaders in LGBT Healthcare Equality by the foundation of the Human Rights Campaign, the nation's largest civil rights organization dedicated to improving the lives of lesbian, gay, bisexual and transgender people.
- **Johns Hopkins Home Care Group** and **Potomac Home Health Care** achieve HomeCare Elite status for the fourth consecutive year. This honor is reserved for Medicare-certified agencies that rank in the top 25th percentile nationally for quality and performance metrics.
- **Johns Hopkins Community Physicians** moves the internal medicine, pediatrics, and gynecology and obstetrics practices from its Wyman Park location to a more patient-centered and spacious facility at 2700 Remington Ave. in Baltimore.
- **The Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center** win environmental excellence awards from Practice Greenhealth, a national association for health care organizations dedicated to environmental sustainability principles and practices.

These milestones are among many notable accomplishments at Johns Hopkins in 2016. Learn more at hopkinsmedicine.org/dome.

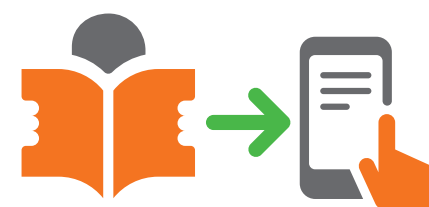
Dome Switching to Bimonthly Print Publication

More news to be published online.

WITH THIS ISSUE, *DOMe* IS SWITCHING TO A bimonthly production schedule to enable the editorial team to report on news and events quickly and more frequently. Print issues will be produced every other month, with a special seventh edition of *Dome* in October devoted to Johns Hopkins Medicine's involvement in our communities.

This change in production will allow us to provide readers more stories in the Inside Hopkins daily email, on hopkinsmedicine.org and insidehopkinsmedicine.org, and through social media.

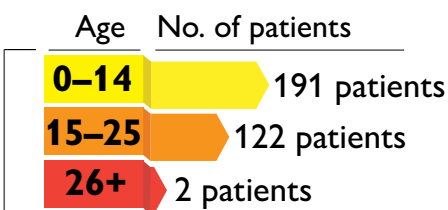
As always, we welcome feedback and story suggestions. Please send them to *Dome's* editor, Linell Smith, at lsmit103@jhmi.edu.



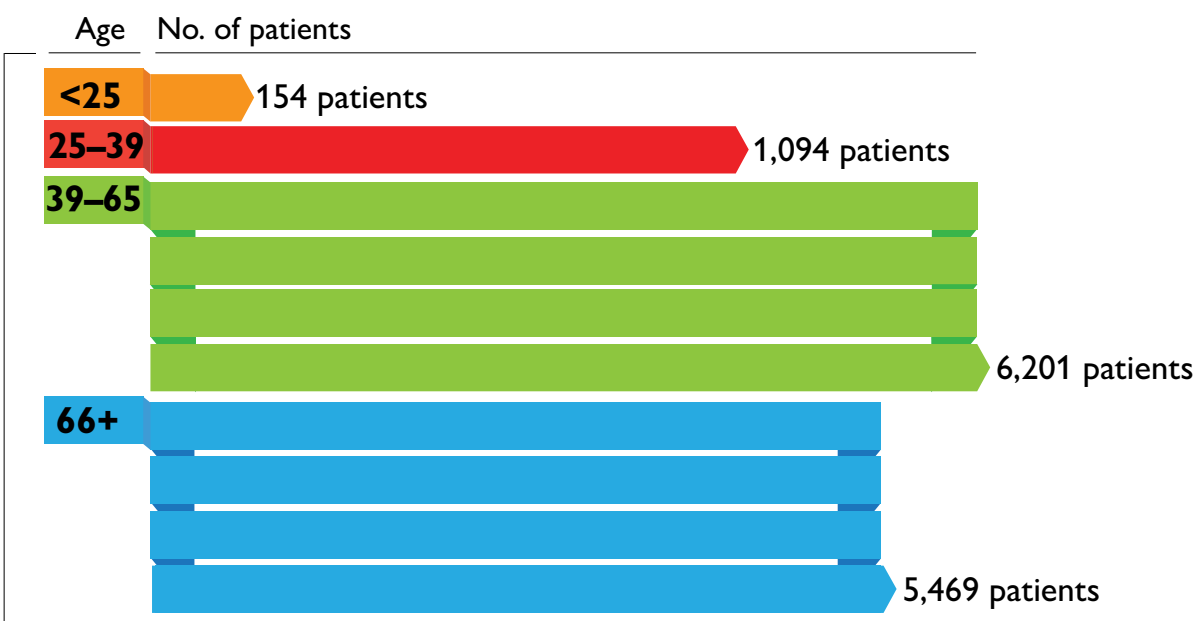
Oncology Patients by Age Range

in Pediatric and Adult Care at The Johns Hopkins Kimmel Cancer Center, FY16

PATIENTS IN PEDIATRIC ONCOLOGY (315 total)



PATIENTS IN ADULT ONCOLOGY (12,918 total)



A New Approach for Adolescents and Young Adults with Cancer

(continued from page 1)

has its own physical and emotional characteristics, different from those of young children or older adults.

In oncology, the dividing line between pediatric and adult care, once fixed at 18, has shifted, letting Matsie remain in the Children's Center while doctors focus less on her calendar age and more on making sure she receives the right treatment for her cancer type and stage of life.

Matsie and other young adults say they prefer pediatric settings, which provide more logistical and emotional support than adult treatment centers. "I've never heard a young adult complain about getting some extra tender loving care," says Kenneth Cooke, who heads the Pediatric Blood and Marrow Transplantation Program and treats patients into their late 20s.

Instead, it's the pediatricians who must adapt. "We've had to make adjustments over the years," says Matsie's doctor, pediatric oncologist David Loeb. "I have patients who are married, patients who have kids. The interactions are different from talking with 5-year-olds and their mothers."

Matsie meets regularly with Allie Gubin, a social worker specifically for cancer patients between the ages of 15 and 25, hired in 2012 through a partnership with the Baltimore-based Ulman Cancer Fund for Young Adults.

Gubin's patients are in a developmental stage already defined by concerns about looks, relationships and independence. Her job is to help Matsie and others cope with an illness that can steal their hair, strain their friendships, and put jobs and careers on hold. Gubin also helped create a fertility preservation protocol at the hospital so patients who may lose their ability to have children have access to education, counseling and fertility services.

A Distinct Group

EACH YEAR, ABOUT 5,330 U.S. teens between 15 and 19 are diagnosed with cancer, out of about 1.7 million cancer cases of all ages. In 1996, one of those teens was 19-year-old Howard County native Doug Ulman. He founded the Ulman Cancer Fund for Young Adults with his family the following year to provide the information and resources he couldn't find.

Ulman later joined what is now the Livestrong Foundation, where he created the LIVESTRONG Young Adult Cancer Alliance in 2006.

The Ulman Cancer Fund is now building the UCF House in East Baltimore, close to Johns Hopkins and other medical centers, to give young adults and their families a place to stay during cancer treatments. It is expected to open in late 2017.

While organizations like the Ulman Cancer Fund provide emotional and logistical support to young adults with cancer, researchers are looking at which treatments work best for this age group. One study, published in 2008, found that 16- to 20-year-olds with acute lymphocytic leukemia, a cancer that strikes all ages, had a disease-free survival rate of 63 percent with pediatric care, compared with 39 percent for patients in the same age range who received adult treatment.

"It makes a lot of sense," says Donald Small, director of pediatric oncology. "The organ systems of an adolescent or young adult are more like a 10-year-old than a 65-year-old. The therapy that we give is more intense, but it turns out that young adults can tolerate that."

Within a few years of that study, The Johns Hopkins Hospital raised the age of patients getting active pediatric oncology treatment from 21 to 25, says Cooke. The new age can be modified, he says, leaving plenty of room for pediatricians and adult



Connie Wong, 19, shares a special bond with her friend Matsie.

doctors to work together and recommend patients to each other.

"We are all under one roof at The Johns Hopkins Hospital," he says. "That gives our patients an important advantage." But there's more to be done, he says, to ensure that each patient gets the correct treatment, regardless of age.

Matsie's cancer, rhabdomyosarcoma, attacks the tissue, muscle and bones of roughly 350 Americans under 21 each year. Older people also get it, but adult oncologists have little experience treating it compared with cancers that are

common in their patient population, like breast, lung and colon.

Being diagnosed at 17 meant Matsie still went to a pediatrician, who referred her to Loeb. Had she been only a few months older, Cooke points out, a primary care physician might have sent her to an adult oncologist.

Currently, Matsie takes oral chemotherapy at home every day and goes to the pediatric infusion center once a week for blood tests and antibiotic infusions.

On a recent visit, Matsie's friend Connie Wong (pictured above) was also there, receiving chemotherapy for head and neck cancer. The two went to high school together. They share the same doctor and a bond that few others can understand. "It's nice seeing another young adult here," says Matsie. "It's such an isolating experience otherwise."

Diagnosed when she was a high school sophomore, Connie, 19, has been in and out of treatment since she was 16. She remembers the February day four years ago when Loeb told her she had cancer. As he spoke, she translated the doctor's words into Chinese for her mother. "She basically couldn't accept it," Connie says. "She kept saying, 'Are you sure?' I think that's the first time I've seen my mom cry."



“IT’S NICE SEEING ANOTHER YOUNG ADULT HERE. IT’S SUCH AN ISOLATING EXPERIENCE OTHERWISE.”

—MATSIE BOSMANS

Allie Gubin, a social worker for patients who are 15 to 25 years old, meets with Matsie and her mother, Gambol Bosmans.

Treatment gave Connie a possibly permanent ringing in her ears. For a while, she lost her ability to taste. But now she’s tolerating chemo with few side effects while taking online classes at Howard Community College and waitressing a few times a month. She hopes to be cancer-free soon.

Connie chooses to remain in pediatric oncology, even though 80 percent of people with her type of cancer are between the ages of 30 and 60. “I feel welcomed here,” she says.

Matsie’s Story

MATSIE STARTED CHEMOTHERAPY AND radiation right after she was diagnosed. The regimen destroyed her ability to get pregnant, but she didn’t worry about that because she planned to adopt anyway, she says.

She studied with a home tutor and finished treatment the day before graduation in 2015. Deemed cancer-free, she walked the stage to receive her high

school diploma with the rest of her class, including Connie.

Next came a bone marrow transplant to prevent the disease from coming back. The procedure was scheduled for August, but tests found that the cancer had returned. Matsie underwent more chemo before receiving bone marrow from her mother, Gambol Bosmans, in November 2015.

By then, Matsie was 18, legally an adult. Gubin asked if she still wanted her parents to come to appointments and weigh in on treatment options. Matsie said yes. “We make decisions together as a family,” says Gambol, who quit her job as a tech recruiter to care full time for her daughter.

In September, with her family’s support, Matsie opted for a surgery to attach the side of her lung to her chest wall, removing space where fluid was gathering. With Gubin’s help, she also completed an advance directive. “I put my parents down as people to make decisions for me if I can’t,” she says.

Matsie endured chemo, a bone marrow trans-

TEENS AND 20-SOMETHINGS AT JOHNS HOPKINS ALL CHILDREN’S HOSPITAL

Pediatric oncologist Peter Shaw is on a mission to strengthen adolescent and young adult cancer care at Johns Hopkins All Children’s Hospital.

Shaw, who joined the St. Petersburg, Florida, hospital in August, is an expert on the subject. He founded the adolescent and young adult oncology program at the Children’s Hospital of Pittsburgh of UPMC, serves as a founding member of the Consortium of Adolescent and Young Adult Cancer Centers, and has published extensively on the subjects of clinical trial enrollment and standards of care for this age group.

At Johns Hopkins All Children’s, new oncology patients must be 21 or younger, an age limit partly dictated by state mandate, Shaw says, though exceptions are possible. He hopes to eventually raise that ceiling to 25.

Meanwhile, he is focused on bolstering fertility services for patients past puberty, encouraging referrals and information-sharing between Johns Hopkins All Children’s and the nearby Moffitt Cancer Center, and creating a social network for teens and 20-somethings through outings such as bowling nights that draw from both hospitals.



Moffitt and Johns Hopkins All Children’s already share an adolescent and young adult oncology program focused on patients with cancers of the bone, muscle and other connective tissues. Shaw is working with physicians at Moffitt to add young adults with leukemia, lymphoma and brain tumors, and those requiring stem cell transplants.

“This patient population is unique,” he says. “In the past, they’ve fallen through the cracks. If they’re treated in the pediatric world, they may be the oldest one on the floor. If they’re in the adult oncology world, the person next them might be 80. Raising our age a little bit and collaborating with Moffitt will resolve a lot of issues.”

—KN

plant, hair loss and lung surgery. Still, illness has added purpose to her life. She created Matsie’s Lights of Love, which gives colorful lights to brighten the rooms of her fellow cancer patients. She is an advocate and speaker for Johns Hopkins pediatric cancer research, the Ulman Cancer Fund, and the wig donation nonprofit Ebeauty.

Now, a few weeks shy of her 20th birthday, Matsie says she wants others to know what it means to be a young adult with cancer.

“Every time I thought I was ready to get a job or go back to school, there was another bump in the road,” she says. “It kind of stinks when strangers ask where you’re going to school or if you’re working. I don’t have answers to any of that. I don’t think many people understand it. I honestly feel like we are the forgotten demographic when it comes to cancer.”

—Karen Nitkin

GROWING UP IN PEDIATRIC ONCOLOGY

Karen Shollenberger was diagnosed with leukemia when she was 10.

She has stayed optimistic—mostly—through relapses, chemo and other treatments. Her most recent relapse was in June, followed by a second bone marrow transplant in August.

Now 22, she still receives care from pediatric oncologist Allen Chen at the Johns Hopkins Children’s Center.



Karen Shollenberger, 22, prefers the pediatric setting, where she began cancer treatment 12 years ago.

Karen, who is close to completing a communications degree at Drexel University in Philadelphia, had to leave campus for the transplant at The Johns Hopkins Hospital. She’s now taking classes online while living with her parents in West Friendship, Maryland.

Karen still plays bingo and cards with the younger patients in the unit, but she feels like the grown-up among them. She knows some from Camp Sunrise, the weeklong sum-

mer overnight camp for children who have or had cancer, sponsored by the Division of Pediatric Oncology. Karen started as a camper there before moving up to become an activity staff member and counselor.

“I’m so glad I’m in pediatrics,” she says, sitting in the teen room of the pediatric oncology center before an appointment. “I think it’s a much happier place.”

—KN

Stewardship Team Leads the Way in Fight Against Overprescribing of Antibiotics

How a group of specialists is making a difference in reducing a public health threat.

INFECTIONOUS DISEASE FELLOW THEODORE MARKOU starts each workday reviewing a list of patients with tests that are positive for *Clostridium difficile*, a bacterium that can cause an infection that produces toxins leading to severe diarrhea.

Most cases of *C. diff* occur as a result of taking antibiotics. While antibiotics kill the bacteria causing an infection, they also inflict collateral damage on the good bacteria that live in the intestine, allowing the *C. diff* bacteria to proliferate. As leader of the *C. diff* Action Team, Markou investigates every reported case at The Johns Hopkins Hospital. The team, which consists of specialists in antimicrobial stewardship and infection prevention, works with clinical teams to optimize care and ensure that precautions are in place to prevent the spread of *C. diff*.

“We go right to the unit and meet with the care team,” says infectious disease physician Sara Cosgrove, director of The Johns Hopkins Hospital’s Antimicrobial Stewardship Program. “We respect the team’s opinion and clinical judgment, but we also want to say, ‘Your patient got *C. diff*, and maybe it could have been prevented.’ Then, we discuss what we can do together to make sure the patient gets the best treatment and that *C. diff* doesn’t get spread to other patients.”

A New Joint Commission Mandate

Antibiotics are lifesaving drugs that have transformed medicine. However, their use comes with some risk. In addition to causing *C. diff*, they are associated with other side effects, such as kidney dysfunction, rashes and emergence of resistant bacteria. As much as 50 percent of prescribed antibiotics are suboptimal or not needed, according to the Centers for Disease Control and Prevention. This widespread overprescribing has resulted in a worldwide public health threat caused by antibiotic-resistant bacteria.

On Jan. 1, a new mandate from The Joint Commission requires that all hospitals implement an antimicrobial stewardship program aimed at optimizing antibiotic prescriptions. Already compliant, The Johns Hopkins Hospital’s program has been providing international leadership in this area for more than 15 years. Johns Hopkins Bayview Medical Center has been using The Johns Hopkins Hospital’s stewardship guidelines for many years. Like other Johns Hopkins member hospitals, it is now implementing its own stewardship program.

Members of The Johns Hopkins Hospital Antimicrobial Stewardship Team review guidelines with care team members on Nelson 6. From left, nurse Ashley Fox, internal medicine resident Catherine Ireland, infectious disease pharmacist Edina Avdic, infectious disease fellow Theodore Markou, infectious disease physician Sara Cosgrove, and infectious disease pharmacist Kathryn Dzintars.

Collaborating with clinicians, the Johns Hopkins Hospital stewardship team introduced its first *Antibiotics Guidelines* handbook in 2002. Designed to fit in the pocket of a white coat, the now 168-page booklet provides extensive guidance on when to prescribe antibiotics, what kind to prescribe, what dose and for how long. The guide is updated annually and provided to all physicians, nurse practitioners, physician assistants, pharmacists, and third- and fourth-year medical students. New

Viruses or Bacteria: What’s got you sick?

Common Condition: What’s got you sick?	Common Cause			Are antibiotics needed?
	Bacteria	Bacteria or Virus	Virus	
Strep Throat	✓			Yes
Whooping cough	✓			Yes
Urinary tract infection	✓			Yes
Sinus infection		✓		Maybe
Middle ear infection		✓		Maybe
Bronchitis/chest cold (in otherwise healthy children and adults)		✓		No
Common cold/runny nose			✓	No
Sore throat (except strep)			✓	No
Flu			✓	No
Asthma			✓	No

Source: Centers for Disease Control and Prevention, 2016

hires also receive training on Johns Hopkins’ best practices for prescribing.

A Bigger Role for Pharmacy

Another anchor of the stewardship program is that prescribing broad-spectrum antibiotics here requires a prior approval from a clinical pharmacist or infectious disease specialist. Approvals are granted during morning

rounds or through a request to the on-call pagers. The stewardship team also reviews antibiotic use after a patient has been on therapy for two to three days, then discusses its findings with care teams. Often, these conversations result in a more targeted antibiotic being prescribed or a different treatment.

Infectious disease pharmacist Edina Avdic notes that the stewardship team is responsible for looking at the hospital’s total patient population.

“The clinician is often looking at that one patient and saying, ‘Well, it could be MRSA,’ even if there is evidence to suggest that it is not,” says Avdic. “He or she doesn’t necessarily see the immediate harm to the patient because, again, antibiotics in some patients can be OK. I think it’s hard to see the harm until it really happens.

The Joint Commission mandate includes a new call for nursing to be involved in the stewardship team. “We’d like to expand our work in this institution to include nurses—not giving advice on antibiotic therapy—but helping to achieve safe antibiotic administration to patients,” says Cosgrove. “Nurses are giving the antibiotics, so they know if the patient is having a reaction. They know if the patient is really having diarrhea as a side effect. And they are able to prompt and ask questions.”

—Michael Keating

Learn more at hopkinsmedicine.org/dome.

“WE GO RIGHT TO THE UNIT AND MEET WITH THE CARE TEAM.”

—SARA COSGROVE,
DIRECTOR OF THE JOHNS HOPKINS HOSPITAL’S ANTIMICROBIAL STEWARDSHIP PROGRAM





The 2016 Community Service Award recipients are from left: Leigh Goetzke, Alexia Camm, Jessica Havern, Panagis Galiatsatos, Yvette Hicks, Charles Odonkor, Daniel Pham and Carlisa Jones.

Legacy of Service

Eight recipients of the 2016 Martin Luther King Jr., Community Service Awards were honored at Johns Hopkins' annual MLK commemoration.

Alexia Camm Administrative Coordinator, Marketing and Communications Johns Hopkins Health System

Alexia Camm says there's a common misconception that people who lead a busy life will never succeed as volunteers. "You can find a way to volunteer that fits you," assures Camm, "even if it's just for a day." Camm works full time as an administrative coordinator. When she's not at work, she volunteers for Thread, a nonprofit that links at-risk high school students with volunteer mentors and community resources. Through her department's employee engagement committee, Camm helped organize two days of cleaning and flower planting at a park used by children in Southwest Baltimore. She has also volunteered for the Maryland Food Bank, Marian House, House of Ruth and United Way.

Panagis Galiatsatos Pulmonary and Critical Care Fellow Johns Hopkins University School of Medicine

Born and raised in East Baltimore's Greektown, physician Panagis Galiatsatos says he owes it to his hometown to help reduce the health disparities that afflict so many in the city. He channeled his commitment to health equity into Medicine for the Greater Good (MGG), a program he co-founded with colleagues at Johns Hopkins Bayview Medical Center. Since 2011, MGG has inspired hundreds of undergraduate and graduate

student volunteers across Johns Hopkins to help underserved city residents become advocates for their own health.

On his own time, Galiatsatos speaks about chronic health conditions and takes part in screenings, health fairs and other events in schools, churches and libraries in East Baltimore. A pulmonary and critical care fellow at the Johns Hopkins University School of Medicine, Galiatsatos regards health disparities as "primary health issues, not just primary care issues" that transcend medical specialties.

Leigh Goetzke Client Relations Account Manager Johns Hopkins HealthCare

Looking to volunteer with her three children, Leigh Goetzke signed her family up to raise puppies for Guiding Eyes for the Blind, an organization that connects individuals in need of a guide dog with the perfect Labrador retriever or German Shepherd. Six years later, the Goetzkes have trained five puppies in their Annapolis home to sit, stay and follow unique commands that prepare them for formal training to become service dogs for blind or visually impaired individuals. Goetzke, a client relations account manager for Johns Hopkins HealthCare, stays in contact with their first puppy's owner. "Our puppy has changed her life, and I am fortunate to have been a small part of that change," she says.

Jessica Havern Director of Enterprise Performance for Health Care Transformation and Strategic Planning The Johns Hopkins Health System

When Jessica Havern moved to Baltimore two years ago, she got involved with the Junior League of Baltimore, an organization of women committed to promoting volunteerism, developing the potential of women, and improving communities through effective action and leadership of trained volunteers. Now, the Johns Hopkins Health System's director of enterprise performance for health care transformation and strategic planning looks forward to monthly volunteer activities, like sorting donations at the Junior League's Wise Penny thrift store, planting trees with Blue Water Baltimore, overseeing donation drives for House of Ruth and preparing healthy meals with Moveable Feast.

Yvette Hicks Financial Informatics Systems Architect Johns Hopkins Health System

Yvette Hicks' first volunteer experience was as a candy striper growing up in Hartford, Connecticut. Since moving to Baltimore in 2008, she's been deeply involved with the nominating committee of the Junior League of Baltimore, which trains members to lead and serve on volunteer initiatives. "It makes me feel good to help others," says Hicks. Among her many volunteering activities, she

serves meals with her teenage son at Our Daily Bread, speaks to students about achieving academic success for the Maryland Business Roundtable for Education and recently signed up to help the P-TECH program, which blends high school and college classes with work experience to help students build careers in science, technology, engineering and math.

Carlisa Jones Administrative Supervisor Wilmer Eye Institute

For 15 years, Carlisa Jones has encouraged Johns Hopkins' participation in the Juvenile Diabetes Research Foundation Walk for a Cure, signing up fundraising team captains and walkers who have raised tens of thousands of dollars in donations. Jones has personally raised nearly \$14,500 the past two years. As Johns Hopkins' lead campaign organizer, she encourages colleagues to increase their financial support, solicits donations for snacks from supermarket chains and organizes an awards luncheon for the department captains. Fundraising took on special significance when her husband, Dean, became a patient at the Johns Hopkins Kimmel Cancer Center for non-Hodgkin lymphoma. The couple organized a charity dance, which netted nearly \$7,500 for pediatric oncology and juvenile diabetes research. Among other service activities, Jones volunteers for the annual Henrietta Lacks celebration in Turner Station.

Charles Odonkor Resident, Physical Medicine and Rehabilitation Johns Hopkins University School of Medicine

Since 2014, Charles Odonkor and a few colleagues have offered a free writing and review service to help minority students craft

compelling, error-free essays as part of their applications for college and medical school. The fourth-year resident in psychiatry also collects late-version textbooks and tablets loaded with links to various open-source medical libraries so that disadvantaged medical students in countries such as his native Ghana can have access to necessary information. Project REACH, Representatives for Equal Access to Community Health, has helped more than 400 students since 2011. Additionally, Odonkor organizes an orthopaedics shadowing program that lets local students observe African-American physicians and scientists.

Daniel Pham Ph.D. candidate in neuroscience Johns Hopkins University School of Medicine

Like many great ideas, Project Bridge emerged from confusion. Daniel Pham, a Ph.D. candidate in neuroscience, was unsuccessful in his attempt to describe to his partner the intricacies of his research. The communication breakdown led Pham and colleagues to found Project Bridge, "with the goal of getting scientists to communicate and connect with the public," he says. The outreach program features talks and demonstrations by Johns Hopkins scientists in farmers markets, cafes and restaurants. In September, Project Bridge brought Baltimore Brain Fest, a daylong neuroscience expo, to a city elementary school. "It's a very grass-roots approach, getting bystanders to come by and having scientists in the community, explaining rudimentary topics," Pham says.

—Janet Anderson, Sarah Richards, Katelynn Sachs and Stephanie Shapiro

AAAS Honor



Janice Clements, Ph.D., professor of molecular and comparative pathobiology, director of the Retrovirus Laboratory, and vice dean for faculty, has been elected as a fellow of the American Association for the Advancement of Science (AAAS). The honor, voted on by Clements' professional peers throughout the country, recognizes her "distinguished contributions to the field of virology, particularly for explaining the molecular biology, pathogenesis and viral latency" of the simian immunodeficiency virus and HIV.

New Bloomberg Professor



Lisa Cooper, M.D., M.P.H., vice president for health care equity, professor of medicine and director of the Johns Hopkins Center to Eliminate Cardiovascular Health Disparities, has been named the university's 25th Bloomberg Distinguished Professor. With this new appointment, Cooper plans to establish a unified Institute for Equity in Health and Healthcare at Johns Hopkins, bringing together researchers, clinicians, educators and administrators across the university to collaborate on developing innovative practice and training solutions for at-risk populations. The Bloomberg professorships are funded by a \$350 million gift from Johns Hopkins alumnus, philanthropist and former New York City Mayor Michael Bloomberg.

EAST BALTIMORE



Kenneth Stoller, M.D., assistant professor of psychiatry and behavioral sciences and director of the Johns Hopkins

Broadway Center for Addiction, received a 2016 American Association for the Treatment of Opioid Dependence Nyswander/Dole "Marie" Award for outstanding contributions to opioid addiction treatment. The award praises Stoller's "transformational leadership" of the center, which has become an exemplar of services that address the entire scope of opioid addiction issues.

Martha Zeiger, M.D., professor of surgery, oncology, and cellular and molecular medicine, and associate dean for postdoctoral affairs, will become president of the American Association of Endocrine Surgeons in April. Zeiger has held leadership positions in other national medical societies, including the American Association of Clinical Endocrinologists and the American Thyroid Association. She also founded and is dean of Endocrine Surgery University, an annual course for all endocrine surgery fellows in North America.

JOHNS HOPKINS BAYVIEW MEDICAL CENTER

W. Daniel Hale, Ph.D., assistant professor of medicine, director of the Healthy Community Partnership and special adviser to the

president of the medical center, has received a \$25,000 Elizabeth Hurlock Beckman Award for inspiring students to foster creation of Medicine for the Greater Good, a program in which medical students and trainees develop projects that directly benefit the community.



Laura Hanyok, M.D., has been named assistant dean for graduate medical education. An assistant professor of medicine, Hanyok directs the internal medicine residency program's Resident Continuity Clinic. She has focused her career on medical education, served as director of interprofessional education for the school of medicine and received a highly competitive Macy Faculty Scholar award from the Josiah Macy Jr. Foundation.

Kai Shea, M.S.W., L.C.S.W.-C., has been named director of social work. A 17-year veteran of the medical center, Shea has provided clinical social work to patients and families in the medical ICU, the pediatric ICU and, most recently, the Johns Hopkins Kimmel Cancer Center. In her oncology role, she collaborated with the American Cancer Society and the Lung Cancer Alliance on programming.

JOHNS HOPKINS HEALTHCARE



Richard Safeer, M.D., medical director of employee health and wellness, has been elected to the board of directors of the American College of Lifestyle Medicine (ACLM). During his three-year term, he will help guide ACLM's efforts to research, educate and promote the use of lifestyle as a therapeutic intervention for treating chronic disease.

NATIONAL CAPITAL REGION



Akila Viswanathan, M.D., M.P.H., professor of radiation oncology and molecular radiation sciences, executive vice chair of radiation oncology and molecular radiation sciences, and director of gynecological radiation oncology, has been named national capital region director of Johns Hopkins radiation oncology and molecular radiation sciences. Viswanathan has clinical and research interests in gynecologic malignancies, uterine cancers and image-guided brachytherapy.

SIBLEY MEMORIAL HOSPITAL

Grace Daniels, manager of case coordination; **Jo Ellen Harris**, director of patient safety and quality improvement; and **Jerry Price**, senior vice president of real estate and construction, have received meritorious service awards from the District of Columbia Hospital Association.



A SAFETY MILESTONE: Rane Snyder, a nurse in the adult burn unit at Johns Hopkins Bayview Medical Center, shows Richard Bennett, hospital president, how to prepare to change the dressing for a wound—a process that can take as long as 40 minutes. The recent demonstration celebrated a significant patient safety milestone at the burn center: three years without a central line-associated bloodstream infection (CLABSI). Such an accomplishment is particularly difficult to achieve with burn patients, according to patient care manager Kelly Krout. "Preventing a CLABSI is difficult enough, but preventing a CLABSI in a patient who has no skin—the body's largest defense mechanism—is almost impossible," she notes. Krout credits the unit's success to a five-year quality improvement project and improved communication among burn team members. Learn more at hopkinsmedicine.org/dome.

Recognizing the Best in Clinical Excellence

Winners have been announced for the second year of the Johns Hopkins Medicine Clinical Awards for Physicians and Care Teams. The Office of Johns Hopkins Physicians launched the annual awards program in 2015 to honor the physicians and care teams who embody the best in clinical excellence. More than 260 nominations were submitted from colleagues at The Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center, Johns Hopkins Community Physicians, Howard County General Hospital, Sibley Memorial Hospital, Suburban Hospital, and Johns Hopkins All Children's Hospital.

To learn more, visit: hopkinsmedicine.org/clinical-awards.



Matthew Ladra, M.D., M.P.H., assistant professor of radiation oncology and molecular radiation sciences, has launched the Washington, D.C., area's first dedicated pediatric radiation oncology program in collaboration with Children's National Health System, a Washington, D.C.-based nationally acclaimed pediatric hospital. Johns Hopkins and Children's National Pediatric Cancer Care, which opened last August, joins pediatric medical and surgical oncology experts from Children's National with pediatric radiation oncology experts from Johns Hopkins. Ladra is among the few radiation oncologists whose practice and research focus solely on pediatric cancers.



Benjamin Levy, M.D., associate professor of oncology, has been named clinical director of medical oncology at the Sidney Kimmel Cancer Center. A specialist in thoracic oncology, Levy was previously medical director of thoracic medical

oncology for Mount Sinai Health System in New York City and associate medical director of the Cancer Clinical Trials Office for Mount Sinai Hospital. Levy's main focus is comprehensive clinical care and research development for patients with thoracic malignancies, with particular emphasis on nonsmall-cell lung cancer.

JOHNS HOPKINS ALL CHILDREN'S HOSPITAL



Sharon Ghazarian, Ph.D., has become senior director of the new Health Informatics Core, a group of specialists in database design and integration, statistics, epidemiology and research. Ghazarian, an expert in complex statistical analysis, study design and medical research methodology, has supported research initiatives at Johns Hopkins All Children's since 2011, when she began serving as co-director of the Clinical and Translational Research Training Track.

Marketing and Communications

The internet strategy team e-book, *Lung Cancer: A Guide for Patients and Caregivers*, has received a gold award for Best Health Care Content from Greystone.Net, an internet consulting, education and products firm. The award honors the work of **Stacia Jesner**, director of digital content strategy; **Therese Lockemy**, director of internet marketing and social engagement; internet marketing specialist **Tristin Bates**, who designed the book; and web content specialist **Shena Matsos**.

Johns Hopkins Medicine and the Johns Hopkins Medicine Marketing and Communications Department have received a total of 16 fall Digital Health Awards—more than any other health care institution—from the **Health Information Resource Center**. Judges recognized web-based mobile videos, infographics, print publications and other communications dealing with a broad array of medical issues.

Dome

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