



THE BRISTOL-MYERS SQUIBB CHILDREN'S HOSPITAL
at Robert Wood Johnson University Hospital

FALL 2014

PHYSICIAN **Connection**

A PUBLICATION OF ROBERT WOOD JOHNSON UNIVERSITY HOSPITAL



RWJ Somerset Services:
Eating Disorders Unit

Sickle Cell Clinical Trials

**Vascular Anomalies
and Malformations Program**



PHYSICIAN Connection

Welcome to the Fall issue of Physician Connection.

This is a very exciting time for The Bristol-Myers Squibb Children's Hospital (BMSCH) at Robert Wood Johnson University Hospital. As the premier resource in the state for children's health, we continue to grow and build our pediatric programs, services, technology and staff while providing high-quality patient and family-centered care. Our commitment to children's health enables us to share so many updates with our friends in the pediatric community.

We are proud to report that BMSCH was named "One of America's Best Children's Hospitals" by *US News & World Report* for the third year in a row. We are one of only 89 children's hospitals out of 183 surveyed nationally ranked in one or more specialties. BMSCH is ranked among the top children's hospitals in pediatric urology (#39).



As we reported last issue, we opened our Center for Advanced Pediatric Surgery, which features six brand-new private operating rooms, 10 recovery bays, child-specific surgical equipment and fellowship-trained pediatric subspecialists—all in a comforting environment for kids. The Center has seen rapid growth over the last nine months and because our specialists have all the necessary tools at their fingertips, we have been performing ground-breaking new procedures for kids, like cataract surgery on a 19-day-old-infant, the first cochlear implant in the area for a small child and adolescent bariatric surgery.

Also, we have recruited a new Chief of Pediatric Surgery. Yi-Horng Lee, MD, Associate Professor of Surgery at Rutgers Robert Wood Johnson Medical School, comes to us from the University of Rochester Medical Center, Golisano Children's Hospital. We are excited to have Dr. Lee here and extend him a warm welcome.

To read more about Dr. Lee and all the latest developments, please enjoy another issue of *Physician Connection*.

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PHYSICIAN Connection



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Adolescent Bariatric Surgery Program

B

ETWEEN 1980 AND 2012, the incidence of adolescent obesity (in youths age 12 to 21) quadrupled—from 5 to 21 percent [CDC latest statistics].

The net result: diseases of “older age” (hypertension, fatty liver disease, cardiovascular disease, type 2 diabetes, pseudotumor cerebri) are being manifested increasingly earlier in people’s lives.

When exercise, dieting and structured programs do not help, bariatric surgery becomes an option.

“Parents and teens need to know this is a decision that should not be taken lightly. This isn’t for the teen who wants to look great like her friend in a swimsuit,” says Kim Brennan, RN, Bariatric Surgery Program Coordinator, The Bristol-Myers Squibb Children’s Hospital (BMSCH) at Robert Wood Johnson University Hospital (RWJ). “This is for adolescents who, due to their weight, are on medications that aren’t approved for their age, like a cholesterol medication, for example.”

Both the parents and the adolescent must take this very big step of surgery together. Parents go through every psychological evaluation that their child does. They must follow the same rules and lifestyle changes their child does.

Commitment and support are the keys to success more than the surgery itself. “Dr. Sadek, gets them through that safely, but the rest is hard work on their part,” Brennan explains. Ragui Sadek, MD, is the Medical Director of the Bariatric Surgery Program at RWJ and BMSCH.

She should know — she’s one of his patients.

Although Brennan was 44 when she had the surgery, the veteran nurse is the perfect person to screen candidates and explain everything that will happen before and after surgery. She is relatable and patients and families find that comforting. She also heads the weekly support group, which covers everything from how to relieve a gas bubble in one’s chest to how to firm up loose skin and change clothing sizes repeatedly without breaking the bank.

Comorbidities and Life Span

Contrary to other conditions where comorbidities might increase surgery risk or contraindicate it, comorbidities such as OSA, GERD, asthma, diabetes, and pseudotumor cerebri are criteria for inclusion.

“This is the first generation ever that will have a shorter life span than their parents. A morbidly obese adolescent can expect a shorter life span by 13 years with costly



Ragui Sadek, MD, and Kim Brennan, RN

comorbidities. In a 45-minute surgery, we can either completely remove those comorbidities or reduce them by more than 80 percent,” explains Dr. Sadek.

Dr. Sadek offers only one operation for adolescents: laparoscopic sleeve gastrectomy. He has been performing adolescent sleeve surgeries since 2007, and the program has an 89 percent success rate with a risk of adverse events less than 0.5 percent. Unlike a band or gastric bypass procedure, the sleeve does not cause malabsorption. Instead, it changes the size of the stomach and

decreases ghrelin, the ileal brake that controls appetite. After a 23-hour hospital stay, patients return to their normal activities within a week.

That's when the real work starts: making lifestyle changes for a lifetime.

Change from the Inside Out

Care plans are customized and offer ample tools to ensure success (see sidebar, Program Overview). The program works closely with Children's Specialized Hospital to provide outpatient nutritional, physical, occupational, speech therapy and psychological support as needed.

As dramatic as some changes are, the less obvious ones are the most precious: fitting into a school desk or on a carnival ride, going to school without getting bullied. "Gaining confidence and quality of life are as important as everything else," Brennan points out. "Think if you were a teen who didn't have to wear a CPAP anymore." Dr. Sadek stays in close contact with the adolescent's pediatrician throughout the entire process, including the follow-up care.

Standardized, Proven Interventions

"Our program works with adolescents whether they are surgical candidates or not," says Brennan. The nonsurgical intervention offered to adolescents through the Child Health Institute of New Jersey at Rutgers Robert Wood Johnson Medical School is the Healthy Me Program, a nutrition-based lifestyle changes program in the Department of Pediatrics.

As of October 2014, BMSCH standardized all of the components of the program including the intervention, the surgery and became the first designated Adolescent Bariatric Surgery Program by the Surgical Review Corporation in the country. ■



For more information, please call 732-253-3156.

*(See *Pediatrics* 2011;128:S65-S70 for certification guidelines.)

Program Overview

Milestone	Time Frame	Requirements
Screening	Initial intake	<ul style="list-style-type: none"> Age: 15 to 21 BMI: 40 with significant comorbidities or 50 without Extensive history (includes family history of eating habits, medical conditions) No serious endocrine disease No substance abuse or uncontrolled psychiatric condition Documentation of participation in other weight-loss programs
Pre-Op	6 months	<ul style="list-style-type: none"> Complete the Healthy Challenge <ul style="list-style-type: none"> Initial evaluations by physician and a nutritionist Evaluation/modification of eating patterns Monthly weigh-ins Monthly meetings with physician Coaching on lifestyle changes Additional evaluations <ul style="list-style-type: none"> Cardiology Pulmonology Gastroenterology (includes an endoscopy) Psychologist Pediatrician Sleep studies Bone maturity testing (must have reached skeletal maturity) Physical therapy (for mobility) Patient and family education <ul style="list-style-type: none"> Program coordinator Child life specialist
Post-Op	23-hour hospital stay	<ul style="list-style-type: none"> Immediately: start walking 30 minutes/day After medically cleared: lift 30 pounds
Follow-up	<ul style="list-style-type: none"> 1 week 1 month 3 months 6 months 1 year Semiannually for 2 yrs Then annually for life 	<ul style="list-style-type: none"> Mandatory <ul style="list-style-type: none"> Month 1 psych follow-up and monitoring several times thereafter Monthly support group Weekly walking clinics Physical therapy clearance/guidance for exercise Strongly suggested <ul style="list-style-type: none"> Medical Wellness Program Optional or as needed <ul style="list-style-type: none"> Additional nutritional counseling Occupational therapy Psychological counseling

W

HEN ADULTS GET CATARACTS, the biggest decisions to make are where they want their clearest field of vision and whether they want glasses after surgery. In children and newborns, the decision-making process is much more complex.

Because an infant's eyes continue to grow for up to 15 years, the eye focuses differently at age 1 than it does at age 5 or 10. Any cataract intervention must be weighed against how it will affect eye growth and autofocus ability (accommodation). While lens removal in an infant may take only 45 minutes, what comes before and after the surgery is much more complicated.

Removing a lens from a newborn loses the eye's accommodation in a day and alters eye development. If a cataract affects visual development only minimally, watchful waiting is preferred.

But sometimes cataracts need to be addressed immediately—as with a 19-day-old infant recently seen at The Bristol-Myers Squibb Children's Hospital (BMSCH) at Robert Wood Johnson University Hospital. In the absence of family history, metabolic disorder or infection, his cataract was idiopathic.

Neonatal Cataract Surgery: A Case Study

With an abnormal pupil reflex and a large cataract obscuring the entire visual axis in one eye, he needed cataract removal. Cataracts that severe warrant the loss of accommodation. "If I hadn't intervened, he'd have amblyopia and poor vision development in that eye," says Nancy Sun, MD, attending pediatric ophthalmologist at Children's Hospital (BMSCH), at Robert Wood Johnson University Hospital.

Dr. Sun removed the lens but left the eye aphakic for now. "Around age 6, he'll need a second surgery to replace the lens," Dr. Sun explains, noting that staged procedures are common in infants (which makes family support crucial). "However, for older children, that's not a good option. The urgency to have the eye focus and see well is more immediate, so I may insert an intraocular lens at the time of the first surgery. Beyond that, a plethora of other decisions need to be made, such as whether to make the eye hyperopic."

"BMSCH's Center for Advanced Pediatric Surgery has been very accommodating to us," Dr. Sun continues. "We have a new ophthalmic surgery microscope, the latest vectorette with the highest cut rate for safe cataract removal, equipment to measure the cornea and eye length, and other technology you wouldn't have at even most cataract centers."

While most pediatric ophthalmologists routinely tackle cases of strabismus, dacryostenosis, congenital ptosis, diseases of the orbits, dermoid cysts and other benign tumors, Dr. Sun handles all of those as well as the more complex cataract surgeries on infants and small children. ■



Naiem Nassiri, MD

Vascular Anomalies & Malformations

A 15-YEAR-OLD GIRL who was told she had venous insufficiency and was being treated conservatively with compression stockings now has a new lease on life, thanks to expert treatment from the Vascular Anomalies and Malformations Program (VAMP). VAMP is a partnership between Rutgers Robert Wood Johnson Medical School and The Bristol-Myers Squibb Children's Hospital (BMSCH) at Robert Wood Johnson University Hospital (RWJ).

"We diagnosed an extensive venous malformation that had gone unrecognized throughout her life. She underwent direct stick embolization of this malformation and can now march in the band with very little pain—and her school isn't questioning her about bruises on her leg," says Naiem Nassiri, MD, Assistant Professor of Surgery at Rutgers Robert Wood Johnson Medical School and the Medical Director of VAMP.

That is one of many success stories to come from VAMP since its inception in December 2013. "We always had the expertise here; we just had to pull it all together," Dr. Nassiri explains.

That expertise includes a multidisciplinary who's-who list: a microsurgery-trained pediatric and adult plastic surgeon, a neurosurgeon with special interest in brain AVMs, an expert neurointerventional radiologist with extensive experience in complex head and neck interventions, two expert pediatric otolaryngologists, an expert medical panel of hematologists-oncologists, and a dedicated radiology team. Other pediatric and adult subspecialties

are on hand to treat cardiac, orthopedic and other associated problems as needed. The working environment is equally impressive: a pediatric catheterization lab dedicated solely to VAMP and a hybrid OR suite that can handle complex lesions — all equipped with the latest minimally invasive technologies. Dr. Nassiri adds, "The imaging we have available is phenomenal. The right kind of MRI can make all the difference in accurate diagnosis—and ultimately treatment."

"So many times the diagnosis of 'hemangioma' is tossed around as a general term for a lesion. But the treatment for hemangiomas differs vastly from that of vascular malformations. Incorrect nomenclature leads to the wrong treatment 20 percent of the time," Dr. Nassiri explains. "I've seen patients in their 40s or 50s who had been misdiagnosed since childhood. They were frustrated and discouraged. We follow an evidence-based algorithm based on patient history, clinical findings and imaging that allows us to properly diagnose and treat each specific vascular anomaly."



Dr. Nassiri is both an interventionalist and an open vascular surgeon who offers the full gamut of services for vascular anomalies. A graduate of the first class of the integrated vascular surgery residency (a five-year program), he is the only physician in New Jersey with these credentials. ■

To refer a patient to VAMP, call 732-235-7816, ext. 3. Visit www.rwjuh.edu/vamp for additional information.

Ahead of the Game: Concussion Screening for Student Athletes

UNLIKE OBVIOUS brain injuries involving structural damage, a “concussion” (mild traumatic brain injury, or MTBI) is much more insidious. The neurometabolic cascade triggered by a concussion causes neurovascular compromise and an intracerebral “energy crisis.” If a student can stand, walk, talk, run, and speak clearly, it belies the invisible molecular damage occurring inside; in addition, it creates diagnostic challenges that result in underreporting of cases. However, children and teens are the most likely to get a concussion and take the longest to recover because their brains are still developing. For that same reason, they are also at greater risk for developing second-impact syndrome.

Hassle-free screening

The Concussion Program at The Bristol-Myers Squibb Children’s Hospital (BMSCH) at Robert Wood Johnson University Hospital provides pediatricians with baseline neurocognitive information so they can more readily determine if a child sustains a concussion. The trauma department in collaboration with pediatric neurosurgery and neurology offers this unique program and the only one of its kind in the state associated with a designated Level II Pediatric Trauma Center. The program offers both ImPACT testing and community education specifically for the pediatric population. The Center also provides evaluation, diagnosis and treatment for concussion.

Here’s how it works. The BMSCH staff conduct outreach to trainers, coaches, pediatricians and families to schedule the testing. Baseline testing is done every two years at the child’s school, before the start of their sports season. Trained assessors from the Concussion Program set up the computer-based ImPACT screening in schools’ computer labs. Students take a 25-minute, computer-based assessment that feels like games and puzzles to them but provides important measures of verbal and visual memory, problem solving, attention span, processing speed and reaction time (measured to 1/100th of a second). All data is shared with the athlete’s pediatrician.

If a previously tested athlete suffers a suspected head injury, repeat testing can be done. Or, if a concussion is confirmed, retesting after treatment can verify the athlete’s return to baseline. And, if treatment is required, all of BMSCH’s specialized pediatric sports- and injury-related neurological care is just one phone call away—

including comprehensive pediatric physical and occupational therapy, cognitive behavioral therapy and vestibular therapy. Physicians who are concussion specialists follow a 7-step protocol for return to academics and play.

Education and community outreach

The American Academy of Pediatrics (AAP) states, “Education and recognition remain the most important components of improving the care of athletes with concussions.” Dawn Tortajada, RN, Pediatric Trauma Program Manager at BMSCH, is promoting both—within BMSCH as well as in the community. The program, now about 1.5 years old, continues to evolve and expand.

In July, Tortajada completed an 8-month IRB-approved study with hospital nurses, child-life specialists and physicians to test their knowledge of cognitive assessment before and after an educational program on concussions and cognitive symptoms of recovery. The results were significant. “Now people have it on their radar,” Dawn says happily. “Nurses call me from the floor and ask me to take a look at one of their patients.”

That internal effort also led to serendipities for community education. “A nurse came up to me and said, ‘I coach football; can you talk to the football coaches?’ I got to talk to 40 football coaches all at once.” Tortajada and others from the Concussion Program also speak at summer sports camps and other venues. ■

To learn more about BMSCH’s Concussion Program, call 732-828-3000, ext. 5246. DS.



Signs of unresolved concussion

- Difficulty maintaining past grades
- Difficulty planning, organizing and executing tasks
- Chronic headaches
- Mood changes
- Fatigue



Concussion: a view from the top

- Up to 3.8 million sports- and recreational-related TBIs occur each year in the U.S.
- 75 – 90% of all TBI-related hospitalizations, ED visits and deaths each year are due to MTBIs.
- Annually, EDs treat almost 180,000 children up to age 19 for MTBI.
- Besides sports, accidents (e.g., motor vehicle trauma), falls and assaults can cause MTBI.
- When MTBI is suspected, look for signs of physical, emotional, cognitive and sleep changes
- Quick recognition and response speed recovery.
- Recovery varies widely: 1 to 3 weeks or more (up to several months).
- Some signs and symptoms of a concussion overlap other conditions, including depression, anxiety, attention-deficit disorders and other developmental disorders.
- AAP recommends that any child who sustains a concussion should be evaluated by a physician with expertise in concussion management.
- Education and recognition are the most important components of improving the care of athletes with concussions.



Joseph Donnellan, MD, Medical Director of the Eating Disorders Program at Robert Wood Johnson University Hospital Somerset, discusses patient care with staff on the Eating Disorders Unit of the hospital.

Eating Disorders: Complex Pro

A PPROXIMATELY 2.8 PERCENT of all adolescents have an eating disorder significant enough to warrant intensive medical intervention; an additional 3.3 percent have subthreshold syndromes (National Eating Disorders Association's latest statistics). To address this important but often overlooked need, Robert Wood Johnson University Hospital Somerset (RWJ Somerset) offers a comprehensive, four-tier program for eating disorders. One of only two inpatient centers in the state, the 14-bed unit has treated patients from early adolescence on up for 30 years. Eating disorders can occur in teens as well as adults of any age.

Some people are surprised to learn that 20 percent of the patients are male. "Eating disorders are often missed in males because doctors tend not to look for that. Males are often more fixated on shape while females want to be smaller," notes Joseph Donnellan, MD, Assistant Professor of Psychiatry at Rutgers Robert Wood Johnson Medical School and Medical Director of Behavioral Health and the Eating Disorders Program at RWJ Somerset. Additionally, wrestlers and other athletes of both genders who need to make weight goals are at increased risk of developing eating disorders.

Heeding the Warning Signs

Many signs can alert a practitioner to a serious eating disorder (see sidebar). Because pediatricians see children regularly, they are in a prime position to uncover such problems in their early stages.

However, physicians should not rely solely on their physical exam and lab results as evaluative tools. "All the labs may be normal," warns Dr. Donnellan.

"The body can adapt amazingly even when you're malnourished. So look for evidence of purging or excessive dieting. Ask the person what they think about food and eating, how they view themselves and if they are happy with their weight. Even with normal labs and EKG, there can still be serious problems."

Addressing the Core of the Problem

"Ultimately, an eating disorder is not about eating—it's about trying to feel in control of one's life," Dr. Donnellan continues. "Early adolescence is a common time of onset of an eating disorder. Puberty or other changes—a geographical move, divorce, sickness in the family—may impel an adolescent to the one thing they feel they can control."

"The correct response," Dr. Donnellan emphasizes, "is to look at the underlying problems and help the patient develop healthier coping mechanisms. Otherwise, it can lead to complications ranging from osteoporosis to mood disorders and suicidality (and, if untreated, death)."

While psychotherapy is a mainstay of treatment at RWJ Somerset program, Dr. Donnellan emphasizes that "it won't work if you're malnourished. Malnutrition alone can worsen mood and increase irrational thinking. In addition to psychotherapy, nutritional rehabilitation is critical."

Tiered Support, Tailored to Individual Needs

RWJ Somerset offers tiers of support for adolescents with eating disorders. Since some treatment can be lengthy, RWJ Somerset works very closely with the schools and utilizes certified teachers to help patients stay current



blem, Comprehensive Care

Program	Hours	Indications for that Tier
Inpatient	24/7 at RWJ Somerset	< 80% of ideal body weight Purging or withholding food occurs almost every day Abnormal electrolytes/other labs Abnormal EKG NOTE: Labs may be normal despite serious pathology
Partial Hospitalization	Weekdays at RWJS 8:30am – 3:30pm	May be a step-down program or where a patient starts, depending on the need
Intensive Outpatient	3 days/wk at RWJS 8:30am to 1:30pm	
Community Outpatient	At discharge, outpatient treatment team arranged near patient's home	Must continue outpatient treatment to stay in recovery and prevent relapse

in their studies. A typical day begins with weighing in, then heading to academic classes. Nursing supervises the meals. Each day includes individual and group psychotherapy, nutrition and occupational therapy, and groups on other topics. Family therapy is an integral, crucial part of the program.

A Unique Program

The Eating Disorders Program at RWJ Somerset has a proven track record of success with eating disorders for over 30 years. The program is also unique because it will take any patient regardless of their weight. “Many freestanding programs will not take people who are too sick or medically fragile,” Dr. Donnellan explains. “That’s never an issue with us. If we have a

patient who is very ill, we have instant access to cardiologists, gastroenterologists, and any other medical specialist we may need. If a patient is too unstable for the Eating Disorders Unit, we can send them to the medical floor and transfer them back when appropriate. There is no such thing as a patient who is too sick for us.” ■

For additional information, please visit www.rwjuh.edu/eatingdisorders.

To refer a patient, contact the Access Center at 1-800-914-9444. Patients in crisis can be brought to the center immediately.

**(See Pediatrics 2011;128:S65-S70 for certification guidelines.)*

A Bend in the Road: Clinical Trials That Can Change the



Richard Drachtman, MD

Course of Sickle Cell Disease

SICKLE CELL disease (SCD) is the most common inherited blood disorder. Despite all that is known about its pathophysiology, complications and shortened life expectancy, a paucity of effective treatments exist for it—particularly for vaso-occlusive crises (VOC).

“Besides blood transfusions and pain meds, people in crisis are treated only symptomatically, says Richard Drachtman, MD, Section Chief, Division of Clinical Pediatric Hematology-Oncology at Rutgers Cancer Institute of New Jersey, Professor of Pediatrics at Rutgers Robert Wood Johnson Medical School and an attending pediatric oncologist at The Bristol-Myers Squibb Children’s Hospital (BMSCH) at Robert Wood Johnson University Hospital.

While transfusions can ease crises and prevent silent strokes—which occur in at least 30 percent of children with sickle cell disease—patients can develop alloantibodies and iron overload after prolonged treatment. In the absence of more effective treatments, VOC remains responsible for more than 70,000 U.S. hospitalizations per year, each with an average stay of approximately six days.

In short, no existing therapeutic can abort a VOC once it begins.

But that may change soon—and BMSCH is at the forefront of the effort. It is the only New Jersey facility participating in several pivotal clinical trials for vaso-occlusive crises. Each drug under consideration targets a different aspect of VOC that previously has not been addressed. All the investigative drugs have the potential ability to modify the course of the disease—and hopefully reduce the burden of care historically associated with VOC.

EPIC trial (Mast Therapeutics)

The EPIC trial is evaluating MST-188, or Purified Poloxamer 188, in children and adults. Dr. Drachtman is one of the principal investigators who planned the trial. A synthetic polymer that can “re-engineer” red blood cell morphology, “The drug adheres to hydrophobic surfaces on damaged red blood cells, acting like a membrane sealant that decreases membrane viscosity,” Dr. Drachtman explains. Sealing those surfaces decreases the RBCs’ ability to adhere to other hydrophobic domains, including acute-phase reactants and the vascular endothelium. The result: decreased aggregation and adhesion, as well as increased deformability and improved microvascular blood flow, which can avert secondary tissue ischemia.

“We think patients in crisis will see a significant improvement,” Dr. Drachtman says. “That’s a very exciting thing; it actually looks at an active crisis in a different way.”

Recruitment for the trial has one hitch. Dr. Drachtman elaborates: “You have 23 hours from admission to the Emergency Department (ED) to get the drug started. If kids come to us from other ED’s, we may not be able to study them because of the time factor that the FDA mandated. There was a reason for that: someone who has been in pain for three or four days isn’t the same as someone who’s been in pain one day. It may be harder to get the former pain-free, and you’ll be more likely to get a false negative on a study like this.”

BMSCH started recruiting for EPIC six months ago. Eventually, 70 sites worldwide will participate in the EPIC trial. The drug is administered as a 48-hour intravenous intervention. Regardless of whether patients receive the drug or a placebo, they will still be able to take their usual pain medications.

Ticagrelor trial (AstraZeneca)

BMSCH also will start recruiting for a Phase 2 trial of ticagrelor in the fourth quarter of this year. An antiplatelet drug, ticagrelor’s pharmacokinetics and various weight-adjusted, short-term dosing schedules will be assessed in children who are in vaso-occlusive crisis. Ticagrelor has gone head to head against clopidogrel in many clinical trials for other ischemic diseases. Children ages 2 through 18 are eligible.

Rivipansel trial (Pfizer/GlycoMimetrics)

In a third foray into evaluating emerging treatments for sickle cell disease, BMSCH is in early negotiations with Pfizer to evaluate a novel anti-inflammatory for treating VOC in hospitalized patients. The drug, a pan-selectin antagonist, blocks leukocyte adhesion to chemokines and mediates lymphocyte recruitment in response to inflammation. Children age 6 and older are eligible for this Phase 3 trial. The IV drug has been granted Fast Track status by the FDA.

“BMSCH is an academic medical center connected to an NCI-designated cancer center, which gives its patients unprecedented access to clinical trials and research,” Dr. Drachtman summarizes. “We are also the only New Jersey hospital involved in these clinical trials of sickle cell disease in kids. Many facilities see sickle cell patients, but we have the most comprehensive care available.” ■

To inquire about referring a patient for one of these trials, call 732-235-KIDS.

A Shot in the Arm: Boosting the



Patricia Whitley-Williams, MD

THE HUMAN papilloma virus (HPV) is a silent infectious agent in men and women alike. While it is fairly well-known that it can cause cervical cancer in females, it also can cause anal, oropharyngeal and penile cancer in males. The HPV vaccine is proven to prevent all those kinds of cancer, yet widespread participation in the vaccination program is elusive (see sidebar).

The Centers for Disease Control and Prevention recommends that girls and boys ages 11 to 12 receive the HPV vaccine—when they are already seeing their pediatrician for other vaccines (Tdap, MCV4). Although coverage rates for children receiving at least *one* dose of the HPV vaccine continue to climb each year, returning for the second and third doses over the next six months remains a barrier to compliance—and true chemoprevention.

“It’s very troubling that we’re not doing so well with one dose, let alone three doses,” says Patricia Whitley-Williams, MD, Chair and Professor of Pediatrics, and Chief of the Division of Pediatric Allergy, Immunology & Infectious

Diseases at Rutgers Robert Wood Johnson Medical School and Physician-in-Chief of The Bristol-Myers Squibb Children’s Hospital at Robert Wood Johnson University Hospital. “But when the pediatrician tells the parents that their children need to get the vaccine before becoming sexually active, all the parents hear is ‘sex’—and sometimes they aren’t ready to consider that.” (Statistically, by age 17, at least half of all teens have already had at least one sexual encounter.) “HPV isn’t a household word like whooping cough, but people understand cervical cancer,” Dr. Whitley-Williams continues. “We need to get out the word that HPV is the virus that can lead to cervical cancer later on. Women and men die from HPV-related cancers, and we can prevent that.”

All HPV vaccines include coverage for the high-risk, cancer-causing HPV 16 and 18. Some also include the low-risk HPV 6 and 11, which causes genital warts. If children don’t receive the vaccine when they are younger, it is approved and recommended for women up to age 26 and men up to age 21. The vaccine can be started as early as age 9. ■



HPV Incidence and Compliance

- ~80 million people are infected with HPV; most of them don’t know it.
- Many adolescents ages 15 to 17 already have detectable HPV infections.
- 1 in 5 women who have 1 lifetime partner are infected with HPV.
- ~4,000 women die each year of cervical cancer caused by HPV.
- Only 1 in 3 girls and 1 in 7 boys receive all 3 doses of the vaccine.



HPV Vaccine Coverage Rate

High Touch in a High-tech Environment: Dr. Yi-Horng Lee

TRY CATCHING UP WITH Yi-Horng Lee, MD, Associate Professor and the new Chief of Pediatric Surgery at Rutgers Robert Wood Johnson Medical School and The Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital, and you'll more likely find him at a bedside than in a boardroom. The can-do chief is known for personally taking cases "that no one else wants to take the time to figure out."

Clinical and Research Interests

While rounding in the NICU during his fellowship, Dr. Lee became interested in the development of intestinal microbiome of premature infants. "We seem to give the same antibiotics for intestinal perforation in a 2-week-old infant as we do in a 70-year-old man. That does not make sense. Do we know if they have the same bacterial flora?" Dr. Lee dove into the emerging field of neonatal intestinal microbiota. The basis for this work can further our understanding in necrotizing enterocolitis. The often life-threatening condition in premature infants unfortunately occurs at a time when the parents are just beginning to bond with the child. "From a medical perspective, the disease is an unstoppable runaway train. Financially, it costs millions, if not billions of dollars in the U.S. to treat this." Dr. Lee cites these reasons for studying this topic." He is now looking to expand this line of research to other pediatric surgical conditions such as obesity and trauma.

Dr. Lee routinely performs neonatal surgeries, tumor resections, complex GI reconstructions, and minimally invasive surgeries including thoracoscopy and laparoscopy.

Corporate Vision, Treatment Philosophy

Dr. Lee says he came to BMSCH because he saw "the institutional willingness to be complete in its cadre of subspecialties. This hospital already has a much wider range of services than any other children's

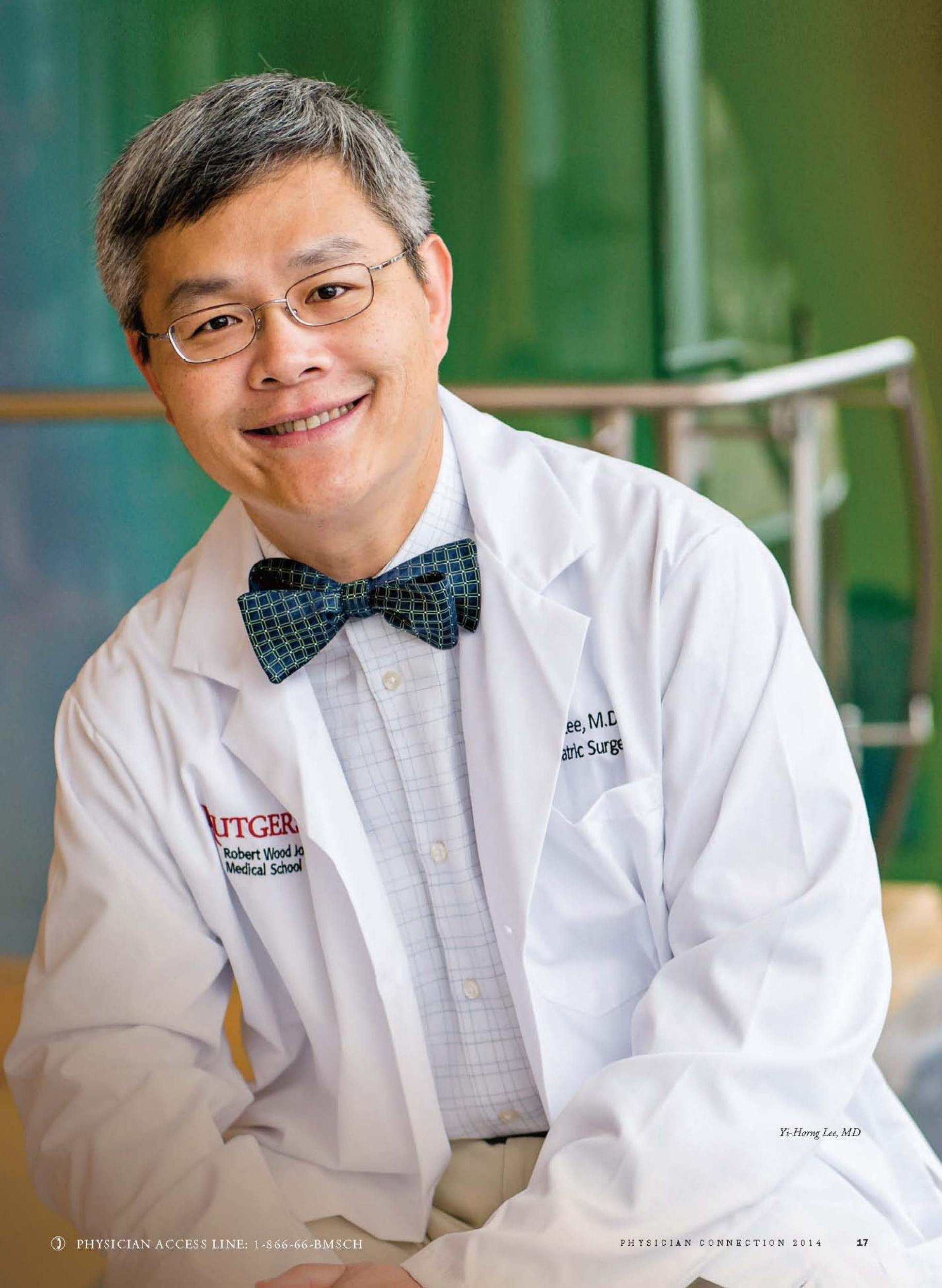
hospital in New Jersey, but I'm committed to having zero gap in the services we offer. In the next two to three years, I want BMSCH to be known as the leading resource for children's care in the state—and recognized as the tertiary referral center for complex neonatal and pediatric surgical problems. The children of New Jersey should be treated in New Jersey, and I want pediatric surgery to serve as the anchor for that."

Dr. Lee also wants to change the perception that a surgeon sees a patient only when he or she has been proven to need surgery. "[The referring physicians] don't have to prove a surgical disease before sending the child to a surgeon. If surgical disease is suspected, we will help with the evaluation and offer surgery as one of the treatment options." More importantly, he wants families and physicians to know that "We're not here to simply operate on children. We're here to take care of them. We will listen and consider surgery as a *part* of that patient's care, and we'll collaborate with other health care providers for the betterment of our patients."

Beyond the Biography

Dr. Lee was recruited from the University of Rochester Medical Center Golisano Children's Hospital. He is a member of the American Pediatric Surgery Association and a fellow of the American College of Surgeons and the American Academy of Pediatrics. He has authored numerous peer-reviewed journal articles and book chapters.

Brushing aside his technical accomplishments, Dr. Lee emphasizes what is most important to him. "I get to do something that very few people get to do, and that brings me great joy. A Chinese proverb says that helping others is the basis for your happiness. Every day I am happy to come to work and help others. I appreciate the opportunity to take care of my patients. It is a privilege to gain the trust of parents during their most vulnerable time. I am very grateful to be a pediatric surgeon." ■



Yi-Hong Lee, MD



Joann Spinale-Carlson, MD

New Pediatric Nephrologist Joins BMSCH

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R. JOANN SPINALE-CARLSON is Assistant Professor of Pediatrics at Rutgers Robert Wood Johnson Medical School and the new Medical Director of Pediatric Kidney Transplantation at The Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson

University Hospital.

Dr. Spinale-Carlson completed her residency and nephrology fellowship at Children's Hospital of Philadelphia (PA), where she won a clinical research award for a poster describing a dialysis algorithm for neonatal patients with hyperammonemia. She will present her latest research findings on new biomarkers for focal segmental glomerulosclerosis at Kidney Week 2014 this November. Dr. Spinale-Carlson published three first-author papers during her fellowship, plus one in medical school. Her research on focal segmental glomerulosclerosis biomarkers was recently accepted for publication by *Kidney International*. She also authored a chapter in a pediatric textbook that will be published within several months.

Dr. Spinale-Carlson serves both the outpatient clinic and inpatient renal service, as well as dialysis patients in the DaVita unit. Her research interests include the molecular pathogenicity of chronic kidney disease and dialysis, as well as social and quality-of-life issues surrounding those conditions.

Dr. Spinale-Carlson is a member of the American Society of Pediatric Nephrology, International Pediatric Nephrology Association and the Society for Pediatric Research. ■



Somasundaram (Jay) Jayabose, MD

Adding Depth in Hematology-Oncology with New Physician

DR. SOMASUNDARAM (JAY) JAYABOSE is a pediatric hematologist-oncologist at Rutgers Cancer Institute of New Jersey, Professor of Pediatrics at Rutgers Robert Wood Johnson Medical School and an attending pediatric hematologist-oncologist at The Bristol-Myers Squibb Children's Hospital (BMSCH) at Robert Wood Johnson University Hospital.

Prior to joining BMSCH, Dr. Jayabose spent four years establishing the Camila Children's Cancer Center at Meenakshi Mission Hospital and Research Center in Madurai, India.

Dr. Jayabose's many past accomplishments include establishing a new pediatric hematology-oncology division at Westchester Medical Center in 1981. He also was the first to start a trial of hydroxyurea in children with sickle cell disease in 1990 (results in *J Pediatr* 1996). He completed his pediatrics residency at New York Medical College-Metropolitan Hospital (NYC) and his fellowship in pediatric hematology-

oncology at Long Island Jewish Medical Center, New Hyde Park, NY. Dr. Jayabose's research interests include sickle cell disease and immune thrombocytopenic purpura. He is also passionate about helping children in developing countries. To that end, he is working with the Office of Global Health at Rutgers Robert Wood Johnson Medical School to establish Twinning programs in pediatric oncology in selected developing countries.

Dr. Jayabose is a member of the American Society of Pediatric Hematology/Oncology, American Society of Hematology and American Society of Clinical Oncology.

His work has been published in more than 80 articles. He is also an ad hoc reviewer for the *Journal of Pediatric Hematology Oncology*. ■



THE BRISTOL-MYERS SQUIBB CHILDREN'S HOSPITAL
at Robert Wood Johnson University Hospital

Pediatric Medical Specialties

Specialty	Department Contact	Appointment Line
Adolescent Medicine	(732) 235-7896	(732) 235-6230
Allergy	(732) 235-7894	(732) 235-6230
Anesthesia	(732) 937-8841	
Cardiology	(732) 235-7905	(732) 235-7905
Critical Care	(732) 235-7887	
Developmental Disabilities	(732) 235-7875	(732) 235-6230
Emergency Medicine	(732) 235-7893	
Endocrinology	(732) 235-9378	(732) 235-6230
Gastroenterology	(732) 235-7885	(732) 235-6230
General Pediatrics	(732) 235-7044	
Genetics	(732) 235-6350	(732) 235-6230
Hematology/Oncology	(732) 235-8864	(732) 235-6455
Infectious Diseases	(732) 235-7894	(732) 235-6230
Kidney Transplantation	(732) 235-7880	(732) 235-6230
Maternal-Fetal Medicine	(732) 235-3892	(732) 235-3892
Neonatology	(732) 235-5699	
Nephrology and Hypertension	(732) 235-7880	(732) 235-6230
Neurology	(732) 235-7875	(732) 235-6230
Pulmonology and CF	(732) 235-7899	(732) 235-6230
Radiology	(732) 937-8833	
Rheumatology	(732) 235-4980	(732) 235-6230
Transport	(866) 66-BMSCH or (866) 662-6724	(732) 235-6230

PHYSICIAN Connection



THE BRISTOL-MYERS SQUIBB CHILDREN'S HOSPITAL
at Robert Wood Johnson University Hospital

Pediatric Surgical Specialties

Specialty	Department Contact	Appointment Line
Bariatric Surgery	(732) 253-3156	(732) 253-3156
ENT		
Otolaryngology (Dr. Traquina)	(732) 247-2401	(732) 247-2401
Otolaryngology (Dr. Chee/ Dr. Kwong)	(732) 235-5530	(732) 235-5530
General Surgery	(732) 235-7960	(732) 235-8353
Neurosurgery	(732) 235-8953	(732) 235-7757
Ophthalmology	(732) 613-9191 or (732) 750-0400	(732) 631-9191 or (732) 750-0400
Orthopedics	(732) 390-1160 or (732) 530-3311	(732) 390-1160 or (732) 530-3311
Plastic Surgery	(732) 235-7865	(732) 235-7865
Same Day Surgery	(732) 253-3512	
Urology	(732) 235-7960	(732) 235-7960

Pediatric Inpatient Units

Specialty	Department Contact
Adolescents	(732) 937-8674
Hematology/Oncology	(732) 418-8075
NICU	(732) 235-3807
Pediatric ED	(732) 418-8173
Pediatrics	(732) 937-8893
PICU	(732) 937-8673



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