

# JOHNS HOPKINS Surgery

WINTER 2017



NEWS FROM THE JOHNS HOPKINS  
DEPARTMENT OF SURGERY

## Surgical Oncology Expands in National Capital Region

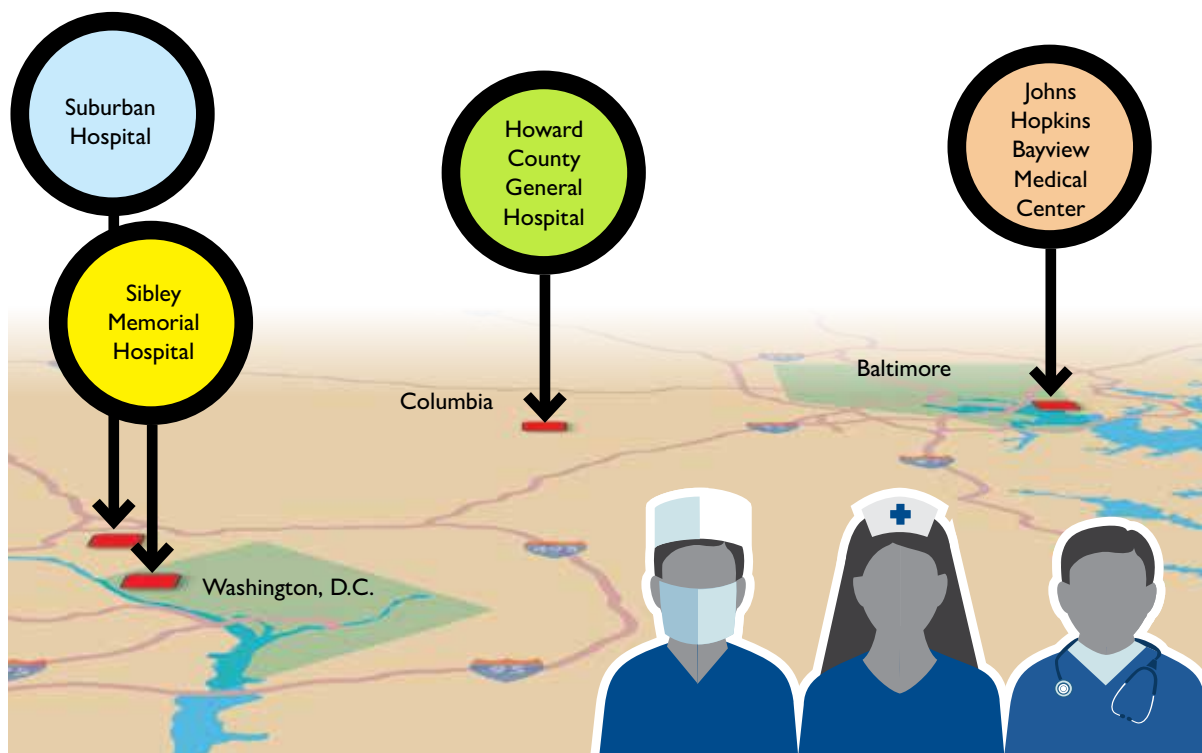
When Johns Hopkins acquired Baltimore City Hospitals in 1984, later renaming it Johns Hopkins Bayview Medical Center in 1994, it offered a novel opportunity: Physicians could provide patients the innovative style of medicine and services that were previously only available at The Johns Hopkins Hospital. In turn, more patients could access the institution's unique protocols in a location that was convenient for them.

Years later, Johns Hopkins has forged similar relationships with other local community hospitals, including Howard County General Hospital in Columbia, Maryland; Suburban Hospital in Bethesda, Maryland; and Sibley Memorial Hospital in Washington, D.C.

This enormous expansion, explains colorectal surgeon **Jonathan Efron**, presents an opportunity for Johns Hopkins to offer regional centers for specific diseases, including cancer. Surgical oncologists are now practicing at each of these locations, serving patients farther south in Maryland, Washington, D.C., and northern Virginia, and offering more convenient locations for out-of-state patients.

"By expanding the regionalization of cancer care, we're trying to make treatment more convenient for both patients and referring doctors away from The Johns Hopkins Hospital," Efron says. "The goal is to have the correct patient cared for in the correct setting."

For example, Efron explains, there are now breast cancer centers of excellence at The Johns Hopkins Hospital, Johns Hopkins Bayview, Howard County



SURGICAL ONCOLOGISTS ARE NOW PRACTICING AT EACH OF THESE LOCATIONS, SERVING PATIENTS FARTHER SOUTH IN MARYLAND, WASHINGTON, D.C., AND NORTHERN VIRGINIA, AND OFFERING MORE CONVENIENT LOCATIONS FOR OUT-OF-STATE PATIENTS.

General, Suburban and Sibley, all with specialized surgeons. Surgeons with expertise in lung cancer are now practicing at The Johns Hopkins Hospital, Johns Hopkins Bayview and Sibley. In fact, Sibley now hosts a branch of the Johns Hopkins Kimmel Cancer Center, with surgeons who treat breast, hepatobiliary, endocrine, neurological, head and neck, and thoracic conditions. Plans are in the works to expand these offerings over the next several years.

According to thoracic surgeon **Stephen Broderick**, one of the newest members of the team at Sibley, these centers are able to provide most of the standard surgical procedures available at The Johns Hopkins Hospital. Even though the most complex operations will still take place at the main campus, patients can access

preoperative and postoperative care, chemotherapy, radiation and other cancer-related services at Johns Hopkins member hospitals closer to their homes.

"Cancer care in the D.C. area is often fragmented. Patients might have their surgeon at one hospital, their medical oncologist at another and their radiation oncologist at a third location," he says. "We can offer comprehensive, multidisciplinary care under one roof." ■

To refer a patient: 443-997-1508



"WE CAN OFFER COMPREHENSIVE, MULTIDISCIPLINARY CARE UNDER ONE ROOF."

—STEPHEN BRODERICK

# Fighting Pancreatic Cancer As a Team

**C**hristopher Wolfgang, who directs Johns Hopkins' Hepato-Pancreato-Biliary Program, says that to win the war against pancreatic cancer in a patient, two battles must be fought. The first battle, he says, is a local one that involves removing primary tumors via complex procedures, such as the Whipple, the modified Appleby, the distal pancreatectomy and others. The second battle is a broader, systemic effort to catch the micrometastases that can spread to distant sites, including the liver, lungs, bone, brain and other organs.

"No one specialty can fight both these battles on its own," Wolfgang says, "and it's nearly impossible to win the war unless specialties are functioning as a team."

That's why Johns Hopkins started the Pancreatic Cancer Multidisciplinary Clinic in 2007. At the time, says Wolfgang, it was the first clinic of its type nationally, integrating specialists from surgery, medical oncology and radiation oncology, and incorporating the latest research from Johns Hopkins and elsewhere to fight pancreatic cancers.

Nearly a decade later, the program is the most experienced and busiest in the country—factors shown time and again to improve patient outcomes. For example, Johns Hopkins pancreatic surgeons performed 349 Whipple operations and over 500 pancreas operations in fiscal year 2016. The group performs many of the operations using a minimal access approach, such as laparoscopic and robotic, as well as the traditional open method.

Besides Wolfgang, surgeons on the team include **John Cameron**, one of the fathers of pancreatic surgery, who has spent nearly five decades performing it. When he began his career at Johns Hopkins in the 1970s, the mortality rate for the Whipple procedure was nearly 30 percent. His efforts brought that rate down to less than 2 percent at Johns Hopkins, and he instructed countless other surgeons in the process to spread his lifesaving technique throughout the world.

Other surgeons on the team include **Marty Makary**, **Matt Weiss** and **Jin He**, who together comprise a premier pancreatic surgery program that includes minimally invasive techniques, an irreversible electroporation program, innovative clinical trials and cutting-edge translational research.

The medical oncology program is led by **Elizabeth Jaffee**, who developed a powerful therapeutic vaccine to mobilize patients' immune systems to combat pancreatic cancer recurrence.



"OUR GOAL FOR ALL PATIENTS WHO WALK INTO THIS CLINIC IS A CURE."

—CHRISTOPHER WOLFGANG

Other medical oncologists on the team include **Dan Laheru**, **Lei Zheng**, **Dung Le**, **Ana DeJesus** and **Nilo Asad**. Each works to incorporate immune treatments with traditional and innovative chemotherapies to systemically contend with metastatic disease.

In addition, radiation oncologists led by **Amol Narang**, pain medicine led by **Michael Erdek**, pathology led by **Ralph Hruban**, and diagnostic imaging led by **Elliot Fishman** and **Karen Horton** round out the team. Each of these individuals is recognized as a leader in his or her field.

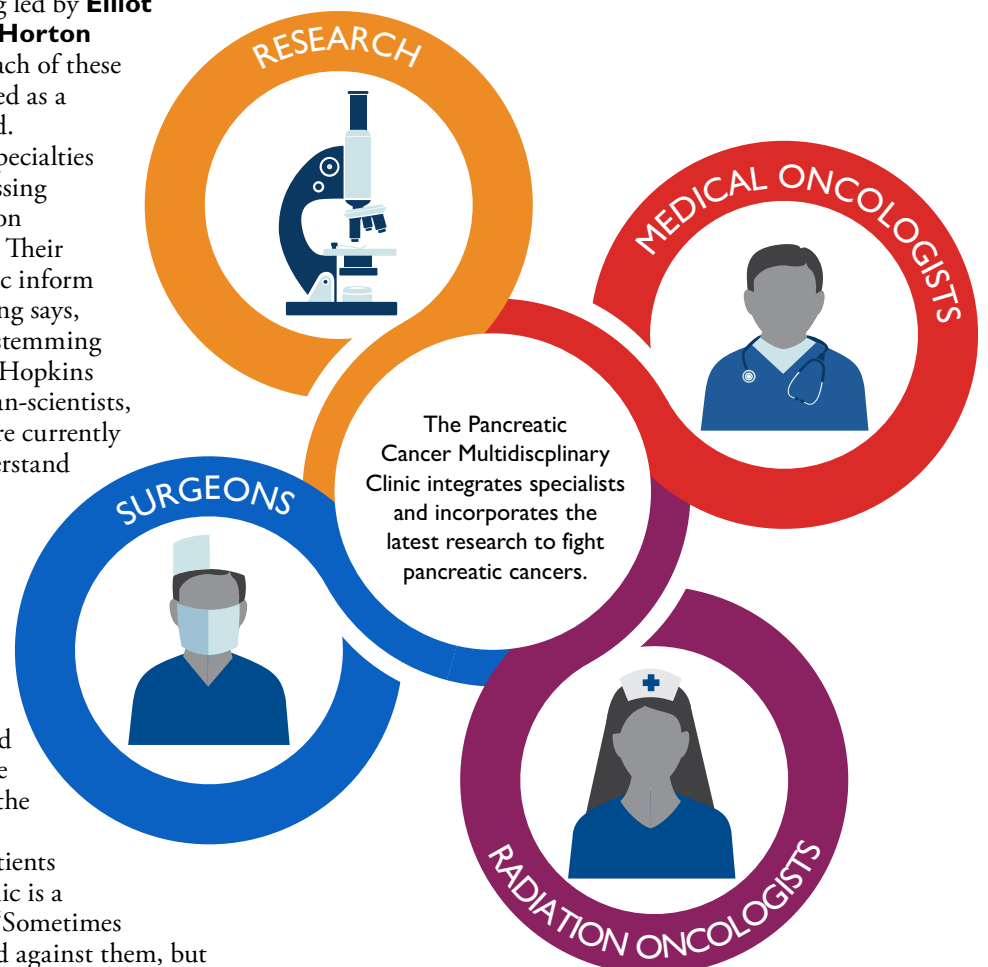
Members from all specialties work in concert, discussing each patient to decide on the best course of care. Their experiences in the clinic inform their lab work, Wolfgang says, with new innovations stemming from patients at Johns Hopkins and elsewhere. Physician-scientists, including Wolfgang, are currently working to better understand pancreatic cancer genetics to develop personalized approaches to treatment and early detection. They're also studying circulating metastatic cells to develop directed therapies and to use the cells as a window into the primary tumor.

"Our goal for all patients who walk into this clinic is a cure," Wolfgang says. "Sometimes the odds can be stacked against them, but

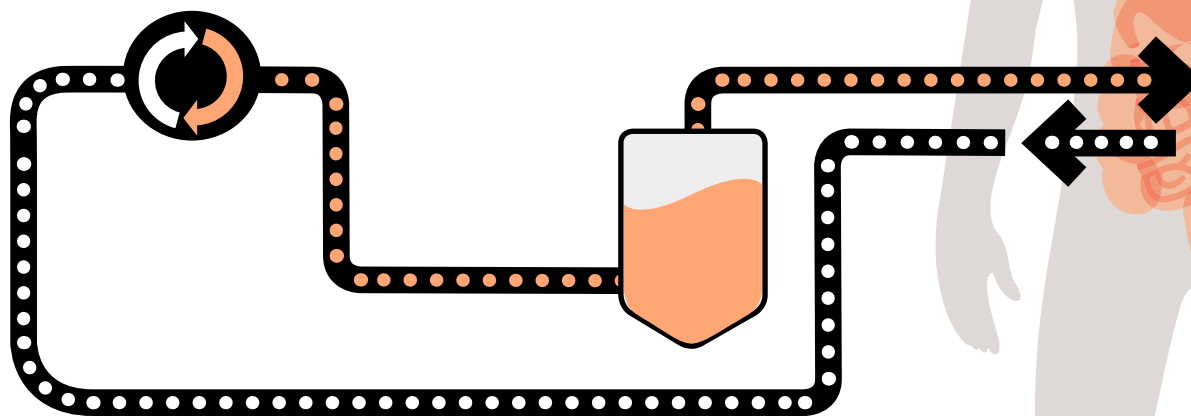
having our team provide every cutting-edge and personalized treatment for every case will give them the best chance." ■



Watch a webinar on surgical advances in pancreatic cancer at [bit.ly/PancreasWebinar](http://bit.ly/PancreasWebinar).



# More Effective Treatment of Peritoneal Tumors



After removing all disease in the abdomen, surgeons close the cavity and insert two catheters, including one to deliver chemotherapy to the patient. The chemotherapy exits through the second catheter, recirculates through a machine and returns to the patient.

**C**ANCERS THAT ORIGINATE in the abdomen and spread throughout the peritoneal cavity used to be universally fatal, says surgeon **Fabian Johnston**, who joined the Johns Hopkins faculty in May 2016. Surgically removing the many metastatic sites seemed like an impossible task, and systemically delivered chemotherapy doesn't penetrate deep enough into the peritoneal lining to catch budding, as-yet-invisible tumors.

However, he explains, a technique that's been slowly gathering steam over the past few decades could offer patients a chance at extended survival or even a cure. Known as hyperthermic intraperitoneal chemotherapy, or HIPEC, it involves flooding the cavity with a warm chemotherapy solution, catching errant malignant cells and small, imperceptible tumors before they develop a foothold in the abdomen or metastasize elsewhere in the body.

The treatment can be an option for patients with appendiceal, colon, ovarian, gastric or primary peritoneal cancers, Johnston says, because these cancers tend to spread locally at first, colonizing the peritoneal cavity. To perform HIPEC, he and the surgical team must first perform a complete cytoreduction of all visible disease throughout the entire abdomen, checking for evidence of lesions on the diaphragm, liver, bladder, bowel and paracolic gutters—anywhere cancerous cells might have traveled throughout the cavity. This initial part of the procedure might take two hours or up to 12 depending on the extent of cancer spread.

"It's a very exhaustive surgery to get patients down to an extremely low level of disease," Johnston says.

Once cytoreduction is complete, the next step is to fill the peritoneal cavity with a chemotherapeutic solution heated to 42 degrees Celsius, about the temperature of a warm bath, and allow it to circulate up to 90 minutes. Heating the solution allows the

selected chemotherapeutic drug to enter cells more easily, increasing its killing power. But since its activity is confined to the abdomen, patients avoid some side effects common with systemically delivered chemotherapies.

Performing HIPEC successfully isn't possible without a multidisciplinary team with expertise on this technique, Johnston says, which isn't available at many institutions. For example, he says, due to the nature of these cancers, many patients aren't optimally nourished before surgery. Working with nutritionists gets patients on track before HIPEC, which helps ease the postoperative period. Anesthesiologists familiar with HIPEC also use protocols that fast-track recovery, including epidurals instead of narcotics and minimal use of fluid, which allow patients' bowels to recover faster and let patients receive oral nutrition earlier.

"I always tell patients that this procedure is a marathon," Johnston says. "HIPEC is like nothing they've ever been through before. Our entire team works together to give patients the best recovery and outcome."

Besides achieving excellent clinical outcomes, Johnston notes that it's important for him and other surgical team members to make sure that patients and their families are cared for like family.

"We hold the entire team," he says, "to the same standard of care we'd want for our own families." ■



"OUR ENTIRE TEAM WORKS TOGETHER TO GIVE PATIENTS THE BEST RECOVERY AND OUTCOME."

—FABIAN JOHNSTON



## Candidates for HIPEC

Patients with certain peritoneal surface malignancy cancers, such as:

- Selected late-stage colon cancer
- Appendiceal cancers
- Pseudomyxoma peritonei
- Select gastric and ovarian cancers



Watch Fabian Johnston discuss hyperthermic intraperitoneal chemotherapy at [bit.ly/JohnstonHIPEC](http://bit.ly/JohnstonHIPEC).

## New Surgeons at Johns Hopkins Medicine



**Shane Ottmann** is the director of the Living Donor Kidney Transplant Program within the Comprehensive Transplant Center. His areas of clinical expertise include abdominal surgery, dialysis access, liver transplant, kidney transplant, pancreas transplant, live donor transplant, hepatobiliary surgery and laparoscopic nephrectomy. His research interests include organ preservation, hepatocellular carcinoma and the expansion of living donor transplant. Before joining Johns Hopkins, he served as chief of the Army-Navy Transplant Service at Walter Reed National Military Medical Center and transplant consultant to the Army surgeon general.



**Jacqueline Garonzik Wang** is a surgeon in the Comprehensive Transplant Center. Her areas of clinical expertise include hepatobiliary surgery; liver, pancreas and kidney transplantation; and living kidney donation. Her research interests include exploring and developing methods to increase living donation, utilizing large health care data sets to improve access to transplantation and post-transplant outcomes, and increasing deceased donor transplant rates by safely expanding organ acceptance criteria.

## ICD-10 Is Here

When referring patients to Johns Hopkins Medicine, please be sure to include ICD-10 codes.



For more information, visit [www.cms.gov/Medicare/Coding/ICD10/](http://www.cms.gov/Medicare/Coding/ICD10/).

## Johns Hopkins Surgery Referral Line

**Call 443-997-1508 to refer a patient.** Get easy access and quick appointments for your patients at multiple locations.

**Our schedulers are available to assist you Monday through Friday, 8 a.m. to 5 p.m. For after-hours or emergency transfers, please use the Hopkins Access Line at 410-955-9444.**

## Explore Our New Online Resource for Physicians: **Clinical Connection**

Connect with Johns Hopkins health care professionals about the latest clinical innovations and advances in patient care. Access videos, articles, news, clinical trials and much more.

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# JOHNS HOPKINS Surgery

Johns Hopkins Medicine  
901 S. Bond St., Suite 550  
Baltimore, Maryland 21231

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### Department of Surgery

Robert Higgins, *director of the Department of Surgery*

### Marketing and Communications

Dalal Haldeman, Ph.D., M.B.A., *senior vice president*  
Lisa Rademakers, *editor*  
Christen Brownlee, *writer*  
Lori Kirkpatrick, *designer*  
Keith Weller, *photographer*

For questions or comments, contact [lradema1@jhmi.edu](mailto:lradema1@jhmi.edu) or 443-287-2527.

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