

# SYNERGY REPORT

## TEAMWORK TACKLES HURRICANE HARVEY

Hurricane Harvey was an unprecedented storm for the Houston area and one of the most damaging in U.S. history. As the storm approached the Texas coast August 25, 2017 and stalled out over the region as a tropical storm, hospital administrators and members of the Synergy Radiology Associates operations team went into action to ensure radiology coverage at area hospitals.

Michael Rodriguez, M.D., is Director of Radiology at Memorial Hermann Katy Hospital and serves on the Synergy operations committee. His responsibilities include preparation for hurricanes or other natural disasters. During Harvey, Dr. Rodriguez was kept busy coordinating with area hospitals and Synergy to ensure adequate staffing at facilities served by Synergy radiologists.

"After the hurricane hit, there was a lot of communication back and forth to make sure we could cover the different facilities," said Dr. Rodriguez. "There were many of our radiologists who had to stay at hospitals, for days, throughout the entirety of the storm."

Synergy radiologist Kenneth Bryant, M.D., was working at Memorial Hermann The Woodlands Medical Center as Harvey moved in.

"Our team came together and determined there needed to be an interventional radiologist staying at each hospital day and night," said Dr. Bryant. "I went home and packed a few days' supplies and came back to ride out the storm at the hospital."

Dr. Rodriguez said the coordination was remarkable, and everyone pitched in to do what was needed to get through the historic storm.

"Various doctors brought in sleeping bags and extra food with them. Sometimes there were beds available, but often not, because stretchers were at a premium," said Dr. Rodriguez. "Down at Clear Lake (Regional Medical Center), there was a lot of flooding, and it was very difficult for people to get in and out."

When the storm hit, Drs. Miles, Uzelmeier and Jennings were already on duty there, and they told other radiologists to stay put.

"They stayed at the hospital for days. It was very impressive, what they were able to accomplish, working alternating shifts," noted Dr. Rodriguez. "We also had radiologists who stayed for about a week after the storm at Katy Hospital due to flooding."

With our interventional radiologists and IR nurses available to the patients around the clock, our hospitals were able to provide numerous, critical medical procedures throughout the storm.

***"The hospital is always on. Things don't stop just for a hurricane and flooding."***

*– Kenneth Bryant, M.D.*



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**Our Community: Highlights from National Rad Tech Week and Heroes in Health Clay Shoot**

# HURRICANE HARVEY (continued)



During natural external disasters, hospitals issue a Code Gray disaster plan, which includes limiting hospital access and visitations, and focusing on essential personnel.

“Code Gray was initiated during Harvey to help ensure that each department had someone in the facility at all times, and that applied to radiology as well,” said Dr. Rodriguez. “We had people on call and a protocol in place. If you were on call that weekend, then you were tagged to be the person that stayed over.”

Synergy radiologists and supporting staff stayed on duty at several hospitals for the duration of the storm.

“A lot of our people grabbed what they needed, went to the hospital and slept there; they didn’t know if they were going to be there for eight hours or eight days,” said Dr. Rodriguez. “Kudos to all the radiologists who did that.”

Dr. Rodriguez emphasized that the entire effort took coordination, teamwork and dedication to patient care.

Dr. Bryant agreed, noting that before the storm, hospital administration stayed in touch with Synergy, which then coordinated with its physicians and came up with a plan.

“We were able to implement the plan, knowing the storm was coming,” said Dr. Bryant. “I think it was a well-thought-out storm plan that we came up with, and everything went smoothly.”

Dr. Bryant is now a “hurricane veteran,” having worked through hurricane Ike in September 2008 at LBJ hospital in Dallas.

“This makes the second hurricane I’ve ridden out at the hospital.”

And when the next storm threatens the Houston area?

“We have already looked ahead to address future preparations, to make sure our plan is updated and in place before the next storm hits,” said Dr. Rodriguez. 🌀

***“Storm or no storm, critical procedures were scheduled, and patients still needed care.”***

*– Michael Rodriguez, M.D.*

## MEDNAX Integration

Synergy Radiology Associates continues its integration with MEDNAX, a national provider of physician services and health solutions. In October 2018, MEDNAX announced the acquisition of Synergy in support of the group’s rapid growth and desire to maintain its position as the most advanced radiology practice in the nation.

The acquisition presents significant opportunities for Synergy to continue its growth pathway and achieve strategic goals. Physician-led MEDNAX brings extensive resources and industry experience to support the Synergy mission, including its vRad platform, the most technologically advanced PACS and RIS systems in the industry. PACS is a “picture archiving and communication system” designed

specifically for the storage, viewing and sharing of medical images; RIS stands for “radiology imaging system” for the management of medical images and all the data associated with them, including billing and patient information.

“Our companies share a common vision of driving excellence in radiology supported by the most advanced technology to positively impact health in a way that could never be achieved by any single radiology practice,” said Walid K. Adham, M.D., President and CEO of Synergy Radiology Associates. “The Synergy-MEDNAX alliance will also improve large-scale data collection, assist with clinical research, support regulatory compliance and promote quality initiatives that result in improved care to the patients we serve.”

***For more information, visit [synergyrad.org/news/events](http://synergyrad.org/news/events)***




# EVENT INVOLVEMENT

## Heroes in Health Sporting Clay Shoot

In February, Synergy sponsored a team and two support stations at the 5th Annual Memorial Hermann Annual Heroes in Health Sporting Clay Shoot at the Greater Houston Gun Club. Our team of four radiologists included: Walid Adham, M.D., Grider Gordon, M.D., Terence O'Connor, M.D. and Armando Saenz, M.D.

The Heroes in Health tournament benefits the Memorial Hermann Life Flight® air ambulance service that transports critically ill and injured patients in the greater Houston area. Life Flight is a community service of Memorial Hermann that operates as a hospital-based, non-profit organization, relying on community support and fundraising to support its operations.


Houston's only hospital-based air medical service, Life Flight serves Houston and surrounding communities, including Harris County, southeast Texas and part of western Louisiana.

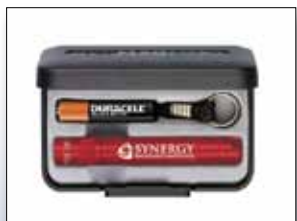
More than 200 people participated in this year's fundraising event, with nearly \$165,000 raised in support of Life Flight. To learn more about Heroes in Health, visit [www.memorialhermann.org/heroes-in-health](http://www.memorialhermann.org/heroes-in-health). For more information about the Life Flight program or to donate, visit [www.memorialhermann.org/lifeflight/donate](http://www.memorialhermann.org/lifeflight/donate). 



## National Radiologic Technology Week

To help close out 2017 on a fun and positive note, Synergy celebrated National Radiologic Technology Week® (NRTW®) with our amazing team of RTs. Established by the American Society of Radiologic Technologists, this special week is set aside to commemorate the anniversary of the X-ray's discovery by Wilhelm Conrad Roentgen in 1895 and honor the work of RTs.

Each year at Synergy, we take this opportunity to recognize the vital role of medical imaging and radiation therapy professionals in providing the highest levels of patient care and safety...and we make sure to mix in a bit of fun while we're doing it! 



# PHYSICIAN BRINGS NEW LIGHT

*In hurricanes' aftermath, Synergy physician and son give the gift of light to U.S. Virgin Islands school children and their families*

The devastation of two Category 5 Caribbean storms in September 2017 took a huge toll on the U.S. Virgin Islands (USVI), Puerto Rico and surrounding areas. The USVI, where Synergy radiologist Thomas Lu, M.D., was raised from age 2, took back-to-back hits from Hurricane Irma on September 6 and Hurricane Maria on September 19.

Dr. Lu grew up on St. Thomas, one of three main islands of the U.S. territory, and his parents still make their home there. Houston was just starting to recover from the destruction of Hurricane Harvey when Hurricanes Irma and then Maria struck the USVI. Dr. Lu and his family watched, listened and worried from Houston, as reports of some of the most powerful hurricanes in modern history spread across the U.S.

Thankfully, his parents were safe, but like most other residents, schools and businesses in the USVI and surrounding islands, they were without power. Dr. Lu's parents lost power with Irma's September 6 landfall, and it was not restored until just before Thanksgiving.

Seeing the storm and its after effects – especially the widespread, long-term lack of power – made a huge impact on Dr. Lu's son, Andrew, whose September 22 birthday was just days after Maria hit. Dr. Lu said his son's thoughts were not about his birthday, but with the people of the USVI.

Having just experienced Hurricane Harvey's assault on the Houston area, and knowing how limited the USVI's resources were in the face of two Category 5 storms, Andrew felt like he needed to do something.

"He wanted to do something for the Montessori school on St. Thomas that he had a connection with," recounted Dr. Lu. "Lack of electricity was a huge problem, so finding a way to provide lighting was one of the first things that came to mind."

Andrew is a high school student at a Houston-area Montessori school and has close ties to the Virgin Islands Montessori School and Peter Gruber International Academy (VIMSIA) in St. Thomas. Each year, Montessori schools from around the globe meet in New York for the Montessori Model United Nations (MMUN) program annual conference.

"Our connection with St. Thomas makes this an important meeting, and Andrew meets students and people from the Montessori school each year, and he has really developed a relationship with them."

MMUN provides students age 9 to 15 the opportunity to learn about the operations of the United Nations and its peacekeeping and humanitarian missions. Andrew has been involved in the MMUN conference each year as a representative of his school, and he is now on the bureau that runs the conference.

To help out in the aftermath of the hurricanes, Dr. Lu and his son decided upon solar lights. They ordered high-quality, solar-powered LuminAID® Lanterns to sell in Houston. For every one of the lights sold, Dr. Lu and Andrew would donate a light to VIMSIA.

"It was a two-for-one deal; buy one light, and we donate a second light," said Dr. Lu.

The project effort resulted in nearly 200 solar lanterns being sent to the St. Thomas



school, where the VIMSIA principal was able to distribute the lights to students and their families. Shortly after the donation, VIMSIA posted a heartfelt message of thanks on its Facebook page.

*"Dr. Thomas Lu of Houston, Texas, has done something amazing! He has been raising money for the USVI relief effort through helpusvi.org. With the money he and his son Andrew raised, he donated a high tech solar LuminAid lantern to each VIMSIA student! Andrew's own school has even been helping to make this fundraiser a huge success... **Thank you Dr. Lu and Andrew for shining a light during a difficult time.**"*

"These kids came to school that day, and they were each able to take home one of these lights. It lifted their spirits and provided something practical for them and their families," said Dr. Lu.

Dr. Lu described how Andrew at first thought the lantern idea might be too simple.

"I reminded him that most people there had no electricity, they were relying only on batteries and, if available, generators."

The school also posted pictures of the very happy and excited students showing off their new lanterns on Facebook.

"A picture is worth a thousand words, and that's when we could see how valuable these lights were and how excited the students were," said Dr. Lu. "I was also very proud of my son for thinking of others before himself." 🍷



## About Dr. Thomas Lu

Raised in the U.S. Virgin Islands, Dr. Lu specializes in interventional and vascular radiology. Growing up, he always wanted to be a doctor, just like his dad. During Hurricane Harvey, he worked with other Synergy radiologists to ensure coverage at area hospitals. (And yes, he also sent his parents several of the solar-powered lanterns.)



# Y-90 SIRT CASE STUDY

## Overview

Originally indicated for inoperable liver cancer, Selective Internal Radiation Therapy (SIRT) with yttrium-90 (Y-90) microspheres is an appropriate option in chemotherapy resistant patients whose colorectal disease has spread to the liver. Synergy radiologists are now performing this advanced, minimally invasive procedure at several Memorial Hermann hospitals with good results. We present this recent case, which is performed by a Synergy radiologist and involves a multidisciplinary team approach to treatment.

## Case History

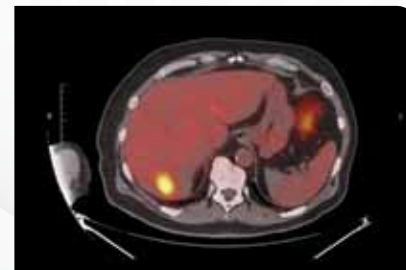
A 70-year-old male patient was initially seen for rectal bleeding. He lives with his wife, has several children and leads an active lifestyle with no history of alcohol, smoking or drug use. He had previously undergone mitral valve repair surgery.

Subsequent CT imaging of the abdomen and pelvis showed a large cancerous growth in the ileocecal region between the large and small intestine. The patient underwent urgent surgery for removal of the right-sided portion of the colon, including removal of the cancerous mass. The cancer was metastatic, having spread to 13 lymph nodes and the liver.

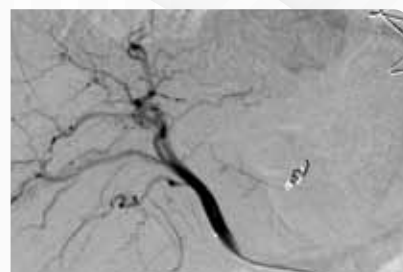
## Additional History

PET CT imaging showed multiple lesions in the right liver; no disease was seen in the left lobe. The patient then underwent port placement and four cycles of chemotherapy with FOLFOX and bevacizumab. Despite chemotherapy, the patient developed progression of disease with rising CEA levels.

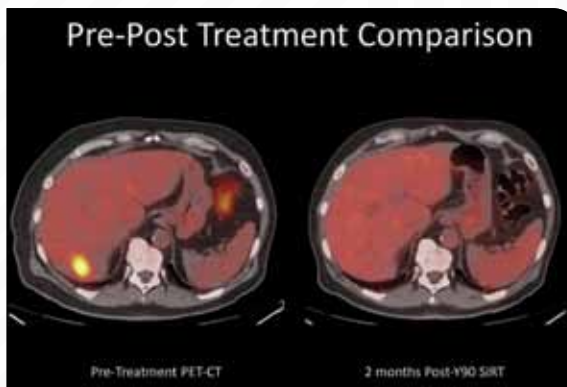
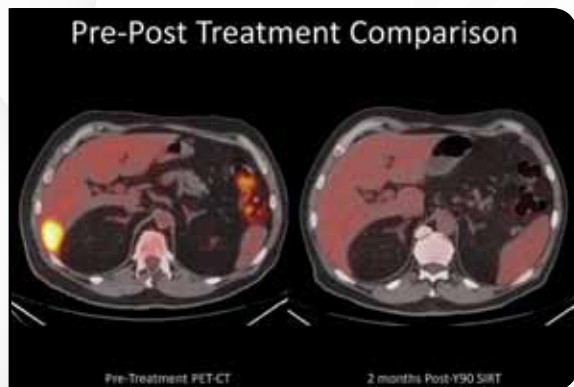
The patient was then referred to Synergy for SIRT Y-90 radioembolization treatment of the cancer that had spread to his liver.



PET-CT images showing multiple hypermetabolic lesions in the right lobe of the liver



Microcatheter used to select the right hepatic artery, where Tc-99m MAA particles were infused as a planning surrogate for yttrium-90 microspheres



Two-month follow up PET-CT scan showing no evidence of metabolically active disease within the liver, reflecting **COMPLETE RESPONSE**

## Clinical Summary

The post-treatment clinical course proceeded normally, and the patient was able to complete hepatic arterial anatomy mapping and intra-arterial infusion treatment phases on an outpatient basis.

Mild fatigue and nausea was experienced for several days after treatment but was adequately controlled with oral medications. No symptoms of cholecystitis (gall bladder inflammation) despite the gallbladder being within treatment zone. The patient was able to return to his active lifestyle within five days of treatment.

A two-month follow up PET-CT showed no evidence of metabolically active disease in the liver, reflecting a **COMPLETE RESPONSE** in this patient.

## Conclusion

SIRT treatment with SIR-Spheres (Sirtex Medical Limited) is a Category 2A recommended treatment in the latest National Comprehensive Cancer Network® (NCCN®) Clinical Practice Guidelines for colon cancer and rectal cancer, and SIR-Spheres are the only fully FDA-approved microspheres for colorectal cancer that has metastasized to the liver.

**For more information on SIRT and other minimally invasive procedures, visit our Y-90 informational page. Physician practices interested in learning more about Y-90 radioembolization should contact the Synergy Radiology interventional team at 713-897-5853.**