Southern DAILY Make Today Different

LOCAL NEWS

Waun Ki Hong, trailblazing MD Anderson scientist, dead at 76

Dr. Waun Ki Hong, an MD Anderson Cancer Center physician-scientist whose research advanced organ-sparing treatment, the use of chemotherapy to prevent cancer and therapy that precisely targets tumors, died Wednesday in Newport Beach, Calif.,. He was 76.

Hong, who retired from MD Anderson in 2014 but continued to serve the institution as an adviser on a variety of programs, nurtured the careers of young scientists, and designed and conducted innovative clinical trials that broke ground in three major fields.

"Waun Ki Hong's brilliant clinical research and mentorship of hundreds of clinicians have extended the lives and improved the quality of life of cancer patients everywhere," Dr. Peter Pisters, president of MD Anderson, said in a statement. "He'll be greatly missed, but he leaves a powerful, far-reaching legacy personally and professionally."

In the early 1980s, Hong led a series of landmark clinical trials demonstrating that patients with laryngeal cancer fared just as well when treated with chemotherapy and radiation as those who underwent surgery to remove the larrynx and thus were robbed of their ability to speak. The finding inspired research that showed such benefits in other cancers.

He also conducted a clinical trial that established that oral cancers could be prevented by treating precancerous lesions, which earned him the reputation as the father of chemoprevention. The trial jump-started the field and led to the use of drugs such as tamoxifen and raloxifene to prevent breast cancer.

Hong's third major influence involved matching patient treatments to molecular targets identified in biopsies, a then new approach whose feasibility was doubted by funding agencies. Hong nevertheless secured funding and led a national trial. His approach is now routine for lung and other cancer types.

Hong is survived by his wife, Mi Hwa; his two sons, Edward and Burton; and four grandchildren. Memorial services will be held in California Jan. 12.

Woman tosses drugs, fake money on highway during Houston police chase

By Samantha Ketterer

A wanted woman tossed drugs and counterfeit money out the window during a long police chase in a stolen car that ended late Sunday in Anahuac.

Police began following the woman when they spotted her running red lights and stop signs along the South Loop around 10:30 p.m., according to Lt. Larry Crowson of the Houston Police Department.

Officers tried pulling her over, but she refused to stop, sparking a chase along the South Loop, Gulf Freeway and I-10 East Freeway, Crowson said.

A woman and her passenger were detained by police after leading them on a chase to Anahuac on Sunday, July 1, 2018. The woman is wanted in Oklahoma on forgery charges.

During the pursuit, she and a passenger allegedly tossed narcotics and counterfeit money out of the window, according to the lieutenant.

Eventually, the chase ended east of Baytown when deputies put out spike strips and flattened her tires. At that point, police realized she had warrants for forgery charges in Oklahoma and the car was listed as stolen out of Tulsa.

The woman and a male passenger were taken into custody, though authorities did not immediately release their names.

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Editor's Choice

FILE PHOTO: A Qualcomm sign is seen during the China International Import Expo (CIIE), at the National Exhibition and Convention Center in Shanghai

FILE PHOTO: Federal Reserve Board Chairman Jerome Powell holds a news conference after a Federal Open Market Committee meeting in Washington

A couple walk between snowmen on Songhua River that displays 2019 snowmen as a part of annual ice festival, in the northern city of Harbin, Heilongjiang province

Visitors stand in front of ice sculptures illuminated by colored lights at annual ice festival, in the northern city of Harbin, Heilongjiang province

FILE PHOTO - Liquified natural gas(LNG) storage tank and workers are reflected in a puddle at PetroChina's receiving terminal at Rudong port in Nantong

FILE PHOTO: The inner view of a terminal hall of the new Daxing International Airport under construction on the outskirts of Beijing

A screen displays the headlines that the U.S. Federal Reserve raised interest rates as a trader works at a post on the floor of the NYSE in New York

FILE PHOTO: A guard walks in front of a Federal Reserve image before press conference in Washington

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COMMUNITY

Many Countries Have Imported Plastic Waste To China And Hong Kong For Many Years. China Started Banning The Import Of This Waste In 2018.

China's Ban On 'Foreign Waste' Causes Recycling Chaos In U.S.

Compiled And Edited By John T. Robbins, Southern Daily Editor

Like many Portland residents, Satish and Arlene Palshikar are serious recyclers. Their house is coated with recycled bluish-white paint. They recycle their rainwater, compost their food waste and carefully separate the paper and plastic they toss out. But recently, after loading up their Prius and driving to a sorting facility, they got a shock.

China's ban means recycling is piling up at Rogue Waste System in southern Oregon. Employees Scott Fowler, Laura Leebrick and Garry Penning say their only option for now is to send it to a landfill. (Courtesy EarthFix)

"The fellow said we don't take plastic anymore," Satish says. "It should go in the trash."

The facility had been shipping its plastic to China, but suddenly that was no longer possible.

The U.S. exports about one-third of its recycling, and nearly half goes to China. For decades, China has used recyclables from around the world to supply its manufacturing boom. But this summer it declared that this "foreign waste" includes too many other nonrecyclable materials that are "dirty," even "hazardous." In a filing with the World Trade Organization the country listed 24 kinds of solid wastes it would ban "to protect China's environmental interests and people's health."

The complete ban takes effect Jan. 1, but already some Chinese importers have not had their licenses renewed. That is leaving U.S. recycling companies scrambling to adapt.

"It has no value ... It's garbage."

Rogue Waste Systems in southern Oregon collects recycling from curbside bins, and manager Scott Fowler says there are always nonrecyclables mixed in. As mounds of goods are compressed into 1-ton bales, he points out some: a roll of linoleum, gas cans, a briefcase, a surprising number of knitted sweaters. Plus, there are the frozen food cartons and plastic bags that many people think are recyclable but are not.

Customs officers check on imported solid waste at an examination centre in Qingdao, Shandong province, October 15, 2013. China's ban on solid waste imports has thrown U.S. waste recyclers into state of chaos. (Courtesy China Daily/Reuters)

For decades, China has sorted through all this and used the recycled goods to propel its manufacturing boom. Now it no longer wants to, so the materials sit here with no place to go.

"It just keeps coming and coming and coming," says Rogue employee Laura Leebrick. In the warehouse, she is dwarfed by stacks of orphaned recycling bales. Outside, employee parking spaces have been taken over by compressed cubes of sour cream containers, broken wine bottles and junk mail.

And what are recyclables with nowhere to go?

"Right now, by definition, that material out there is garbage," she says. "It has no value. There is no demand for it in the marketplace. It's garbage."

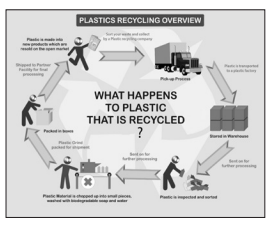
For now, Rogue Waste says it has no choice but to take all of this recycling to the local landfill. More than a dozen Oregon companies have asked regulators whether they can send recyclable materials to landfills, and that number may grow if they can't find someplace else that wants them.

At Pioneer Recycling in Portland, owner Steve Frank is shopping for new buyers outside of China.

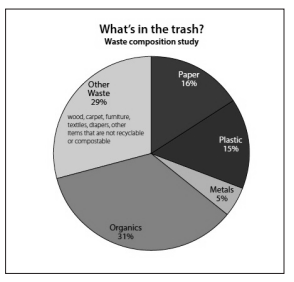
"I've personally moved material to different countries in an effort to keep material flowing," he says.

Without Chinese buyers, Frank says U.S. recycling companies are playing a game of musical chairs, and the music stops when China's ban on waste imports fully kicks in.

"The rest of the world cannot make up that gap," he said. "That's where we have what I call a bit of chaos going on."



Adina Adler, a senior director with the Institute of Scrap Recycling Industries, says China's new standards are nearly impossible to meet. The group is trying to persuade China to walk back its demanding target for how clean our recycling exports need to be. But Adler doesn't think China's decision is all bad.



What China's move is doing is probably ushering in a new era of recycling," she says.

A helping (mechanical) hand

Bulk Handling Systems is betting that robots can be the future of recycling. At its research facility, bits of waste pass by on a conveyor belt as robotic arms poke down, sucking up plastic bags and water bottles then dropping them into bins.

CEO Steve Miller says the robot uses cameras and artificial intelligence to separate recycling from trash "in the same way that a person would do it," but faster and more accurately.

"It actually moves at a rate of 80 picks per minute," he says. "A person might only get 30 picks per minute."

Miller believes technology like this could let the U.S. make its recycling clean enough for China. But the robots are expensive, and few companies have them.

Trash being recycled on automated conveyor belt.

For now, the best bet may come back to the curbside bin.

Recycling companies are considering changing the rules for what's allowed in them or adding an additional bin for paper only to help streamline the sorting process. Steve Frank says Pioneer Recycling is even looking into adding cameras to collection trucks to catch people putting trash in their recycling bins. (Courtesy https://www.npr.org/)

Related

China Is Officially Enacting a Plastic Waste Import Ban

For years, the world has imported plastic waste to China and Hong Kong. In a recent development, China will ban the import of this waste starting in 2018.

PLASTIC WASTE

Starting in January, China's government is enacting a plastic waste import ban, in an attempt to cut down on millions of tons of plastic and other recyclables they receive every year. This change may drastically affect how the world recycles and disposes of waste.

The Guardian reports that, according to an analysis of customs data by Greenpeace, British companies alone have imported over 2.7 million tons of plastic waste to China and Hong Kong since 2012. According to Industry Week, China accepted 51 percent of global plastic scrap imports in 2016. The biggest chunk of that trash came from the US, where the majority of "recycled" plastics are actually shipped abroad to then be recycled; as such, trash has actually become one of the US's biggest exports. Europe, Hong Kong, Japan and Southeast Asia ship their recyclables to China as well. All of this trash has historically been used to fuel China's manufacturing industry.

Chinese authorities inspect bales of imported waste.

China's plastic waste import ban could lead to certain types of plastic no longer being collected, and it has the potential to increase environmental pollution. Quartz reports that this is already happening elsewhere: due to a Chinese ban on certain plastics enacted in 2013, Oregon recycling centers have stopped accepted the plastic "clamshells" that hold berries, as well as hospital gowns and plastic bags; in Olympia, Washington, plastic bags are no longer accepted; and central California built a new recycling center simply to keep up with agricultural plastics that had nowhere else to go.

RETHINKING POLLUTION

So, where will our waste go when China stops importing it? Action will need to come soon: in Hong Kong, mountains of paper waste that would normally go to China have been piling up since a July ban on 24 types of "foreign garbage." That ban is already driving up the prices of paper products. A paper mill manager in southern China told Reuters in September that the price of finished paper had doubled as a result, from 3,000 yuan (US $453) per ton to 6,000 yuan ($906) per ton.

Stuart Foster from Recoup, the UK's national charity for developing plastics recycling, told The Guardian that there were inklings of possible import restrictions years ago. However, there was no action taken in the UK. This is despite the fact that, Foster says, that this could be an opportunity for the UK to create their own plastics infrastructure, which could add to the economy.

China no longer wants trash from the U.S. and other countries.

The plastic pollution problem is especially bad in the oceans, as seen from the marine debris accumulated on a beach of the remote island of Kaho'olawe in Hawaii. (Image credit: NOAA)

But while government officials worldwide consider how to move forward after China's plastic waste import ban, the main focus has to be on the environment. This ban may undo the decades-long effort to build a plastics recycling industry, and lead to even more plastics being produced; IndustryWeek reports that China has already begun investing in brand new plastic to replace what they're no longer recycling, to the delight of US chemical companies.

That's especially bad news as plastic waste continues to harm the environment, particularly marine animals. The U.N. has called our plastics problem a "planetary crisis," and action needs to be taken soon. Unless another country steps in to fill the recycling gap China has created, this issue will only get worse.

As Foster told The Guardian, "Whatever happens we need to maintain control of the material because the bigger worry is about leakage of plastic into the environment." (Courtesy https://futurism.com)

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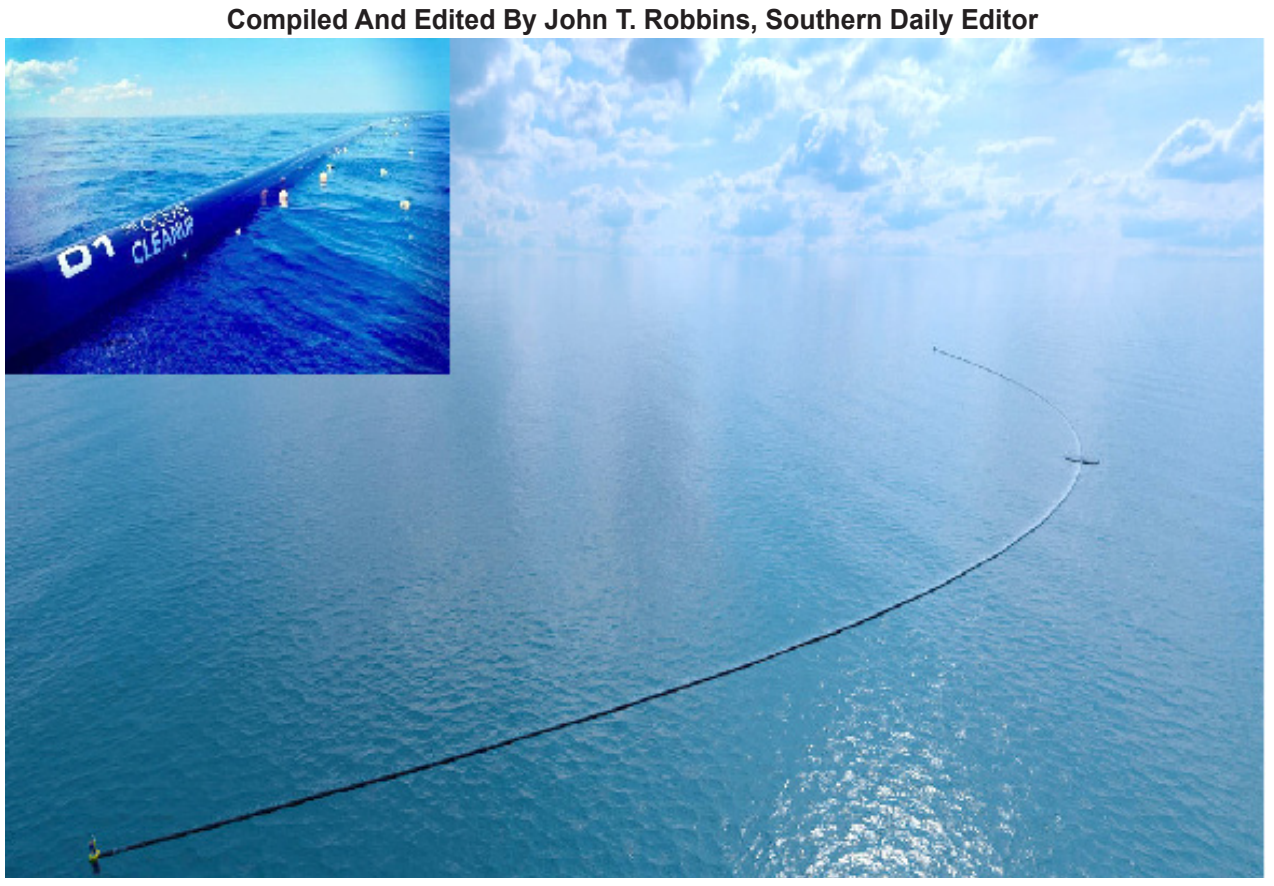
BUSINESS

The World's Largest Ocean Cleanup Has Officially Begun

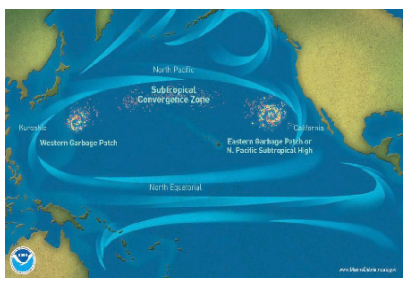
Compiled And Edited By John T. Robbins, Southern Daily Editor



Ambitious dreams have now become a reality as the Ocean Cleanup deploys its $20 million system designed to clean up the 1.8 trillion pieces of trash floating in the Great Pacific Garbage Patch. Check out another Forbes piece on how Ocean Cleanup aims to reuse and recycle the ocean plastic.

The floating boom system was deployed on Saturday from San Francisco Bay and will undergo several weeks of testing before being hauled into action. The system was designed by the nonprofit Ocean Cleanup, which was founded in 2013 by 18-year-old Dutch inventor Boyan Slat. Their mission is to develop "advanced technologies to rid the world's oceans of plastic."

The floating boom system, with the help of dozens of more booms, is estimated to clean up half of the Great Pacific Garbage Patch within the first five years. Each boom will trap up to 150,000 pounds of plastic per year as they float along the currents between California and Hawaii.



Location of the Great Pacific Garbage Patch and the subtropical convergence zone. (Graphic-NOAA)

The garbage patch is so large, it is easily detectable from space via satellites and covers roughly 1.6 million square kilometers and 1.8 trillion pieces of debris. The trash is collected and trapped within a circulating ocean current, called a gyre. This prevents the distribution of the garbage patch, a benefit when creating a system to collect the plastic.

The floating boom system, after undergoing testing, will be towed out 1,400 miles to the garbage patch around mid-October and begin collecting trash. The floating boom drifts along with the local currents, creating a U-shaped formation. As the boom floats, it collects trash in the U shaped system, which has 10 feet of netting below it to collect smaller fragments of plastic. Once the boom is full, a vessel will meet the boom to collect the plastic and transport it to land for sorting and recycling. The idea is that the 10 feet of netting is not deep enough that fish can't swim below it, with the hope that the boom will collect trash and not fish. However, this is something that remains to be seen in the open ocean.

While the organization has ambitious plans and the technology still remains unproven in the open ocean, they are the closest to a solution to cleaning up the garbage patch we have. No other company has a deployable system able to clean up the garbage patch on this scale.

The company is backed by some heavy hitters in the tech industry, including Peter Thiel, co-founder of PayPal and Marc Benioff, the chief executive of Salesforce.com

Continued testing and deployment of additional boom systems will help further refine the systems to be more efficient and less disruptive to ocean ecosystems.

(Courtesy forbes.com)

Related

Ocean Cleanup History

Ocean Garbage Patches Are Vast And Dispersed

Ocean currents concentrate plastic in five areas in the world: the subtropical gyres, also known as the world's "ocean garbage patches". Once in these patches, the plastic will not go away by itself. The challenge of cleaning up the gyres is the plastic pollution spreads across millions of square kilometers and travels in all directions. Covering this area using vessels and nets would take thousands of years and cost billions of dollars to complete. How can we use these ocean currents to our advantage?

MILESTONE / 2016

FIRST NORTH SEA PROTOTYPE

Making modifications on a small scale structure 10 miles offshore is relatively easy. In contrast, making corrections on a large scale structure 1000 miles offshore would be an entirely different challenge – at a different cost. Therefore, The Ocean Cleanup deployed a 100 meter-long barrier segment in the North Sea, 23 km off the coast of The Netherlands on the 22nd of June 2016. It was the first time our design was put to the test in open waters and the tests conducted gave valuable insights to our engineering team.

Our passive cleanup system uses the natural ocean currents to collect and concentrate plastic. By placing long, floating cleanup system in the Great Pacific Garbage Patch between Hawaii and California, we can clean up the accumulated plastic and prevent it from breaking down into even more harmful microplastic over time. Our design needs to withstand harsh weather conditions and constant wear and tear. Since our technology is the first of its kind, we believe the best way to move forward is to test often and fast and make iterative improvements based on these tests.

OBJECTIVE AND SET-UP

To investigate the durability of our design, we deployed a system segment in the North Sea. At this test site, conditions are more severe than those in the Pacific Ocean, due to the North Sea's strong tidal currents, and the test site's short, steep wave patterns.

The objective of the North Sea prototype was twofold;

• Test the boom design on a small-scale for survivability in extreme conditions

• Gaining experience as an organization in the ocean deployment of a cleanup array

FINDINGS

During an inspection of the North Sea prototype in August, we noticed the two outermost air chambers were bent out of shape. Thanks to underwater footage we were quickly able pinpoint the cause; shackles had disconnected from the mooring, which increased the forces on the ones remaining as well as the floater. After our diagnosis, we continued to closely observe the situation and decided to take the barrier back to shore after close to two months.

ITERATING TOWARDS EXECUTION

The data gathered is used to help engineers develop a system fully resistant to severe conditions of the ocean once deployed in the North Pacific. Thanks to the North Sea prototype test, we also learned how the chosen material proved to be suboptimal for the purpose. The results of this test were a strong support in making the conclusion not to move ahead with inflatable floaters that were derived from standard oil-collection booms, but rather turn to rigid HDPE pipes instead. (Courtesy www.theoceancleanup.com)