Thanks to a generous grant from the Jennifer Linscott Tietgen Family Foundation, a Rochester-based non-profit organization that supports melanoma education and research, a promising new phase I clinical trial has been launched at Roswell Park Cancer Institute (RPCI). The trial will test the safety and effectiveness of a new cancer vaccine in patients with advanced melanoma. The vaccine was developed by RPCI researchers John Kane III, MD, and John Subjeck, PhD.

In awarding the grant, the Foundation praised RPCI's melanoma team for its “advanced understanding of this devastating cancer” and for “working tirelessly to improve diagnostic testing and treatment.”

There’s no doubt that there’s a powerhouse of talent, dedication and innovative research behind the launch of this clinical study. Principal investigator Dr. John Kane III is Chief of the Melanoma/Sarcoma Service and a nationally lauded surgical oncologist with expertise in the research and treatment of melanoma and sarcoma — both rare, but highly complex cancers. *US News & World Report* consistently cites him as one of the nation’s top surgeons. Dr. Kane’s collaborator, Dr. John Subjeck, a Senior Scientist in the Department of Cell Stress Biology, is an internationally recognized pioneer in heat shock protein biology — an area of research that played a key role in the development of the melanoma vaccine.

The new vaccine, which will be used as a therapy, not as a way to prevent the cancer, combines heat-shock proteins (HSPs) and the whole-protein antigen gp100.

Present in all living cells, HSPs are naturally-occurring molecules that stabilize other proteins during times of environmental stress and damage. “In order for the proteins in our body to function properly, they are folded in a certain way, but when exposed to stresses, such as an elevation in temperature, they try to unfold, causing them to potentially malfunction,” said Dr. Kane. Expressed at high levels during stress, HSPs assist in resolving this problem before the cell dies.

Dr. Subjeck laid the groundwork for the study with his pioneering work in identifying the various functions of HSPs, which normally protect cells by binding to proteins just long enough to see them through these periods of stress.

“Think of HSPs as molecular chaperones that keep proteins out of trouble and help prevent cells from being compromised,” said Dr. Kane. “We have also found that HSPs are very powerful stimulators of the immune system, amplifying the effectiveness of the vaccine.”

Because the researchers are able to use gp100, a whole-protein target, “all components of the immune system are stimulated, and the number of melanoma patients who could potentially respond to this vaccine is much greater compared to many other immune-based therapies that...”
RPCI Launches Innovative, Early-Stage Cancer Research Projects

Studying the Role of Genetics in Two Types of Cancers

Acute lymphoblastic leukemia (ALL), which impacts children and teens, and acute myeloid leukemia (AML), which primarily affects those over the age of 40, are common hematologic cancers with high mortality rates. It is estimated that in the U.S. in 2013 there will be more than 6,000 newly diagnosed ALL cases, with nearly 1,500 ALL-related deaths and nearly 15,000 newly diagnosed AML cases.

Despite the devastating impact of these diseases, little is known about what causes them or puts people at risk. In fact, studies in the general population have described only obesity and smoking as being associated with AML, but primarily in individuals over age 55. And there are no published environmental risk factors for AML in children, or for ALL diagnosed at any age.

Studies of the role genetics plays have been somewhat successful in identifying risk factors, but more work needs to be done. Thanks to generous donations to RPCI, Lara Sucheston, PhD, Assistant Member in the Department of Cancer Prevention and Control, and Theresa Hahn, PhD, Associate Member and Associate Professor of Oncology in the Department of Medicine, recently launched studies that could lead to identifying genetic markers that associate with the risk of developing these devastating illnesses.

“We have a unique resource available through the National Marrow Donor Program to thoroughly study the role of genetics in these two cancers,” said Dr. Sucheston. “Specifically, we have clinical, personal and genetic information on thousands of AML and ALL patients and healthy, unrelated men and women who donated their bone marrow or blood for allogeneic transplant. This data will allow the first-ever genome-wide evaluation of variations that contribute to the risk of AML and a much-needed replication of genetic association findings with ALL. The ultimate goal is a better understanding of the genetic risk of these diseases.”

The “beLIEVE” Collection by New Era

Support Roswell Park in style with a blue version of the New Era “beLIEVE” cap!

The cap was created as part of New Era’s commitment to help raise awareness and funds to find a cancer cure. Priced at $17.99, the caps can be purchased at New Era’s flagship store, located at 160 Delaware Avenue in Buffalo, and the Roswell Park Gift Shop, located in the hospital lobby at Elm & Carlton Sts. All proceeds (100 percent) from the sale of the caps will be donated to support-lifesaving research and compassionate patient support programs at Roswell Park.

Caps can also be purchased online: shop.neweracap.com/new-era/20492542
Exploring New Ways to Better Understand Solid Tumors

The abnormal environment in which tumors grow (low pH, poor oxygenation) can severely reduce the effectiveness of anti-cancer therapies. While therapies are being developed to “prime” tumors so that they respond better to treatment, there remain very few methods to measure anticipated changes in the tumor microenvironment and help predict the efficacy of treatments.

Donations to RPCI are helping Joseph Spernyak, PhD, Imaging Research Scientist and Co-director of the Preclinical Imaging Resource, create and refine a set of next-generation magnetic resonance imaging (MRI) agents to non-invasively probe the status of the tumor microenvironment, particularly for tumors located deep within the body. Through active collaboration with Janet Morrow, PhD, Professor, Department of Chemistry, University at Buffalo, Dr. Spernyak and his team are focused on imaging compounds that will report the pH and oxygenation of tumor tissues.

“The ability to better understand the tumor environment and find ways to make it more conducive to therapy would be a considerable step forward in our ability to determine the most effective treatments for patients with solid tumors,” said Dr. Spernyak.

Exploring New Treatment Strategies for Triple Negative Breast Cancer

Breast cancer is the second leading cause of cancer-related death in women in the U.S. While treatment strategies have been developed for patients with hormone-receptor positive and HER2-positive breast cancers, treatment strategies for triple-negative breast cancers are lacking. Triple-negative breast cancers typically have poor outcomes that have improved only marginally in recent decades.

Andrei Bakin, PhD, Assistant Professor of Oncology in the Department of Cancer Genetics at RPCI, and his team, have discovered a critical role of a certain protein, TAK1, in the growth of cancer cells, including triple-negative breast cancer cells. Recently, TAK1 has also been identified in colon, lung and pancreatic cancers. Blocking TAK1 chemically or genetically reduced tumor invasion and enhanced tumor cell death in response to certain drugs.

Donations to RPCI are helping Dr. Bakin and his team define signature genetic clues related to TAK1 dependency in breast cancer cells and the signatures of the genetic and chemical inhibitors of TAK1 to predict with accuracy responses to treatment and to design custom-tailored drugs with the greatest therapeutic benefit and outcome.

“Despite progress in cancer diagnostics and treatment, a significant proportion of breast cancer patients develop recurrent disease that progresses to the metastatic stage and become resistant to therapy,” said Dr. Bakin. “Thanks to donors, this study will facilitate the development of new treatments and, quite possibly, bring new hope to our patients with triple-negative breast cancers.”
When Dennis Mills started developing a raspy voice, he knew something was wrong—and as a sales manager, he couldn’t afford to let the problem slide. A visit to an ear, nose and throat doctor identified the cause: leukoplakia, a condition caused by the growth of abnormal cells that appear as thick white or gray patches, usually inside the oral cavity or on the vocal cords. While leukoplakia is not cancer, sometimes it can turn into cancer if it’s not removed. A biopsy at RPCI confirmed that Dennis’ leukoplakia was indeed precancerous. A doctor in RPCI’s Photodynamic Therapy (PDT) Center removed the abnormal tissue. However, two weeks later, a follow-up exam revealed that the cells had grown back.

“The doctor and I talked about options,” recalls Dennis, whose wife, Laurie, is a Senior Corporate Coding Specialist at RPCI. That’s when Dennis learned about PDT, a treatment developed at RPCI that uses laser light to activate light-sensitive chemical compounds called photosensitizers.

PDT begins with an intravenous (IV) infusion of a photosensitizer, which is nontoxic until it’s exposed to light. It delivers a three-way punch: it kills abnormal cells directly, cuts off their oxygen supply by destroying new blood vessels that form to “feed” them; and wakes up the body’s immune system to fight cancer from the inside. Because abnormal cells absorb the photosensitizer selectively, healthy cells are protected.

PDT is FDA-approved for treating specific types of cancer and pre-cancer. But it’s still being studied as a treatment for leukoplakia, so Dennis enrolled in a clinical research study that enabled him to receive PDT on an experimental basis. Dennis and other patients who took part in the study provided critical information about the treatment that eventually will help the FDA decide whether it should be approved for treating throat cancer.

Four years after treatment, “I’ve had no issues,” he reports. “No leukoplakia.” He credits the doctors and Clinical Research Coordinator Michele Cooper, RN, with “explaining everything really well. I had a very positive experience.”

PDT was developed at RPCI in the late 1970s by Thomas Dougherty, PhD, Chief Emeritus. Our PDT Center is a worldwide leader in its use for treating many types of cancer including cancers of the skin, lung, breast, esophagus, colon and rectum.
It was noon on Wednesday, August 8, 2012, when Martha Townson lay beside her husband, holding him in her arms for the last time. Brian had been diagnosed with collecting duct renal carcinoma (CDC) just months before, but was now only able to communicate through a squeezed hand or slight smile. Brian said he knew it was his time. Martha knew that it would be today – that it would be soon. She held him and closed her eyes. Just how would life go on?

Those who knew Brian would describe his joyful nature, his kindness, his dry British humor and his ready smile. Martha described her husband as someone who got his “kicks” from helping others, who always made time for others and was genuinely interested in listening to what they had to say. So when it came time for Martha to move forward in life without Brian, she knew the best way to deal with her grief was through giving back in a way that reflected Brian’s love for others.

“Brian loved quotes, and one of his favorite sayings was that it was ‘better to light a candle than curse the darkness,’” said Martha. “What this really meant was to do something positive and get on with it rather than dwell in the negative.”

Prior to his passing, Brian talked about starting a foundation with the hope of learning more about CDC. CDC is a rare kidney disease that has very little understanding and even less research. It accounts for less than 2 percent of kidney cancers and has unique clinical, histological and pathological characteristics. The disease tends to be very aggressive and is frequently discovered with the cancer having metastasized (spread beyond the kidney). Patients who are diagnosed with CDC are given a poor prognosis due to the tumor’s resistance to common chemotherapies.

Since CDC is a rare form of kidney cancer, the Townsons believed it would take years to find someone who would be interested in researching the disease. But after his passing, Martha made it her mission to honor Brian’s wish to start a foundation and find a researcher who would be interested in learning more about the disease.

Roberto Pili, MD, Professor of Oncology, Chief of the Genitourinary Section, and Leader of Genitourinary Program in the Department of Medicine at Roswell Park Cancer Institute, treated Brian during the final stages of his cancer journey and came to know Brian and Martha on a medical and personal level. He learned of the Townson Family Foundation, and the possibility of researching CDC, at Brian’s memorial service.

“Right after Brian passed, I saw a young patient who also had CDC. She was in the late stages of this cancer, and she wanted to know if there was any other help I could give her,” said Dr. Pili. “But when she passed, I knew it was time to put effort into understanding why this tumor was not responding to treatment.”

Dr. Pili sought funding from the Roswell Park Alliance Foundation (RPAF) for his research. The Townson Family Foundation, too new to fully back the study, offered to match what Dr. Pili received from the RPAF. Through these funds, Dr. Pili began his research aimed at gaining knowledge about CDC so that it could be treated more effectively.

“Our current therapy is not acceptable — the tumor doesn’t respond,” said Dr. Pili. “We need to develop drugs that can be specific for CDC or identify an existing drug that can be used. We need a better drug, which requires more knowledge.”

Dr. Pili is currently collecting tumors to study — not an easy task for a rare cancer — but hopes to soon move on to collaborating with others to do sequencing. His dream is to one day have enough funding for a staff member dedicated to this project.

One of Dr. Pili’s hopes for the future of his research is to create a better quality of life for patients with CDC and to make an impact on their lives. Martha seeks the same. She also wants to give patients a better prognosis, and one day find the cure.

“The importance of this research is broader than me, my family and Dr. Pili. It has the potential to give us insight into how rare diseases function,” said Martha.

Martha believes Dr. Pili’s findings will help patients diagnosed with CDC, and potentially other resistant cancers.

“What better decision to make after Brian’s passing than to let his legacy of caring and hard work help others? It’s exactly what he would have wanted us to do,” said Martha. “Our giving back through research that is so personal has helped our family heal in ways we could not ever have imagined.”
Sharing a good book with the little ones you love can be a cozy, magical time. When a hospital stay interrupts the fun, Roswell Park’s new “Read to Me!” program bridges the distance.

Presented by RPCI’s Pastoral Care Department and supported by generous donations, “Read to Me!” invites inpatients to choose a book from a list of titles. Using a special audio recorder provided by Pastoral Care, the patient can read the book aloud and record it on a CD, which is then tucked into a pocket inside the front cover of the book. The book and CD are sent, free of charge, as a gift to the special child or children the patient has designated. The CD enables the child to follow along as the patient reads the story.

Beth Lenegan, PhD, Director of Pastoral Care at RPCI, says patients choose from books written for a range of ages, “from very small children to pre-teens.” She adds that some patients are hospitalized for long periods of time, and often it’s not possible for them to see their children, grandchildren or young friends during that time. The opportunity to share a story read by the patient “helps keep the family connected,” she says.

Hodgkin’s lymphoma survivor, Christopher Reinhardt, reads If You Give A Mouse A Cookie for his four-year-old daughter, Aubrey.

Her Love of Books Lives On

Donors contributed the books on the “Read to Me!” list, while the special audio recorder was purchased with a gift from the family of Jayne and Phil Hubbell.

In January of 2009, the Hubbells established an endowment to help support the RPCI mission. Later that year, Jayne passed from breast cancer. Since then, Phil has honored his wife’s memory with multiple gifts to support breast cancer research. In addition, he has been a volunteer with Roswell Park’s Pastoral Care program since 2005.

“Read to Me!” was made possible by their family’s generosity. It honors Jayne’s love of books and her work from 1980-86 as volunteer chair of Literacy Volunteers of Buffalo and Erie County.
Started in 1981, the Familial Ovarian Cancer Registry at Roswell Park is the only research resource in the United States that has continuously recorded and tracked familial ovarian cancer lineage and has established itself as a valuable resource for a variety of research endeavors associated with cancer genetics.

Under the direction of Shashikant Lele, MD, and Kunle Odunsi, MD, Ph.D., the registry collects detailed family history information from individuals who have been diagnosed with ovarian cancer, are from families with apparent two or more cases of ovarian cancer or are from families with a syndrome possibly related to ovarian cancer.

“The registry is currently conducting innovative research to learn more about the causes of familial cancer,” explained Dr. Odunsi, Chair Department of Gynecologic Oncology and Director of the Center for Immunotherapy at Roswell Park. “Our hope is to discover new genes that predispose a woman to the development of ovarian cancer. This information will help us to better detect ovarian cancer so we can ultimately prevent the disease.”

Any woman over the age of 18 whose family has two or more diagnosed cases of ovarian cancer is eligible to join. There is no cost to become a member. The registry represents the world’s largest collection of family histories, medical records and blood samples that are related to familial ovarian cancer, with information from over 2,700 families, and more than 50,000 individuals.

In the past twelve months, the registry finished the exciting accomplishment of completing the first pass of the entire human genome on 100 women who are part of the registry.

“We hope to continue the momentum we’ve established by spreading the word about the registry and its initiatives,” said Dr. Odunsi. “The Registry’s partnering with the Center for Personalized Medicine at Roswell Park has opened the door for innovative research that will accelerate the pace of discovery. We hope to stimulate conversation among family members so women can make informed decisions about their genetic risks for ovarian cancer.”

Angeline Jolie Opens Up Conversation About Risk For Breast and Ovarian Cancers

*On Tuesday, May 14, Angeline Jolie announced she had undergone a double mastectomy, removal of both breasts.

*Jolie carries a “faulty” gene, known as BRCA1. According to family doctors, the gene gave her an 87 percent risk of breast cancer and a 50 percent risk of ovarian cancer.

**“Jolie’s surgery sends a powerful message to all women- understand the importance of family medical history and know your options,” says Dr. Odunsi.
After severe leg pain drove 23-year-old Kevan Busa to the emergency room in Syracuse, N.Y., he learned that he had acute lymphoblastic leukemia (ALL). Without treatment, doctors said, he wouldn’t live two weeks.

It was May 2002 and Kevan’s world as he knew it dissolved in an instant. His brain raced as he wrestled with the idea that the disease might cut his life short. On top of that, everything he had worked for was slipping away. His summer internship — finished. Plans to spend the fall semester in Spain — over.

In September 2012, when he should have been starting his senior year of college, he underwent a blood stem cell transplant, his only hope for a cure. In some ways, he was lucky: he found a donor through Be The Match (the National Marrow Donor Program) and got his transplant at Roswell Park Cancer Institute (RPCI), among the top U.S. centers that provide blood or marrow transplantation (BMT).

The treatment was grueling. “I’m not going to sugar-coat it,” says Kevan. His diseased marrow was destroyed with chemotherapy and radiation, followed by a “rescue” transplant using the blood stem cells from his donor.

That was just the beginning. Leaving the hospital after a transplant, for about 60 days, BMT patients must stay within 30 minutes of RPCI so they can be monitored closely. They experience extreme fatigue. With weakened immune systems, they often stay indoors to avoid the germs and situations that can put them at risk for infection. During many weeks in limbo, they can easily give in to boredom and despair.

“You have to stay mentally engaged in something,” advises Kevan. “Don’t concentrate on the negatives. Make yourself a goal, and picture that goal every day.”

Kevan pictured himself graduating — on time, with his class — and starting a career in landscape architecture. But he didn’t just dream; he pushed ahead. He fused his experience as a leukemia patient with his studies in landscape architecture and completed an independent study on the ideal outdoor “healing spaces” for BMT patients. When he couldn’t sleep, he researched Buffalo’s historic parks and green spaces designed by Frederick Law Olmsted, the "father of American landscape architecture."

He thought about designing hospital spaces specifically for veterans or children or other patients with special medical needs — a goal he hopes to pursue in the future.

Dreams and hard work helped him through. Marking the last of his recovery days in Buffalo, he returned home to Syracuse at the start of the New Year.

One year ago, Kevan was so sick he could not walk. This summer, he graduated with a degree in landscape architecture from the State University of New York (SUNY) College of Environmental Science and Forestry.

On June 22, after months of training, and accompanied by his team, the Kickin’ Cancer Krew, Kevan biked the 20-mile in the Ride for Roswell, a cycling event to raise funds for cancer research and patient care at RPCI. His mother, sister and more than a dozen friends traveled from Syracuse to be a part of his team. Nearly 8,000 riders raised more than $4 million that day.

On March 2, 2011, seven-year-old Stella Usiak received life-changing news: she was diagnosed with acute lymphoblastic leukemia (ALL).

Stella was scared. Her mother, Jen, recalls the diagnosis as devastating.

“A mom is someone who kisses boo boos. But this time I couldn’t take away the pain and make it better,” Jen said. “I could only support her. As a parent, you have to release control and trust that your child is taken care of.”

Stella and her mom found the long hospital stays hard. They looked to organizations like Carly’s Club at Roswell Park for fun activities. Through Carly’s Club, Stella attended a Sabres game and got to see her favorite artist in concert – Taylor Swift. She also painted nails, hung out and watched TV with other patients at Roswell Park to pass the time.

“There were so many days that she was sick, so we wanted to make sure she had fun along the way,” said Jen. “It was important for us to make sure Stella was able to do normal activities. We always made time for that.”

It was this community of support that helped Stella when she was rushed to the hospital right before her eighth birthday.

“Even though I was here on my birthday, they made it fun for me,” said Stella. “I dressed up like a clown and squirted people with water from a trick flower.”

Stella and her family also felt support from all around the community. Jen said she was surprised at how kind people were. They received cards, packages and meals from friends, family and people who had never met Stella.

This past spring, Stella was selected as a recipient of a room makeover from Special Spaces, an organization that creates dream bedrooms for children with life-threatening illnesses. In May, Special Spaces made over Stella’s room with a Taylor Swift theme.

“My room has a stage and a karaoke machine,” said Stella. “The whole room is amazing.”

The future for Stella looks bright. Right around her tenth birthday in June she completed her last round of chemotherapy treatments. She can’t wait to turn a year older and relax in her new room, cancer free.

Founded in 2002, Carly Club offers support programs to make life more manageable for children diagnosed with cancer and their families, and to raise funds for pediatric cancer research seeking cures at Roswell Park Cancer Institute. This support program is funded by generous donations.
When a loved one loses his or her battle with cancer, we often look for ways to honor them and to help those who continue to struggle with the disease. After Steve LoVullo, co-chair and participant for Chip In For Carly’s Club, lost his great-uncle to leukemia, he sought a way to make a difference. He and his family have been involved with Roswell Park ever since the loss, making many friends along the way.

For the past seven years, Steve has been involved with Chip In For Carly’s Club. Chip In challenges participants to play one hundred holes of golf in just one day, with golfers collecting pledges of $5,000 or more to benefit pediatric cancer research at Roswell Park. Steve first got involved with Chip In through his close friend, Stuart Scheff, the founder of Chip In For Carly’s Club.

The event was a great match for Steve. The father of two young boys, Steve is actively involved in sports. He coaches baseball and hockey, and is a passionate golfer. The children and teens he works with through Carly’s Club inspire him; meeting them makes the event worthwhile. Steve noted the significance of helping the kids during a difficult time in their lives.

“These children do not want to be treated differently because they have cancer,” he said. “The funds raised during events like Chip In lets children diagnosed with cancer enjoy what kids do, which is the most important part. You cannot lose sight of that.”

During the Chip In tournament, golfers are assigned a “buddy”: a child or teen that comes onto the golf course to meet golfers, play a few holes, and just be a kid. This year, Steve’s buddy was Zach, a fun-loving, athletic kid who was diagnosed with lymphoma. Ever since they were paired up, Steve says they have been communicating.

Steve hopes that his involvement with Carly’s Club, Chip In and Roswell Park inspires his own children to remember to help people in any way they can. Both of his sons attend the Chip In tournament each year, and Steve is proud to say that his nine-year-old son asks for donations to cancer-related charities in lieu of birthday gifts.

“When you see how this makes the kids feel, it’s all worth it,” Steve said. “The golf is the easy part.”
Browse our new line of holiday cards, photo cards, and gifts online. All items are customizable and feature artwork by pediatric patients and families at Roswell Park!

Select holiday card designs are also available for purchase in the Roswell Park Cancer Institute Gift Shop.

In addition to holiday cards and merchandise, shop cards and gifts for all the occasions in your life, from weddings to baby showers online.

Proceeds from the sale of items benefit compassionate patient support programs at Roswell Park Cancer Institute.

Online orders can be picked up at Krepe-Kraft (1755 Elmwood Ave) or shipped to your home. To order, visit paintboxproject.com.

The Paint Box Project
Cancer Cures Collection 2013

Join us for a candle lighting ceremony in honor or memory of your loved ones.

Tree of Hope
Lighting Festivities
Friday, December 6, 2013
4:30 pm - 6:30 pm

Goin’ Bald for Bucks
ROSWELL PARK CANCER INSTITUTE

Goin’ Bald in 2013
The Goin’ Bald for Bucks program is in full swing. We hope you and your school will join us this year in the fight against cancer.

To get started:
• Contact Goin’ Bald for Bucks at Roswell Park by calling 716-845-8788, emailing GoinBaldforBucks@roswellpark.org or going online at BaldForBucks.org.
• Establish a primary organizer and set the date, time and place of your event.
• Send in your commitment form.
• Register online at BaldForBucks.org.

We will help you get the rest organized!
All Star Night is a Success!

Roswell Park Cancer Institute’s premiere black tie gala – All Star Night – took place Saturday, November 2, at the Buffalo Niagara Convention Center. Hundreds turned out for the themed event, which included dinner, awards and live and silent auctions. M & T Bank served as presenting sponsor for the second consecutive year.

A portion of the evening was dedicated to recognizing the accomplishments of Candace Johnson, PhD, Deputy Director and Chair of the Department of Pharmacology and Therapeutics at RPCI, and the Ride For Roswell Steering Chairs. A Gilda Radner Courage Award was presented to 60 Minutes correspondent and CBS News chief foreign affairs correspondent Lara Logan, who spoke about her journalism career and her cancer journey.

(continued from cover)

The phase I clinical trial will enroll between 12 and 20 patients over three years. Participating patients will receive a series of three injections over six weeks. The HSP vaccine is created entirely in the laboratory, meaning that no human cells are required for its manufacture. Because of this, large quantities can be made available and stored for long periods of time.

In a time when federal funding for cancer research has become increasingly competitive and available dollars significantly reduced, the vaccine’s elegant design and rationale — as well as its enormous therapeutic potential — captured the attention and interest of the National Cancer Institute (NCI). Dr. Kane received Rapid Access to Intervention Development support from the NCI to develop the vaccine. These highly selective awards are intended to help new and promising developmental therapies advance quickly to the clinical-trial phase.

The melanoma clinical research study is the sixth launched through RPCI’s Center for Immunotherapy since the Center opened in 2010. Another nine immunotherapy trials, now in the pipeline and each one developed by RPCI investigators, are expected to follow in the next year.

Over 76,690 new cases of melanoma, the deadliest form of skin cancer, will be diagnosed in the U.S. this year and 9,480 Americans will die from the disease. The researchers say that if its promise is borne out in this and subsequent clinical studies, the HSP vaccine may be tested as a treatment against other solid-tumor cancers.