Some Relatives of Melanoma Patients Still Engage in Unsafe Sun Practices

As the weather gets warmer, many people begin spending more time outdoors. However, many of those at risk for skin cancer fail to increase their protection against the sun, thus putting them at an increased risk for the disease, including the most serious type of melanoma.

Previous research shows that family members of melanoma patients continue to engage in very few sun protection activities and expose themselves to the sun at greater-than-average rates. Sharon L. Manne, PhD, leader of the Cancer Prevention and Control Program at the Cancer Institute of New Jersey (CINJ) and chief of the Section of Population Studies, is the first author of a recently published study which sought to uncover demographic and attitudinal reasoning behind this. Dr. Manne is also a professor of medicine at UMDNJ-Robert Wood Johnson Medical School.

Results published in the February 21st edition of BMC Public Health found that first-degree relatives (parent, sibling, or child) of melanoma patients who took steps to decrease their exposure to the sun had higher education levels and were aware of the limited benefits of sunbathing. Conversely, first-degree relatives who reported extensive sunbathing, despite their family member’s diagnosis, tended to be younger females who perceived more benefits of sunbathing and that being tan is healthy.

The authors – which also include CINJ behavioral scientist Elliot J. Coups, PhD, associate professor of medicine at UMDNJ-Robert Wood Johnson Medical School, and colleagues from Fox Chase Cancer Center, Moffitt Cancer Center and the University of Pennsylvania – say that these family members in the latter group could benefit from targeted interventions.

Such interventions could include debunking the perceived benefits of sunbathing, highlighting developments in sunscreen manufacturing such as the availability of spray-on or non-greasy formulas, and emphasizing how sun exposure accelerates skin damage by creating age-progressed photos of the individual. The authors also note that future research on the subject should target both younger relatives and male relatives.

Research

Breaking Down Barriers

One of the biggest problems with treating cancer is drug resistance. Not all patients respond favorably to anti-cancer drugs, and those who do may develop a resistance to them. One might ask why…and what can be done about it? In a laboratory on the fourth floor at The Cancer Institute of New Jersey, those are queries that investigators led by CINJ researcher and UMDNJ Vice President for Research and Interim Dean of the Graduate School of Biomedical Sciences, Kathleen Scotto, PhD, tackle every day.

Dr. Scotto’s team looks at drug transporters, which can penetrate a cancer cell. One of these transporters is coded for by the Multiple Drug Resistance (MDR) gene, which doesn’t discriminate, as it causes resistance against numerous drugs. Scotto has studied this particular gene for 25 years, having been a student in the laboratory that actually cloned it in 1986.

MDR encodes a protein (P-glycoprotein) within the surrounding perimeter of a tumor cell, giving it direction.
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- Faculty Feature: Yibin Kang, PhD
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Director’s Corner

The national cost of cancer care is projected to reach at least $158 billion by 2020 – a 27 percent increase from 2010. That sobering figure from the National Institutes of Health speaks to the critical need for support of cancer research, including scientific exploration that is undertaken at the nation’s 40 National Cancer Institute-designated Comprehensive Cancer Centers.

As the only such center in New Jersey, The Cancer Institute of New Jersey is committed to developing the next generation of cancer therapies. As a consortium cancer center, CINJ is part of a unique matrix of collaborators including Rutgers, The State University of New Jersey and Princeton University. Strong relationships with these entities, along with state support and competitive grants from government agencies, allow CINJ investigators to share resources and ideas in order to advance the science of cancer.

For instance, CINJ Associate Director for Basic Science and Rutgers Molecular Biology and Biochemistry Professor Dr. Eileen White, is a recipient of funding from the National Institutes of Health, which helps support her study in the areas of cell death and cell self-digestion. As you’ll read on page 3, Dr. White, Princeton collaborators Drs. Joshua Rabinowitz and Hilary Coller, and other colleagues have discovered that a cancer cell’s addiction to the self-digestion and preservation process known as autophagy can aid in tumor growth. By finding ways to block that process, future treatments could be developed that target the most aggressive cancers. It is research such as this that gives us the building blocks for the pathway to “personalized medicine.”

CINJ’s resources are also made available through valuable industry partnerships. As you’ll read on pages 7 and 14, CINJ’s long-standing relationship with Johnson & Johnson not only yields philanthropic support for research, treatment and education initiatives, but also allows CINJ to successfully uphold another of its core pillars – cancer prevention.

Ben Franklin once said, “An investment in knowledge pays the best interest.” Investment of resources in CINJ has yielded advances in cancer science, which have directly translated into new patient treatments. What the examples above highlight, along with continued support from the Governor and Legislature, is that CINJ is making a difference in the advancement of cancer research and care. We hope you will join us in furthering this mission.

Sincerely,

Robert S. DiPaola, MD
Director, CINJ: Associate Dean for Oncology Programs and Professor of Medicine, UMDNJ-Robert Wood Johnson Medical School
Breaking Down Barriers  
— Continued from page 1

Addiction to Life-Saving Process Can Aid Cancer Cells in Tumor Growth

A team of investigators at The Cancer Institute of New Jersey, Rutgers University, and Princeton University, have determined that cancer cells are “addicted” to a self-preservation process known as autophagy. They also showed that the inhibition of that process could prove to be a valuable treatment approach for aggressive cancers.

Autophagy is a self-cannibalization process where cells eat themselves to survive starvation. CINJ Associate Director for Basic Science Eileen White, PhD, and collaborators previously discovered that cancer cells can take advantage of the autophagy survival pathway to aid their growth into tumors. In this new study, Dr. White and colleagues found that cancer cells induce autophagy and this self-cannibalization process enables the growth of the most aggressive tumors.

The latest research, which appeared in the March print edition of Genes & Development, focuses on cancer genes known as H-ras and K-ras that are activated in many aggressive cancers with poor prognoses. These cancers, which are acutely sensitive to autophagy inhibition, have high levels of autophagy that provide cancer cells with sufficient nutrition to survive by recycling parts of themselves. In collaboration with the Joshua Rabinowitz and Hilary Collier laboratories at Princeton University, investigators were able to show that autophagy in these aggressive cancers provides fuel to the powerhouses of the cell, the mitochondria. By spurring the mitochondria to generate a steady supply of energy for tumor cells, autophagy keeps those cells alive and growing. These tumor cells are “addicted” to autophagy to support the metabolism of cancer cells.

By identifying that this autophagy “addiction” is prevalent in cancers with Ras mutations, such as lung, pancreatic and colon, a metabolic vulnerability of cancer cells is revealed – a vulnerability the authors say can be utilized for cancer therapy. “What this finding suggests is that patients with these poor-prognosis cancers may benefit from treatment that targets autophagy inhibition,” said White, an adjunct professor of surgery at UMDNJ-Robert Wood Johnson Medical School, and a professor of molecular biology and biochemistry at Rutgers University, who is the senior author of the research publication.

White further notes while exploration involving autophagy inhibition drugs can lead to a more individualized treatment approach, more needs to be done.

This work was supported by grants from the National Institutes of Health, CINJ, the New Jersey Commission on Cancer Research and the Department of Defense.

Scotto, whose laboratory receives funding from the National Institutes of Health, is a professor of pharmacology at UMDNJ-Robert Wood Johnson Medical School. She credits team involvement for the advances made in her laboratory with special acknowledgement to Dr. Jia Shi, Dr. Hairong Hui, Kirk Pabon, Rui Ding, Allie Wierzowski and Michael Mesina.
FACULTY FEATURE: Yibin Kang, PhD

Yibin Kang, PhD, is an associate professor of molecular biology at Princeton University and a member of the Genomic Instability and Tumor Progression Program at The Cancer Institute of New Jersey. He is also the co-director of the Transgenic/Knockout Mouse Shared Resource at CINJ.

Metastasis is responsible for most cancer-related mortalities. Dr. Yibin Kang’s laboratory has been leading the effort to decipher the complex network of genes that facilitate the escape of cancer cells from primary tumors, as well as their survival in blood circulation and eventually colonization of vital organs, such as bone, lung and brain. After his graduate studies at Duke University and postdoctoral training at Memorial Sloan-Kettering Cancer Center, he moved to CINJ in 2004, when he was named a DOH Era of Hope Scholar and American Cancer Society Research Scholar in 2006. Since then, Dr. Kang has been making major breakthroughs in the studies of breast cancer metastasis.

In a recent study in Dr. Kang’s laboratory, researchers identified a signaling molecule called Jagged1 that allows tumor cells to communicate effectively with bone cells, and turn the normal bone renewing function of these cells against breast cancer patients (see article at right). Such tumor-host crosstalk eventually leads to the rapid expansion of tumor mass in the bone marrow of patients and the destruction of normal bone tissues. Dr. Kang’s group is currently collaborating with several major pharmaceutical companies to develop new ways of treating metastatic breast cancer by developing molecular agents that target the pathological interactions between tumors and the host organs.

This illustration shows breast cancer’s “Notch signaling pathway” (green flash) in the bone cells to promote bone destruction and facilitate the growth of tumors.

When someone is diagnosed with breast cancer, it is easy to assume that the cancer stops in the breast. However, metastasis, or the spreading of cancer, is known to be the most dangerous threat to patient health.

Yibin Kang, PhD, an investigator from The Cancer Institute of New Jersey and Princeton University, and colleagues have recently discovered that a well-known protein, known as Jagged1, may be allowing breast cancer cells to spread into bone tissue by misdirecting the bone’s own self-renewal process. Bone metastasis is often the first sign of metastatic recurrence in breast cancer patients and significantly reduces the prospect of long-term survival. Since Jagged1 and its receptor “Notch” are easily accessible from the surface of the cell, future treatments could be developed that would specifically target these proteins.

The findings were published in the February 4 online edition of Cancer Cell.
Desmoid Tumors

Aaron Weiss, DO, a pediatric hematologist/oncologist at The Cancer Institute of New Jersey and assistant professor of pediatrics at UMDNJ-Robert Wood Johnson Medical School, has a special interest in solid tumors of childhood and is currently conducting research on desmoid tumors.

**Q**: What is a desmoid tumor?

**A**: A desmoid tumor is a rare tumor which arises from connective tissue that is involved with muscle formation. Unlike other cancers, it does not have the ability to spread throughout the body. Despite that, these tumors are locally aggressive, meaning they can grow into, and even destroy, adjacent tissues and bones. Depending on its location, a desmoid tumor can become quite disfiguring, cause significant pain and interfere with the normal functioning of the body.

**Q**: What causes this type of tumor?

**A**: In children, most desmoid tumors occur sporadically, meaning a cause is not known. We do know that individuals with this tumor are more likely to have a history of excessive polyp formation in the intestine, prior trauma to the tumor site, elevated hormone levels, and abnormalities in the genes and proteins that control normal growth of connective tissue in the body.

**Q**: Who is most likely to be diagnosed with this type of tumor and how many people are diagnosed each year?

**A**: Desmoid tumors most commonly occur in individuals from six to 15 years of age and between puberty and 40 years of age, with women being the most affected in the latter group. Desmoid tumors in childhood are extremely rare, representing less than 0.1 percent of all cancers. The overall incidence of desmoid tumor is estimated to be two to four new diagnoses per one million people per year.

**Q**: How is it currently treated?

**A**: Surgery is the main treatment for desmoid tumor. Even if the tumor is completely removed, it has a high risk of regrowing. Other treatments including radiation and chemotherapy have been used with some success, but significant side effects can result. These additional therapies are typically reserved for individuals in whom the tumor recurs or cannot be completely removed by surgery.

**Q**: What is the focus of your research?

**A**: I and others are trying to better understand why and how desmoid tumors form which will lead to improvements in treatment and outcome. I am currently designing therapy that may directly target and block important chemical pathways involved in the development and growth of desmoid tumors. My goal is to shrink the tumor, prevent it from regrowing, and improve the quality of life for individuals with desmoid tumor.

To learn more about desmoid tumors or CINJ’s Pediatric Hematology/Oncology Program, call 732-235-KIDS (5437) or visit www.cinj.org.

Left: Desmoid tumor cells as seen under a microscope.

Right: Abnormal protein (brown color) demonstrated within desmoid cells.
A **Unique Look** at **Sickle Cell** Disease

Severe pain. Organ damage. Serious infection. Anemia. These are the effects of a common inherited blood disorder known as sickle cell disease. While those with the disease who undergo regular checkups and develop healthy habits can lead a normal life, there are some barriers that can cause a negative impact on a person’s ability to effectively manage the disease.

It is those barriers that Richard Drachtman, MD, interim division chief of Pediatric Hematology/Oncology at The Cancer Institute of New Jersey, is researching. Along with colleagues from CINJ and Rutgers University, Dr. Drachtman is exploring how cultural and social attitudes and barriers impact the health of sickle cell patients.

On average, some 400 patients with sickle cell disease are treated at the UMDNJ-Robert Wood Johnson Medical School Comprehensive Sickle Cell Center, which is a component of the Pediatric Hematology/Oncology Division at CINJ. In sickle cell disease, the red blood cells become hard and sticky and look like a C-shaped farm tool called a sickle. When these blood cells travel through small blood vessels, they get stuck and clog the blood flow. Populations affected by sickle cell disease include those of African, Hispanic, Mediterranean, Middle Eastern or Asian descent.

The study is looking at demographic factors including whether a patient has health insurance and whether there is a language barrier in receiving care instruction. Other issues being explored include a patient’s knowledge of the disease, if they feel confident in the care given to them, and how sickle cell disease has affected their goals.

Drachtman, who also is a professor of pediatrics at UMDNJ-Robert Wood Johnson Medical School, says by gathering such information from a patient’s perspective, specific interventions can be developed to assure better outcomes for the management of sickle cell disease.

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**Clinical Trials Corner**

At The Cancer Institute of New Jersey clinical research is key to providing comprehensive cancer care to patients throughout the state. With more than 130 active clinical trials, CINJ is leading the way toward uncovering new methods of treatment and prevention of cancer. Most cancer clinical trials are medical studies that test new treatments and new or better ways of using existing treatments for cancer. Researchers use these clinical trials to answer questions about a treatment and to make sure it is safe and effective. CINJ researchers are currently studying a number of new ways to prevent and treat various cancers. For more information on how to take part, individuals should call CINJ’s Office of Human Research Services at 732-235-8675 or e-mail cinjclinicaltrials@umdnj.edu.

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**Seeking New Ways to Block Cancer Cell Survival**

Building upon recent laboratory discoveries on resistance by cancer cells to therapies that attempt to starve cancer, scientists at The Cancer Institute of New Jersey are conducting a clinical trial that further explores how to prevent that action. The goal is to discover if an anti-malaria drug approved by the Food and Drug Administration is able to block a cellular process that acts as a survival method for malignant cells in human melanoma.

Hydroxychloroquine, which is commonly used to treat malaria and certain types of arthritis, has been shown to block autophagy, the process by which cells eat themselves in order to survive through times of stress. This process allows cells to become resistant to cancer therapies. Previous CINJ research indicates that drugs such as hydroxychloroquine may help cancer treatments work more effectively by providing cancer drugs easier entry into the cell. In this trial, investigators want to learn how to detect the process of autophagy in humans with melanoma.

Adults with stage III or stage IV melanoma tumor or tumors and can be scheduled for surgery to either cure the cancer or lessen the symptoms of cancer are eligible to take part in the trial, although other criteria must be met.

The trial is supported by grants from the National Cancer Institute and the Harry Lloyd Foundation.
The Best Way to Treat Cancer is to Prevent it – CINJ’s Tobacco Cessation Initiative

A ccording to the American Cancer Society, tobacco use is the leading cause of preventable death, accounting for one-third of all cancer deaths. Despite the technological advances over the past decades, no single intervention can impact cancer incidence and death more than tobacco cessation. For this reason, New Jersey’s only NCI-designated Comprehensive Cancer Center, The Cancer Institute of New Jersey, has incorporated tobacco dependence treatment activities into its overall cancer prevention mission.

Since its inception in 2000, the UMDNJ-Tobacco Dependence Program (TDP) has pursued its goal to reduce the harm caused by tobacco use through education, treatment, research and advocacy. TDP has been a nationally recognized specialty treatment site offering face-to-face, intensive and comprehensive tobacco dependence treatment to more than 5,000 smokers to date. In addition, the Program is a nationally-recognized leader in tobacco education, having trained more than 1,200 healthcare professionals from 31 states and nine countries around the world to become eligible for Certification as a Tobacco Treatment Specialist.

It has been nearly a year since TDP moved forward as a joint collaboration between CINJ, UMDNJ-Robert Wood Johnson Medical School, and UMDNJ-School of Public Health, continuing to serve the patients of CINJ and its affiliated organizations, as well as the larger New Jersey community.

One of the most important policy changes TDP is excited to be involved with is the decision to make UMDNJ a tobacco-free organization throughout all of its campuses. It is only fitting that as a leader in the fight against cancer, CINJ is representing the first step in this bold initiative, going tobacco-free as of June first. This policy change at CINJ and UMDNJ and its slogan, “Clean Air Because We Care,” illustrates a commitment to the health and well-being of its patients and their families, as well as its staff. By prohibiting the use of any tobacco products on all CINJ grounds, the message is clear – we care about cancer prevention.

Michael Steinberg, MD, MPH, FACP is a CINJ member and director of the TDP. He also is an associate professor of general internal medicine at UMDNJ-Robert Wood Johnson Medical School and an associate professor of health education and behavioral science at UMDNJ-School of Public Health. • Additional information about the UMDNJ-Tobacco Dependence Program can be found at www.tobaccoprogram.org or by calling 732-235-8222.
Many of us may try to keep up with the latest fashion trends, whether it is fun summer outfits or the tan skin beneath them. But what if being a ‘fashionista’ was going to land you with premature aging and a highly-elevated risk for developing skin cancer? Which would you choose, fashion or protection?

TAKING STRIDES (Down the Runway)

Toward Everyday Sun Protection

The truth is skin cancer is the most common type of cancer in the United States, developing in approximately one million Americans each year. According to the National Cancer Institute, exposure to ultra violet (UV) rays (both A and B) appears to be the most important environmental risk factor for the development of skin cancer.

Some of today’s hottest fashion trends coincidentally offer up some great protection:

- **Leggings and long dresses** protect legs, while still being cooler than pants.

- **Sunglasses:** the bigger the better, which helps to protect the delicate skin around eyes while helping to prevent the development of cataracts if the glasses contain UVA/UVB protection.

- **Big floppy hats** are not only in style but they help protect your scalp, face, ears and neck from the sun’s harmful rays. For men who cannot bring themselves to buy a floppy hat, **baseball caps** shield the scalp and face, but remember, extra **sunscreen** is needed on the
Each issue we share the inspirational story of a cancer survivor. For this piece we are pleased to profile Jodi Inverso, the vice president of brand management and communications at the United Way of Greater Mercer County, a freelance graphic designer and a breast cancer survivor.

The 32 year-old whose hobbies include spending time with her husband and son, shopping, exercising and lounging on the beach, was thrown for a loop when she was diagnosed with stage IIA breast cancer at the young age of 30. Jodi endured chemotherapy and radiation, and found out that like many of the females in her family she carries the BRCA1 gene which predisposed her to breast cancer.

Q: Your grandmother had breast cancer twice; did you ever think you could be at risk?

A: I figured since my mom never did, that I was safe at least until I was much older. Sadly, my doctors never thought I should have had a mammogram before I found the lump.

Q: What “life” lessons did you learn from your grandmother’s experiences with breast cancer?

A: My grandmom showed me courage and strength. She did what she had to do and kept on going.

Q: You were diagnosed right at the time when you were starting your family. What kept you going?

A: My son was two and he was the one who really kept me going. I was not going to leave him, and though the sound of chemo was my worst nightmare, I did it all for him. He rarely gave me time to feel sorry for myself, which now I see was probably for the best!

Jodi credits her parents, husband and friends along with Dr. Deborah Toppmeyer and her team at CINJ for being such a strong support system. Young Survival Coalition meetings and events put her in touch with other young women who could relate to what she was going through. She looks forward to enjoying her son, perhaps expanding her family someday and helping other young survivors by volunteering.

Survivor’s Corner:

Jodi Inverso

If these precautionary measures leave you feeling pale, try moisturizers with sunless tanner that have an added SPF of at least 15.

Using these protective pointers and sunscreen will ensure you will look good now and your skin will be runway ready for years to come!

— Janice M. Mehnert, MD, is a medical oncologist at The Cancer Institute of New Jersey and an assistant professor of medicine at UMDNJ-Robert Wood Johnson Medical School. She is a member of both the Melanoma and Soft Tissue Oncology Program and the Phase I/Developmental Therapeutics Program at CINJ.

Surviving and Thriving

Education

• Tunic tops are versatile and lightweight and can be used as a top or a bathing suit cover-up, giving arms a little more protection.

• Scarves are now a year-round fashion ‘must have’ and while keeping you stylish, they help keep the sun off of the often forgotten neck and chest areas.

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Apple’s iPad Makes its Debut at CINJ

To better serve patients and the greater community, The Cancer Institute of New Jersey’s Resource and Learning Center (RLC) has incorporated the Apple iPad and Barnes & Noble NOOK™ electronic reader into its information arsenal.

The RLC provides information on a variety of cancer topics, such as clinical trials; prevention; diagnosis and treatment; research; and nutrition through varied media, such as books, magazines, DVDs and CD ROMs. Now this information can also be accessed in a more portable manner, with the addition of devices and NOOKs.

The devices are loaded with books, music, and videos to provide reliable, relevant and current information about all aspects of cancer and can be used for entertainment with access to games and the Internet.

CINJ’s medical librarian Janet Lasin, MLS, BS, says the devices especially enhance services for those who are less mobile by allowing for the library to come to them should they be unable to come to the RLC. The devices were purchased with support from Johnson & Johnson and the Karma Foundation.

Also new to the RLC is the Health Library II, which showcases 130 3-D animations of surgical procedures including breast lumpectomy, skin biopsies and lung cancer treatments. Along with these new website visuals, Health Library II also features general information about cancer, wellness topics, and prevention education videos.

Health Library II is available at www.cinj.org/rlc/healthlibrary.html.

Teen Cancer Awareness Week at CINJ

In recognition of Teen Cancer Awareness Week in January, former New Jersey Department of Health and Senior Services Commissioner Dr. Poonam Alaigh visited the Alicia Rose Teen Lounge at The Cancer Institute of New Jersey. The room, named in honor of the South Jersey teen who lost her battle with cancer at age 17 and established through the Alicia Rose ‘Victorious’ Foundation, features such amenities as laptop computers, a television, and gaming system. Dignitaries attended a special commemoration event and addressed the unique needs faced by this population.

Left, standing, from left: Alicia’s parents Giselle and Mario DiNatale, state Senator James Beach, and CINJ’s Dr. Robert DiPaola. Front row from left: Dr. Alaigh, David Vereb, and state Assemblyman Louis Greenwald. Above: The event was capped off with a small reception, which included a cake provided by celebrity chef, TLC’s “Cake Boss,” Buddy Valastro of Carlo’s Bake Shop in Hoboken.
Kudos!

Joseph R. Bertino, MD, chief scientific officer at The Cancer Institute of New Jersey and university professor of medicine and pharmacology at UMDNJ-Robert Wood Johnson Medical School, recently received the 36th Annual Jeffrey A. Gottlieb Memorial Award for Outstanding Achievement in Cancer Therapeutic Research. The award, sponsored by The University of Texas MD Anderson Cancer Center, recognizes physicians and scientists who have made outstanding contributions to cancer research. Dr. Bertino is currently leading his laboratory in developing new treatments for patients with cancer, in particular, drugs that specifically target tumor stem cells.

Shridar Ganesan, MD, PhD, medical oncologist at The Cancer Institute of New Jersey and assistant professor of medicine and pharmacology at UMDNJ-Robert Wood Johnson Medical School, received a grant for $75,000 from The Triple Negative Breast Cancer Foundation. The grant will support Dr. Ganesan’s study of 53BP1 protein expression and its role in the development of resistance to platinum drugs and PARP inhibitors in triple negative breast cancer.

Vassiliki Karantza, MD, PhD, medical oncologist at The Cancer Institute of New Jersey and assistant professor of medicine at UMDNJ-Robert Wood Johnson Medical School, received the Genentech Bio-Oncology Career Development Award for Cancer Research on the HER Family Pathway sponsored by the American Association for Cancer Research in the amount of $100,000. Dr. Karantza is studying the interactions between autophagy and the HER2 protein in relation to breast cancer.

Isaac Kim, MD, PhD, chief of urologic oncology and executive director of the Dean and Betty Gallo Prostate Cancer Center at The Cancer Institute of New Jersey, has received recognition as an outstanding father by the Abundant Life Family Worship Church in New Brunswick. Dr. Kim, who is also an associate professor of surgery at UMDNJ-Robert Wood Johnson Medical School, was selected to receive the honor based on his behaviors as a father and his contributions to the Hub City community, including his past leadership role in the annual prostate cancer screening held by CINJ and Robert Wood Johnson University Hospital.

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Inside CINJ

Spotlight:

Lung Cancer Care at University Medical Center at Princeton

With a top-notch thoracic surgeon, a team of other specialists, and the latest diagnostic and surgical techniques, University Medical Center at Princeton (UMCP) offers comprehensive lung cancer care close to home.

John A. Heim, MD, a board certified cardiothoracic surgeon who chairs the Department of Surgery at UMCP, says treatment follows a patient-centered, multidisciplinary approach that focuses on minimally invasive techniques.

“At UMCP, lung cancer services are provided by a diverse team of physicians and specialists who work together to coordinate each patient’s care,” says Dr. Heim. With more than 15 years of experience as a thoracic surgeon, Heim has special interest and expertise in lung and esophageal cancers, pulmonary nodules and mediastinal tumors.

Heim also has specialized training and extensive experience in video-assisted thoracic surgery, or VATS. VATS remains the state-of-the-art in cancer surgery, Heim says. A minimally invasive technique that can be used to accurately stage cancer and to remove malignancies, VATS helps to improve outcomes, reduce post-operative pain and speed recovery times. The technique also makes surgery accessible to patients who may be unable to tolerate traditional surgery due to advanced age or underlying health conditions.

The South Jersey CyberKnife Center at Cooper

Since the South Jersey CyberKnife Center at Cooper opened in July 2008, more than 300 area cancer patients have been treated by this safe and effective cancer treatment tool.

“CyberKnife is an advanced radiosurgery tool designed to treat tumors in the lungs, liver, pancreas, prostate, head, neck and spine with high-dose, concentrated radiation delivered with pinpoint accuracy,” says Tamara LaCouture, MD ’94, chief of the Department of Radiation Oncology at Cooper University Hospital and director of the South Jersey CyberKnife Center at Cooper. “It is a painless, non-invasive radiation treatment that
can be an alternative to conventional surgery and can be used alone or in conjunction with other cancer therapies.”

“During the treatment, the CyberKnife automatically adjusts to compensate for any patient movement such as respiration, during treatment,” says Dr. LaCouture, who is also an assistant professor of radiation oncology at UMDNJ-Robert Wood Johnson Medical School. Treatments generally last between 30 and 90 minutes and are typically completed in one to five visits within the same week. Anesthesia is not required, as the procedure is painless and non-invasive.

Of course sophisticated technology tools, no matter how advanced, are always dependent on the people who manage them. “At Cooper, a team of experienced physicians and nurses coordinate the care of each CyberKnife patient,” says LaCouture. “That team includes radiation oncologists, radiation therapists, a physicist and nurse coordinator – all who have been specially trained in the use of the CyberKnife system.” Other physician specialists may be part of the evaluation and planning process including surgical oncologists, neurosurgeons and other medical specialists.

Novel Therapeutic Trials for Endometrial Cancer Available at Atlantic Health

Endometrial cancer is the most common gynecologic malignancy, according to the National Cancer Institute. While many patients who are diagnosed with endometrial cancer are cured, more than 8,000 women die from this disease each year in the United States. Due to the difficulty in successfully treating this disease, investigators at Atlantic Health aim to have a clinical trial available for most patients who are diagnosed with advanced or recurrent endometrial cancer.

Specifically, for patients with recurrent disease, researchers at Atlantic Health in conjunction with the MD Anderson Cancer Center are exploring novel therapeutic targets to slow tumor growth and to shrink tumors. A Phase II trial is investigating the combination of an oral mTOR inhibitor, everolimus, with an aromatase inhibitor, letrozole. Several studies using mTOR inhibition have demonstrated clinical effectiveness in women suffering from recurrent endometrial cancer. Aromatase inhibition has had limited success in this disease. However, there is preclinical evidence that supports mTOR inhibition to overcome hormonal resistance. At focus in this study are patients with recurrent endometrial cancer who have failed at least one and no more than two prior chemotherapeutic regimens.
They say charity begins at home. For The Cancer Institute of New Jersey, there is no one donor that more fully embodies this notion than New Brunswick-based Johnson & Johnson (J&J). From the earliest days when CINJ was just an idea, to this year when patients will make more than 90,000 visits to CINJ, J&J remains one of CINJ’s most stalwart partners.

J&J’s incredible investment topped $5,000,000 this year, forever impacting patients, families, students, physicians, scientists, nurses and the citizens of New Jersey. Recent programs include:

- The Continuing Umbrella for Research Education (CURE) provides scientific training and academic enrichment classes for highly motivated local high school and undergraduate minority students to help train future leaders in science who are also interested in medicine.

- Grand Rounds and the Distinguished Lecture Series provide clinical and laboratory-based continuing education for professional staff. Renowned leaders in their respective fields are invited to CINJ to disseminate knowledge, advance interdisciplinary collaborations, encourage scientific synergy and help create an environment that attracts postdoctoral and graduate students and fellows.

- The Resource and Learning Center (RLC) is the overarching umbrella to link all aspects of cancer education and patient outreach into an integrated, organized service. Staffed by a medical librarian, the RLC aims to empower patients to participate fully in their healthcare. It provides reliable, relevant and current information about all aspects of cancer. Education vehicles include a user-friendly library, classes and access to educational and psychosocial workshops. Services and programs are free and open to CINJ patients, their families and the community.

- The Pediatric Hematology and Oncology Fellowship provides advanced training in laboratory and clinical research coupled with clinical experience in the management of pediatric hematology cases. The three-year fellowship is the only accredited program of its kind in the state.

- The Body and Soul Plus program educates groups on healthy lifestyles through faith-based organizations (see page 7).

CINJ patient and breast cancer survivor Anne Trinkle, speaks about how she benefited from breast cancer research during a “Pink Picnic” hosted by the BJ’s Wholesale Club in Edison. CINJ recently received a $37,300 breast cancer research grant from BJ’s Charitable Foundation and BJ’s vendor partners as a result of the sale of specially-marked products during national Breast Cancer Awareness Month.

CINJ is truly grateful for J&J’s dedication to fighting cancer at the local, state, national and international levels. Sheri McCoy, vice chairman, Executive Committee, and member of the Office of the Chairman at J&J, summarizes the relationship, “The Johnson and Johnson employees feel great about having a relationship with CINJ. I see the collaboration going on for years and years, and I think it’s because of the fact that we have mutual goals, putting the patient at the center.”
Mort Wernik: A Legacy Reflecting a Lifetime of Commitment

He wasn’t faster than a speeding bullet and couldn’t leap tall buildings in a single bound, but Mort Wernik did use his powers for good and was content to stay out of the spotlight… much like a real-life Clark Kent.

A native of Metuchen, New Jersey, Mort was a graduate of the Philadelphia College of Pharmacy and moved to Philadelphia in the late ’70s. There his extraordinary commitment to community, neighbors, employees and friends took root. A longtime friend described him in this way, “He cared so much about the community and was always there, but he didn’t have to be getting all the glory.”

Although he was a licensed pharmacist, Mort chose to follow an entrepreneurial spirit. He owned both a bar and bed and breakfast. In 2009, his bar, Uncle’s, held its 25-year anniversary. Unfortunately, it was around that time that he was diagnosed with pancreatic cancer.

Mort was treated at The Cancer Institute of New Jersey and “loved it here,” said his brother, Malcolm Wernik. He continued, “Mort always felt that his doctors had time for him and were talking to him as a person, not just as a patient.” Mort took the train from Philadelphia to New Brunswick to receive treatment, but seeing the toll this was taking on him, his doctors arranged for a local hospital to administer his treatments. Malcolm noted, “Mort was so touched by this caring attitude and equally impressed with the amazing research conducted at CINJ. As a pharmacist, he had a scientific mind and really appreciated the work being done here.” Mort passed away in April of 2009.

For all these reasons, according to his brother, Mort Wernik chose to include CINJ in his will, along with those organizations and people he had so willingly and generously supported in his community. His thoughtful bequest truly represents his caring life. If you had met Mort, you may not have seen an “S” on his chest or a cape beneath his coat, but the trail of good works left behind would have left no doubt that you’d just met a real superhero.

The Act of a Hero

Among the many “heroes,” who have helped The Cancer Institute of New Jersey to advance its research, treatment and outreach efforts, are those who have chosen to remember CINJ in their wills. Like most charitable organizations, CINJ benefits greatly from the thoughtful generosity of those who include the CINJ Foundation in their estate plans. Some wish to honor a specific physician or nurse, others express the desire to have research continue on a particular form of cancer, while others wish to advance new and better treatments. All have in common the desire to leave a legacy of hope; to further the promise that research will lead to prevention and treatment.

It is easy to make a gift in your will. A bequest can state simply that you wish to make a gift “…to the Cancer Institute of New Jersey Foundation, at 120 Albany Street, New Brunswick, New Jersey.” Your gift will be applied where it is needed most. You may also specify that the gift is made in memory or honor of another individual or for a particular purpose. The CINJ Foundation will be pleased to assist individuals or their advisor to draft language that will express their wishes precisely.

A bequest is an act of leadership. It is a gift to future generations that hope and healing are within reach. Quite simply, for patients today, and those who will be helped tomorrow, it is the act of a hero. And we can never have too many heroes.

For information, suggested language, or to discuss other ways to leave a legacy, please contact the CINJ Foundation at 732-235-8614.

Century for the Cure

Registration is now open for the 7th Annual Century for the Cure charity bike ride to benefit The Cancer Institute of New Jersey. Mark your calendars! Saturday, September 10, is the date, rain or shine. Go to www.centuryforthecure.com to register as a rider, volunteer or virtual rider (for those who would like to fundraise but are unable to ride). This year the one-day ride offers 100, 80 and 40 mile options.
Fun and Feasting in Red Bank

For one night in January, everyone at the Two River Theater in Red Bank is Irish...or at least knows one Irishman. Hosted by Cancer Institute of New Jersey Foundation Trustee, Ed McKenna, the Irish Fun and Feasting event brings together the entire Red Bank community for a night of friendship, frivolity and fundraising to benefit CINJ. More than 250 guests attended the second-annual event which raised more than $67,000, led by event sponsor Investors Savings Bank.

Forever in my Heart...a Letter of Thanks

The CINJ Foundation is pleased to share this letter with readers. The nurse's name has been removed, as the sentiments expressed by Mrs. Olsen are representative of many letters we receive honoring our amazing CINJ nurses.

Please accept this donation in memory of my wonderful husband Martin Olsen. I would also like to honor one of the sweetest most beloved nurses he ever had. She was our angel through thick and thin, always there with encouragement or just holding a hand. She was with us from the beginning to the end and many times we would have given up if not for her. She is a beautiful human being and an awesome nurse. She will always have my love and thanks, a place forever in my heart.

Thank you. You will always be our angel. Pat Olsen

Teens Get Connected

Perth Amboy High School senior and CINJ patient, Selena Scafe surfs the internet on one of two iPads donated by Syrentha Savio Endowment, which also donated four iPods. Housed in the recently renovated Alicia Rose Teen Lounge at CINJ (see page 10), a gift of the Alicia Rose 'Victorious' Foundation, the latest technology provides pediatric oncology/hematology patients an escape while in clinic.
Launching New Ideas and Young Careers

Every day at The Cancer Institute of New Jersey, scientists and physicians are moving the “unexpected idea” from hypotheses to rigorous research to ground-breaking discovery to meticulous pre-clinical study, and ultimately, into life-saving treatments for patients. In fact, CINJ therapeutic clinical trials developed as a result of scientific discoveries at CINJ have increased 67 percent since 2003. There also has been a 215 percent increase in patient accrual to investigator-initiated studies since that time.

The generosity of CINJ Foundation supporters has fueled seed funding of early research. In an extremely competitive climate for research funding, heightened by significant reductions in federal and state support nationwide, the majority of government grants are awarded to senior scientists with a proven track record. Private funds to invest in new ideas and young careers are critical. These funds enable CINJ scientists to generate the data and preliminary research results that they must have to compete for peer-reviewed grants from state, federal and national funders. Recent philanthropic support highlights the importance of these gifts:

The Jattrude Fogarty Trust continued its commitment to breast cancer research, with a $50,000 gift in support of pilot studies. The Pilot Studies program provides CINJ breast cancer researchers the opportunity to investigate and test novel ideas. The proposals for this funding meet the highest standards of innovative research and are peer-reviewed to ensure the most excellent are recommended for selection. Since 1997, the Trust has invested $470,000 to advance breast cancer research and has supported the work of more than 20 scientists. Alexis Tucci, Esq., trustee of the Jattrude Fogarty Trust, said of the Trust’s long-time commitment, “The quality and scope of the research conducted at CINJ is extraordinary. I have seen the impact of our support in the science coming out of the labs and, most importantly, the benefit to patients. It is a privilege to be a part of the work being conducted at CINJ.”

Through continued support of the Training Program in Translational Research in Cancer, the F.M. Kirby Foundation provides young physicians and scientists critical translational research training. The two-year fellowship combines formal mentorship by senior CINJ faculty with rigorous training in basic laboratory studies and a fundamental understanding of the unique requirements of translating scientific findings to clinical treatments. Graduates of this postdoctoral program are expected to be competitive for academic faculty positions and for entry level, peer-reviewed research funding awards. Over the past three years, the Kirby Foundation has given more than $250,000 to prepare the next generation of physician-scientists.

In a live auction at last fall’s Award of Hope Gala, guests bid with extraordinary generosity to “purchase” research minutes – raising $75,000 to support innovative research by CINJ’s physician-scientists. CINJ faculty chose to allot a major portion of those dollars to support pilot project awards. A competitive submissions process with an internal selection committee is underway.

Students for a Cause

Crossroads North Middle School of South Brunswick helped to spike cancer at its 9th Annual Volley for Life volleyball marathon held in March. Organized by teachers and students in the Tau Unit, which is comprised of 7th and 8th grade students, the event raised more than $6,500. This brings their amazing nine-year total to more than $40,000 in support of The Cancer Institute of New Jersey.

The Monroe Township High School Golf Club wanted to do something to remember a classmate who was treated at CINJ. They decided that helping other pediatric patients at CINJ would be a wonderful tribute to their friend. Through candy sales, the club raised $1,100.
Inside the CINJ Foundation

Hope Gala
Saturday, October 1, 2011
The Hyatt Regency
New Brunswick, New Jersey

Please join us as we celebrate and honor those who make The Cancer Institute of New Jersey a national leader in scientific discovery and compassionate healing.