

2014 Volume III

Dialogue

James P. Wilmot Cancer Institute | University of Rochester Medical Center

Celebrating
40 years
of progress



UR
MEDICINE

WILMOT
CANCER INSTITUTE

Letter from the Director and Co-Director



Jonathan W. Friedberg, M.D., M.M.Sc.
*Director,
Wilmot Cancer Institute*



Hartmut "Hucky" Land, Ph.D.
*Director of Research &
Co-Director,
Wilmot Cancer Institute*

Hello friends of the Wilmot Cancer Institute,

Our understanding of cancer has changed significantly over the last 40 years, and that has meant new and better ways to diagnose and treat cancer.

This progress has been fueled by research — from basic science through clinical trials — that has incorporated genetic discoveries, technological advances and collaboration among disciplines. It has led us to precision medicine, the ability to target specific cancers with more precise drugs, surgery and radiation techniques that spare healthy cells.

What has allowed our precision medicine today is more than 40 years of investment, starting with the federal commitment brought on by the National Cancer Act in 1971 and President Richard Nixon's war on cancer.

The Rochester and Finger Lakes region has been a microcosm of that investment. Our community has generously supported the work of scientists and clinicians at Wilmot Cancer Institute who have devoted their efforts to improving cancer diagnosis and treatment. James P. Wilmot's initial gift established a fellowship for physicians to pursue cancer research in Rochester, and it set a precedent that his family and hundreds of others through the generations have followed. Every year, individuals organize golf tournaments, fashion shows, 5K races and other events that raise funds to support cancer research. They attend our annual Discovery Ball and make provisions to support our work through their estates.

Community support — your support — has been invaluable as federal funding for research has dwindled. It draws scientific and medical talent to Rochester, and it has enabled and accelerated growth here. It is the key to our future, and we are committed to staying at the forefront of cancer care and research.

With our \$30 million campaign to support cancer research underway, we are poised to build on our rich history of discovery and clinical excellence. We are proud of our accomplishments, and you should be, too. We could not do this work without you.

The next 40 years will hold many more advances against cancer, and we will be there to carry our community forward.

Sincerely,

Jonathan W. Friedberg, M.D., M.M.Sc.

Hartmut "Hucky" Land, Ph.D.

40 YEARS

On the Cover

40 years of Cancer Care

The Wilmot Cancer Institute
is a component of
Strong Memorial Hospital

Wilmot Cancer Institute National Advisory Board Members 2013–2014

Stephen McCluski, Chair
Richard T. Bell
Michael Buckley
Rina Chessin
Elaine Del Monte
Richard DiMarzo
Michael Donnelly
Janet Felosky
Marc Fischer

James Hammer
Paul Hanrahan
Gary Haseley
Thomas Ioele
Robert Kessler
Mark Kokanovich
Kathleen Landers
Michael Linehan
Carol Mullin
Walter Parkes
Jeffrey Pierce
Mary Pluta
Ronald Pluta
Barbara Pluta-Randall

Larry Rabinowitz
Donald Rhoda
Greg Smith
Steven H. Whitman
Dennis Wilmot
Paul Wilmot
Bruce Zicari, II

Faculty Board Members

Yuhchayau Chen, M.D., Ph.D.
Jonathan Friedberg, M.D.
Hucky Land, Ph.D.
Aram Hezel, M.D.

Emeritus Members

Judy Wilmot Linehan
Jim Ryan, Jr.

Ex-Officio Board Members

Bradford C. Berk, M.D., Ph.D.
Jonathan Friedberg, M.D.
Mark Taubman, M.D.
Frank Interlichia
Niles Eggleston

Dialogue

Editor / Writer

Lydia Fernandez,
Senior Public Relations
Associate
(585) 276-5788

Contributing Writer

Leslie Orr

Art Director / Designer

Kathleen Mannix

Feature Photography

Ken Huth
Matt Wittmeyer



1. From left, Richard Reichman, M.D.; Robert Rose, Ph.D.; and William Bonnez, M.D., laid the groundwork for the development of a vaccine against human papilloma virus. 2. A conference room in the University of Rochester Cancer Center called the "Cork Room" for its cork walls. 3. Michael Becker, M.D., professor of Medicine, who directs the Blood and Marrow Transplantation Program and the leukemia program. 4. Jacqueline P. Williams, Ph.D., FASTRO, professor of Environmental Medicine & Radiation Oncology, who studies the impact of radiation therapy on normal tissue. 5. James P. Wilmot. 6. The Wilmot family in 2008. 7. Comprehensive Breast Care Center. 8. Construction of the University of Rochester Cancer Center on Crittenden Boulevard. The building now houses the Flaum Eye Institute. 9. Researcher Tom McNeill, Ph.D. in 1980. 10. Robert Cooper, M.D., the first director of the University of Rochester Cancer Center. 11. The James P. Wilmot Cancer Center in 2008.

The 1970s was a pivotal decade for cancer. The passage of the National Cancer Act in 1971 and the launch of the "War on Cancer" brought unprecedented attention and resources to bear on the nation's second-leading cause of death. Scientific discoveries and advances in treatment were beginning to turn the tide, and people were starting to talk openly about living with cancer.

In 1974, amid these historic changes, the University of Rochester established a cancer center.

What has since grown into the Wilmot Cancer Institute has its roots in Great Society-era reforms aimed at bringing the expertise of academic medical centers in fields such as cancer to regional communities. Over 40 years, Wilmot Cancer Institute has stayed true to that vision and been a leader in cancer care — providing access to cutting-edge diagnostics, treatment and research throughout central and western New York.

The University of Rochester Cancer Center, as it was originally known, emerged from the Division of Oncology, established in the Department of Medicine at Strong Memorial Hospital during the 1970s. Thomas C. Hall, M.D., appointed to lead the division, recruited doctors who were interested in cancer into various departments, building groups focused on radiation oncology, surgical oncology, gynecologic oncology and, eventually, medical oncology (a specialty that did not exist until the early 1970s).

By 1974, J. Lowell Orbison, M.D., then dean of the University of Rochester School of Medicine and Dentistry, saw the opportunity to boost the Division of Oncology into something greater. He appointed a committee to apply for a grant from the National Cancer Institute to create a cancer center. Robert Cooper, M.D., a surgical pathologist, was tapped to lead the effort.

"Cooper was very much interested in seeing Rochester focus a little more on the clinical, psychosocial, and clinical trials side, but he also wanted to have a pre-clinical side" that would conduct basic research, recalls John M. Bennett, M.D., professor emeritus in the Department of Medicine, Hematology/Oncology.

Cooper asked Bennett, who had established the hematology/oncology program at Highland Hospital, to lead the clinical oncology program at the University of Rochester Cancer Center. Cooper and Bennett, with their colleagues radiation oncologist Philip Rubin and cancer surgeon Brad Patterson, applied for a specialized cancer center grant through the National Cancer Institute. The grant was awarded in 1975, and Rochester became one of the few university-based medical centers at the time to receive such a core grant.

Since then, the cancer center has evolved into the heart of a network that provides services throughout the Finger Lakes region and is known for its expertise in blood cancers, geriatric oncology, world-renowned research and precision medicine.



At nearly 300,000 square feet, the Wilmot Cancer Center has become the hub of cancer research and clinical activities at Wilmot Cancer Institute and the University of Rochester Medical Center. It encompasses inpatient and outpatient units, as well as research laboratories and support services like social work and integrative oncology. The building's seven floors bring together services that for most of the cancer center's history were spread throughout the medical center.

The quest to bring it all under one roof began soon after the cancer center was established. In the 1980s, the University of Rochester Cancer Center opened in the footprint of what is now the Flaum Eye Institute, about halfway down Crittenden Boulevard. On the outside, it matched the stately red brick of the hospital. On the inside, it was classic '70s.

"It was wood and orange and brown," recalls Karen Mietus, R.N., B.S.N., clinical nurse coordinator, who came to the cancer center in 1986 from another part of the hospital. "But we did have a parking lot!"

Radiation oncology was on the ground floor. The physicians' offices and other outpatient clinical areas were on the first floor. There were two procedure rooms and eight exam rooms that had accordion doors. There was one room for chemotherapy, and it had five chairs, all lined up beside each other.

The nursing staff was small — four part-time nurses and one full-time nurse. They



Karen Mietus, R.N., B.S.N., left, and Michele Haller, R.N., B.S.N., have been taking care of patients at Wilmot Cancer Institute since the 1980s.

were in clinic in the mornings — managing labs, triage and specimens with the help of a single tech — and gave chemotherapy in the afternoons.

"We were a small group, but it was family," says Michele Haller, R.N., B.S.N., ambulatory nurse manager, who came to the cancer center in 1981. "It really felt

like we supported one another. We were a cohesive group, and I think it's still like that."

Today, there are hundreds of clinical staff — including physicians, nurses, techs and pharmacists.

"We didn't have a large cancer center," says Marshall A. Lichtman, M.D., who served



1971:

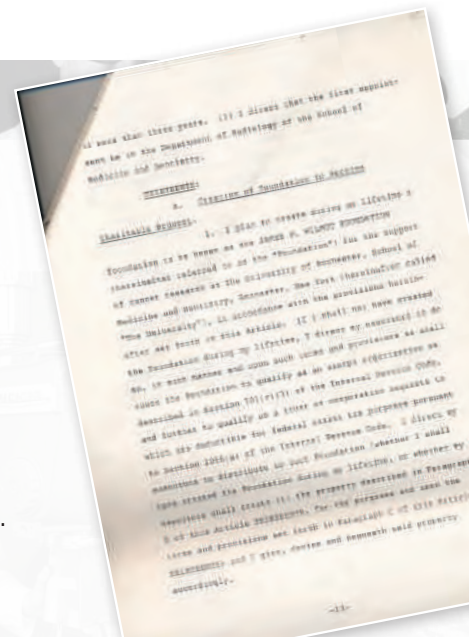
On Dec. 23, President Richard M. Nixon signs the National Cancer Act and the War on Cancer begins.

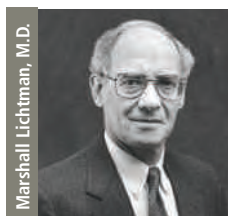
1974:

The University of Rochester Cancer Center was chartered by the University's Board of Trustees.

1975:

URCC receives its Cancer Center Support Grant from the National Cancer Institute.





Marshall Lichtman, M.D.



George Abraham, M.D.



Richard I. Fisher, M.D.

very attractive to the National Cancer Institute during our application for a Center," says Lichtman, who was the first director of the Wilmot Cancer Fellowship.

Rapid growth

With the growth in research and advances in treatment options, the cancer center quickly outgrew its space. It underwent a renovation, and clinical departments expanded into other areas of the hospital, including the third floor of the ambulatory care center. Laboratory space was added as well.

At the same time, the clinical oncology programs were being reorganized. Multidisciplinary clinics were created for breast cancer, genitourinary cancer, pediatric late effects and thoracic oncology, and basic research clusters were developed for each one.

The cancer center was aggressively recruiting faculty with special expertise in these areas and in cancer cell biology/molecular oncology and neuro-oncology.

"The evolution of our understanding of the disease, especially with changes in radiation and chemotherapy, required expansion of our facility," says George N. Abraham, M.D., who was cancer center director in the late 1990s.

By 2000, the cancer center was hitting a growth spurt. That year, it was rechristened as the James P. Wilmot Cancer Center to honor the man who had so generously

endowed a research fellowship and whose family funded many other efforts.

Growth in the number of patients at the cancer center was astounding. Between 2001 and 2005, Wilmot Cancer Center saw 15 to 20 percent increases in annual patient volumes. By 2005, doctors and nurses at Wilmot Cancer Center were providing 100 chemotherapy infusions and 110 radiation therapy treatments every day.

The need for a new, larger and unified cancer center was apparent. Not only had the research operations been spread across the medical center campus, the patient care services were too.

"Eventually it became clear that we had to bring everything back into one building," recalls Kishan J. Pandya, M.D., professor emeritus of Medicine, who had been brought in to oversee the move in the 1990s to the ambulatory care center.

Led by Richard I. Fisher, M.D., who became the center's director in 2001, plans for a new facility began to take shape. The state-of-the-art building that is now home to the Wilmot Cancer Center was designed to double the amount of space devoted to clinical and translational research and bring outpatient services back to one location. It was also designed to lay the foundation for capturing the National Cancer Institute designation as a comprehensive cancer center.

as chief of the Hematology Unit from 1975 to 1990. "But the center had excellent clinicians, scientists and a commitment to medical and nursing education."

"One of the cancer center's special features was the incorporation of the four other community hospitals into its clinical programs. This community outreach was

1981:

The James P. Wilmot Foundation was established to fund the Wilmot Fellowship Program to train physicians in cancer research. More than 100 Wilmot fellows have come through the program and gone on to pursue careers in cancer research.



Mid-1980s:

The URCC opens on the campus of the University of Rochester Medical Center on the site of the current Flaum Eye Institute. It was 126,500 square feet that included clinic and laboratory space.

1989: The Blood and Bone Marrow Transplant program at URCC opened. It is the only bone marrow transplant program in the Rochester area.

Jason Mendler, M.D., Ph.D., and undergraduate Allison Eberhardt study leukemia cells.



Where we are today

When the 164,000-square-foot building opened in 2008, it had three stories. The ground floor and first floor streamlined outpatient care, while the third floor offered research space. The building was constructed with the understanding that as needs grew, the cancer center could expand vertically.

Significant investments in technology, which was rapidly advancing in the early 2000s, brought in state-of-the-art

equipment, including a \$10.5 million linear accelerator that helps doctors better target and deliver radiation to destroy tumors.

These investments, in turn, drew more medical and scientific talent to Rochester.

"Without question, this building helped recruit excellent physicians because it demonstrated the institution's commitment to cancer care, as well as the community's," says Jonathan W. Friedberg, M.D., M.M.Sc., director of the Wilmot Cancer Institute. Friedberg came to Rochester in 2002 from the Dana-Farber Cancer Institute in Boston.

"We've filled this building with talented clinicians who are research-minded," he says.

Faculty and staff grew significantly over the last decade, allowing the expansion of the clinical trials program and deepening the cancer center's expertise in solid tumors.

Within two years, construction began on a four-story vertical expansion of the building. The project added more than 100,000 square feet to the cancer center for research and inpatient care.

For the first time, inpatient units were located within the cancer center. Two

1996

The National Cancer Institute, Centers for Disease Control and Prevention, and the American Cancer Society report the first sustained decline in cancer death rates in the United States since

record-keeping began in the 1930s. The overall U.S. cancer death rate fell by 2.6 percent between 1991 and 1995.



2000

The University of Rochester Cancer Center becomes the James P. Wilmot Cancer Center, named in honor of the prominent local businessman and benefactor. Through The James P. Wilmot Foundation,

Mr. Wilmot and his family had given more than \$13 million by the end of this year to fund cancer research, teaching and treatment at the University of Rochester.





Kishan Pandya, M.D.



Jonathan Friedberg, M.D.



Gary R. Morrow, Ph.D.

inpatient units from Strong Memorial Hospital — the Samuel E. Durand Blood and Marrow Transplant unit (the second largest program of its kind in New York State), and the adult Hematology/Oncology unit, which expanded from 23 to 30 beds — were added to the cancer center. These units occupy the sixth and seventh floors of the cancer center and opened in 2012. They were designed to support the care of patients but also to improve the comfort and convenience for them and their families.

The fifth floor opened in March 2014 to accommodate post-surgical oncology patients from urology, GI cancers, head and neck cancers, and orthopedic cancers. Most of these patients will stay in the hospital for two to seven days.

In addition, the expansion created an urgent care/triage area for patients who had acute needs but did not require a visit to the emergency department.

This expansion essentially created a comprehensive cancer hospital within Strong Memorial Hospital. It now provides the full continuum of inpatient and outpatient care and adds convenience and efficiency for patients and staff.

Not only does the building enhance the patient experience, it also has facilitated collaboration and connection among clinicians and researchers.

"It has a phenomenal design for someone who's trying to be a physician-scientist,"

says Jason H. Mendler, M.D., Ph.D., who is studying leukemia.

"You need to be able to transition quickly from the clinic to the lab," he says. "Everything is so physically close I can really do both jobs."

Looking to the future

While Wilmot Cancer Center was growing on the campus at Strong Memorial Hospital, it also began to extend its reach beyond Rochester. In 2012 and 2013, the cancer center acquired Pluta Cancer Center and Interlakes Oncology and Hematology, which has locations from Geneva to Brockport. This year, it acquired Batavia Radiation Oncology.

The growth at Wilmot reflects the commitment of the leadership at the University of Rochester Medical Center, including UR Medicine CEO Bradford C. Berk, M.D., Ph.D., and Steven I. Goldstein, president and CEO of Strong Memorial and Highland hospitals, Friedberg says.

"Their commitment has helped create an energy that will translate into a bright future," he says.

The acquisitions of Pluta and Interlakes added to a cancer care network that already included Highland Hospital and Sands Cancer Center in Canandaigua through their affiliations with the medical center.

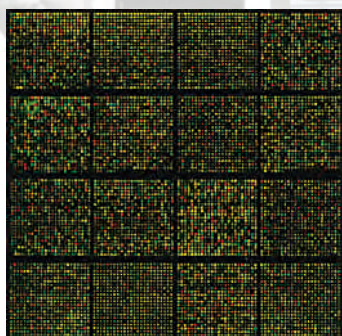
Together, with the Wilmot Cancer Center in Rochester, they comprise the new Wilmot Cancer Institute, the umbrella brand that encompasses all of our clinical enterprises and our research. With the Wilmot Cancer Center at Strong Memorial Hospital at the center of our network, we are bringing our services to the region, not just drawing patients to Rochester.

"This building will become more of a location for the rare and complex, and over time as we expand our locations, some of the standard things we do in this building can be done in those communities," Friedberg says.

Regardless of where the care is delivered, the approach will incorporate precision medicine that will allow more tailored treatment for each patient using cutting-edge technologies and therapies. It will require not just building the infrastructure to deliver this care, but also the expertise of the doctors, nurses and other providers who will help develop and offer this care.

It's an approach that will continue to bolster the Wilmot Cancer Institute's reputation locally and nationally, and it will require strong commitments into the future, Friedberg says.

"We're making investments now to maintain our membership among the nation's elite cancer centers."



2003

Researchers completed the Human Genome Project, successfully sequencing the complete set of human DNA. This work has had and will continue to have tremendous influence in advancing cancer research and treatment.

2006

Gardasil, a vaccine against HPV infection, is approved by the U.S. Food and Drug Administration. URM virologists Richard Reichman, M.D., William Bonnez, M.D., and Robert Rose, Ph.D., discovered a

method to protect against several strains of human papillomavirus (HPV), including those that cause the most prevalent forms of cervical cancer. Their work led to the development of Gardasil.

An evolution in care

While hospitals and medical systems were developing centers that specialized in cancer during the 1970s and early '80s, the treatments for cancer were not yet specialized.

"We functioned in those days as complete oncologists," says John M. Bennett, M.D., who was the first clinical director at Wilmot Cancer Institute. "We saw a potpourri of breast cancer, lung cancer and GI cancers."

"It was pretty straightforward for me to learn to manage a breast cancer patient," recalls Bennett, whose expertise is in leukemia. "Spin forward 20, 25 years, and that would be impossible."

Today, it takes a multidisciplinary team to oversee an individual's care, and the care is specific to that patient. Our focus is on precision medicine — matching the unique characteristics of an individual's cancer with the therapies that are most effective against it. Our approach is patient-centered — involving patients more than ever in decisions about treatment and paying attention to more than the physiological aspects of the disease. Our growing involvement in clinical trials means that patients at every Wilmot Cancer Institute location will have access to cutting-edge protocols.

"Ten patients with the same tumor aren't getting the same therapy anymore," says Carla Casulo, M.D., who came to Wilmot in 2012 and is conducting clinical trials in lymphoma.

Techniques such as gene sequencing can reveal important details about a cancer that allow doctors to clarify a diagnosis and tailor treatment. The University of Rochester Medical Center, for example, began offering HER2 FISH testing for breast cancer in 2013. This test, fluorescence in situ hybridization (FISH), measures the status of the HER2 gene, an important biomarker that can

indicate how aggressive a cancer may be and whether the tumor will respond to particular targeted treatments.

New tools such as the prone breast board available at Wilmot's Comprehensive Breast Care at Pluta and techniques such as high-dose rate brachytherapy for prostate cancer at Highland Hospital allow radiation to be delivered more precisely while protecting surrounding organs and tissues from unnecessary exposure.

These advances in treatment come with advances in understanding their side effects and considerations for quality of life. Cancer control and addressing the social and emotional impact of cancer treatment have



you're helping them live longer," says Gary R. Morrow, Ph.D., who has been studying cancer control in Rochester since 1974 and led pioneering research on nausea and vomiting as side effects of chemotherapy.

long been an emphasis at Wilmot Cancer Institute, and they are now becoming standard parts of care.

"There is a greater awareness of how important it is to help people live better while

“

There are major changes in the public awareness of cancers, and the way patients accept a diagnosis of a cancer. With the major advances in our understanding of cancers and the evolution of highly specific treatments, early diagnosis gives hope for cures or sustainable remissions," says George N. Abraham, M.D., who came to Rochester in 1970 and served as cancer center director from 1997 to 2001.

“

When I started my practice, we didn't even have CT scanners," says Kishan J. Pandya, M.D., who came to Rochester as a medical oncologist in 1979. That technology emerged in the 1980s and was followed by magnetic resonance imaging. "Those imaging technologies made a huge impact on our ability to detect, follow and see what is changing."

Not only does addressing nausea, vomiting, fatigue, sleep disruption and other effects help patients, it helps their providers do more with treatment.

"They're able to use more agents, combine agents and try things that weren't possible when people were already far too affected by what they were doing," Morrow says.

It is now routine to address the non-physical aspects of treatment, to include palliative care and involve the patients in decisions about treatment.

Forty years ago, patients were not such active participants in their care.

"Now we have the Patient Family Advisory Council (PFAC), and patients are such an integral part of everything we do," says Michele Haller, R.N., B.S.N., ambulatory nurse manager at Wilmot Cancer Center. Members of the PFAC, for example, provided input on the design of the rooms on the inpatient floors of the cancer center. They also tested chairs and other furniture that was selected for those units.

"They have played such an active role not only in their own treatment but in how we've evolved as a cancer center," Haller says.



John M. Bennett, M.D.,
was the first clinical director
at Wilmot Cancer Institute.

“

I never thought I would see people getting chemotherapy treated as outpatients," says Gary R. Morrow, Ph.D., who has been studying the side effects of cancer treatment in Rochester since 1974. "There's a huge amount in cancer that used to require inpatient hospitalization and fairly involved care that now is being done as outpatient, with much less patient burden, and a lot of that is because we're much better at dealing with toxicities."

“

I could only dream about giving radiation the way I can today," says Louis "Sandy" Constine, M.D., who started in radiation oncology decades before radiation could be sculpted, contoured or delivered internally. "What a journey to watch changes over 35 years. Everything is different."

Generations of commitment

The Wilmot family's connection to the cancer institute that now bears their name began like it does for so many families — with a diagnosis.

From that diagnosis, and the many that have followed, has come a commitment to cancer research in Rochester that has galvanized the succeeding generations. It began in 1981, when James P. Wilmot, a prominent businessman, bequeathed several million dollars in shares of his company Page Holding Corp. to create a foundation to support cancer research through an annual fellowship. Most recently, it inspired a \$4 million gift from the James P. Wilmot Foundation and the Wilmot family to fund research in genomics, a relatively new discipline that is transforming the study of cancer.

"The impact of the Wilmot family on cancer research and cancer treatment here in Rochester has been incredible," says Hartmut "Hucky" Land, Ph.D., director of research at Wilmot Cancer Institute.

To date, the foundation and the family have given more than \$50 million to the University of Rochester to support cancer research and treatment, a tradition of generosity unmatched by any single donor in the institute's history.

In 2000, the University of Rochester Cancer Center was rededicated as the



James P. Wilmot

Below: Generations of the Wilmot family gathered in 2008 in the lobby of the new Wilmot Cancer Center.

James P. Wilmot Cancer Center to honor the family's commitment, and the Wilmot name has remained as the cancer center has grown into the Wilmot Cancer Institute.

A cure will come, says William B. Wilmot, son of James P. Wilmot and chairman of the Wilmot Foundation. In the meantime, it's important to improve current therapies and to offer the best techniques and technology to patients.

"With every machine — whether it's in surgery, radiation, anything — you need to stay on the cutting edge," Wilmot says. "As long as we're pushing to stay on top of the world, we're in good shape."

Learn more about the Wilmot family's commitment to cancer research in Rochester at wilmot.urmc.edu. Click on Giving Back.



2008

The new James P. Wilmot Cancer Center opens at the corner of Crittenden Boulevard and East Drive. The four-story, 164,000-square-foot building featured the Comprehensive Breast Care Center, the first of its kind in upstate New York.

2012

The new inpatient floors of the Cancer Center open, transforming it into a comprehensive cancer hospital providing inpatient and outpatient care.

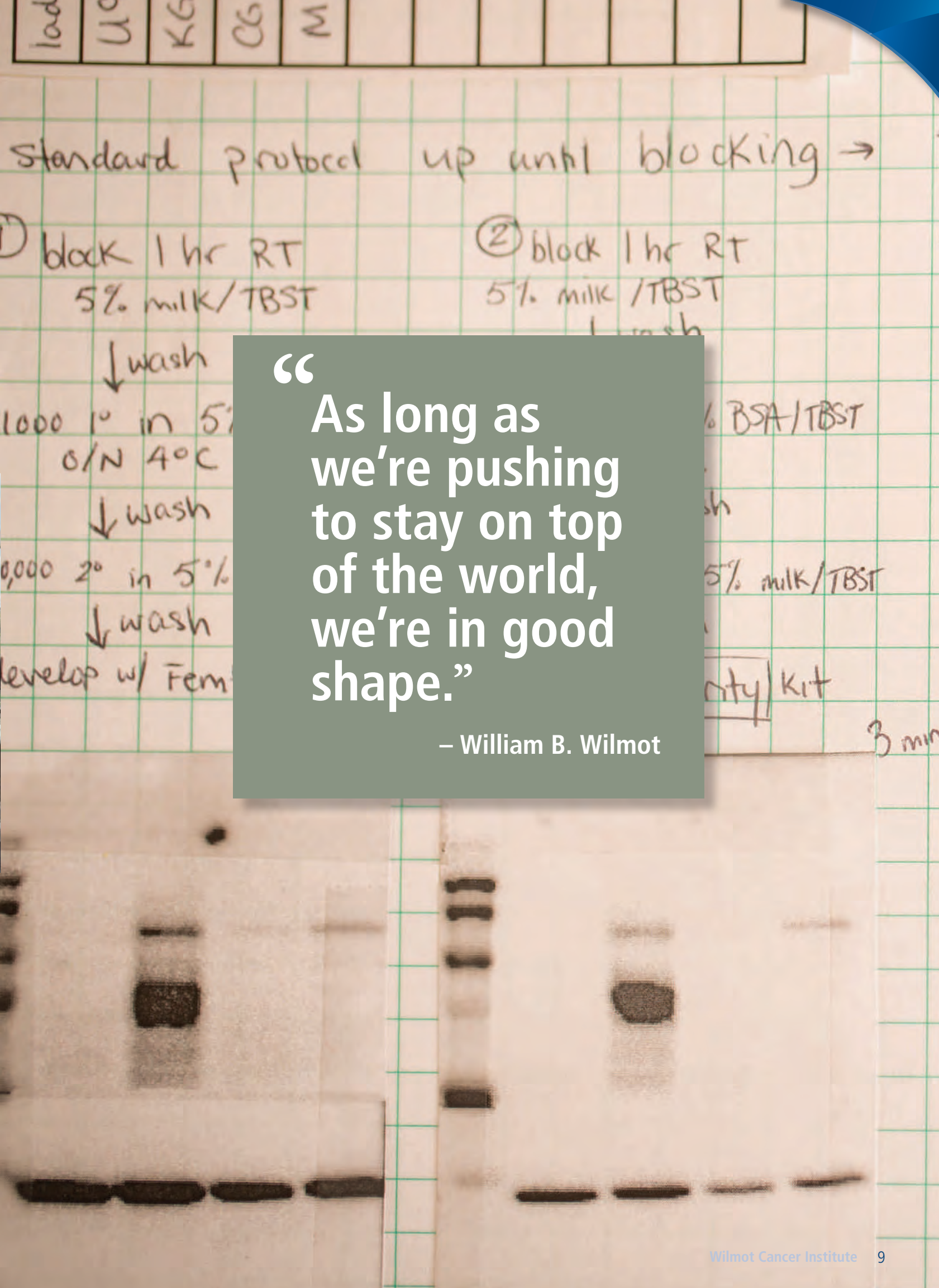


2014

Announcement of Wilmot Cancer Institute.



Sources: National Cancer Institute, National Human Genome Research Institute, University of Rochester Medical Center



“As long as we’re pushing to stay on top of the world, we’re in good shape.”

– William B. Wilmot

Beyond cure: Rochester has a long history of focusing on survivorship

For all but five months of her life, Ginny Hurley has been a cancer survivor.

She was born in the late spring of 1957. By November of that year, she was not eating well and had a general malaise that prompted her mother to check in with the family doctor. He felt a mass in her abdomen and sent the young family to Strong Memorial Hospital.

Today, the doctor would send them for an MRI or CT scan, but in 1957, the only option was exploratory surgery. The surgeons found a tumor — neuroblastoma — that stemmed from the adrenal gland and wrapped around the aorta. They attempted to remove the tumor, but because the baby was doing poorly during the procedure, they were forced to close the incision, leaving much of the cancer behind.

The only option for addressing the cancer that remained was radiation. Under the supervision of Philip Rubin, M.D., now professor emeritus of Radiation Oncology, Hurley underwent six weeks of daily treatments in an effort to cure her cancer.

The prognosis was grim, with uncertainty about whether the treatment would eradicate the disease.

"There was a high likelihood that I would not survive childhood," Hurley says. "But I'm still here."

Now 57, Hurley is the happily married mother of a healthy 28-year-old daughter and a 24-year-old son. She works as a nurse practitioner in oncology.

Hurley is remarkable among the more than 14 million cancer survivors in the



United States today. As late as the 1970s, only about one in two people diagnosed with cancer would survive at least five years. Today, more than two out of three will survive that long, according to the American Cancer Society. The progress in cancer prevention, diagnosis and treatment has fueled the growing numbers of survivors, and the survivors have drawn more attention to the long-term effects of cancer treatment.

"As oncologists caring for our patients, we clearly recognize that cure is not enough," says Louis "Sandy" Constine, M.D., professor of Radiation Oncology who came to the University of Rochester Cancer Center in 1981. "But unfortunately, for many years, cure had to be enough. We are now faced with what we call the Agony of Victory, working with our patients to help them live the best possible life that they can."

For much of the past 40 years, clinicians and researchers at Wilmot Cancer Institute have been looking beyond cure in cancer. The early work in survivorship was led by Hurley's doctor — Philip Rubin, who was the medical center's first chair of Radiation Oncology and a giant in the field of clinical

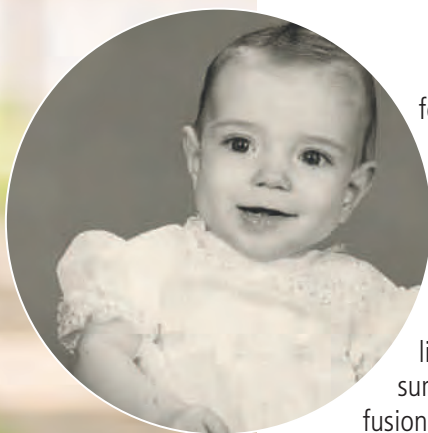
oncology and radiation pathology. He was a national leader and pioneer in the study of radiation's effects on normal tissue. Today, Wilmot Cancer Institute carries on his legacy in research and clinical services for survivors.

Lois Travis, M.D., Sc.D., leads the survivorship research efforts as director of the Rubin Center for Cancer Survivorship in the Department of Radiation Oncology at Wilmot. Among her current projects is a multi-million-dollar, multi-center study to identify which patients are genetically more susceptible to side effects from cisplatin-based chemotherapy.

Constine, who worked with Rubin, leads a multidisciplinary team of specialists with the Judy DiMarzo Cancer Survivorship Program at Wilmot. The clinical program, launched in 2013, is designed to help cancer survivors understand what to expect once their treatment is completed and to prepare them to address the hurdles that can come with living beyond cancer. It is also working to educate primary care providers about the special needs of patients who have undergone cancer treatment.

"For someone who survives cancer, there is no free lunch," Hurley says. "Things are

Louis "Sandy" Constine, M.D., and Ginny Hurley
Inset: Ginny Hurley, before her cancer diagnosis



fertility, secondary cancers and lung damage.

For Hurley, that included scoliosis resulting from the radiation, which caused muscle weakness and atrophy in the area where it was delivered. At age 11, she required surgery that included a spinal fusion and placement in a body cast for healing.

"I spent six months in a cast from my chin to my knees and another six months in a cast from my chin to my hips, all at such a vulnerable age," Hurley says.

In addition, she has had to endure recurrent bowel obstructions felt to be related to previous treatment, and in 2006, she was diagnosed with breast cancer. She recently sought out Constine for his expertise in late effects.

Although cancer survivorship has presented her with many challenges, Hurley also has found that it has given her great gifts — a life with a wonderful husband and children, and a career that allows her to make a difference.

"Ginny makes each of her days a passionate statement, instead of just marking time," Constine says. "She teaches me to appreciate each day, to understand the preciousness of life."

"I never wanted to be anything but a nurse," Hurley says. "Having experienced hospitals, doctors and nurses from an early age, I always knew that I wanted to give back what had been given to me. Being involved with a patient during their cancer journey is a privilege beyond comparison."

Hurley earned undergraduate and graduate degrees from the University of Rochester School of Nursing. Having had her previous medical care at Strong Memorial Hospital, she felt strongly that UR was where she wanted to study. She spent the early part of her career at the University of Rochester Cancer Center. Since becoming a nurse practitioner, she has worked primarily in a private oncology practice in outpatient care.

"I've had an incredible life," Hurley says. "And I'm grateful for every second of it."

never the same. You have to find a new normal, whatever that is."

Long-lasting side effects can occur months or years after cancer treatment. Known as late effects, they can include lymphedema, cardiovascular problems, in-

TEENS LIVING WITH CANCER

Every year, more than 72,000 adolescents and young adults are diagnosed with cancer in the United States. They have medical, social and emotional needs that are often very different from those of younger children or adults.

To help meet those needs, the Wilmot Cancer Institute, in collaboration with Melissa's Living Legacy Teen Cancer Foundation, has created a program to help survivors age 13 to 29 navigate life beyond cancer. The program will feature an Adolescent/Young Adult (AYA) Survivorship Specialist who will work with patients through treatment, their transition to survivorship and beyond. Patients will have access to the AYA Survivorship Specialist in the hospital and in the community.

"Our teens and young adults face

cancer at time in their lives when making decisions and critical choices is a relentless challenge," says Louis "Sandy" Constine, M.D., who directs the Judy DiMarzo Cancer Survivorship Program at Wilmot, which is collaborating with Melissa's Living Legacy. "All of this is tremendously complicated by both the threat of cancer and the side effects of its treatment. They seem to embrace these challenges, but not without appropriate trepidation. They draw on their own inner strength, but also on that of their peers. This is one of the reasons that the new AYA program will be such a vital resource."

The AYA Survivorship Program is designed to help teens and young adults better understand their cancer, their treatment and the importance of proper follow-up care. It also is aimed at

connecting them with community-based services and other survivors like themselves.

"Managing the transition from cancer patient to cancer survivor presents many unexpected challenges for our teens and young adults," says Lauren Spiker, who founded Melissa's Living Legacy in 2001 after the death of her 19-year-old daughter. "This innovative collaboration, the first of its kind in Rochester, will alleviate many of those challenges by providing a continuum of support from point of diagnosis throughout treatment and into survivorship."

To learn more about the Adolescent/Young Adult Survivorship Specialist and services for teens and young adults, contact Alicia Coffin, M.S.N., R.N., O.C.N., at Alicia_Coffin@urmc.rochester.edu or (585) 275-6956.





5



6

Foundation to be known as the JAMES P. WILMOT FOUNDATION (hereinafter referred to as the "Foundation") for the support of cancer research at The University of Rochester, School of Medicine and Dentistry, Rochester, New York (hereinafter called "The University"), in accordance with the provisions hereinafter set forth in this Article. If I shall not have created the Foundation during my lifetime, I direct my executors to do so, in such manner and upon such terms and provisions as shall cause the Foundation to qualify as an exempt organization as described in Section 501(c)(13) of the Internal Revenue Code, and further to qualify as a trust or corporation bequests to which are deductible for federal estate tax purposes pursuant to Section 2053(a) of the Internal Revenue Code. I direct my executors to distribute to such Foundation (whether I shall have created the Foundation during my lifetime, or whether my executors shall create it) the property described in Paragraph

7



8



13



14



15



16



21



22



23



24



29



30



31

THE CURE STARTS HERE



36



37



38



41



42



43

1. Microscopic image of cells. **2.** Camille Abboud, M.D., in 1980, then an assistant professor of medicine. **3.** The University of Rochester Cancer Center staff, 1992. Back row: John M. Bennett, M.D.; Brent Dubeshter, M.D.; Gary Morrow, Ph.D. Front row: Philip Rubin, M.D., and Jean Johnson, R.N. **4.** Radiologist Theodore VanZandt, M.D., Eileen Paterson, M.D., and Susan Rosenthal M.D. **5.** Cynthia Angel, M.D., in the operating room. **6.** The University of Rochester Cancer Center lobby after renovation in the 1990s. **7.** An excerpt from the will of James P. Wilmot, who established a foundation to support the Wilmot Cancer Research Fellowship. **8.** Elizabeth Cyran, M.D., who did her fellowship at URCC. **9.** Robotic surgery for cancer. **10.** 2007 Construction of the Wilmot Cancer Center. **11.** Tracy Jones, left, a radiation therapy technologist, 1991. **12.** Philip Rubin, M.D., the first chair of Radiation Oncology at the University of Rochester Medical Center. **13.** From left, Daniel Ryan, M.D.; W. Richard Burack, M.D., Ph.D.; John M. Bennett, M.D.; Michael Becker, M.D.; Paul Rothberg, Ph.D., at a 2012 Symposium on Neoplasms in Rochester. **14.** James P. Wilmot, prominent businessman and the namesake of Wilmot Cancer Institute. **15.** Susan N. Rosenthal, M.D., with medical oncology fellows **16.** University of Rochester Cancer Center in 1992. Flaum Eye Institute now occupies this space. **17.** Patricia Messina, R.N., administering chemotherapy, 1989. **18.** Avice O'Connell, M.D., director of Women's Imaging at UR Medicine. **19.** Jacob Goldstein, long-time friend and personal physician to James P. Wilmot. He advised Wilmot to establish a foundation to support a cancer research fellowship in Rochester. **20.** John M. Bennett, M.D., the first clinical director at the University of Rochester Cancer Center. **21.** Robert Cooper, M.D., first director of the University of Rochester Cancer Center. **22.** The reception for Thriving After Breast Cancer, a 2002 event, in Flaum Atrium. **23.** The original waiting room at the University of Rochester Cancer Center. **24.** Hartmut "Hucky" Land, Ph.D., speaking with guests at a reception. **25.** Young researchers in a lab at the University of Rochester Cancer Center. **26.** Monitors for the shaped beam surgery machine called Novalis in the Flaum Shaped Beam Surgery Center, 2000. **27.** James Brown, M.D., in the 1980s with a Picker machine. **28.** John M. Bennett, M.D., now professor emeritus of hematology/oncology and pathology. **29.** Construction on the University of Rochester Cancer Center. **30.** Dietmar Siemann, Ph.D., a researcher at the University of Rochester Cancer Center. **31.** Volunteers at Wilmot Cancer Center often help visitors get around in the golf cart. **32.** The lobby of the new Wilmot Cancer Center, which opened in 2008. **33.** Multicellular spheroid tumor model developed by Robert A. Sutherland, M.D. **34.** Joyce Perrone, R.N., B.S., O.C.N. with the Clinac. **35.** Jonathan Friedberg, M.D., M.M.Sc., director of Wilmot Cancer Institute, and Hartmut "Hucky" Land, Ph.D., director of research and co-director of Wilmot Cancer Institute. **36.** Gary Morrow, Ph.D., who now leads Wilmot's Cancer Control and Survivorship research team, in 1980. **37.** Susan Meynadasy, who teaches yoga for women with breast cancer, at Comprehensive Breast Care at Pluta. **38.** Donors and local dignitaries cut the ribbon on the new Wilmot Cancer Center in 2008. **39.** Lynne E. Maquat, Ph.D., professor of Biochemistry and Biophysics, and director of the Center for RNA Biology. **40.** Philip Rubin, M.D., cutting the ribbon at the University of Rochester Cancer Center. **41.** Radiation treatment model, 1980s. **42.** Steven H. Bernstein, M.D., who studied lymphoma at Wilmot Cancer Institute. **43.** Seymour I. Schwarz, M.D., and Robert A. Bambara, Ph.D.

Celebrating 40 years of progress



UR
MEDICINE

WILLMOT
CANCER INSTITUTE

Pioneers, now leaders, in geriatric oncology

Every few months Supriya Mohile, M.D., M.S., leads visiting professionals through her Specialized Oncology Care and Research for the Elderly (SOCARE) program.

They visit her geriatric oncology clinic to learn how her team cares for patients who are age 70 or older and helps meet their specific needs.

"We're an institution that's leading the research and clinical agenda," says Mohile, who is recognized nationally as a leader in her field.

The SOCARE program is one of a handful of geriatric oncology programs in the country, and it is the only outpatient program in New York state. It is also one of the only programs nationwide to have two geriatric oncologists. It serves as a resource for oncologists, surgeons, radiation oncologists, primary care physicians and geriatricians who are looking for a comprehensive evaluation and opinion regarding cancer care for an older person.

Although age is the single most important risk factor for cancer, the field of geriatric oncology is relatively new.

Physicians and researchers at Wilmot Cancer Institute have been among its pioneers and leaders since the field began to emerge in the 1980s. In the 1990s, John M. Bennett, M.D., then a professor of hematology/oncology, and William Hall, M.D., a professor of medicine with a special interest in geriatrics, created the Geriatric Oncology Initiative, which allowed oncology fellows to train and be certified in both geriatrics and medical oncology. This program, funded by the Hartford Foundation, was piloted at 12 cancer centers around the country and was expanded through a partnership with the American Society of Clinical Oncology (ASCO).

Bennett's interest in bringing geriatrics and oncology together stemmed from his experience as a clinician and scientist.

"As a diagnostician, I would see so many patients with acute leukemias who were not offered treatment because they were felt to be too old, but they were never given



Allison Magnuson, D.O.,
and Supriya Mohile, M.D., M.S.

a full assessment," recalls Bennett, who was among the founding members of the International Society of Geriatric Oncology.

As a result of his work, the American Board of Internal Medicine approved the joint program in geriatrics and medical oncology and made certification in geriatrics available to doctors training in all specialties.

His pioneering work established Rochester's reputation for geriatric oncology and paved the way for Mohile to pursue her passion in caring for people over 70 who have cancer. She completed a fellowship funded by the ASCO and Hartford Foundation initiative in 2005.

Her work in the SOCARE program addresses not just clinical issues, but also education and research.

"Geriatrics is a way of thinking," Mohile says. "It's a different approach, a different level of communication."

With older patients, cancer care can be complicated by other medical conditions. In addition, many treatments that are considered standard were never studied in older adults, so their safety and effectiveness for older patients is not clear. Understanding the implications of these issues can make a significant difference in the way a physician approaches treatment for a particular patient.

"We have to teach others," says Mohile, whose clinic regularly includes students, fellows and residents. Mohile has also served as a mentor, most recently for Allison Magnuson, D.O., who joined the SOCARE clinic this year as a second geriatric oncologist.

Through their work, Mohile and Magnuson have been teaching their peers about the impact that age can have on developing treatment plans for older adults.

"It's education for other providers — not just physicians in training but also physicians in practice," Magnuson says.

In addition to education, Mohile and her team are raising Rochester's profile as a research base in geriatric oncology. Mohile is a member of the Cancer and Aging Research Group, a national network of researchers who are collaborating on clinical trials to improve care for older adults with cancer and to set a national research agenda in this field.

She was recently awarded a \$2 million grant to study whether measuring physiological age rather than chronological age is better when considering chemotherapy. She is collaborating with other Wilmot scientists to study drug interactions, communication and decision-making, cognition and emotional health, and the biological and physiological markers at the intersection of cancer and aging.

25 years of changing lives

The Blood and Marrow Transplantation Program at Wilmot Cancer Institute is celebrating 25 years of treating patients with blood disorders and malignancies in our region and from across upstate New York.

While bone marrow transplantation has been available as a treatment for more than 40 years, the seeds for the bone marrow transplant (BMT) program in Rochester were planted in 1980. That year, Marshall Lichtman, M.D., then chief of the Hematology Unit, began pushing the Department of Medicine for a program. It had become apparent that as a site caring for patients with hematological malignancies, the University of Rochester Cancer Center needed ready access to marrow transplantation. At the time, patients were sent to centers as far away as Seattle or Minneapolis for the procedure.

In 1989, Lichtman, with Paul Griner, director of Strong Memorial Hospital, and Jacob Rowe, the first director of the marrow transplant program, oversaw the opening of the Samuel E. Durand Blood and Marrow Transplant Program. The unit was on 8-1200, a specially renovated floor of Strong Memorial Hospital.

"When we started, we were the principal place outside New York City that was doing allogeneic transplants," Lichtman says. Allogeneic transplants are done using cells or marrow from another person who shares certain genes responsible for regulation of the immune system.

Today, the program does two kinds of transplants —autologous, which use a person's own stem cells or marrow removed previously, or allogeneic using stem cells or marrow from another individual, related or unrelated to the patient, who shares key genes.

"We have also expanded the types of patients we can offer this treatment modality to," says Jane Liesveld, M.D., clinical director of the BMT program.



From left, Jennie Graves, R.N., Tammy Clarke, R.N., M.S., O.C.N., B.M.T.C.N., Mary Dibley, R.N., H.P. (ASCP), B.M.T.C.N., and Michael Becker, M.D.

Transplants can now be done in older patients, in patients who have existing infections and in those who have organ problems or illnesses that would have excluded them before.

The BMT program treats about 120 to 130 patients every year, and those patients can come from as far away as the Vermont border and New York's Southern Tier. It is one of only two large BMT programs in upstate New York.

"Getting through bone marrow transplant is a very intense process, and it's going to be life-changing," Liesveld says. "It's going to take a whole team to get you through."

The team at Wilmot's BMT program includes physicians, nurses, BMT coordinators, radiation oncology, a stem-cell processing team, laboratories, infectious disease services, pulmonary services, social work and more.

"We have great people in every spot on the field," says Michael Becker, M.D., who leads the BMT program. "We have a lot of great individual players, but we function really well as a team."

That teamwork is on display every day in the BMT unit on the sixth floor of the Wilmot Cancer Center. The unit relocated from Strong Memorial Hospital in 2012, when the expansion of the cancer center was completed.

"It's made such a difference," Liesveld says. The unit has more windows, more light and more room for family members who want to stay with loved ones during the several weeks they must be in the hospital.

"It's a unit designed for transplants as opposed to a unit retrofitted from the hospital," Becker says.

Advances in blood and marrow transplantation are changing patients' experiences as well. For many years, bone marrow was the only source of stem cells for transplant, and now, they can be drawn from peripheral blood as well. That has helped reduce the risk of infection and the length of time patients have to stay in the hospital, Liesveld says.

The intensity of preparation for transplant has lessened over time as well. Patients can now receive the chemotherapy or radiation in advance of their transplant on an outpatient basis, and Wilmot's BMT unit features an inpatient/outpatient, or IPOP, center that makes that more convenient.

There are still advances to be made. The future may hold new targeted agents to treat leukemias and lymphomas, more ways to address graft-versus-host disease and opportunities to use donors who are not well matched.

Researchers at Wilmot Cancer Institute will likely have a hand in those advances.

"We're looking forward to continue improving and serving the city of Rochester and upstate New York," Becker says.

Scientific Progress and the Power of Community



Left to right: Zeller Corp. employees Amy Hagler, head of human resources; Tom Szczepanski, operations manager; Joe Bertalli, vice president of finance; and Tom McDonough, director of sales, stand with Hucky Land (center) on the factory floor.



Aram Hezel, M.D., above, and Land at a recent Pancreatic Cancer Association of Western New York reception.

A lot has happened in cancer research during the last 40 years, with some dramatic changes occurring inside and outside the laboratory.

In addition to performing complex studies, such as scouring entire gene networks for clues leading to new cancer treatments, you'll find Wilmot Cancer Institute scientists engaging the community through Facebook, and translating their research for various community audiences.

Having the support of the community is critical to the research mission at Wilmot, as it embarks on a \$30 million campaign, launched this spring. (A \$4 million lead gift from the Wilmot family and the James P. Wilmot Foundation has already been earmarked to strengthen the cancer genomics program and improve efforts to deliver precision medicine.)

This connection between Wilmot scientists and supporters outside of the University is the way of the future.

"Being transparent and accessible provides so many opportunities," says

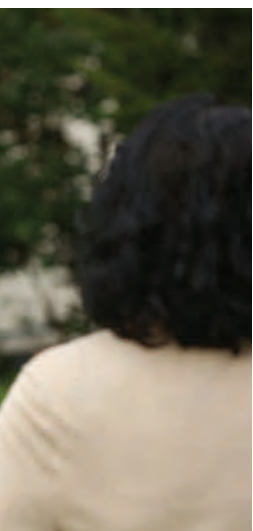
Hartmut "Hucky" Land, Ph.D., director of research and co-director of the Wilmot Cancer Institute. "It helps us grow, and if we don't take advantage of these opportunities we'd go backwards. To have the community on your team is just so powerful."

Private donors are playing an increasingly important role in cancer research due to federal funding challenges. At the same time, advanced technologies and innovation are exposing more possibilities for researchers than ever before. Scientists know that to make their cause appealing,

The discovery of the world's first vaccine to protect against cervical cancer had its roots in a Rochester team.

they must be able to explain their work and its urgency to a lay audience.

One day earlier this year, for example,



Land met with employees at Zeller Corp., an automations and controls company based on the east side of Rochester that designs and manufactures cables, control panels, and control systems for numerous industries. He showed them how their company's donations to the Wilmot Cancer Institute were being used in scientific laboratories.

"Usually you fill out a form and sign a check.

It was something very unique to us to be able to interact one-on-one with a guy who's actually doing the research, using our money," says Tom Szczepanski, operations manager at Zeller. "We began to realize that we understand each other. We're a solutions company, just as he is trying to come up with solutions to a different set of problems. The goals are similar, even if the work itself is very different."

Amy Hagler, the head of human resources at Zeller who lost her mother to breast cancer, says she welcomes Wilmot's desire to build relationships in the community. "Every single employee has been touched by cancer in some way," she says. "It's just such an important cause and it's local. It stays here."

Wilmot researchers believe those types of connections not only result in philanthropic gifts, but spark new ways to think about cancer, to benefit patients.

Gifts coming to the Wilmot Cancer Institute will provide seed money for new research projects, recruit top-flight scientists, or fund specific programs, equipment, or facilities. Wilmot has diverse needs, but everything is underlined by a unique approach: To study how cancer arises by focusing on shared features among many types of malignancies and then develop therapies that target those shared features.

To that end, Wilmot scientists have already identified gene networks that appear to be relevant to multiple different cancers. Now they've started another important initiative — designed to speed the pace of drug discovery — that encourages researchers to identify and match existing, Food and Drug Administration-approved drugs to the new gene targets.

In addition to basic and clinical research aimed at blood cancers and solid tumors, Wilmot is also investigating ways to reduce the late effects of cancer therapy and improve the lives of ever-increasing numbers of survivors.

The future looks promising — based on a series of home runs from the past 40 years.

For example, the discovery of the world's first vaccine to protect against cervical cancer had its roots in a Rochester team. A trio of University virologists — Richard Reichman, M.D., William Bonnez, M.D., and Robert Rose, Ph.D. — each on his own was conducting basic research into how the immune system fights human papilloma virus infection. Their common link brought them together, where their collaboration eventually led to the filing of a patent and, in 1997, one of the first tests in humans of a vaccine to prevent HPV infection. Later the University licensed the rights to the UR technology to MedImmune, a pharmaceutical company that was later sold to SmithKline.

Another big hit from the past involved the study of radiation tolerance. Philip Rubin, M.D., an international expert and professor emeritus of Radiation Oncology at Wilmot, built a team over a 50-year career and established the University of Rochester as a leader in the field. Dating back to World War II and the Manhattan Project, Rubin and Rochester scientists collected all biologic data available on how radiation affects the body. Once the data was declassified, Rubin analyzed it and published extensively in scientific literature.

From there, Rubin's team began studying the use of radiation therapeutically —

again launching Wilmot into a position of leadership to improve treatment by delivering radiation more precisely.

Wilmot also has a long history of excellence in blood cancers. Professor Emeritus John M. Bennett, M.D., is a widely recognized pioneer in myelodysplastic syndrome, a pre-leukemia condition, and an international expert in leukemia. Wilmot researchers also helped to confirm the groundbreaking concept that the microenvironment plays a crucial role in the progression of acute leukemia. And Wilmot physicians are among the top in the country for investigating experimental treatments for lymphoma.

The University's Cancer Control program is noteworthy for a funding history that dates back more than 30 years. Professor Gary R. Morrow, Ph.D., has been at the helm of this effort, overseeing the Community Clinical Oncology Program Research Base (CCOP), a national network of clinical research programs that's been continuously funded since 1983. Oncologists and patients look to the network as a resource to make informed decisions on care and treatment, with a particular focus on common side effects of cancer therapy such as fatigue and nausea.

All of these achievements required a strong culture of collaboration. These days in the hallways at Wilmot, collaboration is not only defined by doctors and nurses working together with laboratory scientists, mathematicians, engineers, technicians, and trial coordinators — it means getting out of the trenches and into the community to spread the word about science and increase awareness of how the Wilmot Cancer Institute uses research to improve patient care.

"You think of cancer, and everyone knows it's a horrible disease that causes grief," says Joe Bertalli, Zeller's vice president of finance. "But after hearing more about Wilmot's research and how cancer impacts the body, I understand it a little better. And when you understand something, you're more likely to support it."

Laying the groundwork to prevent cervical cancer

William Bonnez, M.D., began his research on human papillomaviruses (HPV) in the early 1980s as an infectious disease fellow at the University of Rochester Medical Center. At first, cancer was not a concern. He and his then supervisor, Richard Reichman, M.D., were interested in HPV as a cause of genital warts, a sexually transmitted disease. They were looking for a blood test that would detect the infection, gauge its severity, and perhaps reveal how the body contains the infection.

At the time, researchers were just beginning to recognize HPV as a possible cause of cervical cancer. As evidence of HPV's role grew, Bonnez,

Over the course of the fellowship and the years beyond, he and his colleagues laid the groundwork that led to the world's first vaccines against HPVs, Gardasil and Cervarix. They were able to show that the virus-like particles they created to mimic HPV would generate neutralizing antibodies that would keep the actual virus from infecting human tissue.

"Without the Fellowship, the work would never have happened," says Bonnez, Professor in the Department of Medicine, Infectious Diseases.

Vaccination against HPV is now recommended for children 11 and older, as well as men and women up to age 26. The U.S. Centers for Disease



William Bonnez M.D.

Reichman, and later, a third colleague, Robert Rose, Ph.D., saw the potential to address not just genital warts but also to prevent an infection that could lead to cancer.

In 1986, Bonnez was awarded a Wilmot Fellowship to continue his research on HPV.

Control and Prevention reported in 2013 that since the introduction of the vaccine in 2006, the prevalence of HPV infection among adolescent girls has dropped 56 percent.

"I will always be grateful to the Wilmot family for their support," Bonnez says.



Guided by his long-time friend and personal physician Jacob D. Goldstein, M.D., one of the first graduates of the University of Rochester School of Medicine and Dentistry, James P. Wilmot established a foundation that provides the financial backing to sustain and grow the program.

"Jim Wilmot had an abiding commitment to understand what was needed to push the frontiers of cancer research and patient care into the future," says George N. Abraham, M.D., professor emeritus of Medicine, Hematology/Oncology. Abraham served as chairman of the Fellowship's internal selection committee and went on to direct the cancer center from 1997 to 2001.

Wilmot stipulated that the fellowship be awarded to physicians who had completed their training and were on the cusp of their research careers. Wilmot's will states that fellowships would fund "research with regard to the causation, diagnosis and treatment of common human cancers."

Since its inception in 1982, more



The Wilmot Cancer Research Fellowship has played a crucial role in the ability to attract talented physician-researchers to the Wilmot Cancer Institute.

Chunkit Fung, M.D., assistant professor of Medicine, Hematology/Oncology

than 100 Wilmot fellowships have been awarded. Among a wide range of topics, the research of the Wilmot fellows has improved existing cancer therapies, provided better understanding the mechanisms by which cancers develop and progress, and improved our understanding of the risks and challenges that cancer survivors face. The fellowship also supports the establishment of research programs — including human genetics, stem cell research, and leukemia and lymphoma — as well as the recruitment of key faculty to develop those programs.

The three-year fellowship is highly competitive, and programs are reviewed by an external panel of prominent national researchers from other cancer centers.

"They have to pass muster," says William B. Wilmot, son of James P. Wilmot and chairman of the Wilmot Foundation. While many Wilmot fellows have gone on to significant careers in the U.S. and internationally, many of them have

remained in Rochester to continue their research and mentor younger physician-researchers who in turn have become Wilmot fellows.

"You can't walk around the cancer center now and not run into 10 doctors who came through the program," Wilmot says. They include Jane Liesveld, M.D., clinical director of the Blood and Marrow Transplant Program, who has made major contributions to the understanding of growth factor regulation of bone marrow cells.

Chunkit Fung, M.D., is another. An assistant professor of Medicine, Hematology/Oncology, Fung applied for a fellowship shortly after he came to Rochester in 2011 and was accepted into the program.

He has been working with Lois Travis, M.D., Sc.D., director of the Rubin Center for Cancer Survivorship. His research has been focused on the genetic predisposition that testicular cancer survivors may have for long-term toxicity after chemotherapy. In addition, he's been studying cardiovascular

disease among testicular cancer survivors and the impact that smoking tobacco has on bladder cancer patients.

"It takes time to get your own external funding," Fung says. "And without financial support, you have less time for research."

With the Wilmot Fellowship, Fung was able to gather preliminary data for a study that allowed him to apply for a "K" award, a competitive career development grant from the National Institutes of Health. Beyond that, Fung has had the opportunity to build relationships and collaborate with senior scientists at Wilmot Cancer Institute, which has helped him establish himself as a physician-researcher.

"I'm really grateful for what the Wilmots have done," Fung says.



John M. Bennett, M.D., Carol and John Bennett

Bennett gift supports travel, lectureship

For over 50 years, John M. Bennett, M.D., has been an educator as well as a clinician and clinical researcher. He has served on the University of Rochester Medical Center faculty since 1969, first at Highland Hospital and then at Strong Memorial Hospital, where he helped establish what has become the Wilmot Cancer Institute.

Now professor emeritus of hematology/oncology and pathology, Bennett is providing support for educational opportunities for faculty at the Wilmot Cancer Institute. Bennett and his wife Carol have endowed a traveling fellowship

fund and an annual lectureship that reflect Bennett's interests in leukemia, geriatric oncology and education.

The traveling fellowship fund will support one or more annual awards for the best abstract by a fellow or junior faculty member of the Hematology/Oncology Unit that is accepted for presentation at a national or international meeting.

The annual lectureship will alternate each year between the themes of leukemia and geriatric oncology. The first of these endowed lectures will be held in fiscal year 2015.

"This is a way of continuing my education role," Bennett says.

In addition to the traveling fellowship fund and the lectureship, the Bennetts have supported Wilmot Cancer Institute through the George Eastman Circle and with individual gifts. Their gifts have also funded a case to display the research publications of Wilmot Cancer Institute faculty.

The Bennetts have a long history of giving in the Rochester community — including enhancing the Observation Unit at Highland Hospital and providing financial support and service to The Rochester Philharmonic Orchestra and the Rochester Area Community Foundation. We are grateful for their support.

Survivors Night at Frontier Field

The Rochester Red Wings made the second annual Survivors Night at Frontier Field a win on Aug. 18. Survivors, Wilmot Cancer Institute employees and their families enjoyed a night of baseball, fun and fireworks as they celebrated life beyond cancer.



Zechariah Merrell, left, and his brother Isaiah shout "Play ball!" to open the game.

Survivors helped display a giant flag during the National Anthem before the game.





Tom Wilmot and Judy Wilmot Linehan announcing the \$4 million lead gift from the Wilmot Foundation and the Wilmot family.

Notable contributions to the campaign include:

- Andrew Stalder, a 1948 graduate of the University of Rochester, has provided for two endowed research funds through an estate provision of \$200,000.
- Sandy Hawks Lloyd has pledged \$50,000 in continued support of our nationally recognized geriatric oncology program.
- In gratitude for his exceptional training, School of Medicine and Dentistry alum Dr. Samuel Yi has pledged \$250,000 in support of research in the department of radiation oncology.

Philanthropists Richard T. Bell Sr., and Robert W. Kessler, are leading the campaign. Bell, a throat cancer survivor who was treated at Wilmot, established the Richard T. Bell Endowed Professorship in the Department of Radiation Oncology at Wilmot in 2011. Kessler is a longtime member of the Wilmot National Advisory Board. University Trustee Thomas C. Wilmot, Sr., whose family has supported cancer research for 30 years at the University of Rochester, is serving as honorary chair of the campaign.

CAMPAIGN UPDATE

Over its 40-year history, Wilmot Cancer Institute researchers have been among the leaders in advancing our understanding of cancer, and their work has helped patients here gain earlier access to cutting-edge technologies and therapies.

In May, the Institute launched a \$30 million research-focused fundraising campaign to support the work of our scientists. Gifts to the campaign will be used to establish endowed professorships, endowed research programs, seed grants, and unrestricted cash funds through the

George Eastman Circle, the University's leadership annual giving society.

The Wilmot Foundation and Wilmot family provided a \$4 million lead gift to help recruit and expert in genomics and to endow a distinguished professorship in their name.

At the Discovery Ball on May 10, community members pledged \$865,000 in support of our research programs.

Since then, the campaign's momentum has grown, and 51 percent of the \$30 million goal has been achieved.

To learn more about the campaign and how you can get involved, please visit wilmot.urmc.edu, click on Giving Back.

The annual Planting Seeds of Hope media day will return on Jan. 20-21, 2015, to raise funds for seed grants to support the researchers at Wilmot Cancer Institute.

In 2014, the event raised \$112,000, more than doubling the amount pledged the year before.

Seed grants enable researchers to

launch new pilot projects and gather the scientific data they need to apply for larger government grants or foundation funding to support their next phase of study. For younger researchers in particular, these grants are pivotal for setting their careers in motion and help them make new advances in the field of cancer research and care.

The telethon will be held in the lobby of UR Medicine's Strong Memorial Hospital with hosts from 13WHAM-TV.

If you are interested in volunteering for Planting Seeds of Hope or learning more about the event, please contact Tiffany Paine-Cirincione at tiffany.paine@rochester.edu or (585) 276-4715.

planting seeds of hope

Community Focus



The fifth annual Michael F. Contestabile Memorial Golf Tournament at Shadow Pines Golf Club in Penfield raised \$18,000 for pancreatic cancer research on July 14, 2014.



Dado Boutique's Spring Fashion Show at Restaurant Good Luck in Rochester raised \$14,000 for breast cancer research on May 6, 2014.



Community events to support Wilmot Cancer Institute have a long history. This photo is from a 1988 bike parade and picnic with Brad Zebrack of the National Coalition for Cancer Survivors.



The Pancreatic Cancer Association of Western New York hosted a reception on July 17, 2014, in Greece to celebrate the work of Aram Hezel, M.D., and Hartmut "Hucky" Land, Ph.D., who recently were awarded a \$2 million grant from the National Cancer Institute. The grant will fund research that Hezel and Land began with seed funding from PCAWNY.



The KM Memorial Golf Tournament at Mill Creek Golf Club in Churchville raised \$4,000 for brain cancer research in June 22, 2014.



The third annual STEEL Lillies 5K Run/Walk at the Webster Recreation Center in Webster raised \$17,000 for sarcoma research on June 8, 2014.



The American Junior Golf Association Rolex Girls Junior Championship at The Country Club of Rochester in Pittsford, raised \$20,000 for Wilmot Cancer Institute on June 9, 2014.



The Napa Valley chefs event at REDD, a restaurant owned by Richard Reddington in Yountville, Calif., raised \$75,000 for Crosby's Fund to support pediatric cancer research on Sept. 17, 2013.

Calendar of Community Events

Saturday, Sept. 13, 2014 | Breast Health Day | Eagle Vale Golf Club, 4344 Nine Mile Point Road, Fairport

Join us for this free educational event from 8:30 a.m. to 12:30 p.m. for women interested in breast health. The topics will include breast imaging basics, understanding benign and high-risk pathology, and high-risk breast cancer. Speakers include Dr. Avice O'Connell, Director of Women's Imaging at UR Medicine's Department of Imaging Sciences; Dr. Alissa Huston of Comprehensive Breast Care at Pluta; and Dr. David Hicks, Director of Surgical Pathology. A brunch buffet is included. This event is free and open to the public. To register, call (585) 275-2778.

Saturday, Sept. 27, 2014 | Dado Fall Fashion Show | Baytowne Plaza, 1900 Empire Blvd., Webster

Hosted by dado fashion boutique, this fundraiser is a night of high fashion. The runway show benefits research at Wilmot Cancer Institute. To learn more, please email dado.boutique@gmail.com.

Sunday, Oct. 5, 2014 | Mike Guinness Memorial Rally | Southview Lodge, Mendon Ponds Park

For this event, drivers and passengers will follow witty clues as they wend their way on a 50-mile journey through the Finger Lakes region. The adventure starts at 2 p.m. Any car is welcome. Proceeds from the event benefit brain cancer research at Wilmot Cancer Institute. To learn more, please visit <http://guinnessrally.com>.

Saturday, Nov. 15, 2014 | 5th Annual Step It Up to Cure Pancreatic Cancer 5K Walk | Rochester Institute of Technology

This indoor 5K walk raises funds to support pancreatic cancer research at Wilmot Cancer Institute. To learn more, visit www.pcawny.org/5k.html.

January 20-21, 2015 | Planting Seeds of Hope Media Day | Strong Memorial Hospital lobby

Telethon hosted by 13WHAM-TV. If you are interested in volunteering for Planting Seeds of Hope or learning more about the event, please contact Tiffany Paine-Cirincione at tiffany.paine@rochester.edu or (585) 276-4715.

June 7, 2015

Save the date!



Warrior Walk grows, supports survivorship program

The second annual Warrior Walk on June 1, 2014, drew 70 survivors and nearly 400 of their family members and friends. Held on National Cancer Survivors Day, the Warrior Walk was organized to honor the survivors in our community and to raise funds to support the Judy DiMarzo Cancer Survivorship Program at Wilmot Cancer Institute.

This year's event raised more than \$52,000 for the program, which has seen more than 200 survivors in its

first year. The Survivorship Program provides care plans and services for survivors, as well as education for primary care providers in our community who will care for cancer survivors.

The Survivorship Program is named for Judy DiMarzo, who lost her battle with lymphoma in 2009 and whose family wanted to honor her brave and spirited fight.

We are looking forward to next year's event, which promises to be even bigger. Mark your calendars for June 7, 2015, for our celebration of survivorship!

YOU ARE

beating breast cancer.

Comprehensive Breast Care at Pluta—Every doctor you need in one location. Precision treatments that protect healthy tissue. The most clinical trials in the region. All in a beautiful, newly renovated space.

Megan MacKenzie

Landscaper, hiker and breast cancer survivor



UR
MEDICINE

WILMOT
CANCER INSTITUTE

Learn more at Wilmot.urmc.edu

MEDICINE of THE HIGHEST ORDER



UR
MEDICINE

WILMOT
CANCER INSTITUTE

James P. Wilmot Cancer Institute

601 Elmwood Avenue, Box 704
Rochester, NY 14642

MEDICINE *of* THE HIGHEST ORDER

Non-Profit Org.
U.S. Postage
PAID
Permit No. 780
Rochester, NY

The annual **Planting Seeds of Hope** media day will return on Jan. 20-21, 2015, to raise funds for seed grants to support the researchers at Wilmot Cancer Institute.

planting  seeds of hope

See page 21 for details.

Like Us



WilmotCancerInstitute

Follow Us



@wilmotcancer

wilmot.urmc.edu

The Cure Starts Heresm