

# USC NORRIS cancer

Published by the University of Southern California || Spring 2010

# report

## A Faster Road to Recovery

*Runner Ron Sobel was back on track  
within weeks of robotic surgery for the  
treatment of prostate cancer.*



**USC**  
**NORRIS**  
COMPREHENSIVE  
CANCER CENTER  
AND HOSPITAL

*Inside:* Tea Time at USC Norris, page 6 || Genetic Alterations May Hold Key to New Therapies, page 16  
Division of Hematology Names New Leader, page 18 || Cancer Basics: Lymphedema 101, page 24



**ON THE COVER**

**8**  
**The Marvels of Mechanical Medicine**

*How robots are transforming the surgical treatment of cancer at USC.*



**FEATURES**

**6**  
**Time for Tea**

*Weekly gatherings offer a social hour for patients and their families at the USC Norris Cancer Hospital.*

**16**  
**Genetic Alterations May Hold Key to New Therapies**

*Michael Press, M.D., Ph.D., searches for therapeutic solutions to breast and gynecological cancers.*



**PROFILES**

**14**  
**Nurturing Discovery**

*Joyce Cammilleri helps support research at the USC Norris Comprehensive Cancer Center.*

**18**  
**Building on a Promise**

*Prominent hematologist recruited to head Jane Anne Nohl Division of Hematology and Center for the Study of Blood Diseases.*

**20**  
**A Natural Fit**

*Following a childhood dream, an oncology nurse makes a career out of caring.*

**DEPARTMENTS**

**2**  
**Upfront News**

*Noteworthy faculty and staff research, announcements and events.*

**22**  
**Development News**

*Fundraising activities and opportunities at the USC Norris Comprehensive Cancer Center and Hospital.*

**24**  
**Cancer Basics**

*Lymphedema 101: Information on this common side effect of cancer treatment.*

**USC NORRIS  
 CANCER REPORT**

*A publication of the USC Norris Comprehensive Cancer Center and Hospital*

The USC Norris Cancer Hospital is affiliated with the USC Norris Comprehensive Cancer Center, one of the original eight Comprehensive Cancer Centers as designated by the National Cancer Institute. The USC Norris Comprehensive Cancer Center is part of the Keck School of Medicine of USC.

**Executive Editors**

*Mitch Creem, M.H.A.*  
 Chief Executive Officer,  
 USC Norris Cancer Hospital and  
 USC University Hospital

*Peter A. Jones, Ph.D., D.Sc.*  
 Director,  
 USC Norris Comprehensive  
 Cancer Center

*Carmen A. Puliafito, M.D., M.B.A.*  
 Dean, Keck School of  
 Medicine of USC

*Jane Brust*  
 Associate Senior Vice President,  
 USC Health Sciences  
 Public Relations & Marketing

*Ina Fried*  
 Executive Director,  
 Communications and Marketing

**Editor**  
*Katie Neith*

**Contributors**  
*Cheryl Bruyninckx, Meghan Lewit,  
 Jon Nalick, Monica Padilla, Sara Reeve,  
 Leslie Ridgeway, Health Sciences  
 Public Relations & Marketing*

*Carrie St. Michel and Jessica Ogilvie*  
 Freelance writers

*Brittany De La Torre, Janet Morgan,  
 Tina Pakfar, Tonya Strom*  
 USC Norris Office of Development

**Business Manager**  
*Elaine Sawitskas*

**Distribution**  
*Eva Blaauw and Carol Matthieu*

**Graphic Design**  
*Lime Twig Group*

**Printer**  
*Color Graphics*

**Cover Photography**  
*Van Urfalian*

**USC NORRIS  
 ADVISORY BOARD**

*Harlyne J. Norris\**  
 Chairman

*Lorna Reed\**  
 Vice Chairman

*Stacy Bratcher*  
 Secretary

*David F. Brubaker*

*Glenn L. Carpenter*

*William G. Corey, M.D.*

*Marshall Ezralow*

*Quinn Ezralow*

*Larry J. Freeman*

*Tom Fuelling*

*Peter A. Jones, Ph.D., D.Sc.*  
 Director,  
 USC Norris Comprehensive  
 Cancer Center

*Lawrence W. Kelly*

*Marion Laurie*

*Scott Laurie*

*Elena Loreda Velarde*

*Hook McCullough*

*Jerry W. Neely\**

*Arlene Ray*

*Art Ulene, M.D.*

*Joseph P. Van Der Meulen, M.D.*

**Ex-officio members**

*Mitch Creem, M.H.A.*

*Carmen A. Puliafito, M.D., M.B.A.*

\*indicates a member of the  
 USC Board of Trustees

**HELPFUL NUMBERS:**  
 For patient appointments  
 with The Doctors of USC,  
 call 1.800.USC.CARE

For USC Norris Cancer  
 Hospital information,  
 call 1.800.700.3956

For information on  
 making a gift to USC Norris,  
 call 323.865.0700



The USC Norris Comprehensive Cancer Center is one of 40 centers in the United States designated by the National Cancer Institute, part of the National Institutes of Health. Information contained within this report is not intended to replace medical or other professional advice and counsel. Permission to reprint articles with attribution is freely given. No artwork may be reproduced without the artist's consent. Our mailing list comes from several sources. If you receive

duplicate copies of this report, please send us all the label information and we will strive to eliminate the duplication. Direct inquiries to USC Health Sciences Public Relations & Marketing, 1975 Zonal Avenue, KAM 400, MC 9029, Los Angeles, CA 90033, Phone: 323.442.2830, Fax: 323.442.2832.



Bill Youngblood

The Norris Inpatient Tower at USC University Hospital

## Norris Inpatients Now Served at USC University Hospital

In an effort to expand and improve patient care facilities, USC University Hospital began treating all USC Norris Cancer Hospital inpatients and handling all Norris surgical cases on March 1.

The move is part of a larger initiative to provide enhanced facilities for all patients at USC hospitals—starting with the opening of the Norris Inpatient Tower at USC University Hospital to treat USC Norris Cancer Hospital inpatients.

“This is really about providing the best possible opportunities for improved facilities for our patients,”

said hospitals CEO Mitch Creem, M.H.A. “By caring for our cancer patients at USC University Hospital, we will finally have the opportunity to treat patients in the brand new, state-of-the-art Norris Inpatient Tower. At the same time, we’ll also have a chance to look at the best possible ways to utilize our Norris facilities in the future for our patients.”

All outpatient services will continue to be provided at the USC Norris Comprehensive Cancer Center and Hospital building.

The Norris Inpatient Tower was completed in 2007 but has been virtually unused

since then. It recently underwent renovations, including a telemetry system upgrade and new hand-washing sinks on the floors for staff and physicians.

“The new Norris Inpatient Tower is designed around private rooms with all the amenities,” said Julie Croner, executive administrator for USC Norris Cancer Services. “And what’s even more important is that our patients will be cared for in the most comfortable surroundings by the same nurses and physicians they’ve grown to trust.”

*“This is really about providing the best possible opportunities for improved facilities for our patients.”*

## CHLA AWARDED \$4.7 MILLION GRANT FOR LEUKEMIA PROGRAM

The Bogart Pediatric Cancer Research Program has awarded a five-year \$4.7 million grant to support the Childrens Center for Cancer and Blood Diseases (CCCBD) and the creation of the Bogart Leukemia Research Program at Childrens Hospital Los Angeles, an affiliate of the Keck School of Medicine of USC.

The grant also will support 25 scholarships and personal laptops for pediatric cancer survivors entering college.

Stuart E. Siegel, M.D., director of the CCCBD and professor and vice chair of pediatrics at the Keck School, and Robert C. Seeger, M.D., a physician-researcher with the CCCBD and professor of pediatrics at the Keck School, will direct the research being funded.

Over the past 25 years, the Bogart Program has awarded nearly \$27 million for cancer research at Childrens Hospital Los Angeles.

“The Bogart Pediatric Cancer Research Program has been critical to our efforts to find new treatments for children with cancer,” Siegel said. “Their support allows us to rapidly move new discoveries in the lab to the bedsides of young patients, and has led to a number of major advances in treating and curing pediatric cancers.”

## Longtime USC Norris Cancer Hospital Volunteer Celebrates 100th Birthday



Brook Photography

Ruth Dunn volunteering at a USC Norris event

USC Norris Cancer Hospital’s longest tenured volunteer recently turned 100.

Ruth Dunn, who has been volunteering at USC Norris Cancer Hospital for nearly 25 years, became a centenarian on Jan. 5. She celebrated her birthday in style at a Jan. 10 luncheon at the Edmondson Faculty Center with her Norris friends.

“Ruth is a great example for all of us,” said Alicia

Syres, director of volunteer services at the hospital.

She started out as a volunteer in the gift shop in 1985, but problems with her eyesight made it difficult for Dunn to continue working there. So she found another way to lend a helping hand.

Dunn began making lavender sachets for patients, and more recently began preparing small keepsake boxes for the patients. To

date, she has volunteered more than 7,000 hours.

Syres said Dunn helps to provide “that extra special touch that helps us further our mission here at Norris.”

Dunn said, “I’ll do anything that the Norris wants me to do. I just love it there and it’s nice to be surrounded by such wonderful people.”

## National Cancer Institute Awards USC Epigenome Center \$10.4 Million

The USC Epigenome Center has received a \$10.4 million National Cancer Institute (NCI) grant that is expected to pave the way for more effective treatment for cancer patients.

The grant to the USC Epigenome Center, affiliated with the USC Norris Comprehensive Cancer Center and the Keck School of Medicine of USC, will fund a collaborative effort with Johns Hopkins University to collect epigenomic data from all major types of cancer over the next five years.

The epigenomic data collected will contribute to

The Cancer Genome Atlas, a long-term genome characterization and sequencing project funded by the NCI and National Human Genome Research Institute.

“The data we produce and analyze will lead to new targets for drug development and a better understanding of why some patients respond better to certain drug treatments than others,” said Peter W. Laird, Ph.D., USC Epigenome Center director and co-principal investigator.

The Cancer Genome Atlas will produce and analyze data on several types of molecular



Van Urjidian

From left, Peter Jones, Ph.D., D.Sc., and Peter W. Laird, Ph.D.

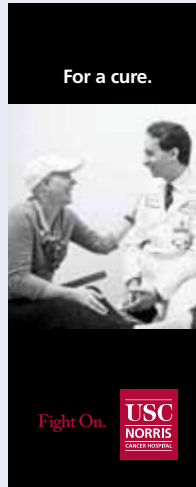
changes, including mutations, chromosomal copy number alterations and gene expression. The USC Epigenome Center will be responsible for all epigenetic data production.

“The Cancer Genome Atlas will look at as many as 500 different samples of tumors and tissues from each cancer type to map the

diversity of molecular changes within and between the different types of cancer,” said Peter Jones, Ph.D., D.Sc., director of the USC Norris Comprehensive Cancer Center and co-investigator on the grant. “It’s a huge operation and a wonderful boost to our cancer research program.”



## USC Launches Major Hospital Marketing Campaign



The two USC-owned hospitals are now telling Los Angeles how their physicians and staff Fight On for their patients in a new multi-media marketing campaign launched on Jan. 6. Designed to create awareness of and preference for the USC Norris Cancer Hospital and USC University Hospital among consumers, the campaign incorporates a mix of billboards, radio spots and print and online advertising.

“USC University Hospital and USC Norris Cancer Hospital are two of the best kept secrets in Los Angeles,” said hospitals CEO Mitch Creem, M.H.A. “We’re making a long-term commitment to market the hospitals and to enhance USC’s reputation in key centers of excellence.”

The USC Norris Cancer Hospital and USC University Hospital brands reflect the existing culture of the hospitals as shaped and embodied by hospital employees and the Doctors of USC, who fight on every day for their patients and, through research, for the discovery of the next medical breakthrough.

The campaign was created by Swanson Russell—an Omaha-based advertising agency specializing in health care marketing—in collaboration with the USC Health Sciences PR and Marketing office.

*“We’re making a long-term commitment to market the hospitals and to enhance USC’s reputation in key centers of excellence.”*

## NEW CANCER RESEARCH PROGRAM TO BE BASED AT USC

USC has been selected to establish a \$16 million cancer research center as part of a new strategy against the disease by the U.S. National Institutes of Health and its National Cancer Institute.

The five-year award will create a National Cancer Institute Physical Science-Oncology Center based at USC and involving a consortium of universities. The new center is one of 12 in the nation to receive the designation as a Physical Science-Oncology Center.

The five-year grant will allow the USC center to focus on creating a set of “virtual cancer” models based on measurements from individual cancer patients. The models then would be used to simulate cancer growth and predict drug responses for each patient.

“The center brings to USC a network of scientists from multiple disciplines to try and control cancer with new ideas,” said David Agus, M.D., senior scientific investigator on the grant, professor of medicine at the Keck School of Medicine and director of the USC Center for Applied Molecular Medicine and the USC Westside Prostate Cancer Center.

Noted technology innovator and entrepreneur W. Daniel Hillis, Ph.D., research professor of engineering at the USC Viterbi School of Engineering and professor of research medicine at the Keck School of Medicine, is the principal investigator for the effort.

“This funding allows us to bring together a unique team of physicists, mathematicians, engineers and biologists to work together with physicians on the understanding and treatment of cancer,” said Hillis, who is also co-chairman of Applied Minds Inc. and a former Disney Imagineering executive.

The USC-led consortium will develop a single, integrated, virtual cancer model that describes cancer’s complexity from the smallest interactions at the molecular-cellular level to large-scale phenomena of how a tumor interacts with its host.

## Renowned Breast Surgeon Stephen Sener Joins USC

Stephen Sener, M.D., a renowned breast surgeon, has joined the Trojan Family to serve as chief of the division of surgical oncology and as a part of the USC Norris Comprehensive Cancer Center and Hospital. Sener, who also serves as professor of clinical surgery at the Keck School of Medicine of USC, came to USC from Northwestern University in Chicago.

He also served as national president of the American Cancer Society (ACS) in 2004-2005. Sener’s service as volunteer chairman of the ACS’s Cancer Incidence and End Results Committee facilitated evolution of the concepts of quality care and health care access. The work also led to the development of the National Cancer Database.

“Dr. Sener has a strong background in administrative leadership, surgical oncology and the ability to facilitate cross-functional program development,” said Carmen A. Puliafito, M.D., M.B.A., dean of the Keck School. “I think he will be an outstanding addition to the Department of Surgery.” As chief of the division of surgical oncology in the Department of Surgery, Sener hopes to augment the breast cancer screening and clinical care program at USC, both on the main medical campus and in the greater Los Angeles community, among other priorities.

“I want to strengthen a clinical and basic research program that will be integrated with breast cancer clinical care, and develop



Geoff Johnson

multidisciplinary programs that are designed to screen general and high-risk populations for cancer

and to facilitate care of newly diagnosed patients with USC physicians,” said Sener.

*“Dr. Sener has a strong background in administrative leadership, surgical oncology and the ability to facilitate cross-functional program development.”*

## Hospitals Join Distinction Centers for Complex and Rare Cancers

USC Norris Cancer Hospital and USC University Hospital are now part of the Anthem Blue Cross Blue Distinction Centers for Complex and Rare Cancers. The hospitals received this group designation after a rigorous application process. This accomplishment demonstrates that the hospitals have met or exceeded the criteria necessary to be designated a Blue Distinction Center for Complex and Rare Cancers and reliability in delivering complex and rare cancer care with better outcomes for our patients.

# TIME *for* TEA

*Weekly gatherings offer a social hour for patients and their families at the USC Norris Cancer Hospital*

BY KATIE NEITH



Photos by Van Urjadian

USC Norris volunteers Jane Morita and Pat Lem offer tea, treats and smiles to patients and their families.



**AFTERNOON TEA** has been a familiar practice in many cultures for centuries. Over the past six years, volunteers and dietary staff at the USC Norris Cancer Hospital have forged a tradition of their own—Friday tea service for patients and their families or friends.

As part of the program, volunteers invite patients to spend some time with family, friends and their fellow patients in the clinic waiting area. They set up a cozy, genial atmosphere, complete with china, linen tablecloths, teapots, fresh flowers and cookies.

USC Norris volunteers Pat Lem and Jane Morita have been serving tea to participants for over five years. Both women share a history with the USC Norris Hospital—their husbands were treated there for cancer.

“My husband received really great care and the attitude at Norris was so different than other places,” says Lem, who decided to volunteer at USC Norris shortly after her husband passed away. She remembers what it’s like to spend time in the hospital with a loved one.

“Sometimes, you forget to eat or you need a break,” she says. “We can offer both patients and their families some comfort. It’s a nice feeling that there is something extra available to look forward to. The tea service can be a good diversion to keep your mind off the seriousness of cancer.”



The weekly program is run as a collaboration between USC Norris Food and Nutrition Service and USC Norris Volunteer Services. Food and Nutrition Services ensure that quality baked goods and teas are served and also provide the teapots, china and fresh flowers that help brighten the area.

In addition to tea service, Ruth Dunn, a 100-year-old USC Norris volunteer (See story on page 3), makes sachets from lavender that she grows in her own garden for each patient attending the teas. She also makes keepsake gift boxes that are wrapped in bows and come with a message of hope and love.

“I think it’s a pleasant surprise to many of the patients and the families, and it lets them know that we are there for them,” says Alicia Syres, director of volunteer services at USC Norris. “We are there week after week, and whoever wants to take advantage of the service is welcome to join us.”

The tradition was the brainchild of Syres and Marta Shand, a former food nutrition director at the hospital. With the help of a USC psychology major and volunteer, Jessica Lewis, and donations from the USC Norris Auxiliary, the plan to help comfort patients and families came to fruition. The program is now funded by the hospital.



*Above left: Baked goods provide a snack. Center: Lavender sachets handmade by volunteer Ruth Dunn. Right: Warm tea offers comfort as patients wait for their appointments.*

“It’s a unique service—one of the many niceties that we offer at Norris,” says Syres. “Sometimes it’s the little things that make a difference.”

For volunteers Morita and Lem, the benefit has come full circle. They are now close friends who share cooking and baking recipes, and enjoy the time they spend serving tea.

“It’s very rewarding to sit and talk with the patients and their families, and to provide this service for them,” says Morita. “I think it really gives them a break and is something they can enjoy—even if only for a short bit of time.”

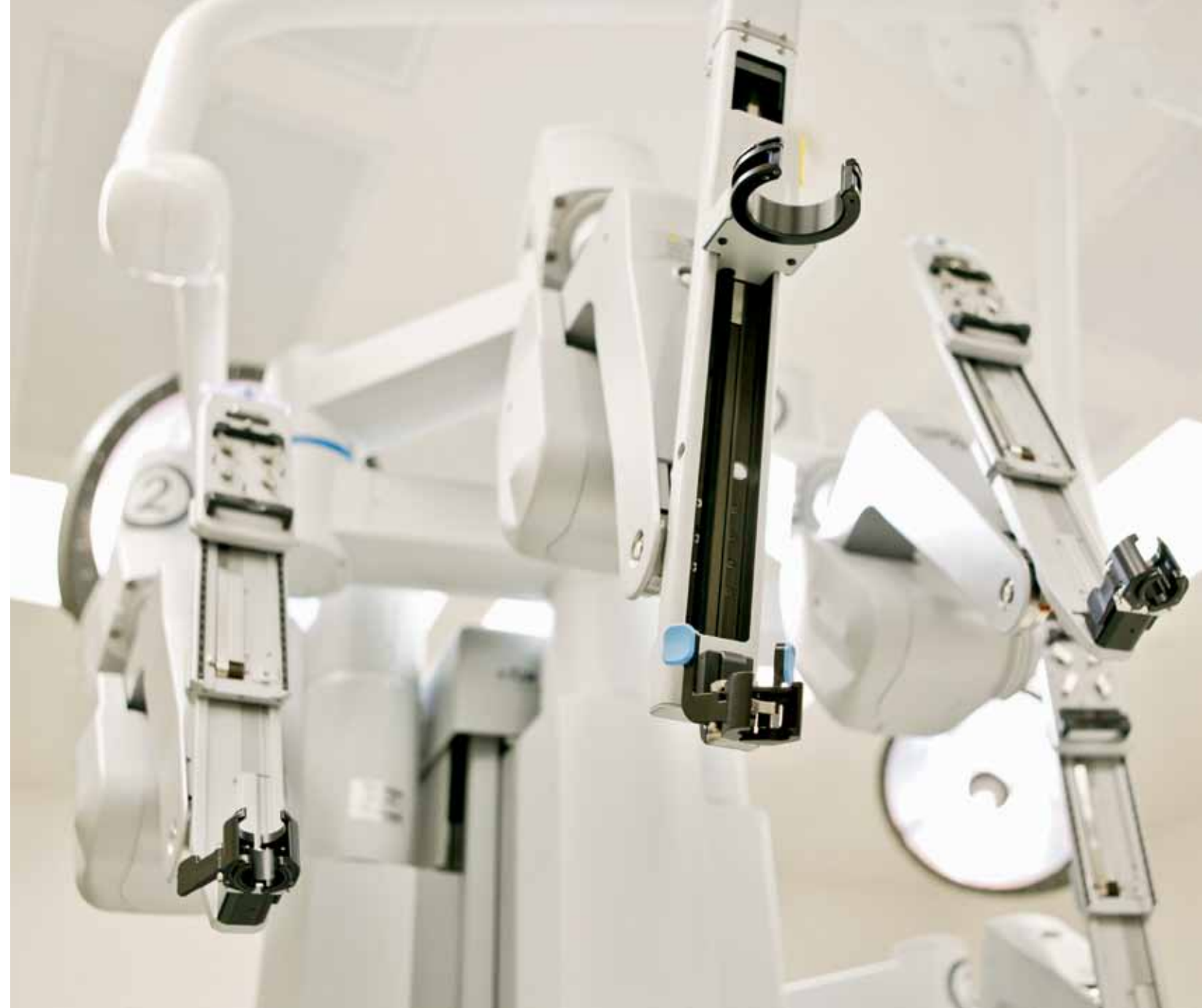
*Individuals interested donating their time as volunteers at the USC Norris Cancer Hospital should call Alicia Syres, director of volunteer services, at (323) 865-3118.*

# The Marvels of Mechanical Medicine

*How robots are transforming the surgical treatment of cancer at USC*

BY JESSICA P. OGILVIE

FOR RUNNER RONALD SOBEL, THE DIAGNOSIS OF PROSTATE CANCER AT AGE 60 WAS "A PURE NIGHTMARE." ESPECIALLY WHEN HIS PRIMARY UROLOGIST TOLD HIM IT WAS SPREADING QUICKLY, AND THAT HE HAD EIGHT WEEKS TO MAKE A TREATMENT DECISION. | "THE HELL YOU LIVE IN FOR THOSE WEEKS IS THE QUESTION OF DECIDING WHETHER YOUR PRIMARY GOAL IS ERADICATING CANCER OR HOPING TO MINIMIZE SIDE EFFECTS," SAYS SOBEL. "THAT'S A REALLY TOUGH DECISION, AND THAT WAS THE WORST PART OF THE WHOLE EXPERIENCE."



Photos by Van Urfrilian

Top: The four interactive robotic arms of the da Vinci surgical system hold and reposition surgical instruments and a camera during surgery. Bottom, left: The console where the surgeon works, using hand controls and foot pedals to remotely manipulate the robot's arms with very high precision. Middle: When looking through the two lenses, the console provides a highly magnified 3D image of the body's interior. Right: A view of the entire patient cart with robotic arms.

Fortunately, he was referred by a cancer survivor to Inderbir S. Gill, M.D., M.Ch., founding executive director of the USC Institute of Urology, who made the decision-making process easy.

“Once I met with Dr. Gill and got a sense of his confidence, his competence and his assurance that he would eradicate the cancer, I came to terms with it,” says Sobel. “I made the choice that if I could be cancer-free, I would be.”

And cancer-free he is. Just a few weeks post-surgery, Sobel was back in the swing of things—running, gardening and feeling good—with minimal side effects.

#### ROBOTS IN THE OR

In the ever-evolving world of medical technology, doctors and researchers are constantly seeking the next big development that will improve the patient experience. At USC, surgeons have forged ahead with the robotic surgery technique that only a few years ago may have seemed like science fiction.

Sobel is one of many prostate (and other) cancer patients who have relied on robotic surgery to treat their disease.

The *da Vinci* robot, the only robot that has been approved by the Food and Drug Administration for surgical use, is not a human-like thinking and feeling robot that may spring to mind. Rather, it's a machine that is controlled remotely by an operating surgeon. The robot acts, in some ways, as a very high-tech assistant.

---

---

“Wristed movements add the dimension of high maneuverability, and that translates into excellent surgical technique.”

—INDERBIR S. GILL, M.D., M.CH., FOUNDING EXECUTIVE DIRECTOR OF THE USC INSTITUTE OF UROLOGY



Leaders in robotic surgery at USC Norris: Niels C. Kokot, M.D., Inderbir S. Gill, M.D., M.Ch., and Laila I. Muderspach, M.D.

By mimicking, with staggering precision, every minute movement of a surgeon's hands, the robot has ushered in a new era of surgical excellence.

“The robot allows us to deliver high precision in a minimally invasive environment,” says Gill, whose team at the USC Institute of Urology is a world leader in urological robotic and laparoscopic cancer surgery.

Traditionally, surgeons have performed open surgery when treating cancer, using large incisions to allow for a surgeon to place his hands in the operating area. Over the past 20 years or so, however, minimally invasive laparoscopic surgery has become increasingly utilized for certain surgeries.

Robotic and laparoscopic surgery involves making four to five small key-hole cuts, each about one centimeter long. Through these incisions, a surgeon inserts a high-resolution camera called a laparoscope, and long, thin tubes called trocars that hold small replicas of traditional surgical instruments. The surgeon is then able to navigate the operating area in a far less invasive manner, and patients experience significantly less pain and a shorter recovery period.

#### A CLOSER LOOK

Sitting at a robotic console several feet away from the patient, the surgeon looks into a lens that provides a three-dimensional view of the operating area. He or she then uses hand controls and foot pedals to remotely manipulate the robot's four arms, which hold instruments that are very similar to laparoscopic instruments.

Through the lens, the surgeon has the ability to magnify the image, and the movements of the instruments—already incredibly precise—can be scaled to match the needs of the operation. The robot's arms also automatically correct for surgical tremor, providing a superb operating platform.

The robot's arms are equipped with wrists, which may be one of the most significant advantages of the robot.

“Wristed movements add the dimension of high maneuverability, and that translates into excellent surgical technique,” says Gill, who also serves as chairman and professor of the Catherine and Joseph Aresty Department of Urology and associate dean of clinical innovation at the Keck School of Medicine of USC.

Depending on the complexity of the procedure, operations generally take several hours, yet blood loss is minimal and blood transfusions are quite rare. Since the incisions do not involve cutting the muscle, patients typically require less pain medication than those treated by traditional surgery, and can often be out of the hospital in one to two days. A full recovery is often achieved in two to four weeks.

“Robotic surgery was the least invasive choice for me, and I'm thrilled with the results,” says Sobel. “Two to three weeks after surgery, I was back to my rigorous daily activities.”

#### GAINING MOMENTUM

While robotic surgery is growing in popularity among surgeons, news of the technique has also reached the public. At USC Norris, patients routinely request and undergo robotic surgery for cancers of the kidney, bladder, prostate and uterus.

“The patient acceptance of robotics is exceedingly high,” says Monish Aron, M.D., professor and co-director of robotic and advanced laparoscopic urology in the USC Institute of Urology. “In part, patient demand is what has fueled the incredible growth in robotic surgery.”

As far as safety, the robot poses no additional risks than traditional surgery. “Studies have really shown it to be safe,” says Niels C. Kokot, M.D., assistant professor in the Department of Otolaryngology, Head and Neck Surgery at the Keck School of Medicine.

In the highly unlikely event of even a minor robot malfunction, the entire system would simply shut down, and the surgeon would finish the operation laparoscopically.

For the past several years, USC has been home to three robots. Located at USC University Hospital, the robots serve as a shared resource to also treat cancer patients of the USC Norris Cancer Hospital.

#### A CENTER OF EXCELLENCE

The most common use of the robot at USC is in urology. The USC Institute of Urology robotic and laparoscopic team, which consists of five specialized surgeons, is one of the most experienced in the world.

“We are doing almost all major abdominal urologic surgery robotically,” says Gill. “Our five urologic surgeons perform robotic surgery on a daily basis.”

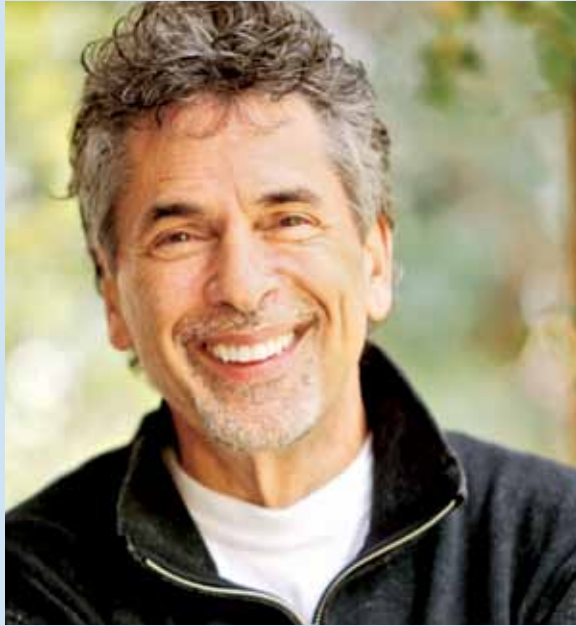
In addition to robotic surgery for prostate and kidney cancer, the institute also offers the procedure for bladder cancer, and is working toward developing robotic surgery for testes cancer as well.

For the treatment of prostate cancer, the key issue in terms of post-operative quality of life for the patient is regaining potency and continence, which can be done through preserving delicate nerves and sphincter muscles around the prostate. The innovative techniques pioneered by USC Institute of Urology surgeons have shown great results; most patients recover urinary control within six months, if not sooner, and 86 percent recover potency within the year.

“Dr. Gill's nerve-sparing wizardry worked great on me,” says Sobel. “I have blood flow where I'm supposed to have blood flow and continence is under control. Life is good.”

When treating kidney cancer less than 7 centimeters in size, the surgeon often (but not always) is able to salvage the organ by performing a partial nephrectomy, in which only the tumor with a trim of the surrounding organ is removed. Since cancer prevention and early detection has advanced in recent years, 70 percent of kidney tumors are now diagnosed at four centimeters in diameter or less—an ideal size for robotic removal, says Aron.

## A Faster Road to Recovery



**RONALD SOBEL, 60**, never thought twice about his active lifestyle. A runner who exercised daily and gardened “aggressively,” he says his energy hadn’t waned throughout his adult life. So when he was recently diagnosed with prostate cancer, it was shocking. “I’m young and I’m active,” says Sobel.

After meeting with Inderbir S. Gill, M.D., M.Ch., of the USC Institute of Urology, Sobel opted to have robotic surgery to remove his prostate and lymph nodes. He expected to be off his feet for months, maybe even years.

Instead, “I’m back up to running and walking 60-70 minutes a day,” he says. “I’m working in the garden, doing heavy lifting, digging, building and climbing in trees.” Robotic surgery not only spared his nerves, but the small incisions and quick recovery time got him back on track within three weeks of surgery.

In addition, the choice of robotic surgery was a particularly lucky one for Sobel. After removal of the prostate, post-surgery dissection of the organ found a completely separate tumor—one that had not shown up on his CT scans.

“If I had chosen radiation therapy, as I had initially thought about doing, they probably would not have found the additional tumor,” says Sobel. “I am doubly grateful that they found everything. I went for the best and brightest, and I’m thrilled with my results.”

For more information on the USC Institute of Urology, visit [www.uscurology.com](http://www.uscurology.com).

Gill suggests that soon, through the use of new robotic technology, 30 to 40 percent of patients with prostate cancer would not need to lose the prostate at all. Instead, he hopes to be able to remove only the tumor, in a procedure that would be similar to a lumpectomy in breast cancer patients. And Gill is hopeful about the timeframe. “We anticipate we will be able to pull this off within the year or so,” he says.

Laila I. Muderspach, M.D., chair of the Department of Obstetrics and Gynecology at the Keck School, has been using the robot for hysterectomies, uterine cancers, gynecological malignancies and cervical cancer, as well as lymph node sampling, in which the lymph nodes surrounding a malignant tumor are screened for cancerous cells. While robot-assisted surgery isn’t always indicated for gynecological cancers, when it’s appropriate, the benefits to both patient and surgeon are many.

“I recently operated on a patient with uterine cancer,” says Muderspach. “We did a hysterectomy, lymph node sampling...it was all robotically assisted, and the instrumentation made it much easier.” As with most robotic surgery patients, the woman was out of the hospital the next day and back to work within two weeks.

### PRACTICE MAKES PERFECT

Surgeons who wish to incorporate the robot into their practice are required to take a training course to become certified in the use of the *da Vinci* robot. At the training, participants learn about the machine and its capabilities, and then practice performing different maneuvers.

When the surgeons return to work, they are often mentored during their first few surgeries using the robot. At USC, mentoring is particularly rigorous, says Muderspach. Only after proving competency are surgeons permitted to perform robotic surgeries unsupervised.

Mihir M. Desai, M.D., director of robotic urology at the USC Institute of Urology, emphasizes that even after completing the training, practice still makes perfect.

In keeping with their leadership position, USC urologists teach courses and workshops focused on robotic surgery. This year, USC will be at the forefront of continuing education in robotics, offering workshops out of the institute including “Step-by-Step Robotic Surgery: Kidney, Prostate and Bladder” and “Advanced Robotic/Laparoscopic Urologic Oncology.”

### A NEW APPLICATION

While the urology and gynecology departments are currently seeing the most patients for robotic-assisted surgery, the hospital has recently added treatment of head and neck cancer to the list, using TransOral Robotic Surgery (TORS).



*Inderbir Gill, M.D., M.Ch., sits at the da Vinci surgical system console, where every movement of his hands is mimicked by robotic arms on the patient cart just a few feet away.*

According to Kokot, cancers of the mouth and throat are traditionally treated surgically by making a large incision through the jaw or lip, in order to have a direct view of the cancer. The surgical site then has to be repaired by taking skin or muscle from a different part of the body and putting it into that area.

Use of the robot eliminates the need for the large incision, and allows for major improvements in recovery. Most patients who have robotic surgery “don’t need tracheostomy tubes, and often times don’t even need a gastrostomy tube, which is the feeding tube in the stomach,” says Kokot.

The *da Vinci* robot was only recently approved by the FDA for TORS and Kokot is currently the only surgeon in the Los Angeles area using robotic surgery for this application.

“I am very excited to be offering TORS as a way of treating my patients here at USC,” he says. “I feel that the technology provided by the *da Vinci* robot allows for the removal of tumors that are otherwise very difficult to access. Being able to remove some of these cancers through the mouth, without large incisions, will have a major advantage in terms of functional recovery.”

While the benefits of using robot-assisted surgery when implicated are clear, surgeons seem to be in agreement that it’s not necessarily better for all types of surgery, or the only option.

“Robotic surgery simply adds another dimension to the spectrum of cancer treatments available,” says Muderspach.

“Everything has a place and a time,” adds Gill, who points out that the individual needs of each patient are evaluated in order to make the best treatment choice for that patient.

### FUTURE GOALS

To hear a USC doctor discuss the future of robotic surgery is like listening to a Hollywood executive outline a screenplay for a futuristic movie.

“We are evaluating microrobotics, where literally we could put self-navigating robots inside the abdomen and direct them with external devices,” says Gill. He adds that single-port robots are on the horizon, which would allow the entire procedure to be performed exclusively through the belly button, leading to scar-free surgery.

“Robotic surgery simply adds another dimension to the spectrum of cancer treatments available.”

— LAILA MUDERSPACH, M.D., CHAIR OF THE DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

Muderspach envisions a future in which patient and surgeon could literally be in two different locations, and surgery could be performed not feet away but miles away.

“Consent would be a major issue,” she says, and regulatory issues would need to be worked out ahead of time. Still, the idea of remote surgery using robotics is not that far-fetched and has been tested by a handful of surgeons around the globe.

For those who pioneer the field of surgery, robotics is clearly leading the way in the advancement of surgical techniques for cancer and other diseases.

“USC is now at the forefront of cutting-edge robotic surgery,” concludes Gill. “Through continuous innovation, research and discovery, we are passionate about improving our patients’ quality and quantity of life after surgery.”

*For more information, or to make an appointment, call The Doctors of USC at (800) USC-CARE.*

# Nurturing Discovery

By Sara Reeve

AS A FORMER SCHOOLTEACHER, JOYCE J. CAMMILLERI KNOWS THAT ENCOURAGEMENT AND NURTURING CAN STIMULATE THE MIND AND INSPIRE GREATNESS. SHE HAS TURNED THAT DESIRE TO FOSTER NEW IDEAS INTO SUPPORT FOR SCIENTIFIC RESEARCH AT USC NORRIS COMPREHENSIVE CANCER CENTER.

**"I BELIEVE USC** has the unique capability of bringing the results of their research to patients faster than any other institution," says Cammilleri, who has been a donor to the USC Norris for the past two years.

"I have personally witnessed the sense of camaraderie between the doctors, scientists and other staff," she says. "I know that all successful ventures rely upon open communication and teamwork—I love the way that USC is structured in that there are so many ongoing projects which cross over into other areas of research. There is a great sense of collaboration and teamwork."

The youngest in a family of seven children from a rural farming community in South Dakota, Cammilleri taught for more than 20 years. With the arrival of her three children, she became a full-time mother. Once her children were in school, she and

her husband created JOICO Laboratories, a well-known hair care product company. When JOICO was sold in 2001, she realized she was in the fortunate position to begin supporting causes she found important.

"I haven't forgotten how many people believed in me and in my vision and invested their time, talent and money into my dreams," she says. "I felt as if I had an obligation to make that same contribution to others, and with research, the dreams are unlimited."

A family connection to the medical field sparked Cammilleri's interest in health care research and advancement. In the mid-nineteenth century, her great-grandmother, Elisabetha, was a practicing physician in a small town in Russia. This familial history of caring for others directed Cammilleri to do what she could through philanthropy.

Her most recent financial gift has been directed to the USC Norris Comprehensive Cancer Center to fund both general cancer research, as well as the USC Epigenome Center, led by Peter Laird, Ph.D.

"Donors like Mrs. Cammilleri ensure that innovative and groundbreaking research can continue here at USC Norris," says Peter Jones, Ph.D., D.Sc., director of the USC Norris Comprehensive Cancer Center. "Her gifts have helped scientists enhance our understanding of cancer and the potential of new areas of research like epigenetics."

Epigenetics is the study of changes in gene silencing affected by the epigenome, a series of chemicals that attach to DNA and get genes to stop and start without actually changing the fundamental genetic information. The USC Norris Comprehensive Cancer Center has become a nationally recognized leader in this emerging field. Researchers and clinicians at USC Norris Comprehensive Cancer Center and USC Norris Cancer Hospital are working to prove that the epigenome, a layer of biochemicals that direct the DNA, plays a major role in cancer, and that epigenetic drugs and therapies have the potential to make real impact on patients' lives.

"I believe Dr. Jones and Dr. Laird are really taking their research into the next level of distinction, and it is my hope this research will not only benefit cancer, but all diseases,"



says Cammilleri. "I am very excited to be able to contribute to valuable work, and to support people who are devoting their lives to the betterment of society. I consider my ability to support USC a privilege."

Cammilleri has given her family an example of generosity that she hopes will inspire giving of all levels. "I spent so much of my earlier life concentrating on working, building, creating, raising my children—I didn't really expect to be in the position of being able to help others in this way," she says. "In and of itself, [philanthropy] is a beautiful thing. We

are all able to give, though obviously we give in different ways."

Although she has been a long-time resident of the Los Angeles area, Cammilleri retains the small-town value of helping a neighbor in need. According to Cammilleri, she looks at giving to USC as a way to invest in her community and in local talent.

"Consider the unique environment USC provides—ongoing cutting edge research, the best of medical care and a long history of service to the community," she says. "All

Angelenos have benefited from the excellence of USC. Just knowing we have a place like this, which is so accessible to so many, offers each one of us a sense of security and hope."

---

*For more information on how to support the USC Norris Comprehensive Cancer Center and Hospital, visit [uscnorriscancer.usc.edu/support/](http://uscnorriscancer.usc.edu/support/), or call (323) 865-0700. To learn more about the USC Epigenome Center, go to [epigenome.usc.edu](http://epigenome.usc.edu).*

*"I spent so much of my earlier life concentrating on working, building, creating, raising my children—I didn't really expect to be in the position of being able to help others in this way. In and of itself, (philanthropy) is a beautiful thing. We are all able to give, though obviously in different ways."*

Vin Urfulian

# GENETIC ALTERATIONS MAY HOLD KEY TO NEW THERAPIES



*For more than two decades, Michael Press has been searching for therapeutic solutions to breast and gynecologic cancers. It's been a long road, but he's more optimistic than ever that a steady stream of therapies will soon be bedside bound.*

BY CARRIE ST. MICHEL

"IT'S A LITTLE BIT OFF MY BEATEN PATH," observes Michael F. Press, M.D., Ph.D., co-leader of the Women's Cancer Program at the USC Norris Comprehensive Cancer Center and the Harold E. Lee Chair in Cancer Research. Press, also a professor of pathology at the Keck School of Medicine of USC—which he joined in 1988—was referring to his laboratory's co-investigator status on a new research study.

Funded by a nearly \$20-million California Institute for Regenerative Medicine (CIRM) grant that's shared with labs at two other California universities, the study's goal is to determine which of several compounds most effectively destroys cancer stem cells specific to colorectal, brain and ovarian cancer. After more than 20 years of focusing almost exclusively on breast and gynecologic cancers, Press views this most recent research path as new terrain.

While this latest research focus represents something of a departure, the Press team is bringing proven techniques to the table.

"We've developed methods for identifying therapeutic targets after cells become cancerous, and these same methods will now be applied to these three types of solid tumors and these new targets," Press notes.

In the current study, the targets are cell-cycle-regulatory proteins with which these investigators will purposefully interfere by introducing compounds designed to disrupt completion of the cell cycle.

"Based on the data to date," says Press, "these compounds appear to disrupt cancer cells much more than they do normal cells." One of the study's primary targets is called polo-like kinase 4. "When you inhibit polo-like kinase 4 with new drugs developed by the team, the cancer cells die," he explains.

The research team, composed of investigators at three California universities (UCLA, USC and Stanford) and one Canadian university (University of Toronto), will hone in on



drugs possessing the most promising inhibitory abilities, and from there Press anticipates a translational fast track.

"In about two years, we expect to file an investigational new drug application for the polo-like kinase 4 compound and, at that point, early clinical trials can begin," he says.

Press expects that the second drug they're studying will hit similar milestones the following year. The overriding goal, says Press, is to get these drugs to patients by the grant's conclusion in 2014.

In addition to the CIRM-funded study, Press, in collaboration with the Cancer International Research Group, and his lab colleagues are currently screening women with HER2-positive breast cancer for participation in an international clinical trial. Officially titled the "BETH Study: Treatment of HER2 Positive Breast Cancer With Chemotherapy Plus Trastuzumab vs. Chemotherapy Plus Trastuzumab Plus Bevacizumab," the trial will assess the additional benefit of combining the latter two drugs with chemotherapy in the treatment of early breast cancer.

Always managing a full research plate, Press also recently presented results at national scientific meetings of a study his team completed last year. The study involved analyzing nearly 5,000 breast cancer tumor



Michael Press, M.D., Ph.D., reviews the pathology of a breast carcinoma at his microscope.

samples for alterations in the topoisomerase II-alpha gene (TOP2A) and the protein HER2. Approximately 35 percent of HER2-amplified breast cancers have co-amplification of the TOP2A gene, which encodes an enzyme that's a major target of anthracycline-based chemotherapy.

According to Press, the study's purpose was to determine whether TOP2A rather than HER2 gene alterations might be predictive for unique responsiveness to anthracyclines in some breast cancers. He points out that a large percentage of women with invasive breast cancer are treated with anthracycline-containing chemotherapy.

"Based on our findings, we would argue that only about 8 to 10 percent of these women will actually benefit from this therapy," says Press.

Looking ahead, Press is very optimistic. "I anticipate that a steady stream of therapies will be available at the bedside over the next five years," he says.

According to Press, the key to getting there is zoning in on genetic alterations. He points to breast cancer as an example.

"If you look at breast cancer as a series of genetic alterations, then it's a matter of understanding what those alterations are and then lining up drugs that interfere with those pathways that have been altered."

With an eye toward an endgame, Press says the goal is to identify the critical 50 to 100 alterations and the pathways that they affect. "Then we need to have drugs that reverse these breaks," he says.

With decades of research experience, Press speaks with authority when he says, "I'm very encouraged by the rate at which genetic alterations are being targeted with therapeutic agents. I'll be amazed if we don't make significant inroads in the next few years, not only in breast cancer, but in a host of other cancers as well."

Photos by Van Urghien

# BUILDING on a Promise

*Prominent hematologist recruited to head Jane Anne Nohl Division of Hematology and Center for the Study of Blood Diseases at USC Norris* BY KATIE NEITH

IN LATE 2007, a transformative gift of \$60 million was bestowed upon the division of hematology at the USC Norris Comprehensive Cancer Center. Now, the division has a new leader to pave the way for a growing clinical and research practice anchored by the donation.

Preet Chaudhary, M.D., Ph.D., is an internationally renowned physician-scientist recently recruited to serve as chief of the Jane Anne Nohl Division of Hematology and Center for the Study of Blood Diseases at the USC Norris Comprehensive Cancer Center and Hospital.

“Dr. Chaudhary is an outstanding physician scientist who will play a major role in the cancer center. He has an active basic science laboratory, as well as profound clinical skills, making him an exceptional addition to our institution,” says Peter A. Jones, Ph.D., D.Sc., director of the USC Norris Comprehensive Cancer Center.

His appointment is a major step toward fulfilling the promise of the \$60 million gift from the estate of Jane Anne Nohl. USC Norris and the division of hematology were chosen as beneficiaries based on the outstanding care that her longtime friend and estate trustee Larry Kelly received from Donald Feinstein, M.D.,

hematologist and professor emeritus of medicine at the Keck School of Medicine of USC.

“Dr. Chaudhary is a nationally recognized physician-scientist whose vision will help to develop an outstanding scientific and clinical hematologic malignancy program—particularly in leukemia, myelodysplastic syndromes and lymphoma—and to maintain and expand its outstanding reputation in thrombotic and hemorrhagic disorders,” Feinstein says.

Chaudhary, who arrived at USC on Jan. 1, calls the Nohl gift a blessing, particularly in today’s funding climate.

“It will help us recruit some of the top-notch clinical investigators in the field, as well as strong basic and translational investigators,” he says. “In addition, the gift will provide support for years to come, which will allow researchers to build on innovation and develop therapies that will have a major impact on outcomes for patients.”

Chaudhary also serves as professor in the Department of Medicine at the Keck School of Medicine of USC, and as co-leader of the Leukemia and Lymphoma Program and associate director for translational research at the USC Norris Comprehensive Cancer Center.

He came to USC from the University of Pittsburgh Cancer Institute, where he was professor of medicine, director for translational research, leader of the hematologic malignancies program and co-leader of the cancer stem cell program.

“Over the past two to three decades, there has been tremendous progress made in understanding the molecular basis of cancer, in general, and blood cancer in particular. However, the fruit of that research hasn’t reached the patient that much,” says Chaudhary. “Translational research is the area where we will apply this research to fill the gap. We want to bring the discoveries made in the lab to the bedside.”

As a physician-scientist dedicated to hematologic oncology, Chaudhary has research interests in several areas of cancer, including AIDS-associated cancers, cancer drug resistance, biology of normal and leukemic hematopoietic stem cells, programmed cell death and cellular signaling. He is also interested in molecularly targeted and biological therapies and novel strategies to improve the outcome of stem cell transplantation.

As chief of the Jane Anne Nohl Division of Hematology and Center for the Study of Blood Diseases, Chaudhary hopes to employ strategic recruitment in key areas and build on existing strengths of current members of the hematology division. He also plans to expand the hematology practice at the USC Norris Cancer Hospital.

“We are working very actively on growing the leukemia program,” says Chaudhary. “Along with that goal, we are planning to start an allogeneic transplant program (which uses donor bone marrow) and also expand our autologous transplant program (which uses blood or bone marrow stem cells harvested from the patient).”

He also emphasizes that the division will work to bring more innovative clinical trials to the USC Norris Comprehensive Cancer Center and Hospital, so that patients have access to cutting-edge trials and the latest drugs.

As recent transplants to Los Angeles, Chaudhary and his wife look forward to exploring the area with their two small children. In particular, they are excited about all the opportunities for outdoor family activities, including area beaches and national parks.

Chaudhary is equally enthusiastic about the opportunity to be a part of the USC Norris community.

“As one of the earliest cancer centers to get a National Cancer Institute designation as a comprehensive cancer center, USC Norris is a great place to be,” he says.

Chaudhary points to a superb research environment full of talented basic and clinical investigators, as well as an improved infrastructure with the recent acquisition of USC Norris Cancer Hospital and USC University Hospital.

“The combination of excellent talent and the superb hospital infrastructure makes USC a very exciting place to be for research, so I know I am in the right place,” he concludes.

*“As one of the earliest cancer centers to get a National Cancer Institute designation as a comprehensive cancer center, USC Norris is a great place to be.”*



Van Urfehlan



Von Urpelt

# A Natural FIT

*Following a childhood dream, an oncology nurse makes a career out of caring at the USC Norris Cancer Hospital*

BY TANIA CHATILA

**EVEN AS A SMALL CHILD** living in the Philippines, Susan Victoria always knew her calling in life.

“I used to play nurse all the time and pretend that I was taking care of patients,” says the Manila native. “I would put on my white shoes and white dress. Also, I made a nurse cap that I would wear while pretending to examine my sister.”

Victoria would even use her uncle’s stethoscope to listen for heartbeats. He was a doctor and a strong influence on Victoria’s passion for health care at an early age.

“Nursing was the only thing I ever really thought about doing with my life,” she says. “I think I always just knew that I wanted to help people.”

Now, decades later, Victoria is living out her childhood aspirations as a seasoned registered nurse at USC Norris Cancer Hospital, where she has spent most of her professional career.

She started there in the mid-1980s, shortly after immigrating to the United States and passing her board exams. At the time, Victoria was working through a registry and moonlighting at several different area hospitals. She had cared for all patient types—medical/surgical, obstetrics—but never oncology.

“My first impression of Norris was really amazing,” Victoria says. “It was brand new, nice, clean, and the patient care was really great here.”

Though she had never really considered oncology nursing as a specialty, Victoria was drawn to Norris’ intimate staff setting and its

expertise in cancer care. In 1990 she became a full-time nurse, and she hasn’t looked back since.

A familiar face at Norris, Victoria has worked in nearly all of the facility’s departments, including the Judy and Larry Freeman Cancer Day Hospital, imaging and radiology, pre-surgery and on the nursing floors.

It’s these lessons that have helped turn Victoria into the respected, veteran oncology nurse that she is today. But she admits the learning experience hasn’t always been easy.

“My first experience with a dying patient was really, really hard for me,” Victoria says, recalling the painful memory.

“brilliance,” and “dedication.” She’s also well respected by her peers and often consulted for advice.

“At Norris, we are really a lot like a family,” she says. “We’re team-oriented and really open to each other for recommendations. We consult with each other and listen to each other. It’s really an honor to work with such a well-groomed staff.”

So much so that over the years Victoria has recruited at least a handful of employees to the hospital, all of whom are still actively employed there.

“I always tell people, if you want to learn, this is the place to be,” Victoria says. “We have good doctors, good nurses, and the patients are really happy with the care they receive here. We have people who come to this hospital from all over the world.”

In her 24 years at Norris, Victoria says she has seen an incredible amount of growth at the hospital and cancer center, including new leadership, an increased patient census, expanded services and unrivaled clinical expertise.

It’s why Victoria has no plans to leave until she has to.

“I’ll probably leave when I retire. I’m so lucky to be here, doing what I love,” she says.

Reflecting back on her childhood days playing nurse in her Manila home, not much has changed since then. Victoria’s passion for helping people and her commitment to patient care endures.

“Except now,” she says, “I have my own stethoscope.”

*“I always tell people, if you want to learn, this is the place to be. We have good doctors, good nurses, and the patients are really happy with the care they receive here. We have people who come to this hospital from all over the world.”*

She’s currently a relief charge on the seventh floor of the Norris Inpatient Tower at USC University Hospital, where she supervises staff when she’s not providing clinical bedside care.

“What I love about Norris is that there is so much experience here in oncology nursing,” says Victoria. “Norris gave me an expertise. It helped me learn how to deal with many different kinds of patients and situations.”

Since her first day walking the halls of this renowned cancer facility, Victoria says she’s been faced with a constant string of lessons learned from patients, physicians and colleagues alike.

Since then, Victoria has built hope and a resolve that is indicative of the *spirit* of Norris. She takes patient success stories and uses them to encourage others.

“I had one patient, when she came here she was so sick that she almost died,” Victoria says. “But somehow, she was able to recover. The last time I saw her, she looked like a model. I tell her story now and sometimes she even comes in to offer support to other patients.”

It’s that positive attitude, compassion and endearing personality that provide encouragement to Victoria’s patients and colleagues. And it’s evident in the stack of letters and cards she’s received from patients and their families expressing gratitude for her “charm,”

## Supporting Cancer Research

Run 4 Her Life, a run/walk held Oct. 18 in Glendale, raised funds to support the Harold E. and Henrietta C. Lee Breast Center, USC Norris Comprehensive Cancer Center and the research of Michael Press, M.D., Ph.D., Harold E. Lee Chair in Cancer Research and professor of pathology. From left are event participants: Stefanie Marquez, pathology doctoral candidate; Ivonne Villalobos, administrative services coordinator for the Keck School Department of Pathology, with baby Michaela; Press; and Tonya Strom, assistant director of development for the USC Norris Comprehensive Cancer Center.



## HOFFMAN DEDICATION

The USC Norris Comprehensive Cancer Center celebrated the dedication of the Valerie and Eugene Henry Hoffman Waterfall—located at the Kennedy Plaza—on Oct. 11, 2009. The Hoffmans donated \$1 million last year to benefit research at USC Norris. At right, at the event, are friends and family of Eugene Hoffman (seated) and USC alumna Valerie Foster Hoffman (center left) as well as (cutting ribbon, from left) Keck School of Medicine Dean Carmen A. Puliafito, M.D., M.B.A., and USC Norris Comprehensive Cancer Center Director Peter Jones, Ph.D., D.Sc.



## New Head of Development Named



Keck School Dean Carmen A. Puliafito, M.D., M.B.A., and Ann Braun at a welcome reception in her honor.

Ann Braun joined the Keck School of Medicine of USC on Feb. 1 as executive director of development and senior associate dean for resource development, signaling a new era of integrated fundraising efforts for the newly integrated USC academic medical center.

Braun comes to USC from the University of Florida College of Medicine, where she served as associate dean of development and alumni affairs.

Braun will report to Keck School Dean Carmen A. Puliafito, M.D., M.B.A., and work with the school's clinical department chairs, basic science department chairs and institute directors, including USC Norris Comprehensive Cancer Center director Peter Jones, Ph.D., D.Sc., and with Mitch Creem, M.H.A., the CEO of the USC hospitals, to increase philanthropic support for priority programs in patient

care, research and education across the USC Health Sciences Campus.

"Ann's experience in academic medicine is significant, and her track record in building successful development programs is impressive," Puliafito said.

Building upon the Keck School's naming gift of \$110 million from the W.M. Keck Foundation nearly a decade ago, Braun will design and manage a new \$500 million fundraising initiative for USC's new academic medical center, which includes the USC Norris Comprehensive Cancer Center and Hospital.

"Academic medicine is one of our country's most precious public goods," Braun said. "I'm committed to promoting awareness of its mission to educate the next generation of physicians and scientists, to provide specialized care for those most in need and to advance medical research that can lead to new therapies and disease prevention."

## Fighting Cancer is Always in Fashion

The San Pedro Peninsula Cancer Guild celebrated its 25th anniversary on Nov. 8, 2009, at its annual boutique, luncheon and fashion show, "An Affaire to Remember," held at the Hyatt Regency Hotel in Long Beach. Proceeds from the annual event support the gastrointestinal cancer research of Heinz-Josef Lenz, M.D. The guild has raised more than \$1.6 million for cancer research at USC Norris since 1995.



Heinz-Josef Lenz, M.D.; Jan Moore, event co-chair; Josephine Nizetich, guild president; Christine Ofiesh, event co-chair; and Peter Jones, Ph.D., D.Sc.

## Hospital Garden Named for Women's Cancer Research Fund

Members of the Women's Cancer Research Fund (WCRF) gathered in the courtyard of the USC University Hospital Norris Inpatient Tower on the afternoon of Oct. 12, 2009, to celebrate the unveiling of a garden named in their honor.

A program of the Entertainment Industry Foundation, the WCRF is a long-time supporter of the USC Norris Comprehensive Cancer Center.

About 40 invited guests gathered to applaud the support of the WCRF. Peter Jones, Ph.D., D.Sc., director of the USC Norris

Comprehensive Cancer Center, welcomed guests and thanked the WCRF for supporting cancer research. Keck School Dean Carmen A. Puliafito, M.D., Ph.D., recognized the individual founders of the fund, including Anne Douglas, Quinn Ezralow, Marion Laurie, Kelly Meyer and Jamie Tisch, as well as EIF president and CEO Lisa Paulsen.

The speakers also acknowledged the work of Renette Ezralow, the late wife of USC Norris supporter Marshall Ezralow and a founder of the WCRF.



At the Oct. 12 garden unveiling are, from left: Keck School Dean Carmen A. Puliafito, M.D., M.B.A., Kelly Meyer, Quinn Ezralow, Jamie Tisch, Anne Douglas, Marion Laurie and Peter Jones, Ph.D., D.Sc., director of the USC Norris Comprehensive Cancer Center.

"The reason I work on ovarian and breast cancer is because of her," said Parkash Gill, M.D., Ezralow Family Chair in Cancer Therapeutics and featured speaker at the event.

The WCRF founders and Paulsen were awarded plaques to commemorate the day. Quinn

Ezralow thanked the researchers at USC for their imagination and their knowledge.

"Together, we can truly imagine a future without breast cancer because of the incredible knowledge you bring to discovering new treatments and ultimately, a cure," she said.

For more information or to make a gift to the USC Norris Comprehensive Cancer Center and Hospital, visit [uscnorriscancer.usc.edu/support/](http://uscnorriscancer.usc.edu/support/) or call (323) 865-0700.



## Save the Date!

Sunday Evening, September 26, 2010

USC Norris Comprehensive Cancer Center  
and the Pasadena POPS  
present

## "Hooray For Hollywood"

a very special benefit concert to  
support cancer research

For more information please call (323) 865-0700

# Lymphedema 101

## What is lymphedema?

Lymphedema is an abnormal collection of protein-rich fluid between cells in body tissue due to impairment of the lymphatic system. The lymphatic system is a major component of the immune system that transports lymph fluid from tissues to the circulatory system. The lymph fluid consists of protein, cell debris, fat and bacteria.

The main symptom of lymphedema is persistent swelling of the affected area, according to Mahjabeen Aftab, OTR/L, CLT-LANA, clinical instructor of occupational therapy and lead certified lymphedema specialist at USC Norris Cancer Hospital and USC University Hospital. Other symptoms may include infection, discomfort, loss in range of motion and redness, tightening or hardening of the skin.

“Lymphedema is a chronic, physically and psychologically debilitating disease, commonly affecting extremities but can involve head and neck, genitalia and trunk,” says Aftab.

## What are the causes?

According to Aftab, lymphedema is caused by either a congenitally compromised lymphatic system, or acquired blockage of the lymph nodes or channels. For cancer patients who experience lymphedema, the condition may be due to surgery, lymph node removal due to cancer, radiation induced fibrosis of lymph nodes and vessels, tumors, obesity, infection or peripheral vascular diseases.

## How is it treated?

If you think you may have lymphedema, talk to your doctor. “Lymphedema is not curable, but is manageable,” says Aftab. She emphasizes that treatment is imperative, as lymphedema can have an impact on physical, mental, functional, psychosocial and emotional aspects of one’s life, especially for breast and head and neck cancer survivors.

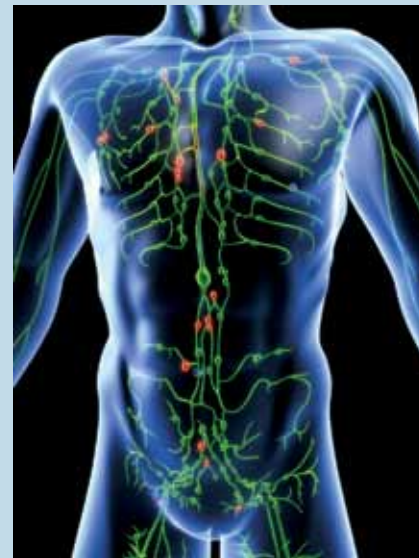
Treatment is non-invasive, and should be provided by a certified therapist. According to Aftab, treatment typically includes two phases. The first is an intensive phase that includes Manual Lymph Drainage (MLD), which is a gentle type of massage used to drain excess fluid from the affected area.

Additional treatment in the initial phase may include compression bandaging to help prevent fluid buildup, meticulous skin and nail care to prevent infection, remedial exercises and assessment for specialized compression garments.

The second phase of treatment is considered a maintenance phase, in which patients are encouraged to practice self-care of the condition.

“In the maintenance phase, we work with patients to foster independence in their care, which may include self MLD, a home exercise program, social reintegration and utilization of community resources,” says Aftab.

She points out that at USC Norris, lymphedema patients also have continued access to a multidisciplinary team and follow-up visits with caregivers in the maintenance phase.



“The Occupational Therapy Department of the USC Norris Cancer Hospital and USC University Hospital has been very aggressively and successfully involved in treating lymphedema patients since 2001,” says Aftab. “We have highly qualified and passionate therapists available to work with specific populations, especially cancer survivors who have unique needs. Occupational therapists are able to customize treatments to the individual needs of the patient resulting in superior clinical outcomes and improved quality of life.”

*For more information and referrals, please contact the Department of Occupational Therapy at (323) 442-8850.*

## WHAT I'VE LEARNED ABOUT CANCER

“As a patient, I am grateful for the medical care I received at the USC Norris Cancer Hospital, not only for treating my cancer but for also attending to my well-being. Now as a USC medical student, it is no surprise to me that the faculty teaches us that the secret to patient care is in caring about the patient.”

— ROBERT MARTINEZ  
Second-year medical student at  
the Keck School of Medicine of USC





**USC Health Sciences**  
**Public Relations & Marketing**  
 1975 Zonal Ave.  
 Keith Administration Bldg., Suite 400  
 Los Angeles, CA 90033-9029

NON-PROFIT  
 ORGANIZATION  
 US POSTAGE  
**PAID**  
 UNIVERSITY OF  
 SOUTHERN  
 CALIFORNIA



**For a cure.**  
**Fight On.**



USC University Hospital and USC Norris Cancer Hospital. Offering world-class, research-based medical care in a personal, private setting.

1500 San Pablo Street • Los Angeles, CA 90033 • USChospitals.com • 1-800-USC-CARE