CRACKING THE CODE

Unraveling the mystery of cancer and genetics
INNOVATIONS INSTITUTE FACULTY

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Elmar Nurmemmedov, PhD
Assistant Professor of Translational Neuro-Oncology and Neurotherapeutics

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Jinhoon Wang, PhD
Assistant Professor of Molecular Oncology

Tiffany Wilson, MD
Professor and Chief of Urology

Venkata M. Yampaginidi, PhD
Associate Professor of Translational Neuro-Oncology and Neurotherapeutics

Donald L. Morton, MD
Professor of Surgery

*Deceased

PROFILES

Catherine Brown
The John Wayne Cancer Foundation president works to increase the organization’s national presence.

Ron Fromm
FRANT’s president advocates for his group’s charitable works.

Bert Ward
The head of a major air cargo company embraces cancer research.

Dr. Robert McKenna Jr.
An expert in lung cancer surgery joins the Institute.

We want to hear from you. Tell us what you think of this publication. Please call, email or write to us with any feedback, suggestions or questions.
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Genetic testing empowered a young mother to confront her cancer risk.

ON THE COVER

Genetic testing and counseling give families vital information to fight cancer. Illustration by Ajay Peckham

WE WANT TO HEAR FROM YOU
PULLING TOGETHER TO CONQUER CANCER

In many old Westerns, including many of my father’s movies, the good guy is rarely without a partner—someone to watch his back, advise him and cheer him on. In this issue of Innovations, we celebrate the partners who accompany us on our lengthy and challenging journey to reduce the suffering caused by cancer.

At the John Wayne Cancer Institute, our unsung front consists of thousands of individual donors, many of them long-time supporters or representing second or third generations of philanthropic families—as well as numerous charitable and service-minded organizations. These organizations include the Associates for Breast and Prostate Cancer Studies (ABCS), the Fashion Footwear Association of New York (FFANY), the John Wayne Cancer Foundation, the John Wayne Cancer Institute, Auxiliary and Saint John’s Health Center Foundation to name a few. This issue includes stories about three of our partners. We are so grateful for the support of the John Wayne Cancer Foundation, which has been with us since the beginning and has a new president, Cathy Brown. We also pay tribute to the ABCS, recalling its 30 years of activities that signifies what the Institute what it is today. We can never thank you enough, but I hope the progress we’re witnessing today in cancer diagnosis, prevention and treatment is a reminder of the power we wield when we work together side by side.

We celebrate the partners who accompany us on our lengthy and challenging journey to reduce the suffering caused by cancer.

In this issue of Innovations, we invite you to read about the fascinating field of genetic counseling for cancer. The rapid evolution of genetic information means anyone today can undergo testing that may provide valuable information on personal risk and prevention strategies. But who should seek genetic testing? In the article, beginning on page 16, you’ll hear from two of the John Wayne Cancer Institute’s newest faculty members who are experts in this dynamic field: Richard Frieder, MD, and Osa Gordon, MD. These skilled physicians describe the clues that lie within our families and may suggest the need for genetic testing.

Dr. Frieder and Dr. Gordon exemplify the quality of the Institute faculty as it continues to expand. In our quest to develop an even more comprehensive cancer care program, we have recently added highly regarded experts in neuro-oncology, lung cancer and urology to our faculty. This issue of Innovations will introduce you to Robert McKenna Jr., MD, our new chairman of thoracic surgery (page 32), who devised a minimally invasive lung cancer surgery called video-assisted thoracic surgery (VATS) for patients with lung cancer and emphysema.

I’m always impressed at the synergy among our faculty. These clinicians and researchers (ABCs), in this issue, work as a team, and share knowledge and ideas about improving cancer care. Our laboratory researchers, such as those in the molecular oncology department, are continually working with clinicians to move cutting-edge research from the bench to the bedside. On page 24, you’ll get a sense of the translational research pioneered by Darrin B. Hoos, PhD, and his colleagues in molecular oncology.

In short, the John Wayne Cancer Institute faculty is touching many areas of cancer, and I’m deeply proud of our research and achievements. Of course, none of this would be possible without the backing of our steadfast network of supporters. Thank you for all you do.

With utmost respect,

Marcel Loh
Chief Executive
Providence Saint John’s Health Center and the John Wayne Cancer Institute

Let us know when you have questions or suggestions. We welcome your feedback. With information, consultation and thoughtful consideration, you can be confident of making a personalized decision—a decision that’s right for you.

Is personalized medicine ready for prime time?

People who are diagnosed with cancer are vulnerable. Fear of the disease and confusion about what to do are normal reactions that can leave patients overwhelmed. It’s incumbent upon physicians and nurses to reassure our patients, care for them with compassion and provide them with all of the information they need to make decisions about their treatments. That’s why it’s incumbent upon us to be well informed about the rapid evolution of genetic information about the fascinating field of genetic counseling for cancer.

Today there is understandable excitement around personalized medicine—testing cancer patients for gene mutations and biological information in order to target specific therapies for the disease. In some cases, genetic testing is clearly warranted and useful. But we need to ask ourselves: Is personalized medicine ready for prime time? Should genomic testing be done on everyone with cancer? I think not. But there are some people who say yes.

I believe that, at the present time, there are too few medications to target the mutations that have been identified. Suggesting that every patient could benefit from genetic testing may be giving people false hope. Moreover, a lot of the testing is still very expensive and often is not approved by insurance. It’s so important that we never take hope away from our patients. But some people with cancer are sensitive to overly aggressive advertising, and we must protect those patients. This problem is coming from the health care industry and organizations trying to lure people into the system, not necessarily from individual doctors. Trust your doctor and listen to your doctor’s advice on whether genetic testing may be a good option for you. Be an informed and educated consumer. With information, consultation and thoughtful consideration, you can be confident of making a personalized decision—a decision that’s right for you.
Dr. Elmar Nurmemmedov Joins the Institute

The John Wayne Cancer Institute is proud to announce the appointment of Elmar Nurmemmedov, PhD, as assistant professor of translational neuro-oncology and neurotherapeutics. Dr. Nurmemmedov is an expert in the field of cancer drug discovery.

Born in Qusar, Azerbaijan, he earned a bachelor’s degree in biology from Middle East Technical University in Turkey, and a PhD in molecular biophysics from Lund University, Sweden. He completed post-doctoral training at the Scripps Research Institute in San Diego, California, and Harvard Medical School, in Cambridge, Massachusetts.

“The therapeutic research angle at the John Wayne Cancer Institute provides the flexibility to do cutting-edge research and then translate the findings into clinical practice,” Dr. Nurmemmedov says. “This is a unique place where the combination of innovative research and strong leadership can result in novel biomedical therapies.”

“The need for new cancer drugs to address specific molecular targets is significant,” he says. At the Institute he will work with Santosh Kesari, MD, PhD, professor of neurosciences and chair of the department of translational neuro-oncology and neurotherapeutics. Dr. Nurmemmedov is an expert in the field of cancer drug discovery.

Joins the Institute

Dr. Santosh Kesari Recognized for Glioblastoma Research

Santosh Kesari, MD, PhD, the recently appointed director of neuro-oncology and chair of the department of translational neuro-oncology and neurotherapeutics at the John Wayne Cancer Institute, was honored November 20 at the Society for Neuro-Oncology’s 20th annual Scientific Meeting and Education Day. Dr. Kesari received the inaugural Glioblastoma Multiforme Heroes Award, presented by CURE Media Group, publishers of CURE magazine.

Dr. Kesari was among fourHeroes honorees who were nominated by patients and caregivers to recognize their selfless contributions to the field and the lives of individuals impacted by glioblastoma multiforme—the most aggressive and common form of primary brain cancer. The ceremony featured actress and author Valerie Harper, who was diagnosed with lung cancer in 2009. The disease spread to her brain in 2013. The actress continues to undergo successful treatment and advocates for cancer research funding.

Voyager, a band that fits around the patient’s head and provides a specific electromagnetic field that prevents cancer cells from growing, without side effects affecting the rest of the body. The small, targeted electromagnetic field disrupts cancer cell division in patients with these aggressive brain tumors.

“We are excited to bring this novel technology to Los Angeles. Voyager alone or in combination with traditional chemotherapy could provide patients with another avenue for treating recurrent GBM,” says Dr. Barkhoudarian.

The feasibility study is investigating whether the device is successful in slowing and even halting the progression of disease, leading to prolonged survival rates. “Working as a team, we can conduct real-time research and clinical care in patients, which allows us to accelerate approval of novel treatments in hopes of developing a cure,” says Dr. Kesari.

Innovative Clinical Trial for Glioblastoma

A novel, noninvasive device for patients with recurrent glioblastoma multiforme (GBM) is now being offered by John Wayne Cancer Institute scientists as part of a clinical trial. Saint John’s Health Center is the first facility in Los Angeles to participate in the trial of the device, called Voyager. Garni Barkhoudarian, MD, principal investigator and Santosh Kesari, MD, PhD, co-investigator at the Pacific Neuroscience Institute and John Wayne Cancer Institute, are actively recruiting patients for this study. Dr. Kesari’s lab was involved in the initial preclinical studies that moved this technology from the bench to the clinic.

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October 25
GVC Presents “FFANY Shoes on Sale”
The Waldorf Astoria New York, NY
The 23rd annual Fashion Footwear Association of New York Charitable Organization (FFANY) fundraiser, the largest charity event of the shoe industry, will be held in support of significant and innovative breast cancer research. The Institute is honored to again be one of nine beneficiaries.

October
John Wayne Cancer Institute Auxiliary Membership Luncheon
Beverly Wilshire Hotel Beverly Hills, CA
The annual luncheon and boutique help support the John Wayne Cancer Institute Auxiliary, which has raised money for Institute projects for three decades.

November
Associates for Breast and Prostate Cancer Studies Annual “The Talk of the Town” Gala
Beverly Hilton Hotel Beverly Hills, CA
The Associates for Breast and Prostate Cancer Studies host this extraordinary event each year to honor individuals who have made a difference in the fight against cancer. This black tie event attracts more than 800 guests as well as major media attendees. Providence and supporters alike gather to raise funds for the Institute’s breast and prostate cancer research. The evening includes dinner, dancing, guest performances, a boutique and an auction.

December
Benefactors Dinner
Four Seasons L.A.
Los Angeles, CA
The scientific progress made daily at the John Wayne Cancer Institute would not be possible without the generosity of our donors. The Benefactors Dinner honors the many people who have helped us carry out our mission of supporting innovative cancer research at the highest levels of giving in 2016. Attendees will meet with members of the Wayne family and the Institute’s faculty and fellows and will hear updates and research highlights.

Dr. Dave S.B. Hoon Appointed to Breast Cancer Research Council

Dave S.B. Hoon, PhD, was recently named as a council member to the California Breast Cancer Research Program (CBCRP), one of only eight members who work outside the University of California System. The CBCRP is the largest state-funded breast cancer research effort in the nation and is administered by the Research Grants Program Office within the University of California Office of the President. CBCRP is funded through the tobacco tax, voluntary tax contributions and individual donations. The group funds California investigators to solve questions in basic breast cancer biology, causes and prevention of breast cancer, innovative treatments and ways to live well following a breast cancer diagnosis. Council members are chosen to represent people who are affected by breast cancer and the institutions that can contribute to solutions. The council is responsible for tracking the trends and opportunities for progress that arise in the breast cancer community, addressing underserved and environmental issues, and making funding and planning recommendations.

“It’s an honor to be chosen to serve on this council,” says Dr. Hoon, who is a professor and director of molecular oncology, chief of scientific intelligence and director of the genomics sequencing center at the Institute. “This organization is one of the largest in the U.S. for state funding of breast cancer research. It has distributed more than $250 million in breast research funds since 1995. I have received several of those competitive grants. This is my way of giving back and helping the CBCRP with policies and new approaches that will result in better breast cancer treatments.”

Dr. Hoon is highly regarded for his work on diagnostic molecular genetics, tissue and blood biomarkers for molecular staging of sentinel lymph nodes and classification of human solid tumors such as melanoma, breast cancer and gastrointestinal cancer. Dr. Hoon and his team are also working on immune biomarkers and the molecular underpinnings of breast cancer to identify potential targets for new therapies.

Dr. Delphine J. Lee Named to Providence Council

Delphine J. Lee, MD, PhD, director of translational immunology and director of the Drisk-Dougherty Laboratory for Cancer Research at the John Wayne Cancer Institute, has been appointed a member of the Research Leadership Council for Providence Health & Services. Dr. Lee has also been elected to serve as co-chair of the council.

“I’m very pleased and grateful that the John Wayne Cancer Institute has been included to help set the strategy and vision for research at Providence, bringing us to one of the most recent ministries to be added to the system,” Dr. Lee says. “The leadership council’s role is to evaluate research needs: basic / translational, clinical trials, grant funding, reported outcome research, quality research, etc.”

The council works to ensure that the faculty and staff of all the ministries meet the highest standards of research and care. “Part of the council’s mission is to align researchers clinically and make sure everyone is following the gold standard,” Dr. Lee says. “I hope our efforts on the Research Leadership Council will help Providence Health & Services to be a nationally competitive, transparent, integrated, quality-driven system of care for research.”
Daniel F. Kelly, MD, and his colleagues are authors of a paper in the December issue of the Journal of the American College of Surgeons. The study reviewed surgical outcomes of melanoma that had metastasized, or spread, to the abdomen. The authors found that digital sequencing can prevent repeated invasive biopsies when the initial biopsy is inadequate or uninformative, as well as the patient’s cancer has progressed despite treatment. The work was published recently in the Journal of Surgical Oncology (JSO). Dr. Kelly and colleagues in the department of molecular oncology are also authors of a review of aays for circulating microRNA markers in patients with cancer. That study appears in the Journal of Clinical Immunology.

Anton J. Bilchik, MD, PhD, is a coauthor of a study that found that digital sequencing can prevent repeated invasive biopsies when the initial biopsy is inadequate or uninformative, as well as the patient’s cancer has progressed despite treatment. The work was published recently in the Journal of Surgical Oncology (JSO). Dr. Kelly and colleagues in the department of molecular oncology are also authors of a review of aays for circulating microRNA markers in patients with cancer. That study appears in the Journal of Clinical Immunology.

Delphine J. Lee, MD, PhD, is the senior author of a study published in Oncotarget, which describes outcomes of patients who required an incision of the pituitary gland during surgical removal of pituitary tumors. The authors discovered that incisions or partial resections of the pituitary gland appear to be generally well tolerated and, in the great majority of patients, are not associated with new postoperative hormonal issues.

Gary B. Deutsch, MD, is a coauthor of a study that found that digital sequencing can prevent repeated invasive biopsies when the initial biopsy is inadequate or uninformative, as well as the patient’s cancer has progressed despite treatment. The work was published recently in the Journal of Surgical Oncology (JSO). Dr. Kelly and colleagues in the department of molecular oncology are also authors of a review of aays for circulating microRNA markers in patients with cancer. That study appears in the Journal of Clinical Immunology.

Timothy G. Wilson, MD, is a coauthor of a study that found that digital sequencing can prevent repeated invasive biopsies when the initial biopsy is inadequate or uninformative, as well as the patient’s cancer has progressed despite treatment. The work was published recently in the Journal of Surgical Oncology (JSO). Dr. Kelly and colleagues in the department of molecular oncology are also authors of a review of aays for circulating microRNA markers in patients with cancer. That study appears in the Journal of Clinical Immunology.

Santosh Kesari, MD, PhD, presented a study at the 20th annual Society for Neuro-Oncology meeting in San Antonio, Texas, on Tumor Treating Fields (TTFields) therapy, which features a portable, noninvasive device that creates low-intensity electric fields within a tumor that can cause cancer cell death. The treatment offers another option to patients with a challenging form of brain cancer called glioblastoma multiforme.
Dedication and Enthusiasm Characterize the New Post-Doc Fellows

The Institute is delighted to welcome four new post-doctoral fellows to our research laboratories. These individuals are experienced researchers and clinicians who have joined our faculty for additional studies in the areas of molecular oncology, surgical oncology or translational immunology.

**SELENA LIN, PHD**

Dr. Selena Lin recently graduated from Drexel University College of Medicine in Philadelphia, Pennsylvania, with a PhD in microbiology and immunology. She was attracted to the John Wayne Cancer Institute to study the early detection of cancer using circulating cell-free DNA and circulating tumor cells.

"I find studies of circulating tumor DNA and circulating tumor cells to be cutting-edge and fascinating," she explains. "I want to learn some of these techniques because they provide a better way to study cancer."

Dr. Lin has experience developing urine-based DNA assays for early detection of liver cancer. She will use those skills to explore the potential clinical utility of circulating tumor cells and cell-free circulating tumor DNA that can be detected in the blood (a liquid biopsy) in people with melanoma, lung or prostate cancers. These liquid biopsies could be used in the clinic as a screening test for early cancer recurrence.

"This not only saves lives, by providing early detection of cancer, but reduces health care costs with a cost-effective method to screen frequently or monitor patients," she says.

Dr. Lin became interested in cancer research while working as an intern at the biotech company Genentech. "I found the impact their work had on cancer patients was extremely satisfying and rewarding," she says. "Since then, I have been involved in cancer research for more than eight years. Cancer is a deadly disease and there is a need for research to find solutions."

**XIAOWEN WANG, MD**

Dr. Xiaowen Wang is a neurosurgeon who comes to the Institute from Huashan Hospital of Fudan University in Shanghai, China, where he worked on clinical and translational research on glioma. The hospital is home to one of the largest brain surgery centers in the world, performing about 15,000 brain surgeries each year.

At the Institute, Dr. Wang will work in the department of molecular oncology. Huashan Hospital of Fudan University has a long-standing collaboration with Dave S.B. Hoon, PhD, director of molecular oncology, chief of scientific intelligence and director of the genomics sequencing center.

The collaboration, says Dr. Wang, "allows neurosurgeons to learn translational research techniques in molecular oncology under Dr. Hoon’s mentorship. I chose this program after learning about the outstanding success of my neurosurgeon colleagues who have participated in the program and were able to publish their work in top peer-reviewed journals."

Dr. Wang will study the underlying molecular mechanisms in different types of glioma—brain cancers that are difficult to treat. The studies are aimed at unraveling some of the mysteries of the disease, knowledge that could contribute to early diagnosis and lead to targeted therapies. The causes of cancer have long fascinated Dr. Wang.

"I am very interested in the genomic and epigenetic variations present in cancer," he says. "As a neurosurgeon, I can only excise the brain tumor, knowing that will not be a cure." In his spare time, Dr. Wang, who is currently a PhD candidate, is working in the anatomy lab to learn minimally invasive techniques to remove brain tumors.

**JULIANA NOGUTI, DDS, PHD**

Dr. Juliana Noguti has broad research interests that, over the years of her training, drew her into a quest to better understand the very origins of cancer at the cellular level. Dr. Noguti, who was born in Florianópolis, Brazil, graduated with a degree in dental science and completed a residency in oral medicine at the Heliopolis Hospital—one of the biggest public hospitals specializing in cancer in Sao Paulo, Brazil—in 2008. Leaving her career as faculty at the University of Sao Paulo Faculty of Dentistry (Universidade de Sao Paulo), she dedicated her efforts to pursue further training in research, driven by the desire to make a bigger difference. In 2010 she completed a master’s degree in oral pathology and in 2014, a PhD focused in oral cancer. She performed additional research at the University of Wisconsin and the Ostrow School of Dentistry from the University of Southern California.

"I chose John Wayne Cancer Institute because this research facility emphasizes the development of novel treatments and training a new generation of scientists in order to investigate cancer beyond the laboratory bench," she says. "The ability to do laboratory work, cell culture, preclinical and clinical trials is a perfect combination to establish consolidated results that could be used for treatment as well as resources for other scientists around the world."

At the Institute, Dr. Noguti will study mechanisms involved in antimetastatic activity of immune cells in order to provide a better understanding of the role of innate and adaptive immune response in cancer. Identifying these signals may lead to new strategies and therapies to fight cancer.

"A large number of genetic and epigenetic changes are required to drive normal cells toward malignancy, and the immune response is also involved during the carcinogenesis process," she explains. "The key to understanding these changes, the immune response and how the malignant transformation happens in tissue have been the most fascinating challenges. Despite new treatments and approaches, we still don’t know the answers to many questions for this disease. I have chosen this path in order to make a difference and be part of something important that could help people around the world."

**JAVIER OROZCO, MD**

Dr. Javier Orozco has a long-standing interest in breast cancer and is pursuing the highest levels of training. He was born in San Rafael, a small city in Mendoza, Argentina. He attended medical school at the National University of Cuyo, Argentina, and completed an obstetrics and gynecology residency followed by a specialization in medical oncology. He also obtained a master’s degree in molecular oncology at the Centro Nacional de Investigaciones Oncológicas in Madrid, Spain, and has worked as a breast surgeon and breast oncologist.

At the Institute, Dr. Orozco will assist in research aimed at solving the puzzle of medication resistance.

"We know that breast cancer is an extremely heterogeneous disease and comprises several subtypes, with different therapeutic options," he explains. "One of my objectives is to try to help in the understanding of why treatments sometimes stop working due to resistance to medications. In order to accomplish this, we are working with an interdisciplinary group of researchers including surgeons, pathologists, oncologists, molecular biologists and bioinformaticians. This combination of diverse skill sets has enormously impacted our understanding of resistance mechanisms."

"Dr. Orozco says he was attracted to the Institute’s sophisticated molecular oncology department. "The molecular oncology department combines strong research with a clear translational impact, which will allow me to grow as a researcher and better understand the molecular basis of cancer," he says. "I believe that research is a key pillar in the fight against cancer. Today more than ever before, advances in cancer research directly affect decisions about treatment, and we are starting to see a huge impact on the survival of our patients. It’s a privilege and pleasure to work under the mentorship of leaders in breast cancer research at such an esteemed center."
Fellows Share Research Findings

The Institute’s talented fellows engage in cutting-edge cancer research under the direction of the Institute faculty. This research targets their interest areas and addresses key questions in disease prevention, diagnostics, treatment and the biology of cancer.

BRADLEY C. BANDERA, MD — Dr. Bandera presented a study in April on disparities in endocrine risk reduction among young women with a type of breast cancer called lobular carcinoma in situ. The paper was presented at a meeting of the American Society of Breast Surgeons in Dallas.

TREVAN D. FISCHER, MD — Dr. Fischer reported on disparities in amputation rates for nonmetastatic soft-tissue sarcomas in communities at the 2016 meeting of the Pacific Coast Surgical Association. Dr. Fischer has also presented an oral presentation at the Society of Surgical Oncology in Boston analyzing the effects of radiation on retropertitoneal sarcoma.

MARISS J. JONES, MD — Dr. Jones, a first-year surgical oncology fellow, presented her study on meltdowns at the January meeting of the American College of Surgeons. The study emphasizes the importance of lifelong skin surveillance and follow-up for patients with an initial melanoma diagnosis. Dr. Jones won the Physician-in-Training Cancer Research Paper Prize for this work, which means the submission will be entered into the national competition for a possible opportunity to present at the American College of Surgeons national meeting.

BRIANA J. LAU, MD — Dr. Lau, co-chief administrative fellow, is co-chair of a study on surgical approaches to remove the liver or part of the liver, published in October in the journal, Annals of Surgery. The conditions would be considered rudimentary compared to U.S. hospitals. Anesthetic gases had to be vented through a tube that extended outside, and the doors of the OR had to be prohibited them from working.”

D.A. FLAHERTY, DO, PHD — Dr. Flaherty, co-chief of the Surgical Oncology Fellowship Program, was selected for the Colorectal Cancer Research Scholar Award, presented in March at the 2016 Society of Surgical Oncology meeting. The award recognizes excellence in translational research focusing on the molecular biology of colorectal cancer. Dr. Lee’s study addresses treatment disparities in adolescents and young adults with rectal cancer.

MATTHEW P. SALOMON, PHD — Dr. Salomon is a coauthor on a recently published study on the molecular mechanism of colorectal cancer. He was also a coauthor of a poster presented in February at the 26th Annual North American Skull Base Society Meeting in Scottsdale, Arizona.

AMY VOCI, DO — Dr. Voci, the John Wayne Cancer Institute Auxiliary breast fellow, presented a clinical guidelines study regarding breast conservation surgery at the January meeting of the American College of Surgeons in Santa Barbara.

Two Surgical Oncology Fellows Join Guatemala Mission

Surgical oncology fellows Briana J. Lau, MD, and Devin C. Flaherty, DO, PhD, were among a group of 32 health care professionals from Providence Health & Services who traveled to Guatemala in February to provide surgical services to the residents of a remote village.

Lee and Dr. Flaherty, who serve as co-chief administrative fellows at the Institute, spent a week in the village of Retalhuleu to perform general surgeries such as gallbladder removal and hernia repairs. Without these occasional visits by physician groups, the villagers lack access to medical care.

“The patients were very humble and very grateful,” Dr. Lau says. “Our patients were farmers, mechanics, working-class people. What impacted me was that these health problems prohibited them from working.”

The health care team included several professionals from Saint John’s Health Center, Providence Saint Joseph Medical Center and Providence ministries in Oregon. The village had a small hospital, and the team was able to correct the uremic patient who is a patient in a vicious cycle. They also had access to three operating rooms.

The conditions would be considered rudimentary compared to U.S. hospitals. Anesthetic gases had to be vented through a tube that extended outside, and the doors of the OR had to be kept tightly shut to keep out flies. Still, the operations were safe and effective, Dr. Lau says.

“If we did the operations with the same quality or standards we have here,” she says. “We were a group of 32 people who really didn’t work together before — most of us were strangers — but we were able to seamlessly work together to change the lives of these people.”

John Wayne Cancer Foundation President Expanding John Wayne’s Legacy in Fighting Cancer

Catherine A. Brown’s career path has been oriented toward one goal. “I’d like to say, when I put my head on the pillow at night, that I’m working toward the greater good of the world,” she says. “It’s about making a larger contribution to society.”

Catherine’s long career working for health care nonprofit organizations led her last year to join the Newport Beach-based John Wayne Cancer Foundation. As president of the organization, she’s tuning her attention to strengthening the Foundation’s ties to national cancer organizations and expanding the footprint of John Wayne’s legacy in the cancer fight.

“There are so many options for collaboration in the cancer field,” Catherine says. “I think collaboration between national cancer-related organizations is the key to finding the cure. John Wayne’s name and legacy is a movement, allowing people to join him in the fight against cancer. If people come together under the name of John Wayne, I think we can do great things. It’s all about carrying his legacy forward.”

Founded in 1985, the John Wayne Cancer Foundation was created in honor of the Duke after his family promised to use his name to continue his fight against cancer. The John Wayne Cancer Foundation’s mission is to bring courage, strength and grit to the fight against cancer through research, education, awareness and support. The John Wayne Cancer Foundation is a founder and major supporter of the John Wayne Cancer Institute.

As president, Catherine is charged with implementing key strategies to increase the John Wayne Cancer Foundation’s presence both nationally and internationally. Trained as a nurse, she has worked in the health care nonprofit sector for more than 35 years, most recently as vice president of the Pacific West Region for the Leukemia & Lymphoma Society. She graduated from Hunter College, City University of New York, with a degree in nursing and also holds a master’s degree from the University of Pennsylvania and the Wharton School of Business.

Under her leadership, the foundation has established a grant program to help fund the research of the more than 160 physicians and researchers who are graduates of the Institute’s prestigious Surgical Oncology Fellowship Program.

The foundation also has a large skin cancer prevention and awareness campaign, called Block the Blue, that is aimed at protecting young people on skin cancer prevention. The foundation collaborates with organizations like the United States Lifesaving Association to reach about 50,000 youths each year. Recently Summer Sanders, an Olympic gold medalist in swimming and melanoma survivor, became the national spokesperson for the program.

The foundation is also launching several new fundraising campaigns this year, including the Show Your Grit campaign, which will launch on May 26—John Wayne’s birthday—and will conclude on Father’s Day, June 19. Show Your Grit participants are invited to don cowbow hats and post photos in honor of someone they know who has fought or is fighting cancer to the campaign hashtag and tag friends to do the same. For every photo posted, sponsors will contribute to the foundation.

“We feel fortunate to have Cathy as the president of the John Wayne Cancer Foundation, and her leadership has been instrumental in the establishment of new partnerships, national awareness and fundraising initiatives,” says Ethan Wayne, chairman of the John Wayne Cancer Foundation. “She is committed to John Wayne’s fight against cancer and to the expansion of our programs and our grant-making. Through her leadership, we will be able to advance cancer research, education, awareness and support.”

When Catherine isn’t traveling to promote the foundation’s programs and initiatives, she loves to take in the theater, watch football and travel. “I feel incredibly honored I was selected and privileged to have the opportunity to do this.”
Mandy Waldorf Graham felt she had been stalked by cancer since her early adolescence. Her mother was obsessed by it because all the women in her family—her mother, grandmother and aunts—were stricken with the dreaded disease by the time they hit age 50. Then when Mandy was in college, her older sister was diagnosed with a cancer of unknown origin and died less than 11 months later at age 32.

“I had this looming fear,” says the 38-year-old Los Angeles-based advertising executive. “And my mother expected that any day she would find out she had cancer too.”

But Mandy pushed her worries into the back of her mind because she didn’t think there was anything she could do about it. She didn’t become more proactive until after the birth of her third child 1½ years ago, when she went to see a new gynecologist. Given her family history, the doctor suggested that she get tested for the presence of genetic mutations that would greatly heighten her risks for developing cancer.

The test did, in fact, reveal precisely what she feared: She was positive for BRCA2, a mutant gene that indicated she had an 85% chance of developing breast cancer, and her odds for ovarian and pancreatic cancer were also much higher.

“All of a sudden everything got very serious,” says Mandy, who subsequently underwent a battery of tests, including an MRI and an ultrasound of her ovaries, to make sure she didn’t already have cancer. “Although the test results confirmed my fears, the result itself was a relief. It was no longer an irrational or mysterious fear; it was grounded in truth. Now my doctors and insurance company would take me seriously if anything suspicious popped up. That is not what happened when my sister started feeling sick and consulted with doctors. It took much too long before someone took her seriously enough to consider cancer at age 31.”

Mandy was referred to Richard Frieder, MD, an assistant professor of clinical cancer genetics and a specialist in cancer risk assessment at the John Wayne Cancer Institute and a physician at Saint John’s Health Center, who outlined her options. They ranged from simply doing intensive surveillance in order to detect any possible cancers at their earliest stages to the more aggressive steps of mastectomies with breast implants and reconstruction along with removal of her ovaries and fallopian tubes so the cancers wouldn’t have a place to take root.

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Taking preventive measures can greatly reduce risk. Removing the ovaries and tubes along with hormone replacement can curb the 45% lifetime risk of ovarian cancer down to less than 2%. Using modern cosmetic techniques to perform preventive mastectomy brings the breast cancer odds down to less than 5%. Both surgeries represent life-changing and lifesaving care for women with these high-risk genes.

Genetic counseling and testing can arm you with information to fight cancer.

WRITTEN BY LINDA MARSA | PHOTOGRAPHED BY LAUREN PRESSEY
"The mastectomy seemed like a good first step," says Mandy, who underwent the surgery along with breast reconstruction earlier this year. "It feels a little weird, and it has changed my body forever. But I need to take care of myself—for myself and for my family."

Since then other family members have been tested, and one of her brothers and his oldest daughter, who's 21, both have the BRCA1 mutation. "Getting the test is the simple part. But what happens when you see the results is what becomes much more difficult." It's even the case in her own family. But how do we know when there truly is a family history of cancer which indicates that these malignancies are inherited and caused by mutations in our DNA, or when they're just a product of the environment, bad luck and unknown causes?

"Most breast cancers are found in women without known risk factors, but those with personal and family histories may make a woman more susceptible," says Dr. Frieder. "About 60 percent of breast cancers are related to BRCA1 and BRCA2 and 'broken' inherited genes, which are then inherited by family members. Other cancers can be caused by environmental triggers and may be increased or decreased by genetics, which are then influenced by environmental factors."

In general, about 20% of all cancers may have an identifiable hereditary susceptibility, and both low-risk as well as low-risk women and men can be helped by preventive care, risk reduction and cancer prevention. "Testing enable people to take control, maximize their wellness and oftentimes changes their destinies," says Dr. Frieder. "This isn’t bad news, but a gift."

Funding out you have a genetic predisposition but that most of that cancer is preventable is good news."

WHO SHOULD GET TESTED

People are candidates for genetic counseling and testing if there is a strong family history of cancer. That’s why it’s important to talk to family members to find out what type of cancers relatives had and in what ages they were diagnosed and subsequently died.

In about 10% of the most common cancers, genetics seem to play a role, including breast, pancreatic, ovarian, stomach, uterine, colon, thyroid and adrenal cancers. Experts say look for patterns that would indicate there is a strong hereditary component. These red flags include: early age of onset, such as breast or colon cancer before the age of 40 or prostate cancer before age 50; family members with multiple cancers or cancers in paired organs (both breasts or both kidneys), or multiple people in the family having the same form of cancer.

There are also what are called linked cancers, which means cancers that may seem dissimilar but are usually caused by the same genetic mutations, such as pancreatic and melanoma, breast and ovarian, breast and colon, colon and bladder, and thyroid and adrenal. A genetic condition called Lynch Syndrome, for example, causes a range of seemingly unrelated cancers in both men and women. If there is a high incidence of some cancer pairs or people in your family get different types of cancers, that may also be a tip-off.

Certain endocrine cancers, such as neuroendocrine tumors, also have a high genetic component. Surgery is not the only option to prevent a recurrence. In case of Lynch Syndrome, for example, certain hereditary mutations, women must pay for annual breast MRIs.

Even if you already have cancer, these tests can help. "Understanding that someone has a genetic predisposition will change their management and treatment plan, as well as possibly prevent a second cancer," says Dr. Frieder.

Positive genetic tests may also open the option of using a highly effective new chemotherapy, such as Lyparza, which works specifically on BRCA-positive ovarian cancers by focusing the attack on these molecular flaws. It may change the way radiation is used or suggest that more invasive surgery would be better.

WHAT TESTS ARE AVAILABLE

The great news is that there are multiple panel testing for hereditary cancer susceptibility, which can identify an array of cancer genes that have been linked to cancer (see box). But now there’s been an explosion in genetic testing, which has greatly increased access. Moreover, costs have dropped dramatically from a high of $4,000 for BRCA tests to as low as $475 for up to 19 genes. Under the guidelines of the Affordable Care Act, insurers have to pay for these tests when a family history indicates it’s appropriate.

If you're concerned, see a genetic specialist. There is a difference of genetic counseling—nationwide, there are only about 250. But Saint John's Health Center has specialists on staff to help you evaluate your risks. The Cancer Prevention Clinic at the Margaret Petersen Breast Center at Saint John's can also help people understand their risks and provide them with resources.

Dr. Richard Frieder

Dr. Ora Gordon

The program is being developed by Ora Gordon, MD, professor of genetics at the John Wayne Cancer Institute and director of medical genetics and integrative medicine at the Roy and Patricia Disney Cancer Center in the Providence Medical Institute in Burbank, and Burton J. Bitchik, MD, PhD, chief of medicine and chief of the John Wayne Cancer Institute's gastrointestinal research program.

A multidisciplinary prevention program for individuals at high risk for these diseases could save lives, Dr. Gordon says.

"Pancreatic cancer remains a cancer that is often very late-stage when detected, but early-stage pancreatic cancer is curable, just like early-stage breast cancer," she says. "We want to identify people who may be at risk in advance of any symptoms and try to optimize prevention."

A significant proportion of pancreatic cancer cases are hereditary, and genetic testing can assess for 13 gene mutations linked to the disease. Individuals deemed at high risk could undergo tests such as endoscopic ultrasound or upper GI exams to monitor the health of the pancreas. Nutritional and adopting a healthy diet might also minimize risk.

Testing for people at higher risk for colorectal cancer aims at detecting the gene mutations that cause Lynch syndrome and other forms of hereditary colon cancer. Lynch syndrome is the most common cause of hereditary colon cancer and puts individuals at risk for colon, gynecological cancers and pancreatic cancer. People with Lynch syndrome should undergo colonoscopy more frequently. Doctors might also recommend aspirin therapy and lifestyle modifications to lower the risk of tumors.

Dr. Gordon says.

The Institute and Saint John’s Health Center are ideal places to offer sophisticated genetic testing because of the availability of specialized imaging technologies, top-rated surgeons and cancer clinic trials available to patients with challenging types of cancer.

"I think what we’re coming to understand is that 15% to 20% of all cancer patients have a significant hereditary component, and that has changed the way we evaluate people," Dr. Gordon adds. "Family history is important, but there are people who don’t know their history. Finding new tools to evaluate these people is really going to change the game."
Gifts Reinforce the Surgical Oncology Fellowship Program

Surgeons who are specially trained in the intricacies and challenges of removing cancer are among the most highly prized in their profession. The John Wayne Cancer Institute’s Surgical Oncology Fellowship Program provides doctors with the skills that elevate them to the role of experts and leaders in the field. Two philanthropic donations have kick-started a campaign to support this important program into the future.

The Tarble Foundation and the John Wayne Cancer Institute have recently received a $1 million gift from the Tarble Foundation established the Surgical Oncology Fellowship Program. The program assists with the training of physicians who will become leaders in surgical oncology. The program’s success is reflected in the fellowship endowment which will result in a fellowship program that continues to train talented surgeons in complex general surgical oncology. More than 80% have become university professors, directors or department chairs. The Institute’s program was among the first in the nation to be accredited in 2013.

Mark Faries, MD, who is also a professor of surgery, director of the many graduates who have become department chairs and complex surgical methods, ”A gift to the John Wayne Cancer Institute to establish a fellowship in surgical oncology fellowship endowment will result in future generations of fellows having careers that make a substantial impact in the fight against cancer,” says Jan Tarble, director of the Tarble Foundation.

A gift to the John Wayne Cancer Institute surgical oncology fellowship is important because the Institute has long inspired us,” says Patrick Wayne, chairman of the Institute has long inspired us,” says Patrick Wayne, chairman of the Institute has long inspired us,” says Patrick Wayne, chairman of the Institute has long inspired us,” says Patrick Wayne, chairman of the Institute has long inspired us,” says Patrick Wayne, chairman of the Institute has long inspired us,” says Patrick Wayne, chairman of the Institute has long inspired us,” says Patrick Wayne, chairman of the Institute has long inspired us,” says Patrick Wayne, chairman of the Institute has long inspired us,” says Patrick Wayne, chairman of the Institute has long inspired us,” says Patrick Wayne, chairman of the Institute has long inspired us,” says Patrick Wayne, chairman of the Institute has long inspired us,” says Patrick Wayne, chairman of the Institute has long inspired us,” says Patrick Wayne, chairman of the 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Kicking Breast Cancer With High-Heeled Shoes

The fact that the Fashion Footwear Association of New York—or FFANY—finances hard-to-fund, first-step research on breast cancer gives its CEO and president, Ron Fromm, great satisfaction. Add to that the fact that the organization’s annual QVC Presents “FFANY Shoes on Sale” fundraiser has netted close to $50 million for breast cancer research, and Fromm’s excitement is infectious.

When he describes how enlightening it is to meet with researchers at the John Wayne Cancer Institute at Saint John’s Health Center—one of only nine centers across the country to receive funding from FFANY—it’s clear why he loves this effort. “The ‘FFANY Shoes on Sale’ event brings together competing wholesalers and retailers for a nation-wide, on-air shoe-a-thon – QVC Presents ‘FFANY Shoes on Sale’ the next year when QVC stepped up to partner with FFANY to turn it into a nationwide, on-air shoe-a-thon – QVC Presents ‘FFANY Shoes on Sale’,” Today “FFANY Shoes on Sale,” now in its 23rd year, is the largest fundraising event brings together competing philanthropy is an important part of the New York association’s vision, which aims to facilitate business operations for its 350 members. Representing 580 brands, FFANY hosts four expositions each year to help launch products, and works to develop and keep talent in the industry. FFANY’s fundraiser started out as a shoe sale at one of the expos in New York’s Central Park. That led to “FFANY Shoes on Sale,” the next year when QVC stepped up to partner with FFANY to turn it into a nationwide, on-air shoe-a-thon – QVC Presents “FFANY Shoes on Sale.”

Today “FFANY Shoes on Sale,” now in its 23rd year, is the largest fundraising effort in the fashion footwear industry. It’s a year-round enterprise for FFANY’s small staff in conjunction with QVC and Resource and Event Management to manage the on-air sale and gala event held at the Waldorf Astoria.

A 40-year veteran of the fashion footwear industry, Ron started out as a shoe sale at one of the expos in New York’s Central Park. That led to “FFANY Shoes on Sale” the next year when QVC stepped up to partner with FFANY to turn it into a nationwide, on-air shoe-a-thon – QVC Presents “FFANY Shoes on Sale.”

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Ron has been a FFANY member for two decades, continues: “There are so many bellwether marks of progress we’ve made against breast cancer, it makes me very excited and proud of the work that everyone does at FFANY and the research centers. It’s a great thing to be part of.”

We intuitively understood the connection between women, footwear and breast cancer. We thought it was a win-win for everyone in the industry, and it has proven to be so.”

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The fashion footwear industry is a major funder of basic research.

Ron Fromm helps steer funding for cancer research.
Scientists probe the mysteries of cancer to defeat it.

Imagine Sherlock Holmes with his inquisitive mind and ever-ready magnifying glass, painstakingly scouring a crime scene for the tiniest shred of evidence that will provide insights into a mystery. That’s a useful metaphor for the men and women who work in the molecular oncology department at the John Wayne Cancer Institute.

Instead of specifically focusing on cancers of various organs, such as the lung, breast or brain, molecular oncology scientists study the molecular genetics of cancer at its nanoscale—the DNA and RNA. They identify common genes involved in the development of cancers and study the epigenetic events that turn these genes on and off and influence tumor growth.

This is an interdisciplinary field that was once considered “basic science”—a study of the more arcane aspects of a disease. But over the past two decades, the field has sprung to life as new molecular tools and knowledge have become available, yielding insights that rapidly change practice.

In the Institute’s molecular oncology department, the team led by Dave S.B. Hoon, PhD, embraces the notion of translational medicine: moving the information they glean into clinical practice as quickly as possible. Dr. Hoon was an early advocate of molecular oncology, encouraged by the Institute’s cofounder, Donald L. Morton, MD, to bring cutting-edge techniques and determine the patient’s best course of action.

The early studies focused on capturing and studying circulating tumor cells and cell-free DNA in the blood, a concept Dr. Hoon helped pioneer. He also worked with Dr. Morton to study tumor cells that migrate from a tumor to nearby draining lymph nodes, such as the sentinel lymph node, to better diagnose the disease using molecular techniques and determine the patient’s best course for treatment and prognosis.

Molecular oncology studies help to explain why cancer in some people is more aggressive than in others, why treatments work in some people and not others and why certain patients become resistant to cancer drugs.

“Resistance to modern drug therapy is a big problem,” Dr. Hoon says. “None of the major cancer therapies can prolong life over a long period of time or are effective in every patient. In recent years we’ve begun to look at molecular mechanisms which evolve during therapy that lead to resistance: what causes it and can we reverse it. That is where molecular oncology and translational medicine really come to fruition.”

Molecular studies are now used to “personalize cancer therapy.” A patient’s own genetic and epigenetic makeup can, in some cases, suggest whether a particular therapy will work or be ineffective. “Only some patients’ tumors will respond to various therapies,” he explains. “Those who won’t respond should be getting other treatments immediately. We want to determine, molecularly, which drugs will work effectively alone or in combination in individual patients’ tumors. Usually single therapies do not work efficiently. More often now we use targeted, combination therapies.”

The methods used to capture these circulating cells are now being used in the Institute’s Multicenter Translational program in cancer blood-marker clinical trials. The program, called Cancer-ID, awards up to $20 million for a five-year program. The Institute has six patents on the technology and has licensed it to a startup biotech company. Data on more than 1,000 patients in Europe indicates the device, which screens 1 to 1.5 liters of blood in 30 minutes, is able to isolate a sufficient number of circulating tumor cells with minimal complications. The device uses a medical device biotech company, is developing a unique medical device that uses a guide wire to capture circulating tumor cells in patients’ blood. The device, pioneered at the Institute in the mid-2000s, is aimed at improving earlier diagnosis of cancer and recurrence. The detection of circulating tumor cells also allows physicians to assess the genetic makeup of tumor cells spreading in blood in order to target and monitor treatments more effectively.

Patients with a gene called IRAK1 have more breast cancers that are likely to spread aggressively and acquire resistance to paclitaxel, a drug often used to treat metastatic breast cancer.

Resistance to Therapy

Research to understand why some patients respond to therapy and others do not is beginning to influence treatment. Department of molecular oncology researchers recently collaborated on a breast cancer study with Genome Institute, Biopolis, in Singapore, showing that patients with a gene called IRAK1 have more breast cancers that are likely to spread aggressively and acquire resistance to paclitaxel, a drug often used to treat metastatic breast cancer. The over-expression of this gene is found more commonly in patients with estrogen receptor negative disease, such as triple-negative breast cancer. The findings from the study, published in December in the prestigious journal Nature Communications, found that a derivative of the plant ginseng can modify IRAK1 expression and induces more sensitivity to paclitaxel.

Cancer Blood Biomarker Detector

The molecular oncology department, in partnership with a medical device biotech company, is developing a unique medical device that uses a guide wire to capture circulating tumor cells in patients’ blood. The device, pioneered at the Institute in the mid-2000s, is aimed at improving earlier diagnosis of cancer and recurrence. The detection of circulating tumor cells also allows physicians to assess the genetic makeup of tumor cells spreading in blood in order to target and monitor treatments more effectively.

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Molecular Oncology Research Long Supported by the ABCs

In 1990, a group of dedicated philanthropists in Los Angeles banded together and decided to try to make a difference in cancer research. The Associates for Breast and Prostate Cancer Studies (ABCs) was born and has provided unwavering support to the John Wayne Cancer Institute for the past quarter-century. The all-volunteer support group has raised more than $15 million to fund groundbreaking research projects and equipment. The group holds two signature events each year: a Mother’s Day luncheon and bonspiel, and “The Talk of the Town,” Gala.

The ABCs organization was officially established by Maryjo Kastner and Mary Roth, Jack and Stan Foster, MD; Elaine and Jack Leaman, and Cordelia and Hal Gershman. These couples had originally been associated with the Eddie Cantor Charitable Trust and were supporting a variety of causes. They decided to devote all their charitable efforts to eradicating cancer and unanimously chose to support progressive and innovative breast and prostate cancer research at the John Wayne Cancer Institute. Later, the group added prostate cancer to their list of fundraising objectives.

“The group of four women has stood by us all these years, offering their hard work, ideas and friendship,” says Patrick Wayne, chairman of the Institute’s board of directors. “They never seem to tire of the effort and, instead, approach each fundraising project with enthusiasm.”

Each June, the group presents a check to the Institute and honorees of the ABCs, who have passed away during the previous year. “We’ve become very close over the years, like a second family,” says Gloria Gebbia, the ABCs president for the past 17 years and a member for 18 years. Gloria, a former movie producer, and her husband John have been the backbone of the group for many years. After the joint ABCs, she was promptly recruited to help create a public service announcement and assist with the annual gala because of her background in the entertainment industry. When Marty Roth passed away, the group “handed me the book and said, ‘You’re the one who can do the show,’” Gloria recalls. She took over the reins of the gala and has never looked back.

Members of the group are steadfast in their support to each other, she says.

“I call and say we need volunteers, they all come, I never really get a ‘no.’ Everybody wants to give of themselves. We have such great friendships.”

Today the ABCs organization is comprised of close to 200 men and women who reside mainly in the Los Angeles Westside area. Many are highly successful professionals in a variety of fields, including the entertainment industry. ABCs members regularly communicate with the Institute and carefully consider their funding projects. The group has helped support many fruitful research initiatives, including:

- Research to identify new ways to detect and diagnose breast and prostate cancer early through highly sensitive blood tests
- The normal mode biopsy technique
- Research to develop immunological approaches to breast cancer vaccines
- Studies aimed at helping breast and prostate cancer patients overcome drug resistance
- Designing the next generation of nano therapy—developing novel agents for targeting cancer without harming normal cells.

“Major breakthroughs in cancer research are made possible because of private support,” says Anton J. Bilchik, MD, PhD, professor of surgery, chief of medicine and chief of the gastrointestinal research program. “The ABCs have truly impacted our ability to carry out novel research and develop promising new therapies.”

Many members of the ABCs have been touched by cancer. Gloria notes. But they’re called past periods of discomfort and are witness to significant progress today.

“We’re worked so hard,” she says. “It’s wonderful when you can see people who have had cancer and they’re doing so well.”
Beti Ward travels to Hawaii once a month, but don’t look for her lounging on the beach with an umbrella drink in hand. Most likely she’ll be up to her elbows in work as chief executive of Pacific Air Cargo, a company she formed in 2000 after “retiring” from the air cargo business just two years earlier.

Retirement didn’t go as planned. In 1998 Bettie sold her previous air cargo company, which flew goods between the mainland and Hawaii. She signed a non-compete clause with an executive of Pacific Air Cargo, a company she formed in 2000 after “retiring” from the air cargo industry. She was back in business.

When not to talk at all, “she recalls. So before the next meeting, she read and realized there was a gender difference. She was back in business.

But as she stood before her first meeting of Pacific Air Cargo personnel, Bettie got a feeling that such tissue would be useful in the study of the genetics of cancer. Bettie also was “a big fan of John Wayne” and attended the Institute’s Annual Bonfire Diner where she met Patrick Wayne and several of the Institute’s doctors. “They were all so wonderful, excited and devoted that I put the Institute on my list of annual giving” she explains. Her donations benefit research into brain cancer, which claimed her mother’s life in 1999.

Betti applies the same high standards in philanthropy that she applies to her business. “Tanja is very particular about the organizations she supports and donates to,” says Tanja. “She does quite a bit of research to ensure the money is indeed going where it’s supposed to be going.”

Tanjia describes Bettie as a woman who can’t be far behind. “She is very particular about the organization she supports and donates to.”

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Whether in business or in giving, Bettie is always forward-thinking. “I have the Institute in my will as well,” she says. “I’m sure there’s a cure out there somewhere. We know the cause and effect. A cure can’t be far behind.”

Left: Bettie Ward, center, with daughter Carolyn Poe and son Gary Poe. Middle: Pacific Air Cargo reunites many people in Hawaii with their pets. “The pets travel first class with us on the main deck, not in the dark belly of the plane,” Bettie says. Right: Baby buffalo on route to Hawaii from Texas.

Spreading Her Wings
Betti Ward, the queen of air cargo, keeps a keen eye on cancer research.

WRITTEN BY SANDI DRAPER
PHOTOGRAPHED BY LAUREN PRESEY

Betti Ward travels to Hawaii once a month, but don’t look for her lounging on the beach with an umbrella drink in hand. Most likely she’ll be up to her elbows in work as chief executive of Pacific Air Cargo, a company she formed in 2000 after “retiring” from the air cargo business just two years earlier.

Retirement didn’t go as planned. In 1998 Bettie sold her previous air cargo company, which flew goods between the mainland and Hawaii. She signed a non-compete clause with an executive of Pacific Air Cargo, a company she formed in 2000 after “retiring” from the air cargo industry. She was back in business.

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The Men Behind the Microscopes

Pathologists play a vital role in cancer diagnosis and research.

WRITTEN BY SHARI ROAN
PHOTOGRAPHED BY SCOTT GILBERT

They work mostly out of sight, in the quiet of a laboratory—surrounded by microscopes, test tubes, glass slides and computers. Some patients never meet a pathologist and must be hard-pressed to explain what a pathologist does.

But the cancer pathologists on staff at the John Wayne Cancer Institute are not behind-the-scenes guys. David L. Krasne, MD, and John R. Jalas, MD, PhD, are Saint John’s Health Center pathologists who provide critical support for cancer diagnosis and research at the Institute, along with other members of the Saint John’s pathology unit.

“In surgical oncology, we are hard-pressed to explain what a pathologist does. They work mostly out of sight, in the quiet of a laboratory—surrounded by microscopes, test tubes, glass slides and computers. Some patients never meet a pathologist and must be hard-pressed to explain what a pathologist does. But the cancer pathologists on staff at the John Wayne Cancer Institute are not behind-the-scenes guys. David L. Krasne, MD, and John R. Jalas, MD, PhD, are Saint John’s Health Center pathologists who provide critical support for cancer diagnosis and research at the Institute, along with other members of the Saint John’s pathology unit. In their work at the Health Center, Dr. Krasne and Dr. Jalas are part of a group of pathologists who examine blood and tissue samples for a variety of both cancerous and noncancerous conditions. “We’re the disease sleuths—the diagnosticians. The subsequent treatment and prognosis is based on the pathology report. So we have to get the right answers,” Dr. Jalas says.

In his years at the helm, Dr. Krause has created a department that prides itself in accurate work and strong relationships.

“What most people do not realize is what a big difference it can make regarding who the pathologist is on a case,” he says. Pathologists have to work diligently and become skilled across a broad range of conditions to ensure errors are not made, he says. “In that regard a critical criterion for our pathology department is we’re all very strong generalists.”

But the staff also possesses focused expertise in many areas including neuropathology, diseases of the blood and lymph nodes, breast, gastrointestinal system, urologic oncology, gynecologic pathology, cutaneous and melanocytic tumors of the skin, cutaneous diagnosis and others. “We work as a team. Our aggregate knowledge and experience is applied to every patient,” Dr. Krause says.

In their roles at the Institute, Dr. Krause and Dr. Jalas support the research team by providing tissue samples for studies and participating in various research projects. Dr. Jalas is currently working with Dr. Bilchik on immunoprophylaxis of colon cancer and the cancer staging system. “Basically we’re trying to look at how the body is reacting to the cancer,” he says. “Based on that, we can work to predict how patients will do. Maybe some patients who get chemotherapy don’t need it. Maybe some patients who get chemotherapy do need it. That’s very exciting research.”

Dr. Krause is currently collaborating with surgical oncology fellows to determine if a certain type of melanoma may not require a sentinel node biopsy to see if the cancer has spread beyond the primary tumor. Both Dr. Jalas and Dr. Krause, and the entire pathology team at Saint John’s also teach the surgical oncology fellows. The fellows are urged to look beyond the cancer pathology report. “The principle we instill in them is that they need to know who the pathologist is and have a familiarity with their work; it has to be someone they can talk to and trust,” Dr. Krause says.

Today cancer diagnosis and treatment is increasingly based on assessing the genetic underpinnings of the tumor. Gene sequencing technology can tell oncologists things about a tumor that can’t be seen with a microscope. “Part of what we do hasn’t changed in 150 years: processing tissue, making slides and looking at it with a microscope,” Dr. Jalas notes. “But now we’re moving to next-generation sequencing. With sequencing information, we’ll be able to say this particular cancer will respond best to this particular drug.”

Yet neither Dr. Krause nor Dr. Jalas expects their expertise to replace any time soon. “There is still immense value from the information you get from looking at something under a microscope, and most diseases and cancers are still defined by their microscopic appearance,” says Dr. Krause.
Dr. Robert McKenna Jr. devised a minimally invasive lung surgery.

**Leading the Way in Lung Cancer Surgery**

With an innovative style, Dr. Robert McKenna Jr. fits right in at the Institute.

**WRITTEN BY TRAVIS MARSHALL**

**PHOTOGRAPHED BY LAUREN PRESSEY**

The John Wayne Cancer Institute expanded its expertise in the treatment of lung cancer when internationally acclaimed thoracic surgeon Robert McKenna Jr., MD, moved his practice to Saint John’s Health Center in November 2015. Dr. McKenna, professor and chair of thoracic surgery, is an expert in the surgical treatment of lung cancer and emphysema. He spent the previous 19 years with Cedars-Sinai Medical Center.

“The Institute is bringing in new experts and more surgeons, and the researchers here are really outstanding,” he says. “It’s very exciting.”

The defining feature of Dr. McKenna’s career has been the development and implementation of a cutting-edge surgical technique called video-assisted thoracic surgery (VATS) for patients with lung cancer and emphysema.

“In the past, lung surgery would require an eight- to 10-inch incision to open the chest cavity,” he says, explaining that VATS only requires a small incision, through which the surgeon can place a small camera and surgical tools to remove parts of the lungs.

Some surgeons originally thought VATS was only suitable for simple surgeries, like biopsies. Few thought the technique could be used to remove entire lobes.

“At the time, people thought it was not possible to perform a successful cancer operation that way,” he says.

He proved the naysayers wrong. Dr. McKenna performed the world’s first VATS lung cancer procedure in 1992 and went on to write the definitive book on the subject, _Atlas of Minimally Invasive Thoracic Surgery_. Today he’s performed more than 3,000 VATS lung cancer operations—more than any other thoracic surgeon in the world. The surgery reduces pain and shortens the patient’s recovery time while minimizing risks associated with more invasive surgery.

“I would not have done minimally invasive lung cancer surgery if I didn’t think it was a safe operation,” he says. “And 24 years later, there is now a huge amount of data that shows VATS is better for patients and some evidence that survival rates are better as well.”

Along with treating patients, Dr. McKenna also gives talks all over the world to medical professionals—some interested, prompting targeted drug treatments, such as erlotinib (Tarceva). “Some patients have a protein called an epidermal growth factor receptor (EGFR) on the surface of the lung cancer cells,” he says. Erlotinib can block these EGFRs, preventing the cells from growing or multiplying.

Another promising area of research is genetic testing of patients’ tumors. One mutation he looks for is called ALK. For those that have it, a targeted therapy called crizotinib (Xalkori) shows promise. “I have a patient who had extensive lung cancer that had spread from head to toe,” he says. “He had the ALK mutation and used the therapy, and nine years later he has no cancer and he is doing great.”

Perhaps most promising, however, is the improvement of screening programs to help catch lung cancer in the early stages. People at high risk of the disease (ages 55 and older with 30 years of smoking) can undergo low-dose CT screening, which may discover tumors long before symptoms emerge and at a time when the lung cancer is much more curable.

Dr. McKenna is excited about research at the Institute under the direction of Dave S.B. Hoon, PhD. “Dr. Hoon is a real leader who has studied how to find cancer cells in the bloodstream for more than 30 years,” he says. “We are working on blood tests to look for lung cancer cells.” Earlier detection of lung cancer would be a major advancement since many tumors are not detected until the disease has spread.

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“With no early warning systems, many people are diagnosed with advanced-stage disease and do not survive lung cancer,” Dr. McKenna says.

“Screening with CT scans is well-documented to reduce mortality rates from lung cancer.”

**There is now a huge amount of data that shows VATS is better for patients and some evidence that survival rates are better as well.**
JOHN WAYNE CANCER INSTITUTE AUXILIARY ODYSSEY BALL

“The Duke” Special Service Award was presented to John Wayne Cancer Institute oncologist Mark B. Faries, MD, at the 31st annual John Wayne Cancer Institute Auxiliary Odyssey Ball held on April 9 at the Four Seasons Beverly Wilshire Hotel. Dr. Faries is director of the Surgical Oncology Fellowship Program, director of the Donald L. Morton, MD, Melanoma Research Program and director of therapeutic immunology at the Institute.

“Dr. Faries embodies the most important attributes of great physicians: medical expertise, a driving curiosity and a compassionate connection to his patients,” said Steven J. O’Day, MD, professor of medical oncology, director of immuno-oncology and director of clinical research at the Institute.

Lorraine and Danielle Morton, wife and daughter of the late Donald L. Morton, MD, presented the inaugural “Dr. Donald L. Morton Legend Award” to philanthropist Ruth Weil. Ruth, a John Wayne Cancer Institute Auxiliary board member and hospital volunteer, was a friend and early supporter of Dr. Morton’s work.

The event, which attracted more than 450 guests, benefits the Institute and is organized by the John Wayne Cancer Institute Auxiliary led by president Anita Swift and co-chairs Martha Harper, Colleen Pennell, Elizabeth Rawjee, Jessica Royer and Shirley Lipstone. KTLA-TV anchor Kaj Goldberg hosted the “Cowboys and Legends” themed gala, which featured music and dancing to the Morgan Leigh Band.

The event helped raise more than $750,000 to benefit the John Wayne Cancer Institute including a generous sponsorship of $100,000 from Dr. Miriam and Sheldon Adelson. A highlight of the evening was a surprise announcement of a $1.5 million gift from Ruth Weil to endow the Ruth and Martin H. Weil Surgical Oncology Fellow at the Institute.
ASSOCIATES FOR BREAST AND PROSTATE CANCER STUDIES ANNUAL “THE TALK OF THE TOWN” GALA

The Associates for Breast and Prostate Cancer Studies (ABCs) recognized individuals who have made a difference in the fight against cancer at its annual “The Talk of the Town” Gala on November 21, 2015, at the Beverly Hilton Hotel. This year’s honorees include actress Rene Russo, who received the Spirit of Entertainment Award, and cardiac surgeon Richard F. Wright, MD, who was recognized with the Spirit of Hope Award. Singer Pat Benatar headlined the evening’s entertainment. “The Talk of the Town” Gala attracted more than 800 guests and included dinner, dancing, guest performances, a boutique and auction. Proceeds provide critical funds for the John Wayne Cancer Institute’s innovative breast and prostate cancer research programs.
JOHN WAYNE CANCER INSTITUTE BENEFACTORS DINNER

The Institute’s generous donors and supporters were recognized on December 6, 2015, at a festive dinner at the Four Seasons LA. The annual Benefactors Dinner allows the Institute faculty and leadership to personally thank the donors who have helped us carry out our mission by supporting cancer research at the highest levels of giving. Attendees enjoyed an evening with the Wayne family, while members of the Institute faculty and fellows shared research highlights and updates on Institute projects.
JOHN WAYNE CANCER INSTITUTE AUXILIARY ANNUAL MEMBERSHIP LUNCHEON AND BOUTIQUE

The John Wayne Cancer Institute Auxiliary Annual Membership Luncheon and Boutique was held on October 22, 2015, at the Beverly Wilshire. Nearly 300 guests enjoyed boutique shopping from more than 20 vendors who donated a portion of their proceeds to the Institute. Hillary Fogelson, a grateful patient, three-time melanoma survivor, author and advocate presented the Angel Award to Dr. Delphine J. Lee. The auxiliary’s Public Service Award was presented to the Ford Warriors in Pink by Michael Wayne. Melanie Wayne, auxiliary treasurer and chief financial officer, and daughter of John Wayne, presented a check on behalf of the auxiliary in the amount of $1,470,787. The event was co-chaired by Katie Lewis and Mariol Zaro while Gerard DiNome served as emcee.

CARITAS GALA

The annual Caritas Gala, held on October 24, 2015, at the Beverly Wilshire Hotel, raised more than $650,000 for Saint John’s Health Center. The event recognized individuals who display exceptional compassion and service to their communities, including Wendy Goldstein, executive vice president and head of urban A&R at Republic Records; trustee Peter Mullin and his wife, philanthropist Merle Mullin; and trustee Bruce Meyer and his wife, community leader Raylene Meyer. The gala, which drew more than 475 guests, was co-hosted by the Saint John’s Health Foundation board of trustees and the Irene Dunne Guild.

CATHY CLASSIC

The Cathy Classic was held November 14, 2015, at the Kissimmee Bay Country Club in Kissimmee, Florida. Sponsored by the Hasselberger Family in memory of David’s sister, Cathy, the event benefits melanoma research. The Institute is a beneficiary of the annual event.

MARTIN M. COLLINS GOLF TOURNAMENT

The urologic oncology and prostate program at the John Wayne Cancer Institute was the beneficiary of the 10th annual Martin M. Collins Golf Tournament, February 22, at Canyon Gate Country Club. The event, which raised more than $80,000, is held in honor of Dr. Timothy G. Wilson and in memory of Martin M. Collins. The tournament is organized by Brian Collins, Keith Underwood and Andy Anderson.

QVC PRESENTS “FFANY SHOES ON SALE”

The annual QVC Presents “FFANY Shoes on Sale” was held October 19, 2015, at the Waldorf Astoria in New York City. For more than 20 years, the Fashion Footwear Association of New York event has sold thousands of shoes at half the manufacturers’ suggested retail price to raise funds for breast cancer research and education. The John Wayne Cancer Institute was one of nine beneficiaries of the 2015 event.

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PROFILE: Beti Ward
An Institute supporter with an eye for business. page 28

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