Precision Medicine: The Future Starts Now
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Alpha Clinic Makes Stem Cell Therapies a Reality
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Read about Karen Reckamp, M.D., M.S., Medical Director for Clinical Research Operations, and her role in precision medicine on page 6.
who enters our hospital, there are many more who are saved by our research, which has led to the development of some of today’s most widely used cancer drugs. Numerous potential therapies are in development, with almost 5,000 patients a year participating in clinical trials.

Most importantly, our outcomes set us apart. Patients come to City of Hope from across the country and around the world because our outstanding physicians and nurses provide the best, most advanced cancer treatments, all with a focus on the individual, not his or her disease.

So, yes, this is a place of hope and joy, as you will find when you meet the patients in these pages.

Mark Twain once said, “The two most important days of your life are the day you are born, and the day you find out why.” At City of Hope, we know why we are here. Our defining characteristic over the past 100-plus years has been a steadfast commitment to serving humanity. That dedication encompasses both the exceptional, compassionate care for which we’re known, as well as the acceleration of new treatments and new cures. There is great joy in that.

Robert W. Stone
President and Chief Executive Officer
City of Hope

At the heart of the park-like grounds on our campus stands a very special landmark we call the Spirit of Life® fountain. Dedicated almost 50 years ago, the bronze sculpture atop the fountain depicts a mother and father delicately balancing together, as they joyfully hold an infant aloft.

Some might say this light-hearted sculpture is an incongruous image for a cancer center and biomedical research institution. After all, we have a serious purpose: to cure cancer, diabetes and other life-threatening diseases and, in the process, transform the future of health.

Yet this is a special icon for a special place. A place of hope and, yes, joy.

Over the years, the discoveries made at City of Hope have changed the lives of patients around the world. For every patient
As efforts to reduce health care costs escalate, and definitions of what constitute health care value and quality are rewritten, it’s more important than ever to understand what City of Hope does for patients. Joseph Alvarnas, M.D., is an outspoken proponent of the need to define “value” in health care. He discusses City of Hope’s unique system of care.

**CN:** Describe how City of Hope provides comprehensive, leading-edge care.

**JA:** We take patients throughout a continuum of care to treat their disease and restore their sense of wholeness. The care is seamless, highly effective and person-centric.

**CN:** What sets City of Hope apart?

**JA:** It’s our laser-like focus on patients. We have a deep commitment to and respect for our patients. We have a person-centered vision of excellence in care and a medical staff with the expertise, experience and skills to provide this care.

We are also uniquely committed to creating more effective treatments and ensuring that our research efforts translate into meaningful new therapies. The Beckman Research Institute gives us basic science capabilities. We have one of three Alpha stem cell clinics in California, where new therapies are rapidly developed and given to patients. We have a research hospital where the staff is trained in caring for patients receiving a “first-in-human” medication. Few places in the United States can say that.

**CN:** What is person-centered care?

**JA:** We tailor care plans on a person’s risk. It includes standard-of-care medicine, as well as innovative therapies targeted to the person’s immune system or disease. The plan is carried out by an integrated team of physicians, nurse practitioners, nurses, social workers, chaplains and other professionals.

**CN:** What should someone consider when deciding where to get care?

**JA:** People with a life-threatening disease are embarking on a long-term relationship with their physician, so if they can’t talk to their physician openly, or their questions aren’t answered respectfully, they’re in the wrong place. Also, a person with a rare or hard-to-treat disease should seek care from an expert, since state-of-the-art treatments change rapidly.

**CN:** How is health care reform affecting access to care?

**JA:** Insurance companies are trying to reduce costs, but cheaper care often doesn’t mean better care. It’s a tragedy when patients can’t be treated effectively, because they’re stuck in their provider network.

**CN:** Explain the need for a broader national conversation about quality and value of health care.

**JA:** In the rush to make health care more efficient, payors don’t always understand what they are paying for. This is where the concept of value comes in. Our challenge is to help payors understand the value of, and consistently pay for, the services we provide.

We have a person-centered vision of excellence in care and a medical staff with the expertise, experience and skills to provide this care.”
Quality in medical care doesn’t just happen. It must be an institution’s singular focus. That’s the case at City of Hope, an institution known for highest-quality patient care and exceptional service.

At City of Hope, Tricia Kassab charts the course for enterprise quality, ensuring that our patients’ health and well-being are paramount.

CN: How does City of Hope continually improve quality of care?
TK: We use a data-driven approach and believe in transparency. We are proud to be shaping how quality is measured: Our metric for unplanned readmissions is being considered for national implementation. We recognize we don’t have all the answers and are always looking to implement best practices used by other organizations.

CN: Explain how City of Hope ensures the excellence of its medical staff.
TK: We have a comprehensive credentialing and privileging program that is central to determining standards for new and existing medical staff members. It details the process for assessing the qualifications of a health care practitioner before he or she renders direct patient care. We allow only those practitioners who meet particularly high standards to treat patients, and we evaluate their competency on an ongoing basis.

CN: What quality accomplishments have you helped City of Hope achieve?
TK: We have achieved the highest 10-year survival rate in the U.S. for our transplant patients. Over the last eight years, we have seen a statistically significant decline in hospital-acquired infections due to vigilance with hand washing and environmental cleaning, and new directives for isolating patients and intravenous catheter insertion and care.

We developed an Enterprise Quality Council comprised of members of the Duarte and City of Hope community practice sites. This council is committed to continuously monitoring and improving the care delivered under the City of Hope name.

CN: How are care and quality moving ahead at City of Hope?
TK: We are continuing to identify performance improvement opportunities and to close the gap on variations in care. Having care pathways that are standardized and allow for us to identify variances and track outcomes is the first step.

We are working toward more transparent dissemination of information to the physicians, hospital departments and community practices. I would like to see more publications, posters and presentations about quality.

I hope to ensure that all sites with the City of Hope name provide the same high level of quality and safety that our patients expect.
Patients Enthusiastically Dive into New Portal

Increasing access to our care is high on City of Hope’s list of strategic priorities. Empowering patients to participate in their own care is an important part of that effort. That’s one reason for launching a new patient portal, MyCityofHope, in September.

Patients have responded enthusiastically. Since registration began in early October, more than 3,000 patients have registered — a 43 percent rate of response to the invitation.

When surveyed about the portal, patients who registered were overwhelmingly positive, with comments that included, “Everything is excellent” and “This just made my life 100x easier.”

GIVING PATIENTS POWER OVER THEIR HEALTH

MyCityofHope was designed to empower patients to become more involved with their care by providing secure electronic access to their personal health information anytime, anywhere.

This includes:
- Appointments
- After visit summary
- Medications
- Immunizations and reminders
- Allergies
- Vital signs
- Test results
- Health issues

More than 3,000 patients have registered to use City of Hope’s patient portal, MyCityofHope, gaining access to their medical information.

The goal of providing enhanced access to personal health information is to increase patients’ participation and ownership of their care, which can help them stay on top of their treatment and, hopefully, improve outcomes.

PLANS FOR THE NEXT PHASE AND BEYOND

The next phase of the portal will provide secure communication between patients and their care providers and handle prescription refill requests.

Sections for Spanish-language assistance in the form of brochures and frequently asked questions are under development.

Later phases will include appointment scheduling and bill payment features.
Philanthropy Summit Attendees Learn About the Importance of Research and Collaboration

BY CHRISTA PECIKOZIC

For the second year in a row, City of Hope partnered with Town & Country Magazine on a Philanthropy Summit, which took place on May 7 at the New York Historical Society in New York City. Linda Malkas, Ph.D., deputy director of basic research and associate chair of City of Hope’s Department of Molecular Cellular Biology, was one of four speakers on a panel entitled, “Best Practices: Making & Spending Our Cancer-fighting Dollars.” The panel was moderated by news veteran Katie Couric, who explained how cancer research has changed. Today, organizations are forming dream teams of scientists who collaborate, rather than compete.

During the discussion, Malkas provided insights into breakthroughs in cancer research, the importance of research collaboration and the impact it can have on speeding cures. Joining her was actor and Stand Up To Cancer ambassador Tony Goldwyn, who spoke about how his mother’s passing from lung cancer inspired him to get involved in the cause.

Lisa Paulsen of the Entertainment Industry Foundation and Craig B. Thompson, M.D., of Memorial Sloan Kettering Cancer Center also sat on the panel.

With topics ranging from how to improve our education system to understanding the roots of philanthropic funding for cancer research, the summit brings together a community of people who have the influence and means to move the needle in philanthropy.

Honoring Our Legacy of Support

CITY OF HOPE’S DONOR RECOGNITION GALLERY SHOWCASES MORE THAN 100 YEARS OF DONOR SUPPORT

BY BETSY STEWART

Philanthropic support is a hallmark of City of Hope’s legacy. The names of thousands of supporters cover buildings, gardens and tribute walls across our campus. These special spaces serve as inspiring, attractive tributes to vital members of the City of Hope community.

Now, our new online Donor Recognition Gallery makes it possible for donors and friends of City of Hope everywhere to learn about this meaningful part of our legacy by visiting cityofhope.plannedlegacy.com.

The website links more than 100,000 donor names to plaques, donor walls and buildings around campus that celebrate generous donors and the advancements that they have made possible throughout our history. Each name that is honored has its own page, which can be printed or shared with friends and family via email or social media.

CELEBRATING A RICH LEGACY OF DONOR SUPPORT

Since our inception in 1913, City of Hope has partnered with generous individuals and organizations, who had the vision to help us achieve our mission of caring for people fighting life-threatening diseases. The Donor Recognition Gallery is an exhaustive archive of photographs and donor names from throughout City of Hope’s history.

Many of our earliest spaces were named for groups or cities that formed chapters to raise money for City of Hope. For example, the Cleveland Building was named for one such group. Built in 1923, it provided space to treat tuberculosis patients.

Other early facilities bore the names of leaders. The Moses I. DeVorkin Memorial Hospital, dedicated in 1941, was named for former City of Hope Board Chairman Moses I. DeVorkin, M.D.

We continue to add recognition around campus to honor our growing community of partners, which include committed individuals and organizations, who contribute toward buildings, research and clinical efforts. Patient rooms, research labs, outdoor benches and more bear the names of philanthropic partners furthering City of Hope’s lifesaving mission.

As City of Hope grows and expands, many buildings and recognition pieces have been removed to allow for ongoing growth of medical and scientific programs. The Donor Recognition Gallery provides a permanent virtual tribute and record for these generous donors.
A Bold New World

Precision medicine focuses on genetic makeup of both patients and tumors. It’s the future of cancer care — and City of Hope is ready

BY VERONIQUE DE TURENNE

It was 2009 when a City of Hope patient in her 40s learned that the cancer she had been fighting for several years had metastasized to her lungs. Her medical team ran genetic tests on the tumor, but none of the drug therapies available at the time targeted the known mutations in the tumor cells.

Although at first the woman responded to chemotherapy, by 2013 toxicity had caused side effects so grave that the patient was faced with stopping her treatment. And then her doctors ran another test.

“We retested the biology of the tumor and this time, it turned out that we knew so much more about it,” said Karen Reckamp, M.D., M.S., medical director for Clinical Research Operations, co-chair of the Lung Cancer and Thoracic Oncology Program at City of Hope. Just four years after that initial diagnosis, doctors were able to identify a genetic mutation that previously had gone unrecognized. The best news of all: A drug that acted against that specific mutation was now available.

“She has been on the new treatment for two years now, with very good success,” Reckamp said. “That’s one of my favorite stories.”

Welcome to the brave new world of precision medicine, in which the diseases themselves can point to a treatment and even a cure. With leading-edge research and groundbreaking partnerships, City of Hope stands in the precision medicine vanguard.

“Precision medicine is the future of cancer care,” said Steven T. Rosen, M.D., provost and chief scientific officer at City of Hope, and the Irell & Manella Cancer Center Director’s Distinguished Chair. “We have been evolving toward a personalized approach to the treatment of cancer for a number of years, and as we continue to develop insight into targeted treatment, I see us becoming ever more precise in how we select and administer therapies.”

So what is precision medicine? It’s an emerging medical model that takes into account the unique genetic code of each individual, and then compares it to the genome of that person’s tumor. Doctors also factor in environmental and lifestyle influences, such as smoking or exposure to toxins, which can affect cancer development, and then propose treatment options that are specifically targeted to each patient. The approach has such promise that, during his State of the Union address at the start of this year, President Barack Obama announced a Precision Medicine Initiative, along with $215 million in initial funding.

Decades of research have revealed that cancer is fundamentally a disease of the genome. What makes cancer cells different from normal cells are the changes in their genes, which cause them to grow and divide at a rate that wreaks havoc on the human body. Yet it is these very changes that make cancer uniquely suited to precision medicine, said Sumanta Kumar Pal, M.D., an assistant clinical professor in the Department of Medical Oncology & Therapeutics Research, and co-director of the Kidney Cancer Program at City of Hope. By first mapping an individual’s genome, and then mapping the genome of his or her tumor, doctors can see the mutations that are driving the cancer, and work to develop a targeted therapy.

“We’ve suspected for some time that every cancer has a unique biology,” Pal said. “What we lacked was the technology to identify the relevant genes.”

The turning point came in 2003 with the completion of the Human Genome Project, an international scientific collaboration that resulted in the first-ever complete genetic map of human DNA. Since then, technology has grown apace. The first human genome took eight years and close to $1 billion to complete. Now, a genome can be sequenced in mere days, and for just a few thousand dollars.

With each advance, however, comes a new set of challenges. The most pressing is the need to collect adequate data to create a knowledge pool that is both deep enough and sufficiently diverse to yield reliable answers. Then, with such an avalanche of information, comes the need for the tools to quickly make sense of it all.
ORIEN WILL ACCELERATE DATA EXCHANGE — AND NEW CANCER THERAPIES
City Of Hope has Joined a Novel Research Partnership

The Oncology Research Information Exchange Network, or ORIEN, is the world’s largest collaboration for cancer research. ORIEN is anchored by the Moffitt Cancer Center and the Ohio State University Comprehensive Cancer Center — Arthur G. James Cancer Hospital and Richard J. Solove Research Institute. City of Hope joins the network along with University of Virginia Cancer Center, University of Colorado Cancer Center, University of New Mexico Cancer Center, Rutgers Cancer Institute of New Jersey, Morehouse School of Medicine, and the University of Southern California.

ORIEN’s expansion will enable more than 50,000 new patients to donate their tissue and clinical data to the network each year, thereby increasing the potential they can be matched with a potentially lifesaving clinical trial.

The network contributes to extensive databases of cancer patient information, including medical history, cancer tissue and DNA, which provides a rich resource for basic research and clinical trials. “Rapidly evolving science and modern diagnostics are moving the field of cancer research and cures forward, but it’s not something one institution can accomplish on its own. City of Hope is proud to partner with Moffitt, the OSUCCC-James and the new ORIEN members to share data, collaborate and to ultimately change the cancer treatment model,” said Steven T. Rosen, M.D., provost and chief scientific officer for City of Hope, the Irell & Manella Cancer Center Director’s Distinguished Chair and director of City of Hope’s comprehensive cancer center.

For City of Hope patients, membership in the network means expanded access to clinical trial offerings from National Cancer Institute-designated cancer centers.

The network partners with industry to accelerate and improve clinical trial efficiency, with the aim of bringing safe and effective treatments more quickly to all patients.

“You need hundreds of thousands of patients to gather the information that’s critical to being able to conduct studies and trials that will provide answers,” Pal said. “We’re in this era of big data, and part of the challenge is to associate these various factors with precise information regarding ethnicity, socioeconomic background, genetic makeup.”

To that end, City of Hope has recently entered into a trio of partnerships to collect, organize and evaluate the vast pool of patient data necessary for the advancement of precision medicine.

The first, the Oncology Research Information Exchange Network, also known as ORIEN, is the largest collaboration for cancer research ever assembled. ORIEN, which launches with clinical data from more than 100,000 patients who have donated both tissue and clinical data for cancer research at the molecular level, will speed advances in the development of precision medicine treatments.

Beyond the ORIEN partnership, City of Hope is now one of 14 cancer centers in the U.S. and Canada that will have access to IBM’s supercomputer, Watson. Programmed to mimic human cognition, Watson’s singular brainpower can be harnessed to sift and organize data, and to draw therapeutic conclusions based on each tumor’s genetic code.

Further, in July, doctors at City of Hope joined a new National Cancer Institute clinical trial called NCI-Molecular Analysis for Therapy Choice. Also known as NCI-MATCH, the trial will analyze patients’ tumors in order to determine whether they contain genetic abnormalities for which targeted therapies already exist. Reckamp, who will serve as a principal investigator for one of the arms of the multicenter trial, said the trial will give patients with rare cancers much greater access to targeted therapies.

Because the nature of cancer research is dealing with a deluge of information — the genome of just one patient totals more than 100 gigabytes — partnerships such as these are the key to future breakthroughs, said Larry W. Kwak, M.D., Ph.D., City of Hope’s associate director for developmental therapeutics and translational research and the Dr. Michael Friedman Professor in Translational Medicine.

“Because the mutations (that drive cancer) are rarely common to all cases, you need the largest group of patients possible, with detailed information tied to their clinical outcomes, to determine which mutations are significant, which are silent, or which are tied to barriers to effective treatment like drug resistance,” Kwak said.

Even with alliances such as Watson, ORIEN and NCI-MATCH joining in the fight, challenges to the future of precision medicine remain. At present, many of the tissue samples collected during the diagnostic process at smaller hospitals and medical centers are not suitable for gene sequencing.

Still, the pace of recent progress has doctors at City of Hope looking with confidence into the future.

Concluded Reckamp, “At City of Hope we are looking to provide specific treatments for a person’s specific cancer, and each year we are getting better and better at achieving that goal.”

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LARRY W. KWAK
CAR-T Therapy to Patients Who Need It

The trials at City of Hope are exploring the potential of an especially powerful type of immunotherapy that modifies white blood cells known as T cells, then uses those cells to recognize a specific marker for cancer. City of Hope is one of only seven centers nationwide studying this therapy — and the only one in California offering clinical trials. City of Hope is now using this approach — known as chimeric antigen receptor, or CAR-T cell therapy in clinical trials for leukemia, lymphoma and other hematologic malignancies. The trials use a similar approach tailored to each cancer: Patients have T cells collected from their blood, then modified using a lentivirus — a specific type of virus that encodes the T cells with specific antigen receptors. The modified cells are then able to recognize proteins found on cancer cells — which, researchers say, triggers the immune system to fight the cancer.

“Immunotherapy is clearly an area of tremendous potential for treating cancer,” said Stephen J. Forman, M.D., leader of the Hematologic Malignancies and Stem Cell Transplantation Institute and director of the T Cell Immunotherapy Laboratory at City of Hope. “We’re proud and excited to be among the few teams in the country working on this type of immunotherapy and to have the opportunity to offer these therapies to our patients through clinical trials.”

Among the diseases that City of Hope researchers are targeting with CAR-T cell therapy in current protocols are lymphoma, acute lymphoblastic leukemia and chronic lymphocytic leukemia. A trial for acute myeloid leukemia (AML) will be the first ever to target the CD123 antigen — a molecule that helps signal a protein important to the immune system — using CAR-T cells in AML patients.

Several centers nationwide are working with CAR-T cell therapies, each taking slightly different approaches and studying different cancers and different targets. City of Hope has the clinical and scientific expertise to house the entire process on its campus — including collecting the cells, manufacturing the lentivirus, modifying and replicating the cells and reinfusing them. Researchers have focused on enriching the memory of T cells, with the aim of creating cells that will be long-lived in the body and reproduce. This is what could allow for the T cell therapy approach to potentially have a longer-lasting effect than medications, which would have to be taken repeatedly.

“When you get a cold or infection, the immune cells specifically track down and rid the body of infected cells,” said Forman, the Francis & Kathleen McNamara Distinguished Chair in Hematology and Hematopoietic Cell Transplantation. “That’s what we want to achieve for our cancer patients.”
A group photo showcasing cancer survivors has become a cherished tradition of the Bone Marrow Transplant Reunion. At the 39th reunion on May 1, the number of patients cured of blood cancers by bone marrow and stem cell transplants had grown so large that the photographer has to use a cherry picker. It says a great deal about how these treatments have developed. Stephen J. Forman, M.D., the Francis & Kathleen McNamara Distinguished Chair in Hematology and Hematopoietic Cell Transplantation, can remember the first Bone Marrow Transplant Reunion in 1977, which consisted of a single patient and his donor. This year, more than 4,500 patients and family members gathered to celebrate their freedom from cancer. Each wore a button proclaiming the length of time since their transplant. Renowned entertainers — cancer survivors themselves — performed for the empathetic audience.

MEETING THEIR HEROES

A few patients had the opportunity to meet their stem cell donors. The reunion brought 9-year-old Amanda Cooper face-to-face with her personal superhero, Lars Nijland, the man whose stem cells had the power to heal her cancer. He arrived without a cape, but with a simple explanation as to why he donated his marrow: “It was simply the right thing to do.” “I only knew a few things about him before today,” Amanda told a crowd of patients, nurses, doctors and reporters. “I knew he was a boy from Germany. Most of all, I knew he was a superhero, brave and selfless.”

Yesenia Portillo, 15, welcomed her donor, Phil Ratcliff, with tearful thanks and a hug. Portillo is an acute myeloid leukemia survivor: Ratcliff, a West Point graduate who’d signed up for the registry nearly a decade earlier. “I’d forgotten I’d signed up until they called me,” he quipped.

Cancers are frequently able to develop properties that trick the immune system into believing that they are part of the body itself, and researchers believe the modified T cells will be able to recognize cancer cells and signal the immune system to fight.

Future T cell trials at City of Hope are opening the therapy to other types of cancers, including brain cancer, multiple myeloma and breast metastases to the brain.

Investigators from the Hematologic Malignancies and Stem Cell Transplantation Institute working with CAR-T cells include Elizabeth Budde, M.D., Ph.D., assistant professor; Christine Brown, Ph.D., associate director of the T Cell Therapeutics Research Laboratory; Myo Htut, M.D., assistant clinical professor; Samer K. Khaleed, M.D., assistant clinical professor; Amrita Y. Krishnan, M.D., director of the Multiple Myeloma Program; Leslie Popplewell, M.D., associate clinical professor; Saul Priceman, Ph.D., assistant research professor; Tanya Siddiqi, M.D., assistant clinical professor; Jamie Wagner, senior research associate in cancer immunotherapies and tumor immunology; and Xiuli Wang, M.D., Ph.D., associate research professor in hematology and hematopoietic cell transplantation.
City of Hope’s commitment to and leadership in this endeavor, as well as enables us to pursue the crucially important work of bringing the promising potential of stem cell treatments to fruition."

In addition to the ACT-I grant, City of Hope has previously been awarded more than $55 million in CIRM funds for laboratory and translational research, primarily in HIV/AIDS and brain cancer.

**POTENTIAL NEW WAYS TO FIGHT AIDS**

City of Hope scientists are investigating two different means of altering stem cells to fight AIDS. One approach is a combination of stem cell and gene therapy using small ribonucleic — or RNA — molecules that block the genes HIV needs to infect immune cells, specifically T cells. Developed by John Rossi, Ph.D., Lidow Family Research Chair and chair of the Department of Molecular and Cellular Biology, this approach aims to spur the immune system to produce T cells resistant to HIV by infusing the patient with these altered stem cells.

Another approach uses an enzyme called a zinc-finger nuclease, or ZFN, as a pair of molecular scissors that can edit the HIV patient’s stem cell genes so they no longer produce a key protein the virus requires to infect cells. This approach has been developed by a team of investigators at City of Hope working with Sangamo Biosciences and Keck School of Medicine of USC.

Karen Aboody, M.D., professor in the Department of Neurosciences and Division of Neurosurgery, co-leader of...
the Developmental Cancer Therapeutics Program and principal investigator of a CIRM Disease Team Award, in collaboration with Jana Portnow, M.D., associate professor of medical oncology and associate clinical director of the Brain Tumor Program, developed a neural stem cell platform for targeting cancer drugs selectively to tumor sites, potentially increasing efficacy and decreasing side effects.

This platform is now available through clinical trials offered by ACT-I. In previous laboratory and first-in-human safety trials, Aboody and her team established that neural stem cells genetically modified to express a therapeutic enzyme migrated to cancer cells. These enzymes could then convert a prodrug — a benign form of a drug — into a potent cancer-killing drug at the tumor site. The prodrug itself can cross the blood-brain barrier which blocks most chemotherapy drugs, one of the challenges of treating brain cancers.

This illustrates the productivity of our faculty and their contribution to advancing cancer care,” said Rosen, the Irell & Manella Cancer Center Directors Distinguished Chair.

Of the hundreds of important developments in cancer research and care showcased at the meeting, the most exciting tool showcased for fighting cancer was the human immune system.

Another field of research that created much buzz was precision medicine — with studies that identified how to tell which patients are most likely to respond to specific therapies. In Chicago, City of Hope researchers shared their own findings, learned about other findings and brought their new knowledge home to their patients.

Anyone who tours City of Hope will almost certainly be taken by two key buildings: City of Hope Helford Clinical Research Hospital and the Arnold and Mabel Beckman Center for Cancer Immunotherapeutics & Tumor Immunology.

The heart of the campus, in more ways than one, the two buildings are a stone’s throw from each other. The hospital is dedicated to treating cancer patients who are currently fighting their disease, and the research institute to finding the treatments and cures these patients need — and efficiently bringing those innovations to the clinic.

That drive to help patients is what inspires so many City of Hope physicians and scientists to attend, and present research at, medical conferences. There, they can share their discoveries with their peers worldwide, as well as learn about new advances and developments in cancer research and care. One of the most notable of those conferences occurred in May and early June.

Thousands of researchers and physicians convened in Chicago for the 2015 American Society of Clinical Oncology (ASCO) Annual Meeting, including a delegation from City of Hope who shared findings about a number of cancers and treatment approaches, including assessments of potential new therapies.

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Where Technology Is About the Patient

BY ROBIN HEFFLER

HEAD AND NECK CANCER TREATMENT: Where Technology Is About the Patient

SURGERY FOR HEAD AND NECK CANCERS IS UNARGUABLY COMPLEX, REQUIRING EXTREMELY CONTROLLED MOVEMENTS AND EXCEPTIONAL TRAINING

“Given where we are operating, our primary concern is maintaining speaking, swallowing and breathing,” said Ellie Maghami, M.D., chief of head and neck surgery, who recently teamed with Robert Kang, M.D., assistant clinical professor of otolaryngology and surgery, to perform a supraglottic laryngectomy, removal of a portion of a patient’s cancerous larynx, or voice box, above the vocal chords. “We want to treat disease and maintain the anatomy to have safe functioning.”

Maghami and Kang used a robot to help them perform that surgery. They avoided the traditional operation, which splits open the jawbone, and instead performed the procedure through the patient’s
mouth, using tiny robotic instruments to reach the back of the throat. That approach minimizes invasiveness, complications and scarring, and significantly reduces or eliminates the need for additional reconstructive surgery, while maximizing function.

Robotic operations require intensive training and extreme skill — and are offered only at large or highly specialized medical centers, such as City of Hope. Complex though robotic procedures are, they’re only one of the many leading-edge technologies at City of Hope used in head and neck cancer treatment.

WHERE HIGH-TECH CARE MEETS COMPASSIONATE CARE
But what truly sets the head and neck program apart is its comprehensive and compassionate approach to patients.

“We have in place a sophisticated, multidisciplinary head and neck team, which covers every aspect of the care required,” Maghami said. “The patient becomes the hub to whom we’re all connected. We put together plans to maximize the chances of beating the cancer and minimize the toxic effects of radiation and chemotherapy. And surgeons don’t hand off care to others after surgery, but manage postoperative and follow-up care as well.”

Mona Swinehart, R.N., an oncology-certified nurse who coordinates treatment for surgical patients at City of Hope, said care begins as soon as patients register with the call center.

“Our goal is to have all patients given to an R.N., who gets a health history, chooses an appropriate doctor, answers all questions, explains how the City of Hope system works and helps them to feel comfortable with the system,” she said. Swinehart said that doctors across the country refer patients to Maghami, who has received “wonderful” reviews from her patients. Kang too gets many referrals, she said, and is known for his warmth with patients and their families. “Patients are here for many years,” Swinehart said. “Doctors often take that extra step of being a friend to the patient. I’ve seen doctors who’ve gone to patients’ weddings.”

RESEARCH MAKES A DIFFERENCE
A large part of the strength of the head and neck cancer program is the strength of the larger organization, Maghami said. “City of Hope is a center of excellence,” she said. “We sit at the national table evaluating diseases from the most recent information coming out of labs and clinical trials.”

“We have in place a sophisticated, multidisciplinary head and neck team, which covers every aspect of the care required ... We put together plans to maximize the chances of beating the cancer and minimize the toxic effects of radiation and chemotherapy.” ~ Ellie Maghami

An associate clinical professor of surgery and holder of The Norman and Sadie Lee Professorship in Head and Neck Cancer, Maghami is currently researching the potential to turn cancer cells back into normal cells through bioengineered and modified viruses. In another study, she is targeting immune system cells to enhance the effectiveness of radiation.

Similarly, Kang is engaged in several research projects. One seeks to target a gene that already has increased the effectiveness of radiation in cancers other than the head and neck. Another is a clinical trial with Maghami, examining the results of robotic surgery.

“We spent the first 10 years building the clinical program as the place to go to,” Maghami said. “In the next 10 years we want to build the academic program, which will further enhance the effectiveness of our clinical work.”
ON A SPRING DAY IN 2013, 10-YEAR-OLD JACKIE GARCIA OF WHITTIER, CALIFORNIA, NOTICED A LUMP IN HER JAW. HER MOTHER SUSPECTED IT WAS A MINOR PROBLEM, PERHAPS DUE TO A FALL, BUT MADE AN APPOINTMENT WITH A PEDIATRICIAN, JUST TO BE ON THE SAFE SIDE.

ON A SPRING DAY IN 2013, 10-YEAR-OLD JACKIE GARCIA OF WHITTIER, CALIFORNIA, NOTICED A LUMP IN HER JAW. HER MOTHER SUSPECTED IT WAS A MINOR PROBLEM, PERHAPS DUE TO A FALL, BUT MADE AN APPOINTMENT WITH A PEDIATRICIAN, JUST TO BE ON THE SAFE SIDE.
City of Hope is one of only a handful of centers in the United States offering trials in chimeric antigen receptor — or CAR-T cell therapy. This first-in-human trial will inject a patient’s T cells — modified in a laboratory to recognize certain markers on cancer cells — directly into the tumor site. City of Hope is the only center offering CAR-T cells in injection form for brain cancer.

“The data from our preclinical studies makes us confident that this treatment has the potential to be very powerful and last longer than previous attempts at immunotherapy for brain cancer,” said Behnam Badie, M.D., chief of neurosurgery at City of Hope. “This could take the treatment of brain tumors to the next level, and open up a new avenue of treatment to patients who badly need it.”

The safety trial will study glioblastomas and advanced gliomas, and will evaluate the therapy on inoperable tumors and also in patients who have had their tumors surgically removed.

City of Hope has been offering CAR-T cell immunotherapy in clinical trials for several blood cancers. This is will be the first trial here to evaluate the method against a solid tumor.

T cells are the cells in the immune system that recognize threats to the body then mount an attack against the infection or disease. One reason cancers are difficult to fight is that they are adept in tricking the immune system. In CAR-T cell therapy, a patient’s T cells are extracted, and then modified in a laboratory using a lentivirus. The virus “reprograms” the T cell to recognize receptors on cancer cells. Specifically, in Badie’s trial, a certain kind of T cell — CD4 cells — will be trained in the lab to fight cancer. These cells are memory T cells, meaning they replicate in the body and “remember” diseases they’ve fought previously. These cells activate the “soldier” T cells that fight disease.

The hope is that the immune system will mount an attack on the existing cancer — then do the same should the cancer recur.

However, the goal for the initial trial is to evaluate the safety of the cells and determine a safe therapeutic dose.

The CAR-T cell laboratory is overseen by Christine Brown, Ph.D., associate director of the T Cell Therapeutics Research Laboratory, and Stephen J. Forman, M.D., Francis & Kathleen McNamara Distinguished Chair in Hematology and Hematopoietic Cell Transplantation.

The research is being funded through a grant from the Gateway for Cancer Research Foundation.
As a teenager living in Duarte, California, James Finlay organized 50 to 60 donors for a blood drive to benefit City of Hope, meeting his need for a community service project on his way to becoming an Eagle Scout.

“That was my first major interaction with City of Hope,” he said. “I had very little sense of the research that goes on here.”

Finlay never imagined that two decades later he would be a student with not only an inside view of — but also a role in — the investigations conducted at City of Hope’s Irell & Manella Graduate School of Biological Sciences. The renowned program trains a handful of select graduate students in the fields of chemical, molecular and cellular biology, as well as bioinformatics and genetics.

On Friday, June 12, Finlay became one of 12 graduate students who received doctor of philosophy degrees at the school’s 17th Commencement in the Rose Garden on City of Hope’s main campus. The keynote address was delivered by Harry Gray, the Arnold O. Beckman Professor of Chemistry and founding director of the Beckman Institute at the California Institute of Technology. Gray is acclaimed for his research on a wide range of fundamental problems in inorganic chemistry, biochemistry and biophysics.

**TRAINING THAT LEADS TO SIGNIFICANT CAREER POSITIONS**

After commencement, graduates will follow in the footsteps of their predecessors, who have landed fellowships and staff positions in prominent universities, the National Institutes
THIS YEAR’S GRADUATES INCLUDE:
MAGGIE BOBBIN, JACKSON CHAMPER,
CHU-TING (ISAAC) CHENG,
JESSICA CHRISTENSON, ERIN DENNY,
JAMES FINLAY, KURT JENKINS,
MONIKA POLEWSKI, LAURA SMITH,
NADIAH WAN MOHD GHAZALLI,
TIANYI WANG, CHUNYUE WENG

of Health, the National Cancer Institute, and major biotech and pharmaceutical companies.

Jessica Christenson, for example, a student in the lab of Susan Kane, Ph.D., professor emeritus of cancer biology, will be a postdoctoral fellow in pathology at the University of Colorado.

Erin Denny, also a mentee of Kane, has accepted a postdoctoral position as a licensing associate at Amgen.

And, Maggie Bobbin will soon start a postdoctoral fellowship in pathology at Massachusetts General Hospital. She was mentored by John J. Rossi, Morgan & Helen Chu Dean’s Chair of the Irell & Manella Graduate School of Biological Sciences and chair and professor of molecular and cellular biology.

Rossi said that in bridging basic science and clinical medicine the graduate program offers an experience that similar programs can’t match.

“The close interactions among our academic and clinical faculty create a culture of cooperation that is unique for biomedical graduate programs,” he said.

A PERSPECTIVE THAT’S HARD TO MATCH

Enrolled in both the Ph.D. program and a residency in laboratory animal medicine, Finlay had two mentors: Carlotta Glackin, Ph.D., associate professor of neurosciences, and Richard Ermel, D.V.M., M.P.V.M., Ph.D., director of and professor in the Division of Comparative Medicine’s biomedical and translational research programs. Soon, Finlay will begin a position as a clinical veterinarian in the Department of Animal Resources at USC, with which he collaborated during his residency. During his graduate training at City of Hope, Finlay said, he thrived in the school’s close-knit environment, and was constantly reminded of why he wanted to work in his chosen field.

“When I would go the cafeteria or would lock up my bicycle, I saw cancer patients all the time, including little kids in wheelchairs going for treatment,” he said. “It puts a human face on the research, and really, really motivates you to want do good research.”
By the time the Rev. Martin Luther King Jr. spoke those words in Chicago in 1966, the Civil Rights Act had been passed, the Voting Rights Act was the law of the land and the March on Washington was a three-year-old memory. Yet King clearly recognized his work was far from complete. He knew he needed to advocate for what’s been called “America’s forgotten civil right.”

At about the same time, a group of psychologists gathered at the Swampscott Conference in Boston, where they began to shift their thinking from individual practice to the still-new realm of community psychology. It wasn’t enough, they realized, to treat a single patient when his or her community may be in crisis. A broader view was needed, one that examined social justice, diversity, empowerment, citizen participation and, yes, prevention and health promotion.

Nevertheless, it would be nearly two more decades before minority health inequality received the national attention it deserved. The big change came in 1985 when Health and Human Services Secretary Margaret M. Heckler issued the landmark Report of the Secretary’s Task Force on Black and Minority Health. The Heckler Report, as it became known, laid out for the first time extensive data documenting health disparities in minority communities, calling the situation “an affront both to our ideals and to the ongoing genius of American medicine.” The Heckler Report helped motivate Congress to create the federal Office of Minority Health, reauthorized in 2010 as part of the Affordable Care Act.

So, 50-plus years after those first stirrings, and 30 years after Washington took notice, where are we today?

“We’ve made great strides,” says Kimlin Tam Ashing, Ph.D., director of City of Hope’s Center of Community Alliance for Research & Education (CCARE), “Medical advances have trickled down to all communities, improving all of our lives. But gaps still persist. African-American women, for example, still have a lower breast cancer survival rate than white women, and whites of both genders have a higher colorectal cancer survival rate compared to blacks.”
CCARE plays a critical role in advancing the health disparity movement and reducing minority health care gaps. Building on the foundation created by the Heckler Report, CCARE goes into neighborhoods, identifies inequalities and crafts programs to alleviate them. Embracing the community psychology concept, CCARE helps underserved populations learn more, live healthier and receive better care.

The people of CCARE bring their personal passions to that mission. They see progress being made, as well as challenges still in place.

Noe Chavez, Ph.D., a population researcher, grew up in El Paso, Texas. He remembers visiting family across the border in Juarez, Mexico, and seeing shanty homes with no running water. We are better off in America, he says, but pockets of poverty remain.

Chavez’s colleague Aria M. Miller, Ph.D., comes from a middle-class African-American family that “wasn’t poor, but we didn’t have all we need.” Her parents experienced overt racism that’s less evident today, she said, though not entirely gone.

Direct bias may no longer exist, but it’s a fact that, while the percentage of Asian and Latino men in medical schools is growing, the African-American percentage stands at a paltry 2.5 percent, and it’s dropping.

Many hope the Affordable Care Act will be a powerful equalizer, bringing quality health care to more people of all backgrounds. It’s too soon to tell. But all agree that better education, especially among the young, can make a substantial difference. CCARE puts that belief into practice with a variety of youth programs including a partnership with Neighbors Acting Together Helping All (NATHA) and its unique “Eat, Move, Live” program.

“The better educated our young people are,” said Miller, “the more they can influence their wider communities, change old attitudes and really make a difference. That’s the key.”

~ Aria M. Miller
Patients Are Partners
IN TRANSFORMING CARE AT CITY OF HOPE

When you want to understand how to enhance the patient experience, go straight to the source: the patients themselves.

Patients and their families offer unique perspectives on care and services, providing valuable insights about what is working well and what is not. That’s why City of Hope turns to them for advice.

Since its establishment in 2008, City of Hope’s Patient and Family Advisory Council has helped improve the experience of patients and their families throughout the institution. Similarly, El Concilio, our Spanish-speaking advisory council, has helped improve services for Hispanic patients and caregivers.

Over the last six months, the advisory council has partnered with the director of security to add parking spaces and way-finding signage to the main campus in Duarte, California, collaborated with Volunteer Services to increase volunteer support, increase the choices of snacks in patient infusion areas and advocated for expanded after-hour food options for families accompanying patients for treatment. El Concilio created maps for Spanish-speaking patients and their families, and were integral in the development of City of Hope’s Spanish website.

"By partnering with patients and families on projects, and incorporating their perspectives in planning and decision-making, we advance patient- and family-centered care," said Annette Mercurio, M.P.H., M.C.H.E.S., director of programs for the Department of Supportive Care Medicine.

The Advisory Council is sponsored by the Sheri & Les Biller Patient and Family Resource Center and the Department of Supportive Care Medicine and composed of 22 City of Hope patients and family caregivers and three City of Hope staff members.

The council is so adept at improving the hospital experience for current and future patients, that it has been presented as a best practice model at regional, national and international conferences of health care leaders.

Mercurio said City of Hope’s Patient and Family Advisory Council demonstrates the power of engaging patients and families as partners in everything from care redesign and program planning to policy development and enhancing the overall experience.

For more information on the Patient and Family Advisory Council at City of Hope, contact the council coordinator, Becky Andrews, at bandrews@coh.org.
 THESE WERE THE DREADED WORDS ALLISA MILLER HEARD TWO DAYS AFTER SURGERY TO REMOVE A MASS IN HER ABDOMEN. AT 29 YEARS OLD, MILLER WAS TOLD SHE HAD OVARIAN CANCER.

“No, I don’t. I have a beautiful 2-year-old daughter — my life’s best accomplishment — an adoring husband and wonderful friends,” she remembers thinking. “I saw my cherished family life slipping through my fingers, and I felt defeated.”

That defeat quickly diminished once Miller arrived at City of Hope.

Walking onto City of Hope’s campus, Miller and her family were greeted by friendly faces that provided a strong sense of reassurance. She met with Robert Morgan, M.D., professor in the Department of Medical Oncology & Therapeutics Research. Morgan confirmed Miller’s diagnosis and explained her treatment plan. She was comforted knowing that she would be treated by a caring and compassionate medical team at the world’s leading institution for cancer care and research.

“I needed a strong team behind me, and City of Hope was that team,” Miller says.

On April 7, 2014, with her husband at her side, She received the first round of toxins. She cried. She prayed. “How dare this cancer threaten this mommy to a precious baby girl?!” she screamed. “But I knew I could handle the challenge by leaning on my faith. I was ready to fight this with every fiber of my being.”

Miller describes her City of Hope experience, from the receptionists who greeted her to the nurses on Unit A, as nothing short of amazing. “The nurses looked at me with kindness in their eyes, which reassured me they were not going to let me fail,” she remembers, calling each member of her nursing team “a true angel on earth.”

Now more than one year post-treatment, Miller will celebrate her triumph over ovarian cancer by participating in this year’s Walk for Hope on Sunday, Nov. 8, and raising funds for research in women’s cancers. She walks for other survivors and for those who lost their battle to cancer, but left a lasting impression on her heart.

Join Miller in the fight against women’s cancers. Register for Walk for Hope at walkforhope.org or call 800-266-7920 for more information.
Charitable Grants Help Transform Medicine

FUNDING SUPPORTS CANCER AND DIABETES RESEARCH

BY HOLLY STRAWBRIDGE

Research is the backbone of advances in medicine and patient care, and the lion’s share of funding for these advances comes from charitable grants.

As a medical center with an impressive track record in conducting important research, City of Hope continues to benefit from charitable grants. This year alone, three major organizations have granted more than $1.4 million to City of Hope researchers. These funds have the potential to transform how patients with cancer and diabetes are treated.

UNIHEALTH FOUNDATION
UniHealth Foundation awarded Arti Hurria, M.D., $733,951 who developed a method to assess the risk of chemotherapy side effects and other complications in older adults to improve patient-centered care. This was largest grant ever obtained from the foundation by a City of Hope investigator. Hurria and her team have developed a method to assess the risk of chemotherapy side effects and other complications in older adults. The UniHealth Foundation funds will enable them to integrate that assessment method into everyday care. Their goals are to reduce serious complications and unnecessary hospitalizations, empower patients to make educated treatment decisions and improve their quality of life.

STOP CANCER
STOP CANCER, an organization that underwrites the work of leading-edge scientists, has awarded $525,000 in grants to City of Hope to support new projects. These funds provide exposure for the projects that often leads to additional funding.

“STOP CANCER has been a vital part of our success for many years by supporting our finest investigators as they work to bring new cures to those challenged by cancer,” said Steven Rosen, M.D., provost and chief scientific officer, and the Irell & Manella Cancer Center Directors Distinguished Chair.

Three faculty members each received Research Career Development awards of $150,000 over three years:

- Mark Boldin, M.D., Ph.D., and his research group are investigating the role of microRNAs in the regulation of inflammation and lymphoma.
- Thomas Slavin, M.D. is studying the genetics of pancreatic and gastric cancers. Under mentorship from cancer geneticists Jeffrey Weitzel, M.D., and Susan Neuhausen, Ph.D., Slavin will look for hereditary markers in individuals with pancreatic and gastric cancers.
- Yuan Yuan, M.D., Ph.D., received the Margie and Robert E. Peterson Foundation Research Career Development Award to study novel therapeutics to overcome treatment resistance in breast cancer.

Three projects were awarded one-year seed grants of $25,000 each:

- Jae Yeon Jung, M.D., Ph.D., received the 2015 Marni Levine Memorial Seed Grant recognizing groundbreaking women’s cancer research for her work in cryoimmunotherapy for metastatic breast cancer.
- Karen Reckamp, M.D., M.S., and Linda Malkas, Ph.D., received the 2015 Beverly Weiss Memorial Seed Grant for a project pursuing an innovative approach for selectively targeting small cell lung cancer for treatment.
- Jeremy Jones, Ph.D., received the 2015 Marcia Israel 10th Anniversary Memorial Seed Grant for his research into the role of neuroendocrine differentiation in drug resistance.

THE LEONA M. AND HARRY B. HELMSLEY CHARITABLE TRUST
Joyce Niland, Ph.D., the Edward and Estelle Alexander Chair in Information Sciences is principal investigator of a project awarded a three-year, $228,000 grant from the Leona M. and Harry B. Helmsley Charitable Trust.

Niland will use the funds to support and encourage the attendance of diabetes researchers at Human Islet Cell Research Network (HIRN) conferences. These conferences provide a forum for the exchange of scientific ideas, fostering collaborations and generating new joint projects.

HIRN was recently launched by the National Institute of Diabetes and Digestive and Kidney Diseases to understand how human beta cells — cells in the pancreas that produce insulin — are lost in people with type 1 diabetes. Chief among the network’s objectives is to find innovative strategies to protect or replace functional beta cells in those living with the disease.
Donor Carlotta Glackin

CANCER RESEARCHER UNDERSTANDS IMPORTANCE OF FINDING, AND FUNDING, CURES

BY PHYLLIS FREEDMAN

Carlotta Glackin, Ph.D., a third-generation Californian, was raised in the Westwood neighborhood of Los Angeles. As a child, she was treated to a parade of fascinating, learned dinner guests. One was her uncle, who was director of the Scripps Institute of Oceanography, a major research institute. His conversations sparked Glackin’s interest in science.

When a family friend serving as a postdoctoral fellow at UCLA invited her to visit her lab after school, the 11-year-old quickly accepted.

Glackin’s interest in science was parlayed into undergraduate degrees in molecular biology and biochemistry. After graduation, she entered a Ph.D. program in molecular biology at Caltech, under the direction of James Bonner, Ph.D. The timing was perfect: The renowned teacher and scientist was already emeritus, and Glackin was his last Ph.D. student.

Glackin continued her postdoctoral work at Caltech under Barbara Wold, Ph.D. “I wanted a woman mentor to see what it would be like to be a woman scientist in academia,” says Glackin. “She pushed me very hard, but I would not be as successful today without her guidance.”

Now running her own lab, Glackin explains. The lab is hoping to bring a protocol to clinical trials soon.

In 1999, Glackin herself was diagnosed with ovarian cancer. Naturally, she turned to City of Hope. “I’d go in for my treatment, then go back to my lab,” she recalls. “The nurses and staff were amazing. City of Hope really is the best place to get treatment.”

Cancer-free now for 16 years, Glackin is thinking about her legacy, both scientific and financial. “My mother passed away from breast cancer in 2010, and my sister also had it. It’s hard it is to get funding,” she says.

That’s why she named City of Hope a beneficiary in her trust.

“I have spent most of my career at City of Hope working with superb graduate students. Having been a patient, too, I want to focus on the next generation and ensure that City of Hope continues to be a research and treatment leader,” she says. “My gift through my estate to fund scholarships for graduate students will help ensure that what I’ve achieved will live on.”

You Can Support Ongoing Nursing Education THROUGH OURHOPE

BY HANNA GUTHRIE

Nurses often serve as a bridge between patient and physician, and are usually the ones who provide patients with their daily care. At City of Hope, our nurses play a critical role in our commitment to delivering compassionate care. It’s our nurses who ensure that patients and their families are comfortable and well informed throughout their treatment.

Just as our physicians are challenged to keep up with the rapid advancements in their field, so are nurses. And just like our physicians, our nurses take their ongoing education seriously. It’s absolutely necessary to providing state-of-the-art, evidence-based care.

You can help support their commitment by visiting cityofhope.org/ourhope, creating your ourHope page and selecting “Nursing Education” from the dropdown menu.

Perhaps you will be celebrating an upcoming birthday or anniversary or participating in an athletic challenge. Perhaps you would like to honor the memory of a loved one. Or maybe you’d like to say “thank you” to a special nurse. Whatever the occasion, ourHope allows you to make your story with friends and family. You can help support their commitment by visiting cityofhope.org/ourhope.

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If you are looking to do something meaningful, funding nursing education through ourHope will honor City of Hope nurses and help support the valuable care they provide. Create your page today by visiting cityofhope.org/ourhope.
More than 20 music and sports stars stepped up to the plate to strike out cancer at the 25th Annual City of Hope Celebrity Softball Game. This year’s game, played on June 13, at First Tennessee Park in Nashville, was a close match that resulted in Team iHeart beating Team Opry 6-5.

Although Bret Michaels, Bobby Bones and the other iHeart team players earned bragging rights, City of Hope patients were the real winners, with more than $200,000 raised for cancer research.

Before the first pitch was thrown, the crowds cheered wildly as City of Hope patient Stephen Bess, a Nashville native, met his stem cell donor Jonas Baade for the first time. During his treatment for acute lymphoblastic leukemia, Bess received a lifesaving donation of genetically matched stem cells from a stranger who lived half a world away in Germany. In a special ceremony, Bess had the rare privilege of meeting his hero, Jonas Baade, in front of his family, friends and 3,000 supporters.

“My life changed because a complete stranger volunteered to save my life by donating his stem cells when he was called on,” said Bess. “How does one say thank you for that?”

After the meeting, both Bess and his bone marrow donor played ball alongside country artists Aaron Watson, Charles Esten, Chuck Wicks, Lauren Alaina, Lindsay Ell, Love and Theft, Vince Gill and many others seeking to beat cancer.

The Celebrity Softball Game was presented by Staples, which has been a long-standing, generous corporate supporter of City of Hope. Since 2006, Staples has raised more than $7.3 million for cancer research through various corporate giving and fundraising efforts. Other presenting sponsors included PEOPLE Country and the U.S. Army.

“Over the years, City of Hope has been extremely gratified by the support of the Nashville community, by the commitment of partners such as Staples and by the enthusiasm of the fans,” said Robert W. Stone, president and CEO of City of Hope. “Together, they’ve made City of Hope a part of this remarkable community, and we are deeply grateful.”

BY DENISE HEADY
3M continues its support for City of Hope by donating between 30 cents and $2 for purchases of pink products, including 3M Scotch tape dispensers shaped like a stiletto heel or a pebble, both created by renowned designer Karim Rashid. Don't forget pink multipurpose scissors and Post-It pop-up note dispensers in the shape of a heart; all benefiting City of Hope.

Available at quill.com and Staples, Office Depot and other office product retailers.

ACCO BRANDS USA Get organized and support lifesaving breast cancer research with specially marked pink planners, calendars, notebooks and more from ACCO Brands USA. Mead, an ACCO brand and a longtime supporter of City of Hope, has donated more than $31 million to our breast cancer programs. Specially marked ACCO, AT-A-GLANCE, Cambridge, Quartet and Swingline products can be purchased online at mead.com and quill.com, as well as at Staples and Office Depot.

BEAUTY GEM INC. Worldwide jeweler, Beauty Gem, is supporting City of Hope with specially-marked jewelry available at Sears, Km _, amazon.com and groupon.com. Beauty Gem will donate 5 percent of the net sales price of various necklaces, rings, charm bracelets and earrings to City of Hope. This line is only available until December 31, 2015, so get shopping!

GOJO/PURELL Through May 31, 2016, GOJO is supporting City of Hope via sales of specially marked 8 oz bottles of pink Spring Bloom Purell instant hand sanitizer to distributors, donating $3.60 per each case of 12, up to $50,000, to City of Hope's breast cancer programs.

NEWELL RUBBERMAID Newell Rubbermaid is donating to City of Hope with each purchase of a Pink@Work product, including specially marked PaperMate, Parker and Uni-ball pens, Expo and Sharpie markers, Liquid Paper and various Rolodex products. The donations for our breast cancer programs range from 10 cents to $1, with information on the product packaging. Visit pinkatwork.com for more information. Available from CVS/pharmacy, Staples, OfficeMax and other office products retailers.

PRAVANA INTERNATIONAL Pravana International has created NEVO, a gluten-free and vegan hair-care line with no sulfates, parabens or phthalates. Pravana is donating 5 percent of NEVO product sales to City of Hope for cancer research, treatment and education. Available at specialty salon supply shops.

DryBar and Sephora locations nationwide will feature specially-marked pink travel Detox Dry Shampoo products in support of City of Hope’s breast cancer program. DryBar is donating $1.00 from this popular item through October 31.

HARD ROCK AND KISS Hard Rock and KISS have teamed up to donate 15 percent from the sale of the brand's KISS Signature Series Edition 32 T-shirt and collectible pin, in support of City of Hope. These special-edition products will be available for a limited time in stores and online at hardrock.com.

Murad’s Hydrate for Hope, a limited edition moisturizer which will be paired with a charming two-toned pink limited edition cosmetic bag available only through the sale of the Hydrate for Hope set. The bag is lined with a fabric print of original art by Howard Murad, M.D., F.A.A.D., and founder of Murad Inc. Hydrate for Hope will be available at murad.com, sephora.com, Murad Inclusive Health Spa and leading spas and salons while supplies last.

FOR THE LATEST INFORMATION ON OUR SHOP4GOOD PARTNERS, GO TO WWW.CITYOFHOPE.ORG/SHOP-FOR-GOOD
Hope Sweat & Cures is a fitness and fundraising team that raises funds for City of Hope research and treatment programs while participating in half marathons, full marathons, cycling and triathlon events. In its first year, Hope Sweat & Cures is already a success. After only three races, Hope Sweat & Cures raised more than $75,000. With more events this year, including Bike the Coast in Oceanside, California, Trick or Tri Triathlon in Irwindale, California, the Rock ‘n’ Roll Half Marathon in Las Vegas and more, staying fit has never been so productive!

“So many people are affected by cancer, and it’s a horrible illness,” says Alejandra Arroyo, a Hope Sweat & Cures team member who participated in the ASICS LA Marathon. “I run in memory of those who lost their fight, those who have won the fight and those who continue to push forward. Together we can make a difference!” she says.

We invite you to join the team and sweat the big stuff — the things that really matter, like finding cures! Learn more at hopesweatcures.org.

GEMS OF THE DESERT SHINE AT CHARITY GOLF TOURNAMENT

GEMS OF THE DESERT CHAPTER Led by Gems of the Desert Chapter co-presidents Richard Stenton and Earl Matzkin, this year’s Desert Gems Charity Golf Tournament raised nearly $85,000 for cancer research and treatment at City of Hope. The event was held at the beautiful Desert Horizons Country Club in Indian Wells, California, on April 13. Major sponsors included Trader Joe’s and Shakti Warriors.

Participants enjoyed a round of golf, followed by cocktails and dinner. Entertainment was provided by saxophonist Will Donato, a national recording artist who generously donated his musical talents for the event. - Debbie Long

RAIN CAN’T DAMPEN HIKE4HOPE

Desert Communities Bad weather did not stop nearly 500 participants and 100 dedicated hike leaders, who weathered a storm to hike through the Indian Canyons of Palm Springs on Sunday, March 1.

Hike4Hope was co-chaired by Eileen Stern, president of The Desert Women’s Council, and Elaine McLain. Major sponsors included the Agua Caliente Band of Cahuilla Indians, Banner Mattress and Food4Less.

Thanks to the support of our sponsors and volunteers, and enthusiastic fundraising by the hikers, this year’s event raised nearly $95,000 for women’s cancer research and treatment at City of Hope! - Debbie Long
ABOUT OUR CHAPTERS
Nearly a century ago, small groups of women and men united to help City of Hope bring care and dignity to people suffering from tuberculosis. These first local chapters reached out nationwide to like-minded people in their effort to support City of Hope in the fight against disease. Today, chapters — dedicated groups of individual volunteers who raise millions of dollars to advance innovative research, treatment and education programs — remain a critical part of City of Hope’s fundraising efforts.

SAN DIEGO

Putt It Forward
WITH SWINGS FOR JULIE GOLF TOURNAMENT, PATIENT HELPS CREATE A BETTER FUTURE
BY ROBYN HIMA

On April 28, the Twin Oaks Golf course in San Diego was packed to the greens with avid golfers waiting to tee off at the third annual Swings for Julie Golf Tournament. Organized and hosted by Max Kauffman and Haven Dunn, co-owners of D Street Bar & Grill, the tournament was started as a way to help fund the mountain of medical bills amassed by Max’s wife, Julie.

In 2011, Julie began a two-year search of a diagnosis. She traveled from doctor to doctor trying to find an explanation for what started as uncharacteristic exhaustion and a burning sensation in her lungs, then proceeded to dropping blood counts and lesions on her cerebellum. In navigating her rocky road of misdiagnoses and escalating frustrations, her medical GPS took an unexpected turn that led her to Stephen Forman, M.D., at City of Hope. At Forman’s recommendation, Julie underwent a lifesaving bone marrow transplant on July 12, 2013.

“It’s hard to put into words how much Dr. Forman means to me and my family. He saved my life,” Julie says, beaming. “I am honored to be able to give back to him so that he can continue his research into saving lives. I am truly blessed that he came into my life as a doctor and is now my friend.”

And give back, she does. With her medical bills behind them, Julie and Max now host the tournament to raise money for City of Hope and Forman’s research. Rather than “paying it forward” they “putt it forward,” and this year raised more than $20,000.

Although Julie has had an up-and-down road, the confidence she has in Forman and the medical staff at City of Hope provides the energy she needs to live her life as a confident woman, adored wife, loving mother of two, cherished friend and, now, cancer survivor.

A LEGACY OF HOPE
FLORIDA Philanthropists Millicent and Ben Bauer wanted to make a difference in the lives of patients confronting cancer and other serious illnesses. In 2004, they directed the generosity of the Bauer Bisgeier Foundation to City of Hope with a $100,000 gift. The Millicent and Ben Bauer Patient Room in City of Hope Helford Clinical Research Hospital is a tribute to their commitment to speeding new treatments and cures for patients everywhere.

Millicent Bauer’s involvement with City of Hope included membership in the Pembroke Pines chapter and continued throughout her life. In February 2015, City of Hope received a gift of $500,000 from her estate — an enduring legacy of her philanthropic leadership and vision. — Shari Meehan
**SOUTHWEST**

**Golfers Go Big at Extravaganza**

BY TERI LANE

The Southwest Food Industries Circle (SWFIC) hosted its 23rd annual Spirit of Hope Celebration in April, raising more than half a million dollars for City of Hope. The two-day extravaganza was held at the Sheraton Wild Horse Pass Resort & Spa and Whirlwind Golf Club in Chandler, Arizona. Golf participants enjoyed 18 holes on this challenging but spectacular course and were treated to breakfast, lunch, goody bags and awards. Van’s Golf Shops donated vouchers for Under Armour and the Oakley Concept Shop, which were raffled.

Saturday night brought a beach-themed cocktail reception, silent auction and dinner. For the first time, the event featured an auction that accepted bids made by mobile phone. Items included Tiffany jewelry, Kate Spade handbags, trips to the Ste. Michelle Winery and Lake Tahoe, and multiple opportunities to rub elbows with executives at sporting events and other occasions.

Maureen Johnson, a resident of Chino Valley, Arizona, who was treated at City of Hope for three different types of cancer, twice brought the crowd to its feet with moving stories of her courageous battles with the disease. The 22-year veteran of the food industry and her husband, Marc, were celebrating their 45th wedding anniversary and her birthday that evening. The crowd surprised Johnson with flowers and an impromptu round of “Happy Birthday,” leaving few dry eyes in the house.

Johnson’s moving story reinforced the value of the SWFIC’s generous support to City of Hope, raising more than $15 million since 1992.

City of Hope would like to acknowledge the presenting sponsors of this year’s Celebration: Alliance Beverage, Anheuser-Busch, Co-Sales Company, Hensley Beverage, MillerCoors, Pepsi/Frito-Lay, Southern Wine and Spirits and Young’s Market Company.

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**A Magical Evening for Hope**

BY ROBYN HIMA

It might have been the allure of magic that brought out more than 300 members from the Ocean Hills North County Chapter for “A Magical Evening for Hope,” but it was compassion and heartfelt generosity that raised over $45,000 for City of Hope.

The chapter’s annual gala was truly a magical evening, presented by loyal City of Hope supporters Jack and Linda Morgan. Fundraising chair Rona Cole, chapter president Regina Aulisio and a talented event committee turned their community’s clubhouse into a magic castle, complete with magicians from the famed Magic Castle in Hollywood, California.

Guests were entertained by mini magic shows, fortune tellers, palm readers and delicious appetizers and beverages.

The highlight of the evening was an inspiring story of hope. Seventeen-year-old City of Hope survivor, Marshall Cotta, told his story of surviving a rare form of cancer when he was 18 months old. In his honor, the emcee hosted a raise-the-paddle appeal for donations. Longtime chapter member Carol Mathews generously offered to match the first $5,000 pledged by guests in attendance. As a result, a total of $15,000 was raised that evening — easier then pulling a rabbit out of a hat!
Give Me Shelter

BUS TRAVELERS GET RESpite FROM SUN

BY SUSAN DOUGLASS YATES

When the much-anticipated extension of the Metro Gold Line from Pasadena to Azusa opens in September, Duarte/City of Hope will have its own station. This will make getting to City of Hope easier and more convenient for outpatients, visitors and employees living throughout Greater Los Angeles and the San Gabriel Valley.

A hundred years ago, traveling to City of Hope (then known as the Sanatorium) on public transportation meant taking the Pacific Electric (PE) streetcar. The PE station was located about a mile from the sanatorium. A regular shuttle service covered the final distance to the campus.

In the 1950s, buses began replacing streetcars. A bus route that included a stop at City of Hope brought outpatients, visitors and employees to our front door.

In the early 1960s, City of Hope erected shelters on both sides of Duarte Road. This photo shows (from left to right) William Lancaster, mayor of Duarte; R.O. Christiansen, director of public relations, Metropolitan Transit Authority; and William Markey, administrative director, City of Hope, testing the accommodations of the canopied bench as the Glendora-bound #68 bus stands by.

A CENTURY OF DISCOVERY — a series of photos and stories from the City of Hope Archives reflect the institution’s rich history, showcasing its scientific achievements, compassionate patient care and philanthropic achievements from the past century.
Create a legacy of healing and hope for those with cancer, diabetes and other serious illnesses by leaving a gift to City of Hope in your will. Most gifts cost you nothing now and there is no minimum contribution required. Contact Amy Goldman to discuss giving opportunities that meet your personal objectives at plannedgiving@coh.org or 800-232-3314 or request our complimentary planning publications at www.myplanwithcoh.org.

LEAVING A LEGACY IS SMARTER AND EASIER THAN YOU THINK

Harlan Kirschner
Spirit of Life® Honoree, National Professional Salon Industry Chairman and Legacy of Hope Society member