Advancing Treatment for Brain Cancer p2
From Fatigue to Fit p4
World’s Smallest Pacemaker p5
Celebrating 30 Years Among the Stars p7
Lung Cancer: Reasons for Hope p8
Health and Prevention Classes p10
Watch Edwin Carrillo’s Story p12
Few diagnoses are more difficult to hear than malignant brain tumor—which is why our neurosurgeons and oncologists are at the forefront of finding better ways to treat it.

St. Jude Medical Center is one of the first hospitals in the nation—and the second in California—to use a new breakthrough that allows surgeons to visualize brain cancer in real time. A revolutionary imaging agent called Gleolan causes the tumor to “light up” by making cancer cells appear fluorescent red, clearly delineating tumor tissue from the surrounding brain.

“For the first time, we have real-time visualization of the tumor in the operating room, allowing us to safely and accurately resect significantly more of it—an outcome that is directly tied to improved survival,” explains Lars Anker, MD, a board-certified neurosurgeon who routinely uses the new technique. “This is an important step forward in our ability to meaningfully impact patient outcomes.”

Clinical trials showed patients given Gleolan had twice the rate of survival without progression after six months. Administered orally several hours before surgery, Gleolan is metabolized by the tumor cells and when illuminated by specialized imaging technology, the cancerous cells become fluorescent and glow an intense red or pink, while normal brain tissue appears blue.

Within St. Jude’s state-of-the-art neurosurgery suites, Gleolan is being used to more successfully treat the most common type of malignant brain cancer—gliomas—which present an unusual challenge as their tentacles or “fingers” often extend into multiple areas of the brain. “Gliomas follow fiber tracts within the brain, making them geometrically complex and often difficult to distinguish from healthy tissue,” says Dr. Anker. “It’s why resection is so challenging—and why seeing the tumor in real time is such a game changer.”

Used in Europe since 2007, Gleolan (also called 5-ALA) was given fast-track approval by the FDA in 2017. “We have been carefully tracking the performance of Gleolan in Europe for years and although we are among the first to bring its benefits to patients in the U.S., there is no doubt it will become the standard of care for glioma tumors,” explains the fellowship-trained neurosurgeon. “It’s simply a matter of how long it will take.

Because single cancer cells often migrate away from the tumor and remain invisible, surgical resection of gliomas is typically followed by a second phase of treatment. At St. Jude, the next step often involves molecular profiling of the patient’s cancer to identify a specific immunology or biotherapy to target the cancer’s cellular signature. The recent DCVax autologous tumor cell vaccine trial—one of over 100 clinical trials at St. Jude—demonstrated an increase in 3-year survival rates from 16 to 28 percent for brain cancer patients. “This is the strength of our Brain Tumor Program,” says Dr. Anker. “An across-the-board commitment to finding new and better answers for our patients.”

To learn more, please call our nurse navigator at (714) 446-5567.
Always Tired?

Time to replace your fatigue with something better

For millions of Americans, tired is their new normal. Finding a solution often starts with blood tests to rule out common culprits, including anemia, diabetes and thyroid conditions. But Jyotika Wali, MD, board-certified internal medicine physician, has a longer checklist—and it’s helped many beat fatigue and increase their energy.

**VITAMIN DEFICIENCY:** People are often deficient in key vitamins and minerals – including D, B, E and magnesium—any of which can cause fatigue. “These nutrients play a major role in your body’s energy production,” explains Dr. Wali, who recommends high-quality, pharmaceutical grade supplements. “When there’s a deficiency, the result is often fatigue.”

**TOO LITTLE SHUT-EYE:** Sometimes the issue is sleep apnea and sometimes it’s just the false belief that “five hours is all I need.” A lack of sleep impacts two hormones—ghrelin and leptin—that control your hunger, explains Dr. Wali: “Not enough sleep can sabotage your weight, vitality and open the door to depression.”

**EATING THE WRONG THINGS:** “Spikes in blood sugar—whether from a Coke or white bread—leave you feeling tired,” says Dr. Wali, explaining that refined carbs stimulate insulin, a fattening hormone and over time can lead to insulin resistance.

In addition, most people consume too many inflammatory omega-6 fatty acids—thanks to an abundance of processed foods and hydrogenated oils—and too few omega-3 foods, such as avocados, eggs, wild caught salmon and olive oil. “An imbalance of omega-3 and omega-6 fatty acids creates fatigue and inflammation,” says Dr. Wali.

According to the popular Fullerton physician, the key is to begin with a few small changes—not attempting a dramatic overhaul. “Today, find a great B supplement and make a bowl of guacamole,” she urges. “Tomorrow, get some exercise by dancing for 20 minutes or take a brisk walk. Small steps can lead to big successes.”

To contact Dr. Wali, please call (714) 451-0000. To find a physician visit us at stjudemedicalcenter.org/find-a-doctor.
World’s Smallest Pacemaker Brings Big Benefits

On Tuesday, Bonnie Williams, 77, lacked the energy to leave her house and wondered if she had much time left on earth. On Wednesday, she had a Micra pacemaker—about the size of a large vitamin—inserted to treat her atrial fibrillation. And on Thursday, she went shopping and wondered how to celebrate how incredible she felt.

“There hasn’t been a significant improvement in cardiac pacing in decades—until now,” explains Brian Kim, MD, Medical Director of the St. Jude Catheterization Lab and one of the first in the state to bring the benefits of the miniaturized pacemaker to patients.

With no wires or electrical leads, the tiny self-contained pacemaker is implanted directly into the heart’s right ventricle, allowing most patients to go home the same day. Inserted by a catheter through the femoral artery, the Micra requires no surgical “pocket” or incision, eliminating two of the most common complications.

In fact, Micra’s complication rate is almost 60 percent lower than traditional pacemakers—and the gains in convenience are equally impressive. “Patients typically go home the same day and resume normal activities within 24 hours, compared to standard pacemakers that require an arm sling for 4-6 weeks to prevent lead dislodgement,” says Dr. Kim, a board-certified electrophysiologist who performed Orange County’s first Micra insertion two years ago, shortly after its FDA-approval.

While Micra is currently used to treat a limited number of cardiac patients, most often those with bradycardia, Dr. Kim says that will change. “This is the beginning of a paradigm shift away from how we have provided pacing therapy for the last 20 years.”

Bonnie’s grateful for the paradigm shift in her own life. “Dr. Kim told me these batteries will last about 12 years and then I’ll need to get a new one,” says the grandmother of 11. “I have quite a few things left to do.”

To contact Dr. Brian Kim, please call (714) 543-5555, or to find a cardiologist visit us online at stjudemedicalcenter.org/find-a-doctor.
Discovering the many hiking paths of Orange County was a benefit that the 67-year-old former sports coach was enjoying in his retirement. But once George’s vision began deteriorating, he feared his hiking days may soon come to an end.

George was diagnosed with the eye disease glaucoma, a slowly progressive “silent thief of sight” and a leading cause of irreversible blindness worldwide.

The good news is that with early detection and treatment, most people with glaucoma will not lose their vision. Thanks to donors and generous patients who recently helped fund new cutting-edge ophthalmic technology for St. Jude, there is further hope for stopping glaucoma and other vision-robbing diseases before they progress too far.

“There is a new wave of technology that is innovating eye care, and St. Jude is so fortunate to have donors keeping us at the forefront of the latest treatment options,” says Jeffrey Winston, MD, a board-certified ophthalmologist at St. Jude Medical Center.

“Community support empowers our team to do everything we can to reduce fears of vision loss and give patients the best possible outcomes.”

The donor-funded Cyclo G6® Glaucoma Laser System with MicroPulse P3™ Glaucoma Device features the first nonincisional, noninvasive laser for the treatment of glaucoma. Before this technology, options were limited to incisional surgery or medicated drops administered multiple times per day to reduce eye pressure.

“Using segmented, low-energy laser pulses, the new system can deliver the same results as other, less convenient options in a matter of minutes,” says Dr. Winston. “There’s also less tissue disruption and recovery time is minimal, allowing our patients to get back to their lives more quickly.”

Donors also helped update microscopes used during eye surgery to new top of the line LuxOR® LX3 Microscopes with Optiwave Refractive Analysis technology integration. Used primarily for cataract, glaucoma and retinal procedures, the microscopes offer superior focus and magnification capabilities, and allow for unprecedented, real-time calculations to assure accuracy of lens measures.

“Better visualization equates to more efficient and precise surgeries with better patient outcomes,” says Anita Lawrence, RN, BSN, CNOR, nurse manager for the St. Jude Outpatient Surgery Center. “When surgeons can see better at all stages and feel confident in their technology, everybody wins.”

Beyond the enhanced capabilities that will benefit patients like George and countless others in the future, Anita believes the community has blessed her team with another meaningful gift.

“Support from community members provides a sense of partnership that we are part of something amazing and greater than ourselves,” says Anita. “Knowing that others care enough to support our patients with the best resources inspires us to provide the highest level of care possible. That is the true gift, and we are forever grateful.”

To make your own meaningful gift to St. Jude, please call (714) 992-3033.
Come Celebrate 30 Years Among the Stars

Join us on November 16, 2019

From the confidence and strength that emanates from their powerful walk down the runway, you would almost forget that the models of St. Jude’s A Walk Among the Stars Fashion Show are also cancer patients and survivors.

These “stars” are expected to shine even brighter this year, as the community comes together to celebrate the 30th anniversary of this beloved and inspiring event. Proceeds will support the final phase in St. Jude’s journey to fully transition its breast program to 3D mammography—a revolutionary breakthrough in breast cancer detection that is already saving lives.

“Thanks to generous donors who helped us acquire the first two of six-needed 3D mammography systems, we’ve already caught very small cancers which may not have been seen on a traditional 2D scan alone,” says Brenna Chalmers, MD, board-certified diagnostic radiologist at the St. Jude Kathryn T. McCarty Breast Center. “I’m thrilled that A Walk Among the Stars will help complete our conversion to this leading-edge technology for the benefit of the women who come through our breast center.”

In honor of its pearl anniversary, A Walk Among the Stars will feature new and exciting highlights such as live entertainment, a silent auction, a gourmet dinner and its most inspiring fashion show to date at the Anaheim Marriott.

Adding to the energy of the night is a challenge gift from two families who are asking supporters to meet or exceed their collective $150,000 donation made toward the 3D mammography initiative.

Whether or not one attends the event, starting now, any gift made toward 3D mammography will count toward the challenge.

To make your contribution or to RSVP for the event, please call (714) 992-3033, or visit stjudemedicalcenter.org/wats.

Did you know? Charitable gift annuity rates are the highest they’ve been in years. To learn how you can support St. Jude and get income back for life, call (714) 992-3033.

Follow us on Facebook

St. Jude Memorial Foundation
Lung Cancer: Reasons to Hope
(And why screening is key)

Lung cancer kills more Americans than the next three cancers—breast, colon and prostate—combined. Typically only caught in its later stages, survival rates have not improved significantly in decades.

St. Jude Medical Center is a national leader in changing that statistic through state-of-the-art diagnosis and treatment—including robotic surgery to more precisely remove the cancer, a technique which St. Jude was recently recognized as among the nation’s best.

Yet the most powerful tool in dramatically increasing survival rates may be far simpler: a lung CT scan.

“Low-dose CT screening can detect even small lung abnormalities and is considered the gold standard in finding lung cancer at its earliest, most treatable stage,” explains Daniel Oh, MD, nationally-respected thoracic surgeon at St. Jude who oversees the hospital’s new Lung Cancer Screening Clinic. “Just as mammography and colonoscopy have significantly improved patient outcomes, routine lung screening can shift diagnosis from late-stage to early, far more curable stages.”

Who should be screened?
The clinic is designed to make screening and education easy and convenient for those most at risk of lung cancer—former or current heavy smokers.
Low-dose CT screening is covered by insurance for those who have smoked a pack a day for 30 or more years—or smoked for 20 years and have an additional risk factor, such as COPD or other lung disease, occupational exposure to asbestos or diesel fumes, or a family history of lung cancer. Heavy smokers who have quit in the last 15 years should also be screened.

Despite being a covered benefit, less than 5 percent of those who need to be screened are. “Lung CTs can identify cancer before there any clinical signs or symptoms, making it invaluable in saving lives,” says Joy Amundson, MSN, Acute Care Nurse Practitioner, the clinic, explaining a face-to-face visit with either her or the patient’s physician comes first. “It’s important for patients to understand both the risks and benefits.”

**Expert diagnosis and follow-up**

If a lung nodule or “spot” is found, the patient’s scans and medical history are reviewed by a multidisciplinary team—including a radiologist, pulmonologist and Dr. Oh—to determine what, if any, follow-up is needed.

“Most nodules are benign, a few require ‘watchful waiting’ and a few require immediate testing,” explains Dr. Oh, Associate Professor of Surgery at USC and Medical Director of the St. Jude Center for Thoracic and Esophageal Diseases. “By using new evidence-based protocols to minimize unneeded or invasive procedures, we offer patients the right care at the right time.”

*To schedule a lung cancer screening, please call (714) 446-5830.*

To attend Dr. Oh’s free community class on improvements in lung cancer diagnosis and treatment, please call 459-DOCS (3627). Dr. Oh will cover today’s most successful approaches to screening, monitoring and treating lung cancer, including new advances coming out of clinical trials.
Cataracts and Glaucoma: New Advances
May 14 | 6 p.m.
Cataracts and glaucoma are common among adults over 60. Billy Pan, MD, a board-certified ophthalmologist and glaucoma specialist, will cover successful treatments and prevention strategies for both. Common misconceptions and myths will be discussed, as well as the full range of innovative new solutions—from advanced technology lenses to iStent Inject.

Macular Degeneration: Answers, Treatments, Research
May 15 | 6 p.m.
Macular degeneration is the leading cause of vision loss—but it is treatable. Join Sean Adrean, MD, a board-certified ophthalmologist and retina specialist, to learn about the differences between “wet” and “dry” macular degeneration, the best approach for each, and current clinical trials that could bring new hope to patients. From vitamins to eye injections to surgery, learn about the best options for protecting your sight.

From Fatigued to Fit
May 16, 6 p.m.
Too many people drag themselves through the day, wondering when fatigue became their constant companion. Join Jyotika Wali, MD, a board-certified internal medicine physician, to discover the common causes of fatigue—from deficiencies in vitamins and omega-3, to insulin resistance—and learn strategies and suggestions for regaining your vibrancy.

Gain practical advice and useful health information to help you start your journey toward better health, fitness and quality of life.

Looking for a Solution to Heartburn, Reflux or GERD?
May 21 | 6 p.m.
Left untreated, acid reflux and the symptoms of GERD can damage the esophagus and increase your risk of esophageal cancer.

Join Phuong Nguyen, MD, a board-certified gastroenterologist and expert in endoscopic treatment of digestive disorders, to learn about successful approaches for treating GERD, including an important new minimally-invasive, outpatient treatment called TIF (Transoral Incisionless Fundoplication). In addition to covering options from medications to laparoscopic treatments, Dr. Nguyen will discuss patient outcomes with TIF, a 30-minute, endoscopic procedure that is bringing relief to those who don’t respond to medications or simply want to eliminate the use of heartburn medications.

What’s Your Risk of Lung Cancer?
May 22 | 6 p.m.
If you smoke a pack or more a day—and have for many years—your risk could be high. Join one of Southern California’s leading experts in diagnosing and treating lung cancer to learn who should be screened and how to catch lung cancer in its earliest, most curable stage.

Daniel Oh, MD, a board-certified thoracic surgeon, will cover evidence-based approaches to monitoring lung nodules, innovations in the treatment of nodules and cancer, and what promising new treatments are currently in clinical trials. If you or a loved one smokes, this not-to-be-missed class will offer the best information and recommendations available.

Menopause: Answers and Solutions
May 23 | 6 p.m.
Some women sail through menopause while others face life-changing symptoms. From insomnia and hot flashes to brain “fog” and depression, the effects of menopause can be as varied as their intensity.

Join Jerald Thanos, MD, OB/GYN, to gain the information you need to successfully navigate menopause and relief symptoms. Dr. Thanos will cover the pros and cons of hormone replacement, “synthetic and bioidentical” as well as more non-prescription approaches to regain your quality of life.

Could Acupuncture Help Your Pain?
May 30 | 6 p.m.
Recent studies have demonstrated the effectiveness of acupuncture in safely reducing pain, including chronic back pain, arthritis, headaches and fibromyalgia pain. Current research is also evaluating its helpfulness in treating anxiety, depression, inflammation and other conditions.

Join Lauren Soojin Kim, L.Ac, Clinical Director of Wellness at the Jaseng Center for Integrative Medicine and an expert in acupuncture, to learn how this noninvasive treatment can help optimize the natural healing mechanisms of your body. Come learn who can benefit, what the evidence shows, and get answers to your questions.

How to Maintain Your Weight Loss
June 5 | 6 p.m.
Losing weight is hard. But keeping it off can be even harder. Join the St. Jude Wellness Center dietitian and psychotherapist for an enlightening session on how to incorporate multiple aspects of lifestyle behaviors to maintain the happy, healthy weight you worked so hard to achieve.

Coping with the Emotions of Caregiving
June 11 or July 25 | 6 p.m.
(chose the date most convenient)
Taking care of someone you love is exhausting, both physically and emotionally. Join experts from the Orange County Caregiver’s Resource Center to learn:
• how to reduce feelings of stress, guilt and frustration
• strategies for reframing emotions and avoiding depression
• successful coping strategies, including respite goals

Your role is important, so join us for advice and support to make it a little easier.

Waking Up to Fall Asleep: Do You Have Sleep Apnea?
June 12 | 6 p.m.
Sleep apnea is the leading undiagnosed sleep problem in America – affecting almost 10 million people, most of whom have no idea why they feel so tired all the time. Waking up with headaches, snoring, feeling tired during the day even after spending 8 or 9 hours in bed are common symptoms.

If you feel tired throughout the day, or know someone struggling with constant fatigue, join our sleep expert to learn about symptoms, diagnosis, and solutions. If you’ve already been told you have sleep apnea but have questions about your diagnosis or equipment, come for answers and solutions.

Cooking Up Health
July 16 | 6 p.m.
Summer means all those colorful, disease-fighting fruits and vegetables are waiting for you at the nearest grocery store or farmers market. Join us in the St. Jude Wellness Center’s very own teaching kitchen for a cooking demonstration and class on interesting, fun and delicious ways to eat up those beautiful, antioxidant-filled veggies.

*Class is limited to 20 people.
Maternity Classes

A must for first-time parents, St. Jude Medical Center’s comprehensive prenatal classes are taught by certified and experienced instructors who will help you prepare and boost your confidence as you approach your big day. **For information or to RSVP, visit stjudemedicalcenter.org/healthclasses or call (877) 459-DOCS (3627).**

**Mother Baby Prenatal Classes**
A must for first-time parents, St. Jude Medical Center’s comprehensive prenatal classes are taught by certified and experienced instructors who will help you prepare and boost your confidence as you approach your big day.

**Breastfeeding Basics**
All the information you need to get breastfeeding off to a great start. Learn latching and positioning techniques, how to establish or increase an abundant milk supply, signs of success, and how to avoid or treat common breastfeeding concerns.

**Maternity Tours**
Find out more about our innovative programs and services available to parents. A tour of the Labor and Delivery unit is included, and important details for your delivery day will be covered, including where to park and check in at the hospital. To ensure you are able to get the most out of your visit, this tour has been designed for adults only.

**Grandparents**
This class helps grandparents feel comfortable in their new role and learn about today’s new parenting techniques. Playing with baby, infant communication and temperament, health and safety will also be discussed.

**Newborn Baby Care**
How will you adjust to life with a newborn? From the first hours after birth to the first weeks at home, this class offers information, tips and proven techniques to keep your baby safe, happy and healthy. Learn the basics of bathing, diapering, swaddling, calming a crying baby, and more.

**Prepared Childbirth**
This evidence-based class will cover the anatomy and physiology of pregnancy, the labor and birth process, pain management, and more. Participants will have the opportunity to learn and practice breathing, relaxation methods and positions that will be very important tools throughout labor.

**CPR and Infant Safety**
Our Heartsaver CPR class will help you recognize life-threatening emergencies, provide CPR and relieve choking in a safe and effective manner for infants, children and adults. At the end of this class you will be eligible for a two-year Heartsaver/AED certification card through the American Heart Association.

Our Infant Safety/CPR class is highly recommended for expectant mothers, spouses, grandparents and caregivers or babysitters. This non-certification course will cover CPR and choking for infants as well as important principles for infant and child safety.

**Sibling Class**
This interactive class is specially designed for the big brother or sister-to-be who is between 3 and 8 years of age. Children will learn what to expect when the new baby arrives and have the chance to practice safe holding and helping to care for the new addition to the family.

**Count the kicks to track your baby’s health**

During pregnancy, counting your baby’s kicks (or the punches, jabs and rolls) can help monitor the baby’s well-being. Fortunately, our free app makes it easy—while also giving you all the information you need during each week of your pregnancy, from how to eat for your baby’s brain health to preparing for labor to helpful to-do lists.

Once your newborn comes home, the Circle app will help you track diapers and feedings, while continuing to give you up-to-date information about each month and stage of your baby’s development.

Go to the App Store to download for iPhone or Google Play for Android. Look for Circle by St. Joseph Health, then select St. Jude Medical Center.

*Learn more at stjudemedicalcenter.org/circle.*
St. Jude Neurosciences Institute
Expert care close to home

A nationally-recognized center of excellence, the St. Jude Neurosciences Institute offers multidisciplinary teams of experts and the most advanced neurosurgical capabilities in the state, giving our patients the very best opportunity to recover and heal.

We bring together fellowship-trained specialists in neurosurgery, neurointervention radiology, neurology, and physical medicine/rehabilitation, as well as one of California’s largest teams of neurointensivists, board-certified in neurocritical care. The comprehensiveness of our care includes one of the only accredited stroke and brain injury programs in the state, offering families every advantage—from innovative, early mobility protocols while patients are still in the ICU, to our unique drivers’ assessment and training program.

Whether it’s earning recognition from U.S. News & World Report, or receiving the Joint Commission’s highest honor for stroke care—given to just 100 hospitals in the nation—we’re proud of the awards we’ve earned. But we’re more proud of the accomplishments behind the awards: returning moms, dads, sons, and daughters to their families and lives.

To learn more, please call our nurse navigator at (714) 446-5567.