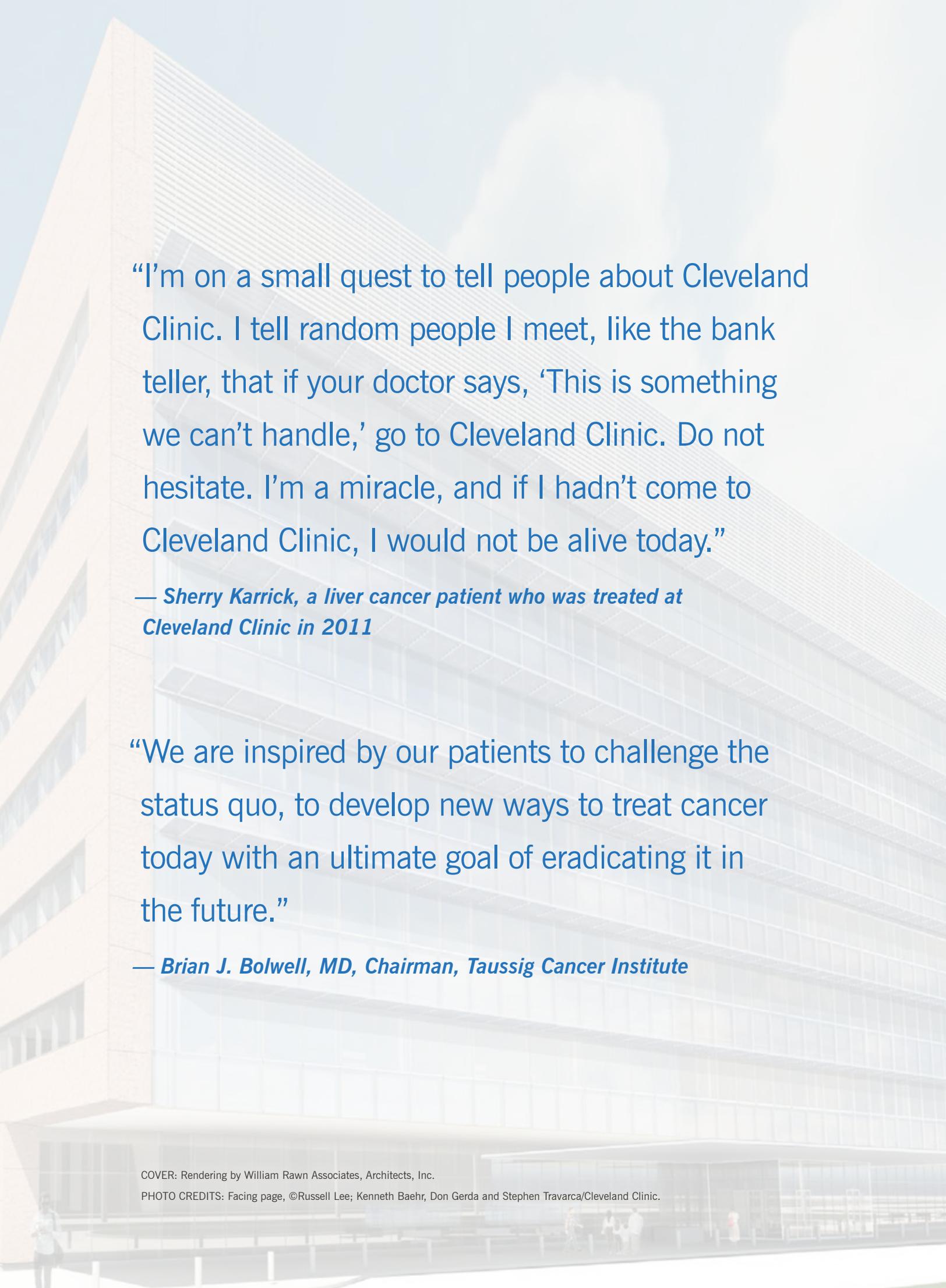




One
Cancer Center



“I’m on a small quest to tell people about Cleveland Clinic. I tell random people I meet, like the bank teller, that if your doctor says, ‘This is something we can’t handle,’ go to Cleveland Clinic. Do not hesitate. I’m a miracle, and if I hadn’t come to Cleveland Clinic, I would not be alive today.”

— *Sherry Karrick, a liver cancer patient who was treated at Cleveland Clinic in 2011*

“We are inspired by our patients to challenge the status quo, to develop new ways to treat cancer today with an ultimate goal of eradicating it in the future.”

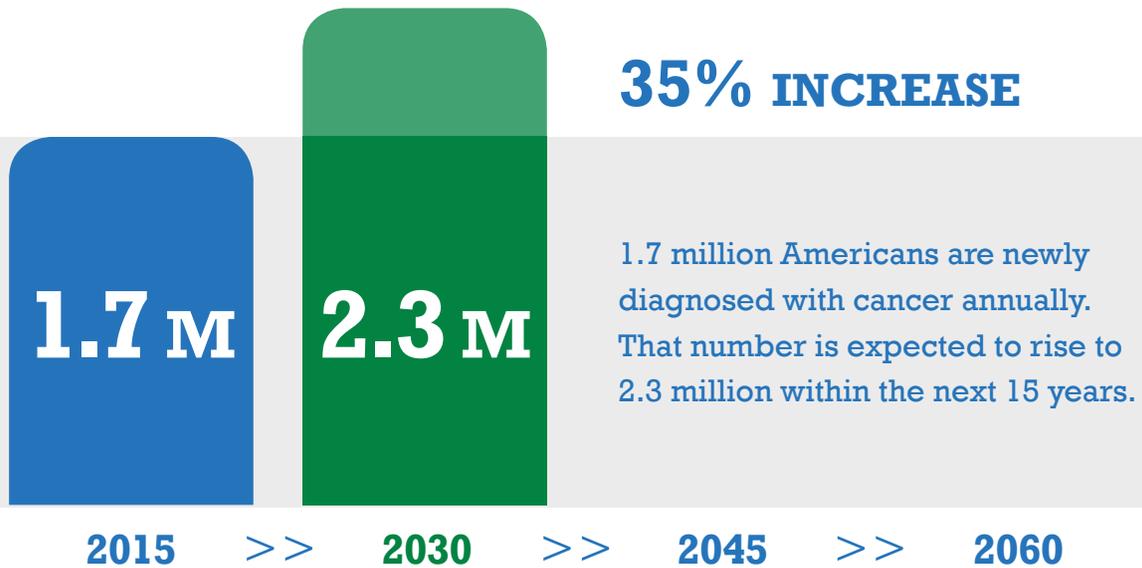
— *Brian J. Bolwell, MD, Chairman, Taussig Cancer Institute*



Cleveland Clinic's cancer program is about the power of one team...

Caring for one patient and one family at a time...

In one of the most advanced cancer-research centers in the world.



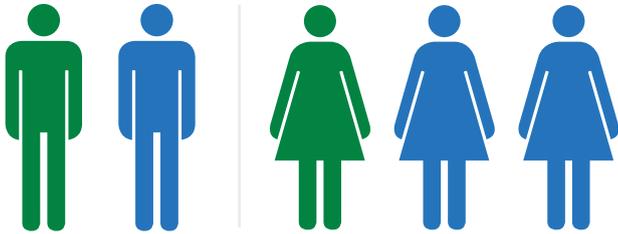
A Health Challenge for Every *One*

Cancer affects us all. About half of American men and one-third of women will be diagnosed with cancer during their lifetimes. The coming year will include approximately 1.7 million cancer cases in the U.S. and 590,000 cancer-related deaths.

Yet there is reason for optimism: Cancer death rates have dropped more than 20 percent over the last 25 years due to lower smoking rates, improved screening practices and better treatments. Cleveland

Clinic's cancer program is a leading contributor to this success story. Our physicians, nurses and other clinicians are committed to providing the highest levels of clinical care while also connecting patients and their families with counseling, education and other support services.

Cleveland Clinic enrolls thousands of patients in clinical trials every year to find better methods for screening and diagnosis, evaluate new treatments



During the course of a lifetime, **1 in 2 men** and **1 in 3 women** will be diagnosed with cancer in the United States.

Cancer is the leading cause of death across the globe – **7.4 million** people lose their lives every year.



and discover ways of minimizing side effects. And research in precision medicine, which aims to effectively treat cancer without harming healthy cells, is underway at Cleveland Clinic. This groundbreaking work informs the clinical practice of today and advances the cancer treatment of tomorrow.

Still, there's much to do. Cancer is largely a disease of aging, and more cases will be diagnosed

as the population grows older. Some experts predict that cancer will soon surpass heart disease as our nation's leading cause of death. We must redouble our efforts to help every patient survive and thrive.

This is why we are asking you to partner with Cleveland Clinic to advance cancer care — for patients in Ohio, throughout the United States and around the world.

One essential goal drives the work we do here every day: improving the lives of people with cancer.

“Everyone was wonderful — doctors, nurses, housekeeping, just everyone. I cannot begin to thank all the people who took care of me.”

— Jerry Davidson, who had a bone-marrow transplant as part of his cancer treatment

“Cleveland Clinic is like a second family to me — they make me feel like I’m their only patient.”

— Lisa Craine, who was successfully treated for cholangiocarcinoma, or bile-duct cancer

Cleveland Clinic was founded to provide superior patient care in a healthcare practice that is compassionate, collaborative and innovative. We put patients first — always.

Patient Sherry Karrick learned this firsthand while she was in the hospital following surgery for liver cancer. One day, she recalls, a nurse was walking her down the hall. “We got to a place where you could go right or left, and I wanted to go right, but I decided

to go the other way because there were doctors talking in the hall. But the nurse said, ‘No! Patients first!’ and then she said to the doctors, ‘Patient coming through,’ and they all parted,” Ms. Karrick says. “That made me feel special.”

At Cleveland Clinic, “Patients First” is more than a motto — it’s our guiding light. Here, science and clinical excellence align with humanity and kindness.



Jennifer Yu, MD, PhD



Navneet Majhail, MD

Cleveland Clinic has one of the premier cancer programs in the nation and is ranked No. 1 in Ohio by *U.S. News & World Report*. It is a National Cancer Institute–designated center, where Cleveland Clinic doctors and scientists collaborate with other nationally recognized physicians and researchers, sharing expertise to help cancer patients everywhere.

We specialize in multidisciplinary and individualized care. Experts from a variety of specialties come together to discuss patient cases from all points of view and to generate a care plan tailored to each patient. Our radiation oncologists use advanced technology to better target cancer cells and minimize radiation exposure to healthy tissues. Our researchers are developing drugs and therapies that may provide additional treatment options for individuals with cancer, and we have more than 350 active clinical trials underway at any one time.

We also support our patients and their families with important nonclinical services, such as patient navigation, financial and social-work counseling, education, mentoring, art and music therapy, reiki and massage.



Patient George T. Protiva with nurse Katie Goede

The New Cleveland Clinic Cancer Center

“This is no ordinary building. It will set a new national standard for outpatient cancer treatment in the 21st century.”

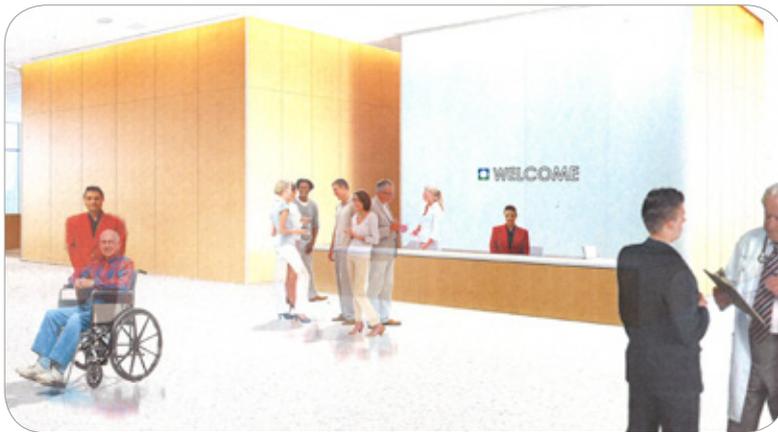
— *Toby Cosgrove, MD, CEO and President, Cleveland Clinic*

Through *The Power of Every One* campaign, Cleveland Clinic will create an even stronger model of cancer care by building a new outpatient cancer center. “All disciplines taking care of all cancers will be in this facility,” says Brian J. Bolwell, MD,

Chairman, Taussig Cancer Institute. “That’s new and that’s different. And that’s the Cleveland Clinic model of care.”

The revolutionary new space also will accelerate one of the most robust cancer-research programs in the country. Dr. Bolwell is focused on ensuring that Cleveland Clinic’s cancer program consistently offers patients and families a comprehensive experience that couples innovative research with compassionate care.

Cancer is a daunting diagnosis, and it’s our responsibility to respond to this anxiety by creating a welcoming atmosphere for patients and families, he says. The new



William Rawn Associates, Architects, Inc.

“We deliver the best care possible in a high-level academic medical setting, and we do it with caring, empathy and compassion. We always strive to do the right thing.”

— *Brian J. Bolwell, MD, Chairman, Taussig Cancer Institute*



Brian J. Bolwell, MD

building will bring specialists together for the convenience of patients in a naturally lit, spacious atmosphere that cancer patients need and deserve.

When it opens in 2017, the building will transform how care is delivered. By uniting all of our treatment disciplines — surgery, medical oncology, radiation oncology, genetics, nutrition, social work and imaging — it will provide great benefits for patients, families and clinicians.

For patients, the new center means receiving all of their care in one convenient location, including support services that attend to their mental health and overall well-being.

For clinicians, the new building will allow them to work closely with other specialists in “pods” organized by cancer type, leading to new insights

into the best approaches for individualized care for a particular diagnosis.

The New Cancer Building at a Glance

- > This 377,000-square-foot outpatient building will unite all our treatment care teams.
- > Its design — featuring abundant natural light, outdoor views and a patient-friendly entryway — was based on patient and caregiver input.
- > The building will meet critical cancer-support needs with a spiritual center, nutritional and genetic counseling, wig and prosthetic services, and art and massage therapy.
- > It will enhance cancer research by including dedicated space to support Phase I, II and III clinical trials.

The Power of Discovery

“I am so fortunate that Cleveland Clinic was able to restore my health. I believe that through ongoing research, Cleveland Clinic WILL find cures for other types of cancers.”

— Athena Mericsko, whose acute promyelocytic leukemia is in remission. Ms. Mericsko rode in the inaugural VeloSano bike-to-cure event to support cancer research at Cleveland Clinic.

Cleveland Clinic, long at the forefront of cancer research and treatment, now leads the way in precision medicine — the future of cancer treatment.

Unlike standard regimens that kill cancer and healthy cells, precision medicine targets genetic mutations that cause cancer while leaving healthy cells intact. This research has the potential to transform the way cancer is treated.

Removing Roadblocks

Cleveland Clinic physician-researcher Yogen Sauntharajah, MD, and his team are taking a novel approach with an existing chemotherapy drug, decitabine. They are using the drug to target the most common cancer-cell mutation, “p53,” which deletes a cell’s self-destruct instruction.

Treatment with this drug convinces a cancer cell to stop growing by renewing its specialization destiny. For example, a lung-cancer cell may have been meant to become a lung-lining cell or a gland cell but was unable to complete its journey. By understanding cells’ roadblocks, researchers are able to take them to their intended destinations.

“It is our hope that this research will guide most first-line cancer treatment in the next 5 to 10 years, turning cancer into a chronic disease and using nonpoisonous drugs with minimal side effects,” Dr. Sauntharajah says.

His team has proved that this approach works in bone-marrow cancer with better results for the patient. To make it work for other types of cancer, the team has created a new form of the drug and has clearance from the FDA to begin clinical trials.

Tailoring Treatment

Gene sequencing and advanced technology in finding the molecular basis of cancer are providing new insights



Yogen Sauntharajah, MD



Jennifer Carew, PhD, and James Phillips, PhD



Mohamed Abazeed, MD, PhD

into each patient's disease, leading to more effective medications and personalized treatment.

Tailoring treatment to individual patients is the mission of our drug discovery program. Jennifer Carew, PhD, James Phillips, PhD, and their research colleagues in the Department of Translational Hematology and Oncology Research are leading projects to find new, selective anticancer agents that inhibit the function of specific genes or proteins that cancer cells need to survive and to resist conventional chemotherapy.

By pursuing drug development within Cleveland Clinic's cancer program, researchers may discover new medications that will change current medical practice. The program helps doctors develop treatments and clinical trials that are specific to their patients. In addition, drug development can be moved along more quickly, and doctors can receive assistance in determining which patients are most likely to respond well to specific treatments.

Among those benefiting from gene-based discoveries are patients who have myeloid leukemias and myelodysplastic syndrome.

"Many of the drugs we have now work very well, but they are not targeted, so we don't know who will respond," says Jaroslaw Maciejewski, MD, PhD, Chair of the Department of Translational Hematology and Oncology Research. With a targeted approach, physicians avoid giving patients treatments that could be toxic and futile for them while also maximizing the response in patients who are most likely to benefit. Cleveland Clinic's findings also are shaping the care of children with chronic juvenile myelomonocytic leukemia.

Testing Protocols

Because cancerous tumors can be resistant to treatment, researchers are trying to identify genetic abnormalities that cause this problem and then develop models for testing treatment protocols.

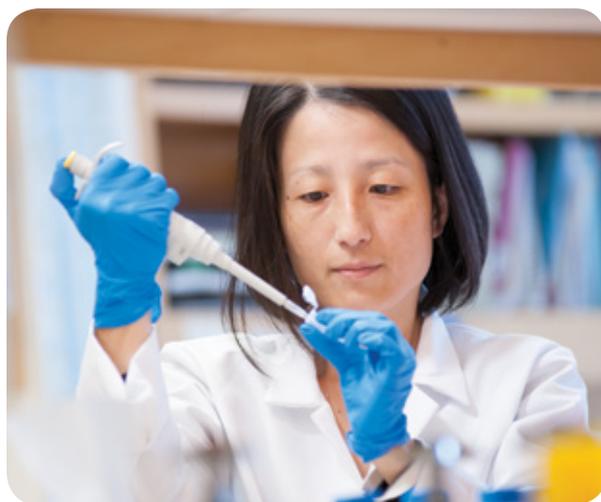
Mohamed Abazeed, MD, PhD, designs testing platforms to help discern which genetic mutations are significant. His team studies tumor-tissue samples from individual Cleveland Clinic patients to determine the tumors' genomic profiles. This process allows the team to evaluate therapies in a targeted way, potentially leading to significantly improved clinical trial design.

Dr. Abazeed's laboratory uses the latest technology to generate and test novel hypotheses rapidly. Currently, this approach is being used to study lung cancer. If the results are promising, the team plans to expand its research to include other types of solid-tumor cancer.

"It doesn't influence a patient's treatment directly yet, but the information gathered from these studies significantly accelerates both clinical studies and potentially therapeutic options for patients," Dr. Abazeed says.

A tumor genomic-analysis study has been underway at Cleveland Clinic since 2013. Oncologists anticipate enrolling 250 patients with one of 15 solid tumor types that historically have had poor prognoses or limited treatment options.

Recently launched clinical trials led by Davendra Sohal, MD, MPH, a staff physician in the Department



Researcher Naoko Hosono

of Hematology/Oncology, are evaluating experimental compounds aimed at those targets.

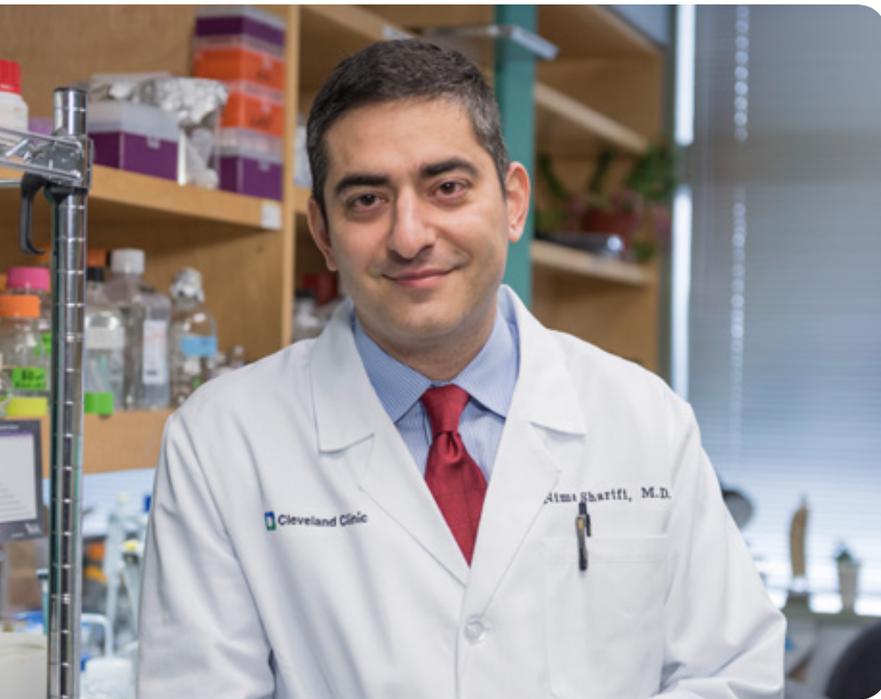
"The consensus of the first year of our study of expanded genomic testing is that we find actionable targets, but we need to have new drugs available more widely," Dr. Sohal says. "We are now building that capability to get these drugs to our patients."

Other Leading-Edge Research

> Cleveland Clinic is widely recognized for prostate-cancer research. Recently, Nima Sharifi, MD, who holds the Kendrick Family Endowed Chair for Prostate Cancer Research, received the Outstanding Achievement in Cancer Research Award from the American Association for Cancer Research, which recognizes achievements of researchers under age 40. He heads a laboratory that is studying how prostate tumors fuel themselves with androgen hormones, even after a patient has treatment that causes the body to stop producing the hormones.

"If we can understand the engine that drives prostate-cancer progression, we can figure out how to reverse it," Dr. Sharifi says.

> Cleveland Clinic is part of a study testing new imaging technology to help reduce the number of breast biopsies. About 1.7 million women in the United States have needle or surgical breast biopsies each year after an ultrasound detects something suspicious that is first found via mammogram or the patients' self-exams. Nearly 60 percent of these masses are found to be noncancerous. Cleveland Clinic is part of the PIONEER-01 trial, sponsored by a San Antonio-based medical imaging company that has developed an imaging device combining ultrasound with opto-acoustics, a technology based on sound and light. Stephen Grobmyer, MD, Chair, Surgical Oncology, leads the study at Cleveland Clinic.



Nima Sharifi, MD



Jaroslaw Maciejewski, MD, PhD, with Brittney Dienes

> IBM's Watson, a supercomputer that can understand human language and answer questions, is using its cognitive computing abilities to study the human genome in the pursuit of individualized cancer treatments. In a pilot program, scientists are testing Watson's Genomics Analytics to advance the use of personalized medicine.

"Clinicians will benefit from the knowledge and insight provided by Watson in the care of their patients," says Charis Eng, MD, PhD, Chair and Founding Director of Lerner Research Institute's Genomic Medicine

Institute and holder of the Sondra J. and Stephen R. Hardis Endowed Chair in Cancer Genomic Medicine.

Your Gifts Are Crucial

Philanthropic support is needed now to take innovative treatment approaches to clinical trials. With the decrease in federal funding for clinical research, only seven out of every 100 projects actually receive government funding. We need your help to bring potentially life-saving treatment options to thousands of patients diagnosed with cancer each year.

"Cleveland Clinic is doing amazing work. And the ovarian-cancer research they are conducting is very important in fighting this deadly disease."

— *Former Cleveland Browns kicker Billy Cundiff, whose mother-in-law passed away of ovarian cancer. Mr. Cundiff and his wife, Nicole, started a foundation to support research for early detection and improved treatment for the disease. The foundation helped fund the ovarian-cancer research of Cleveland Clinic's Angela Ting, PhD.*



Davendra Sohal, MD, MPH

The Power of Commitment.

Cleveland Clinic's unwavering focus on patients is evident in all we do, from our multidisciplinary approach to cancer care to our quest to achieve landmark advances in prevention and treatment—and ultimately find a cure. At Cleveland Clinic, science always drives patient care.

Through *The Power of Every One* campaign, which continues through our centennial in 2021, Cleveland Clinic has a historic opportunity to forge an even stronger model of cancer care. This campaign will help us continue our ability to remain on the

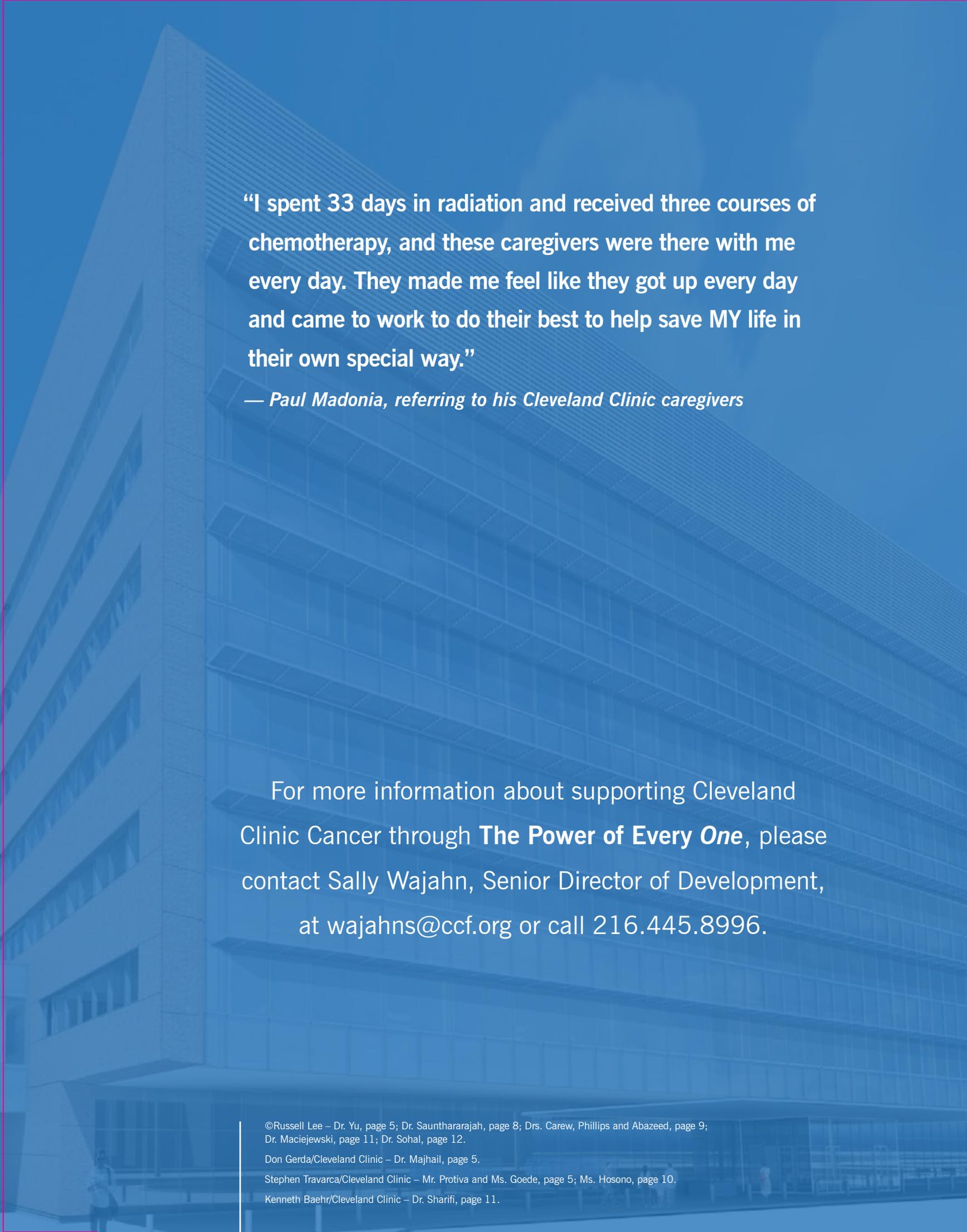
leading edge of research and provide the support services that patients and families need.

By supporting Cleveland Clinic's cancer program and new building, you can shape cancer care at one of the nation's most respected medical centers. You can accelerate the progress of researchers who are on the forefront of the newest approaches to cancer.

Cancer is one of our most pressing health challenges. Together, we can improve and save lives of patients everywhere.

The Power of Every One: Be the next one.

You have the power to partner with Cleveland Clinic to advance cancer care — for patients in Ohio and around the world.



“I spent 33 days in radiation and received three courses of chemotherapy, and these caregivers were there with me every day. They made me feel like they got up every day and came to work to do their best to help save MY life in their own special way.”

— *Paul Madonia, referring to his Cleveland Clinic caregivers*

For more information about supporting Cleveland Clinic Cancer through **The Power of Every One**, please contact Sally Wajahn, Senior Director of Development, at wajahns@ccf.org or call 216.445.8996.

©Russell Lee – Dr. Yu, page 5; Dr. Sauntharajah, page 8; Drs. Carew, Phillips and Abazeed, page 9; Dr. Maciejewski, page 11; Dr. Sohal, page 12.

Don Gerda/Cleveland Clinic – Dr. Majhail, page 5.

Stephen Travarca/Cleveland Clinic – Mr. Protiva and Ms. Goede, page 5; Ms. Hosono, page 10.

Kenneth Baehr/Cleveland Clinic – Dr. Sharifi, page 11.

***The Power of Every One* is the power of your vision and your generosity. The better, bolder, brighter future of healthcare begins with one action. And, together, nothing is beyond our reach.**

┌ The Power
of Every *One*. ┐

Cleveland Clinic Centennial Campaign

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