WE TAKE CANCER PERSONALLY.

Our mission is to see a world free of the devastating effects of BRCA-related cancers.

The Basser Center for BRCA at Penn Medicine’s Abramson Cancer Center provides families with a place they can turn to for education, genetic counseling, and treatment. We raise awareness around the world and are at the center of a global hub of scientists, geneticists, and physicians who are dedicated to better understanding BRCA-related cancers and eventually preventing them altogether.

“Basser’s culture of collaboration enables clinicians and researchers with vastly different expertise to come together to deliver the scientific progress that is the source of hope for so many.”

SUSAN DOMCHEK, MD
Executive Director of the Basser Center

BASSER LEADERSHIP TEAM
Susan Domchek, MD, Executive Director
Beth Stearman, MPH, Administrative Director
Ronny Drapkin, MD, PhD, Director of Gynecologic Cancer Research
Katherine Nathanson, MD, Director of Genetics
Roger Greenberg, MD, PhD, Director of Basic Science
WE ARE ACCELERATING PROGRESS AND HOPE ON MULTIPLE FRONTS
“I have two children, a sister, and cousins, and I would do anything to keep them from going through a cancer diagnosis. What the Basser Center is achieving with preventative care is life-changing, not only for cancer patients, but for their families who may also be at risk.”

CYNTHIA GUILFOIL

VACCINE ON THE HORIZON

THE PROGRESS Robert Vonderheide, MD, DPhil, Director of the Abramson Cancer Center, and his team are developing a novel preventative vaccine, which has been shown to be safe for patients and elicit an immune response in a Phase I clinical trial.

THE HOPE A “smallpox vaccine” for BRCA mutation carriers that dramatically reduces the onset of BRCA1/2-related cancer and eliminates the need for taxing surgeries, which are the current standard of preventative care.

THE SCIENCE The Phase I clinical trial targeting TERT, a protein universally found in cancer, is testing the safety and efficacy of a vaccine in patients who are in remission, but have a high risk for recurrence. Close to 100 patients with breast, pancreatic, ovarian, and colon cancers have been enrolled. In addition, a clinical trial is being planned that will test this vaccine in healthy individuals who have a BRCA mutation. The long-term goal is to prevent cancer altogether.

THE PATIENT

Cynthia Guilfoil, 52, enrolled in the vaccine clinical trial a few months after completing treatment for BRCA-related breast cancer, with the hope that her participation would bring the field one step closer to defeating cancer before it strikes.
COLLABORATING FOR BRIGHTER OUTCOMES

**THE PROGRESS** Design and execution of innovative clinical trials that paved the way for FDA approval of the poly ADP-ribose polymerase (PARP) inhibitors olaparib and rucaparib for BRCA-related cancers. Most recently, olaparib has been shown to delay disease progression, shrink tumors, and improve quality of life compared to chemotherapy for BRCA1 and BRCA2 mutation carriers with advanced breast cancer. Studies are underway for individuals with BRCA1/2 mutations and other cancer types, including pancreatic cancer.

**THE HOPE** Researchers will develop a deeper understanding of the mechanisms by which BRCA-related tumors develop and as a result, create more targeted therapies.

**THE SCIENCE** Roger Greenberg, MD, PhD, the Basser Center’s Director of Basic Science, is working to understand at a cellular level how BRCA1- and BRCA2-deficient cells adapt to PARP inhibition, while Katherine Nathanson, MD, Director of Genetics at the Basser Center and Deputy Director of the Abramson Cancer Center, is exploring how BRCA-related tumors develop in order to identify predictors of their response, or resistance, to treatment. Executive Director Susan Domchek, MD, is studying PARP inhibitors in combination with other drugs to determine how to maximize their success.

For information about gaining access to novel therapies by participating in a Basser Center clinical trial, visit basser.org/research/openstudies. Visit clinicaltrials.gov to access additional trials conducted around the world.

**THE PATIENT**

With the help of PARP inhibitors to target and fight his BRCA-related pancreatic cancer, Steven Merlin, 61, continues to lead an active lifestyle that includes 50-mile bike rides and mentoring other cancer patients and their families.

“Dr. Domchek and her team have provided me with outstanding treatment options that have made all the difference in restoring my health. Seeing the positive outcomes from ongoing research in PARP inhibitors for faster and more effective results gives me an extreme sense of encouragement.”

STEVEN MERLIN
CONNECTING NEAR AND FAR

THE PROGRESS  Top-tier genetic counseling and testing services offered on-site at the Basser Center, as well as the development of “telegenetics”: a genetic counseling model that extends these services to communities with limited or no access through the use of telephone or videoconferencing technologies.

THE HOPE  Countless lives will be saved by helping women and men at high risk of developing BRCA-related cancers make informed, proactive choices about their medical care, regardless of where they live.

THE SCIENCE  The Basser Center is operating on two fronts to make genetic counseling widely available. The BRCA Founder Outreach study, led at Basser by Susan Domchek, MD, and Katherine Nathanson, MD, offers free BRCA genetic testing to women and men of Ashkenazi (Eastern European) Jewish ancestry over the age of 25 to provide vital health information to people who may not otherwise know their risk. This study is partnering with three institutions around the country with the goal of expanding access to genetic testing. Angela Bradbury, MD, is also looking at the effectiveness of telegenetics as a vehicle for providing genetic counseling and testing to individuals in communities with limited access to genetic services.

“Knowing your risk is the best step you can take to prevent BRCA-related cancers, or to detect them early. The Basser Center’s support of vital counseling services helps families make informed decisions that protect their health.”

JACQUELYN POWERS, MS, LCGC
Genetic Counselor

GENETIC COUNSELORS
Jessica Long, MS, LCGC; Dana Foreman Clark, MS, LCGC; Jacqueline Powers, MS, LCGC, Jessica Ebrahimzadeh, MS, LCGC; Danielle McKenna, MS, LCGC, Kelsey Spilman, MS, LCGC (not pictured)
It’s difficult to know how best to take care of yourself and your family. As a BRCA mutation carrier, I don’t want to wait and run the risk of a cancer diagnosis, but I also want to avoid the physical and psychological challenges of undergoing preventative surgeries prematurely. Research at the Basser Center gives me hope that these decisions will only get easier to make.”

ELI LOPEZ

INspiring Breakthroughs

THE PROGRESS Discovery of biomarkers for early detection of ovarian cancer in the fallopian tubes.

THE HOPE Ovarian cancer will be identified and treated years earlier, when a patient has her best chance of survival, and preventative surgeries will no longer require removal of the ovaries.

THE SCIENCE Ronny Drapkin, MD, PhD, Director of Gynecologic Cancer Research at the Basser Center and Penn’s Ovarian Cancer Research Center, and colleagues made a critical discovery about the most common form of ovarian cancer: it originates in the fallopian tubes, and can be detected there 6.5 years before it even begins to grow in the ovaries. This finding has sparked discussion and critical scientific research on the theory that the fallopian tubes, rather than the ovaries, could be removed as a first-step prevention strategy for pre-menopausal women with BRCA mutations.

THE PATIENT

As a BRCA1 mutation carrier with a strong family history of breast cancer, Eli Lopez, 33, turned to the Basser Center for a community of support and insight to help her navigate complex decisions about which preventative surgeries to undergo and when.
NEW THERAPIES, NEW HOPE

THE PROGRESS Development of avatar mouse models that mirror PARP inhibitor resistance in human patients.

THE HOPE Researchers will develop alternative therapies for cancer patients who have become resistant to PARP inhibitors and have few other treatment options.

THE SCIENCE Patients who are BRCA deficient often develop a resistance to PARP inhibitors, one of the most effective treatments for BRCA-related cancers. Fiona Simpkins, MD, a gynecologic oncologist at Penn Medicine, removes portions of human BRCA-related tumors to create mouse models with this same resistance, enabling her to test therapies that could offer new hope for cancer patients who have exhausted available treatments.

“There is an urgent need for novel therapies to extend and improve the lives of patients who are not responding to current treatments. The extraordinary network of resources and support that the Basser Center provides makes this lofty, game-changing goal attainable.”

FIONA SIMPKINS, MD
“The Basser Center gives me so much hope for the future. Their relentless commitment to understanding and defeating BRCA-related cancers fuels my faith that the prevention and treatment options we need are on the horizon.”

DENISE PORTNER
Basser Center Patient
FIVE YEARS OF PROGRESS AND HOPE

2012
BASSER CENTER ESTABLISHED
by Mindy and Jon Gray in memory of Mindy’s sister, Faith Basser. Susan Domchek, MD, is named Executive Director of the Center and the Basser Professor in Oncology.

BASSER GLOBAL PRIZE IS ESTABLISHED AND ENDOWED
by Shari and Len Potter.

THE CENTER AWARDS INAUGURAL INTERNAL GRANTS
Over five years, the Center has awarded grants to 26 Penn investigators.

BASSER LEADERSHIP COUNCIL
is established as a powerful group of advocates and supporters.

JEWSH COMMUNITY OUTREACH POSTER CAMPAIGN PROJECT LAUNCHES
in collaboration with FORCE, Sharsheret, and Bright Pink, reaching 1,500 synagogues nationwide.

2013
FIRST EXTERNAL RESEARCH GRANTS ARE AWARDED
To date, the Center has funded research at 12 leading research institutions across the nation and globe.

FDA APPROVES FIRST PARP INHIBITOR, OLAPARIB
For BRCA-related ovarian cancer. Basser Center research played a lead role in this approval.

2014
INAGURAL BASSER JEAN BASH
held in New York City for BRCA research, education, and outreach.

ELIZABETH PROSTIC MEMORIAL OUTREACH PROGRAM
established and endowed as a webinar series to educate individuals and families around the world.

FDA APPROVES RUCAPARIB FOR BRCA-RELATED OVARIAN CANCER
Basser Center research played a lead role in this approval.

2015
YOUNG LEADERSHIP COUNCIL
is established and has grown to more than 65 members.

BASSER CENTER COMES IN 2ND
in the Revlon LOVE IS ON Challenge.

2016
FDA APPROVES NIRAPEARIB
for all ovarian cancers.

#INVISIBLEGENES LAUNCHES AT 2ND BASSER JEAN BASH
to spread awareness of hereditary cancer.
The social media campaign has close to one million views.

2017
MINDY AND JON GRAY ANNOUNCE NEW GIFT TO THE CENTER
to celebrate five years of progress and hope.

$80M RAISED
since the founding of the Center.

INAGURAL BASSER JEAN BASH
held in New York City for BRCA research, education, and outreach.

ELIZABETH PROSTIC MEMORIAL OUTREACH PROGRAM
established and endowed as a webinar series to educate individuals and families around the world.

FDA APPROVES RUCAPARIB FOR BRCA-RELATED OVARIAN CANCER
Basser Center research played a lead role in this approval.
WE ARE BREAKING DOWN SILOS

FOSTERING GLOBAL COLLABORATION

The Basser Center hosts an annual scientific symposium, awards grants to leading investigators around the world, and honors visionary BRCA-related research through the Basser Global Prize. Collectively, Penn Medicine’s Abramson Cancer Center and Basser Center for BRCA fuel the brightest minds and most advanced research to power the fight against hereditary cancers.

EXTERNAL GRANTS PROGRAM AND GLOBAL PRIZE RECIPIENTS

“We understand that scientific breakthroughs are often the result of years of small, incremental achievements, and we also know that great leaps can be made when genius, inspiration, creativity, and funding are all brought together in a focused pursuit.”

SHARI AND LEN POTTER
Global Prize Founders

* Funded by the Basser Initiative at the Gray Foundation
As a result of the OlympiAD trials co-led by Basser Center Executive Director Susan Domchek, MD, the FDA approved olaparib as the first targeted therapy specifically for BRCA-related breast cancer. Previously approved for BRCA-related ovarian cancer, the effectiveness of olaparib against the 10 percent of triple-negative breast cancers that have BRCA mutations offers hope to patients whose treatment options were previously limited to chemotherapy.

The Basser Center’s robust clinical research program has continued to demonstrate the effectiveness of PARP inhibitors to improve response rates and extend progression-free survival for patients with a range of BRCA-related cancers.
WE ARE GROWING
OUR COMMUNITY OF SUPPORT

The Basser Young Leadership Council (YLC) represents the next generation of advocates for the Basser Center. Since its founding in 2016, the group has grown to more than 65 members across the globe, and is committed to supporting young investigators at Penn. Learn more at basser.org/YLC.

PAYAL SHAH, MD
YLC Young Investigator Award, 2016

Payal Shah, MD, is an Assistant Professor of Medicine in Penn’s Division of Hematology-Oncology. Her research is focused on cancer genetics and the development of clinical trials for patients with cancer. Specifically, she studies novel targeted and immunotherapeutic agents in patients with breast and ovarian cancers, including patients with inherited cancer predispositions. The Basser YLC awarded Dr. Shah the inaugural Young Investigator Award in 2016 to support her research efforts.

KIM REISS BINDER, MD
YLC Young Investigator Award, 2017

Kim Reiss Binder, MD, is an Assistant Professor of Medicine in Penn’s Division of Hematology-Oncology. Her research is focused on the development and testing of new treatments for pancreatic cancer and other GI malignancies. Specifically, her work centers around methods to exploit aberrant DNA-repair pathways, such as in patients with BRCA mutations.

ALEJANDRA CAMPOVERDI
YLC Distinguished Advocacy Award, 2017

Alejandra Campoverdi is a former White House aide, a media executive, and a women’s health advocate. She has spoken publicly about her personal health and her BRCA mutation status in order to bring attention to the importance of increasing health care access for all. In recognition of this work, she was awarded the inaugural YLC Distinguished Advocacy Award at ‘A Night Out with the YLC’ in November 2017.
Key Events Are Raising Significant Funds

Thanks to Generous Supporters

The biennial Basser Jean Bash events in 2015 & 2017 raised more than $15M and celebrated the Center’s progress and the supporters who make its work possible. The inaugural 2015 event honored Mindy and Jon Gray’s foundational gift that established the Basser Center in 2012.

The Revlon LOVE IS ON Challenge in 2016 helped the Basser Center raise an additional $1.2M in just six weeks, including a generous match from Mindy and Jon Gray.

Robert Vonderheide, MD, DPhil; Mindy Gray; Amy Gutmann, PhD, President of the University of Pennsylvania; Susan Domchek, MD; Shari Potter; and Jon Gray at the 2017 Basser Jean Bash in New York City.
WE ARE RAISING AWARENESS

The Basser Center’s high-tech, high-touch educational outreach includes many events, webinars, and conferences that extend the Center’s resources and support across the world for greater impact.

CLOSE TO 1M PEOPLE REACHED BY #INVISIBLEGENES

The #INVISIBLEGENES social media campaign promotes awareness of how some inherited traits, like BRCA mutations, are not as obvious as curly hair or dimples and can remain hidden and dangerous.
Since 2012, Basser Center investigators have become go-to experts for top media outlets covering news on advancements in BRCA-related research, treatment, and education. Our experts have been featured in hundreds of original news stories from outlets across the nation and around the world, including those below.

A PILL MIGHT CONTROL PANCREATIC CANCER, EVEN IF IT DOESN’T CURE IT

Forbes takes a deep dive into the use of PARP inhibitors in the fight against pancreatic cancer, and features a recently opened trial led by investigators at the Basser Center for BRCA. The study examines rucaparib as maintenance therapy in pancreatic cancer that has stabilized in response to a platinum-type chemotherapy.

PROMISING CANCER DRUG EXPLOITS BRCA GENETIC MUTATIONS

A targeted therapy shown to benefit ovarian cancer patients with a BRCA mutation also elicited responses in previously treated pancreatic cancer patients with the mutation, according to results of a study led by the Basser Center for BRCA.

HOPE AND HYPER AROUND CANCER IMMUNOTHERAPY

Using the immune system to better understand cancer growth also could lead to more vaccines to prevent cancer. Vaccine-based trials for individuals at risk of hereditary breast, ovarian, and other cancers associated with BRCA1/2 gene mutations are ongoing at the Basser Center for BRCA.

7 QUESTIONS ON CANCER GENE TESTING

News of Angelina Jolie’s decision to undergo a prophylactic double mastectomy instantly increased awareness of hereditary forms of cancer caused by mutations in the BRCA1 and BRCA2 genes. Experts from the Basser Center for BRCA tackled some of the most commonly asked questions regarding genetic testing for breast and ovarian cancer.

RESEARCH CENTER TO FOCUS ON CANCER GENES

A $25 million gift to the University of Pennsylvania from alumni Mindy and Jon Gray established a center focused on the treatment and prevention of cancers associated with hereditary BRCA mutations. Cancer experts say that what might appear to be a narrow research focus actually has broad implications.

WHEN TO TELL DAUGHTERS ABOUT A GENETIC BREAST CANCER RISK

A 2015 study from the Basser Center found that while adolescent girls from families that carry BRCA1 or BRCA2 mutations worry more about the risk of breast cancer, they have similar levels of psychosocial adjustment, and in fact have higher self-esteem, compared with their average-risk peers.
“This fight is too important, the stakes too high. Future generations deserve better choices. That is why we are all-in at Basser and hope you will join us.”

MINDY AND JON GRAY
Founders, Basser Center for BRCA
2017 BASSER CENTER TRIBUTES

The Basser Center for BRCA has received many generous and thoughtful gifts in honor, memory, and celebration of the following people and organizations.

On behalf of all our patients, families, researchers, caregivers, and staff, we thank you from the bottom of our hearts. You make our work possible.

Learn more about the Basser Center for BRCA by visiting basser.org or calling 215.662.2748.

For more information about supporting the Basser Center for BRCA, please contact Laura Ferraiolo at 215.746.2948 or lferr@upenn.edu.
WE TAKE CANCER PERSONALLY.

BASSER.ORG